

HP Web Jetadmin 10.0

User Guide



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1 Installation and Setup Guide for HP Web Jetadmin 10.0

When you install HP Web Jetadmin 10.0, you only need to install it on one hardware platform that meets the recommended minimum requirements ([Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#)) and is centrally accessible on the network. You may then access the software from any supported Windows desktop on the network and manage all supported network-connected peripherals.

HP Web Jetadmin 10.0 offers several installation options. If you have installed a previous version of HP Web Jetadmin 10.0, you can choose to upgrade the previous version or install a new copy. Upgrading an older version preserves your settings for discovery options and groups and is most likely the best choice if you have already been using HP Web Jetadmin 10.0.

 **NOTE:** HP recommends that you fully test HP Web Jetadmin 10.0 in environments where earlier releases have been integrated into critical business operations. HP Web Jetadmin device management, alerting, and other features have been greatly improved with the introduction of HP Web Jetadmin 10.0 and, prior to implementing this software into full production, HP recommends that you fully test and qualify the application.

Please read all support materials when implementing HP Web Jetadmin 10.0. For current information regarding HP Web Jetadmin 10.0 software, see the documents on http://www.hp.com/go/webjetadmin_software titled **Late Breaking News, Supported Devices on HP Web Jetadmin 10.0**, and **Differences Between HP Web Jetadmin 10.0 and HP Web Jetadmin 8.1**.

NOTE: If the installation stops with a warning that a reboot is required, reboot the host on which the HP Web Jetadmin 10.0 installer is running. Then relaunch the installer to continue to installation.

Minimum System Requirements for HP Web Jetadmin 10.0

Table 1-1 Technical specifications for HP Web Jetadmin 10.0 (Product number: J6052AA)

Supported network operating systems	<p>Microsoft Windows XP Professional (with SP 2 and above), Server 2003, Windows Vista Business Edition and Enterprise Edition (Windows 2000 Professional with SP 4 is supported as a Smart Client client). Print management features are supported with Microsoft Windows XP Professional (with SP 2 and above), Server 2003, and Windows 2000 Professional and Server.</p> <p>NOTE: All operating supported operating systems are 32 bit only.</p>
Supported browsers	Microsoft Internet Explorer 6.0 or above (client host requirement)
Shared print queue creation support	Windows XP Professional, Server, or Advanced Server
Network peripheral management supported printers	HP Web Jetadmin 10.0 supports HP and non-HP printers connected through HP Jetdirect print servers and standard printer MIB-compliant third-party network connected printers. The capabilities available for third-party printers will vary from basic to more robust capabilities when the devices are used with HP-certified HP Web Jetadmin 10.0 plug-ins.
Active network connection	HP Web Jetadmin 10.0 must be on a host that has an active IPv4 network connection.
Supported network protocols	IPv4
Software update and migration	HP Web Jetadmin 7.8, 8.0, and 8.1 are supported with either update or migration path installation to HP Web Jetadmin 10.0. (Operating systems and host requirements for software update are the same as those required for new installation. Operating systems and host requirements for software migration are the same as those required for new installation and have Windows 2000 Professional and Server as additional supported platforms.)
Database support	SQL Server 2005 Express included in application installation (requires SP 2 when installed on Windows Vista)
File system type	NTFS (no FAT support)
Virtual Machine (Optional Platform)	<p>VMWare Server</p> <p>NOTE: For a VMWare server, the virtual machine network must be set to <code>bridged</code> to facilitate HP Web Jetadmin 10.0 communications.</p> <p>When VMWare HP Web Jetadmin 10.0 host is running NAT mode, the remote Smart Client will not connect to the HP Web Jetadmin 10.0 host, alerts are not received, and configuring devices prompts the user for V1 credentials when no credentials are set on the device.</p> <p>Any feature that responds back to the host requires this configuration.</p>
Host access requirements	Application host: local administrator required for installation or application upgrade; Client host: local user access required for ClickOnce client application; Administrator required for .NET installation

Table 1-1 Technical specifications for HP Web Jetadmin 10.0 (Product number: J6052AA) (continued)

System requirements: Server	<p>PC with 1.0 GHz or higher processor (2.4 GHz recommended), 1 GB RAM, 2 GB available disk space (minimum recommended, will vary depending on data migrated from older HP Web Jetadmin and data storage needs required by device data collections), .NET 2.0 or higher (if not detected the software will provide assistance for steps to install .NET 2.0).</p> <p>NOTE: If both server and client will be run from the same machine or if the server will be run from a virtual machine, the minimum requirement should be increased to improve response times from the HP Web Jetadmin server.</p>
System requirements: Client	<p>PC with 1.0 GHz or higher processor (2.4 GHz recommended), 1 GB RAM, .NET 2.0 or higher (if not detected the software will provide assistance for steps to install .NET 2.0), 1024 by 768 client display resolution (minimum). Optimized for Normal font size.</p>

Steps to Install HP Web Jetadmin 10.0

To begin the installation, follow these steps:

1. Access <http://www.hp.com/go/webjetadmin> to get the HP Web Jetadmin 10.0 software.
2. Run `wjasetup.exe`.
3. Follow the instructions as each page is displayed.
4. When the installation is complete, click **Close**.

Installing HP Web Jetadmin 10.0 from a Command Line or Script

Sometimes it is required to install software from a command line, through a script, or some automation. Use these steps:

1. Create a SetupProperties.xml file using the -x option: `WjaSetup.exe -x=SetupProperties.xml`.
2. If desired, use a text editor or an xml editor of your choice and edit the SetupProperties.xml file you just added.

Validate the SetupProperties.xml file using the -v option, to make sure that the manual editing was done correctly: `WjaSetup.exe -v=SetupProperties.xml`.

3. Run `WjaSetup.exe` in silent mode using the -s option: `WjaSetup.exe -s=SetupProperties.xml`.

When running HP Web Jetadmin install executable in silent mode at a command prompt, use the /wait option. This will cause the command line to wait until the install process exits before continuing. Here is an example:

```
start /wait WjaSetup.exe -s=Properties.xml
```

When invoking `WjaSetup.exe` from other launch points or programs, these must have appropriate wait parameters or methods established to allow the `install.exe` to complete.

4. If desired, look at the log file created in the Document and Settings folder when `WjaSetup.exe` runs (for example `C:\Documents and Settings\{username}\Local Settings\Temp\hp\wja\WjaSetup\WjaSetup.log`).

Upgrade versus Migrate

In HP Web Jetadmin 10.0 you have the ability to either upgrade from earlier revisions of the software on the same system hosting the application, or you can migrate settings from another system hosting an earlier release to a new system where HP Web Jetadmin 10.0 will be installed. Upgrades should be performed when an HP Web Jetadmin 10.0 installation is planned and can be supported on the same host without interrupting critical business operations. Migration should be performed when the software is being evaluated or when a newer hardware platform is required.

Evaluation is key in testing and qualifying new software. HP Web Jetadmin (versions 7.8 or 8.x) settings can be harvested using the **Migration Tool** and then migrated into a system hosting HP Web Jetadmin 10.0. In these cases, alerting and reports settings are left enabled on the older HP Web Jetadmin and not migrated into the system hosting HP Web Jetadmin 10.0. In this case, fleet management is still active on the older HP Web Jetadmin installation while a few test printers are setup to evaluate alerts and reporting features.

Deployment of HP Web Jetadmin 10.0 may require a newer hardware platform and also that alerts and reports settings can be migrated. In these cases, the older HP Web Jetadmin host can be left in a disabled state by using an option within the **Migration Tool** and then these same alerts and reports settings can be migrated into the new system hosting HP Web Jetadmin 10.0. Migration for the purpose of deploying HP Web Jetadmin 10.0 can also be performed as a next-step after evaluating the software. Simply perform the steps outlined below a second time with a new HP Web Jetadmin 10.0 installation.

Upgrades

When installing HP Web Jetadmin 10.0 on a system where an earlier release of HP Web Jetadmin (versions 7.8 or 8.x) is running, the installer dialog box allows the system to be upgraded using settings and data collected during the previous version of HP Web Jetadmin (versions 7.8 or 8.x) or it may be installed using default settings for HP Web Jetadmin.

 **NOTE:** Only upgrade HP Web Jetadmin on supported hardware and operating system platforms (see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#)). If newer software requirements can only be met with a new host a migration may be needed (see [Migrating to HP Web Jetadmin 10.0 on page 8](#)).

If you select: **Collect Settings from my previous version**, the installer gathers all of the settings and data from the earlier release of HP Web Jetadmin and stores them in an encrypted file that is readable by the HP Web Jetadmin 10.0 release. Then, once HP Web Jetadmin 10.0 installation is initially launched on this HP Web Jetadmin 10.0 server, the settings and data are automatically imported. Device groups, devices, and other details will appear within the HP Web Jetadmin 10.0 client soon after the initial launch. The older HP Web Jetadmin service is stopped, the local service “HP Web Jetadmin” is switched from AUTOMATIC to MANUAL, and the older HP Web Jetadmin directories and files are left intact.


If you do not select: **Collect Settings from my previous version**, the HP Web Jetadmin 10.0 installer is launched. Installation proceeds without migrating settings and data from the previous versions of HP Web Jetadmin into the new HP Web Jetadmin 10.0 instance on this same server. The older HP Web Jetadmin service is stopped, the local service “HP Web Jetadmin” is switched from AUTOMATIC to MANUAL, and the older HP Web Jetadmin directories and files are left intact.

Migrating to HP Web Jetadmin 10.0

It is possible to upgrade from earlier releases of HP Web Jetadmin software by installing HP Web Jetadmin 10.0 on a host that has an earlier version of HP Web Jetadmin installed. It is also possible to migrate settings collected from an earlier release of HP Web Jetadmin. This is done by using a utility called **Migration Tool** that is available at http://www.hp.com/go/webjetadmin_software.

HP Web Jetadmin 10.0 supports upgrade and migration from these earlier releases of software:

- HP Web Jetadmin 7.8
- HP Web Jetadmin 8.0
- HP Web Jetadmin 8.1


 **NOTE:** Limited settings will be transferred through an upgrade or migration ([Migrated Settings on page 9](#)).

Data and settings migration from an older off-host installation of HP Web Jetadmin 7.8, 8.0, or 8.1 to a new HP Web Jetadmin 10.0 installation are possible by first using **Migration Tool**. **Migration Tool** is an executable that is run on the system hosting the older version of HP Web Jetadmin and creates a migration bundle file that is used at the new HP Web Jetadmin 10.0 installation. **Migration Tool** (`hpwja_MigrateCollectSettings.exe`) can be downloaded from the HP Web Jetadmin Download Drivers and Software page at http://www.hp.com/go/webjetadmin_software.


Steps for Collecting Settings and Data to Migrate


Here are the steps for collecting settings and data from the remote host where the older version HP Web Jetadmin resides:

1. Obtain the **Migration Tool** (`hpwja_MigrateCollectSettings.exe`) from http://www.hp.com/go/webjetadmin_software.
2. Save `hpwja_MigrateCollectSettings.exe` in any empty directory to the hard drive for the system hosting HP Web Jetadmin (version 7.8, 8.0, or 8.1).

 **NOTE:** The **Migration Tool** will display a timeout failure if HP Web Jetadmin or the Report Generation Plug-in is currently performing a data collection on devices. If this occurs, run the **Migration Tool** only when there is no collection activity. Asset Utilization - Data Collection Schedules within the Report Generation Plug-in can be used to determine if any data collections are currently running and also to determine existing data collection schedules.

3. Run `hpwja_MigrateCollectSettings.exe`. The wizard starts and provides a summary. Click **Next**.
4. You are asked if the HP Web Jetadmin 10.0 service should be re-started. Select or deselect **Restart**. Choose **Next**.

 **NOTE:** The executable `hpwja_MigrateCollectSettings.exe` stops the service during the migration and will not restart the service unless you answer **yes**.

 **WARNING!** Be sure the HP Web Jetadmin 7.8, 8.0, or 8.1 host is not currently providing support for critical processes. Alerts, Reporting and other HP Web Jetadmin features will be interrupted by running **Migration Tool**.

5. You are asked to supply a Bundle Password. This password protects sensitive data that may be a part of the migration bundle file. Knowledge of this password is required when using the bundle file in the HP Web Jetadmin 10.0 installation. Type the password and click **Next**.
6. The migration starts and displays progress.
7. When the migration is completed, the location of the migration file (`SettingsBundle.cab`) is displayed. This should be the same location as where the executable (`hpwja_MigrateCollectSettings.exe`) was launched.

The bundle migrations file (`SettingsBundle.cab`) will contain most of HP Web Jetadmin settings and all of the device addresses as well as the MS Access (`.mdb`) file if Access was used with Report Generation Plug-in. Once the bundle file is collected and moved to the correct directory on the new HP Web Jetadmin 10.0 installation host, you are ready to begin the installation. To complete this portion of the migration, see the instructions at [Installing HP Web Jetadmin 10.0 Using a Migration Bundle File on page 12](#).

Migrated Settings

The following settings are migrated:


- Alerts
 - Alerts settings
 - Custom email templates
 - HP Web Jetadmin current subscriptions
- Credentials
 - Device SNMPv1 Authentication
 - Device SNMPv3 Authentication
 - Device File System Password
 - Device EWS Username and Password
- Device Cache Export
 - Created export schedules
 - All Export parameters
- Device Configuration
 - Custom Field Columns
 - Retry Count
 - Retry Interval
- Devices
 - Devices present in PDS cache are migrated over if the device is connected to the network and “discoverable”

- Discovery
 - Discovery Schedules
 - Multicast Routers To Cross
 - Background Discovery
 - Discovery SNMPv3
 - Hosts File
 - Discovery Method
 - Manual Discovery Settings
- Filters
 - Filters that do not contain wildcards
- Groups
 - Groups with or without subgroups
 - Auto Groups (Group bound with filter)
- RGP
 - Current data collections
 - Scheduled Reports
 - Historical Data
- Views
 - Device List views

Migrating Reports Generation Plug-in Data: Preparing an HP Web Jetadmin 10 Install Host to Connect to an SQL Server


Read and follow this section when the **SettingsBundle.cab** file was taken from an HP Web Jetadmin 7.8/8.x host where the Reports Generation Plug-in was connected to MySQL or SQL Server. The Reports Generation Plug-in data will not transfer unless these steps are followed.

SQL Server

 **NOTE:** It is helpful to have the HP Web Jetadmin **Reports Generation Plug-in Data Connector Settings** screen available when configuring these settings.

1. On the host where HP Web Jetadmin 10.0 is to be installed, open **Control Panel > Administrative Tools**.
2. Open **Data Sources (ODBC)**.
3. Under the **System DSN** tab, select **Add**.
4. Within the **Create New Data Source** wizard, select **SQL Server**. Then select **Finish**.

5. Provide a name and a description and select the correct server name or IP address on which the Reports Generation Plug-in data resides. Then select **Next**.
6. At the screen labeled **How should SQL Server verify the authenticity of the login ID?**, select **With SQL Server authentication using a login ID and password enter by the user**. Uncheck the box for **Connect to SQL Server to obtain default settings for the additional configuration options**. Then select **Next**.
7. Check the box for **Change the default database to:** and add the name of the Reports Generation Plug-in database on SQL. Leave the rest of the options at default. Select **Next**.

 **NOTE:** For HPWebJetadminDB, be sure to match the name displayed in **Reports Generation Plug-in Database Connector** settings.

8. Leave everything unchecked with the exception of **Perform translating for character data**. Select **Finish**.

You are now ready to begin the migration (see [Installing HP Web Jetadmin 10.0 Using a Migration Bundle File on page 12](#)).


MySQL

The setup procedure is similar to the steps required to originally install RGP on HP Web Jetadmin 8.x. In HP Web Jetadmin 8.x, you installed the `MyODBC Connector v3.51` ODBC drivers from <http://dev.mysql.com/downloads/connector/odbc/3.51.html>. When configuring RGP to use MySQL, RGP asks for some basic information. With this information, RGP in HP Web Jetadmin 8.x configures a **System DSN** profile in the `MyODBC` drivers.

In the upgrade case where you will be installing HP Web Jetadmin 10.0 over HP Web Jetadmin WJA 8.x, and you are using MySQL with RGP, the `MyODBC` drivers will have already been installed. The RGP migration component will attempt to connect to the MySQL database via the DSN profile. In a migration case, you will need to install the **MyODBC Connector v3.51** drivers, and set up a **System DSN** profile manually.

1. Install the `MyODBC Connector v3.51` drivers from <http://dev.mysql.com/downloads/connector/odbc/3.51.html>, using the Windows MSI Installer version. Choose all default options during installation.
2. Navigate to **Control Panel > Administrator Tools > Data Sources (ODBC)**.
3. Open **Data Sources (ODBC)**.
4. Under the **System DSN** tab choose, **Add**.
5. Scroll down to select the **MySQL ODBC 3.51 Driver** option. Then select **Finish**. A new window should pop up with several empty fields; this is where we set up the **System DSN** profile:
 - **Data Source Name:** enter `WJADB`.
 - **Description:** leave it empty.

- **Server:** enter the server hostname or IP address of where the MySQL server is that contains the RGP database tables.
 - **User:** enter the user name that was used when initially configuring RGP in WJA 8.x. (In MySQL this may be 'root', etc.) For the "Password" field, enter the password that was used when initially configuring RGP in HP Web Jetadmin 8.x.
6. When you have entered the correct information, click on the **Database** pull-down menu. The default name for this table is **HPWebJetadminDB**. Select the proper table and click **OK**. The **System DSN** profile is now configured.


 **NOTE:** If no items (database tables) are listed, check your settings and try again. The database table that you created in HP Web Jetadmin 8.x should be present in the pull-down menu.

Once the **System DSN** profile is configured, you can place the **Migration Settings Bundle** in the folder **Documents and Settings\All Users\Application Data\Hewlett-Packard\HPWebJetadmin\config**, and then begin the installation of HP Web Jetadmin 10.0 (see [Installing HP Web Jetadmin 10.0 Using a Migration Bundle File on page 12.](#))


Installing HP Web Jetadmin 10.0 Using a Migration Bundle File

For an installation using a migration bundle file, the file (`SettingsBundle.cab`) is required and would have been created under the steps outlined in [Steps for Collecting Settings and Data to Migrate on page 8](#). If the file was not created, go back to that section and review the instructions for using **Migration Tool**.

To migrate using a migration bundle file, follow these steps:


 **NOTE:** In some cases, the migration can last as long as several hours. For example, if there are large amounts of the Report Generation Plug-in (RGP) data, the migration could take longer. This is also true for installations that contain several thousand devices.

1. Place the file `SettingsBundle.cab` in the same directory where you have placed the HP Web Jetadmin 10.0 installer (`wjasetup.exe`). This file will be copied to the local directory `DRIVE:\Documents and Settings\All Users\Application Data\Hewlett-Packard\HPWebJetadmin\config\SettingsBundle.cab` where `DRIVE` indicates the location of the user documents and settings directories. The file will not be removed as part of the install-migration; the user may remove this file if they choose to do so.
2. Start the installation of HP Web Jetadmin 10.0 by launching `wjasetup.exe`. Follow all installer steps. Bundled data and settings contained in the `SettingsBundle.cab` will not be imported during the installation. Instead, bundle data and settings are imported on first-run of the HP Web Jetadmin 10.0 client when the `SettingsBundle.cab` file is present.
3. After the installer is finished, launch the HP Web Jetadmin 10.0 client. Once the client has started, a **Migrate Web Jetadmin Settings** pop-up window is displayed. This pop-up requests that you provide the password and also enable the options for Alerts or Reports data and settings.

 **NOTE:** Selecting Cancel within this pop-up will cause the Migration process to stop. Migration is a one-time process; by selecting **Cancel**, you are agreeing that HP Web Jetadmin 10.0 should never again attempt migration. If **Cancel** is selected and if Migration is desired at a future time, you must un-install HP Web Jetadmin 10.0 and then reinstall it with the `SettingsBundle.cab` file correctly placed (see Step 1. in this section).


NOTE: The migration screen is offered only one time for each HP Web Jetadmin 10.0 installation where a `SettingsBundle.cab` file is detected during a client launch. The option to select Alerts, Reports data, or Alerts and Reports data is only offered one time; you will not receive the option to go back through the **Migration Tool** and select different options. If you complete the migration process and would like to change your selection for migration options, you need to uninstall HP Web Jetadmin 10.0, reinstall a new copy of HP Web Jetadmin 10.0, then proceed with a new migration.


4. Provide the password requested by the client (this was supplied in step 6 ([Steps for Collecting Settings and Data to Migrate on page 8](#))).
 - The checkbox next to **Migrate Alerts Subscriptions** will cause the migration to establish Alerts subscriptions in the HP Web Jetadmin 10.0 installation based on Alerts subscriptions that were established on the older HP Web Jetadmin installation. It will also cause HP Web Jetadmin 10.0 to modify traps destination tables on devices that have these Alerts subscriptions established. The trap destination table entry for the older HP Web Jetadmin will be removed.

 **NOTE:** The checkbox next to Migrate Alerts Settings should only be checked if you understand and agree that Alerts on the older HP Web Jetadmin host will be decommissioned as a requirement to migrate alerts subscriptions to the new HP Web Jetadmin 10.0 server.

 - The checkbox next to **Migrate Report Data** will cause the migration to import all historic data from the Report Generation Plug-in source that was in use on the older HP Web Jetadmin installation. In the case where Microsoft Access was in use on the older installation, an MDB file will be extracted from the migration bundle file and then imported into the HP Web Jetadmin 10.0, SQL 2005 Server Express database.


In the case where the source was either Microsoft SQL Server, Microsoft SQL Server 2005, MySQL or Microsoft SQL Server Desktop Engine (MSDE), the migration will use Report Generation Plug-in database connection settings that were gathered by the **Migration Tool**. These connection settings will be used by HP Web Jetadmin 10.0 migration for the purpose of connecting to the database and gathering all the historic reports data. This reports data is then imported into the HP Web Jetadmin 10.0, SQL 2005 Server Express database. Connection to the remote database will require that the user running the HP Web Jetadmin 10.0 installation is logged onto the network/domain in such a way that facilitates authentication between HP Web Jetadmin 10.0 and the system hosting the database. The data and/or collections settings for Report Generation Plug-in will not be interrupted by this process. Once the Migrate reports data and Migrate alerts subscription choices are complete, click **Next**.

 - 5. A settings confirmation screen will appear; choose **Migrate** if you agree to proceed. Settings will start to be migrated and progress will be displayed. During the migration process, the HP Web Jetadmin 10.0 server will perform a specified address Discovery for all devices brought forward during the migration process; this step ensure the new server is storing the most current information about the managed devices. The duration to run this discovery will be one variable that may increase the time to complete the HP Web Jetadmin migration process. Discovery progress will display separately while the discovery portion of migration takes place.
-
-  **NOTE:** Settings and data import will vary depending on the migration bundle file and whether the user chose Migrate reports data and/or Migrate alerts subscriptions.
6. When the migration is complete, use the **Details** button to review Migration Results.

 **NOTE:** During the Migration device Discovery process, one or more devices in a "communication error" state may have been detected. These devices are added to HP Web Jetadmin 10.0 based on their presence in the HP Web Jetadmin 7.8/8.x cache. These devices are added to the HP Web Jetadmin 10.0 discovery to cover a case where HP Web Jetadmin 7.8/8.x Report Generation Plugin data is present and where this data should be retained. The devices can be found easily in the **Error Devices** listing found beneath the **All Devices** listing in the HP Web Jetadmin 10.0 navigation tree. As these devices come back online, the HP Web Jetadmin poller will add column data to lists and the devices will be removed from the **Error Devices** list. A device found in this list can be quickly refreshed by using a right-click menu item named **Refresh Selection (Full)**. If device communication occurs, the "communication error" is lifted.

7. Click **Done**.

Post-Installation Actions

 **NOTE:** The HP Web Jetadmin 10.0 server will start automatically as a Microsoft Service. The HP Web Jetadmin 10.0 server cannot accept HP Web Jetadmin client connections until the HP Web Jetadmin server has fully loaded all services into memory. Dependent upon your HP Web Jetadmin server available system resources, it may take 1-2 minutes for all services to completely load after initial server installation or server reboot.


The first time you launch HP Web Jetadmin 10.0 after installation, a pop-up dialog is displayed stating that no devices have been discovered. You can opt to launch discovery settings at this point.

Once the installation is complete, HP Web Jetadmin 10.0 can be launched from a supported browser by entering the hostname or IP address of the computer on which it is installed, followed by the port number and path. Typical default port numbers for Web services have a value of 80. Since HP Web Jetadmin 10.0 may be running simultaneously with another Web service on the same computer, HP Web Jetadmin 10.0 uses a port number of 8000. If desired, the port value may be altered.

Here is an example of the URL used to activate HP Web Jetadmin 10.0 on a supported Windows desktop: `http://myhost:8000`. In most cases, the browser will auto-launch the Smart Client file download and on first-run will present a **Run** dialogue ([Smart Client Deployment on page 16](#)). Choose the **Run** button to activate the .NET Smart Client application loader. A short time will elapse while Smart Client installs the application to your desktop system. In some cases, you might have to click **Click Here** in the browser window before the download process is started.

Restarting the HP Web Jetadmin Service

It may be necessary to stop and restart the HP Web Jetadmin 10.0 service. An example of this would be when a network is switched from hard-wired to wireless. Once the network is switched, HP Web Jetadmin 10.0 must be restarted in order for the application to realize the change.

 **WARNING!** Restarting HP Web Jetadmin 10.0 services may interrupt background tasks and user sessions. Always check the application before restarting.

To script the stop of all HP Web Jetadmin 10.0 services, use these command strings in this order:

- Net stop HPWJAUpdateService
- Net stop HPWJAService
- Net stop mssql\$HPWJA

To script the start of all HP Web Jetadmin 10.0 services, use these command strings in this order:

- Net start mssql\$HPWJA
- Net start HPWJAService
- Net start HPWJAUpdateService

You can revert back to an older version of HP Web Jetadmin (versions 7.8 or 8.x) from an upgrade if needed. Follow these steps:

1. Uninstall HP Web Jetadmin 10.0.
2. Use Windows Service Manager to set the older HP Web Jetadmin service (listed as **HP Web Jetadmin** in the Services MMC) to **activate** and to also start the service.

Smart Client Deployment

HP Web Jetadmin 10.0 uses the Microsoft ClickOnce Smart Client technology to provide you with the best application experience possible. This technology runs a .NET application by automatically downloading and launching it through your web browser. The Smart Client runs as a local .NET application on your computing host and communicates with the HP Web Jetadmin 10.0 service via .NET Remoting. Once the Smart Client application is started, the browser is no longer needed. HP Web Jetadmin 10.0 also uses the browser for online help and proactive Product Update notification but, essentially, the client application runs locally on your computer (like many other applications). With this, the URL form `http://hostname:8000` can be used to access HP Web Jetadmin 10.0 remotely from anywhere on your intranet and/or WAN.

 **NOTE:** When the HP Web Jetadmin 10.0 installer builds the shortcut on the install host (DRIVE: \Documents and Settings\All Users\Start Menu\Programs\HP Web Jetadmin 10\), it uses the default port number 8000 in the item URL. You can modify this if the port number of the HP Web Jetadmin URL is altered. Simply change the URL `http://localhost:8000` to `http://localhost:xxxx` where xxxx is the value of the new port number being used.

NOTE: Modification of the HTTP port used to launch the HP Web Jetadmin Smart Client is possible through a configuration file change. The default port numbers are 8000 for HTTP and 8443 for HTTPS. Port numbering is changed through a configuration file found on the HP Web Jetadmin directory:

```
DRIVE:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard\HPWebJetadmin\config\
```

```
File: HP.Imaging.Wjp.Core.WebServer.config.xml
```

NOTE: Either of the entries for `HttpsPort` or `HttpPort` can be altered. Here is an example of the entries:


```
<property name="HttpsPort">
<type> HP.Imaging.Wjp.Core.Framework.ConfigurationItemString </type>
<value> 8443 </value>
</property>
<property name="HttpPort">
<type>HP.Imaging.Wjp.Core.Framework.ConfigurationItemString </type>
<value> 8000 </value>
</property>
```

All that is needed to start the Smart Client session is a browser. Administrator rights are not required to run Smart Client applications but .NET 2.0 is required to be installed; local administrator rights might be required prior to the installation.

Some characteristics about Smart Client are:


- The HP Web Jetadmin 10.0 server is initially contacted through `http/https`.
- The server transfers about 2 MB of Smart Client application to the client where it is saved to disk and runs as the user logged onto the computer. (In Internet Explorer, **Run As** can be used to run Smart Client and the HP Web Jetadmin 10.0 client application as an alternate user.)

- The Smart Client application, running on the client, executes commands to download the HP Web Jetadmin 10.0 client files (about 50 MB) and starts `UIExec.exe` (browser is now inactive).
- `UIExec.exe` runs and opens the graphical user interface (the HP Web Jetadmin 10.0 client application).
- The server downloads all relevant information to the client and then periodically pings the client when new information exists for retrieval.

 **NOTE:** HP Web Jetadmin 10.0 will launch by authenticating the user who is logged onto the system where the browser was launched. In cases where an alternate user (one who is not logged onto the browser desktop) requires access to HP Web Jetadmin 10.0 the Windows **Run As** prompt can be invoked. Open **Start > Programs** and right-click on the Internet Explorer icon. Choose **Run As**; a dialogue box is opened and prompts for alternate users. See the Microsoft Windows documentation for details about using **Run As**.

NOTE: In most cases, the Smart Client will auto-launch; in some cases local security settings on the workstation may prevent the application from auto-launching. Use the **Start HP Web Jetadmin** button to manually launch the Smart Client or refer to Microsoft documentation to adjust local security settings.

To run the Smart Client in a workgroup on Microsoft Windows XP, you need to adjust the Microsoft security settings:

 **NOTE:** Consult Microsoft documentation to learn more about security policy settings.

1. Access the **Control Panel**.
2. Open **Local Security Policy MMC > Local Security Policy MMC**.
3. Navigate to **Local Security Settings > Local Policies > Security Options**.
4. Locate the item **Network access: Sharing and security model for local accounts**.
5. Change the setting to **Classic local users authenticate as themselves**.


To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Steps for Using Smart Client

If you are using Windows 2K3 as a client, it is recommended that you add the URL of the HP Web Jetadmin 10.0 server as a Trusted Site.

Once the HP Web Jetadmin 10.0 installation is complete, a Smart Client session can be started in one of two ways:

1. Look in the **Start > Programs** group on the computing host where HP Web Jetadmin 10.0 was installed. A program group named HP Web Jetadmin 10.0 should have been created and should contain a shortcut to HP Web Jetadmin 10.0 software. This launches a browser session that starts a Smart Client session with HP Web Jetadmin 10.0.
2. Browse to the following URL at the computing host: `http://localhost:8000`. This also launches a browser session that starts a Smart Client session.

 **NOTE:** In some cases (for example, Windows 2003 server), the URL of HP Web Jetadmin 10.0 might have to be added to browser trusted security zones.

Default Settings

Table 1-2 Default Settings for HP Web Jetadmin 10.0

Configuration Item	Value	Where to change it
SNMPv1 Timeout Value	500ms	Tools > Options > Application Management > Network > SNMP
SNMPv3 Timeout Value	1000ms	Tools > Options > Application Management > Network > SNMP
SNMP Retries	3	Tools > Options > Application Management > Network > SNMP
Application Log 'Save log entries' time	30 days	Tools > Options > Application Management > Application Log
SLP Multicast routers to cross	4	Device Discovery Wizard (must change each time)
Configuration Retries	0	Tools > Options > Device Management > Configuration > General
Hours between configuration retries	8	Tools > Options > Device Management > Configuration > General
Alerts Polling Rate: Maximum communication interval	24 hours	Tools > Options > Device Management > Alerts > General
Device list polling rates: polling interval	2 seconds	Tools > Options > Device Management > Device Lists > Device List Polling Rates
Device list polling rates: Maximum devices to poll at one time	2	Tools > Options > Device Management > Device Lists > Device List Polling Rates
Status polling rate: Poll interval	5 seconds	Tools > Options > Device Management > Status > Single Device View
		Tools > Options > Device Management > Status > Multi Device View
Status polling rate: Time between polling intervals	Single: 5 seconds	Tools > Options > Device Management > Status > Single Device View
	Multiple: 10 seconds	Tools > Options > Device Management > Status > Multi Device View
Status polling rate: Maximum devices to poll at one time	Single: 2 devices	Tools > Options > Device Management > Status > Single Device View
	Multiple: 3 devices	Tools > Options > Device Management > Status > Multi Device View
HTTP timeout	6 seconds	Tools > Options > Device Management > Network > HTTP

Table 1-2 Default Settings for HP Web Jetadmin 10.0 (continued)

Configuration Item	Value	Where to change it
Discovery history retention	90 days	Tools > Options > Device Management > Discovery > General
Firmware upgrade – maximum concurrent upgrades	8	Tools > Options > Device Management > Firmware > Firmware Upgrade Options
Firmware upgrade – retries	0	Tools > Options > Device Management > Firmware > Firmware Upgrade Options
Device filters – time period for device to remain “New”	14 days	Tools > Options > Device Management > Device Filters
Configuration history retention	30 days	Tools > Options > Device Management > Configuration > General
Reports data retention	1 year	Tools > Options > Device Management > Reports > Data Retention
Supply low threshold	25%	Tools > Options > Device Management > Supplies > General
Alerts history retention	30 days	Tools > Options > Device Management > Alerts > General
Critical alerts polling interval	5 minutes	Tools > Options > Device Management > Alerts > General

Recommended Configuration Settings for HP Web Jetadmin 10.0

Once HP Web Jetadmin 10.0 is installed, it is ready to run. Some of the initial steps you must take to begin managing devices and the print environment are: application settings, discovery and various features setup. Here are a few simple ideas around deploying HP Web Jetadmin 10.0 once an installation has been completed. It may be necessary to use online help for HP Web Jetadmin 10.0 or other documentation.

Application settings are options like email, SNMP, server, or HTTP. These are found in **Tools > Options** from the HP Web Jetadmin 10.0 toolbar and then navigating the **Application Management** category.

HP Web Jetadmin 10.0 is used to find devices on your networks. It may be as simple as enabling HP Web Jetadmin 10.0 to simply listen for devices on the network passively or it may involve your working with an IT team to map out your entire IP network. Once this network map is known, IP segments can be entered into HP Web Jetadmin 10.0 IP Range discovery and a complete inventory of network connected devices can be completed. PC-connected device discovery is also possible from within HP Web Jetadmin 10.0. Many of the same settings and techniques can be used to perform this type of discovery which can lead to an inventory of locally connected devices. HP Web Jetadmin 10.0 online help or other documentation should be consulted prior to planning and implementing HP Web Jetadmin 10.0 device discovery.

Feature setups such as Roles (or permissions), Users, Alerts (for devices, and Device Groups, all need to be configured prior to the initial HP Web Jetadmin 10.0 implementation. Many of these features were described in previous sections here and are discussed in more detail within the online help for HP Web Jetadmin 10.0 and other documentation prior to configuration.

Uninstalling HP Web Jetadmin 10.0

Uninstalling HP Web Jetadmin 10.0 from a computing host is quite simple. Removing HP Web Jetadmin 10.0 software also removes the Microsoft SQL Express 2005 instance of HP Web Jetadmin 10.0 database. Restoring the database is possible provided you have run the correct backup procedures and have store the files securely.

Steps to Uninstall HP Web Jetadmin 10.0


To uninstall HP Web Jetadmin 10.0, follow these steps:

1. In your Control Panel, go to **Add or Remove Programs**.
2. Select HP Web Jetadmin 10.0 and click **Remove**.
3. Follow the instructions as each page is displayed.
4. When the uninstall is complete, click **Close**.
5. If desired, look at the log file created in the Document and Settings folder when `wjaSetup.exe` runs (for example, `C:\Documents and Settings\{username}\Local Settings\Temp\hp\wja\Uninstaller\Uninstaller.log`).

Steps to Uninstall HP Web Jetadmin 10.0 in Silent Mode

To safely remove HP Web Jetadmin 10.0 in silent mode, follow these steps:

1. To get the Uninstaller, access `C:\Program Files\Hewlett-Packard\Web Jetadmin 10\Uninstaller\Uninstaller.exe`.

 **NOTE:** `C:\Program Files` is the default location, but on any user system this could be a different drive and/or folder.

2. Use the `-x` option to extract a properties file (`Uninstaller.exe -x=properties.xml`).
3. After manually editing the properties file, use the `-v` option to validate a properties file (`Uninstaller.exe -v=properties.xml`).
4. Use the `-s` option to run the Uninstaller in silent mode using the given `properties.xml` file (`Uninstaller.exe -s=properties.xml`).

Backing Up and Restoring HP Web Jetadmin 10.0

- [Script Files](#)
- [Backing Up HP Web Jetadmin 10.0 Settings and Database](#)
- [Restoring HP Web Jetadmin 10.0 Settings and Database](#)
- [Other Details and Notes for Backing Up and Restoring HP Web Jetadmin 10.0](#)

Regular backups of HP Web Jetadmin 10.0 software are recommended to mitigate the risks of host and/or application failure. Prior to using this information in a production environment, scripts and other backup/restore details should first be tested in a non-production environment by the customer or designated HP Web Jetadmin 10.0 administrator.

Script Files

The script examples for backup and restore of HP Web Jetadmin 10.0 can be found in the HP Web Jetadmin 10.0 install directory (WJABackupRestore). These files are:

- **backup.bat**
- **osql_backup.sql**
- **osql_restore.sql**
- **restore.bat**
- **WJABackupRestoreInstructions.txt**

After you have located the files, copy them to another directory outside of the HP Web Jetadmin 10.0 install directory where you will create backup scripts.

Backing Up HP Web Jetadmin 10.0 Settings and Database

- [Steps for Backing Up HP Web Jetadmin 10.0 Settings and Database](#)

These items are required for backup:

- script files supplied by HP.
- HP Web Jetadmin 10.0 running on a supported host.
- administrative access to this host.

Steps for Backing Up HP Web Jetadmin 10.0 Settings and Database

To backup HP Web Jetadmin 10.0, follow these steps:

1. Copy the backup/restore files onto the host where HP Web Jetadmin 10.0 is installed. These files should all reside in the same directory located on a local drive outside of the HP Web Jetadmin 10.0 directory (for example, `c:\BRWJA`).
2. Choose **Start > Run** and type `cmd`. Then click **OK**. A command window is displayed.
3. In the command window, change the directory to the path where the backup/restore files exist.

4. At the prompt, type `backup.bat`. The HP Web Jetadmin 10.0 service will automatically stop and the backup process will begin.

5. The following disclaimer is displayed:

This batch file is for illustrative purposes only. If used in a production environment, this batch file should first be tested in a non-production environment by the customer or designated HP Web Jetadmin administrator in order to determine its effectiveness. Type `Ctrl+C` to quit. Press any other key to continue.

6. Wait until the process is finished. The HP Web Jetadmin 10.0 service will automatically start.

7. Files have now been created as a file-set and exist in the same directory with the backup/restore scripts.

The file-set should contain a file named “HPWJA_DB_BACKUP.dat”, a file name “osql_backup.log”, and a directory named “Settings” that contains several other files.

The file-set should be moved or stored elsewhere for safekeeping.

It might be important to record the state of HP Web Jetadmin 10.0 plug-ins. This can be done through the **Application Management > Product Update > Installed Packages**. All plug-in and version information should be recorded. This may be needed when restoring the application.

Restoring HP Web Jetadmin 10.0 Settings and Database

These items are required for restoring settings and data:

- file-set (including backup/restore scripts supplied by HP) from previously performed backup procedure (“HPWJA_DB_BACKUP.dat”, “osql_backup.log”, and a directory named “Settings” that contains several other files).
- HP Web Jetadmin 10.0 running on a supported host and in the same state as was recorded in the backup procedure.
- administrative access to this host.

⚠ WARNING! Restoring database and settings to HP Web Jetadmin 10.0 will cause any existing data to be lost.


One of three restoration scenarios is possible:

1. HP Web Jetadmin 10.0 installed on the same host and same instance of Windows (supported) from which the backup data was taken.
2. HP Web Jetadmin 10.0 installed on the same host that has a new instance of Windows (supported), which is different from the instance of Windows where the backup data was taken.
3. HP Web Jetadmin 10.0 installed on a different host, not the host from which the backup data was taken.

Steps for Restoring HP Web Jetadmin 10.0 Settings and Database

To restore HP Web Jetadmin 10.0, follow these steps:

1. Copy the existing backup/restore file-set to a folder or drive local to the host where HP Web Jetadmin 10.0 is installed.
2. Choose **Start > Run** and type `cmd`. Then click **OK**. A command window is displayed.


 **NOTE:** Windows Vista requires that any script requiring administrative access and run from Command Prompt must be executed using `run as administrator`. Since a backup and restore script starts and stops the HP Web Jetadmin 10.0 service, administrative access is required. To launch a Command Prompt window in this way, click **Start > Programs** and then right-click **Command Prompt** and select **Run as administrator** from the right-click menu. When the Command Prompt launches, the window title bar should read **Administrator Command Prompt**.

3. In the command window, change the directory to the path where the backup/restore files exist.
4. At the prompt, type `restore.bat` and press `Enter`.

If using the script provided, the following disclaimer is displayed:

This batch file is for illustrative purposes only. If used in a production environment, this batch file should first be tested in a non-production environment by the customer or designated HP Web Jetadmin administrator in order to determine its effectiveness. Type `Ctrl+C` to quit. Press any other key to continue.

5. The HP Web Jetadmin 10.0 service will automatically stop and the restore process will begin.
6. Wait until the process is finished. The HP Web Jetadmin 10.0 service will automatically start.


 **NOTE:** Text in the command window should report that a number of files were copied and that an `osql_restore.log` file is available for viewing. No errors should be present.

7. Open HP Web Jetadmin 10.0 and verify that settings and data were restored.

Other Details and Notes for Backing Up and Restoring HP Web Jetadmin 10.0


Settings and data covered by backup/restore processes include:

- all current devices and device attributes.
- all collected device metrics.
- all stored reports and data export settings and archives.
- all device credentials.

 **NOTE:** When restoring settings and database information to the HP Web Jetadmin 10.0 host, encrypted data will no longer function if the host or Windows OS instance is different from that which was used to process the original file-set. In these cases, the encrypted data can be restored manually through the HP Web Jetadmin 10.0 user interface ([Backing Up and Restoring HP Web Jetadmin 10.0 on page 22](#)). A few examples of encrypted data include device passwords, SMTP user/password settings, HTTP proxy user/password settings, and more.

- all stored device configuration.

- all Alerts settings including notification and supplies management details.
- all HP Web Jetadmin 10.0 Groups details and settings.
- all application history details.
- all application settings including templates, schedules, filters and views that were saved previously by users.
- all application security settings including user roles and stored credentials.

 **NOTE:** When restoring settings and database information to the HP Web Jetadmin 10.0 host, encrypted data will no longer function if the host or Windows OS instance is different from that which was used to process the original file-set. In these cases, the encrypted data can be restored manually through the HP Web Jetadmin 10.0 user interface ([Backing Up and Restoring HP Web Jetadmin 10.0 on page 22](#)). A few examples of encrypted data include device passwords, SMTP user/password settings, HTTP proxy user/password settings, and more.

The following settings and data are not covered by backup/restore processes:

- HP Web Jetadmin 10.0 client stored settings.
- HP Web Jetadmin 10.0 base installation.
- plug-ins and patch base installation (includes language support plug-ins).

2 User Guide for HP Web Jetadmin 10.0

Printing the User Guide

To access the HP Web Jetadmin 10.0 user guide, click [hpwja_userguide.pdf](#).

If you do not have the free Adobe® Reader® installed on your system, click <http://www.adobe.com/products/acrobat/readstep2.html>.

3 Introduction to HP Web Jetadmin 10.0

- [Product Support](#)
- [Differences Between HP Web Jetadmin Versions 8.x and 10](#)
- [Getting Around in HP Web Jetadmin 10.0](#)
- [The HP Web Jetadmin 10.0 Server](#)
- [The HP Web Jetadmin 10.0 Client](#)

HP Web Jetadmin 10.0 increases business productivity by helping you manage supplies, proactively address potential printing problems, automatically configure peripheral drivers, and update firmware. HP Web Jetadmin 10.0 provides all of the peripheral management capabilities you need in one easy-to-use Web browser interface. It is a free utility that you can download from <http://www.hp.com/go/webjetadmin>.

Product Support


This section contains information about getting online help and product support.

Online Help

The HP Web Jetadmin 10.0 help system includes detailed information to assist you in configuring and managing your devices on a network.

The Help feature includes the following:

- **Help folder:** the tree-structured Help folder contains conceptual information about HP Web Jetadmin 10.0 features and may be accessed from anywhere within HP Web Jetadmin 10.0. Expand the Help folder to access the Table of Contents and the HP Web Jetadmin 10.0 folder, which provides access to the Index, Installation and Setup Guide, and License.
- **Context help:** each page in HP Web Jetadmin 10.0 features a help icon (?) on the content toolbar. When you click the help icon, HP Web Jetadmin 10.0 displays context help for that page. Context help provides only the information you need for the displayed page or option.

 **NOTE:** In order to use external links, your browser must have access to the public internet. If you are behind an internet firewall, you may need to configure proxy servers. Consult with your network administrator to determine the appropriate settings for your browser.

- HP Web Jetadmin 10.0 Reviewer/Evaluator's Guide provides enough information for a successful evaluation and also provides a list of what capabilities to consider when implementing a fleet management software tool.

Direct Links to Support

Hewlett-Packard maintains an extensive Web presence to provide information and assistance. To obtain technical support for HP Web Jetadmin 10.0, go to <http://www.hp.com/go/webjetadmin> and click the link to Technical Support. For phone support, available Monday through Friday, 6:00 am to 6:00 pm, Mountain Standard Time, call 1-800-HPINVENT (1-800-474-6836).

Differences Between HP Web Jetadmin Versions 8.x and 10

HP Web Jetadmin 10.0 has many significant improvements compared to HP Web Jetadmin 8.x. In addition, some features have been discontinued.

- New or improved capabilities in HP Web Jetadmin 10.0:
 - Smart Client for easy access.
 - New built-in device view layouts include Active Directory, Asset, Detailed, Jetdirect, Security, Status, and Warranty.
 - New application views include **Device Management**, **Print Management**, and **Application Management**.
 - New device pruning and filtering capabilities.
 - Additional profiles management capabilities, including the ability to configure and save default view to be associated with a user or group.
 - Policy-based auto group functionality.
 - Additional feedback on background tasks.
 - Additional batch configuration capabilities for authentication methods.
 - Export data cache by subgroup inheritance.
 - PC Discovery integration into more HP Web Jetadmin tasks.
 - IP Range shared between PC Discovery and Networked Devices.
 - Additional discovery analysis tools.
 - Native RGP and supplies integration.
 - Increased consumables alert reliability.
 - Ad-hoc consumables shopping list creation based upon needed supplies.
 - Device communication failure proactive alerting.
 - Improved print path management and queue creation including support for UPD.
 - Consolidation into one SQL Express database.
- HP Web Jetadmin 8.x plug-ins that are now core capabilities of HP Web Jetadmin 10.0:
 - PC Printer Discovery Plug-in.
 - Report Generation Plug-in.
 - HP Driver Preconfiguration Plug-in.
 - Authentication Manager Plug-in.
 - Device Storage Manager Plug-in.

- HP Web Jetadmin 10.0 does not have the following capabilities that are currently in HP Web Jetadmin 8.x:
 - Mapping capabilities.
 - Data Storage Manager's downloadable fonts and macros capability.
 - Cancel print job.
 - Exportable log files.
 - MegaTrack In Printer Agent and MegaTrack In Printer Agent PIN plug-in.
 - HP Proactive Support plug-in.
 - Advanced support for HP CM8060 MFP with Edgeline Technology.
- Capabilities that have been discontinued in HP Web Jetadmin 10.0:
 - PSA (Print Server Appliance) Device Support and Discovery.
 - HP Jetdirect Password.
 - Novell Print Path Creation.
 - Bootp Server Support.
 - Win2000 Server Support.
 - Remote Discovery Agent.
 - Proactive Cache Level.
 - Support settings like Admin, email, and URL.

Getting Around in HP Web Jetadmin 10.0

- [Application Views in HP Web Jetadmin 10.0](#)
- [Top Menu Bar Features](#)
- [Page Layout in HP Web Jetadmin 10.0](#)
- [Wizards](#)
- [Other Features](#)

The user interface for HP Web Jetadmin 10.0 is designed to be efficient and intuitive, limiting the number of steps required to complete a task and streamlining software operation.

Application Views in HP Web Jetadmin 10.0

HP Web Jetadmin 10.0 can be separated into three views accessible through the lower portion of the left navigation pane:

- [Device Management on page 50](#): used for all device-related functions.
- [Print Management on page 224](#): used to manage print queues and drivers on remote servers and workstations.
- [Application Management on page 238](#): used for application functionality such as users and roles, security, and software updates.

Top Menu Bar Features

- [Preferences](#)
- [Device Filters](#)
- [Device Identification](#)
- [Application Logging](#)
- [Data Synchronization](#)

The top menu bar is always present and changes depending on the application view, presence of plugins, or the version of HP Web Jetadmin 10.0. This allows you to use functionality without having to change to a different view.

Across the top menu bar are four choices:

- **File:** add new groups, alerts, and configuration templates, print, and exit HP Web Jetadmin 10.0.
 - **New:** create groups ([Create a New Device Group on page 89](#)), alerts templates ([Create a Subscription Template on page 157](#)), and configuration templates ([Create a Configuration Template on page 143](#)).
 - **Print:** print the device list ([Printing Device Lists on page 82](#)).
 - **Exit:** exit HP Web Jetadmin 10.0.
- **View:** customize interface settings based on the user's credentials:
 - **Column Layouts:** create custom views by identifying columns displayed for any device list ([Columns for Device Lists on page 68](#)).
 - **Filters:** create and manage filters using the Filter Manager and Filter Editor ([Filters and Device Lists on page 71](#)).
 - **Refresh Selection:** available on a device list page for single device views. This causes the data for the selected device to be retrieved directly from the device. It is useful if you suspect the data displayed for the device may be out of date.
 - **Task Module docking area:** manage the task modules you want to always be displayed ([Docking Task Modules on page 37](#)).
 - **Preferences:** set preferences for data to be displayed in device lists ([Device Lists on page 67](#)). See [Preferences on page 33](#).
- **Tools:** manage global settings including:
 - **Device Discovery:** starts the **Discovery** wizard to locate network and PC-Connected devices ([Discover Devices \(the Device Discovery Wizard\) on page 121](#)).
 - **Application Log:** you can view a log of all transactions that have occurred including the user, what the activity was and its details, and when it happened ([Application Logging on page 34](#)).
 - **Data Synchronization:** synchronize data between multiple installations of HP Web Jetadmin 10.0 ([Data Synchronization on page 35](#)).
 - **Options:** manage configuration settings for each view ([Device Management Options on page 52](#) and [Application Management Options on page 243](#)).
- **Help:** provides online help for this product ([Online Help on page 29](#)).

Preferences

Preferences for lists (in [Device Lists on page 67](#) and [Device Groups on page 85](#)) lets you manage data displayed in those lists. The top menu bar is always present and will change depending on the application view, presence of plug-ins, or the version of HP Web Jetadmin 10.0. You can use functionality without having to change views.

Device Filters

- [Steps for Configuring Device Filters Through Preferences](#)

You can select which device lists or filters are displayed in the left navigation pane.

Steps for Configuring Device Filters Through Preferences

1. From the top menu bar, select **View > Preferences > Device Filters**. The **Preferences** page is displayed with fields for device filters.
2. Move the filters from **Available filters** to **Selected filters** to display them in the left navigation pane under **All Devices**.

To remove filters from the left navigation pane, select them in **Selected filters** and move them to **Available filters**.

3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Device Identification

- [Steps for Configuring Device Identification Through Preferences](#)

Space on device lists can be limited and the columns you select to display must be chosen carefully. You can select columns to identify the devices on the **Select Devices** page, on the device list pages in **Device Lists** ([Device Lists on page 67](#)) and in **Device Groups** ([Device Groups on page 85](#)) and in the **Status** tab ([Status Tab on page 54](#)). This can be customized on a per-user basis. One user may have a preference for asset number detail while another user may have a preference for only IP address and IP hostname. Both of these users can customize device tools to reflect only the device information that is most important to them.

Steps for Configuring Device Identification Through Preferences

1. From the top menu bar, select **View > Preferences > Device Identification**. The **Preferences** page is displayed with fields for device identification.
2. Move the fields from **Available Fields** to **Selected Fields** to display them as columns on device lists throughout HP Web Jetadmin 10.0.

To remove columns from device lists, move the fields from **Selected Fields** to **Available Fields**.

3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Application Logging

In HP Web Jetadmin 10.0, you can view a log of all transactions that have occurred including the user, what the activity was and its details, and when it happened.

1. From the top menu bar, select **Tools > Application Log**. The **Application Log** is displayed.
2. The following actions can be performed on the **Application Log**:
 - To re-sort the **Application Log**, click on any column header.
 - To change the log settings, click on **Edit Log Settings**. You can change the length of time to save log entries and also clear the log ([Application Log on page 250](#)).
 - To clear the log, click **Clear Log**.
 - **Help**: provides online help for this product ([Online Help on page 29](#)).

Data Synchronization

- [Steps for Data Synchronization](#)

You can synchronize data between HP Web Jetadmin 10.0 servers on your network.


You can either enter the hostname or IP address of the HP Web Jetadmin 10.0 server you want to synchronize with, or you can discover all HP Web Jetadmin 10.0 devices on your network (in **Application Management** under [Web Jetadmin Management on page 275](#)).

A local user must be in:

- the user group on the HP Web Jetadmin 10.0 host and also be associated to a data synchronization role on that host.
- the user group on the HP Web Jetadmin 10.0 remote Smart Client.
- the admin group on the data synchronization host.

Steps for Data Synchronization

1. On the top menu bar, access **Tools > Data Synchronization**.
2. Select the HP Web Jetadmin 10.0 server you want to synchronize with:
 - If you know the hostname or IP address for the HP Web Jetadmin 10.0 server you want to synchronize with, enter it in **WJA Quick Discovery**.
 - If you do not know the hostname or IP address for the HP Web Jetadmin 10.0 server you want to synchronize with, highlight the server or servers in the list.
3. You can:
 - **Synchronize**: synchronize the HP Web Jetadmin 10.0 servers now. Click **Synchronize**.
 - **Schedule**: set up a future time to synchronize the HP Web Jetadmin 10.0 servers. Click **Schedule**.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

 - **Clear Schedule**: clear any synchronization schedules that have been set up already. Click **Clear Schedule**.
4. The **Synchronization Credentials** page is displayed. Enter your password and click **Verify Link** to verify the authentication. The link must be verified before you can proceed.
5. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Page Layout in HP Web Jetadmin 10.0

- [Left Navigation Pane](#)
- [Task Modules](#)
- [Workspace](#)

Each page in HP Web Jetadmin 10.0 has the following features:

- a left navigation pane that lists all functions for each separate view ([Left Navigation Pane on page 36](#)).
- an area at the right to display content or task modules which provide access to related features or tasks ([Task Modules on page 36](#)).
- work space: changes depending on the view and the feature selected ([Workspace on page 37](#)).

Columns for most lists can be resized by clicking and dragging the column headers.

Left Navigation Pane

HP Web Jetadmin 10.0 has a navigation pane on the left side of the user interface that displays a tree for the current view (**Device Management**, **Print Management**, or **Application Management**). The tree breaks up the view's functionality into organized parts. The **Device Management** view contains most of HP Web Jetadmin 10.0's functionality and therefore has the most complex tree.

Many parts of the navigation tree have right-click functionality. An example of this is [Discovery on page 99](#), where the **Discover devices** right-click menu item can be selected.

Other parts of the tree have drag-and-drop functionality enabled such as Device Groups ([Device Groups on page 85](#)). Devices can be selected in device lists within the workspace and dragged into Device Groups; the selected devices are added as group members. Many top-level nodes can invoke summary functionality in the workspace. By selecting a top-level node, such as Alerts, the workspace in the right-hand portion of the interface contains a summary of the Alerts features. The task modules that are specific to a feature (such as Alerts) will be displayed in the work space. The feature summary can be altered by selecting or deselecting the task modules that are important to you. We will cover more on this in the task module section.

Task Modules

Task modules are flexible blocks of specific or targeted functionality designed to help a user more quickly perform a task or obtain feature information. These can be found in many of the workspace pages or they can be found in the **Task Module docking area**. In either case, you can enable or disable task modules on a per-user basis.

A **Current Task** task module is initially included in the task module docking for each section to provide access to required tasks for that section. All task modules can be hidden or displayed and can be moved within the content area. For example, in **Device Groups**, the **Current Tasks - Device Groups** task module lists all tasks within **Groups**.

Docking Task Modules

The task module docking feature is a powerful tool that enables you to do any of the following:

- Customize a user-specific collection of task modules from a choice of any or all task modules available in the application.
- View the collection of task modules regardless of the current focus of the application.
- Undock the collection of task modules to maximize application space.
- Dock the task module to any one of four sides of the work space.
- Hide the collection of task modules beneath a tabbed control that enables access at any time.
- View a Current Tasks task module that changes depending on the focus (context) of the application.
- Many task modules can be configured more than once within the docking area.

To display the **Task Module docking area**, click **View > Task Module docking area**. This is a toggle selection; if you select it again it closes the **Task Module docking area**.

Workspace

The large area just right of the navigation tree is considered the HP Web Jetadmin 10.0 workspace. This area changes depending on the View and Navigation tree elements selected. In many cases, the focus of this area can be a summary of a feature space. You can obtain this summary by selecting any top-level element within the navigation tree. Any element with the + symbol next to it is a top-level element and can invoke a summary focus. An exception to this rule is the **All Devices** list. When **All Devices** is selected in the left navigation pane, the device list is displayed in the workspace. There are also other exceptions that won't be covered here. The workspace can also reflect specific feature functionality. Whenever a sub-level element (generally one that has no + symbol next to it) is selected, the workspace reflects specific functionality. This can be seen in **Discovery History** ([Discovery History on page 125](#)).

Wizards

Wizards provide a collection of steps in the required order for a user to accomplish a task successfully. Every wizard launches in a separate window from the main application via many different controls including right-click menu items and task modules. Many of the wizards within HP Web Jetadmin 10.0 are launched from multiple controls in different parts of the application. An example of a wizard is **Create Group** ([Create a New Device Group on page 89](#)). After you start the wizard, you are asked to specify the group type, the group name, and the group members; then you can continue with the displayed steps until the task is successfully completed. Confirmation and results pages provide both a safeguard and additional details about the task.

Other Features

- **Drag-and-drop**: You can drag-and-drop various items (for example, devices) onto functionality (reports, groups, and more) to save time and increase accuracy.
- **Errors Encountered within HP Web Jetadmin 10.0**: Errors exist on the page anytime the user interface has an error or cannot understand input, it displays "error on page". Hovering the mouse over the error icon will give an indication of the problem that exists on that page.

- **Identification of the HP Web Jetadmin 10.0 Server:** The title bar on the HP Web Jetadmin 10.0 client window always indicates the computer name of the system where HP Web Jetadmin 10.0 is installed.
- **Determining the Software Version:** By using **Help > About**, an HP Web Jetadmin 10.0 logo page can be launched. This contains the exact revision of the software in the xx.x.xxxxx format which represents MajorApplicationVersion.MinorApplicationVersion.Buildnumber number.
- **Client Performance:** HP Web Jetadmin 10.0 provides a significant improvement in application performance over earlier versions. The client application performs many tasks locally in order to reduce traffic to the server thus improving client performance. Here are some points about how the client application is leveraged to maximize performance:
 - Round-tripping the client/server connection is a thing of the past thanks to a client application that is built on .NET technology. The older, browser-based interface contacted the server application for the majority of user actions.
 - All graphics are managed and reside with the client.
 - Notification of change events from the server are performed on an as-needed basis only.
 - Most list operations are performed by the client application and not at the server.
 - Client performance benefits from virtualization in that only data needed for display is actually passed from server to local host.
 - All clients share update traffic from a single data set on the server.
 - At times, the client performance can be impacted by one of or both of network and HP Web Jetadmin 10.0 settings. HP Web Jetadmin 10.0 uses a very economic polling pattern when gathering information from devices. When a UI element is added that causes HP Web Jetadmin 10.0 to retrieve information from devices, the result may be less than optimal.
- **Running Multiple Clients:** More than one HP Web Jetadmin client application can be run on a single host. A number of client sessions communicating to different HP Web Jetadmin 10.0 server applications at one time is possible. It is also possible to run multiple client sessions on a single host that are connected to the same HP Web Jetadmin 10.0 server application.
- **Smart Client File Cache:** Smart Client cache is another name for the place where the client application files are stored. Other .NET applications will also share this part of the user directory.

Characteristics of the Smart Client cache are:

- Files are stored in `Documents and Settings\User Directory\Local Settings\Apps\2.0.`
- Installation and removal of these files and directories does not require administrative access on the local machine.
- The Smart Client cache has a 200 MB limit imposed by the Microsoft .NET Framework.
- It contains client debug control file and trace log. These logs can be cleared manually with the tool **Mage.exe -cc Del *.*** of Smart Client cache, and will reload during the next run.

The HP Web Jetadmin 10.0 Server

- [HP Web Jetadmin 10.0 and Distributed Environments](#)
- [Overview of Directories and Files](#)
- [SQL Database Overview](#)
- [Other Components and Services Details](#)
- [Ports](#)
- [Localization](#)
- [Client Support](#)
- [HP Web Jetadmin 10.0 Network Traffic and Behavior](#)

HP Web Jetadmin 10.0 runs on a server host allowing remote access from HP Web Jetadmin host clients. The following sections outline features and information about the HP Web Jetadmin 10.0 server application.

HP Web Jetadmin 10.0 and Distributed Environments

HP Web Jetadmin 10.0 is a scalable client/server designed to support distributed environments. HP Web Jetadmin 10.0 can be installed on either a server or on a user's desktop. It can be installed on multiple servers and the user desktop can support multiple instances of the HP Web Jetadmin 10.0 client application running at the same time.

The HP Web Jetadmin 10.0 server performs many background tasks such as discovery and configuration of devices, firmware retrieval, application security, and more. HP Web Jetadmin 10.0 has a robust client application that runs on Microsoft Windows desktops. The client application displays device lists and groups and provides all the control interfaces needed to perform device management. HP's careful architecture of tasks that are performed by either the server or the client has given HP Web Jetadmin 10.0 extraordinary performance improvements over earlier releases of the software.

Characteristics of the HP Web Jetadmin 10.0 server-based application are:

- Can run on remote server-host or locally on a client-host.
- Supports multiple clients (up to 15 or more) accessing a single HP Web Jetadmin 10.0 server.
- Supports multiple client sessions on a single desktop accessing separate HP Web Jetadmin 10.0 servers.
- Provides secure client application downloads through a Microsoft Smart Client connection that is established via Internet Explorer.
- Communication for both server and client applications is provided through Microsoft .NET Remoting.
- Provides change event mechanism by the server to efficiently update application details at clients.
- Retrieves details by the server from <http://www.hp.com> facilitating updates to software, firmware, and more.
- Offers update service for obtaining application patches, plug-ins, and more from <http://www.hp.com>.

- Client updates happen automatically whenever newer server-based client components exist.
- Device credentials and user/roles details securely stored by the server.
- Provides HTML online help content to clients.
- Communicates to devices, both network and PC-Connected, from the server.
- Communicates from the server to other hosts (email, print queue, Active Directory, SNMP traps, and more).

How it Works

Once HP Web Jetadmin 10.0 is installed, a variety of elements exist to support mainly the client, application and device communication. HP Web Jetadmin 10.0 runs on the server as a service. It has a simple http server that exists for the purpose of providing Smart Client application downloads ([Smart Client Deployment on page 16](#)). The HTTP server also provides online user documentation.

The HP Web Jetadmin 10.0 service also takes care of all the details behind client-driven requests. HP Web Jetadmin 10.0 communicates with devices in ways that are both user-driven and automated as background activities. Some of these background activities include:

- **slow polling:** keeps network traffic to a minimum even when there are multiple client sessions running.
- **user-scheduled activities:** includes discovery, firmware upgrades, and device configuration.



NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

Backup and restore of all HP Web Jetadmin 10.0 settings can be accomplished by following procedures outlined in the Installation and Setup chapter. All HP Web Jetadmin 10.0 user settings and data that are not stored in the database exist in files stored in the directories `Drive:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard\HPWebJetadmin\`.

Characteristics of the HP Web Jetadmin 10.0 service are:

- Once the software is installed, the HP Web Jetadmin 10.0 service (HPWJAService) runs in the background.
- Different communication interfaces exist:
 - http
 - https
 - tftp
 - snmp
 - .NET Remoting
 - .NET Listen

- TFTP send/receive
- SLP
- The client application is first downloaded via a Smart Client connection that is launched through Internet Explorer.
- Client communication works over .NET remoting which provides both authentication and encryption.
- HP Web Jetadmin 10.0 communication to devices and other hosts can be both user driven or driven by automated processes

.NET Framework 2.0

HP Web Jetadmin 10.0 is dependent on Microsoft's .NET Framework 2.0. HP Web Jetadmin 10.0, during install time, will direct the user to Microsoft's .NET Framework 2.0 resources if they are not already installed on the server host.

Overview of Directories and Files

On the server file system, HP Web Jetadmin 10.0 resources can be found in the following places:

- Drive:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard\HPWebJetadmin
- Drive:\Program Files\Hewlett-Packard\Web Jetadmin 10
- Drive:\Program Files\Microsoft SQL Server\MSSQL.1 (SQL Database instance for HP Web Jetadmin 10.0).
- Drive:\Documents and Settings\All Users\Start Menu\Programs\HP Web Jetadmin 10 (contains URL for launching HP Web Jetadmin 10.0).

HP Web Jetadmin 10.0 services include:

- HP Web Jetadmin 10.0 Core Service:


Drive:\Program Files\Hewlett-Packard\Web Jetadmin 10\bin
\HPWJAService.exe

Display name: HPWJAService

- HP Web Jetadmin 10.0 Update Service:

C:\Program Files\Common Files\Hewlett-Packard\WJA Update Service
\HPWJAUpdateService.exe

Display name: HPWJAUpdateService

 **NOTE:** HP Web Jetadmin 10.0 Update service provides [Product Update on page 270](#) features for managing client and server components.

- MSSQL\$HPWJA (must be started before HPWJAService):

c:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Binn\sqlservr.exe-sHPWJA

Display name: SQL Server (HPWJA)

Files and directories added to different directories include:

Table 3-1 HP Web Jetadmin 10.0 Files and Directories

Files and Directories	Details
Program Files	<ul style="list-style-type: none">• Core application components, DLLs, and more.• HP Web Jetadmin 10.0 service executable.• Files downloaded via Smart Client application install.• Universal Print Driver.• Certificates.• EULAs (end user license agreements).• Other documents such as the release notes and online user documentation.
Documents and Settings	<ul style="list-style-type: none">• All application settings (file based)• Trace control file for debug mode• Trace file when debug mode (server) is enabled

Backup and restore of all HP Web Jetadmin 10.0 settings can be accomplished by following procedures outlined in the Installation and Setup Guide for HP Web Jetadmin 10.0 or in the Installation and Setup chapter of the User Guide for HP Web Jetadmin 10.0. All HP Web Jetadmin 10.0 user settings and data that are not stored in the database, exist in files stored in the `Drive:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard\HPWebJetadmin\` directory.

SQL Database Overview

HP Web Jetadmin 10.0 uses a local SQL database instance. This database instance, named “HP Web Jetadmin 10.0: database engine” within SQL components, is where HP Web Jetadmin 10.0 stores and manages all captured device data. HP Web Jetadmin 10.0 does not require that SQL Server Express is installed prior to the HP Web Jetadmin 10.0 installation. HP Web Jetadmin 10.0 installs Microsoft SQL Server 2005 Express Edition as part of initial application install when this version of MS SQL Server does not exist. HP Web Jetadmin 10.0 is able to coexist with other versions of Microsoft SQL server if they happen to be installed on the same host. During the HP Web Jetadmin 10.0 installation, OSQL commands are executed which install the database components including HP Web Jetadmin 10.0 database instance and data structures. There are no user-specified attributes for any of the SQL elements at install time.

- HP Web Jetadmin 10.0 installs and utilizes the Microsoft SQL Server 2005 Express Edition.
- The database instance is “HP Web Jetadmin 10.0: database engine”.
- HP Web Jetadmin 10.0 along with its database instance can coexist on the same host with other versions and instances of SQL server.
- HP Web Jetadmin 10.0 contains the full Microsoft SQL Server 2005 Express Edition installation.
- During application install, OSQL commands are executed to install the database components including HP Web Jetadmin 10.0 database instance and data structures.

Microsoft SQL Server 2005 Express Edition

Microsoft makes available a free edition of SQL Server named SQL Server 2005 Express Edition. The previous name for this free SQL server was MSDE (Microsoft Data Engine). These are both Microsoft's lightweight version of the for-fee products SQL Server and SQL Server 2005. They can be embedded into other applications like HP Web Jetadmin 10.0 software. SQL Server Express requires .NET framework, has a 4 GB database size limitation, and can exist on a host with any other MSDE or MS SQL Server implementation.

HP Web Jetadmin 10.0 Database Instance

The database instance for HP Web Jetadmin 10.0 as it is installed on the host is named "HP Web Jetadmin 10.0: database engine". It is also a service that runs in the Windows Service Manager MMC as "SQL server (HPWEBJETADMIN)". This service has a dependency on the HP Web Jetadmin 10.0 service which can also be observed in the Windows Service Manager MMC. The service "SQL server (HPWEBJETADMIN)" cannot be stopped without first having the "HPWJAServices" service stopped.

Characteristics of the HP Web Jetadmin 10.0 database are:

- HP Web Jetadmin 10.0's SQL database instance: "HP Web Jetadmin 10.0: database engine".
- The service, "SQL server (HPWEBJETADMIN)" has a dependency on the HP Web Jetadmin 10.0 service: HPWJAServices.
- Removing the HP Web Jetadmin 10.0 SQL server instance by using Add/Remove Programs, renders the HP Web Jetadmin 10.0 service effectively disabled.

HP Web Jetadmin 10.0 Data Managed within the Database

Data managed within the database instance used by HP Web Jetadmin 10.0 includes:

- Application logs ([Application Logging on page 34](#))
- User/Role Association ([User Security on page 260](#))
- User preferences ([Users on page 266](#))
- Role Permissions ([Roles on page 263](#))
- Credentials ([Credentials for Devices on page 84](#))
- Device Groups ([Device Groups on page 85](#))
- Tasks (throughout HP Web Jetadmin 10.0)
- Templates (throughout HP Web Jetadmin 10.0)
- Devices and supported device objects ([Device Lists on page 67](#))
- Data collections ([Data Collection on page 185](#))

Supporting the HP Web Jetadmin 10.0 Database

The HP Web Jetadmin 10.0 database is fully managed by the HP Web Jetadmin 10.0 application. The application should be the only entity connecting to the database. No user-accessible detail exists within the database and the database should not be considered a source of raw content for other user-processes. The database should be considered proprietary.

External Database Support

HP Web Jetadmin 10.0 supports the local instance data base for SQL Server Express. This database instance is created by the HP Web Jetadmin 10.0 install executable when the application is installed. Connecting HP Web Jetadmin 10.0 to an external database is not supported and no features exist within HP Web Jetadmin 10.0 that facilitate this connection. HP will review external databases at a future time and could possibly implement a feature/solution for this functionality.

Other Components and Services Details

- [Low privileged service account](#)
- [HTTP Service](#)

Following are other components and services information.

Low privileged service account

HP Web Jetadmin 10.0 running as a service runs authorized under the NT AUTHORITY \NetworkService account. This is a built-in, low-privilege account.

HTTP Service

HP Web Jetadmin 10.0 contains a small and embedded http/https service. This service exists for three reasons:

- Smart Client application delivery (initial client access).
- Help content delivery (during client session).
- Device application file hosting (devices get jar file when directed by **Device Management** features).

A few key points about this http service include:

- The integrated http service is simple and only exists for the purpose of distributing files.
- This service contains no script execution interpreters or cgi-bin capability.
- The service does not allow file navigation.
- The service does not execute read/write calls to HP Web Jetadmin 10.0's database.
- The http/https server is integrated into the HP Web Jetadmin 10.0 service which runs as a low-privilege account on the local host.
- http service does not run in kernel mode.

HTTPS

The http service can be configured to run default https and uses certificates which are obtained through a local certificate-authority. When https is enabled, it enforces authentication between the users IE browser and the local http service. This provides tighter security for initial HP Web Jetadmin 10.0 client launch than is provided by http. Some environments may require that all http servers enforce and run default https.

Characteristics of the http service are:


- https can be enabled as part of a post install procedure with HP Web Jetadmin 10.0 security settings.
- https requires that the user obtain a certificate from a certificate-authority.
- https can only be enabled through a client running on the local system hosting HP Web Jetadmin 10.0 software.

HTTP and HTTPS Ports Adjustments

Some customers may require a different port number on the HTTP server that is embedded into HP Web Jetadmin 10.0. The default port numbers are 8000 for HTTP and 8443 for HTTPS. Port numbering is changed through a configuration file found on the HP Web Jetadmin 10.0 directory:

```
DRIVE:\Documents and Settings\NetworkService\Local Settings\Application  
Data\Hewlett-Packard\HPWebJetadmin\config  
\HP.Imaging.Wjp.Core.WebServer.config.xml
```

Either of the entries for HttpsPort or HttpPort can be altered. Changing these ports requires restarting HP Web Jetadmin 10.0.

 **NOTE:** Open **Start > Programs > HP Web Jetadmin 10.0** and then alter the program link by right-clicking it and then choosing **Properties**. The port number within the link variable must be changed to match the new port number being used.

Ports

HP Web Jetadmin 10.0 listens on several ports continuously and opens other ports for specific functionality. Below are the ports used by the system hosting HP Web Jetadmin 10.0:

Table 3-2 Server Required Ports

Port Number	Type	I/O	Details
0	UDP	I/O	TFTP send/receive request handling
0	UDP	O	SNMP
0	TCP	O	WMI Communication
0	TCP	O	Firmware upgrade
69	UDP	I	TFTP incoming port
427	UDP	I	SLP Listen
3702	UDP	I	WS Discovery Listen*
4088	TCP	I/O	Client Remoting
8000	UDP	I	Web Jetadmin Discovery Listen*
8000	TCP	I	WebServer (http)
8443	TCP	I	WebServer (https)
27892	UDP	I	Traps Listener

* for the discovery of other HP Web Jetadmin servers

Below are the ports used by clients to receive:

Table 3-3 Client Receive Ports

Port Number	Type	I/O	Details
161	UDP	I	SNMP
445	UDP	I	WMI Communication
9100	TCP	I	Firmware

Localization

HP Web Jetadmin 10.0 will be released in 19 localized languages later in 2007. At that time you will have the option of installing one base language. You can update the server to any of the other 19 languages but only by using the [Product Update on page 270](#) feature. Client locale settings will determine if HP Web Jetadmin 10.0 displays in a localized language (providing a language update is available on the server) or the client will display in English (when language support is lacking on the server).

Client Support

Smart Client is a Microsoft .NET term that describes a clients initial request for a .NET application ([Smart Client Deployment on page 16](#)).

HP Web Jetadmin 10.0 Network Traffic and Behavior

HP Web Jetadmin 10.0's server application performs a number of actions including:

- **Client Event Notification:** When users are logged into the application, a separate client application is running on the local desktop host. HP Web Jetadmin 10.0 server uses a TCP connection to notify the client application when changes exist. This notification drives the client application to connect to the server .NET Remoting channel and order updated information. Notification happens only when:
 - changes in data exist for client retrieval.
 - the server has not heard any communication from the client over a predetermined period of time.
- **Supplies Alerts Polling:** When devices exist in supplies groups, supplies Alerts are enabled ([Alerts on page 148](#)). The Alerts features drive both user alerts (via email or a log) and other supplies-related reports. All of the alerts are based on user-selected threshold values. When a device exists with a supply level value that is not very close to the specified supply threshold, HP Web Jetadmin 10.0 polls that device more slowly, taking up less network bandwidth. When a device exists with a supply value that is very close to the specified supply threshold, HP Web Jetadmin 10.0 polls that device more often. This smart-polling mechanism ensures that the supply level alert is delivered in a timely manor while limiting the polling that is done on the network. Supplies Alerts polling is integrated with other kinds of polling within the HP Web Jetadmin 10.0 system which means that polling is only performed when stale information is detected.
- **Slow Polling:** HP Web Jetadmin 10.0 uses a slow-polling mechanism that queries for device information. This mechanism is user configurable; the faster it is set for will put a larger load on the

network (see documentation on application settings and/or the training module on application maintenance). This slow-polling mechanism is used for a variety of tasks listed here:

- Users are viewing lists and one or more information attributes displayed has become stale.
- Automatic Device Groups exist ([Device Groups on page 85](#)).
- Supplies Device Groups exist ([Supplies on page 212](#)).
- **Background Tasks:** Many features in HP Web Jetadmin 10.0 can be launched automatically or manually by a user logged into a client application session. In either case, these can become tasks and can be run without a user being logged into a client application session. These are called background tasks and are managed centrally by HP Web Jetadmin 10.0 software. In fact, these can be displayed and reviewed by the user at any time through a task manager interface. The **Active Tasks** task module is one way users can view running tasks.

The HP Web Jetadmin 10.0 Client

- [Host Requirements](#)
- [ClickOnce Software Installation and Launch](#)

Users gain access to HP Web Jetadmin 10.0 through a local .NET client application. The application runs on any supported client desktop. The first time the HP Web Jetadmin 10.0 server is accessed by a client, client application files are installed and launches a Windows client session. This client session communicates with the HP Web Jetadmin 10.0 application as it runs on the server. Client application files are left in the users' Local Settings directory and are updated on the fly as needed. The server and client applications can be run on the same or different hosts.

Host Requirements

The following are required by the HP Web Jetadmin 10.0 host:

- Operating systems supported for running client application
 - WinXP Professional
 - Windows Server 2003
 - Vista Business Edition and Enterprise Edition
 - Windows 2000 Professional SP4
- NET Framework 2.0
 - Install requires Administrator rights
 - Smart Client provides direction to Microsoft's .NET 2.0 Installer
 - Non-IE browsers will not detect the absence of .NET 2.0 Framework
- Other requirements
 - 200 MB
 - Network
 - User logged in to local host, or user with local administrator rights when using "Run As" (Internet Explorer)

ClickOnce Software Installation and Launch

The following sequence occurs when you start the Smart Client installation and launch:

1. Client using Internet Explorer browses http service (URL: http://server:8000)
 - Server detects .NET on browser client (Page linked to dotnetfx.exe download at Microsoft.com).
 - Browser is redirected to HP Web Jetadmin 10.0.

- Browser passes .application to .NET Framework (dfshim).
 - .NET Framework verifies signature, reads the xml and performs a Smart Client launch.
2. Smart Client is launched.
 - For the first run, an Application Run dialog box is displayed to client.
 - 2.0 MB files are downloaded via the http service.
 - UIExec.exe is launched on client host.
 3. .NET remoting begins (port 4088).
 - For the first run, 50 MB files downloaded.
 - The HP logo page is visible.
 - The client files are updated if a newer version is detected.
 4. HP Web Jetadmin 10.0 Client application is started.
 - The client begins detecting events, executing calls, and more.
 - Help content traverses the http service.
 - All other client communication is via .NET remoting.

.NET Need Notification

The HP Web Jetadmin 10.0 server will detect a host that does not have .NET 2.0 Framework installed. When it detects this, a message is displayed asking you to install the .NET Framework or start HP Web Jetadmin 10.0.

Users are able to install the .NET Framework with the admin privileges. The **Start HP Web Jetadmin** link is used to launch the client once .NET Framework is in place.

4 Device Management

- [All About Device Management](#)
- [Device Lists](#)
- [Device Groups](#)
- [Discovery](#)
- [Configuration](#)
- [Alerts](#)
- [Firmware](#)
- [Reports](#)
- [Supplies](#)

All About Device Management

- [Device Management Task Modules](#)
- [Device Management Options](#)
- [Device Tabs on Device List Pages](#)

The **Device Management** view provides many features that help you configure and manage devices on your network. The **Overview** page can provide you access to all of these features through the various task modules ([Device Management Task Modules on page 51](#)).

Device Management Task Modules

The following task modules can be displayed or hidden in the **Overview** section of **Device Management** and also in the corresponding functional area within HP Web Jetadmin 10.0 by right-clicking within the page and selecting the specific task module.


 **NOTE:** Any task module within HP Web Jetadmin 10.0 can be displayed throughout HP Web Jetadmin 10.0 by docking it ([Docking Task Modules on page 37](#)).

Table 4-1 Device Management Task Modules

[Device Lists on page 67](#)

- [Device Lists - Current Tasks and Common Tasks Task Modules on page 79](#)
- [Device Lists - Summary Task Module on page 79](#)

[Device Groups on page 85](#)

- [Device Groups - Current Tasks and Common Tasks Task Modules on page 88](#)
- [Device Groups - Summary Task Module on page 88](#)
- [Device Groups - Management Task Module on page 88](#)

[Discovery on page 99](#)

- [Discovery - Current Tasks and Common Tasks Task Modules on page 117](#)
- [Discovery - Summary Task Module on page 118](#)
- [Discovery - Active Discoveries Task Module on page 118](#)
- [Discovery - Scheduled Discoveries Task Module on page 118](#)
- [Discovery - Templates Task Module on page 118](#)
- [Discovery - Quick Monitor Task Module on page 119](#)

[Configuration on page 130](#)

- [Configuration - Common Tasks Task Module on page 133](#)
- [Configuration - Recent Configurations Task Module on page 133](#)
- [Configuration - Active Configurations Task Module on page 133](#)
- [Configuration - Scheduled Configurations Task Module on page 134](#)
- [Configuration - Templates Task Module on page 134](#)

[Alerts on page 148](#)

Table 4-1 Device Management Task Modules (continued)

- [Alerts - Current Tasks and Alerts - Common Tasks Task Modules on page 150](#)
- [Alerts - Recent Alerts Task Module on page 151](#)
- [Alerts - Alert Subscriptions Task Module on page 151](#)
- [Alerts - Subscription Templates Task Module on page 151](#)

[Firmware on page 164](#)

- [Firmware - Current Tasks and Common Tasks Task Modules on page 166](#)
- [Firmware - Active Tasks Task Module on page 166](#)
- [Firmware - Scheduled Tasks Task Module on page 166](#)

[Reports on page 173](#)

- [Reports - Current Tasks and Report Management - Common Tasks Task Modules on page 177](#)
- [Reports - Report Templates Task Module on page 178](#)
- [Reports - Archived Reports Task Module on page 178](#)
- [Reports - Data Collection - Management Task Module on page 178](#)
- [Reports - Data Collection - Templates Task Module on page 179](#)
- [Reports - Scheduled Reports Task Module on page 179](#)

[Supplies on page 212](#)

- [Supplies - Current Tasks and Supplies - Common Tasks Task Modules on page 213](#)
 - [Supplies - Group Summary Task Module on page 213](#)
 - [Supplies - Group Tools Task Module on page 213](#)
-

Device Management Options

The following options can be set in Device Management:

Table 4-2 Device Management Options

Functional Area	Available Options
Discovery	<ul style="list-style-type: none">• General on page 120• Blocked Devices on page 81
Device Lists	<ul style="list-style-type: none">• Hidden Devices on page 79
Status	<ul style="list-style-type: none">• Single Device View on page 56• Multiple Device View on page 56
Device Filters	<ul style="list-style-type: none">• New (Time Period) Filter on page 82
Configuration	<ul style="list-style-type: none">• General Configuration Settings on page 134
Reports	<ul style="list-style-type: none">• General on page 180• Data Retention on page 180

Table 4-2 Device Management Options (continued)

Functional Area	Available Options
Supplies	<ul style="list-style-type: none">• General on page 214
Alerts	<ul style="list-style-type: none">• General on page 151• Template Settings on page 152

Device Tabs on Device List Pages

When you select a device list, a group, or a filtered list, the lower portion of the page displays device tabs that provide additional functionality that can be performed on the devices selected in the displayed list:

- [Status Tab on page 54](#): shows the status of the selected device or devices depending on list selection.
- [Config Tab on page 57](#): allows device configuration for one or more devices, depending on the current selection in the device list.
- [Alerts Tab on page 58](#): shows alert subscription and template tools for a single device or multiple devices, depending on list selection.
- [Groups Tab on page 59](#): lists devices that have been selected in the list and their groups (if any). Also allows easy access to add devices to an existing or new group.
- [Reports Tab on page 60](#): allows easy access to report functionality for the selected device or devices.
- [Supplies Tab on page 61](#): displays supplies information for the selected device or devices. Links are also provided for you to shop online for supplies.
- [Storage Tab on page 62](#): controls secure disk erase and disk initialize operations on either single device or multiple devices, based on the list selection.
- [Applications Tab on page 63](#): lists, adds, and removes device based application files.
- [Detailed Information Tab on page 64](#): provides information on many device attributes related to diagnostics and troubleshooting device issues.
- [Capabilities Tab on page 64](#): provides information about device features and capabilities.
- [Troubleshoot Tab on page 64](#): provides information to allow you to troubleshoot one or more devices.
- [Firmware Tab on page 65](#): updating is performed on either a single device or multiple devices depending on list selection (printer and HP Jetdirect firmware updating is available).

Showing and Hiding Device Tabs

The device tabs are displayed in the lower portion of any device list page to provide you with more detailed information about the devices. The device tabs are enabled by default but can be disabled at any time. The advantage of displaying the device tabs is to enable quick access to all device data by simply selecting the device in the device list and then clicking on the desired tab.

To hide the device tabs, use the **Hide Device Tabs** tool (the up/down arrow button on the toolbar on any device list page). This offers more room to display the device list itself. Hiding device tabs can also reduce network traffic and improve performance while working with large lists of devices.

Status Tab

- [Parts of the Status Tab Page](#)
- [Related Application Options for the Status Tab](#)

Device status can appear for a single device or multiple devices depending on list selection. Device status polling rates can be altered for both multiple and single status modes. The number of devices that can concurrently display status through **Status** tab is limited to ten by default but can be increased or decreased ([Multiple Device View on page 56](#)). These settings can be accessed in **Tools > Options > Device Management > Status**.

The **Status** tab shows real-time status messages and graphics that indicate device issues for the selected device or devices. While the status tab is being shown, the device status is updated regularly. Use the **Status** tab to quickly assess the current status of one or more devices.

The polling rate of the devices is set in **Tools > Options > Device Management > Status > Single Device View** ([Single Device View on page 56](#)).

The **Status** tab has three possible views:

- **Single device view** (most common): When a single device is selected, the single device view is shown. The toolbar on the **Status** tab links to the embedded web server for the selected device (if the device supports this feature). Device identification information such as device model, host name, IP address, and system contact information is also displayed (as requested through the top menu bar on **View > Preferences > Device identification**). Current supply levels, including the name of the consumable and a percentage level are shown. Additional information on all supplies is available on the device's **Supplies** tab at the bottom of any device list.
- **Multiple device view**: When between 2 and 10 devices are selected, the multiple tiled view is shown. Device identification information such as device model, host name, and IP address is also displayed. Current supplies levels are shown. Additional information on all supplies is available on the device **Supplies** tab.

The number of devices shown is determined by the configuration setting in **Tools > Options > Device Management > Status > Multi Device View** ([Multiple Device View on page 56](#)). If the number is set to 5, and you have selected more than 5 devices, status for the first 5 devices is shown.

- **Composite device view**: When more than 10 devices are selected, the composite view is shown. The number of selected devices is shown along with how many are in an **OK**, **Error** or **Caution** state on the device **Status** tab at the bottom of any device list.

Parts of the Status Tab Page

Options on the **Status** tab page include:

- For single device view:
 - **Embedded Web Server** (only enabled in Single device view): brings up a web browser that takes you to the device's embedded web server, if the device has one.
 - **Configure Page**: shows the **Config** tab; you can change or add configuration information for devices.
 - **Online** or **Offline** (only enabled in Single device view): shows whether the selected device is online or offline. You can actually change the status for the device remotely using this option.
- For multiple device view (2-10 devices):
 - **Configure Page**: shows the **Config** tab; you can change or add configuration information for devices.
- For composite device view (over 10 devices):
 - **Configure Page**: shows the **Config** tab; you can change or add configuration information for devices.

Parts of the **Status** tab page include:

- **Single device view** (one selected device):
 - **Status**: shows the status of the selected device.
 - **Information**: shows device identification information as requested through the top menu bar on **View > Preferences > Device Identification**.
 - **Front Panel Messages**: shows the front panel message currently displayed on the selected device.
 - **Supply levels**: shows the ink levels remaining for the selected device.
- **Multiple device view** (2-10 selected devices):
 - **Status**: shows the status of the selected devices.
 - **Information**: shows device identification information as requested through the top menu bar on **View > Preferences > Device Identification**.
 - **Front Panel Messages**: shows the front panel message currently displayed on the selected devices.
 - **Supply levels**: shows the ink levels remaining for the selected devices.
- **Composite device view** (10 or more selected devices):
 - **Status summary**: The number of selected devices is shown along with how many are in an **OK**, **Error** or **Caution** state.


Related Application Options for the Status Tab

- [Single Device View](#)
- [Multiple Device View](#)

Single Device View

Settings here dictate how the status for a device is displayed when you click the **Status** tab in the lower portion of any device list. For information about how multiple devices are displayed when you click **Status**, see [Multiple Device View on page 56](#).

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Status** and then select **Single Device View**.
 2. Configure the desired settings:
 - **Polling interval:** select the period of time in seconds in which HP Web Jetadmin 10.0 can send device requests onto the network.
 - **Time between polling intervals:** select an inactive period (time in seconds) where the application does not send device queries.
 - **Maximum devices to poll at one time:** select the number of devices that can be queried concurrently. HP Web Jetadmin 10.0 will place X device queries onto the network in a poll burst and wait for responses. HP Web Jetadmin 10.0 will continue to place X device queries onto the network each time a burst of queries is satisfied with response packets. It will continue to do this until the **Polling interval** time is expired and then will wait until the number of **Maximum devices to poll at one time** is satisfied before sending any new device queries.
-
-  **NOTE:** To reset all values to defaults, check the **Reset to Default Values** box. For default values, see [Default Settings on page 18](#).
-
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.


Multiple Device View

Settings here dictate how the statuses for devices are displayed when you click the **Status** tab in the lower portion of any **Device** list. For information about how a single device is displayed when you click **Status**, see [Single Device View on page 56](#)

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Status** and then select **Multi Device View**.
2. Configure the desired settings:
 - **Maximum number of devices to show:** enter the maximum number of devices to display in the lower portion of any **Device** list, if multiple devices are selected in the **Device** list. For example, if 20 devices are selected on a **Device** list and you enter 10 as the maximum number to show, the status for the first 10 is displayed.
 - **Polling interval:** select the period of time in seconds in which HP Web Jetadmin 10.0 can send device requests onto the network.

- **Time between polling intervals:** select an inactive period (time in seconds) where the application does not send device queries.
- **Maximum devices to poll at one time:** select the number of devices that can be queried concurrently. HP Web Jetadmin 10.0 will place X device queries onto the network in a poll burst and wait for responses. HP Web Jetadmin 10.0 will continue to place X device queries onto the network each time a burst of queries is satisfied with response packets. It will continue to do this until the **Polling interval** time is expired and then will wait until the number of **Maximum devices to poll at one time** is satisfied before sending any new device queries.

 **NOTE:** To reset all values to defaults, check the **Reset to Default Values** box. For default values, see [Default Settings on page 18](#).

3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Config Tab

- [Parts of the Config Tab Page](#)

The **Config** tab allows device configuration for the selected device or devices. A list of configuration items is displayed and is based on the configuration items supported for the devices selected. You can change one or more configuration items and apply the settings to the device or devices selected.

If a single device is selected, the configuration items in the tab are shown with the current device settings. If multiple devices are selected, configuration items in the tab are shown with unspecified or blank settings. The list of configurable options varies by the devices selected. With multiple devices selected, all configurable items will probably not apply to all devices. Only settings that apply to a device will be set on that device. Some options may be repeated multiple times because different settings are supported on different devices. If it is not clear which device or device model a particular setting applies to, holding the mouse over the name in the configuration settings displays a tooltip with additional information.

Parts of the Config Tab Page

Features on the **Config** tab page include:

- **Customize:** create or view your personalized list of favorite configuration settings in the **My settings** category; this provides fast access.
- **Apply Template:** select a previously created configuration template to apply to the currently selected devices.
- **View History:** displays a list of recent configurations that have occurred on one or more of the selected devices ([View Configuration History on page 138](#)).

Options on the **Config** tab page include:

- **Settings category tree:** configuration items are organized into categories to make them easier to find. Within each category, items are sorted alphabetically. **My Settings** is a special category that can be defined according to each user's preference.
- **Configuration settings:** make changes to device configuration settings in this section. Each item you change should show a check mark automatically, indicating that it will be included in this configuration. You can manually uncheck items to reset their values and exclude them from the configuration. Any changes made to these settings will not take effect until they are applied and confirmed.

- **Refresh:** gets the current settings from a single device, or the unspecified settings for multiple devices. Any pending changes which have not been applied will be lost.
- **Save as Template:** used to capture the selected configuration into an HP Web Jetadmin 10.0 configuration template. This can be done for a variety of reasons:
 - A backup of the device configuration is needed to manage maintenance and risk.
 - A device configuration is deemed as “release accepted” and a template is needed to configure other devices with like-settings.

Schedule: schedule this configuration for later ([Schedule a Device Configuration on page 139](#)).

Apply: apply all of the settings to the device or devices now.

The configuration template only captures configuration options that are selected.

Alerts Tab

- [Parts of the Alerts Tab Page](#)

The **Alerts** tab allows easy access to alerts settings for a particular device or set of devices. Device alerts provide the ability for the device to proactively notify you when a problem occurs with the device.

You can set alerts using the **Alerts** tab or by selecting **Alerts** from the menu at the left. Using the **Alerts** tab can be faster since you have already selected the device or devices.

The **Alerts** tab has two possible views:

- **Single device view:** the current set of subscribed alerts is displayed. You can subscribe to alerts, change alert subscriptions, or remove alert subscriptions.
- **Multiple device view:** a summary view of how many devices have alerts subscriptions and how many do not. The same quick access to alerts subscriptions, change alert subscriptions, or remove alert subscriptions is provided.

Parts of the Alerts Tab Page


Options on the **Alerts** tab page include:

- **Group By:** the different ways you can choose to group alerts:
 - **Device:** displays devices that can be individually expanded to show each applied subscription and corresponding Alerts detail.
 - **Subscription:** displays subscriptions by name that can be individually expanded to show devices to which the subscription has been applied.
 - **Solution Type:** displays one or any of the three types of Alerts that have been configured. These can be expanded to show individual subscriptions and devices to which the subscription has been applied.
- **+ (Expand All):** view detail.
- **- (Collapse All):** view summary information only and no detail.
- **Subscribe:** create an alert subscription.

- **Apply Subscription Template:** use alert subscription settings to apply to additional devices. The **Alert History** option allows you to view the alerts history for the selected set of devices.
- **Alert History:** view alerts history; can group by device or by alert.

Parts of the **Alerts** tab page include:

- **Device Model**
- **IP Hostname**
- **IP Address**
- **Advanced Settings**

 **NOTE:** There are two threshold settings that can be set through **Advanced Settings; Count threshold** and **Percent threshold**. When **Count threshold** is enabled, the Alert will trigger as the increasing device counter matches the value (number) applied here. This is only visible when Page Count Alerting is enabled.

Percent threshold supplies a common threshold value (percentage) that can apply to threshold Alerts. This is a decreasing percentage and is set on an integer value. This is a percentage based on decreasing supplies. This setting is only applicable to supplies that are depleting or depleted and need replacing.

- **Notification Type**
- **Subscription Type**
- **Linked to Template**

This page displayed is identical to the page displayed when you select **Alerts - All Subscriptions** in the left navigation pane ([All Subscriptions on page 162](#)).

Features on the **Alerts** tab page include:

- **Save As Template:** save the current settings as an alerts template ([Create a Subscription Template on page 157](#)).
- **Unsubscribe:** remove devices from this alerts template ([Edit an Alert Subscription Template on page 160](#)).
- **Edit Subscription:** make changes to an alerts subscription ([Edit an Alert Subscription Template on page 160](#)).

Groups Tab

- [Parts of the Groups Tab Page](#)

This tab reflects the group or groups to which a device has membership, when a single device is selected. The tab re-displays all selected devices from any device list showing all columns specified in **View > Preferences > Device Identification**, and the **Groups** column when multiple devices are selected.

These devices will be added to any group created from the **Groups** tab, **Add devices to group**, or **Add devices to new group**. In the single device mode, **Remove From Group** can be used to remove the selected device from any manual group.

Parts of the Groups Tab Page

Parts on the **Groups** tab page include:

- **Add devices to group:** easily add devices to an existing group.
- **Add devices to new group:** conveniently create a group and immediately add devices to it.

Columns on the **Groups** tab page include:

- **Group:** lists the name of the group for the selected devices.
- **Description:** shows the description of the corresponding group as entered while creating a group with the **Create new device group** wizard or while editing a group with the **Edit device group** wizard.
- **Contact:** shows contact information of the corresponding group as entered while creating a group with the **Create new device group** wizard or while editing a group with the **Edit device group** wizard.

Features on this page include:

- **Remove From Group:** remove a device from the selected group ([Remove Devices from a Manual Group on page 93](#)).
- **View:** view the devices in the selected group ([View a Device Group on page 98](#)).



NOTE: You must select a group before clicking **View**. If you are in a group and click **View** in the **Groups** tab, you must have a row selected with a group other than the one you are in.

Reports Tab

- [Parts of the Reports Tab Page](#)

The **Reports** tab allows easy access to report functionality for a device or set of devices.

The two main areas of this feature allow you to access the two main reporting tasks:

- **Data Collection:** must be enabled for devices to ensure the raw data is present to generate reports. Turning on data collection (by checking the check box and clicking **Apply**) enables this process. The **Job Data** collection option enables the **Jobs by user: color/mono** report. The **Device Data** collection enables the **Device pages: color/mono** report.
- **Report Generation:** select the type of report to generate.

Parts of the Reports Tab Page

Parts on the **Reports** tab page include:

- **Group By:** the different ways you can choose to group data:
 - **Device:** orders the tab-list by each device displayed in the list selection. Expanding the list shows each device and its collection state for each data collection type.
 - **Data Collection:** orders the tab-list by data collection type and shows devices beneath each.

- **Enabled:** shows two groups of devices. One is **Enabled** which are devices that have by-user data collection enabled. The other one is **Disabled**, which are devices that do not have by-user data collection enabled.
- **None:** shows a tab-list of all devices selected with their data collection states appearing within columns.
- + (Expand All) or - (Collapse All): show all details or show only summary information.
- **Add devices to data collection:** add devices to a data collection that have been defined ([Add Devices to Data Collection on page 188](#)).
- **Apply data collection template:** apply a data collection template ([Apply a Data Collection Template on page 190](#)).
- **Generate report:** produce a report after data collection has completed ([Generate a Report on page 197](#)).
- **Schedule report:** schedule this report to be generated at a specific time ([Schedule a Report on page 201](#)).

Supplies Tab

- [Parts of the Supplies Tab Page](#)


The **Supplies** tab page provides a quick way to let you review supplies information on a device or set of devices. The devices selected to view supplies information do not have to be tracked for supplies usage.

Parts of the Supplies Tab Page

Options on the **Supplies** tab page include:

- **Group By:** controls how the supplies information is presented: by device, urgency, HP part number, or none.
 - **Device:** shows devices in a collapsed state. Expanding one or more devices reveals supply detail.
 - **Urgency:** groups the devices by Out, Warning and OK supply status categories. Expanding these reveals device and supply detail.
 - **Part number:** groups the devices by collapsed supply part number categories. Expanding these reveals device and supply detail.
 - **None:** reveals supply detail in an expanded device list.
- **View:** choose between two views of the supplies data: the default view or the details view, which includes serial number of the supply, install date, and last used date.
- + (Expand All): view detail.
- - (Collapse All): view summary information only and no detail.
- **Shop for supplies online:** easy access to HP SureSupply to shop for all supplies or just needed supplies (the default). After this selection is made, you are connected to the HP SureSupply web site with either needed or all supplies categories pre-selected to order. You are notified that information will be transferred to the HP SureSupply web site and can approve or disapprove of the information being sent to that web site.

- **Show all** and **Show only needed**: turn on or off supplies tracking. When a device is tracked for supplies, the device is automatically included in the supplies needed list when supplies are needed. Turning tracking off on the device causes the product to never include the device in the supplies needed list.

 **NOTE:** The **Show only needed** state is dictated by the setting in **Tools > Options > Device Management > Supplies** ([General on page 214](#)).

- **Print shopping list** (icon): prepares a printout of the device list as it is currently displayed.

Storage Tab

- [Parts of the Storage Tab Page](#)
- [Device File System Password](#)
- [Fonts, Macros, and Stored Jobs](#)


Storage management functionality is used to manage objects on device storage facilities such as disk or flash devices. Currently, Storage Management features can control three storage related items on devices. This functionality can be viewed from any device list with one or more devices selected and then choosing the **Storage** tab.

All selected devices are displayed in the **Storage** tab list with **Media Type**, **Description**, and **Capacity** defined. Used space and Read/Write accessibility are displayed for each device in the list. In addition, grouping controls exist for multiple devices enabling a variety of storage analysis and storage configuration access.

Parts of the Storage Tab Page


You can display device information on the **Storage** tab page:

- **Group By**: devices displayed on the **Storage** tab page can be grouped as follows:

 **NOTE:** Switching between **Group By** options does not uncheck the storage facility checkboxes.

- **Group By Device**: lists one device per line. Individual lines can be expanded to view and select the different **Media Types** that reside on the device. Once **Media Types** are selected by using the corresponding checkbox, devices can be selected setting up storage facilities for **Storage** configuration actions.
- **Group By Media Type**: lists the devices under three media types, including **Hard Disk**, **No Media**, and **Other**. Devices grouped in **No Media** have no storage facilities on which **Storage** features can function. Devices that exist in the other two Media types can be selected using the corresponding checkbox and then the media type can be selected setting up storage facilities for Storage configuration actions.
- **Group By None**: lists device storage facilities one per line. Selecting the corresponding checkbox sets up the specific storage facility for Storage configuration actions.
- + (Expand All): view detail.
- - (Collapse All): view summary information only and no detail.

Features on the **Storage** tab page include:

 **NOTE:** Once storage facilities are checked, storage configuration controls become selectable and can be used to activate storage features on the device. All storage features are device-based; HP Web Jetadmin 10.0 is only a configuration agent.

- **Write Protection:** enables or disables write functionality on the selected storage facility. This makes a device read-only or read-write capable.
- **Initialize File System:** causes the device user-directory structure to initialize. The file system will vary depending on device or storage type; please see device-specific documentation. An option to enable write-protect can be set to leave the device in read-only mode once the file system has initialized. This feature can be scheduled as a one-time or recurring operation.
- **Secure Storage Erase:** starts the devices secure storage erase action. One of three secure modes can be set for the storage erase action. These modes are **Non-secure fast erase**, **Secure fast erase**, and **Secure sanitizing erase**. The extent of security in the secure erase feature on the device will depend on device model and firmware. See device documentation regarding Secure Storage erase features for more details. An option to enable write-protect can be set to leave the device in read-only mode once secure storage erase has completed. This feature can be scheduled as a one time or recurring operation.

Device File System Password

If a file system password exists on the device and if it is not captured in HP Web Jetadmin 10.0's **Credential Store**, you will be prompted for the password when attempting to perform any configuration action. Device file system passwords can be configured on the devices from HP Web Jetadmin 10.0. When these are configured, they are also placed into the **Credential Store**. Global file system credentials can be added to HP Web Jetadmin 10.0 through **Tools > Options > Application Management > Credentials > File System** ([File System Password on page 258](#)). These are used when no password exists in the store and one is required by the device.


Fonts, Macros, and Stored Jobs

Earlier releases of HP Web Jetadmin along with the Device Storage Manager plug-in had features to manage fonts, macros and jobs stored on devices. At this time, HP Web Jetadmin 10.0 does not have features for managing fonts, macros and jobs stored on devices. A newer release of HP Web Jetadmin 10.0 will someday support this functionality. When necessary, you should continue to use the latest version of HP Web Jetadmin 8.x and Device Storage Manager plug-in for managing fonts, macros, and stored jobs.

Applications Tab

Device applications can be downloaded and executed onto devices to facilitate an embedded runtime environment. These applications support a variety of operations and run much like programs and services on PCs. Applications can be developed to provide additional functionality such as address books, digital send features, and more. One key application is the **Manager** application that must be loaded onto the device before HP Web Jetadmin 10.0 can view and modify applications.

One or more devices selected from any list will appear under the **Applications** tab. Each device will appear with any resident applications. Again, the **Manager** application must be loaded onto the device before HP Web Jetadmin will list resident applications. Some device models have the **Manager** application embedded into firmware making it resident.

 **NOTE:** Some HP Web Jetadmin 10.0 configuration options require device applications. These include all configuration options for either EWS or digital send functionality. When this type of configuration is either viewed or changed via HP Web Jetadmin 10.0 software, device applications are automatically installed.

Features on the **Applications** tab page include:

- **Install Manager:** For devices that do not already have the **Manager** application installed or do not have a firmware embedded **Manager** application, the **Install Manager** function must be used. Devices that do not have the **Manager** installed will appear in the **Applications** list with the indication (**Manager** not installed). To install the **Manager**, select the device or devices from the **Applications** list and choose **Install Manager**.
- **Install Applications:** Once the **Manager** application is installed on the device, other resident applications are listed. New device applications can be removed or added at this time. **Install Applications** is used to push device applications onto the device.
- **Application Repository:** Device applications that are available on the HP Web Jetadmin 10.0 host system can be viewed by using **Application Repository**. When launched, this interface lists all applications that are ready to be installed on devices. You can also use the following to manage the applications:
 - **Upload:** upload application files from the client host onto the HP Web Jetadmin 10.0 host.
 - **Delete:** remove applications from the HP Web Jetadmin 10.0 host.
- **Credentials:** Device credentials can be used to protect against unauthorized downloading and manipulation of device resident applications. The EWS password is used for this purpose and is managed within the HP Web Jetadmin 10.0 **Credential Store**. This device credential can also be set on one or many devices through HP Web Jetadmin 10.0 [Configuration on page 130](#).

Detailed Information Tab

The **Detailed Info** tab page shows many points of device information that are typically of interest to people in charge of device uptime. You can refresh this information by clicking **Refresh**.

Capabilities Tab

The **Capabilities** tab page shows a list of capabilities information for either a single device or multiple devices, depending on the devices selected in the device list. Device capabilities are displayed in two columns: capabilities name and capabilities value. An alphabetic sort can be done on the capabilities name.

Troubleshoot Tab

- [Parts of the Troubleshoot Tab Page](#)

The **Troubleshoot** tab page provides several features that can be used to remotely control devices and analyze other areas for troubleshooting purposes. The features available change depending on the device or devices selected in the device list.

Parts of the Troubleshoot Tab Page

Options on the **Troubleshoot** tab page include:

- **Embedded Web Server:** available only when a single device is selected in the device list; launches the selected device's resident http interface.
- **Online/Offline:** available only when a single device is selected in the device list; remotely toggles the selected device between online and offline.

- **HP Support:** available only when a single device is selected in the device list; launches the product page content from <http://www.hp.com> for the selected device. HP Instant Support pages are launched when the device supports this type of <http://www.hp.com> content.
- **Reset Device:** available only when a single device is selected in the device list; launches controls to remotely reset the device or to remotely restore the device to factory defaults.
- **Print Test Page:** available for both single and multiple device selections on the device list; can launch a local device configuration page or send a file from the client to host to the device's 9100 print port.

The file must be in a file format that the printer natively knows how to print; this varies by printer. For example, most printers can accept simple .txt files and pjl formatted files. Some printers can natively print pdf files, and so forth.

Parts of the **Troubleshoot** tab page include:

- **Detailed status:** available for both single and multiple device selections on the device list.
Single device selections: HP Web Jetadmin 10.0 reflects all status messages for the selected device. This is different from a single device status view where only the most severe message is displayed.
Multiple device selection: HP Web Jetadmin 10.0 reflects status counters for selected devices in the device list.
- **Troubleshooting tools:** provide historical information for single or multiple device selection and include:
 - **Recent Alerts:** shows all recent alerts for the device selected.
 - **Recent Configurations:** shows the recent configuration for the device selected.
 - **Firmware Updates:** shows all available firmware updates for the selected device.

Firmware Tab

- [Parts of the Firmware Tab Page](#)


The **Firmware** tab page can be activated on any device list. Both single and multiple devices can be displayed within this tab and can be sorted by **Device** or **Firmware Type**.

Parts of the Firmware Tab Page

Options on the **Firmware** tab page include:

- **Group By:** devices displayed on the **Firmware** tab page can be grouped as follows:
 - **By Device:** lists one device per line. Individual lines can be expanded to view.
 - **By Firmware Type:** lists the devices sorted by firmware type.
 - **By None:** lists all selected devices and corresponding data, uncategorized. When this option is used with any other option, it categorizes the data under device. To see the data, select **+** next to the device.
- **+** (Expand All): view detail.
- **-** (Collapse All): view summary information only and no detail.

From any of these lists **Upgrade device**, **Upgrade Jetdirect**, or **Schedule upgrade**, actions can be launched. In all cases, you can select **Automatic** (recommended versions) or **Custom** (select the firmware version to use, for example, if you want to select an older firmware image if one happens to exist on the HP Web Jetadmin 10.0 host).

 **NOTE:** You can change the default for the number of retries HP Web Jetadmin 10.0 will attempt before stopping ([Firmware Upgrade Options on page 167](#)).

NOTE: When HP Jetdirect firmware upgrades, a device can be left in short stack if it is accidentally disconnected during the upgrade or if some other fatal error occurs. HP Web Jetadmin 10.0 will detect that error condition and attempt the upgrade again to ensure the device is not left in a bad state. A condition on HP Jetdirect cards is **NLS Missing** which happens if the card needs to be upgraded once for English, and then again for localized languages; HP Web Jetadmin 10.0 will detect this situation as well.

Device Lists

- [All About Device Lists](#)
- [Task Modules for Device Lists](#)
- [Related Application Options for Device Lists](#)
- [Printing Device Lists](#)
- [Deleting Devices from Device Lists](#)
- [Refreshing Devices](#)
- [Find More Devices](#)
- [Credentials for Devices](#)

All About Device Lists

- [Pre-Defined Device Lists](#)
- [Columns for Device Lists](#)
- [Customizing Layouts for Device Lists](#)
- [Filters and Device Lists](#)
- [Searching in Device Lists](#)
- [Exporting Device Data](#)

HP Web Jetadmin 10.0 **Device Lists** and related features such as sorting and filtering lets you easily locate, manage, and analyze device fleets. Batch configuration, fleet upgrades, reporting and other powerful HP Web Jetadmin 10.0 features all start with the basic list of devices.

For example, Pete is an HP Web Jetadmin 10.0 user who understands that all devices of a certain model and in a certain geographical location require firmware updates. These updates are required to enhance the device functionality and increase performance. Using advanced filtering, Pete can get a list of devices that match both the model and geographical location criteria. Pete can then export the details from this list and use the contact information to begin communicating a timeframe in which the firmware updates will occur. After a time, the contacts are all aware of the firmware update activity that will happen after hours when most devices are not in use. Then, using a device list and firmware updating, Pete can schedule the fleet updates for these devices. Later, again using HP Web Jetadmin 10.0 lists, Pete can view all of the devices that have or have not completed the firmware update process. A common theme in this scenario is device lists and filtering. (See [Filters and Device Lists on page 71.](#))


To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Pre-Defined Device Lists

The following pre-defined device lists show devices on your network that are not marked as hidden:

- **All Devices** list: displays a list of all discovered devices.
- **Error Devices** list: displays a list of discovered devices in an error state.
- **Warning Devices** list: displays a list of discovered devices in a warning state.

- **New (Last Discovery)** list: displays all devices that were discovered for the first time by the last discovery.
- **New (Manual)** list: displays all devices considered new.
- **New (Time Period)** list: displays all devices that were discovered for the first time within the last 14 days (number of days can be set in **Tools > Options > Device Management > Device Filters > New Devices Filter**) ([New \(Time Period\) Filter on page 82](#)).
- **Ungrouped Devices** list: shows all devices not assigned to any group.
- Plus the first four lists included under **PC-Connected Devices** list: shows all printers that are connected to a PC rather than directly to the network.

 **NOTE:** If the **Device Model** column is blank, that device has a model name that HP Web Jetadmin 10.0 does not recognize. If **Unknown (Disconnected)** appears in the **Device Model** column, the HP Jetdirect print server does not have a printer connected to it.

Groups lists are the **Device Lists** that display when a group is selected. These lists can be searched or filtered just as the **All Devices** list can be searched or filtered ([Searching in Device Lists on page 74](#) or [Filters and Device Lists on page 71](#)). For more information about Groups, see [Device Groups on page 85](#).

Columns for Device Lists

- [Columns Dependent on HP Web Jetadmin 10.0 Data](#)
- [Manipulating Columns in Device Lists](#)
- [Steps for Adding or Removing Columns for Device Lists](#)

Columns in **Device Lists** contain device data or device properties. Most of the data displayed in these columns is obtained by queries to the devices themselves while some of the data is specific to HP Web Jetadmin 10.0. Columns can be used to sort data and also can be customized in a variety of ways. (See [Manipulating Columns in Device Lists on page 69](#) and [Customizing Layouts for Device Lists on page 70](#).)

You can select columns to view on the **Device Lists** from a static list of columns. However, if your device does not support a column you have selected, the column will report **Unavailable** on the **Device Lists** for that device.


Column types are added to HP Web Jetadmin 10.0 as newer device models release with new and different data objects available. At this writing, there are about 300 column types; this number grows with the addition of new device updates, new functionality, and other plug-ins.

Columns Dependent on HP Web Jetadmin 10.0 Data

Some column data is internal to HP Web Jetadmin 10.0 and is not obtained from the device, such as device status or other data specific to the local application. Examples of these columns dependent on HP Web Jetadmin 10.0 data are:

- **User Defined Settings:** custom columns that can be created by users and then populated with data that is only resident on the application. (In previous versions of HP Web Jetadmin 10.0, this used to be called custom fields or custom settings.)
- **Acknowledged:** shows if you have defined the device as **Acknowledged**. Acknowledging devices can be done by right-clicking any selection of devices in any devices list. “Acknowledge” only affects the count of devices in the **New (Manual)** list.


- **Credentials Required:** shows requests for required credentials that were not met.
- **Discovery Date/Time:** time and date of the last discovery.
- **Last Communication:** time and date of the last communication.
- **Last Discovered:** time and date of the last discovery that found this device.
- **PC-Connected:** if a device is locally connected to a PC.
- **Status:** HP Web Jetadmin 10.0 status message about the device.
- **Severity:** severity rating of status for the device.
- **Device Groups:** shows the group membership for a device, listing either a single group or the word “multiple”. If you hover-over it with your mouse a listing of all groups is displayed.

 **NOTE:** You can enable two different columns that help track discovery and communication and represent internal device date/time tracking: **Last Communication** and **Last Discovered**. These time stamps are updated whenever a discovery has occurred in which the device was discovered or re-discovered.

Manipulating Columns in Device Lists

You can manipulate columns on the device lists in HP Web Jetadmin 10.0:

- **Selecting Devices:** selecting a device means performing some action that causes the device to become selected which sets up the device or devices for some further action. Click to select one device or **Shift+Click** to select multiple devices.
- **Resize columns:** to set the width of a column, click and drag the column marker in the list header to the desired width. Or, to resize the column to the broadest width required to display the data, double-click on the column header.
- **Sort columns:**
 - to sort the entire device list by a specific column, click in the header for that column. Click again to reverse the sort.
 - to perform a secondary sort on a list, use **Shift+Click** on a different column after the initial sort.
 - to perform additional sorts, hold down **Shift** while clicking on different column headers.
- **Display or hide columns:** to display or hide columns, right-click on the column header. The columns that are currently displayed have a checkmark next to them; the ones that are not displayed (or hidden) have nothing next to them. Click on the columns to display or hide.
- **Right-click menus:** various kinds of right-click menus are displayed based on whether something is selected and what list is displayed. For example, if a device is selected on a device list, right-clicking within the device list causes different menu options to be displayed than right-clicking when no devices are selected.
- **Re-order columns:** move columns around in device lists by dragging-and-dropping them in the header to where you want them.

 **NOTE:** The column **IP Hostname**, which is enabled by default, is dependent on [DNS on page 245](#) lookups. For security and performance reasons, you can turn them off.

Steps for Adding or Removing Columns for Device Lists

1. Access any **Device List**. Right-click in any column header and select **Customize**. The **Select Columns** wizard is started.
2. Select the column by highlighting it and clicking the arrow buttons between the two lists. To select multiple columns, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons.

You can select the columns displayed on this page by choosing:

- **Basic**: provides the same selection as those displayed when you are in a **Device List**, right-click the column header, and select **Customize** (which displays the **Select Columns** wizard).
 - **Standard**: provides a selection of choices more commonly used.
 - **Advanced**: provides a selection of all choices.
3. Click **OK**. The changes should be reflected on the **Device Lists**.

Customizing Layouts for Device Lists

- [Steps for Adding a Customized Device List](#)
- [Steps for Editing a Custom Device List](#)

In addition to the **Default** layout which is always available (it cannot be deleted), you can create different layouts to apply to any **Device List**. At the top of each **Device List** is a **Layouts** field with a drop-down list from which you can select any custom layout or default layout or create a layout. The layouts can be:

- **Shared**: any user can access them.
- **Private**: cannot be accessed by other users.

Steps for Adding a Customized Device List

1. In the toolbar, click **View > Column Layouts**. The **Column Layout Manager** page is displayed.
2. Click **New**. The **Column Layout Editor** page is displayed.
3. Type the name of the custom view in **Name**.
4. Select the column to display on the device lists by highlighting it and clicking the arrow buttons between the two lists.

To show all columns, select the radio button **Advanced**. Advanced columns are those that are rarely used. Then select the columns as you did earlier.

 **NOTE:** To select multiple columns, use either **Ctrl+Click** or **Shift+Click**. To move the order of the visible columns, use the up/down arrows.

5. If this view can be seen or used by other users, check the box for **Shared** (or public).
6. Click **OK**. The **Column Layout Manager** page is displayed. Click **Close**. The view you just edited is available to select on the device lists.

Steps for Editing a Custom Device List

1. In the toolbar, click **View > Column Layouts**. The **Column Layout Manager** page is displayed.
Highlight the view to edit and then click **Edit**. The **Column Layout Editor** page is displayed.
2. Select the column to display or remove from the device lists by highlighting it and clicking the arrow buttons between the two lists.

To show all columns, select the radio button **Advanced**. Advanced columns are those that are rarely used. Then select the columns as you did earlier.

 **NOTE:** To select multiple columns, use either Ctrl+Click or Shift+Click. To move the order of the visible columns, use the up/down arrows.

3. If this view can be seen or used by other users, check the box for **Shared** (or public).
4. Click **OK**. The **Column Layout Manager** page is displayed. Click **Close**. The view you just added is now available to select on the device lists.

Filters and Device Lists

- [Built-in Filters](#)
- [Filter Manager and Editor](#)

Filters are used to limit the content of any list based on a specified criteria. Filters can also be applied to other features such as Automatic device groups ([Manual versus Automatic Device Groups on page 86](#)).

Characteristics of filters are:

- Multiple layers of filtering can be created by using AND/OR operators.
- Filters can be stored and also shared with other users.
- There are a few built-in filters that exist when HP Web Jetadmin 10.0 is first installed ([Built-in Filters on page 72](#)).
- Filters can be added as filtered lists in the left navigation pane.

Available actions for filters listed on the **Filters** menu (accessible from the toolbar) are:

- **Built-in:** apply a built-in filter to a displayed device list; built-in filters include Color Devices, Error Devices, PC-Connected Devices, Ungrouped Devices, and Warning Devices ([Built-in Filters on page 72](#)).
- **Shared:** (if there are shared filters); lists any filter that has been designated as “shared” in the **Filter Editor**.
- **Private:** access all filters that are not shared (as specified in the **Filter Editor**).
- **Clear:** clears filters from devices selected in the device list. Highlight a device, click **Filters** and select **Clear**. The filters will be cleared from that device.
- **New:** create a filter using the **Filter Editor** ([Steps for Creating \(or Adding\) Filters on page 72](#)).
- **Edit:** edit an existing filter using the **Filter Editor** ([Steps for Editing Existing Filters on page 73](#)).

- **Save As:** save an existing filter with another name to make two filters using the **Filter Editor** ([Steps for Editing Existing Filters on page 73](#)).
- **Manage:** create a filter, edit a filter, or delete a filter using the **Filter Manager** ([Managing Filters on page 74](#)).

Built-in Filters

Built in filters are listed as Built-in under the **Filter** menu:

- **Error Devices:** any devices with a severity of “Error”.
- **Warning Devices:** any devices with a severity of “Warning”.
- **New (Last Discovery):** any devices that were added to the **All Devices** list since last discovery.
- **Ungrouped Devices:** any device that is not a member of a group.
- **PC-Connected Devices:** any device that was discovered through PC-Connected device discoveries.
- **Color Devices:** any device with color capability.
- **New (Time Period):** any device that falls into the “new” state based on the days setting within **Tools > Options > Device Management > Device Filters > New Devices Filter** ([New \(Time Period\) Filter on page 82](#)).
- **New (Manual):** list of new devices until you flag each as “acknowledge”. Acknowledging devices can be done by right-clicking any selection of devices in any devices list. “Acknowledge” only affects the count of devices in the **New (Manual)** list.

Filter Manager and Editor

- [Steps for Creating \(or Adding\) Filters](#)
- [Steps for Editing Existing Filters](#)
- [“Save As” Filters](#)
- [Managing Filters](#)
- [Steps for Applying Filters for Device Lists](#)
- [Other Ways to Access Filters](#)

The **Filter Manager** and the **Filter Editor** are two filtering features in **Device Lists** that work together to help you add and manage filters:

- **Filter Manager:** displays all filters in HP Web Jetadmin 10.0; through the **Filter Manager** you can add a new filter, edit an existing filter, or delete a filter.
- **Filter Editor:** invoked when you choose to add or edit any filter; you can also delete filters using this tool.

Steps for Creating (or Adding) Filters

1. Access a device list. In the toolbar click **Filters** and then click **New**. The **Filter Editor** is displayed.
2. Type the name for this new filter in **Name**.

3. To make this filter visible to other users, select **Shared**. If the filter is not shared, it is only visible to the user who created it.
4. If the filter is shared, you can choose to have it display in the left navigation pane under the **All Devices** list by selecting **Available Under All Devices**.
5. If you select **Advanced**, a text-field area is displayed for you to manipulate filter attributes that are expressed in explicit text rather than through a graphical interface. An example of this content is show here: `Contains("Asset Number", "2") AND Contains("Asset Number", "1", MatchCase)`.

An invalid string should be blocked from being applied to settings. An Insert feature is provided to place operators and functions into the advanced filter content. A Validate feature is provided to report problems with the advanced filter content if any exist.

6. To add this filter, click **Add**. Now you can specify:
 - **Device Property**: device and system attributes which are the same as HP Web Jetadmin 10.0 columns. The list can be expanded or compressed by using the radio controls **Basic** (provides the same selection as those displayed when you are in a **Device List**, right-click the column header, and select **Customize** (which displays the **Select Columns** wizard)), **Standard** (choices more commonly used), or **Advanced** (all choices).
 - **Not**: checkbox that invokes “not” filtering. When an attribute matches the filter functions, the device will NOT be shown in the list.
 - **Filter Function**: a set of standard operators that give flexibility to the device property definition. These operators will change depending on the **Device Property** selected.

Once multiple selections are chosen and displayed in **Filter Function**, you can choose “AND” or “OR” (the default is “AND”).
 - **Value**: provides an entry point to define the **Filter Function** and **Device Property** value. This can either be a free text field or a pre-populated drop-down menu depending on the **Device Property** selected.
 - **Options**: contains features that further describe the content of free text. Examples are “Match Case” and “Ignore Case”. This feature is only active when free text fields are available.
7. When done, click **OK**. The **Filter Editor** is displayed with your selections.
8. When done, click **OK**. The device list is displayed.

Steps for Editing Existing Filters

1. Access a device list. In the toolbar click **Filters** and then click **Manage**. The **Filter Manager** is displayed.

 **NOTE:** You can also edit filters through the top menu bar **View > Filters**.

2. Make the changes to the existing filter.
3. When done, click **OK**. The Filter Editor is displayed with your selections.
4. When done, click **OK**. The device list is displayed.

“Save As” Filters

1. Access a device list. In the toolbar click **Filters** and then select **Save As**. The **Save Filter As** is displayed.
2. You can save a copy of a filter under a new name or edit an existing filter definition.

Managing Filters

1. Access a device list. In the toolbar click **Filters** and then select **Manage**. The **Filter Manager** is displayed.
2. Select the filter and then click:
 - **New**: create a filter ([Steps for Creating \(or Adding\) Filters on page 72](#)).
 - **Edit**: edit an existing filter ([Steps for Editing Existing Filters on page 73](#)).
 - **Copy**: copy an existing filter to create a new filter.
 - **Remove**: delete a filter.
3. Follow the steps for the action requested.

Steps for Applying Filters for Device Lists

1. Display the device list on which you want to apply the filter.
2. In the toolbar click **Filters** and then click one of the following:
 - **Built-in**: apply a built-in filter to a displayed device list; built-in filters include Color Devices, Error Devices, PC-Connected Devices, Ungrouped Devices, and Warning Devices ([Built-in Filters on page 72](#)).
 - **Shared**: (if there are shared filters); lists any filter that has been designated as “shared” in the **Filter Editor**.
 - **Private**: access all filters that are not shared (as specified in the **Filter Editor**).
3. Select the filter from the list. The device list will automatically display only those devices that match the criteria in the selected filter.
4. To view all devices again, click **Filters** and then select **Clear**.


Other Ways to Access Filters

1. Access a device list. In the toolbar click **Filters** and then click **Manage**. The **Filter Manager** is displayed.
2. Access a device list and right-click. Then select **Filters**.

Searching in Device Lists

- [Steps for Searching in Device Lists](#)
- [Advanced Searches](#)

You can search any device list quickly for a device that meets specified criteria. As your device lists grow, this Search capability becomes more valuable. HP Web Jetadmin 10.0 supports regular expressions. For more flexible searches, see [Advanced Searches on page 75](#).

 **NOTE:** The first time you search through a device list will take longer than subsequent times.

This feature provides a method of searching all visible data fields in the displayed device list. The quick feature or a more complex advanced feature exist, both providing different levels of auto-select. **Search Text** is found on the toolbar in any device list and is a simple entry point for searching text. Typing search text into this field and using Enter causes the search feature to begin parsing text from all exposed column data. A simple scenario uses the string “color” in the Quick Search field. Once entered, the search finds the next occurrence of “color” from the present list position. F3 and Shift-F3 can be used to advance or backup the search operation.

Steps for Searching in Device Lists

1. At the top-right of any device list is a Search box. Type the search criteria there and then press Enter.
2. The first instance of your search criteria is selected and its status is displayed in the bottom portion of the device list page.
3. To go to the next occurrence, press F3. To go backwards through the found matches, press Shift-F3.

Advanced Searches

- [Regular Expressions](#)
- [Steps for Advanced Searches](#)

The **Advanced Search** feature is useful if you want to add flexibility to your search.

Using the **Advanced Search** feature, you can:

- **Match case:** finds only the exact matches for the string entered as well as upper and lower case.
- **Add to selection:** the next matching string will be selected and strings that you have previously selected remain selected as well.
- **Use regular expression:** a string that describes or matches a set of strings, according to certain syntax rules. When this option is selected, the string typed in **Find what** is treated as a search pattern and not as exact text to match. The content of the text in **Find what** must follow the standard Microsoft definition of a pattern.

For example, `gr(a|e)y` can be used to search for both `grey` and `gray` without having to perform two searches.


For more information about regular expressions, see [Regular Expressions on page 76](#).

The **Find** options provide you with the capability to find:

- **Next:** find and highlight the next occurrence of the string typed in **Find what**.
- **Previous:** find and highlight the previous occurrence of the string typed in **Find what**.
- **Find All:** find and highlight all occurrences of the string typed in **Find what**.

Wrap at end of list allows the search to continue to the end of the **Device** list and then continue at the top until the point in the list where the search was started. This feature only applies when using **Next** or **Previous**.

The **Search column** selection box allows you to select which columns to search for the string you have entered. All columns displayed on the device list are displayed in **Search column**.

 **NOTE:** The first time you search through a device list will take longer than subsequent times.

Regular Expressions

On the **Advanced Search** page, if you check **Use regular expression** you can use the **Find what** like a search pattern to look for (rather than searching for exact text to match). The content of the text follows the standard Microsoft definition of a regular expression pattern which consists of the following:

Table 4-3 Regular Expressions for Advanced Searches

Expression	Syntax	Description
Any character	N/A	Matches any single character except a line break.
Zero or more	*	Matches zero or more occurrences of the preceding expression, making all possible matches.
One or more	+	Matches at least one occurrence of the preceding expression.
Beginning of line	^	Anchors the match string to the beginning of a line.
End of line	\$	Anchors the match string to the end of a line.
Beginning of word	<	Matches only when a word begins at this point in the text.
End of word	>	Matches only when a word ends at this point in the text.
Line break	\n	Matches a platform-independent line break. In a Replace expression, inserts a line break.
Any one character in the set	[]	Matches any one of the characters within the []. To specify a range of characters, list the starting and ending character separated by a dash (-), as in [a-z].
Any one character not in the set	[^...]	Matches any character not in the set of characters following the ^.
Or		Matches either the expression before or the one after the OR symbol (). Mostly used within a group. For example, <code>sponge mud bath</code> matches <code>sponge bath</code> and <code>mud bath</code> .
Escape	\	Matches the character that follows the backslash (\) as a literal. This allows you to find the characters used in regular expression notation, such as { and ^. For example, <code>\^</code> Searches for the ^ character.
Tagged expression	{}	Matches text tagged with the enclosed expression.
C/C++ Identifier	:i	Matches the expression <code>([a-zA-Z_\$][a-zA-Z0-9_\$]*)</code> .

Table 4-3 Regular Expressions for Advanced Searches (continued)

Expression	Syntax	Description
Quoted string	:q	Matches the expression <code>((("[^"]*" ('[^']*'))(['^']*))</code> .
Space or Tab	:b	Matches either space or tab characters.
Integer	:z	Matches the expression <code>([0-9]+)</code> .

Steps for Advanced Searches

1. At the top-right of any **Device List**, click the (show) binoculars icon.
2. Type the search criteria in **Find what**.
3. Select which matches to find in **Find options**:
 - **Match case**: only finds matching text where the case of the letters matches the search string when it is checked. Finds matches with both matching case and mismatched case when this option is not checked.
 - **Add to selection**: the next matching entry found is selected, but any previously selected entries also remain selected. When this is not selected, the next matching entry will be selected, but any previously selected entries will be unselected.
 - **Use regular expression**: the **Find what** string acts as a search pattern to look for (rather than the exact text to match) ([Regular Expressions on page 76](#)).
4. Select how to find matches in **Find**:
 - **Next**: search in a forward direction looking for the next occurrence of the string to be found. When starting a new search, this includes the device that currently has focus. When continuing a search it starts with the next device that matches.
 - **Previous**: search in a reverse direction looking for the previous occurrence of the string to be found. When starting a new search, this includes the device that currently has focus. When continuing a search it starts with the next device that matches.
 - **Find All**: searches all devices starting with the first device.
 - **Wrap at end of text**: only applies when using **Next** or **Previous**; indicates whether or not the search should wrap back around to the start of the device list when it reaches the last device and continue until it reaches the device that had focus when the search was started. If this box is checked the search wraps, otherwise when it reaches the end of the list it will stop. When using **Previous**, the search will continue to the end of the device list after it reaches the first entry in the list.
5. If applicable, select the search column.
6. Click **Find**.

Exporting Device Data

- [Steps for Exporting Device Data](#)

Data representing device attributes can be exported to a file and then stored on a disk or sent via email through SMTP. Export data is the same as column data. Many data elements exist within HP Web


Jetadmin 10.0 but the data that is actually available on devices will vary depending on model and device firmware revision.

Steps for Exporting Device Data

1. Access any device list. Then right-click anywhere within the list and select **Export**. The **Export Devices** wizard is started with the **Select columns** page displayed.
2. Select the column by highlighting it and clicking the arrow buttons between the two lists. To select multiple columns, use either **Ctrl+Click** or **Shift+Click**. To move the order of the visible columns, use the up/down arrow buttons. To move all devices from one list to the other, use the middle arrow buttons.

You can select the columns displayed on this page by choosing:

- **Basic:** provides the same selection as those displayed when you are in a **Device List**, right-click the column header, and select **Customize** (which displays the **Select Columns** wizard).
 - **Standard:** provides a selection of choices more commonly used.
 - **Advanced:** provides a selection of all choices.
3. To schedule the export for a later time, click **Schedule device list export**.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

4. Click **Next**. The **Export Devices** page is displayed.
5. Specify the destination:
 - **Save to file:** when the export is complete, you are prompted for the location; the file will be written to that location and the data is displayed on your page.
 - **Email:** send the data to an email address. Type the email address on this page or browse for the correct email address.
6. If emailing, type the file name. Then click **Next**; the **Confirm** page is displayed.

Task Modules for Device Lists

- [Device Lists - Current Tasks and Common Tasks Task Modules](#)
- [Device Lists - Summary Task Module](#)

The following task modules can be displayed or hidden in **Device Groups**.

Device Lists - Current Tasks and Common Tasks Task Modules


The **Device Lists - Current Tasks** task module can be displayed on the **Device List** page and includes the following tasks:

- **Discover devices on my network** ([Discover Devices \(the Device Discovery Wizard\) on page 121](#))
- **Create new device group** ([Add Devices to a Group on page 92](#))
- **Configure devices** ([Configure Devices on page 136](#))

The **Device Lists - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Device Lists - Common Tasks**.


Device Lists - Summary Task Module

The **Device Lists - Summary** task module can be displayed on the **Overview - Device Management** page. This task module lets you access the **All Devices** list plus the first four lists included under **All Devices** (in the left navigation pane).

 **NOTE:** The device lists included in the left navigation pane can be configured in **View > Preferences > Device Filters** ([Preferences on page 33](#)).

Related Application Options for Device Lists

- [Hidden Devices](#)
- [Polling Rates](#)
- [Blocked Devices](#)
- [New \(Time Period\) Filter](#)

 **NOTE:** The column **IP Hostname** is dependent on [DNS on page 245](#) lookups, which are enabled by default. For security and performance reasons, you can turn them off ([Columns for Device Lists on page 68](#)).

Hidden Devices

If device communication has not occurred within a specified number of days, HP Web Jetadmin 10.0 automatically lists that device on the **Hidden Devices** list so that it won't show up in other **Device** lists throughout the product. The number of days specified is actually counted starting at midnight after the policy has been set **and** the device has not been communicated with.


Follow these steps:

1. On the top menu bar, access **Tools > Options > Device Management**.
Expand **Device Lists** and then select **Hidden Devices**.
2. Configure the desired settings:
 - **Automatically hide devices in communication error after:** Specify how many days should pass with no communications from a device before that device should be hidden.
 - **Hidden devices:** To show a device in the device lists even though it has not be communicated with, highlight it in the **Hidden devices** list and click **Show**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Polling Rates

Whenever you access a device list in HP Web Jetadmin 10.0, the devices on the network are polled. You can determine how many devices and how often devices are polled by setting the rate on the **Device List Polling Rates** page. This is useful because you can reduce network traffic by setting a polling rate appropriate for your own environment.

HP Web Jetadmin 10.0 performs a slow-poll when users access device lists. Slow polling means that HP Web Jetadmin 10.0 will only query a certain number of devices every X seconds and only for the certain columns. The columns polled are based upon the union of all columns in the layouts currently displayed on Device List pages on all currently connected clients. This polling rate can be changed through **Tools > Options > Device Management > Device Lists > Device List Polling Rates**. List performance can be improved by changing the polling rate while network traffic will increase.

 **NOTE:** Another way to refresh the list more quickly is to highlight any or all devices where fast data is desired. Selected devices in the currently visible portion of the device list are always polled at a faster rate than non-selected devices.


Polling always occurs across all devices at the specified rate regardless of whether or not a device list is being accessed by anyone. Accessing a device list only affects the columns which are polled for when the polling does occur. Selecting devices within the visible portion of the list will cause those devices to be polled for at a higher rate.

Polling is also affected by thresholds which are built into HP Web Jetadmin 10.0 and are not configurable. For each column, HP Web Jetadmin 10.0 knows how long the data should be considered valid. If HP Web Jetadmin 10.0 is about to poll for a particular column on a particular device, it goes through the following steps:

- If HP Web Jetadmin 10.0 does not have any data for a specific value, it accesses the device. Any value obtained from the device will be displayed in the device lists.
- If HP Web Jetadmin 10.0 cannot obtain the value, then it checks to see how old the information it has is. If it is within the built-in threshold value for this column, then it considers the data valid.
- If the value is considered “old”, then HP Web Jetadmin 10.0 accesses the device to get a more current value. Any value obtained from the device is displayed in the device lists. If HP Web Jetadmin 10.0 cannot get the data from the device, the value is still listed as **Unknown**.

Thresholds are chosen based upon how stable the values are in the particular columns. For example, the **Severity** of a device might be considered out-of-date after 15 seconds, whereas the **System**

Contact (which is less likely to change) might only be considered out-of-date after 24 hours. The device **Model** might never be considered out-of-date.

 **NOTE:** The 24 hour time on **System Contact** is not as long as it seems because if someone changes this value for a device using HP Web Jetadmin 10.0, the data (and all clients) are updated immediately. It is only in a case where someone changes this value through another mechanism that the slow polling may not see the change for up to 24 hours. If this is happening, then you can always wait for HP Web Jetadmin 10.0 to refresh the information about this device at any time (see **Refresh Selection** in [Top Menu Bar Features on page 32](#)).

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Device Lists** and then select **Device List Polling Rates**.
2. Configure the desired settings:
 - **Polling interval:** select the period of time in seconds in which HP Web Jetadmin 10.0 can send device requests onto the network.
 - **Time between polling intervals:** select an inactive period (time in seconds) where the application does not send device queries.
 - **Maximum devices to poll at one time:** select the number of devices that can be queried concurrently. HP Web Jetadmin 10.0 will place X device queries onto the network in a poll burst and wait for responses. HP Web Jetadmin 10.0 will continue to place X device queries onto the network each time a burst of queries is satisfied with response packets. It will continue to do this until the **Polling interval** time is expired and then will wait until the number of **Maximum devices to poll at one time** is satisfied before sending any new device queries.

To reset all values to defaults, check the **Reset to Default Values** box. For default values, see [Default Settings on page 18](#).
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Blocked Devices

The **Blocked Devices** list contains device addresses for which device discoveries are blocked. Devices are added to this list in one of two ways:

- Devices can be deleted from the **All Device** list with the “Delete and Block” option; the devices are then added to the **Blocked Devices** list.
- Devices can be added to (or removed from) the **Blocked Devices** list in **Tools > Options > Device Lists > Blocked Devices** (see steps below).

If a device is on the **Blocked Devices** list, HP Web Jetadmin 10.0 cannot discover it. If you add a device to this list through the **Tools > Options > Device Lists > Blocked Devices**, the device will still be included on the **All Devices** list. Devices can be blocked via IP Address or Hostname. Hostname is the preferred method, since IP Addresses on devices can change.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Device Lists** and then select **Blocked Devices**. The **Blocked Devices** page is displayed.
2. To add a device to the blocked device list so that it will not be found during a discovery, click **Add**.
To remove a device from the Blocked Devices list so that it can be found during a discovery, click **Remove**.
3. To save these settings and close this window, click **OK**.

New (Time Period) Filter

You can determine how long a device is considered new in HP Web Jetadmin 10.0. “New” devices are displayed on the **New (Time Period)** device list.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Device Filters** and then select **New Devices Filter**.
2. Configure the desired settings:
 - **Time period for device to remain “New”**: Specify the number of days devices should be considered “new”.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Printing Device Lists

- [Steps for Printing Device Lists](#)

You can print any device list. You can select specific devices or print the entire list.

Steps for Printing Device Lists

1. From the left navigation pane, access any device list.
2. You can either print the entire list or just selected devices:
 - To print the entire device list, you can choose to print the whole list or certain pages of it. Go to the next step.
 - To print specific devices on the list, highlight those devices and then go to the next step.



NOTE: To select multiple devices, use either **Ctrl+Click** or **Shift+Click**.

3. To preview the list as requested, click **File > Print > Preview > Device List**.
4. On the device list page, in the toolbar click **File > Print > Device List**. The **Print** page is displayed.
5. Select your printer and the page range (**All**, **Selection**, or **Pages** to identify certain page numbers).
6. Click **Print**. The selected list will print to the specified printer.

Deleting Devices from Device Lists

- [Steps for Deleting Devices from Device Lists](#)

You can delete any device from a device list.

Steps for Deleting Devices from Device Lists

1. From the left navigation pane, access any device list.
2. Highlight the device or devices to delete and right-click to select **Delete**.
3. Select one of the following options:

Function	Removes devices from device lists	Removes historical and task data	Will be rediscovered the next time a discovery is performed
Hide	Yes	No	Yes For more information, see Hidden Devices on page 79 .
Delete	Yes	Yes	Yes
Delete and block	Yes	Yes	No; if they are removed from the Blocked Devices on page 81 list, they will be rediscovered the next time a discovery is performed.

4. Click **OK**.

Refreshing Devices

From any device list, you can refresh devices or the display of devices.

To refresh the device display from the HP Web Jetadmin 10.0 server, access any device list and select a device. Then right-click on that device and select **Refresh Selection**.

To refresh the devices and the device display, you can request HP Web Jetadmin 10.0 to go out to the network and get new device settings from the devices on that network. To do this, access any device list and select a device. Then right-click on that device and select **Refresh Selection (Full)**.

Find More Devices

On the **All Devices** page (select **All Devices** from the left navigation menu) in the upper right corner is a **Start discovery** button. When you click that button, the **Device Discovery** wizard starts to walk you through the steps needed for a successful device discovery.

You will want to use this feature after you initially install HP Web Jetadmin 10.0 and then afterwards to find additional devices. When you first install HP Web Jetadmin 10.0, no discovery has been run which means the **All Devices** list will be empty.

For information about the **Device Discovery** wizard, see [Steps to Discover Devices on page 122](#).


Credentials for Devices

- [Steps for Adding Credentials for a Device Using the Needed Credentials Wizard](#)

Some devices use credentials, which must be entered into HP Web Jetadmin 10.0 for a user to access that device. If the credentials entered by the user (when trying to access a device) do not match the credentials entered HP Web Jetadmin 10.0, the device denies access.

The **All Devices** list has a **Credentials Required** column that shows which devices need credentials. **Yes** in this column indicates that the corresponding device requires credentials; **No** indicates that it does not need credentials. If a device requires credentials, you must add them before users access that device. The **Needed Credentials** wizard will walk you through the steps to add credentials. The pages displayed by the wizard will vary based on the specific credentials required by the device or devices.

Steps for Adding Credentials for a Device Using the Needed Credentials Wizard

 **NOTE:** Throughout the **Needed Credentials** wizard there is a **Skip** button that can be used to **not** enter credentials for devices if, for example, you are unsure of the required value for the device.

1. In the **All Devices** list, highlight the device or devices requiring credentials (those with a **Yes** in the **Credentials Required** column).
2. Right-click and select **Update Credentials**.
3. Use the **Needed Credentials** wizard to enter the credential information for the device or devices. Depending upon the credentials required by the device or devices, one or more of the following pages will be displayed for you to complete:
 - **Enter SNMPv1 Get Community Name** page: Select the device for the credential, supply the Get Community Name (can be up to 256 characters), and click **Set**. Then click **Finish**, or click **Next** and follow instructions in the wizard.
 - **Enter SNMPv1 Set Community Name** page: Select the device for the credential, supply the Set Community Name (can be up to 256 characters), and click **Set**. Then click **Finish**, or click **Next** and follow instructions in the wizard.
 - **Enter EWS Password** page: Select the device for the password, type the username and password, and click **Set**. Then click **Finish**, or click **Next** and follow instructions in the wizard.
 - **Enter SNMPv3 Credential** page: Select the device for the password and type the username, the authenticated password, and the private password. Click **Set** and then click **Finish**.

Device Groups

- [All About Device Groups](#)
- [Task Modules for Device Groups](#)
- [Create a New Device Group](#)
- [Add Devices to a Group](#)
- [Remove Devices from a Manual Group](#)
- [Edit a Device Group](#)
- [Delete a Device Group](#)
- [Edit Device Group Policies](#)
- [Rename a Device Group](#)
- [View a Device Group](#)

All About Device Groups

- [Manual versus Automatic Device Groups](#)
- [Group Policies](#)
- [Device Groups Security Restriction Settings](#)

Device Groups lets you separate devices into subsets (or device groups) so that you can easily manage them. You can add and delete groups, name and rename them, and add or remove devices from existing groups. Putting devices in groups lets you configure multiple devices at the same time.

You can organize groups in a hierarchy to make it easier to manage them. It might be best to mirror an existing structure you are using for groups of devices. For example, you can organize your groups by geography, by building and floor, or by functional area (accounting, marketing, and so forth). Device Groups can have the same name when they don't exist within the same parent group.

Device groups can be either Manual, where you specify which devices belong to each group, or Automatic, where you define filter criteria and devices are automatically added to and removed from each group. You cannot manually change the membership of Automatic groups except by changing the filter criteria. You can have both manual and automatic groups at the same time. (See [Manual versus Automatic Device Groups on page 86.](#))

Device groups can also be used to delegate device management responsibilities to specific users. A user can be granted device management permissions for devices only in specific groups.

You can do the following with **Device Groups**:

- Organize your devices into meaningful categories, for ease of management.
- Create a hierarchy of parent groups and subgroups.

Subgrouping is where a group exists as a member or subgroup of a parent group. The top-level parent group in HP Web Jetadmin 10.0 is simply "Device Groups" This exists at the top-level node in the left navigation pane and can only contain other groups

- Create Automatic groups, where membership is determined automatically according to defined filter criteria.
- Create Manual groups, where membership is determined manually.
- Create policies for automatically applying various types of operations on devices when they are added to and removed from a group.
- Schedule various operations to happen on a group, rather than specific devices.
- Apply security permissions for users, such that they can perform operations on some groups, but not others.
- Provide meaningful names up to 48 characters long.
- The same device can be included in more than one device group.

A few common examples of HP Web Jetadmin 10.0 groups scenarios include:

- a geographic representation of your device fleet.
- parent groups representing buildings within a campus could contain subgroups that represent floors or floor quadrants. This could ease finding devices within a campus setting.
- parent groups reflecting how devices are dispersed among organizations.

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Manual versus Automatic Device Groups

Device Groups can also be used to automatically categorize devices by some common criteria. For example, an IP addressing scheme might be used to distinguish devices by the area in which they exist. In HP Web Jetadmin 10.0, the Filter feature in automatic device groups and the ability to create manual device groups provide powerful tools for managing group membership. (See [Create a New Device Group on page 89](#).)

In HP Web Jetadmin 10.0, groups can be set up with one of two different membership types:

- **Manual group:** Each device is assigned manually to the group and remains in the group until you remove it.
- **Automatic group:** Devices are automatically assigned based on filter criteria within HP Web Jetadmin 10.0. Many variations of filter criteria can exist. For example, you might want to understand how many color devices exist on a specific network; you can build two filters: one to describe the network and one to specify the color capability:

Table 4-4 Example of Criteria to Set Group Membership

Property	Function	Value
IP Address	Contains	15.5
Color	Equals	Yes

You can also edit this filter in advanced mode using the HP Web Jetadmin 10.0 filtering syntax. These strings can have functions and values added and modified to affect the outcome of the filtering action. Automatic group membership is updated when one or more of the following occur:

- The Automatic Group has had a filter (or filter change) applied.
- New devices enter the system running a device discovery.
- Device changes are realized by the system that either match or don't match the filter criteria.
- Devices are removed from the system by hiding or deleting them from the **All Devices** list.

Group Policies

- [Example for Group Policies](#)

Policies are applied to groups for the purpose of applying a settings action (or actions) onto a device when it becomes a member of the group or when it is removed from a group.

Many combinations of policy settings can be applied to a group. Multiples of the same policy types can be applied to groups as well. A short definition for each policy type follows:

- **Enable data collection policy:** If you have already defined a reports data collection template, this policy will automatically apply that template to devices when they are added to the group, when they are removed from the group, or both.
- **Subscribe to alerts or unsubscribe to alerts policy:** If you have already defined an alert subscription template, this policy will automatically apply that template to devices when they are added to the group, when they are removed from the group, or both.
- **Configure devices policy:** If you have already defined a device configuration template, this policy will automatically apply that template to devices when they are added to the group, when they are removed from the group, or both.
- **Add or remove devices to supply group policy:** If you have already defined a supply group, this policy will automatically add devices to that supply group when they are added to the group, when they are removed from the group, or both.


Example for Group Policies

Following is a simple example of applying a configuration template to a group:

- An administrator is named Pat.
- Pat has an HP Web Jetadmin 10.0 group named "Pat's Devices".
- One policy setting on the group is a configuration template that sets the **System Contact** to "Pat" and the **Device Location** to "Building 3".

Device Groups Security Restriction Settings

It is possible to restrict device management capabilities to specific groups in **User Security** ([User Security on page 260](#)). To accomplish this, you can create a Role that specifies a restriction type of **Device Group** in **User Security** in the Application Management view. You can then choose from a subset of permissions that can be allowed/denied by device group. After the restricted role is created, it can be assigned to a Windows user or user group. When you grant a restricted role to a user you can choose which device groups the user should have access to.

 **NOTE:** Devices can exist in multiple groups. If the device is in a group the user has access to, the user can access the device in any group.

For example, you want to give user Lisa rights to configure devices in Group A but not Group B:

1. Create a restricted role with **Configure Devices** checked.
2. Assign the newly created restricted role to Lisa and add Group A to the list of groups.

Result-User Lisa can configure devices in Group A but not devices in Group B (unless the device exists in both Group A AND Group B).

Task Modules for Device Groups

- [Device Groups - Current Tasks and Common Tasks Task Modules](#)
- [Device Groups - Summary Task Module](#)
- [Device Groups - Management Task Module](#)

The following task modules can be displayed or hidden in **Device Groups**.

Device Groups - Current Tasks and Common Tasks Task Modules

The **Device Groups - Current Tasks** task module can be displayed on the **Device Groups** page and includes the following tasks:

- **Create new device group** ([Create a New Device Group on page 89](#))
- **Add devices to groups** ([Add Devices to a Group on page 92](#))
- **Remove devices from group** ([Remove Devices from a Manual Group on page 93](#))
- **Edit device group** ([Edit a Device Group on page 94](#))
- **Delete device group** ([Delete a Device Group on page 96](#))
- **Edit device group policies** ([Edit Device Group Policies on page 96](#))

The **Device Groups - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Device Groups - Common Tasks**.

Device Groups - Summary Task Module

The **Device Groups - Summary** task module can be displayed on the **Device Groups** page. This task module lets you easily review how many devices are assigned to a group and how many are not. It also displays how many groups have devices in either an error or warning state. You can use the status indicators on the groups in either the left navigation pane or the **Device Groups - Management** task module to find out which groups contain the error or warning devices. You can also select the **Error Groups** or **Warning Groups** nodes under **All Devices** in the left navigation tree, to see which devices have errors or warnings.

Device Groups - Management Task Module

The **Device Groups - Management** task module shows the groups that exist and their hierarchy. It also provides a shortcut to most features available through **Common Tasks**. This task module is handy if

you want to hide the **Common Tasks** task module from the **Device Groups** page. Tasks accessible through this task module include:

- **New Group** ([Create a New Device Group on page 89](#))
- **Edit** ([Edit a Device Group on page 94](#))
- **Add Devices** ([Add Devices to a Group on page 92](#))
- **Remove Devices** ([Remove Devices from a Manual Group on page 93](#))
- **Delete** ([Delete a Device Group on page 96](#))
- **View** ([View a Device Group on page 98](#))

Create a New Device Group

- [Steps for Creating a Device Group](#)
- [Other Ways to Create a Device Group](#)

A device group is set of devices on your network. After you create a group, you can manipulate all of the devices in that group. You can set up device groups so that device membership is either determined manually by you (**Manual group**) or automatically based on criteria you specify (**Automatic group**).

Naming groups with meaningful descriptions makes it easier to find a specific device group in a list. For example, instead of assigning `Payroll` and `Receivables` as device group names, you could assign `Accounts Payroll` and `Accounts Receivables`. These two device groups would then appear together in a sorted list.

The **Manual group** feature allows you to add discovered devices to a device group, thereby giving you complete control over the group membership. This method can be cumbersome if you have a lot of devices, and membership may need to be reevaluated manually when new devices are discovered or added to the network. However, this method may be required in certain grouping strategies, where the criteria cannot be evaluated automatically (such as “Marketing,” “Payroll”, and “Sales” devices).

The **Automatic group** feature allows HP Web Jetadmin 10.0 to automatically add newly discovered devices to a device group if the devices meet specific criteria. Specify the filters that HP Web Jetadmin 10.0 uses to determine if a new device should be added to a device group. You can specify multiple filters for the device group. You can also use the filters to remove devices from a device group when filter criteria does not apply to a device. Automatic group membership is determined by filter settings; devices cannot be added to or removed from these groups manually.

 **NOTE:** All primary device group criteria applies to subgroups.


Steps for Creating a Device Group

1. Select **Device Groups** in the left navigation pane. The **Device Groups** page is displayed.

On the **Device Groups** page, click **Create new device group**. The **Create Group** wizard is started with the **Specify group options** page displayed.

2. On this page you can specify:

- **Group name:**
 - can be up to 48 characters.
 - can have alphabetic characters.
 - can have numeric characters.
 - can have special characters (such as “” or “-”).
 - can have Unicode characters.
 - cannot contain a forward slash or a backward slash.
 - can have the same name as another group if the two groups with identical names are in different parent groups.
 - naming is flexible and can be changed on existing groups.
- **Parent group:** select this from the drop-down box. Characteristics of parent groups are:
 - can contain a subgroup that has the same name as another subgroup in a different parent group.
 - no known limits exist for the depth of parent groups and subgroups or the number of groups.
- **Group membership type:** determines how devices will be added to the group. Select:
 - **Manual group:** each device is added to the group manually.
 - **Automatic group:** devices are added to the group automatically depending upon the filters set for the group.


 **NOTE:** Automatic group membership is determined by filter settings; devices cannot be added to or removed from these groups manually ([Add Devices to a Group on page 92](#)).

3. If you want to set the properties for the group you are creating, check the box for **Configure group properties now**.
4. Click **Next**. If you are creating a manual group and chose not to configure properties for the group now, the **Confirm** page is displayed. Review the group information entered; if it is correct, click **Create Group**. The **Results** page is displayed giving you a choice to open the group when you click **Done**.

If you chose to configure properties for the group now, proceed with these steps.

5. If you are adding a manual group and want to add devices to the group now:
 - Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list

to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

 **NOTE:** The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

If you are adding an automatic group:

- The **Specify filter criteria** page is displayed for you to define the devices to include in this automatic group. Set up filters so that only those devices are selected and assigned to this group. Select the **Edit mode (Basic or Advanced)**, at the bottom of this page).

After you click **Add**, the **Basic** edit mode lets you define filters using the Function page:

- **Device property:** Select the property from the drop-down list.
- **Not:** Check this if the devices should **not** match the filter criteria. Otherwise, devices matching the filter criteria will be assigned to this group.
- **Filter Function:** Select the way in which the devices should match the filter criteria from the drop-down box (contains, ends with, equals, and so forth).
- **Value:** Type the value for the filter criteria.
- **Options:** Choose to ignore the case to determine a match or to match the case.
- **Show device properties:** Select **Basic** (most commonly used filters), **Standard** (commonly used filters), or **Advanced** (all filters).

If you chose the **Advanced** edit mode, you can define filters this way:

- Type your own formula using the **Insert** button to insert various expressions.
 - When you have finished, click **Validate** to ensure the formula for the filter is valid.
- Click **Next**.
6. The **Specify group properties** page is displayed. Enter the description and contact information for this group and then click **Next**.
 7. The **Configure group policies** page is displayed. Policies impact the device and HP Web Jetadmin 10.0-based settings as they become members of the group. Select the policy from the **Policy** column and click **Add**. Then click **Next**.

The **Policy** column lists policies based on the user's permissions. This list is blank if there are no user permissions configured ([User Security on page 260](#)).

8. The **Confirm** page is displayed. Review the group information entered; if it is correct, click **Create Group**. The **Results** page is displayed giving you a choice to open the group when you click **Done**.

Other Ways to Create a Device Group

- In the navigation pane, right-click on **Device Groups** and select **New group**.
- In the navigation pane, expand the **Device Groups** tree and right-click on the parent group for the new group and select **New group**.
- In the navigation pane, right-click on **Overview** and select **Device Groups > New group**.

- From the top menu bar, select **File > New > Group**.
- On the **All Devices** page, right-click on the device to add to a group and select **Device Groups > Add devices to new group**. This allows you to create a group and add the selected device or devices to that group at the same time.
- On the **All Devices** page, highlight the device to add to a group and then, in the lower portion of the **All Devices** page, click on the **Device Groups** tab. Click **Add devices to new group**.
- In the **Device Groups - Management** task module, click **New Group**.


Add Devices to a Group

- [Steps for Adding Devices to a Group](#)
- [Other Ways to Add Devices to a Group](#)

Managing a group of devices can be easier than managing individual devices. Adding devices to a group lets you manage all of the devices in that group at the same time. Removing devices from a group means to delete them from the group, but they will remain in the **All Devices** list. You can only add devices to a group that has been identified as a manual group; devices are automatically added to any group identified as an automatic group based on filter criteria ([Manual versus Automatic Device Groups on page 86](#)).

Steps for Adding Devices to a Group

1. Select **Device Groups** in the left navigation pane. The **Device Groups** page is displayed.
On the **Device Groups** page, click **Add devices to group**. The **Add Devices** wizard is started with the **Select group** page displayed.
2. Select the group to add devices to and click **Next**.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

 **NOTE:** The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

4. Click **Next**. A **Confirm** page is displayed.
If changes need to be made, click **Back** and make corrections.
If no changes need to be made, click **Add Devices**. The **Results** page is displayed. Click **Done** to display the **Device Groups** page.

Other Ways to Add Devices to a Group

- In the navigation pane, right-click on **Device Groups** and select **Add devices to group**.
- In the navigation pane, under **Device Groups** right-click on the specific group to add devices to and select **Add devices to group**.
- In the navigation pane, right-click on **Overview** and select **Device Groups > Add devices to group**.

- In the **Device Groups - Management** task module, select a device group and click **Add Devices**.
- To add devices to a group from the **All Devices** page, highlight the device or devices to add to a group and drag-and-drop them onto the group in the left navigation pane (the **Device Groups** tree must be expanded in the left navigation pane).
- To add devices to a group from the **All Devices** page, right-click on the device to add to a group and select **Device Groups > Add devices to group**
- To add devices to a group from the **All Devices** page, highlight the device to add to a group and then, in the lower portion of the **All Devices** page, click on the **Device Groups** tab. Click **Add devices to group**.
- You can also add devices using any of the methods to edit a group:
 - In the navigation pane, right-click on **Device Groups** and select **Edit group**.
 - In the navigation pane, right-click on **Overview** and select **Device groups > Edit group**.
 - In the **Device Groups - Management** task module, select a device group and click **Edit**.
 - In the navigation pane, expand the **Device Groups** tree and right-click on the specific group to edit and select **Edit group**.

Remove Devices from a Manual Group

- [Steps for Removing Devices from a Manual Group](#)
- [Other Ways to Remove Devices from a Manual Group](#)

You can delete any device from a device group that has been identified as a manual group ([Manual versus Automatic Device Groups on page 86](#)).

Steps for Removing Devices from a Manual Group

1. Select **Device Groups** in the left navigation pane. The **Device Groups** page is displayed.
On the **Device Groups** page, click **Remove devices from group**. The **Remove Devices** wizard is started with the **Select group** page displayed.
2. Select the manual group to remove devices from and click **Next**.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

 **NOTE:** The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

4. Click **Next**. A **Confirm** page is displayed.
If changes need to be made, click **Back** and make corrections.
If no changes need to be made, click **Remove Devices**. The **Results** page is displayed. Click **Done** to display the **Device Groups** page.

Other Ways to Remove Devices from a Manual Group

- In the left navigation pane, right-click on **Device Groups** and select **Remove devices from group**.
- In the left navigation pane, under **Device Groups** right-click on the specific group to remove devices from and select **Remove devices from group**.
- In the left navigation pane, right-click on **Overview** and select **Device Groups > Remove devices from group**.
- In the **Device Groups - Management** task module, select a device group and click **Remove Devices**.
- In the left navigation pane, expand the **Groups** node and click the group you want to modify. The list of devices in the group is displayed. Select the devices you want to remove and click **Delete** on your keyboard.
- In the left navigation pane, expand **Groups** and click the group you want to remove. The list of devices in the group is displayed. Click **Remove devices from group** in the toolbar at the top of the page.
- In the **All Devices** page, select the device you want to remove from a group. Select the **Groups** tab at the bottom of the page to see which groups the device belongs to. Select the appropriate group and click **Remove From Group**.
- You can also remove devices using any of the methods to edit a group:
 - In the navigation pane, right-click on **Device Groups** and select **Edit group**.
 - In the navigation pane, right-click on **Overview** and select **Device Groups > Edit group**.
 - In the **Device Groups - Management** task module, select a device group and click **Edit**.
 - In the navigation pane, expand the **Device Groups** tree and right-click on the specific group to edit and select **Edit group**.


Edit a Device Group

- [Steps for Editing a Device Group](#)
- [Other Ways to Edit a Device Group](#)

After a device group has been created, you can change its name, the devices in the group, how the devices are assigned to that group (manually or automatically), or any of its properties.

Steps for Editing a Device Group

1. Select **Device Groups** in the left navigation pane. The **Device Groups** page is displayed.
On the **Device Groups** page, click **Edit device group**. The **Edit Group** wizard is started with the **Select group** page displayed.
2. Select the group to edit from the drop-down list.
3. Click **Next**. The **Specify group options** page is displayed.
4. On this page you can modify the group name, the parent group, or whether devices will be added manually (**Manual group**) or automatically (**Automatic group**).

 **NOTE:** When you change a device group from Manual to Automatic, devices that meet the filter criteria for the automatic group will replace any devices that had been in the group when it was a manual group. Changing a device group from Automatic to Manual will not cause the device membership to change; the devices present in the group will be retained and manual modifications can be performed on those devices.

If you are renaming the group, remember a group name:

- must have a unique name within its parent group.
- can be up to 48 characters.
- can have alphabetic characters.
- can have numeric characters.
- can have special characters (such as “” or “-”).
- can have Unicode characters.
- cannot contain a forward slash or a backward slash.

5. Click **Next**.

If you chose **Manual group**:

- a. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.


 **NOTE:** The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

- b. Click **Next**. The **Specify group properties** page is displayed. Type the description and contact information for the devices. Click **Next**.
- c. The **Configure group policies** page is displayed.

If you chose **Automatic group**:

- a. The **Specify filter criteria** page is displayed. Complete this page when it's available. Click **Next**.
- b. The **Specify group properties** page is displayed. Complete this page when it's available. Click **Next**.
- c. The **Configure group policies** page is displayed. Complete this page when it's available.

6. Click **Next**. A **Confirm** page is displayed.

 **NOTE:** Automatic group membership is determined by filter settings; devices cannot be added to or removed from these groups manually.

If changes need to be made, click **Back** and make corrections.

If no changes need to be made, click **Save Group**. The **Results** page is displayed. Click **Done** to display the **Device Groups** page.

Other Ways to Edit a Device Group

- In the navigation pane, right-click on **Device Groups** and select **Edit group**.
- In the navigation pane, right-click on **Overview** and select **Device Groups > Edit group**.
- In the **Device Groups - Management** task module, select a device group and click **Edit**.
- In the navigation pane, expand the **Device Groups** tree and right-click on the specific group to edit and select **Edit group**.
- If you are editing a group to move it to a different parent group, within the left navigation pane you can highlight that group and drag-and-drop it onto the desired parent group.

Delete a Device Group

- [Steps for Deleting a Device Group](#)
- [Other Ways to Delete a Device Group](#)

You can keep your groups current by removing those groups that are no longer needed.

Steps for Deleting a Device Group

1. Select **Device Groups** in the left navigation pane. The **Device Groups** page is displayed.

On the **Device Groups** page, click **Delete device group**. The **Delete Group** wizard is started with the **Select groups** page displayed.

2. Highlight the group or groups (must be at the same level) to delete.



NOTE: Multiple groups, if at the same level, can be selected; use either **Ctrl+Click** or **Shift+Click**.

3. Click **Next**. A **Confirm** page is displayed.

If changes need to be made, click **Back** and make corrections.

If no changes need to be made, click **Delete**. The **Results** page is displayed. Click **Done** to display the **Device Groups** page.

Other Ways to Delete a Device Group

- In the navigation pane, right-click on **Device Groups** and select **Delete group**.
- In the navigation pane, right-click on **Overview** and select **Device Groups > Delete group**.
- In the navigation pane, expand the **Device Groups** tree, right-click on the group to delete, and then select **Delete group**.
- In the navigation pane, expand the **Device Groups** tree, highlight the group to delete and click **Delete** on your keyboard.
- In the **Device Groups - Management** task module, select a device group and click **Delete**.

Edit Device Group Policies

- [Steps for Editing Device Group Policies](#)

- [Other Ways to Edit Device Group Policies](#)

You can make changes to device group policies.

Steps for Editing Device Group Policies

1. Select **Device Groups** in the left navigation pane. The **Device Groups** page is displayed.

On the **Device Groups** page, click **Edit device group policies**. The **Edit Group Policies** wizard is started with the **Select group** page displayed.

2. Select the group or click **Browse** to find the group and click **Next**. The **Configure group policies** page is displayed.

3. Select the policy to edit and click **Add** to add a new policy. Or to remove a policy, select it and click **Remove**.

If you are adding a new policy, the **Add Policy** dialog box is displayed. Select the policy action and then select a trigger; click **Add**.

After you edit or remove a policy, click **Next**. The **Confirm** page is displayed listing any policies you have added or removed.

4. Click **Save Policies**. The **Results** page is displayed.

If you need to make changes click **Back**.

If no changes need to be made, click **Done**. The **Device Groups** page is displayed.

Other Ways to Edit Device Group Policies

- In the navigation pane, right-click on **Device Groups** and select **Edit group policies**.
- In the navigation pane, expand the **Device Groups** tree and right-click on the specific group to edit and select **Edit group policies**. (This is only available for the following device lists: Error Devices, Warning Devices, New (Last Discovery) Devices, and Ungrouped Devices.)

Rename a Device Group

- [Steps for Renaming a Device Group](#)
- [Other Ways to Rename a Device Group](#)

You can change the name of a group to give it a more meaningful name.

Steps for Renaming a Device Group

1. In the left navigation pane, expand the **Device Groups** node and right-click on the specific group to rename; select **Rename**.

2. Type the new name and click **Enter**. A group name:

- must have a unique name within its parent group.
- can be up to 48 characters.
- can have alphabetic characters.
- can have numeric characters.

- can have special characters (such as “” or “-”).
- can have Unicode characters.
- cannot contain a forward slash or a backward slash.

Other Ways to Rename a Device Group

- You can also rename a group using any of the methods to edit a group:
 - In the left navigation pane, right-click on **Device Groups** and select **Edit group**.
 - In the left navigation pane, right-click on **Overview** and select **Device Groups > Edit group**.
 - In the **Groups - Management** task module, select a device group and click **Edit**.
 - In the left navigation pane, expand the **Groups** node and right-click on the specific group to edit; then select **Edit group**.

View a Device Group

- [Steps for Viewing a Device Group](#)
- [Other Ways to View a Device Group](#)


You can view device groups that have been created.

Steps for Viewing a Device Group

1. In the left navigation pane, expand **Device Groups**.
2. Select the group you want to view.

Other Ways to View a Device Group

- In the **Device Groups - Management** task module, select a device group and click **View**.
- In any device list, click the **Groups** tab. Select a group and then click **View**.

 **NOTE:** You must select a group before clicking **View**.

Discovery

- [All About Device Discovery](#)
- [Task Modules for Discovery](#)
- [Related Application Options for Discovery](#)
- [Discover Devices \(the Device Discovery Wizard\)](#)
- [Schedule a Discovery](#)
- [Discovery History](#)
- [Discovery Templates](#)

All About Device Discovery

- [Discovering Devices with HP Web Jetadmin 10.0 through Firewalls](#)
- [Discovery Types and Methods](#)

Discovery features enable HP Web Jetadmin 10.0 to find devices and then add them to the HP Web Jetadmin 10.0 device lists. You might have information about the network that can be used in HP Web Jetadmin 10.0 discovery settings, but some discovery features enable you to search for devices without networking details.

A powerful discovery engine exists within HP Web Jetadmin 10.0 enabling you to locate most devices on both small and large networks. HP Web Jetadmin 10.0 includes a new discovery for printers located in Active Directories ([Active Directory Discovery on page 114](#)). Scheduling and discovery templates allow you to tailor HP Web Jetadmin 10.0 features to any topology or geographically deployed printer fleet. (See also [Schedule a Discovery on page 123](#) and [Create a Discovery Template on page 126](#).)

New discovery features in HP Web Jetadmin 10.0 include:

- [Active Directory Discovery on page 114](#).
- [Import and Export Features of IP Range Files on page 110](#).
- IP Range calculator ([Setting Realistic Ranges on page 108](#)).
- [Discovery History on page 125](#).
- Discovery Templates ([Create a Discovery Template on page 126](#)).
- [Blocked Devices on page 81](#).
- Integrated PC-Connected device discovery ([How HP Web Jetadmin 10.0 Discovers PC-Connected Devices on page 102](#)).

Network devices can be automatically discovered on multiple subnets and then managed. Seven types of discovery are currently supported:

- [SLP Multicast Discovery on page 105](#): an SLP Multicast request is sent out on the network to evoke a response from devices connected to HP Jetdirect print servers.
- [IP Broadcast Discovery on page 106](#): an SNMP Broadcast is sent to the specified Broadcast address. SNMP Devices respond.

- [IP Range Discovery on page 107](#): searches for devices within a range of IP addresses.
- [Specified Device Address Discovery on page 112](#): you can add address lists of known devices to HP Web Jetadmin 10.0 to query only specific end nodes.
- [Active Directory Discovery on page 114](#): queries Microsoft Active Directory using an Active Directory starting point such as domain, organization units (OUs), or other Active Directory containers.
- [Domain Discovery on page 116](#): for PC-Connected devices, the domain is browsed to identify Windows hosts on the network.
- [Quick Device Discovery on page 104](#) is also available to discover devices when you add the hostname or IP address information to this feature anywhere in **Device Management**. Plus, HP Web Jetadmin 10.0 can listen for SLP announcements that are propagated from HP Jetdirect-connected devices. This passive mechanism requires no additional settings and only generates network traffic when HP Web Jetadmin 10.0 receives an SLP announcement.

In addition to gathering devices that are directly connected to the network, HP Web Jetadmin 10.0 can find PC-Connected devices. These are devices that are connected through USB or parallel connectors to either desktops or servers on the network ([Discovery Types and Methods on page 100](#)).

When you initially install HP Web Jetadmin 10.0, you will be asked if you want to run a discovery immediately. You can request to discover devices at any time. By default, HP Web Jetadmin 10.0 does not listen for SLP broadcasts; when passive SLP is enabled, some devices may be found by this type of discovery even if you do not initiate a discovery.

Discovering Devices with HP Web Jetadmin 10.0 through Firewalls

Although firewalls provide a secure perimeter for business resources, they can also present a barrier to software products. HP Web Jetadmin 10.0 provides the ability to discover and manage devices throughout a business network.

HP Web Jetadmin 10.0 uses Multicast and SLP techniques to discover devices on your network. Using standard firewall configurations, multicasts are typically blocked because the communication port on which it relies is blocked. To facilitate a broadcast discovery such as Multicast and SLP, HP Web Jetadmin 10.0 uses the well-known static port, UDP port number 427. To enable this discovery technique, the machine running HP Web Jetadmin 10.0 must unblock the port used from within the firewall settings.

HP Web Jetadmin 8.0/7.8 (and earlier) use the same port numbers as HP Web Jetadmin 10.0. It is not advised at this time to run HP Web Jetadmin 10.0 and HP Web Jetadmin 8.0/7.8 (and earlier) on the same server machine. To unblock a particular port, consult your firewall protection product's help.

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Discovery Types and Methods

- [How HP Web Jetadmin 10.0 Discovers Network Devices](#)
- [How HP Web Jetadmin 10.0 Discovers PC-Connected Devices](#)
- [Quick Device Discovery](#)
- [SLP Multicast Discovery](#)
- [IP Broadcast Discovery](#)

- [IP Range Discovery](#)
- [Specified Device Address Discovery](#)
- [Active Directory Discovery](#)
- [Passive SLP Discovery](#)
- [Domain Discovery](#)

Following are the various types of discoveries performed by HP Web Jetadmin 10.0. There are two distinct types of discoveries:

- **Network Connected Device Discoveries:** find devices on your network. HP Web Jetadmin 10.0 always follows the node-discovery with SNMP queries in order to resolve devices. Once the SNMP query resolves a device, it is placed in the All Devices list. Resolved devices include any HP Jetdirect connected hardcopy device, any third party hardcopy device, some HP network scanners, some HP network projectors, and more. See [How HP Web Jetadmin 10.0 Discovers Network Devices on page 101](#).
- **PC-Connected Device Discoveries:** discovers PCs and then printers connected directly to them. This discovery facilitates both learning about devices that are connected directly to PC hosts and also gathers detailed information about those devices when the SNMP Proxy agent is being used. This discovery facilitates both learning about devices that are connected directly to PC hosts and also gathers detailed information about those devices when the SNMP Proxy Agent is being used. SNMP Proxy Agent is a small software package that can be installed onto a PC and facilitates HP Web Jetadmin communications with locally connected devices. PC-Connected device discoveries can be performed without the SNMP Proxy Agent being installed onto remote hosts but this type of discovery will only gather a minimal amount of device information. See [How HP Web Jetadmin 10.0 Discovers PC-Connected Devices on page 102](#).

Discovery methods are for the most part shared between PC-Connected and network device types. The following table shows which discovery option can be selected for each of the two discovery methods:

Table 4-5 Discovery Options for Network Device Discoveries and PC-Connected Device Discoveries

Type of Discovery	Network Device Discoveries	PC-Connected Device Discoveries
Quick Device Discovery on page 104	Yes	No
SLP Multicast Discovery on page 105	Yes	No
IP Broadcast Discovery on page 106	Yes	Yes
IP Range Discovery on page 107	Yes	Yes
Specified Device Address Discovery on page 112	Yes	Yes
Active Directory Discovery on page 114	Yes	Yes
Domain Discovery on page 116	No	Yes

How HP Web Jetadmin 10.0 Discovers Network Devices

HP Web Jetadmin 10.0 uses several methods to find devices connected directly to the network. Regardless of the method used, HP Web Jetadmin 10.0 first gathers nodes from the network and then determines which of those nodes is a qualified device. Qualification is always done using the SNMP protocol. Nodes found are always queried for specific SNMP objects and then determined to be a

qualified printing/imaging device. Once these devices are qualified, HP Web Jetadmin 10.0 places them in the **All Devices** list. Each of the methods used to find network devices will be discussed in the following sections.

Maintaining Accurate Address Information

HP Web Jetadmin 10.0 has the ability to adjust IP addresses stored for each device. In many cases, IP addresses on devices will remain static and changes within the HP Web Jetadmin 10.0 device lists won't be needed. In a few cases, device addresses may change due to device moves or when device addresses are assigned with DHCP. In these cases, HP Web Jetadmin 10.0 should be able to cope with the changes and quickly change its internal record of a device's IP address.

HP Web Jetadmin 10.0 will automatically change a device's IP address anytime it has realized a change in that address. For example, a device might have been configured with the IP address 15.62.40.203 yesterday but today it has the IP address 15.62.42.198.

How HP Web Jetadmin 10.0 Discovers PC-Connected Devices

HP Web Jetadmin 10.0 can discover printers connected directly to PCs. This discovery facilitates both learning about devices that are connected directly to PC hosts and also gathers detailed information about those devices when the SNMP Proxy Agent is being used. The SNMP Proxy Agent is a small software package that can be installed onto a PC and facilitates HP Web Jetadmin 10.0 communications with locally connected devices. PC-Connected discoveries can be performed without the SNMP Proxy Agent being installed onto remote hosts but this type of discovery will only gather a minimal amount of device information. This discovery queries desktop and server hosts in order to find locally connected devices. These are devices that are not connected directly to the network, they are connected to the LPT ports or USB ports on the local host.

When one of the types of discoveries for PC-Connected devices is invoked, HP Web Jetadmin 10.0 communicates directly with the remote host in one of two ways:

- By looking for an SNMP Proxy Agent on the local PC if the agent exists, HP Web Jetadmin 10.0 begins to query the device through the proxy in much the same way as it queries devices directly connected to the network. Through the agent, many pieces of information are available including status, page count, supply levels, and more.
- Through WMI (Windows Management Instrumentation): WMI is a Microsoft service that runs on most Windows operating systems and is used by remote management applications to gather information. HP Web Jetadmin 10.0 performs a query through WMI on workstations found by way of its various discovery mechanisms. This query attempts to resolve Windows printer model details for devices that are plug and play compatible. The WMI PC-Connected discovery solution does not gather status or other details from the device. The WMI PC-Connected discovery also requires administrator (local) credentials on each host queried.

PC-Connected device discoveries use different query protocols depending on the method used. The table below shows differences in primary and secondary protocols. The primary protocol is used first and if communication is possible through the protocol, devices are queried. The secondary protocol is used when no communication was attained through the primary protocol.

Table 4-6 Primary and Secondary Protocols for PC-Connected Device Discoveries

PC-Connected Device Discovery Method	Primary Protocol	Secondary Protocol
IP broadcast	SNMP	WMI
IP range	SNMP	WMI

Table 4-6 Primary and Secondary Protocols for PC-Connected Device Discoveries (continued)

PC-Connected Device Discovery Method	Primary Protocol	Secondary Protocol
Specified addresses	SNMP	WMI
Active Directory	SNMP	WMI
Domain	SNMP	WMI

It is important to remember that discovery through the WMI protocol requires administrative access to the remote host being queried. The local admin password can be used but in many environments a domain user is granted administrative privileges on local Windows hosts. Administrative credentials are entered at the time of discovery by using the checkbox, **Specify credentials for this discovery**.

PC-Connected devices are added to the same **All Devices** list as are network connected devices. Devices that are discovered via PC-Connected Devices can be distinguished from other devices.

SNMP Proxy Agent

HP SNMP Proxy Agent is installed onto remote hosts (workstations or servers) and provides an SNMP proxy on the remote host that facilitates communications for discovery of locally connected devices. This proxy used in conjunction with the workstation's SNMP service captures status, page count and many other details on devices connected via LPT or USB ports. HP SNMP Proxy Agent is installed as a service via an executable file or MSI installer that can be obtained from <http://www.hp.com>. HP SNMP Proxy Agent can be deployed onto remote hosts through any combination of desktop management applications or scripting.

- The HP SNMP Proxy Agent is available on the HP Web Jetadmin 10.0 Software and Drivers downloads page.
- A companion readme.txt file describes agent installation details.
- Two installation types exist and can be run in "silent mode" to afford automation distribution.
- HP SNMP Proxy Agent discoveries only support read-only device queries, configuration, alerts, and other HP Web Jetadmin 10.0 functionality is not available at this time for these devices.
- Only a single locally connected printer can be discovered.
- Printers must have a DOT4 bi-directional-capable driver installed in order to be discovered.
- In most cases, the printer model name, engine page count, toner levels, serial number, and more are available. Many recent enterprise devices support additional objects, while some of the lower end personal printers may not support many objects at all.

Required settings are listed in the following table.

Table 4-7 Required Settings for HP SNMP Proxy Agent

Required	<ul style="list-style-type: none"> • Intel® Pentium® or Celeron™ processor (Pentium II or higher recommended) • 64 MB RAM (128 MB RAM or higher recommended) • 10 MB available hard disk space
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Table 4-7 Required Settings for HP SNMP Proxy Agent (continued)

Supported Operating Systems	<ul style="list-style-type: none">• Microsoft Windows 2000 (SP 4)• Microsoft Windows XP (SP 2)• Microsoft Windows Server 2003 Enterprise Edition
Required Operating System Settings and Components	<ul style="list-style-type: none">• Microsoft Windows SNMP service must be installed and configured to allow queries from the HP Web Jetadmin 10.0 server.• The community name should be set to public for read access.• Firewall settings should be appropriately modified to allow HP Web Jetadmin 10.0 to query the proxy agent (for example, UDP port 161 should be open for SNMP queries).
Supported Printers	The HP SNMP Proxy Agent supports a wide variety of HP printers as long as they are installed using a DOT4 bi-directional capable driver.
Administrative Access	Administrative rights on the remote Windows host are only required when installing the HP SNMP Proxy Agent. The agent remains open and administrative rights are not required for HP Web Jetadmin 10.0 to perform queries through this agent.

Quick Device Discovery

- [Steps for Quick Device Discovery](#)

(For network device discoveries only.)

Quick Device Discovery is comparable to **Quick Device Find** in earlier versions of HP Web Jetadmin. If you enter the IP hostname or IP address strings and select **Go**, this feature searches device addresses in the HP Web Jetadmin 10.0 database first and then performs a network query. If a device is found at the address provided, it is added to the HP Web Jetadmin 10.0 **All Devices** list.

Quick Device Discovery does not search the **All Device** list in HP Web Jetadmin 10.0; it only acts on device address detail. **Text Search** and **Advanced Search** parses all the strings in the device list and highlights devices that have a criteria match.

Use **Quick Device Discovery** if you want to find one device and know its IP address or hostname, or if you are searching for only one device and do not want to run discovery on your entire network. **Quick Device Discovery** is available on the navigation pane (in the left-hand corner at the bottom).

When the device is found, it is added to the **All Devices** list and selected.

 **NOTE:** **IP Hostname** can be used in **Quick Device Discovery** but requires that [DNS on page 245](#) lookups be enabled (they are by default). For security and performance reasons, you can turn them off.

Steps for Quick Device Discovery

1. Start in the **Quick Device Discovery** box in the left-hand corner of the navigation pane.
2. Enter the device's IP address or hostname and click **Go**.
3. The device is added to the **All Devices** list and selected for easy recognition.

SLP Multicast Discovery

- [Details About Running an SLP Multicast Discovery](#)

(For network device discoveries only.)

A discovery using SLP multicast requires minimal settings to launch. SLP (service location protocol) is used to cast a query onto the network for the purpose of finding HP Jetdirect devices. After initial device response, SNMP follow-up queries are performed to learn more about devices and add them to the **All Device** list in HP Web Jetadmin 10.0. This discovery mechanism finds HP Jetdirect devices on both local and remote subnets.

Characteristics of an SLP Multicast discovery for network devices include:

- Multicast packets are sent to the HP Jetdirect-specific multicast address: 224.0.1.60.
- Packets contain a router hop-counter (IP time to live attribute) that can be set from within HP Web Jetadmin 10.0 (default 4 hops).
- Packets expire when router hop-counter reaches zero.
- The discovery mechanism is fast.
- The discovery presents low network traffic.
- HP Jetdirect firmware must be at least x.06.00 or greater.
- Only HP Jetdirect-connected printers will be discovered.

The reach of SLP multicast discovery will depend upon the:

- setting for **Routers to cross (hops)** (a configuration option for Discovery; see [General on page 120](#)).
- configuration of the network routers; if the router is configured to pass multicast requests on to other sections of your network, then a discovery could potentially discover devices on your entire network.

The other option to control the reach of the discoveries is to configure the multicast request to span a certain number of routers ([General on page 120](#)). Spanning routers will require the routers to be configured to allow multicast request to be forwarded.

The discovery could also be affected by the configuration of your local firewall ([Discovering Devices with HP Web Jetadmin 10.0 through Firewalls on page 100](#)).

If the router is configured to pass multicast requests on to other sections of the network, and **Discovery** is configured to cross multiple routers, then a discovery could potentially discover devices across multiple subnets and perhaps your entire network.

Details About Running an SLP Multicast Discovery

(For network device discoveries only.)

If one of the discovery methods you choose is **SLP multicast** (while creating templates ([Create a Discovery Template on page 126](#)), editing templates ([Edit a Discovery Template on page 128](#)), or scheduling ([Schedule a Discovery on page 123](#))), then the **Choose SLP multicast settings** page is displayed. On this page, select the number of routers to cross (or hops) for the discovery. Increasing the number of hops might increase the amount of time for the discovery to complete; plus, it generates more network traffic than a discovery with fewer routers to cross.

IP Broadcast Discovery

- [IP Broadcast Discoveries for Network Devices](#)
- [IP Broadcast Discoveries for PC-Connected Devices](#)
- [Details About Running an IP Broadcast Discovery](#)

IP Broadcast discoveries send SNMP query packets (in the form of IP broadcasts) to one or more IP network(s). These are used in both PC-Connected and network device discoveries.

IP Broadcast Discoveries for Network Devices

An IP Broadcast discovery enables you to find devices or HP Web Jetadmin installations when IP broadcast addressees are known. IP broadcast discoveries send SNMP query packets (in the form of IP broadcasts) to one or more IP network(s). One network-specific broadcast address exists for each IP subnet on an IP intranet. IP subnets are determined by the IP network number and the IP subnet mask. IP calculators, available free on the Internet, are a great way to determine IP broadcast addresses. An all 1s IP broadcast can also be used to query the entire intranet. Broadcasting is typically blocked by routers due to traffic spike concerns.

Characteristics of IP broadcast discoveries for network devices include:

- Sends SNMP queries over one or more IP broadcasts.
- Listens for replies and then qualifies network connected devices.
- Default broadcast is the Global Broadcast Address (255.255.255.255).
- Can use one or more known IP broadcast addresses with optional address descriptions.
- Limited checking is performed to determine if the broadcast address is valid.
- Fast and thorough, especially on a local segment.
- Most modern networks block broadcast traffic.

IP Broadcast Discoveries for PC-Connected Devices

IP broadcast discoveries for PC-Connected devices send an SNMP query to the IP broadcast address specified. An all 1s broadcast is the default. Systems with the SNMP Proxy Agent first answer with the operating system. HP Web Jetadmin 10.0 follows up with queries to both host and to printer specific objects. IP Broadcast discovery does not attempt WMI queries when no SNMP proxy agent exists.

Characteristics of IP broadcast discoveries for PC-Connected devices include:

- Settings are the same as network device.
- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.



NOTE: Microsoft Windows Server 2003 with the SNMP Proxy Agent does not always respond to IP broadcasts from the HP Web Jetadmin server. It is recommended that alternate discovery methods be used to find locally connected devices on Microsoft Windows Server 2003.

Details About Running an IP Broadcast Discovery

1. In the left navigation pane, click **Discovery** and then click **Discover devices on my network** (in the **Discovery - Current Tasks** task module). The **Device Discovery** wizard is started with the **Specify discovery options** page displayed.
2. Select **Specify settings** and then select **IP broadcast**. Click **Next**. The **Select IP broadcast address** page is displayed.
3. You can:
 - Select a broadcast address.
 - **Add**: add a broadcast. Type the address in **Address** and type a description (if desired) in **Description**. Then click **Add**.
 - **Show favorites only**: view only the broadcast addresses you have added by clicking **Show favorites only** (at the bottom of the page).
 - **Remove**: remove addresses from the list by highlighting the address and clicking **Remove**.
 - **Customize**: add or remove addresses to favorites by clicking **Customize**. Then select an address and click **Add Favorite** or **Remove Favorite**. When done, click **OK** ([Customizing IP Range Discoveries on page 111](#)).
4. Click **Next**.

IP Range Discovery

- [Setting Realistic Ranges](#)
- [Import and Export Features of IP Range Files](#)
- [IP Range Discoveries for Network Devices](#)
- [Customizing IP Range Discoveries](#)
- [IP Range Discoveries for PC-Connected Devices](#)
- [Details About Running an IP Range Discovery](#)

In contrast to running a broadcast discovery (where all devices or HP Web Jetadmin installations in the subnet are queried), you can choose to discover a specified IP range or a number of IP ranges. This reduces network traffic and eliminates the possibility of having unwanted devices. HP Web Jetadmin installations show up in the database. IP Range discovery searches for devices or HP Web Jetadmin installations within a range of IP addresses. This type of discovery is accurate and thorough but can be slow for large ranges.

IP Range Discovery is effective when the administrator has knowledge of IP segments. Administrators use IP Range Discovery settings to map IP segments or groups of IP segments into HP Web Jetadmin 10.0 discovery. This method efficiently sweeps selected portions of the network or WAN. IP Range address pairs consist of beginning and ending IP addresses. IP Range discoveries first ping specific IP addresses as defined by range address pairs. If the device responds, HP Web Jetadmin 10.0 follows with SNMP queries. Multiple ranges can be specified in IP Range discoveries. HP Web Jetadmin 10.0 pings in bursts of 30 queries to the first set of addresses from the first range and then waits one second before sending the next burst of 30 queries.


Setting Realistic Ranges

- [Setting Ranges Based on Subnets or Contiguous Subnets](#)

Most networks are divided up into subnets, which can be used to describe a network IP addressing scheme and are sometimes referred to as IP maps. A subnet within a large network can be described with a network number and a subnet mask. This is an example of one subnet with an IP range of 15.5.188.1 through 15.5.191.254:

- Network number example: 15.5.188.0
- Subnet mask example: 255.255.252.0

There are 1,022 possible addresses on this subnet. It may take HP Web Jetadmin 10.0 only about 10 minutes to discover devices on this network depending on the network, the number of devices on that network, and the host on which HP Web Jetadmin 10.0 is installed.

 **NOTE:** IP address calculators are an easy way to analyze IP networks. Many free versions of IP calculators exist and can be obtained on the Internet.


IP Range discovery can perform to expectations when the range data has been correctly developed. It is easy to configure ranges that are larger than needed and actually cause the discovery to take a long time and perhaps even yield little in the way of devices. For example, a class A range could easily be developed for the HP intranet but would literally take weeks to complete. On most large networks, the majority of the IP addresses won't answer the HP Web Jetadmin 10.0 query and will cause timeouts to occur; these translate into very long discovery times.

If you specify an IP range that is very large, your network might crash if that IP range is for a class A or class B network (when the first two octets of the IP range are not the same). HP Web Jetadmin 10.0 will display a warning message stating that a large range might cause a large amount of network traffic; you can choose to continue or change the range.

You can choose to specify a large subnet range using the larger subnet address feature (**Tools > Options > Application Management > IP Ranges > General**). Large networks are considered any network bigger than a Class B network, which has up to 65,000 nodes.

Setting Ranges Based on Subnets or Contiguous Subnets

Since large IP ranges can cause HP Web Jetadmin 10.0 discovery to take long periods of time to complete, it can be useful to use subnet ranges rather than the entire network for a discovery. These subnets, when put together into one list, represent an IP map. This type of a map can be obtained from an IT or Network Infrastructure team. It is also a good idea to work with these teams to discuss plans for implementing HP Web Jetadmin 10.0 discoveries.

 **NOTE:** Hewlett-Packard strongly recommends that you discuss HP Web Jetadmin 10.0 discoveries with your information technology or network administration team.

Here is an example of IP range planning. Assume we have 27 subnets on our hypothetical network. All of these subnets use the same subnet mask of 255.255.255.0. Here are the network numbers that represent our 27 subnets:

15.0.1.0, 15.0.2.0, 15.0.3.0, 15.0.4.0, 15.0.5.0, 15.0.30.0, 15.0.31.0, 15.0.32.0, 15.0.33.0, 15.0.34.0, 15.0.35.0, 15.0.36.0, 15.0.37.0, 15.0.38.0, 15.0.39.0, 15.0.55.0, 15.0.64.0, 15.0.65.0, 15.0.66.0, 15.0.67.0, 15.0.68.0, 15.0.69.0, 15.0.70.0, 15.0.71.0, 15.0.72.0, 15.0.73.0, 15.0.74.0

From this information, we can formulate the following IP address ranges and import them into HP Web Jetadmin 10.0:

- 15.0.1.1-15.0.1.254
- 15.0.2.1-15.0.2.254
- 15.0.3.1-15.0.3.254
- 15.0.4.1-15.0.4.254
- 15.0.5.1-15.0.5.254
- 15.0.30.1-15.0.30.254
- 15.0.31.1-15.0.31.254
- 15.0.32.1-15.0.32.254
- 15.0.33.1-15.0.33.254
- 15.0.34.1-15.0.34.254
- 15.0.35.1-15.0.35.254
- 15.0.36.1-15.0.36.254
- 15.0.37.1-15.0.37.254
- 15.0.38.1-15.0.38.254
- 15.0.39.1-15.0.39.254
- 15.0.55.1-15.0.55.254
- 15.0.64.1-15.0.64.254
- 15.0.65.1-15.0.65.254
- 15.0.66.1-15.0.66.254
- 15.0.67.1-15.0.67.254
- 15.0.68.1-15.0.68.254
- 15.0.69.1-15.0.69.254
- 15.0.70.1-15.0.70.254
- 15.0.71.1-15.0.71.254
- 15.0.72.1-15.0.72.254
- 15.0.73.1-15.0.73.254
- 15.0.74.1-15.0.74.254

We can take the formulation one step further and simplify things. Some of the IP ranges are contiguous. These contiguously-addressed subnets are one after the other, in order, making it easy to combine them. The final result would look like this:

- 15.0.1.1-15.0.5.254
- 15.0.30.1-15.0.39.254
- 15.0.55.1-15.0.55.254
- 15.0.64.1-15.0.74.254

This has reduced the number of IP ranges from 27 to 4. We can build this into a form that is easily imported into HP Web Jetadmin 10.0 and also reflects descriptions. Here is an example of data that can be imported via a text file:

- 15.0.1.1-15.0.5.254 = subnet range for western area
- 15.0.30.1-15.0.39.254 = subnet range for central area
- 15.0.55.1-15.0.55.254 = subnet range for branch office
- 15.0.64.1-15.0.74.254 = subnet range for eastern area

Consolidating ranges makes dealing with large quantities of data simpler but may not help when descriptions are needed for the purpose of cataloging ranges.

Import and Export Features of IP Range Files

IP range data can be developed in other tools and imported through text files. In fact, HP Web Jetadmin 10.0 can export IP range data to text files. This makes it easier to deal with large numbers of IP ranges, manipulate complex data and archive data for use in multiple instances. The format for IP Range import and export file format can be broken down as follows:

- 1 range per line
- Each IP address is separated by a hyphen character (-)
- Comment or description strings can be appended to the IP range by using an equal character (=)

Here is an example of 1 IP range with a comment: xxx.xxx.xxx.xxx-xxx.xxx.xxx.xxx=descriptive text string (where xxx represents an octet in the IP address).

There is no known limit to the number of IP ranges manageable within HP Web Jetadmin software. IP ranges are also used by other features like PC-Connected printer discovery and HP Web Jetadmin Installations discovery. All IP ranges entered into HP Web Jetadmin can also be managed globally from within **Tools > Options > Application Management > IP Ranges > IP Ranges**.

IP Range Discoveries for Network Devices

IP Range discoveries for network devices or HP Web Jetadmin installations first send an SNMP query to all addresses within the range. When nodes are discovered, HP Web Jetadmin 10.0 performs queries to determine qualified devices. These qualified devices, when found, are added to the device lists.

Characteristics of IP range discoveries for network devices or HP Web Jetadmin installations include:

- IP ranges are simply two addresses that represent range begin and end points.
- Multiple ranges can be specified in an IP Range discovery.

- IP range data can be manually added through the user interface.
- IP ranges can be imported to HP Web Jetadmin 10.0 from text files.
- Multiple IP ranges can be added and with optional, descriptive tags.
- HP Web Jetadmin 10.0 sends 1 query to each address represented by the range.
- HP Web Jetadmin 10.0 pings the device ranges in bursts of 30.
- HP Web Jetadmin 10.0 has features to calculate IP ranges based on:
 - Local client host
 - HP Web Jetadmin 10.0 server host
 - Device
- HP Web Jetadmin 10.0 IP Range discoveries have proven to be effective, accurate and thorough.
- HP Web Jetadmin 10.0 IP Range discoveries can be very slow if not configured properly.
- HP Web Jetadmin 10.0 IP Range discoveries can draw security attention due to their scanning action.

Customizing IP Range Discoveries

When you are setting up an IP Range discovery, you have the option to customize the IP Ranges. You can customize IP Ranges in two places within HP Web Jetadmin 10.0. In **Device Management > Discovery**, select **IP Ranges** as the type of discovery and then select **Customize**. In **Application Management > Web Jetadmin Management**, in the **Common Tasks** task module click **Find Web Jetadmin installations** and select **IP ranges** as the type of discovery; then select **Customize**. You can choose to add or remove addresses to favorites by selecting an address and clicking **Add Favorite** or **Remove Favorite**.

IP Range Discoveries for PC-Connected Devices

IP Range discoveries for PC-Connected devices first send an SNMP query to all addresses within the range. If SNMP communication is possible on a device, the discovery attempts to find a locally connected printer. If no SNMP communication is possible and if the user provided administrative credentials, the discovery will attempt to find a locally connected printer on the device.

Characteristics of IP range discoveries for PC-Connected devices include:

- IP Range scanning is same as network connected.
- Nodes representing hosts are detected.
- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.

Details About Running an IP Range Discovery

The **Select IP ranges** page is displayed when you choose **IP range** as the discovery method while:

- creating discovery templates ([Create a Discovery Template on page 126](#))
- editing discovery templates ([Edit a Discovery Template on page 128](#))

- scheduling a discovery ([Schedule a Discovery on page 123](#))
- running a Web Jetadmin discovery ([Find Web Jetadmin Installations on page 277](#))

On the **Select IP ranges** page, you can select the IP address ranges displayed or you can edit the ranges.

1. Choose the action to take:

- Select an IP range.
- **Add**: add an IP range by clicking **Add**. Type the range in **First address** and **Last address**; then type a description (if desired) in **Description**. Click **Add**.

To calculate a range, click **Calculate range**. The **Calculate IP Range** page is displayed:

- **Subnet from my computer**: automatically use IP address ranges currently found on the local subnet of your computer. You can add a description in **Description** if desired.
- **Subnet from WJA server**: automatically use IP address ranges currently found on the subnet of the HP Web Jetadmin 10.0 server. You can add a description in **Description** if desired.
- **Subnet from network address**: type a known IP address and subnet mask. You can add a description in **Description** if desired.
- **Edit**: make changes to IP ranges by clicking **Edit**. Follow the steps in the bullet above for “Add”.
- **Delete**: remove addresses from the list by highlighting the address and clicking **Delete**.
- **Import**: if desired, import a range list by clicking **Import** and then browse for the range list.
- **Export**: if desired, export a range list by clicking **Export** and then browse for location you want to store the range list.
- **Show favorites only**: view only the IP ranges you have added by clicking **Show favorites only** (at the bottom of the page).
- **Customize**: add or remove addresses to favorites by clicking **Customize**. Then select an address and click **Add Favorite** or **Remove Favorite**. When done, click **OK**.

2. Click **OK**.


Specified Device Address Discovery

- [Specified Device Address Discoveries for Network Devices](#)
- [Specified Device Address Discoveries for PC-Connected Devices](#)
- [Details About Running a Specified Device Addresses Discovery](#)

Sometimes there is enough information about your device fleet that enables building a base of device addresses. These addresses can be added to HP Web Jetadmin through the Specified Address discovery feature. Specified Device Address discoveries use an explicit list of device addresses. These addresses can be IP hostnames or IP addresses. IP hostnames can have fully qualified domain information appended. Address information can be both imported from and exported to text files. Specified Device Address discovery works similarly to IP Range discovery; HP Web Jetadmin simply moves down a list of addresses, performing queries and adding qualified devices to the all devices list.

Here is an example of a small specified address base:

- 15.5.2.1
- 15.5.62.4
- 15.5.8.3
- 15.5.8.7
- BP005a.yourco.com
- BP065
- BP076.yourco.com

 **NOTE:** For PC-Connected device discoveries, HP Web Jetadmin 10.0 follows SNMP queries with WMI queries when no SNMP Proxy Agent has been detected on the remote host.

Specified Device Address Discoveries for Network Devices

Network device discovery queries each address in the list specified. Devices qualified through these queries are added to the **All Devices** list.

Characteristics of Specified Device Address discoveries for network devices include:

- Specified device address discoveries find devices based on user supplied addresses.
- IP address or hostnames are valid address forms.
- HP Web Jetadmin 10.0 initially qualifies the device by using an SNMP query.
- Follow-up queries through SNMP qualify the device and place it into the **All Devices** list if appropriate.
- This discovery is very fast and only hits the addresses specified by the user.
- This discovery is only as accurate as the address base specified by the user.
- Addresses can be entered into HP Web Jetadmin 10.0 one by one or they can be imported from text file.
- In HP Web Jetadmin 10.0, addresses can be exported to text file.

Specified Device Address Discoveries for PC-Connected Devices

Specified Address discoveries for PC-Connected devices first send an SNMP query to all addresses within the list of addresses. If SNMP communication is possible on a device, the discovery attempts to find a locally connected printer. If no SNMP communication is possible and if the user provided administrative credentials, the discovery will attempt to find a locally connected printer on the device using WMI protocol.

Characteristics of Specified Device Address discoveries for PC-Connected devices include:

- Specified address scan is the same as network connected.
- Nodes representing hosts are detected.

- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.

Details About Running a Specified Device Addresses Discovery

If one of the discovery methods you choose is **Specified address** (while creating templates ([Create a Discovery Template on page 126](#)), editing templates ([Edit a Discovery Template on page 128](#)), or scheduling ([Schedule a Discovery on page 123](#))), then the **Select addresses** page is displayed. On this page, you can select the IP address ranges displayed or you can edit the addresses:

1. In the left navigation pane, click **Discovery** and then click **Discover devices on my network** (in the **Discovery - Current Tasks** task module). The **Device Discovery** wizard is started with the **Specify discovery options** page displayed.
2. Select **Specify settings** and then select **Specified addresses**. Click **Next**. The **Select addresses** page is displayed.
3. Click **Edit Addresses**. The **Specified Addresses** page is displayed.
4. Type the network address in **Network address** and click **Add Address**; the address is displayed below in the box. Repeat this until you have entered all network addresses.
5. Check **Show For Me** next to each IP address you want to include on the **Select IP ranges** page (the previous page).
6. If desired, remove any ranges by highlighting it and clicking **Remove Address**.
7. If desired, import a range list by clicking **Import Addresses** and then browse for the range list.
8. If desired, export a range list by clicking **Export Addresses** and then browse for location you want to store the range list.
9. Click **OK** and then click **Next**. The **Confirm** page is displayed.
10. Click **Start**. The **Results** page is displayed. Click **Done**.

Active Directory Discovery

- [Active Directory Discoveries for Network Devices](#)
- [Active Directory Discoveries for PC-Connected Devices](#)
- [Details About Running an Active Directory Discovery](#)

Active Directory Discovery requires your knowledge about the Active Directory domain. HP Web Jetadmin 10.0 provides a new discovery feature that queries Microsoft Active Directory using an Active Directory starting point such as domain, organization unit (OU), or other Active Directory containers. In the case of network devices, HP Web Jetadmin 10.0 scans the Active Directory for published shared printers. In the case of PC-Connected device discovery, HP Web Jetadmin 10.0 scans the active directory for Windows hosts. From these initially discovered lists of nodes, HP Web Jetadmin 10.0 finds and qualifies devices and then adds them to the **All Devices** list.

Active Directory Discoveries for Network Devices

Active Directory (AD) discovery requires your knowledge about the AD domain. Once the AD discovery is started, the LDAP protocol is used to query AD for published print shares. From print shares discovered, the Port Name field is checked for the default name forms which are: `IP_< ipaddr >` or `IP_< ipaddrA >< port >`. If these defaults are detected, IP addresses are queried through SNMP

to detect network connected printers. When network connected devices are discovered, they are added to the HP Web Jetadmin 10.0 **All Devices** list. No special user credentials are needed other than device based SNMP Get Community strings (normally not used). In fact, HP Web Jetadmin 10.0, running under the low privilege account, Network Service, takes the credentials of the user logged in through the HP Web Jetadmin 10.0 client and uses these to query the Active Directory.

You can choose to perform recursive queries meaning any sub-units below the specified path will be searched. The administrator can also perform discovery on multiple Active Directory locations. And, the discovery can also be filtered on both location and description strings if these are published to the Active Directory.

Characteristics of Active Directory discoveries for network devices include:

- You can activate Active Directory discovery by specifying AD location(s).
- You can optionally set location and/or description filtering to narrow Active Directory discovery.
- You can optionally specify Active Directory recursion searching to one or all levels below the specified AD location or locations.
- Active Directory discovery scans the directory for printer shares.
- IP addresses that are resolved from printer shares are queried using SNMP.
- Printers that are qualified are populated into HP Web Jetadmin 10.0's **All Devices** list.
- Discovery is fast.
- Discovery does not require any special privileges and relies on public Active Directory search.
- Discovery is accurate to the extent that network printers are shared and published through Active Directory.
- Discovery relies on the fact that a default port name in the Active Directory share actually contains the printer's IP address.

Active Directory Discovery discovers published print queues in a network's Active Directory. To find the IP address of the network device to which the print queue is attached, AD discovery parses the print queue's port. An IP address can only be detected from those print queues with ports with the default format of IP_www.xxx.yyy.zzz.

Active Directory Discoveries for PC-Connected Devices

Active Directory discoveries for PC-Connected devices use the LDAP protocol to identify Windows hosts on the network. Each host identified is queried using the WMI protocol. Administrative credentials are required for this discovery. Once a connection is established through WMI, the host is queried for a locally connected printer.

Characteristics of Active Directory discoveries for PC-Connected devices include:

- Settings are identical to discoveries for network devices.
- Discoveries for PC-Connected devices scan Active Directory for Windows hosts.
- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.
- Local administrator credentials are required to perform this discovery.

Details About Running an Active Directory Discovery

Start here if one of the discovery methods you choose is **Active Directory** (while creating templates ([Create a Discovery Template on page 126](#)), editing templates ([Edit a Discovery Template on page 128](#)), or scheduling ([Schedule a Discovery on page 123](#))), then the **Specify Active Directory options** page is displayed. On this page, you can define options for Active Directory discoveries:

1. Type the path for the Active Directory location or browse to it. Then click **Add**; it will be displayed in the list below.
2. Check next to any location you want included in the discovery.
3. If desired, remove any ranges by highlighting it and clicking **Remove**.
4. Select the recursion level:
 - **Current level**: discoveries check the container specified by the path and the contents of any containers in the path.
 - **All levels**: discoveries check the container specified by the path plus the contents of all containers and sub-containers in the path.
5. Specify the print queue filter to use in **Filter**.
6. Click **Next**.

Passive SLP Discovery

(For network device discoveries only.)

When HP Jetdirect-connected devices are power-cycled, they propagate SLP (service location protocol) multicast packets. When HP Web Jetadmin 10.0 detects an HP Jetdirect SLP multicast (recognized by the source 124.0.1.60), it performs follow-up SNMP queries and adds the device to the **All Devices** list.

Characteristics of Passive SLP discoveries for network devices include:

- Passive SLP discovery is quiet; HP Web Jetadmin 10.0 does not propagate traffic unless a previously undetected device announces itself.
- HP Web Jetadmin 10.0 listens for UDP traffic on port 427.
- Devices, including new devices, are discovered as they are powered on.
- Router filtering may inhibit multicast packets.
- Can be disabled on HP Jetdirect print servers.
- Will only discover HP Jetdirect-connected print servers.

Domain Discovery

- [Details About Running a Discovery Using Domains](#)

(For PC-Connected device discoveries only.)

For Domain discoveries for PC-Connected devices, the domain is browsed to identify Windows hosts on the network. Each host identified is queried using the SNMP or WMI protocol. Administrative credentials are required for WMI. For WMI, once a connection is established the host is queried for a locally connected printer.

Characteristics of domain discoveries for PC-Connected devices include:

- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.
- Might be slow on large domains.
- Local administrator credentials are needed to perform this discovery.

Details About Running a Discovery Using Domains

Start here if one of the discovery methods you choose is **Domain** (while creating templates ([Create a Discovery Template on page 126](#)), editing templates ([Edit a Discovery Template on page 128](#)), or scheduling ([Schedule a Discovery on page 123](#))), then the **Select domains** page is displayed. On this page, you can select the domains to include in the discoveries:

1. Type the domain in **Domain** or browse for the domain. Then click **Add**. The domain is displayed in the **Domain** box below.

To remove any domains from the **Domain** box, highlight the domain and click **Remove**.

2. Click **Next**.

Task Modules for Discovery

- [Discovery - Current Tasks and Common Tasks Task Modules](#)
- [Discovery - Summary Task Module](#)
- [Discovery - Active Discoveries Task Module](#)
- [Discovery - Scheduled Discoveries Task Module](#)
- [Discovery - Templates Task Module](#)
- [Discovery - Quick Monitor Task Module](#)

The following task modules can be displayed or hidden in **Discovery**.

Discovery - Current Tasks and Common Tasks Task Modules

The **Discovery - Current Tasks** task module can be displayed on the **Discovery** page and includes the following tasks:

- [Discover Devices \(the Device Discovery Wizard\) on page 121](#)
- [Schedule a Discovery on page 123](#)
- [Create a Discovery Template on page 126](#)
- [Apply \(or Run\) a Discovery Template on page 127](#)
- [Edit a Discovery Template on page 128](#)
- [Delete a Discovery Template on page 128](#)

The **Discovery - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Discovery - Common Tasks**.

Discovery - Summary Task Module

The **Discovery - Summary** task module gives you the date and time of the last discovery. You can:

- [View Configuration History on page 138.](#)
- [Discover Devices \(the Device Discovery Wizard\) on page 121.](#)

Discovery - Active Discoveries Task Module

The **Discovery - Active Discoveries** task module shows you any discoveries currently running. You can:

- Stop a discovery by highlighting it and clicking **Stop**.
- View the progress of the discovery by highlighting it and clicking **View**.

Discovery - Scheduled Discoveries Task Module

The **Discovery - Scheduled Discoveries** task module shows you any discoveries that are scheduled to run but that have not run yet. You can:

- [Delete a Discovery Template on page 128](#)
- [Edit a Discovery Template on page 128](#)

Discovery - Templates Task Module

The **Discovery - Templates** task module enables you to perform any action on a discovery template:

- [Apply \(or Run\) a Discovery Template on page 127](#)
- [Create a Discovery Template on page 126](#)
- [Delete a Discovery Template on page 128](#)
- [Edit a Discovery Template on page 128](#)
- **View**. The following is displayed:
 - **Discovery type**: network device discovery or PC-Connected device discovery.
 - **Credentials specified**: whether or not credentials were requested for devices.
 - **Use global credentials**: uses credentials established in **Tools > Options > Credentials** (does not require you to provide credentials).
 - **Discovery methods**: a summary of the different methods used.

From this summary template page, you can:

- **Edit** ([Edit a Discovery Template on page 128](#)).
- **Apply** ([Apply \(or Run\) a Discovery Template on page 127](#)).
- **Delete** ([Delete a Discovery Template on page 128](#)).

Discovery - Quick Monitor Task Module

The **Discovery - Quick Monitor** task module enables you to discover a specific device and monitor its status all in one step. Enter the device's IP address in **Device** and then click **Go**; or drag a device from any device list into the quick monitor task module.

- **Go**: type an IP address or hostname in **Device** and click **Go**; the device status and information is displayed.
- **Clear**: removes all information from the **Quick Monitor** task module.
- **Open**: when activated in the **Device Management** view, brings the user to the **All Devices** list with the device specified in **Quick Monitor** task module selected within the **All Devices** list.

Related Application Options for Discovery

- [SNMPv3 Enabled Devices](#)
- [General](#)
- [Network](#)

Discovery settings refine the way HP Web Jetadmin 10.0 performs a discovery in your own environment.


SNMPv3 Enabled Devices

Devices that have SNMPv3 fully enabled can be discovered by HP Web Jetadmin 10.0. To discover these devices, enable **Discover SNMPv3 devices** in **Tools > Options > Device Management > Discovery**.

HP Web Jetadmin 10.0 requires SNMPv3 credentials for these devices in order for them to be discovered. There are two ways HP Web Jetadmin 10.0 can become aware of device SNMPv3 credentials:


- HP Web Jetadmin 10.0 is used to enable SNMPv3 and also configure the SNMPv3 credentials onto the devices. In this case, HP Web Jetadmin 10.0 stores the credentials into its credential store and uses them whenever device communication is required. HP Web Jetadmin 10.0 also marks these devices as SNMPv3-enabled and remembers to use the credentials and SNMPv3 whenever communication is required.
- HP Web Jetadmin 10.0 has had SNMPv3 credentials added to the Global credentials store and these credentials match those credential values on the devices. In this case, HP Web Jetadmin 10.0 is being made aware of credential values that work for devices that are SNMPv3-enabled. When one of these devices is encountered, HP Web Jetadmin 10.0 will try the credential values that are configured using the option **SNMPv3 Credentials** in **Tools > Options > Application Management > Credentials**. If the credential values work and HP Web Jetadmin 10.0 is able to communicate with the devices, the credential values will be stored individually for each device.

Devices that were discovered through SNMPv1 and have had SNMPv3 enabled through some other means such as Embedded Web Server or another instance of HP Web Jetadmin 10.0 will indicate a communication failure when HP Web Jetadmin 10.0 attempts to re-establish communication. The **Refresh Selection (Full)** command can be used on these devices to cause HP Web Jetadmin to reset them to SNMPv3-enabled devices.

 **NOTE:** If SNMPv3 communication was established outside of HP Web Jetadmin, the global discovery setting for **Discover SNMPv3 Devices** must be configured in **Tools > Options > Device Management > Discovery > General**. No new SNMPv3 devices will be added to the database unless this option is enabled.


General

General Discovery settings include settings for SLP Listen, SNMPv3, and discovery history (or statistics).

 **NOTE:** HP Jetdirect firmware version x.06.00 or greater is required to support the Multicast and SLP discovery method.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Discovery** and then select **General**.
2. Configure the desired settings:
 - **Listen for new devices (passive discovery):** Select this to use passive discovery (on port 427 for SLP signals propagated at HP Jetdirect power-on). (The default for this field is off or unchecked.)
 - **Discover SNMPv3 devices:** Select this to enable SNMPv3 credential entry fields in HP Web Jetadmin 10.0 discovery settings. When these credentials are added (at discovery settings or global credentials), HP Web Jetadmin 10.0 attempts SNMPv3 queries on devices. (The default for this field is off or unchecked.)

 **NOTE:** SNMPv3 discoveries can be slow if not properly set. These should be targeted at only parts of the network that are known to have SNMPv3-enabled devices. Also, SNMPv3 devices **require** that SNMPv3 Credentials are entered.

 - **Retention:** Select the number of days to retain statistics from discoveries (the default is 90) ([Discovery History on page 125](#)).
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Network

Related options that can be set in HP Web Jetadmin 10.0 through **Tools > Options > Application Management > Network** include:

- [SNMP on page 244](#):
 - **SNMPv1 timeout value**: specify how long HP Web Jetadmin 10.0 should wait for a reply from a network query from SNMPv1 devices (the default is 500ms).
 - **SNMPv3 timeout value**: specify how long HP Web Jetadmin 10.0 should wait for a reply from a network query from SNMPv3 devices (the default is 1,000ms).
 - **SNMP retries**: specify how many times HP Web Jetadmin 10.0 should retry an SNMP communication with devices before giving up once a timeout has occurred (the default is 3 total attempts).
- [DNS on page 245 \(Enable DNS lookups\)](#): forces HP Web Jetadmin 10.0 to query name services for each device discovered. This setting is sometimes disabled in environments where DNS responses are slow or are not functioning. (The default is on.)
- [IP Ranges on page 248](#): global store for IP Range settings used by network device discovery, PC-Connected device discovery and HP Web Jetadmin 10.0 application discovery.
- [Credentials on page 252](#): in some cases, credentials like [SNMP Get Community Name on page 255](#) or [SNMPv3 Credentials on page 257](#) are being used. Use **Credentials** to set well known device credentials. These will be tried during discovery when devices don't respond to queries that use default credentials.

Discover Devices (the Device Discovery Wizard)

- [Discover Devices](#)
- [Steps to Discover Devices](#)
- [Other Ways to Discover Devices](#)

Discover Devices launches the HP Web Jetadmin 10.0 **Device Discovery** wizard. This wizard is used to launch or schedule any type of active discovery method. The wizard ends with a **Results** page that can be monitored or hidden.

Discover Devices

Node-discovery and node-resolve progress are both reported through a **Results** page, which is the last page displayed as part of the **Discovery** wizard.

The **Results** page displays progress for the different portions of a discovery. This can make it easy to determine which method is currently executing or whether node-discovery or node-resolve portions have begun execution. Here is a list of items displayed on the **Results** page:

- **Progress**: shows a throbber graphic and percentage complete, or it shows that the discovery is complete.
- **Started by**: shows the user that initiated the discovery.
- **Progress (estimated)**: shows an overall estimated percentage.
- **Current method**: states the current method executing (IP Range, and so forth).

- **Nodes found:** shows a count of nodes responding so far.
- **Nodes resolved:** shows the number of nodes being resolved.
- **Devices found (this discovery):** shows a count of nodes that are qualified devices (network or PC-Connected).
- **New devices (this discovery):** shows a count of devices that are new since last discovery.

Steps to Discover Devices

1. In the left navigation pane, click **Discovery** and then click **Discover devices on my network** (in the **Discovery - Current Tasks** task module). The **Device Discovery** wizard is started with the **Specify discovery options** page displayed.
2. To use a discovery template that has already been created, select it from the drop-down list.
3. Select the type of discovery you want to perform (**Network devices** or **PC-Connected devices**).



NOTE: For more information about any of the types of discoveries, see [Discovery Types and Methods on page 100](#).

4. Select the discovery method you want to use (at least one must be selected) ([Discovery Types and Methods on page 100](#)).
5. If you want to specify credentials for this discovery, check **Specify credentials for this discovery**. This is used if devices have been configured for SNMPv3, or if non-standard SNMP Get Community Names are being used.
6. To run this discovery later, check **Schedule discovery**. To run this discovery now, leave this box unchecked.



NOTE: If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

7. Click **Next**.
8. Depending on the discovery options selected, you will be asked to specify configurations. In most cases you can edit the criteria listed by clicking **Edit**.
9. If you chose to schedule this discovery, the **Specify schedule options** page is displayed:
 - a. Select the start date and time from the drop-down lists.
 - b. Select the recurrence for this schedule.
 - c. Enter the name of this schedule in **Name** and click **Next**.



NOTE: For more information about scheduling discoveries, see [Schedule a Discovery on page 123](#).

10. The **Confirm** page is displayed. If all of the settings are correct, click **Start**.

11. The **Progress** page is displayed showing you the Discovery's progress. To hide the discovery click **Hide**; to stop the discovery click **Stop**.
12. When the discovery has completed (or if you click **Stop** during the discovery), the **Results** page is displayed:
 - To view the discovered devices, check **View all devices**.
 - To exit, click **Done**.


Other Ways to Discover Devices

1. In the left navigation pane, right-click on **All Devices** and select **Discover devices**.
2. Within any device list, right-click and select **Discover**.

Schedule a Discovery

- [Example for Scheduling Discoveries](#)
- [Steps to Schedule a Discovery](#)
- [Other Ways to Schedule a Discovery](#)

HP Web Jetadmin 10.0 has a flexible discovery scheduler that allows the administrator to launch specific discoveries at the desired date and time. Multiple schedules can be created and maintained which enables the administrator the flexibility of launching different discoveries in different time zones and with different settings. Both PC-Connected device discovery and network connected device discovery can be scheduled. Many discovery schedules can exist and be run as a one-time event or as recurring events.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

Characteristics of scheduling discoveries include:

- Scheduled discoveries can contain different types of Discovery settings including different settings values such as IP range, broadcast addresses, and so forth.
- Recurring schedules can be set up to be daily, weekly, monthly, and so forth.
- Specific weekdays can be chosen for recurring schedules.
- Settings within preexisting schedules can be altered without having to create new scheduled events.
- A [Discovery - Scheduled Discoveries Task Module on page 118](#) exists to easily view, edit and delete existing schedules.

Example for Scheduling Discoveries

You are tasked with scanning subnets in Europe and Asia once per week in order to keep the HP Web Jetadmin 10.0 **All Devices** lists up to date. Each of these locations has 5 subnets. Most of the employees in these locations turn off the devices at night in order to save energy. You want to launch two discoveries every Wednesday at 11:00AM in the area where the devices exist. You and the HP Web Jetadmin 10.0 host are in the central time zone.

You create two discovery schedules:

Table 4-8 Examples of Discovery Schedules

Schedule Name	Time	Weekly	IP Ranges Included
Asia	9:00PM central time	Every week on Tuesdays	15.62.40.1-15.62.47.254
Europe	4:00AM central time	Every week on Wednesdays	15.5.188.2-15.5.188.254

Steps to Schedule a Discovery

Follow these steps:

1. In the left navigation pane, click **Discovery** and then click **Schedule discovery** (in the **Discovery - Current Tasks** task module). The **Device Discovery** wizard is started with the **Specify discovery options** page displayed.
2. Select the type of discovery you want to perform (**Network devices** or **PC-Connected devices**).



NOTE: For more information about any of the types of discoveries, see [Discovery Types and Methods on page 100](#).

3. Select the discovery method you want to use (at least one must be selected) ([Discovery Types and Methods on page 100](#)).
4. If you want to specify credentials by checking **Specify credentials for this discovery**. This is used in cases if devices have been configured for SNMPv3, or if non-standard SNMP Get Community Names are being used.
5. Click **Next**. The **Specify schedule options** page is displayed.
6. Select the date and time for the discovery to run.



NOTE: If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

7. You can further define an appropriate time range for the discovery to start by checking **Allow start time to occur between the specified hours of** and then selecting the **From** and **To** times.
8. Select the recurrence for this schedule.
9. Type a name for this schedule and click **Next**. The **Confirm** page is displayed.

10. If all of the settings are correct, click **Start**. The **Results** page is displayed.
11. Click **Done**.

Other Ways to Schedule a Discovery

1. In the left navigation pane, right-click on **Discovery** and select **Schedule discovery**.
2. In [Discover Devices \(the Device Discovery Wizard\) on page 121](#), you can schedule a discovery to run at any time.

Discovery History

- [Steps for Discovery History](#)
- [Other Ways to View Discovery History](#)

After discoveries have been run, you can consider the effectiveness of the discoveries so that you can tailor any future discoveries based on these statistics. Three types of data are gathered:

1. **Discovery summary data:** allows comparing effectiveness of different discoveries, on a per-discovery method level and includes original discovery settings.
2. **Detailed discovery data:** shows data about what discovery methods discovered which devices; this also displays a **Unique** field that shows how many devices were discovered only by that method.
3. **PC-Connected device discovery data:** allows gauging reliability of PC-connected device discoveries.

After discoveries have been run, you can:

- View statistics associated with the discoveries:
 - list of discoveries (History).
 - for each discovery: start time, stop time, methods run, total devices found, and PC-Connected devices found (servers queried and so forth).
 - for each discovery: how many “New” devices were found with each discovery.

Steps for Discovery History

1. In the left navigation pane, expand **Discovery** and then click **History**.
2. The first row lists summary information for each discovery:
 - **Date:** the date and time the discovery ran.
 - **User:** the user who requested the discovery.
 - **Duration:** how long it took for the discovery to complete.
 - **Type:** type of discovery ran (PC-Connected devices or network devices).
 - **Total Devices Found:** the number of network and PC-Connected devices found.
 - **New Devices Found:** the number of “New” devices found (network and PC-Connected).

3. You can expand or collapse the second row by clicking + or - next to each first row. The second row shows more detailed information for each discovery:
 - **Method:** the type of discovery that was run.
4. To clear the statistics for all of the discoveries, click **Clear**.
5. To close the **Discovery History** page, click on another option in the left navigation pane or in a task module.

Other Ways to View Discovery History

- In the left navigation pane, right-click on **Discovery** and select **View discovery history**.

Discovery Templates

Discovery templates can be accessed through the left navigation menu or through the **Discovery - Current Tasks** task module. For more information, see [View a Discovery Template on page 129](#).

Create a Discovery Template


- [Steps for Creating a Discovery Template](#)
- [Other Ways to Create a Discovery Template](#)

Discovery templates are like other templates in HP Web Jetadmin 10.0: they store predefined settings that can be retrieved at a later time. Both PC-Connected printer discovery and network-connected printer discovery settings can be stored in templates. Once a discovery template has been created it can be accessed through a normal discovery launch via [Discover Devices \(the Device Discovery Wizard\) on page 121](#) or can be added into a discovery schedule [Schedule a Discovery on page 123](#).

Characteristics of discovery templates include:

- Any number of predefined Discovery settings can be stored as a Discovery Template.
- The [Discovery - Templates Task Module on page 118](#) is used to:
 - [Create a Discovery Template on page 126](#) (or **Add**).
 - [Edit a Discovery Template on page 128](#).
 - [Delete a Discovery Template on page 128](#).
 - [Apply \(or Run\) a Discovery Template on page 127](#).
 - [View a Discovery Template on page 129](#).
- Discovery templates can be used when creating Discovery Schedules ([Schedule a Discovery on page 123](#)).

Steps for Creating a Discovery Template

1. In the left navigation pane, click **Discovery** and then click **Create discovery template** (in the **Discovery - Current Tasks** task module). The **Create Discovery Template** wizard is started with the **Select methods** page displayed.
 2. Select the type of discovery you want to perform (**Network devices** or **PC-Connected devices**).
-
-  **NOTE:** For more information about any of the types of discoveries, see [Discovery Types and Methods on page 100](#).
-
3. Select the discovery method you want to use (at least one must be selected) ([Discovery Types and Methods on page 100](#)).
 4. If you want to specify credentials, check **Specify credentials for this discovery**. This is used in cases if devices have been configured for SNMPv3, or if non-standard SNMP Get Community Names are being used.
 5. Click **Next**. Depending on the discovery method selected, pages are displayed to further define those settings. Click **Next**.
 6. The **Specify template name** page is displayed.
 7. Enter the name for this template and then click **Next**. The **Confirm** page is displayed.
 8. If all of the settings are correct, click **Create Template**. The **Results** page is displayed.
 9. Click **Done**.

Other Ways to Create a Discovery Template

- In the left navigation pane, right-click on **Discovery** and select **Create discovery template**.

Apply (or Run) a Discovery Template

- [Steps for Running a Discovery Template](#)
- [Other Ways to Run a Discovery Template](#)

After a discovery template has been created, you can select it at any time to run a discovery. (See [Create a Discovery Template on page 126](#).)

Steps for Running a Discovery Template

1. In the left navigation pane, click **Discovery** and then click **Run discovery template** (in the **Discovery - Current Tasks** task module). The **Device Discovery** wizard is started with the **Specify discovery options** page displayed.
2. Select the template to use and click **Next**. The **Confirm** page is displayed.
3. The template summary information is displayed. Review your selection and if it is correct click **Start**. The **Progress** page is displayed. (You can hide the **Progress** page to do other functions in HP Web Jetadmin 10.0 while the discovery is in progress, or you can stop the discovery from this page.)
4. When the discovery is complete, the **Results** page is displayed.

To view the discovered devices on the **All Devices** list, check **View all devices**.

To return to the **Discovery** page, click **Done**.

Other Ways to Run a Discovery Template

1. In the left navigation pane, right-click on **Discovery** and select **Run discovery template**.
2. In the **Discovery - Templates** task module, select **Apply**.
3. Through [Schedule a Discovery on page 123](#), you can plan to run any discovery template.

Edit a Discovery Template

- [Steps for Editing a Discovery Template](#)
- [Other Ways to Edit a Discovery Template](#)

You can change anything in a discovery template. The steps are the same as for [Create a Discovery Template on page 126](#).

Steps for Editing a Discovery Template

1. In the left navigation pane, click **Discovery** and expand **Templates**. Select the template to edit and the template is displayed.
2. Click **Edit**. The **Edit Discovery Template** wizard is started with the **Select methods** page displayed.
3. Make any changes to the methods (at least one must be selected).



NOTE: For more information about any of the types of discoveries, see [Discovery Types and Methods on page 100](#).

4. If you want to specify credentials, check **Specify credentials for this discovery**. The **Credentials** page is displayed if this box is checked, which enables you to enter Get Community Names within the **Discovery** wizard.
5. Click **Next**. Depending on the discovery method selected, pages are displayed to further define those settings. Click **Next**.
6. The **Specify template name** page is displayed.
7. If desired, edit the name for this template and then click **Next**. The **Confirm** page is displayed.
8. If all of the settings are correct, click **Edit Template**. The **Results** page is displayed.
9. Click **Done**.

Other Ways to Edit a Discovery Template

- In the left navigation pane, right-click on **Discovery** and select **Edit discovery template**.

Delete a Discovery Template

- [Steps for Deleting a Discovery Template](#)
- [Other Ways to Delete a Discovery Template](#)

You can delete any discovery template you have created in HP Web Jetadmin 10.0.

Steps for Deleting a Discovery Template

1. In the left navigation pane, click **Discovery** and then click **Delete discovery template** (in the **Discovery - Current Tasks** task module). The **Delete Discovery Templates** wizard is started with the **Select template** page displayed.
2. Highlight the template you want to delete and click **Next**. The **Confirm** page is displayed.
3. If this is the correct template to delete, click **Next**. The template will be deleted and the **Results** page is displayed.
4. Click **Done**.

Other Ways to Delete a Discovery Template

1. In the left navigation pane, right-click on **Discovery** and select **Delete discovery template**.
2. In the **Discovery - Templates** task module, select the template and click **Delete**.

View a Discovery Template

- [Steps for Viewing a Discovery Template](#)
- [Other Ways to View a Discovery Template](#)

You can view templates that you have created for discoveries and also perform other actions on those templates.

Steps for Viewing a Discovery Template

1. In the left navigation pane, click **Discovery** and then do the following to display the **Discovery Templates** page:
 - Click **Templates** (in the left navigation pane under **Discovery**).
2. Highlight the template you want to view and then click:
 - [Apply \(or Run\) a Discovery Template on page 127](#); you can choose to run the discovery now with the selected template, or you can schedule the discovery to run later ([Schedule a Discovery on page 123](#)).
 - [Create a Discovery Template on page 126](#).
 - [Delete a Discovery Template on page 128](#).
 - [Edit a Discovery Template on page 128](#).
 - [View a Discovery Template on page 129](#).
3. To close the **Discovery Templates** page, click on another option in the left navigation pane or in a task module.

Other Ways to View a Discovery Template

1. In the left navigation pane, right-click on **Discovery** and select **View discovery templates**.
2. In the left navigation pane, expand **Discovery** and **Templates**. Select the template to delete and click **Delete**.

Configuration

- [All About Device Configuration](#)
- [Task Modules for Configuration](#)
- [Related Application Options for Configuration Management](#)
- [Configure Devices](#)
- [View Configuration History](#)
- [Schedule a Device Configuration](#)
- [Configuration Templates](#)
- [Create a Configuration Template](#)
- [Edit a Configuration Template](#)
- [Delete a Configuration Template](#)
- [View a Configuration Template to Devices](#)
- [Apply a Configuration Template to Devices](#)

All About Device Configuration

- [Device Credentials](#)
- [Importing a Configuration from a File](#)

Many device settings can be viewed and configured through HP Web Jetadmin 10.0. Device configuration works differently depending on whether a single device or multiple devices are selected.

If a single device is selected, the configuration items in the tab are shown with the current device settings. If multiple devices are selected, configuration items in the tab are shown with unspecified or blank settings. The list of configurable options varies by the devices selected. With multiple devices selected, all configurable items will probably not apply to all devices. Only settings that apply to a device will be set on that device. Some options may be repeated multiple times because different settings are supported on different devices. If it is not clear which device or device model a particular setting applies to, holding the mouse over the name in the configuration settings displays a tooltip with additional information.

Configuration option availability depends on device model, network card and firmware revision. One model of device may support a configuration option for digital send functionality where another model, probably a single-function one, does not support that same configuration option. Again, in fleet scenarios, any configuration option that is set in HP Web Jetadmin 10.0 will only be applied to device models for which it is supported.

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Device Credentials

Whenever HP Web Jetadmin 10.0 encounters a device configuration that requires credentials, it looks to the device-specific **Credentials Store** first ([The Credentials Store on page 252](#)). If credentials exist in the store for that device, they will be used in the configuration. If successful, the device is configured

and the store is left as is. If the credentials in the store do not exist or do not enable configuration success, then global credentials are used. If global credentials enable configuration success, the value or values used are stored for that device. Any time a device credential failure occurs, the device is flagged as “credential required”. Whenever you are attempting a “live” configuration and a “credentials-required” condition is encountered, a “Needed Credentials” dialog box is displayed providing a way for you to add credentials to the HP Web Jetadmin 10.0. Once the required credentials are added, the configuration should succeed.

This state can also be detected in post-configuration in either **Configuration History** or in the **Credentials Required** column. After the required credential values exist in the **Credentials Store**, prompting from HP Web Jetadmin 10.0 should not occur unless the values on the device change.

For more information about credentials, see [Credentials for Devices on page 84](#).

Importing a Configuration from a File

A CSV (comma separated value) file can be created and then imported into HP Web Jetadmin 10.0 for the purpose of device configuration. This provides a way to configure a fleet of devices with unique parameters that would otherwise have to be configured one device at a time. CSV files can easily be created by exporting data from a spreadsheet or word processing program.


Here is an example of a device configuration scenario:

- 30 devices exist: 16.24.1.26-16.24.1.56
- Asset number assignments are required: Abc10040-Abc10070
- Assignments are made respective to IP address sequence

A file can be created to represent the configuration desired. Here is a quick look at an example file:

Table 4-9 Example of a Configuration File

IP Addr	Port	Asset Number
16.24.1.26	1	Abc10040
16.24.1.27	1	Abc10041
16.24.1.28	1	Abc10042
16.24.1.29	1	Abc10043
16.24.1.30	1	Abc10044

 **NOTE:** The first column for device identification can be an IP Address or Mac Address. The second column is always “Port,” and is usually 1 unless a device is attached to a multi-port print server.

Once the file is created and stored to disk on the client desktop; the user can import the file contents into HP Web Jetadmin 10.0 using **Configure Devices**.

The CSV file contains header text for each device property to be configured. Once the user has browsed and uploaded the file a Map Headers control appears. The customer specific header text can be matched with the corresponding device property.

The first two columns are used to identify the devices to be configured. These devices must have already been discovered in HP Web Jetadmin 10.0 prior to importing the file, or they will not be configured:

Table 4-10 Column Headers for Columns 1 through 3 for a CSV File

Column 1: Device Identifier (either IP address, hardware address (MAC address), or IP hostname)
Column 2: Port (always just "Port")
Column 3+: selected by the user

Table 4-11 Importable Device Settings for Columns 3+ for a CSV File

Access Control List
Asset Number
Company Name
Default Copier Copies
Default Printer Copies
Device Location
Device Name
Get Community Name
Job Timeout
Set Community Name
System Contact
System Location
System Name
TCP Idle Timeout
Any User defined settings (added through Tools > Options > Device Management > Configuration > User Defined; User Defined Configuration Settings on page 135). (In previous versions of HP Web Jetadmin 10.0, this used to be called custom fields or custom settings.)

Once the mapping is configured, HP Web Jetadmin 10.0 displays the data headers and device status. Devices which were previously discovered and successfully matched are shown in the list; any devices in the file which were not successfully matched are counted as "Unresolved devices".

Only the settings listed above can be imported from a file. If a setting contains a comma, quotations must be used around that particular setting. For example, the following line can be used to set values of "Chicago, IL, USA" and "Building 5, Floor 3":

```
16.24.1.26,1,"Chicago, IL, USA","Building 5, Floor 3"
```

Task Modules for Configuration

- [Configuration - Common Tasks Task Module](#)
- [Configuration - Recent Configurations Task Module](#)
- [Configuration - Active Configurations Task Module](#)
- [Configuration - Scheduled Configurations Task Module](#)

- [Configuration - Templates Task Module](#)

The following task modules can be displayed or hidden in **Configuration**.

Configuration - Common Tasks Task Module

The **Configuration - Current Tasks** task module can be displayed on the **Configuration** page and includes the following tasks:

- **Configure devices:** configure single devices or a fleet of devices ([Configure Devices on page 136](#)).
- **Schedule device configuration:** schedule configuration for a device for a later time ([Schedule a Device Configuration on page 139](#)).
- **Create configuration template:** create a configuration template ([Create a Configuration Template on page 143](#)).
- **Apply configuration template to devices:** apply an existing configuration template to devices ([Apply a Configuration Template to Devices on page 146](#)).
- **Edit configuration template:** make changes to an existing configuration template ([Edit a Configuration Template on page 144](#)).
- **Delete configuration template:** delete a configuration template ([Delete a Configuration Template on page 145](#)).
- **View configuration history:** view all of the configuration tasks which have occurred on all devices within the retention period ([View Configuration History on page 138](#)).

The **Configuration - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is **Configuration - Common Tasks**.

Configuration - Recent Configurations Task Module

The **Configuration - Recent Configurations** task module shows the recent configurations. You can select a configuration task and choose one of the following:

- **Details:** view details of the selected task.
- **View History:** view all of the configuration tasks which have occurred on all devices within the retention period ([View Configuration History on page 138](#)).

Configuration - Active Configurations Task Module

The **Configuration - Active Configurations** task module shows the active, or currently running, configurations. You can select a configuration task and choose one of the following:

- **Stop:** stops the current configuration task in progress, preventing any devices which have not yet been configured from being configured.
- **View:** view the selected configuration task in progress, including detailed results.

Configuration - Scheduled Configurations Task Module

The **Configuration - Scheduled Configurations** task module shows the configurations that are scheduled. You can select a configuration task and choose one of the following:

- **Delete:** delete the selected configuration.
- **Edit:** make changes to the selected configuration.

Configuration - Templates Task Module

The **Configuration - Templates** task module shows the configuration templates that have been created. You can select a configuration template and choose one of the following:

- **Apply:** apply the selected configuration template to devices ([Apply a Configuration Template to Devices on page 146](#)).
- **Create:** create a configuration template ([Create a Configuration Template on page 143](#)).
- **Delete:** delete a configuration template ([Delete a Configuration Template on page 145](#)).
- **Edit:** make changes to a configuration template ([Edit a Configuration Template on page 144](#)).
- **View:** view a configuration template ([View a Configuration Template to Devices on page 145](#)).


Related Application Options for Configuration Management

- [General Configuration Settings](#)
- [User Defined Configuration Settings](#)

Global settings can be set here for fleet configurations.

General Configuration Settings

If a device is turned off or is disconnected from the network, it will not respond to a configuration attempt. You can schedule how many times and how often HP Web Jetadmin 10.0 tries to configure devices before the configuration attempt is considered a failure. If a device does not respond to HP Web Jetadmin 10.0 during a configuration operation, it is added to a list of failed configuration operations. HP Web Jetadmin 10.0 tries to configure each device on the list until either the number of specified retries has occurred or all devices have been configured.

 **NOTE:** The settings on this page apply to all configuration options including scheduled configurations, configurations initiated by a user, and multiple device configurations. If the device cannot be configured, an entry noting the failed operation is logged in the Application Log ([Application Logging on page 34](#)) and in Configuration History ([View Configuration History on page 138](#)).

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Configuration** and then select **General**.
2. Configure the desired settings:
 - **Number of configuration retries:** Select the number of times a configuration task will attempt to configure a device before giving up.
 - **Hours between configuration retries:** Select the hours between each retry.

- **Retention time:** Select the number of days to retain configuration history (the default is 90).
- **Restore default templates:** Restores all templates shipped with HP Web Jetadmin 10.0.

To clear all previous configuration history, click **Clear History**.

3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

User Defined Configuration Settings

Any number of custom device settings can be created and then configured on devices. These **User defined settings** exist within the application only and not on the devices. These settings can provide additional information about the device that cannot be represented using the available configuration options. These settings can be any text value, and can be displayed in the device lists ([Device Lists on page 67](#)), reports ([Reports on page 173](#)), and Config tab ([Config Tab on page 57](#)). (In previous versions of HP Web Jetadmin 10.0, this used to be called custom fields or custom settings.)

- **Warranty expiration dates:** you would know when to expect to pay for service calls or start a new contract.
- **Lease start and stop dates:** you would know when units need to be returned or lease needs to be renewed.
- **Service maintenance dates:** you would know when to schedule service personnel visits.
- **Locale details:** you would know the city, state, and country/region to easily locate a device.

After the **User defined settings** are configured, they will be displayed in any configuration interface within HP Web Jetadmin 10.0. It is important to remember that these objects only appear in the HP Web Jetadmin 10.0 installation in which they are configured.


Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.


Expand **Configuration** and then select **User Defined**.

2. Any user-defined settings already added are listed:

- **New:** create new user-defined settings. The **Create User Defined Setting** dialog appears. Name the setting and choose whether or not to hide the setting when configuring multiple devices. This option should be checked if the setting is unique for each device and should not be used with multiple devices or templates (such as an identification number). Click **OK**.
- **Edit:** make changes to an existing user-defined setting. Select the setting and click **Edit**. The **Edit User Defined Setting** dialog appears. Make any changes and click **OK**.

 **NOTE:** Changing a setting name does not affect any current or historical data saved for that setting, so the new name should still match the setting purpose. Also, changes may not take effect completely until the HP Web Jetadmin 10.0 client is closed and restarted.

- **Delete:** remove any user-defined setting. Select the setting and click **Delete**. The **Delete User Defined Setting** dialog appears. Confirm your selection and click **OK**.

 **NOTE:** After a setting is deleted, all current and historical data is lost for that setting and the setting will be removed from any templates or scheduled tasks. Also, changes may not take effect completely until the HP Web Jetadmin 10.0 client is closed and restarted.

3. Settings on this page are effective immediately without clicking **Apply**, and cannot be canceled.

Configure Devices

- [Steps to Configure Devices](#)
- [Other Ways to Configure Devices](#)

You can configure devices without using a configuration template.

Steps to Configure Devices

1. In the left navigation pane, click on **Configuration**.

In the **Configuration - Common Tasks** task module, select **Configure devices**. The **Configure Devices** wizard is started with the **Specify configuration options** page displayed.

2. Select one of the options:

- **Use template:** devices will be configured by applying settings from a template. Select a configuration template from the drop-down box and go to Step 3.
- **Specify settings:** devices will be configured by specifying settings in the wizard. Go to Step 3.
- **Import from file:** devices will be configured by importing settings from a CSV file. (See [Importing a Configuration from a File on page 131.](#))

- Click **Next**. The **Select CSV file** page is displayed.


- Type the path and name of the CSV file to import, or browse for the file. Click **Next**. If successful, it shows you the headers from the CSV file.

 **NOTE:** If any errors are found in the CSV file, you will need to correct them and then try this import procedure again.

- Select the comparable device setting for each header. Click **Next**. The **Confirm** page is displayed.

- Click **Configure devices**. The **Results** page is displayed. Click **Done** to display the **Configuration** page.

3. To schedule the configuration for a later time, click **Schedule configuration**.


 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

4. Click **Next**. The **Select devices** page is displayed.

5. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**. If you chose to specify settings, the **Specify device settings** page is displayed.

6. The settings displayed are the ones supported by the devices selected in Step 5. Settings are organized alphabetically within each category. You can also use the personalized **My Settings** category to easily find your favorite settings. If **My Settings** is not visible, then right-click and select **Show 'My Settings'**. Select the configuration options and then click **Next**.

 **NOTE:** For information about specific configuration options that might not work properly in a batch mode, see [Captured Configurable Options and Configuration Templates on page 142](#).

If you chose to schedule this configuration, the **Specify schedule options** page is displayed.

If you did not choose to schedule this configuration, go to Step 8.

7. Select the start date and time for your configuration, specify how often it should run, and give it a name. Configuration schedules can have the following flexible settings applied:
 - **Task name:** enter a name for this scheduled task, for easier identification in the task modules and the configuration history.
 - **Allow start time to occur between the specified hours of:** limits the start time to a specified window of time. The configuration will only run if able to do so during the time specified here. This is useful for configurations that should only occur in low traffic times such as late at night.
 - **Recurrence, Once:** launches only once in the specified schedule.
 - **Recurrence, Daily:** task will recur daily once per day or once per weekday depending on the selected setting.
 - **Recurrence, Weekly:** task will recur once every X weeks on the day specified depending on the setting.
 - **Recurrence, Monthly:** task will recur once every X months on XX day depending on setting; or, task will recur on specified day pattern depending on setting.

Click **Next**. The **Confirm** page is displayed.

8. Review the settings selected. If you did not choose to schedule this configuration, go to step 10.
9. Click **Create Schedule**. The **Results** page is displayed.

At this point, the schedule has been created but the devices have not yet been configured. You may want to run the configuration once to make sure there are no problems, such as devices needing credentials in order to be configured. This will increase the chances of the scheduled configuration completing successfully. If you do not want to run the configuration now, uncheck the option **Run configuration now (recommended)** and click **Done** to display the **Configuration** page. Otherwise, you will be taken to a second **Configuration** page.

10. Click **Configure Devices**. The **Results** page is displayed. To see details of the configuration, click **Details**. Then click **Close**.

Click **Done** to display the **Configuration** page.

Other Ways to Configure Devices

- In the left navigation pane, right-click on **Configuration** and select **Configure devices**.
- In any device list, select one or more devices; right-click, select **Configuration**, and then select **Configure devices**.
- In the **Configuration - Recent Configurations** task module, select a recent configuration, right-click and select **Configure devices**.
- To configure devices using a template, in any device list, select one or more devices. Then select the **Config** tab and click **Apply Template**.
- In any device list, select one or more devices; select the **Config** tab at the bottom of the page. Make changes to configuration settings on the tab and click **Apply**.

View Configuration History

- [Steps to View Configuration History](#)
- [Other Ways to View Configuration History](#)

Any device configuration result is added to configuration history.

Steps to View Configuration History

1. In the left navigation pane, expand **Configuration** and then click **History**. The **Configuration History** page is displayed.
2. Select the way you want to group the history results:
 - **None**: shows all the history as a flat list, which can be sorted by column.
 - **Task**: shows configurations according to task name, which can only be changed on scheduled tasks.
 - **Device**: shows configurations by device.
 - **Initiator**: shows configurations according to the user who initiated them.
 - **Start time**: shows configurations according to start time.

- **Device result:** shows configurations according to the device results, to easily find device failures.
 - **Task result:** shows configurations according to the overall task result.
3. To view details click + (Expand All) in the header to expand all details or at a line item to expand just that line.


Other Ways to View Configuration History

- In the left navigation pane, click **Configuration**. In the **Configuration - Common Tasks** task module, select **View configuration history**.
- In the **Configuration - Recent Configurations** task module, select **View History**.
- In the left navigation pane, right-click on **Configuration** and select **View configuration history**.
- In the left navigation pane, right-click on **Overview**. Select **Configuration > View configuration history**.
- In any device list, select one or more devices. Then right-click and select **Configuration > View configuration history** to view the history for just those devices.
- In any device list, select one or more devices. Select the **Config** tab at the bottom of the page. Then select **View History** to view the history for just those devices.
- In any device list, select one or more devices and select the **Troubleshoot** tab. In the **Troubleshooting tools** drop-down select **Recent Configurations** and click **View History** to view the history for just those devices.

Schedule a Device Configuration

- [Steps for Scheduling a Device Configuration](#)
- [Other Ways to Schedule a Device Configuration](#)

Configurations can be scheduled to occur at the time and day you specify. Like other scheduling within HP Web Jetadmin 10.0, configuration schedules can have the following flexible settings applied:

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.


NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

- **Task name:** allows flexible naming of scheduled tasks.
- **Start Date and Time:** specifies when the configuration will launch.
- **Allow start time to occur between the specified hours of:** limits the starting of task to a specified window of time. Task will only run if able to do so during the specified time period. This is useful for tasks that should only occur in low traffic times such as late at night.
- **Recurrence, Once:** launches only once in the specified schedule.

- **Recurrence, Daily:** will recur daily once per day or once per weekday depending on setting.
- **Recurrence, Weekly:** will recur every X weeks depending on setting.
- **Recurrence, Monthly:** will recur once every X months on XX day depending on setting; or, task will recur on specified day pattern depending on setting.

Once a configuration task is scheduled it can be viewed in the **Configuration - Scheduled Configurations** task module. Running tasks can be viewed in **Configuration - Active Configurations** task module.

Steps for Scheduling a Device Configuration

 **NOTE:** All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

1. In the left navigation pane, click on **Configuration**.

In the **Configuration - Common Tasks** task module, select **Schedule device configuration**. The **Schedule Device Configuration** wizard is started with the **Specify configuration options** page displayed.


2. Select one of the options:

- **Use template:** devices will be configured by applying settings from a template. Select a configuration template from the drop-down box and go to Step 3.
- **Specify settings:** devices will be configured by specifying settings in the wizard. Go to Step 3.
- **Import from file:** devices will be configured by importing settings from a CSV file. (See [Importing a Configuration from a File on page 131.](#))
 - Click **Next**. The **Select CSV file** page is displayed.
 - Type the path and name of the CSV file to import, or browse for the file. Click **Next**. If successful, it shows you the headers from the CSV file.

 **NOTE:** If any errors are found in the CSV file, you will need to correct them and then try this import procedure again.

- Select the comparable device setting for each header. Click **Next**. The **Confirm** page is displayed.
 - Click **Configure devices**. The **Results** page is displayed. Click **Done** to display the **Configuration** page.
3. Click **Next**. The **Select devices** page is displayed.
 4. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**. If you chose to specify settings, the **Specify device settings** page is displayed.

5. The settings displayed are the ones supported by the devices selected in Step 4. Settings are organized alphabetically within each category. You can also use the personalized **My Settings** category to easily find your favorite settings. If **My Settings** is not visible, then right-click and select **Show 'My Settings'**. Select the configuration options and then click **Next**.

 **NOTE:** For information about specific configuration options that might not work properly in a batch mode, see [Captured Configurable Options and Configuration Templates on page 142](#).

6. Select the start date and time for your configuration, specify how often it should run, and give it a name. Configuration schedules can have the following flexible settings applied:
 - **Task name:** enter a name for this scheduled task, for easier identification in the task modules and the configuration history.
 - **Allow start time to occur between the specified hours of:** limits the start time to a specified window of time. The configuration will only run if able to do so during the time specified here. This is useful for configurations that should only occur in low traffic times such as late at night.
 - **Recurrence, Once:** launches only once in the specified schedule.
 - **Recurrence, Daily:** task will recur daily once per day or once per weekday depending on the selected setting
 - **Recurrence, Weekly:** task will recur once every X weeks on the day specified depending on the setting.
 - **Recurrence, Monthly:** task will recur once every X months on XX day depending on setting; or, task will recur on specified day pattern depending on setting.

Click **Next**. The **Confirm** page is displayed.

7. Review the settings selected.
8. Click **Create Schedule**. The **Results** page is displayed.

At this point, the schedule has been created but the devices have not yet been configured. You may want to run the configuration once to make sure there are no problems, such as devices needing credentials in order to be configured. This will increase the chances of the scheduled configuration completing successfully. If you do not want to run the configuration now, uncheck the option **Run configuration now (recommended)** and click **Done** to display the **Configuration** page. Otherwise, you will be taken to a second **Configuration** page.

9. Click **Configure Devices**. The **Results** page is displayed. To see details of the configuration, click **Details**. Then click **Close**.

Click **Done** to display the **Configuration** page.

Other Ways to Schedule a Device Configuration

- In any device list, select one or more devices; right-click and select **Configuration > Schedule configuration**.
- In the left navigation pane, right-click on **Configuration** and select **Schedule configuration**.
- In the left navigation pane, right-click on **Overview** and select **Configuration > Schedule configuration**.
- In many of the methods for **Configuring a device** or **Applying a template**, you also have the option of scheduling that task by checking **Schedule configuration** on the first page of the wizard.

Configuration Templates

- [Adding Configuration Templates to a Group Policy](#)
- [Captured Configurable Options and Configuration Templates](#)

Configuration templates are used to store device settings and apply those settings to one or more devices. This can be done to keep device configurations consistent and to make it easy to apply a common set of settings on a regular basis. Templates are an easy way to change the settings for regularly scheduled configurations, without having to recreate the entire schedule. Templates can also be used to save many settings from a device, either for backup purposes or to apply to similar devices.

You can create and manage configuration templates:

- **Create configuration template:** create a configuration template ([Create a Configuration Template on page 143](#)).
- **Apply configuration template to devices:** apply the selected configuration template to devices ([Apply a Configuration Template to Devices on page 146](#)).
- **Edit configuration template:** make changes to an existing configuration template ([Edit a Configuration Template on page 144](#)).
- **Delete configuration template:** delete a configuration template ([Delete a Configuration Template on page 145](#)).
- **View configuration template:** view an existing configuration template ([View a Configuration Template to Devices on page 145](#)).

Adding Configuration Templates to a Group Policy

Configuration templates can be added to Group policies. Group policies are a powerful new automation tool that can save you a great deal of time configuring devices and HP Web Jetadmin 10.0 settings. Any device group can have a property known as Group Policy. One type of group policy is Configure Devices, which uses a selected configuration template from the list of existing templates. The configuration template can be applied either as the device is added into the group or as the device is removed from the group. Multiple Configure Devices Group Policies using different templates can exist on a single device group.

Captured Configurable Options and Configuration Templates

Some configuration options behave differently for single-device configuration than they do for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, some configuration options will fail when the template is used to configure multiple

devices. The configuration options that will fail when used to configure multiple devices via a stored configuration template are:

- Tray Administration
- Authentication Manager
- Control Panel Language
- Default Media Type
- SNMP Trap Destination Table
- Access Control List
- IPv6 Options
- Asset Number
- System Name
- IP Address
- LAA Address Configuration

When capturing device settings via the **Save As Template** feature, these items should remain unchecked. If it is desired to have these configuration options as part of the template, an edit can be performed on the template after it has been saved and the desired configuration option can be selected and configured appropriately. Once the modified template is saved, a version of the configuration option that supports multiple configuration will be used and the operation should succeed. This situation will not occur during normal use of multiple device configuration or when a configuration template is created independently from a device.

Create a Configuration Template

- [Steps to Create a Configuration Template](#)
- [Other Ways to Create a Configuration Template](#)

Configuration templates are used to store device settings and apply those settings to one or more devices. This can be done to keep device configurations consistent and to make it easy to apply a common set of settings on a regular basis. Templates are an easy way to change the settings for regularly scheduled configurations, without having to recreate the entire schedule. Templates can also be used to save many settings from a device, either for backup purposes or to apply to similar devices.

Steps to Create a Configuration Template

1. In the left navigation pane, click on **Configuration**. In the **Configuration - Common Tasks** task module, select **Create configuration template**. The **Create Device Configuration Template** wizard is started with the **Specify template options** page displayed.
2. Enter the name of the template (up to 48 characters).
3. Select the configuration options to include with the template and then click **Next**. The **Confirm** page is displayed.

 **NOTE:** For information about specific configuration options that might not work properly in a batch mode, see [Captured Configurable Options and Configuration Templates on page 142](#).

NOTE: The configuration options selected for this template will only be applied to those devices that support the options.

4. Review the settings selected and click **Create Template**. The **Results** page is displayed.
5. Click **Done** to display the **Configuration** page.

Other Ways to Create a Configuration Template

- In the left navigation pane, right-click on **Configuration** and select **Create configuration template**.
- In the left navigation pane, expand **Configuration** and right-click **Templates**. Then select **Create configuration template**.
- In the **Configuration - Templates** task module, select **Create**.
- In the left navigation pane, right-click on **Overview** and select **Configuration > Create configuration template**.
- In the left navigation pane, expand **Configuration** and select **Templates**. Click **Create** next to the list of templates displayed.
- In any device list, select one or more devices and click the **Config** tab at the bottom of the page. Select the configuration options and then click **Save as Template**.

Edit a Configuration Template

- [Steps to Edit a Configuration Template](#)
- [Other Ways to Edit a Configuration Template](#)

You can make changes to any configuration template after it has been created.

Steps to Edit a Configuration Template

1. In the left navigation pane, click on **Configuration**. In the **Configuration - Common Tasks** task module, select **Edit configuration template**. The **Edit Device Configure Template** wizard is started with the **Select template** page displayed.
2. Select the template to edit and click **Next**. The **Specify template options** page is displayed. You can change the name of the template if desired (up to 48 characters).
3. Select the configuration options to include with the template and then click **Next**. The **Confirm** page is displayed.



NOTE: For information about specific configuration options that might not work properly in a batch mode, see [Captured Configurable Options and Configuration Templates on page 142](#).

NOTE: The configuration options selected for this template will only be applied to those devices that support the options.

4. Review the settings selected and click **Save Template**. The **Results** page is displayed.
5. Click **Done** to display the **Configuration** page.

Other Ways to Edit a Configuration Template

- In the left navigation pane, right-click on **Configuration** and select **Edit configuration template**.
- In the left navigation pane, expand **Configuration** and then expand **Templates**. Right-click on the template to edit and select **Edit configuration template**.
- In the left navigation pane, expand **Configuration** and then expand **Templates**. Select the template to edit and click **Edit** on the page displaying the template settings.
- In the **Configuration - Templates** task module, select the template to edit and click **Edit**.
- In the left navigation pane, expand **Configuration** and then select **Templates**. Select the template to edit from the list displayed and click **Edit**.

Delete a Configuration Template

- [Steps to Delete a Configuration Template](#)
- [Other Ways to Delete a Configuration Template](#)

Configuration templates can be deleted.

Steps to Delete a Configuration Template

1. In the left navigation pane, click on **Configuration**. In the **Configuration - Common Tasks** task module, select **Delete configuration template**. The **Delete Device Configuration Template** wizard is started with the **Select template** page displayed.
2. Select the template to delete and click **Next**. The **Confirm** page is displayed.
3. Click **Delete Template**. The **Results** page is displayed.
Click **Done** to display the **Configuration** page.

Other Ways to Delete a Configuration Template

- In the left navigation pane, right-click on **Configuration** and select **Delete configuration template**.
- In the left navigation pane, expand **Configuration** and then expand **Templates**. Select the template to delete and click **Delete** on your keyboard.
- In the left navigation pane, expand **Configuration** and then expand **Templates**. Right-click on the template to delete and select **Delete configuration template**.
- In the **Configuration - Templates** task module, select the template to delete and click **Delete**.
- In the left navigation pane, expand **Configuration** and then select **Templates**. Select the template to delete from the list displayed and click **Delete**.

View a Configuration Template to Devices

- [Steps to View a Configuration Template](#)
- [Other Ways to View a Configuration Template to Devices](#)

You can view existing configuration templates.

Steps to View a Configuration Template

1. In the left navigation pane, expand **Configuration** and then expand **Templates**. Click on the template you want to view. The template page is displayed.
2. You can view all of the settings for the template. You can also:
 - **Apply**: apply the selected configuration template to devices ([Apply a Configuration Template to Devices on page 146](#)).
 - **Edit**: make changes to an existing configuration template ([Edit a Configuration Template on page 144](#)).
 - **New**: create a configuration template ([Create a Configuration Template on page 143](#)).
 - **Remove**: delete a configuration template ([Delete a Configuration Template on page 145](#)).

Other Ways to View a Configuration Template to Devices

- In the **Configuration - Templates** task module, select the template to view and click **View**.


Apply a Configuration Template to Devices

- [Steps to Apply a Configuration Template to Devices](#)
- [Other Ways to Apply a Configuration Template to Devices](#)

When you apply a configuration template, you are actually configuring devices with the settings that were stored in the template.

Steps to Apply a Configuration Template to Devices


1. In the left navigation pane, click **Configuration**. In the **Configuration - Common Tasks** task module, select **Apply configuration template to devices**. The **Apply Device Configuration Template** wizard is started with the **Specify configuration options** page displayed.
2. Select the configuration template from the drop-down box.
3. If you want to schedule this configuration to run at a later time, select **Schedule configuration**. Click **Next**; the **Select devices** page is displayed.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

4. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**. The **Confirm** page is displayed.

5. Review the settings selected. Click **Apply Template**. The **Results** page is displayed.
6. To see details of the configuration, click **Details**. Then click **Close**.

Click **Done** to display the **Configuration** page.

Other Ways to Apply a Configuration Template to Devices

- In the left navigation pane, expand **Configuration** and then expand **Templates** to list all of the configuration templates. You can drag-and-drop one or more devices onto one of the configuration templates listed under **Templates**.
- In the left navigation pane, right-click on **Configuration** and select **Apply configuration template**.
- In any device list, select one or more devices. Then right-click and select **Configuration > Apply configure template**.
- In the **Configuration - Templates** task module, select the template to apply and click **Apply**.
- In the left navigation pane, expand **Configuration** and then select **Templates**. Select the template you wish to apply from the displayed list and click **Apply**.
- In the left navigation pane, expand **Configuration** and then expand **Templates**. Right-click on the template you wish to apply in the navigation tree and select **Apply configuration template**.

Alerts

- [All About Alerts](#)
- [Alerts Traps Listener Port](#)
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- [Subscribe for Device Alerts](#)
- [Edit an Alert Subscription](#)
- [Alert History](#)
- [Alert Subscription Templates](#)
- [Create a Subscription Template](#)
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All About Alerts

- [Alerts and HP Web Jetadmin 10.0](#)
- [What You Can Do With Alerts](#)
- [Types of Alerts](#)
- [Examples of Alerts](#)

HP Web Jetadmin 10.0 can detect different events occurring on devices and then relay detailed messages about those events, device states, and other important specifics. These messages can be sent to email addresses or to **Alerts History** within HP Web Jetadmin 10.0. For example, error or warning conditions on printers, such as paper out or toner low, can trigger email messages to be sent by HP Web Jetadmin 10.0 that contain detailed information pertaining to the condition, allowing the recipient to act upon that condition immediately

The advantage of alerts is that you can receive proactive, real-time warnings via email for events that occur on networked printers. Receiving early notification of printer events allows administrators to correct the problems before they impact end user productivity, saving time for both the administrator and the end user. Helpdesks might use alerts to proactively troubleshoot issues with printers before end users detect them. Individuals responsible for ordering consumables, such as toner cartridges, might enable toner low alerts so they can be warned of toner low conditions in order to proactively order toner before it runs out.

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Alerts and HP Web Jetadmin 10.0

As in earlier releases of HP Web Jetadmin, proactive alerting is accomplished through detection of an event based on a device, processing to determine the appropriate action to take, and then notification through some method (usually email). The initial detection of device based events is done in one of two ways:

- **Polling devices:** always used for Supplies and for Critical Alerts types.
- **Traps:** packets sent to HP Web Jetadmin 10.0 to signal an event. When the device is first established in HP Web Jetadmin 10.0 Alerts, the trap destination (the application's IP address) is configured onto the device.

The following Alerts features have been added to HP Web Jetadmin 10.0:

- Intuitive, easy to use Alerts settings interface
- Multiple subscription control
- Alerts subscription templates
- Supplies alerting
- Backup polling
- Adaptive polling (supplies)
- Alerts history interface

What You Can Do With Alerts

You can use Alerts to have immediate or real-time notification that an event has occurred. A common scenario is a print maintenance or support team. These people would like to know when a problem happens rather than to wait for a customer complaint. In this way, they can proactively handle trouble perhaps even prior to the customer experiencing downtime.

In HP Web Jetadmin 10.0, you actually **subscribe** to Alerts to get information about devices. When you subscribe to an Alert, you are requesting information from a device (or devices) about specific settings on that device (or devices) including events, email address notification, and more. (See [Subscribe for Device Alerts on page 152.](#))

Types of Alerts


There are three types of Alerts:

- **General alerts (detailed):** include most non-supply device events and rely on traps. Polling is established when traps destinations cannot be configured.
- **Supplies alerts:** monitor device supply status and levels through polling. The polling mechanism uses a combination of slow-polling and sliding time interval depending on the level of the supply being monitored.
- **Critical alerts:** events are monitored by polling every five minutes. The polling interval is configurable within the range of 5 to 360 minutes. Because of the frequent polling nature of this solution, it is important to use it sparingly and only for devices that need immediate attention. All General Alerts are available.

Examples of Alerts

Following are some examples of alerts you might want to configure:

- An alert set to add specific printer error code events to **Alerts History** as these events occur ([Alert History on page 156](#)).

 **NOTE:** Alerts now support more detailed printer errors such as “Subsystem 72 -- Service Error” and more.

- An alert set to notify a recipient through email about a Toner Low condition.
- An alert set to notify a recipient through email about a specific supply threshold.
- An alert set to propagate an SNMP trap directed at a listener process on another application such as HP OpenView.

Alerts Traps Listener Port

Earlier releases of HP Web Jetadmin used a different traps listener port for **Reports** than the traps listener used for Alerts events. In HP Web Jetadmin 10.0, this has changed. Shown here are the differences between previous versions of HP Web Jetadmin and HP Web Jetadmin 10.0:

- HP Web Jetadmin 10.0 traps listener port: is UDP port=27892 for Alerts and Reports by-user collections.
- Prior versions of HP Web Jetadmin 10.0 traps listener port was UDP port=27892 for Alerts and UDP port=27894 for Report Generation Plug-in by-user collections.

Task Modules for Alerts

- [Alerts - Current Tasks and Alerts - Common Tasks Task Modules](#)
- [Alerts - Active Tasks Task Module](#)
- [Alerts - Recent Alerts Task Module](#)
- [Alerts - Alert Subscriptions Task Module](#)
- [Alerts - Subscription Templates Task Module](#)

The following task modules can be displayed or hidden in **Alerts** on the **Alerts Management** page.

Alerts - Current Tasks and Alerts - Common Tasks Task Modules

The **Alerts - Current Tasks** task module can be displayed on the **Alerts Management** page and includes the following tasks:

- [Subscribe for Device Alerts on page 152](#)
- [Create a Subscription Template on page 157](#)
- [Apply an Alert Subscription Template on page 159](#)
- [Edit an Alert Subscription Template on page 160](#)
- [Delete an Alert Subscription Template on page 161](#)

The **Alerts - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is **Alerts - Common Tasks**.

Alerts - Active Tasks Task Module

The **Alerts - Active Tasks** task module shows you any alerts currently scheduled. You can:

- Stop an alert by highlighting it and clicking **Stop**.
- **View** an alert template. The following is displayed:
 - **Task Name:** the name of the alert.
 - **State:** whether or not credentials were requested for devices.
 - **Initiator:** the name of the user who started the alert.
 - **Start Time:** the time the alert should start.

Alerts - Recent Alerts Task Module

View summary information or complete information about alerts history ([Alert History on page 156](#)). Click **View History** to see the entire **Alert History** page.

Alerts - Alert Subscriptions Task Module

- **Subscribed devices** ([Subscribe for Device Alerts on page 152](#)): how many devices had alert subscriptions. Also displayed is the percentage of all devices that devices with alert subscriptions represents.
- **Unsubscribed devices:** how many devices have no alert subscriptions. Also displayed is the percentage of all devices that devices with no alert subscriptions represents.

Alerts - Subscription Templates Task Module

- [Apply an Alert Subscription Template on page 159](#)
- [Create a Subscription Template on page 157](#)
- [Delete an Alert Subscription Template on page 161](#)
- [Edit an Alert Subscription Template on page 160](#)
- View ([Alert Subscription Templates on page 157](#))

Related Application Options for Alerts

- [General](#)
- [Template Settings](#)

Global settings can be stored here for managing alerts.

General

You can define how often devices should be checked to see if they warrant alerts or not. Frequent polling can increase network traffic; infrequent polling might cause some device alerts to go unnoticed and

therefore unattended. You can also specify how long an alert event stays in the alert history log or clear the alerts log at any time.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Alerts** and then select **General**.
2. Configure the desired settings:
 - **Maximum communication interval:** used when no device communications have existed for the specified number of hours (the default is 24 hours).
 - **Critical alert interval:** used for devices with **Critical Alerts** settings; the devices are polled every X minutes (the default is 5 minutes).
 - **Retention time:** the number of days to save alerts log entries (default is 30 days). To clear the log, select **Clear Log**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Template Settings

You can reset the default alert subscription template back to its original state. This is convenient if changes have been made to the template that you do not want applied anymore.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Alerts** and then select **Template Settings**.
2. To reset the alert subscription template to factory settings (its state when first installed), click **Restore**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Subscribe for Device Alerts

- [Steps for Subscribing to Device Alerts](#)
- [Other Ways to Create an Alert Subscription](#)

You can define alerts for one or more devices.


Steps for Subscribing to Device Alerts

1. Expand the **Alerts** tree in the left navigation pane. In the **Alerts - Common Tasks** task module, select **Subscribe for device alerts**. The **Create Alert Subscription** wizard is started with the **Specify alerts subscription type** page displayed.
2. Choose one of the following:
 - Select a template from the drop-down box, or
 - Specify the alert settings:
 - **General alerts (detailed)**: include most non-supply device events and rely on traps. Polling is established when traps destinations cannot be configured.
 - **Supplies alerts**: monitor device supply status and levels through polling. The polling mechanism uses a combination of slow-polling and sliding time interval depending on the level of the supply being monitored.
 - **Critical alerts**: events are monitored by polling every five minutes. The polling interval is configurable within the range of 5 to 360 minutes. Because of the frequent polling nature of this solution, it is important to use it sparingly and only for devices that need immediate attention. All General Alerts are available. This and other polling rates are adjustable.

Click **Next**. The **Select devices** page is displayed.

3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to **Groups**. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.


 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**. The **Specify notification type** page is displayed.

4. Select the way you want to be notified about alerts:

 **NOTE:** Alerts will always be included in the **Alert History** display. Also, plug-in solutions such as the SNMP Traps Generator will add the choices to this page.


- **Alert logging only:** enter any alerts into the Alert History Log and do not send any email messages about the alerts. Click **Next**. The **Select alerts** page is displayed.
- **Email Notifier:** enter any alerts into the Alert History Log **and** send an email message about the alerts. Click **Next**. The **Specify notification settings** page is displayed:
 - Enter the email address or browse for the email address. Multiple email addresses can be separated by a semi-colon.
 - Select the email format:
 - Concise** (default): short description of the received alert.
 - Verbose:** longer description of the alert.
 - Custom:** message format that you can create and name for reuse later. If you do not find a template in the drop-down list of custom messages, you can create one by clicking **Custom Email Templates**.
 - Click **Next**. The **Select alerts** page is displayed.

Proper SMTP settings must be made in **Tools > Options > Application Management > Email > SMTP** ([SMTP on page 246](#)) and [Email Addresses Management on page 246](#)).

5. Select the alerts you want to be notified about and then click **Next**. The **Specify advanced settings** page is displayed; select the advanced settings (the ones displayed are dependent on the alerts selected on the previous page):
 - **No advanced settings:** select this option if you do not want to configure any advanced settings.
 - **Time to ignore duplicate alerts:** when enabled, this value keeps HP Web Jetadmin 10.0 from sending duplicate Alerts within the time specified. This setting is specific to the Subscription being edited or created.
 - **Ignore duplicates for:** specify the amount of time that should elapse before HP Web Jetadmin 10.0 should post an alert to email or to **Alerts History**.
 - **Ignore first time period:** if you want HP Web Jetadmin 10.0 to ignore the first time period (as indicated in **Ignore duplicates for** above), then select this option.

Click **Next**; the **Specify subscription name** page is displayed.

6. Type the name for this set of alerts. Click **Next**; the **Confirm** page is displayed.
7. Click **Subscribe**; the **Progress** page is displayed.
8. To see details about the alerts, click **Details**; to see details about the alerts for each device, click **Expand All**. When done, click **Close**; the **Progress** page is displayed again.

 **NOTE:** The **Device Trap Table Settings** page might be displayed. If so, complete this page and click **Finish**.

9. Click **Done**.

Other Ways to Create an Alert Subscription

- Right-click on **Alerts** in the left navigation pane and then select **Subscribe**.
- In the **All Devices** list, highlight a device and right-click. Select **Alerts > Subscribe**.
- In the **All Devices** list, highlight a device. Click the **Alerts** tab in the lower portion of the page and then select **Subscribe**.

Edit an Alert Subscription

- [Steps for Editing an Alert Subscription](#)
- [Other Ways to Edit an Alert Subscription](#)

After an alerts subscription has been made for a device, changes in existing Notification Settings, email recipients and formats, Available Alerts selections, Advanced Settings, and the Subscription Name can be changed.

Steps for Editing an Alert Subscription

1. Expand the **Alerts** tree in the left navigation pane and select **All Subscriptions**. Select the subscription or device and then click **Edit Subscription** (at the bottom of the page). The **Edit Subscription** wizard is started with the **Specify notification type** page displayed (if the subscription is a supplies solution, this page will not be displayed).
2. Select the way you want to be notified about alerts:
 - **Alert logging only**: enter any alerts into the Alert History Log and do not send any email messages about the alerts. Click **Next**. The **Select alerts** page is displayed.
 - **Email Notifier**: enter any alerts into the Alert History Log **and** send an email message about the alerts. Click **Next**. The **Specify notification settings** page is displayed:
 - Enter the email address or browse for the email address. Multiple email address can be separated by a semi-colon.
 - Select the email format:
 - Concise** (default): short description of the received alert.
 - Verbose**: longer description of the alert.
 - Custom**: message format that you can create and name for reuse later. If you do not find a template in the drop-down list of custom messages, you can create one by clicking **Custom Email Templates**.
 - Click **Next**. The **Select alerts** page is displayed.
3. Select the alerts you want to be notified about. Click **Next**. The **Specify advanced settings** page is displayed; select the advanced settings.
Click **Next**; the **Specify subscription name** page is displayed.
4. Type the name for this set of alerts. Click **Next**; the **Confirm** page is displayed.
5. Click **Edit Subscription**; the **Progress** page is displayed.

6. To see details about the alerts, click **Details**; to see details about the alerts for each device, click **Expand All**. When done, click **Close**; the **Results** page is displayed again.
7. Click **Done**; the **All Subscriptions** page is displayed.

Other Ways to Edit an Alert Subscription

- In the **Alerts - Alert Subscriptions** task module, click **Subscribed devices**. The **All Subscriptions** page is displayed. Select the subscription or device and then click **Edit Subscription**.

Alert History

- [Steps for Viewing Alert History](#)
- [Other Ways to View Alert History](#)

On the **Alert History** page, you can view the following information about alerts:

- **Time Received:** the time the alert was received.
- **Alert:** the name of the alert.
- **Device Model:** the model of the device that received the alert.
- **IP Hostname:** the IP Hostname of the device that received the alert.
- **IP Address:** the IP Address of the device that received the alert.

You can sort the details by any of the columns listed by dragging that column to the top left of the page.

Steps for Viewing Alert History

1. Expand the **Alerts** tree in the left navigation pane. In the **Alerts - Recent Alerts** task module, click **View History**. The **Alert History** page is displayed
2. After you have viewed the history, click **Close**. The **Alerts Management** page is displayed.

Other Ways to View Alert History

- Right-click on **Alerts** in the left navigation pane and select **View alerts history**.
- Click and expand **Alerts** in the left navigation pane. Then right-click on **History** and select **View alerts history**.
- In the **Alerts - Recent Alerts** task module, view summary information, or highlight an alert and click **View History**.
- In the **All Devices** list, highlight the device and then click the **Alerts** tab in the lower portion of the page. Then select **Alert History**.
- In the **All Devices** list, highlight the device and then right-click. Select **Alerts > View alerts history**.
- Select a device from the device list and select the **Troubleshoot** tab. Then **Recent Alerts** from the right drop-down list. Click on **View History** to display the complete log for that device.

Alert Subscription Templates

- [Steps for Viewing Alert Subscription Templates](#)
- [Other Ways to View an Alert Subscription Template](#)

You can view Alert templates (including the default template) and also do any of the following actions:

- [Apply an Alert Subscription Template on page 159](#)
- [Create a Subscription Template on page 157](#)
- [Delete an Alert Subscription Template on page 161](#)
- [Edit an Alert Subscription Template on page 160](#)

Steps for Viewing Alert Subscription Templates

1. Expand the **Alerts** tree in the left navigation pane and then expand **Templates** to list all Alert templates. Click on the template you want to view. The specific template detail is displayed.
2. You can do any of the following:
 - **Apply:** apply the template to devices ([Apply an Alert Subscription Template on page 159](#)).
 - **Edit:** make changes to the template ([Edit an Alert Subscription Template on page 160](#)).

Other Ways to View an Alert Subscription Template

- Expand the **Alerts** tree in the left navigation pane and then click on **Templates**. The **Alerts - Subscription Templates** page is displayed listing all of the Alert templates. Highlight a template and then click **View**.

Create a Subscription Template

- [Steps for Creating a Subscription Template](#)
- [Other Ways to Create an Alert Subscription Template](#)

Alert templates are used to store settings to be reused again. When an Alert Subscription Template is applied to a device as a 'Linked Subscription', the subscription will be altered if the associated template is changed. A default Alerts Subscription Template is pre-configured when HP Web Jetadmin 10.0 is installed and contains a combination of Supplies, Service and Media Path Alerts.

Steps for Creating a Subscription Template

1. Expand the **Alerts** tree in the left navigation pane. In the **Alerts - Common Tasks** task module, select **Create subscription template**. The **Create Alert Subscription Template** wizard is started with the **Specify alerts subscription type** page displayed.
2. Specify the alert settings:
 - **General alerts (detailed)**: include most non-supply device events and rely on traps. Polling is established when traps destinations cannot be configured.
 - **Supplies alerts**: monitor device supply status and levels through polling. The polling mechanism uses a combination of slow-polling and sliding time interval depending on the level of the supply being monitored.
 - **Critical alerts**: events are monitored by polling every five minutes. The polling interval is configurable within the range of 5 to 360 minutes. Because of the frequent polling nature of this solution, it is important to use it sparingly and only for devices that need immediate attention. All General Alerts are available. This and other polling rates are adjustable.

Click **Next**. The **Specify notification type** page is displayed.

3. Select the way you want to be notified about alerts:
 - **Alert logging only**: enter any alerts into the Alert History Log and do not send any email messages about the alerts. Click **Next**. The **Select alerts** page is displayed.
 - **Email Notifier**: enter any alerts into the Alert History Log **and** send an email message about the alerts. Click **Next**. The **Specify notification settings** page is displayed:
 - Enter the email address or browse for the email address. Multiple email address can be separated by a semi-colon.
 - Select the email format:
 - Concise** (default): short description of the received alert.
 - Verbose**: longer description of the alert.
 - Custom**: message format that you can create and name for reuse later. If you do not find a template in the drop-down list of custom messages, you can create one by clicking **Custom Email Templates**.
 - Click **Next**. The **Select alerts** page is displayed.
4. Select the alerts you want to be notified about. Click **Next**. The **Specify advanced settings** page is displayed; select the advanced settings.

Click **Next**; the **Alerts template name** page is displayed.
5. Type the name for this set of alerts. Click **Next**; the **Confirm** page is displayed.
6. Click **Create Template**; the **Results** page is displayed.
7. To apply the template to devices now, click **Apply template** and complete the pages displayed ([Subscribe for Device Alerts on page 152](#)). To apply the template to devices later, click **Done**; the **Alerts Management** page is displayed.

Other Ways to Create an Alert Subscription Template

- Right-click on **Alerts** in the left navigation pane and then select **Create subscription template**.
- In the **Alerts - Subscription Templates** task module, click **Create**.

Apply an Alert Subscription Template

- [Alert templates in Group Policies](#)
- [Steps for Applying an Alert Subscription Template](#)
- [Other Ways to Apply an Alert Subscription Template](#)

After an alert template has been created, you can specify devices to use it with ([Create a Subscription Template on page 157](#)). When applying a template to devices, you can choose to have the devices:

- **Link template to subscription:** any changes made to the template will automatically affect any devices associated with this template.
- **Do NOT link template to subscription:** changes made to this template will not affect the devices associated with it. This is used to apply the template settings as a new subscription without linking that subscription in any way to the original template.

Alert templates create an alerts subscription on the devices to which they were applied. Any time a new template is applied, a new alerts subscription is created on those devices.


Alert templates in Group Policies

The Groups Policy features is a powerful new automation tool that saves users a great deal of time configuring devices and HP Web Jetadmin 10.0 settings. Both Automatic and Manual type groups can have the Group Policy property. One policy that can be added to any device group's properties is Alerts. Both Subscribe and Unsubscribe using Alert templates can be applied to devices in the group either as they are populated into group membership or as they are removed from group membership. In this way, devices can have specific Alerts applied or de-applied without impact to other Alerts settings. (See [Group Policies on page 87](#).)

Steps for Applying an Alert Subscription Template

1. Expand the **Alerts** tree in the left navigation pane. In the **Alerts - Common Tasks** task module, select **Apply subscription template**. The **Select template** page is displayed with all alert subscription templates in alphabetical order.
2. Highlight the template and click **Next**. The **Select devices** page displayed.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**. The **Specify link options** page is displayed.

4. Select the way you want to be notified about alerts:
 - **Link template to subscription:** any changes made to the template will automatically affect any devices associated with this template.
 - **Do NOT link template to subscription:** changes made to this template will not affect the devices associated with it. In effect, you are just using the settings from the template and then saving them under a different name for the device just added. You must enter that different name for the subscription.

Click **Next**.

5. The **Confirm** page is displayed. Click **Apply Template**.
6. To see details about the alerts, click **Details**; to see details about the alerts for each device, click **Expand All**. When done, click **Close**; the **Results** page is displayed.
7. Click **Done**.

Other Ways to Apply an Alert Subscription Template

- In the **Alerts - Subscription Templates** task module, highlight a template and click **Apply**.
- In the left navigation pane, right-click on **Alerts** and select **Apply subscription template**.
- In the **All Devices** list, highlight the device and then click the **Alerts** tab in the lower portion of the page. Then select **Apply Subscription Template**.
- In the **All Devices** list, highlight the device and then right-click. Select **Alerts > Apply subscription template**.
- In the **All Devices** list, select one or more devices and drag them to the **Templates** node in the left navigation pane.

Edit an Alert Subscription Template

- [Steps for Editing an Alert Subscription Template](#)
- [Other Ways to Edit an Alert Subscription Template](#)

After an alert subscription template has been created, it can be changed. (See [Create a Subscription Template on page 157](#).)

If devices have been associated with the template, and if you chose to have them unlinked from the templates, then any changes made will not affect those devices. (See [Apply an Alert Subscription Template on page 159](#).)

Steps for Editing an Alert Subscription Template

1. Expand the **Alerts** tree in the left navigation pane. In the **Alerts - Common Tasks** task module, select **Edit subscription template**. The **Edit Subscription Template** wizard is started with the **Select template** page displayed.
2. Highlight the template and click **Next**. The **Select alerts** page is displayed.
3. Select the alerts you want to be notified about and then click **Next**. The **Specify advanced settings** page is displayed; select the advanced settings and click **Next**.
4. The **Specify notification type** page is displayed. Select the way you want to be notified about alerts:
 - **Alert logging only**: enter any alerts into the Alert History Log and do not send any email messages about the alerts. Click **Next**.
 - **Email Notifier**: enter any alerts into the Alert History Log **and** send an email message about the alerts. Click **Next**. The **Specify notification settings** page is displayed:
 - Enter the email address or browse for the email address. Multiple email address can be separated by a semi-colon.
 - Select the email format:
 - Concise** (default): short description of the received alert.
 - Verbose**: longer description of the alert.
 - Custom**: message format that you can create and name for reuse later. If you do not find a template in the drop-down list of custom messages, you can create one by clicking **Custom Email Templates**.
5. Click **Next**. The **Specify name** page is displayed. Type the name for this set of alerts. Click **Next**; the **Confirm** page is displayed.
6. Click **Save Template**; the **Results** page is displayed.
7. Click **Done**.

Other Ways to Edit an Alert Subscription Template

- In the **Alerts - Subscription Templates** task module, highlight a template and click **Edit**.

Delete an Alert Subscription Template

- [Steps for Deleting an Alert Subscription Template](#)
- [Other Ways to Delete an Alert Subscription Template](#)

You can delete Alert subscription templates.

Steps for Deleting an Alert Subscription Template

1. Expand the **Alerts** tree in the left navigation pane. In the **Alerts - Common Tasks** task module, select **Delete subscription template**. The **Delete Alert Template** wizard is started with the **Select template** page displayed.
2. Highlight the template you want to delete and click **Next**. If the template is linked to devices, specify the options to remove:
 - **Remove template but save linked subscriptions**: delete the template but do not delete any occurrences of this template that have been saved by other names with devices associated with it (unlinked, see [Apply an Alert Subscription Template on page 159](#)).
 - **Remove subscriptions for all linked devices (listed below)**: delete the template and any subscriptions to the template for all of the devices listed on this page.

Click **Next**. The **Confirm** page is displayed.

3. Click **Delete Template**; the **Results** page is displayed.
4. Click **Done**.

Other Ways to Delete an Alert Subscription Template

- In the **Alerts - Subscription Templates** task module, highlight a template and click **Delete**.

All Subscriptions

- [Steps for Viewing Alert Subscriptions](#)
- [Other Ways to View Alert Subscriptions](#)

On the **All Subscriptions** page, you can view the following information about alerts:

- **Device Model**: the model of the device that received the alert.
- **IP Hostname**: the IP Hostname of the device that received the alert.
- **IP Address**: the IP Address of the device that received the alert.
- **Advanced Settings**: any advanced settings for the device.
- **Notification Type**: how you are notified about the alert (logging or email and logging).
- **Subscription Type**: **General alerts (detailed)**, **Supplies solution**, and **Mission critical solution**.
- **Linked to Template**: If the device is linked to a template (any future changes to that template will affect the alert settings for the device).

Steps for Viewing Alert Subscriptions

1. Expand the **Alerts** tree in the left navigation pane and select **All Subscriptions**. The **All Subscriptions** page is displayed.
2. A summary is displayed with all alert subscription templates in alphabetical order. To view details, click **+** next to the device. To show details for all subscriptions click **+** (Expand All) at the top of the page, or click **-** (Collapse All) to minimize all subscriptions.

3. To group Alerts, select **Group By** at the top of the page. You can group alerts by:
 - **Device**: displays devices that can be individually expanded to show each applied subscription and corresponding Alerts detail.
 - **Subscription**: displays subscriptions by name that can be individually expanded to show devices to which the subscription has been applied.
 - **Solution Type**: displays one or any of the three types of Alerts that have been configured. These can be expanded to show individual subscriptions and devices to which the subscription has been applied.
4. With **All Subscriptions**, you can do any of the following:
 - **Save as Template**: starts the **Create Alert Subscription Template** wizard, with the subscription settings that were selected; see [Create a Subscription Template on page 157](#).
 - **Unsubscribe**: stop subscribing to the alerts currently set for this device.
 - **Edit Subscription**: make changes to the alerts for this subscription; see [Edit an Alert Subscription on page 155](#).

Other Ways to View Alert Subscriptions

- From any device list or a group list, select the **Alerts** tab. The subscriptions for the selected devices are displayed.
- Right-click on **Alerts** in the left navigation pane and select **View alerts subscriptions**.

Firmware

- [All About Firmware](#)
- [Task Modules for Firmware](#)
- [Related Application Options for Firmware](#)
- [Upgrade Firmware](#)
- [Firmware Repository](#)

All About Firmware

- [Qualifying Firmware](#)

Both printer and HP Jetdirect device firmware can be updated from HP Web Jetadmin 10.0. A firmware image file can be downloaded onto the HP Web Jetadmin 10.0 application and if the version of this image is greater than the version on the device, an upgrade is possible. HP Web Jetadmin 10.0 cannot be used to downgrade firmware to an older revision level. Firmware updates can be scheduled to occur at any time. Firmware update retry is also available in cases where an update failed or a device was not on the network.

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Qualifying Firmware

- [Firmware Repository and Qualifying Firmware](#)
- [Refresh Feature](#)
- [Download Feature](#)
- [Upload Feature](#)
- [Qualify Feature](#)
- [Finding Images](#)

Qualifying firmware images ensures that firmware images are tested by individuals with permissions to qualify images before installing and implementing them in your workplace. When firmware images are required to be **Qualified**, they are listed with the column **Qualified** in the **Firmware Repository**. You can require firmware images to be qualified by checking **Use qualified firmware images** in **Tools > Options > Device Management > Firmware > Firmware Repository Options**. If you have appropriate permission, you can actually qualify firmware images and also download and install qualified or non-qualified firmware images. If you do not have permission, you can only download and install firmware images that have been **Qualified**. Permissions are set in **Application Management > User Security > Roles**; for permissions settings, select **Device Firmware > Manage Firmware Images**.

Firmware Repository and Qualifying Firmware

The **Firmware Repository** can be accessed from the navigation pane under **Firmware** ([Firmware Repository on page 170](#)). HP Jetdirect and printer firmware images exist on <http://www.hp.com> and can be accessed in two ways:

- HP Web Jetadmin 10.0 can contact <http://www.hp.com> and display available images to users.
- Image files can be manually obtained and uploaded to HP Web Jetadmin 10.0 by the user through the **Upload** button on the **Firmware Repository** page.

In both cases, the goal is to get the desired image(s) onto the HP Web Jetadmin 10.0 host so that they can be used for updating. Firmware that is available on the local HP Web Jetadmin 10.0 host is marked as **Available** in the **WJA Server** column. Images that are listed and marked as **Not Available** reside on <http://www.hp.com> but have not yet been downloaded to HP Web Jetadmin 10.0.

Refresh Feature

Firmware images on <http://www.hp.com> that are ready for download can also be displayed through the **Firmware Repository** by using the **Refresh** feature. When activated, this feature checks the image listing at <http://www.hp.com> and displays new updates as **Available** in the **HP.com** column. Contact with <http://www.hp.com> from the system hosting HP Web Jetadmin 10.0 is required for the **Refresh** feature to work. This feature can be used at any time to update the listing.

Download Feature

The **Download** feature is used to download selected images from <http://www.hp.com> onto the HP Web Jetadmin 10.0 host. Once a download action is complete, the image is marked as **Available** in the **WJA Server** column.

Upload Feature

Contact with <http://www.hp.com> from the system hosting HP Web Jetadmin 10.0 may not be possible. In this case, files can be obtained through a browser and then uploaded onto HP Web Jetadmin 10.0 manually. Once the **Upload** action is complete, images are marked as **Available** in the **WJA Server** column.

Qualify Feature

Images that are downloaded can be marked as **Qualified**. This allows administrative control over firmware images as they are downloaded from the Web. This feature must first be enabled within **Tools > Options > Device Management > Firmware > Firmware Repository Options, Use qualified firmware images**. Once this feature item is enabled, the **Qualified** column in the **Firmware Repository** will become visible.

Users assigned to **Roles** having **Upgrade Device** permission enabled, but who do not have **Manage Firmware Images** enabled are able to upgrade only with firmware images that are qualified (those marked as **Yes** in the **Qualified** column. Images that are not qualified, will not appear in the list.

Administrators assigned to **Roles** having **Manage Firmware Images** enabled, have the ability to see non-qualified images (those marked as **No**) and qualified images (those marked as **Yes**). These administrators can use upgrade devices with this firmware for test and qualification purposes. Once the firmware is qualified, these same administrators can use the **Qualify** feature in the **Firmware Repository** to mark the firmware as qualified. This action allows other users to begin performing upgrades with tested/qualified firmware.

Finding Images

HP Jetdirect firmware can be obtained through http://www.hp.com/go/wja_firmware. HP Printer firmware images can be obtained by visiting the device specific Software and Drivers Downloads pages at http://www.hp.com/go/webjetadmin_software. Devices that have firmware update capability will offer a self extracting executable. The file required for HP Jetdirect printer firmware updates has an rfu extension. This file can be extracted from the download and then uploaded into HP Jetdirect by using **Upload**.

Task Modules for Firmware

- [Firmware - Current Tasks and Common Tasks Task Modules](#)
- [Firmware - Active Tasks Task Module](#)
- [Firmware - Scheduled Tasks Task Module](#)

The following task modules can be displayed or hidden in **Firmware**.

Firmware - Current Tasks and Common Tasks Task Modules

The **Firmware - Current Tasks** task module can be displayed on the **Firmware** page and includes the following tasks:

- [Upgrade Firmware on page 168](#)
- [View the Firmware Repository on page 170](#)

The **Firmware - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is **Firmware - Common Tasks**.

Firmware - Active Tasks Task Module

The **Firmware - Active Tasks** task module can be displayed on the **Firmware** page and includes the following tasks:

- **Stop** any active task.
- **View** active tasks ([View the Firmware Repository on page 170](#)).

Firmware - Scheduled Tasks Task Module

The **Firmware - Scheduled Tasks** task module can be displayed on the **Firmware** page and includes the following tasks:

- **Delete** any scheduled task ([Delete on page 172](#)).
- **Edit** scheduled tasks ([Edit on page 171](#)).

Related Application Options for Firmware

- [Firmware Upgrade Options](#)
- [Firmware Repository Options](#)
- [HTTP Settings](#)

Global settings can be stored here for managing firmware images and how devices are updated.

Firmware Upgrade Options

You can change the way firmware upgrades are performed, including how retries are done if a device cannot be contacted or the number of devices that can be upgraded at once.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Firmware** and then select **Firmware Upgrade Options**.
2. Configure the desired settings:
 - **Maximum concurrent upgrades:** Select the maximum number of upgrades at a given time.
 - **Retries:** Select the number of retries for an upgrade and also how many times you want to wait before trying to upgrade the device's firmware again.
 - **Time between retries:** Select the hours between each retry.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Firmware Repository Options

You can change the way that HP Web Jetadmin 10.0 manages its local copies of firmware images. Images can be retrieved in the background on a regular schedule (for example, late at night or on a weekend). You can also tell HP Web Jetadmin 10.0 to only use firmware images that have been tested and "qualified" for use by your organization.

Follow these steps:


1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Firmware** and then select **Firmware Repository Options**.
2. Configure the desired settings:
 - **Enable background checking:** Select this to have HP Web Jetadmin 10.0 check for new firmware updates on <http://www.hp.com> in the background. To change the schedule click **Change**:
 - Select the date and time. You can also specify the start time to be within a range of hours.
 - Select the recurrence.
 - Click **OK**.



NOTE: If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

- **Use qualified firmware images:** You can choose to only use qualified firmware images. This means someone in your organization has to certify an image before it can be installed. If you check this, then in the **Firmware Repository**, firmware images will have to be certified as qualified before they can be installed by a user who has non-administrative permissions. See [Qualifying Firmware on page 164](#).

 **NOTE:** Whomever is actually qualifying firmware images in the **Firmware Repository** must have **Manage Firmware Images** permissions set through **Device Management > Device Firmware** in [User Security on page 260](#).

3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

HTTP Settings

The ability for HP Web Jetadmin 10.0 to display and get firmware images from <http://www.hp.com> directly requires that HP Web Jetadmin 10.0 can contact <http://www.hp.com>. This requires that the **Allow download** feature in **Tools > Options > Application Management > Network > HTTP** be enabled and maybe also proxy settings ([HTTP on page 245](#)).

Upgrade Firmware

- [Upgrading Firmware for HP Jetdirect Devices versus Printer Devices](#)
- [Steps for Upgrading Firmware](#)

Once the firmware images exist on HP Web Jetadmin 10.0 host, they can be applied as upgrades to devices.

If you chose to only use qualified firmware images, then you must certify firmware images before upgrading the firmware. (To require firmware images be qualified, access **Tools > Options > Device Management > Firmware > Firmware Repository Options** and check **Use qualified firmware images**; whomever is actually qualifying firmware images in the **Firmware Repository** must have **Manage Firmware Images** permissions set through **Device Management > Device Firmware** in [User Security on page 260](#).)

Upgrading Firmware for HP Jetdirect Devices versus Printer Devices


Upgrading firmware on HP Jetdirect devices versus printing devices is similar but not identical. HP Jetdirect firmware updates are done by contacting the device through SNMP and directing it to perform an update by obtaining the updated firmware from a TFTP service that is started on the HP Web Jetadmin 10.0 server. HP Web Jetadmin 10.0 uses the standard port number for the TFTP server (port 69) that may get blocked by firewall software on the system hosting HP Web Jetadmin 10.0 software. Once the update action is started, the device performs get actions against the image file on the TFTP server until the whole image file is obtained. The actual update action is performed by the HP Jetdirect device itself.

Printer firmware updates are done by HP Web Jetadmin 10.0 sending the RFU image file to the printer in the same way a print job would be sent. This print-file action is done via port 9100 on the printer. Once the printer receives the job, it recognizes it as an update and then launches internal processes that

perform the actual update. HP Web Jetadmin 10.0 is used strictly as a file send agent in the case of printer firmware updates.

Steps for Upgrading Firmware


1. In the left navigation pane, expand **Firmware**. In the **Firmware - Common Tasks** task module, select **Upgrade firmware**. The **Upgrade Firmware** wizard is started with the **Select upgrade type** page displayed.
2. Select the type of firmware to upgrade (device or HP Jetdirect).
3. To schedule the firmware upgrade for later, select **Schedule firmware upgrade**. Click **Next**. The **Select devices** page is displayed.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

4. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**. The **Select firmware version** page is displayed.

To search <http://www.hp.com> for the latest firmware, click **Download images now (if necessary)**.

You can choose to select the recommended version (**Automatic**) or you can select a version (**Custom**).

If you chose to only use qualified firmware images (in **Tools > Options > Device Management > Firmware > Firmware Upgrade Options**), a column is displayed showing whether or not each image listed is qualified. You can select any of the qualified images to upgrade. If you need to qualify an image and you have the appropriate permissions (**Manage Firmware Images** set through [User Security on page 260](#)), select the image and click **Qualify**. The **Qualify Images** wizard is started and you can complete qualifying images.

5. If you are scheduling this upgrade for a later time, the **Specify schedule options** page is displayed. Select the start date and time. Then click **Next**.
6. The **Confirm** page is displayed. Click **Next**.
7. The **Results** page is displayed. Click **Done**.


Firmware Repository

- [View the Firmware Repository](#)
- [Download](#)
- [Upload](#)
- [Refresh the Latest Firmware Images](#)
- [Edit](#)
- [Delete](#)

The first step in firmware updates is to find available images. Images exist on <http://www.hp.com> and can be accessed in two ways:

- HP Web Jetadmin 10.0 can contact <http://www.hp.com> and display available images for you.
- You can manually obtain and upload image files to HP Web Jetadmin 10.0.

In both cases, the goal is to get the desired image onto the HP Web Jetadmin 10.0 host so that it can be used for updating. This image will be marked as **Available** on the **Firmware Repository** page.

 **NOTE:** For more information about qualifying firmware and the **Firmware Repository**, see [Qualifying Firmware on page 164](#).

View the Firmware Repository

You can view the firmware images for use by HP Web Jetadmin 10.0 on the **Firmware Repository** page. This page displays the version of the firmware, the date of the version, whether the image is local or not, and the device models the firmware upgrade supports. From here you can choose to:

- [Download on page 171](#)
- [Upload on page 171](#)
- [Refresh the Latest Firmware Images on page 171](#)
- [Delete on page 172](#)

Steps for Viewing the Firmware Repository

1. In the left navigation pane, expand **Firmware** and click **Firmware Repository**.
2. The available firmware upgrades are listed on the **Firmware Repository** page.

Other Ways to View the Firmware Repository

- In the left navigation pane, click **Firmware**. In the **Firmware - Common Tasks** task module, select **View firmware repository**.

Download

Download is used to download selected images from <http://www.hp.com> onto the HP Web Jetadmin 10.0 host. Once a download action is complete, the image is marked as **Available** in the **WJA Server** column on the **Firmware Repository** page.

Steps for Downloading Firmware

1. In the left navigation pane, expand **Firmware** and click **Firmware Repository**.

The firmware upgrades are displayed on the **Firmware Repository** page. Click **Download**. The **Download Firmware** wizard is started with the **Confirm** page displayed.
2. Click **Next**. The image is downloaded to HP Web Jetadmin 10.0 and the **Results** page is displayed. Click **Done**.

Other Ways to Download Firmware

- In the left navigation pane, click **Firmware**. In the **Firmware - Common Tasks** task module, select **View firmware repository**.

Upload

Contact with <http://www.hp.com> from the system hosting HP Web Jetadmin 10.0 may not be possible. In these cases, files can be obtained through a browser and then uploaded onto HP Web Jetadmin 10.0 manually. Once the **Upload** action is complete, images are marked as **Available** in the **WJA Server** column on the **Firmware Repository** page.

Steps for Uploading Firmware

1. In the left navigation pane, expand **Firmware** and click **Firmware Repository**.

The firmware upgrades are displayed on the **Firmware Repository** page. Click **Upload**. The **Upload Firmware Image** wizard is started with the **Select firmware file** page displayed.
2. Enter or browse to the file with the firmware image and click **Next**. The image is uploaded to HP Web Jetadmin 10.0 and the **Results** page is displayed. Click **Done**.

Refresh the Latest Firmware Images

HP Web Jetadmin 10.0 images on <http://www.hp.com> that are ready for download can also be displayed through the **Firmware Repository** by using the **Refresh** feature. This checks the image listing at <http://www.hp.com> and displays new updates as **Available** in the **HP.com** column on the **Firmware Repository** page. Contact with <http://www.hp.com> from the system hosting HP Web Jetadmin 10.0 is required for the **Refresh** feature to work.

Steps for Refreshing Firmware Images

1. In the left navigation pane, click **Firmware** and then click **Firmware Repository**.

On the **Firmware Repository** page, select **Refresh**.
2. The available firmware updates are found and listed on the **Firmware Repository** page.

Edit

You can edit any scheduled upgrade task listed in the **Firmware - Scheduled Tasks** task module.

Steps for Editing a Firmware Upgrade Task

1. In the **Firmware - Scheduled Tasks** task module, select the task and click **Edit**.
2. Make any changes to the scheduled upgrade task and click **Next**. The **Confirm** page is displayed.
3. Click **Next**. The schedule for upgrading the firmware will be changed.

Delete

You can delete any firmware image listed on the **Firmware Repository** page.

Steps for Deleting Firmware Images

1. In the left navigation pane, click **Firmware** and then click **Firmware Repository**.
On the **Firmware Repository** page, select the firmware image you want to delete and click **Delete**.
2. A confirmation message is displayed. Click **Yes**.
3. The firmware will be deleted from HP Web Jetadmin 10.0.

Reports

- [All About Reports](#)
- [Task Modules for Reports](#)
- [Related Application Options for Reports](#)
- [Available Reports](#)
- [Getting Started](#)
- [Data Collection](#)
- [Report Generation](#)
- [Archived Reports](#)


All About Reports

- [Types of Data Collection and Available Reports](#)
- [Examples](#)

HP Web Jetadmin 10.0 provides a rich set of data collection and reporting features. These features enable data collections that are stored in a database and that are used in generating reports at a later time. After data is collected about a device or group of devices, you can display the data in a report, save the data for future use, or save the report.

There are two steps to producing a report:

1. **Collecting the data:** request which devices to collect information about for the report. Since this process causes network traffic and database space, you must turn on data collection when you want a report.

 **NOTE:** If the data collection is not turned on, then the data will not be included in the report when it is run.

2. **Generating the report:** specify the report type, the device or group or devices to include in the report (which could be all or a subset of the devices you specified in Step 1), and the time frame for the data to be included in the report. This must be done each time you want the report to run.

Reporting in HP Web Jetadmin 10.0 shows data change over time. A very simple report could be simple device page count on a single device (Media Page Count, see [Media Page Count on page 183](#)). After data collection has been established and multiple page counts exist in the database, a report can be displayed that shows the page count change (if any) in a selected time interval.

For more information about producing a report for the first time, see [Getting Started on page 185](#).

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Types of Data Collection and Available Reports

The following reports can be generated and produced if you select the corresponding type of data collection:

Table 4-12 Available Types of Data Collection and Reports

Select this type of Data Collection	To gather this type of data	To generate this report	To determine	Available report formats are	Notes
Accessories Inventory	Lists accessories installed on the devices. For example, a printer might have an accessory duplexer or paper tray.	Device Detail	Tracks device accessory inventory.	Table sorted by device (no charts available).	Accessory data is collected once every 24 hours.
By User Tracking	Pages printed by user including application details. Traps-based triggering.	User Page Count	Which jobs are bring printed and by whom.	Table sorted by device or by user (no charts available). NOTE: Many printers do not support the automatic notification when a job is printed, so data collection will revert back to once every 24 hours.	Data is collected whenever job-traps are sent from a device to the HP Web Jetadmin host; collects device job-table data. For devices that do not support job-traps, HP Web Jetadmin collects the device job table once every 24 hours.
Device Inventory	Reports on device status and attribute changes. Includes device first and last communication.	Device Changes	Reports "new", "found" and "lost" device status. Includes the number of various models installed on the network. This enables you to monitor which devices are actually on the network.	Last known status or time interval (no charts available).	Data is collected once every 24 hours; collects device status and other device details.
Device Utilization	Page-counts for color, mono (black and white), simplex, duplex, and total pages. Also, page counts for copy pages, scan pages, digital send pages, and fax pages.	Media Page Count	Time interval or reporting period counts for media/page types processed.	Reporting period or time interval (charts available).	Data is collected once every 24 hours; collects device page/media detail.
Error History	Shows error type counts stored on a device.	Error History	Tracking error frequency by error type.	Table by period, by type, or by device (no charts available).	Collects error log detail.
Peak Usage	Page-counts for color, mono (black and white), simplex, duplex, and total pages. Also, page counts for copy pages, scan pages, digital	Daily Peak Usage	Device media/page counts on an hourly basis presented via charts or summary reports.	Hourly interval or multiple bar chart.	Data is collected once every 1 hour; collects device page/media detail.

Table 4-12 Available Types of Data Collection and Reports (continued)

Select this type of Data Collection	To gather this type of data	To generate this report	To determine	Available report formats are	Notes
	send pages, and fax pages.				
Supply Utilization	Forecasting and reporting for supplies about to run out or consumption rates, based on current usage. Includes toner cartridges, ink cartridges, and drum kits.	Supply Ordering (HP SureSupply)	Reports supplies order requirements based on percentages, threshold; allows you to automatically place your order via HP SureSupply.	Table or chart.	Data is collected once every 24 hours.
		Supply Replacement Forecast	Predicts supply replacement dates using supply usage histories. Includes percentage of confidence, part number details, current supply levels, and more.	Table or chart.	
		Supply Usage	Improves understanding of supply consumption rates in particular environments. Shows individual supply consumption to-date, supplies' last install date, supply serial number, and more. NOTE: This report only includes information about devices with serial numbers on their toner cartridges.	Table or chart.	

Examples

Reporting in HP Web Jetadmin 10.0 shows data change over time. A very simple report could be simple device page count on a single device. After data collection has been established and multiple page counts exist in the database, a report can be displayed that shows the page count change (if any) in a selected time interval. (See [Media Page Count on page 183](#)).

Following is an example of data collection for page counts for a device for seven days:

Table 4-13 Example for Weekly Page Counts for the Media Page Count Report

Day 1: 20 pages	Day 8: 35 pages
Day 2: 25 pages	Day 9: 40 pages

Table 4-13 Example for Weekly Page Counts for the Media Page Count Report (continued)

Day 3: 26 pages	Day 10: 44 pages
Day 4: 26 pages	Day 11: 44 pages
Day 5: 26 pages	Day 12: 44 pages
Day 6: 26 pages	Day 13: 44 pages
Day 7: 31 pages	Day 14: 47 pages

On days where page counts remain the same (in the example above, Days 3, 4, 5, and 6), HP Web Jetadmin 10.0 stores the unchanged value.

Based on the above example, a simple report totaling pages printed in one week intervals might look like this:

Table 4-14 Example for Media Page Count Report for Weekly Count

Device 1.1.0.1
Week 1: 11 pages (31 pages - 20 pages = 11 pages)
Week 2: 16 pages (47 pages - 35 pages = 16 pages)
Total: 27 pages (11 pages + 16 pages = 27 pages)

Another report totaling pages printed in daily intervals might look like this:

Table 4-15 Example of Daily Page Counts for the Media Page Count Report

Day 1: 0 pages	Day 8: 4 pages
Day 2: 5 pages	Day 9: 5 pages
Day 3: 1 pages	Day 10: 4 pages
Day 4: 0 pages	Day 11: 0 pages
Day 5: 0 pages	Day 12: 0 pages
Day 6: 0 pages	Day 13: 0 pages
Day 7: 5 pages	Day 14: 3 pages
Device 1.1.0.1	
Total Pages = 27	

Complex reporting features exist and facilitate much more than simple page counts. Data collected over time and reported in some interval is the general basis for most reporting features.

Task Modules for Reports

- [Reports - Current Tasks and Report Management - Common Tasks Task Modules](#)

- [Reports - Report Templates Task Module](#)
- [Reports - Archived Reports Task Module](#)
- [Reports - Data Collection - Management Task Module](#)
- [Reports - Data Collection - Templates Task Module](#)
- [Reports - Scheduled Reports Task Module](#)
- [Reports - Report Generation Task Module](#)

The following task modules can be displayed or hidden in **Reports** on the **Reports** page, on the **Data Collection** page, and on the **Report Generation** page.

Reports - Current Tasks and Report Management - Common Tasks Task Modules

The **Reports - Current Tasks** task module can be displayed on the **Reports** page and includes the following tasks:

- [Getting Started on page 185](#): provides introductory information and links that explain the two main steps required to produce reports and enables you to actually request and run a report.
- [Add Devices to Data Collection on page 188](#): also listed on the [Data Collection on page 185](#) menu and on the [Reports - Data Collection - Management Task Module on page 178](#); this is the first required step in producing a report. It enables you to select the type of data to collect from devices and also specify which devices to collect the data from. (After you enable reporting, you must select [Generate a Report on page 197](#).)
- [Remove Devices from Data Collection on page 192](#): also listed on the [Data Collection on page 185](#) menu and on the [Reports - Data Collection - Management Task Module on page 178](#); enables you to exclude previously selected devices from data collection.
- [Generate a Report on page 197](#): also listed on the [Report Generation on page 196](#) menu and on the [Report Generation - Common Tasks Task Module on page 196](#); the second required step in producing a report; after you have started collecting data for reports, you are ready to generate the report.
- [Schedule a Report on page 201](#): also listed on the [Report Generation on page 196](#) menu and on the [Reports - Current Tasks and Report Management - Common Tasks Task Modules on page 177](#); request the report to be produced at a specific time.
- [View Archived Reports on page 210](#): also listed on the [Report Generation on page 196](#) menu and on the [Reports - Archived Reports Task Module on page 178](#); review reports that have been produced and archived.
- [Delete Archived Reports on page 211](#): also listed on the [Report Generation on page 196](#) menu and on the [Reports - Archived Reports Task Module on page 178](#); delete reports that have been produced and archived.

The **Reports - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is **Report Management - Common Tasks**.

Reports - Report Templates Task Module

The **Reports - Report Templates** task module can be displayed on the **Reports** page and on the **Report Generation** page ([Report Generation on page 196](#)) and provides you access to the following tasks:

- **Apply** ([Apply a Report Template on page 200](#)): apply a report template that has already been created to a device or group of devices.
- **Create** ([Create a Report Template on page 205](#)): customize and store reports settings that can be applied to one device or a group of devices while generating a report.
- **Delete** ([Delete a Report Template on page 209](#)): delete a report template that has previously been created.
- **Edit** ([Edit a Report Template on page 207](#)): make changes to a report template that has previously been created.
- **View** ([View a Report Template on page 209](#)): view a report template that has been previously created.

Reports - Archived Reports Task Module

The **Reports - Archived Reports** task module can be displayed on the **Reports** page and on the **Report Generation** page ([Report Generation on page 196](#)) and provides you with access to the following tasks:

- **View** ([View Archived Reports on page 210](#)): also listed on the [Report Generation on page 196](#) menu; review reports that have been produced and archived.
- **Email** ([Email Reports on page 205](#)): also listed on the [Report Generation on page 196](#) menu; email archived reports.
- **Save** ([Save Archived Reports on page 205](#)): also listed on the [Report Generation on page 196](#) menu; save reports that have been produced and archived.
- **Delete** ([Delete Archived Reports on page 211](#)): also listed on the [Report Generation on page 196](#) menu; delete reports that have been produced and archived.

Reports - Data Collection - Management Task Module

The **Reports - Data Collection - Management** task module can be displayed on the **Reports** page and the **Data Collection** page ([Data Collection on page 185](#)) and provides you with access to the following tasks:

- **Add Devices** ([Add Devices to Data Collection on page 188](#)): also listed on the [Data Collection on page 185](#) menu; add devices to a specific type of data collection.
- **Remove Devices** ([Remove Devices from Data Collection on page 192](#)): also listed on the [Data Collection on page 185](#) menu; remove devices from a specific type of data collection.
- **View** ([Data Collection Summaries on page 194](#)): also available from the left navigation pane as specific Data Collection types; view the criteria selected for any specific type of data collection.
- **Anomalies** ([Data Collection Anomalies on page 196](#)): review data collection anomalies and choose to reconcile or resolve them. Anomalies are inconsistent information returned by the printer.

Reports - Data Collection - Templates Task Module

The **Reports - Data Collection - Templates** task module can be displayed on the **Reports** page and the **Data Collection** page ([Data Collection on page 185](#)) and provides you with access to the following tasks:

- **New** ([Create a Data Collection Template on page 189](#)): also listed on the [Data Collection on page 185](#) menu; lets you create a template for data collection.
- **Edit** ([Edit a Data Collection Template on page 191](#)): also listed on the [Data Collection on page 185](#) menu; lets you edit a data collection template that has already been created.
- **Apply** ([Apply a Data Collection Template on page 190](#)): also listed on the [Data Collection on page 185](#) menu; lets you apply a data collection template that has already been created to devices.
- **View** ([Data Collection Templates on page 193](#)): also listed on the [Data Collection on page 185](#) menu; lets you view a data collection template that has already been created.
- **Delete** ([Delete a Data Collection Template on page 192](#)) also listed on the [Data Collection on page 185](#) menu; lets you delete a data collection template that has already been created.

Reports - Scheduled Reports Task Module

The **Reports - Scheduled Reports** task module can be displayed on the **Reports** page and on the **Report Generation** page ([Report Generation on page 196](#)) and provides you with access to the following tasks:

- **Delete** ([Deleting Scheduled Reports on page 204](#)): also listed on the [Report Generation on page 196](#) menu; lets you delete a report that has been scheduled ([Schedule a Report on page 201](#)).
- **Edit** ([Editing the Schedule for a Report on page 204](#)): also listed on the [Report Generation on page 196](#) menu; lets you edit a schedule for a report ([Schedule a Report on page 201](#)).

Reports - Report Generation Task Module

The **Reports - Report Generation** task module can be displayed on the **Reports** page and on the **Report Generation** page ([Report Generation on page 196](#)) and provides you with access to the following tasks:

- **Generate**: also listed on the [Report Generation on page 196](#) menu and on the [Report Generation - Common Tasks Task Module on page 196](#); the second required step in producing a report; after you have started collecting data for reports, you are ready to generate the report ([Generate a Report on page 197](#)).
- **Schedule**: also listed on the [Report Generation on page 196](#) menu and on the [Reports - Current Tasks and Report Management - Common Tasks Task Modules on page 177](#); request the report to be produced at a specific time ([Schedule a Report on page 201](#)).
- **Sample**: select a report and click **Sample** to display a sample of the report.

Related Application Options for Reports

- [General](#)
- [Data Retention](#)

Global settings can be stored here for managing report data.

General

You can define your calendar quarters for your company. Your settings will be reflected in some of the reports generated if the data is separated into quarters. You can also restore report templates that came with HP Web Jetadmin 10.0. Templates are useful when generating the same report periodically. After you change settings to the templates, you can restore them back to the factory defaults if desired. For more information about factory defaults, see [Default Settings on page 18](#).

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**. Then select **Reports**.
2. Select the date for the first day of the first quarter of the year (for your company).
3. To restore all of the Report templates that came with HP Web Jetadmin 10.0, click **Restore**.
4. You will be asked to confirm your request. Click **OK** in the dialog box.
5. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Data Retention

As data is collected for reports, it is stored in tables within the HP Web Jetadmin 10.0 database. You can specify how long to retain data for reporting purposes, and delete data that has been retained by HP Web Jetadmin 10.0 for reporting purposes. Data retention is set to one year beyond the initial collection date. You can change this value to a maximum of five years through this option.

Follow these steps:

1. On the top menu bar, access **Tools > Options** and expand **Device Management**.
Expand **Reports** and then select **Data Retention**.
2. Select the type of data to delete:
 - **All data**: delete all data that has been collected to-date, as though no data collections had ever been done.
 - **User data**: you will be asked to identify the user and then confirm your request.
 - **Device data**: delete device data that has been collected to-date, as though no data collections had ever been done.
3. Click **Delete Data**. Confirm the delete request by clicking **Yes**.
4. Specify how long you want to keep data for reporting purposes (from 1 to 5 years). (The default is one year.)
5. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.


Available Reports

- [Daily Peak Usage](#)

- [Device Changes](#)
- [Device Details](#)
- [Error History](#)
- [Media Page Count](#)
- [Supply Ordering](#)
- [Supply Replacement Forecast](#)
- [Supplies Usage](#)
- [User Page Count](#)

Reports are generated through a combination of user-defined settings and collected data that is stored in the database. There are many report types that correspond directly to data collection types. Completed reports can be displayed through the HP Web Jetadmin 10.0 client host. Reports can also be stored in an archive or sent to email through SMTP.

Reports can be generated in a summary format, a reporting period format, and through any number of graphical formats. Reports can be scheduled to occur at a specified time automatically or immediately.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

NOTE: The message **No Data Collected** is displayed on the report if you have selected a date range that spans time when no report device data exists.

Daily Peak Usage

The **Daily Peak Usage** report tracks hourly page and media counts.

Chart types include only the multiple bar.

Available columns for this report include but are not limited to:

- **Hour** (default)
- **Color** (default)
- **Black and White Pages** (default)
- **Total Page Count** (default)
- **Total Duplex Pages** (default)
- **Total Simplex Pages** (default)
- **Copy Pages**

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Device Changes

The **Device Changes** report captures device status and device communication states. This report can be used to track devices that are missing or have been known to be missing in some timeframe.

The **Report Type** is used to separate devices by status changes or by some interval within the reporting period. These include **Last Known Status** and **Time Interval Summary**.

Available columns for this report include but are not limited to:

- **First seen**
- **Last seen**
- **Status** (default)
- **Device Model** (default)

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Device Details

The **Device Detail** report can be used to inventory and track changes in device accessories.

Available columns for this report include but are not limited to:

- **Accessory** (default)
- **Collection Date** (default)
- **Status** (default)

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Error History

The **Error History** report shows device errors and error categories on either a time interval or by-incident basis.

The **Report Type** enables you to control how error data is tabulated within the report: **By Period**, **By Error Type** or **By Device**.

The reporting frequency can be daily, weekly, monthly, or yearly.

Chart types include only the multiple line and multiple bar.

Available columns for this report include but are not limited to:

- **Time Period** (default)
- **Paper Jam Count** (default)
- **Error ID**
- **Page Count**

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Media Page Count

This report is used to track media and/or page counts over time. There are two possible formats:

- **Time Interval Summary:** specify start and end dates. Each device table is conveyed with the values from the reporting period selected.
- **By Reporting Period:** specify the reporting frequency (monthly, weekly or daily). This breaks each device table into interval periods spanning the reporting period.

The **Reporting frequency** (Monthly, Weekly or Daily) is active only when the report type **By Reporting Period** is selected.

Chart types include pie, multiple bar, and multiple line.

Available columns for this report include but are not limited to:

- **Color** (default)
- **Black and White Pages** (default)
- **Total Page Count** (default)
- **Total Duplex Pages**
- **Copy Pages**
- **Scan Pages**
- **Executive**
- **Letter**

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Supply Ordering

The **Supply Ordering** report provides a list of needed supplies based on your specified percentage and threshold. Also included is an HP SureSupply order option.

Chart types include the bar, multiple line, and multiple bar.

Available columns for this report include but are not limited to:

- **Part No.** (default)
- **Date Collected** (default)
- **Installation Date**
- **Serial Number**

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Supply Replacement Forecast

The **Supply Replacement Forecast** report is a predictive report showing replacement needs for specific supplies. The device supplies metrics that exist in your database will be analyzed, a prediction about needed supplies will be made, and the **Supply Replacement Forecast** will be generated. This prediction is based on details that include supplies levels, percentage coverage, and other historic data

relegated to supplies and printing. The report will include a percentage confidence rating to give you an indication of how much data existed and was used in the analysis. If very little data existed, the percentage confidence should indicate a low value. If you have been tracking supplies on devices for a long period of time, the report would show a higher percentage of confidence.

Chart types include the bar, pie, and multiple bar.

Available columns for this report include but are not limited to:

- **Supply** (default)
- **Part No.** (default)
- **% Remaining** (default)
- **Pages Remaining** (default)

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Supplies Usage

The **Supply Usage** report shows usage based on page count over supply lifetime, including many supply details including install dates and serial numbers. This report only includes information about devices with serial numbers on their toner cartridges.

Chart types include the bar and multiple bar.

Available columns for this report include but are not limited to:

- **Supply Part Number** (default)
- **Supply Description** (default)
- **Supply Consumption (%)** (default)
- **Pages Printed** (default)
- **Average Supply Coverage (%)** (default)

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

User Page Count

The **User Page Count** reports by-user or by-application page counts based on job tables captured at the device.

The **Report Type** is used to convey the information either **By Device** or **By User**.

Chart types include only the pie and multiple bar.

Available columns for this report include but are not limited to:

- **Domain\User** (default)
- **Total Pages** (default)
- **MS Word Pages** (default)
- **Other Applications** (default)

- **Color Pages** (default)
- **Black and White Pages** (default)

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Getting Started

There are two steps to generating a report:

1. **Collecting the data** ([Data Collection on page 185](#)): request which devices to collect information about for the report. Since this process causes network traffic and database space, you must turn on data collection when you want a report. If the data collection is not turned on, then the data will not be included in the report when it is run. Based on the type of data collection selected, you can then request certain reports to be generated.
2. **Generating the report** ([Report Generation on page 196](#)): specify the following:
 - **report type**: the type of data collection selected in Step 1 dictates the reports available to be generated.
 - **group or individual devices** to include in the report, which could be all or a subset of the devices you specified in Step 1.
 - **time frame** for the data to be included in the report.

This must be done each time you want the report to run.

 **NOTE:** You can only select devices for which data has been collected.


Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Data Collection

- [Data Collection Cycle](#)
- [Initial Data Collection](#)
- [By User Tracking](#)
- [Using Group Policies to Set Data Collection](#)
- [Data Collection - Common Tasks Task Module](#)
- [Add Devices to Data Collection](#)
- [Create a Data Collection Template](#)
- [Apply a Data Collection Template](#)
- [Edit a Data Collection Template](#)
- [Delete a Data Collection Template](#)
- [Remove Devices from Data Collection](#)
- [Data Collection Templates](#)
- [Data Collection Summaries](#)

- [Data Collection Anomalies](#)

Data collections are groups of devices that have specific collection types enabled. You can apply a data collection type such as **Device Utilization** to a single device, to multiple devices, or to a device group. When a data collection is first applied to a device or devices, HP Web Jetadmin 10.0 launches a data collection immediately establishing a data baseline. Once the device is populated under a specific data collection type, data collections occur at some interval or by way of some trigger.

 **NOTE:** Applying data collection to a device group is done through [Group Policies on page 87](#).

As data is collected, it is stored in tables within the HP Web Jetadmin 10.0 database. Data retention is set to one year beyond the initial collection date. This value can be changed in **Tools > Options > Device Management > Reports > Data Retention** ([Data Retention on page 180](#)). Data collections for Reports can be retained for up to 5 years.

Data Collection Cycle

Data collection types all have a specific collection cycle that may or may not be dependent on a schedule. The **By User Tracking** data collections are triggered when printers send job-trap packets into the HP Web Jetadmin 10.0 host. All other types are schedule-triggered. All data collections collect data every 24 hours except for the **Peak Usage** data collection which is collected once every hour to provide greater reporting resolution.

The start time for the data collection 24 hour cycle is set at 12:00AM at the HP Web Jetadmin 10.0 host. When subscribing a device to a data collection, you can choose the time of collection if you prefer a different time. The 24 hour cycle is designed to ensure reporting accuracy. Data within reports will be marked if the data collected did not represent a full 24 hour cycle.

The message **No Data Collected** is displayed on the report if you have selected a date range that spans time when no report device data exists.

Initial Data Collection

Activating data collection always launches the specific data collection type on selected devices. This is done to gather initial or baseline data that is then stored in the database. This is not a user-selectable action. The result of this initial data collection can be observed in the **Results** display for any completed data collection configuration.


By User Tracking

The **By User Tracking** data collection type uses SNMP traps to trigger the HP Web Jetadmin 10.0 host data collection. Every time a print job is completed by the device, a trap is sent and HP Web Jetadmin 10.0 runs a complete query of the device's job table. Any new entries in the job table are stored in the HP Web Jetadmin 10.0 database; all old entries that were previously stored are discarded.

By User Tracking accuracy may be limited by two things:

- the device's ability to store only a limited number of jobs in the job table.
- the device's ability to trap when multiple print jobs are queued.

Both of these are dependant on device printer model and firmware. **By User Tracking** and Reporting should never be used as a substitute for job accounting. HP Web Jetadmin 10.0 **Reports** features are designed for trending and analysis purposes.

 **NOTE:** For devices that don't support job-traps, HP Web Jetadmin 10.0 will collect the device's job table once every 24 hours.

Reports and Alerts Traps Listener Port

Earlier releases of HP Web Jetadmin used a different traps listener port for **Reports** than the traps listener used for Alerts events. In HP Web Jetadmin 10.0, this has changed. Shown here are the differences between previous versions of HP Web Jetadmin and HP Web Jetadmin 10.0:

- HP Web Jetadmin 10.0 traps listener port: is UDP port=27892 for Alerts and Reports by-user collections.
- Prior versions of HP Web Jetadmin traps listener port was UDP port=27892 for Alerts and UDP port=27894 for Report Generation Plug-in by-user collections.

Device and Printer Driver Support for By User Tracking

Job logging features are not available on all HP printers. Check your printer documentation to be sure these device-based features exist.

End of job trapping is not supported on all HP printers. In the case where end of job trapping is not supported, HP Web Jetadmin 10.0 will query the job tables once per collection period (24 hours). This may impact the accuracy of by-user reporting due to the limited size of the device job log.

Windows print drivers supplied by HP are known to support device job log entries. Windows print drivers available through Microsoft Windows operating systems may not support job log entries. Be sure to use HP model-specific drivers or the HP Universal Print Driver (UPD) when by-user tracking is required.

Using Group Policies to Set Data Collection

The **Group Policies** feature is a powerful new automation tool that can save you a lot of time configuring devices and HP Web Jetadmin 10.0 settings. Any device group has a property known as a **Group Policies**. One policy that can be added to any device group's properties is **Enable Data Collection**. When activating the **Enable Data Collection** to a device group, you must define a data collection template from the list of existing templates. Also, a trigger is specified that enables the configuration to take place either as the device is populated into the group or as the device is de-populated from the group. Multiple **Enable Data Collection** settings can exist on a single device group. See [Group Policies on page 87](#).

Data Collection - Common Tasks Task Module

Tasks available within **Data Collection** are listed in the **Data Collection - Common Tasks** task module:

- [Create a Data Collection Template on page 189](#): also listed on the [Reports - Data Collection - Templates Task Module on page 179](#) menu; lets you create a template for data collection.
- [Apply a Data Collection Template on page 190](#): also listed on the [Reports - Data Collection - Templates Task Module on page 179](#) menu; lets you apply a data collection template that has already been created to devices.
- [Edit a Data Collection Template on page 191](#): also listed on the [Reports - Data Collection - Templates Task Module on page 179](#) menu; lets you edit a data collection template that has already been created.
- [Delete a Data Collection Template on page 192](#): also listed on the [Reports - Data Collection - Templates Task Module on page 179](#) menu; lets you delete a data collection template that has already been created.

- [Add Devices to Data Collection on page 188](#): also listed on the [Reports - Data Collection - Management Task Module on page 178](#); lets you add devices to a specific type of data collection.
- [Remove Devices from Data Collection on page 192](#): also listed on the [Reports - Data Collection - Management Task Module on page 178](#); lets you remove devices from a specific type of data collection.

Add Devices to Data Collection

- [Data Collection Offset](#)
- [Steps for Adding Devices to Data Collection](#)
- [Other Ways to Add Devices to Data Collection](#)

Devices can be added to any type of data collection.

Data Collection Offset

HP Web Jetadmin 10.0 has a **Collection offset** feature that allows you to specify a positive offset value to the fixed data collection start time. The fixed data collection start time is 12:00AM local server time. The offset value causes HP Web Jetadmin 10.0 to delay the data collection start time by the number of hours entered (up to 23 hours are possible). Here are two examples:

Joy wants to start data collections at 8:00AM for her devices which are in the same area as the HP Web Jetadmin 10.0 server host. Joy enters a data collection offset of 8. Pat wants to start data collections at 12:00PM for his devices which are in an area that has a 14 hour time differential from the area in which the HP Web Jetadmin 10.0 server is hosted. Pat uses an offset of 10 to push the data collection start time to 12:00PM in his area.

Calculations are needed to determine the offset needed. These offsets should not be changed once they are set. HP Web Jetadmin 10.0 will continue to use a 24 hour data collection cycle for all devices.


Steps for Adding Devices to Data Collection

 **NOTE:** If you access this feature through the [Reports - Data Collection - Management Task Module on page 178](#), then you will skip the first page of the **Add Devices to Data Collection Wizard**.

1. Expand the **Reports** tree in the left navigation pane and then click **Data Collection**.


In the **Data Collection - Common Tasks** task module, select **Add devices to data collection**. The **Add Devices to Data Collection** wizard is started with the **Select data collection** page displayed.

2. Select the type of data collection for this template and specify the number of offset hours (if any) and then click **Next**. The **Select devices** page is displayed.

 **NOTE:** For more information about Data Collection offset hours, see [Data Collection Offset on page 188](#).

Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

3. Click **Next**. The **Confirm** page is displayed.
4. Click **Next**. The **Results** page is displayed.

Click **Details** to view the types of data collection for that device. When done, click **Close**; the **Results** page is displayed again.

5. Click **Done** to display the **Data Collection** page.
6. Now you are ready to generate a report.

Other Ways to Add Devices to Data Collection

- In the left navigation pane, right-click on **Reports** and select **Add devices to data collection**.
- In the **All Devices** list, right-click **Reports** and select **Add devices to data collection**.
- In the **All Devices** list, highlight the device and then in the lower portion of the page click the **Reports** tab. Then click **Add devices to data collection**.

Create a Data Collection Template

- [Steps for Creating a Data Collection Template](#)

- [Other Ways to Create a Data Collection Template](#)

Click here for a table showing the [Types of Data Collection and Available Reports on page 173](#).

Data Collection Templates are designed to help you enable more than one data collection type. In summary, you can create a data collection template by opening the **Create Data Collection Template** wizard, select one or more data collection types, name the template, and then confirm the settings.

After the template has been created, it can be applied to devices in the same ways as individual data collection types. By applying data collection templates, you are actually configuring the individual data collection types without having to activate controls multiple times.

For scheduling information, see [Data Collection Offset on page 188](#).

Steps for Creating a Data Collection Template

1. Expand the **Reports** tree in the left navigation pane and then click **Data Collection**.
In the **Data Collection - Common Tasks** task module, select **Create data collection template**. The **Create Data Collection Template** wizard is started with the **Choose data collection type** page displayed.
2. Select the type of data collection for this template and specify the number of offset hours (if any) and then click **Next**. The **Specify template name** page is displayed.



NOTE: For more information about Data Collection offset hours, see [Data Collection Offset on page 188](#).

3. Type the name for the template and then click **Next**. The **Confirm** page is displayed.
4. Click **Next**. The **Results** page is displayed.
5. Click **Done** to display the **Data Collection** page.
6. Now you are ready to apply the template to devices and to generate a report.

Other Ways to Create a Data Collection Template

- In the left navigation pane, right-click on **Reports** and select **Create data collection template**.

Apply a Data Collection Template


- [Steps for Applying a Data Collection Template](#)
- [Other Ways to Apply a Data Collection Template](#)

You can apply a **Data Collection** template that has already been created to a device or group of devices. You can also turn data collection on and off; this is useful if you need to control the network traffic generated to communicate with the devices and also because the data is stored in database tables which, over time, can become quite large. By selecting the data to include, you have great flexibility as to what you want to include in your reports.

Steps for Applying a Data Collection Template

1. Expand the **Reports** tree in the left navigation pane and then click **Data Collection**.
In the **Data Collection - Common Tasks** task module, select **Apply data collection template**. The **Apply Data Collection Template** wizard is started with the **Select data collection** page displayed.
2. Select a template and click **Next**. The **Select devices** page is displayed.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

4. Click **Next**. The **Confirm** page is displayed.
5. Click **Next**. The **Results** page is displayed.
Click **Details** to view the types of data collection for that device. To expand the details for all devices, click **Expand All**. When done, click **Close**; the **Results** page is displayed again.
6. Click **Done** to display the **Data Collection** page.
7. Now you are ready to generate a report.

Other Ways to Apply a Data Collection Template

- In the left navigation pane, right-click on **Reports** and select **Apply data collection template**.
- In the **All Devices** list, right-click **Reports** and select **Apply data collection template**.
- In the **All Devices** list, highlight the device and then in the lower portion of the page click the **Reports** tab. Then click **Apply data collection template**.

Edit a Data Collection Template

- [Steps for Editing a Data Collection Template](#)
- [Other Ways to Edit a Data Collection Template](#)

You can change the type of data collection for a specified template and you can change the template's name.

Steps for Editing a Data Collection Template

1. Expand the **Reports** tree in the left navigation pane and then click **Data Collection**.
In the **Data Collection - Common Tasks** task module, select **Edit data collection template**. The **Edit Data Collection Template** wizard is started with the **Data Collection Template Selection** page displayed.
2. Select a template and click **Next**. The **Choose data collection type** page is displayed.
3. To change the type of data collection for this template, check the type or types to include and uncheck those that should not be included. Then click **Next**. The **Specify template name** page is displayed.
4. To change the name for this template, type the new name in **Template name** (or you can leave the name as it was). Then click **Next**. The **Confirm** page is displayed showing you the old settings and the new settings for this template.
5. Click **Next**. The **Results** page is displayed.
6. Click **Done** to display the **Data Collection** page.
7. Now you are ready to generate a report.

Other Ways to Edit a Data Collection Template

- In the left navigation pane, right-click on **Reports** and select **Edit data collection template**.

Delete a Data Collection Template

- [Steps for Deleting a Data Collection Template](#)
- [Other Ways to Delete a Data Collection Template](#)

You can delete a data collection template.

Steps for Deleting a Data Collection Template

1. Expand the **Reports** tree in the left navigation pane and then click **Data Collection**.
In the **Data Collection - Common Tasks** task module, select **Delete data collection template**. The **Delete Data Collection Templates** wizard is started with the **Select templates** page displayed.
2. Select the data collection template or templates to delete and click **Next**. The **Confirm** page is displayed.
3. Click **Next**. The **Results** page is displayed.
4. Click **Done** to display the **Data Collection** page.

Other Ways to Delete a Data Collection Template

- In the left navigation pane, right-click on **Reports** and select **Delete data collection template**.

Remove Devices from Data Collection

- [Steps for Removing Devices from Data Collection](#)

- [Other Ways to Remove Devices from Data Collection](#)

You can remove devices from any type of data collection at any time.

Steps for Removing Devices from Data Collection

1. Expand the **Reports** tree in the left navigation pane and then click **Data Collection**.

In the **Data Collection - Common Tasks** task module, select **Remove devices from data collection**. The **Remove Devices from Data Collection** wizard is started with the **Select data collection type** page displayed showing the devices currently selected for that type of data collection.
2. Select the type of data collection that you want to remove devices from and click **Next**.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.
4. Click **Next**. The **Confirm** page is displayed showing you the devices to be deleted from this type of data collection.
5. Click **Next**. The **Results** page is displayed.
6. Click **Done** to display the **Data Collection** page.

Other Ways to Remove Devices from Data Collection

- In the left navigation pane, right-click on **Reports** and select **Remove devices from data collection**.

Data Collection Templates

- [Steps for Accessing and Working with Data Collection Templates](#)
- [Other Ways to Access a Data Collection Template](#)

In **Data Collection Templates**, you can:

- Create new templates ([Create a Data Collection Template on page 189](#)).
- View existing templates ([Data Collection Templates on page 193](#)).
- Edit existing templates ([Edit a Data Collection Template on page 191](#)).
- Apply existing templates ([Apply a Data Collection Template on page 190](#)).
- Delete existing templates ([Delete a Data Collection Template on page 192](#)).

You can also add devices to or remove devices from this type of data collection.

Steps for Accessing and Working with Data Collection Templates

1. Expand the **Reports** tree in the left navigation pane; then expand the **Data Collection** tree and click **Templates**.
2. Do one of the following:
 - To create a data collection template, click **New** ([Create a Data Collection Template on page 189](#)).
 - To view an existing data collection template, highlight the template and click **View**. Then you can edit, apply, or delete the template (see below).
 - To edit an existing data collection template, highlight the template and click **Edit** ([Edit a Data Collection Template on page 191](#)).
 - To apply an existing data collection template, click **Apply** ([Apply a Data Collection Template on page 190](#)).
 - To delete an existing data collection template, click **Delete** ([Delete a Data Collection Template on page 192](#)).

Other Ways to Access a Data Collection Template

- In the left navigation pane, expand **Reports** and then expand **Data Collection**. All of the existing templates are listed in the **Data Collection - Templates** task module.

Data Collection Summaries

- [Steps for Data Collection Summaries](#)
- [Other Ways for Data Collection Summaries](#)

You can view which devices have been added to any type of data collection. The following information is displayed:


- **Reports Supported:** shows all of the reports you could generate with this particular type of data collection.
- **Summary:** shows the type (or name) of data collection, the impact the collection itself will have on your network, the time of day the data is collected, and the number of devices you are collecting data about.
- **Devices:** lists all of the devices you have included for this type of data collection.
- **Add/Remove Devices** (button at the bottom of the page): add devices to or remove devices from this type of data collection.

Steps for Data Collection Summaries

1. Expand the **Reports** tree in the left navigation pane and then expand **Data Collection**. Below **Data Collection**, click on any type of data collection. The summary page for that type of data collection is displayed.
2. View the summary data displayed.

3. To add devices from this type of data collection:
 - a. Click **Add Devices** (at the bottom of the page). The **Add Devices to Data Collection** wizard is started with the **Select data collection** page displayed. Click **Next**.
 - b. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

- c. Click **Next**. The **Confirm** page is displayed showing you the devices to be added to this type of data collection.
 - d. Click **Next**. The **Results** page is displayed.
 - e. Click **Done** to display the summary data page.
4. To remove devices from this type of data collection:
 - a. Select the devices you want to remove and click **Remove Devices** (at the bottom of the page). The **Remove Devices from Data Collection** wizard is started with the **Confirm** page displayed.
 - b. Click **Next**. The **Results** page is displayed.
 - c. Click **Done** to display the summary data page.
5. Now you are ready to generate a report.

Other Ways for Data Collection Summaries

- In the **Reports - Data Collection - Management** task module, highlight the type of data collection to view and click **View**.

Data Collection Anomalies

Anomalies can be invoked through the **Data Collection - Management** task module. There are three anomaly conditions:

- Collected page count has decreased: old data (prior to the decrease) will be removed.
- Page counts do not reconcile (example: page count total is different than the sum of color and mono page counts): causes the irreconcilable data to be ignored.
- Invalid device serial number: these are not reconcilable within the application, serial number issues must be corrected at the device.

Steps for Data Collection Anomalies

1. In the **Reports - Data Collection - Management** task module, highlight the type of data collection to review and click **Anomalies**. The **Data Collection Anomalies** page is displayed.
2. Select the anomaly to view and click **Reconcile**.
3. You can choose to **Ignore** the anomaly.
4. When done, click **Close**.

Report Generation

- [Report Generation - Common Tasks Task Module](#)
- [Generate a Report](#)
- [Apply a Report Template](#)
- [Schedule a Report](#)
- [Email Reports](#)
- [Save Archived Reports](#)
- [Create a Report Template](#)
- [Edit a Report Template](#)
- [Delete a Report Template](#)
- [View a Report Template](#)
- [View Reports](#)

After data collection has been performed, you can generate reports. The type of reports that can be generated is dependent upon the type of data collection that you ran.

Report Generation - Common Tasks Task Module

Tasks available within **Report Generation** are listed in the **Report Generation - Common Tasks** task module:

- [Generate a Report on page 197](#)
- [Apply a Report Template on page 200](#)

- [Schedule a Report on page 201](#)
- [View Archived Reports on page 210](#)
- [Email Reports on page 205](#)
- [Save Archived Reports on page 205](#)
- [Delete Archived Reports on page 211](#)
- [Create a Report Template on page 205](#)
- [Edit a Report Template on page 207](#)
- [Delete a Report Template on page 209](#)

Generate a Report

- [Steps for Generating a Report](#)
- [Other Ways to Generate a Report](#)

Generating the report requires you to specify the report type, the group or individual devices to include in the report (which could be all or a subset of the devices you specified during data collection) ([Data Collection on page 185](#)), and the time frame for the data to be included in the report. You will also specify whether the output should be directed to the page or to a file (or both).

A generated, or completed, report can contain a lot of data! A report that is displayed through HTML or CSV may contain notes that provide important notices about stored data. Here are a few of those items:

- **No Data Collected:** no data was collected for the corresponding time period.
- **Partial:** the data represented in the corresponding time period was collected somewhere in that time period and may not represent an actual count.

For example, if you launch a report with **Collect data for today** enabled, this data collection will be out of the normal data collection cycle which begins at 12:00AM (data between 12:00AM and the time you request this would be the data that is out of the normal data collection). Data reported using this data will be marked as **Partial**. This is normally displayed at the beginning or end of a report.

- **Estimate:** data that was averaged over several days. This could be due to a lapse in data collection where perhaps several days went by with no collections.


Steps for Generating a Report

1. Select **Reports** from the left navigation pane. The **Reports** page is displayed.

In the **Report Management - Common Tasks** task module click **Generate Report**. The **Generate Report** wizard is started with the **Choose report options** page displayed.


2. If templates have been created, you can select an existing template from the **Use template** drop-down box.

If there are no existing templates or if you want to request a custom report, select the type of data collection under **Specify settings** and then select the supported reports for that type of data collection from the drop-down box.

 **NOTE:** Be sure and select a report that matches the type of data collection you specified in [Data Collection on page 185](#). If you find you need a different report, you might have to go back to [Data Collection on page 185](#) and select a different type of data collection.

3. To schedule the report to run at a later time, click **Schedule report**.

To run the report now, click **Next**. The **Specify date range for report** page is displayed.


 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.


4. Specify the date range for the data to be included on the report.

The message **Warning: No Data Collected** is displayed when you select a data range that spans time when no report device data exists. This check is done again for selected devices.

If you selected **Schedule report** on the previous page, you have the option to select a previous time period.

 **NOTE:** Even though data can be collected for a period of time, not all of that data has to be included on the report. You can determine a smaller time frame for the data that is actually included in the report.


5. To ensure your report contains recent data, you can select **Collect data for today**. This option enables data collection one more time prior to generating the report so that page counts and other data are up to date as of the minute the report is run, as opposed to the previous night.

 **NOTE:** This option is not available if you are scheduling this report for a later time.

6. Click **Next**. The **Select devices** page is displayed.

Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

NOTE: If data collection has not been enabled for a selected device, you are given the option to start data collection now.

Click **Next**.

7. Now you can actually define what will be included on your report:

- **Report Format:** If applicable for the report being generated, select the chart type for your report from the drop-down box. This criteria varies depending on the report being generated.
- **Report Columns:**
 - **Device ID Columns:** select the columns to include on the report that identify the devices from the drop-down box.
 - **Available columns** and **Columns to show:** select the columns to include on the report. If you want totals for any specific column, check the box under **Show Totals**.

The selections vary by report type but are representative of the data stored for the corresponding data collection type. These can be enabled and disabled and can also be re-ordered in the report.

 **NOTE:** To select multiple columns, use either **Ctrl+Click** or **Shift+Click**.

You can move the type of column up or down in the list (**Up** and **Down**); this determines its order on the report.

- **Group by:** specify how you want the data grouped by selecting an option from the **Group by** drop-down box. An example of this is **Device Model**. If chosen, HP Web Jetadmin 10.0 groups all of the same device models next to each other in the report.
- **Sort by:** specify how you want the data sorted by selecting an option from the **Sort by** drop-down box. An example is IP address: when chosen, HP Web Jetadmin 10.0 orders the devices within the report by their IP addresses. Of course, the ordering occurs within the Group by subsets.
- (If applicable) **Display cartridges with percentage below:** select the percentage for ink levels remaining in cartridges.
- (If applicable) **Order from HP SureSupply?:** check this box if you want to order supplies from HP SureSupply.

8. After you have defined the report format, click **Next**. The **Specify destination options** page is displayed.

9. Select how you want the report displayed (either on the page or directly to email). If sending the report to email addresses, you can either browse for those addresses or you can enter them manually. Separate each address with a semi-colon.
10. Specify the report destination:
 - **Display:** displays the report on your page.
 - **Email:** send the report (in HTML or CSV file format) to an email address ([Email Reports on page 205](#)). Type the email address on this page or browse for the correct email address.
11. Specify the file format:
 - **HTML:** save the file as an HTML document ([Save Archived Reports on page 205](#)).
 - **CSV:** export the report as a CSV document ([Email Reports on page 205](#)).

Click **Next**; the **Specify report name** page is displayed.
12. Enter the name for this report and specify how long you want to keep this report. Then click **Next**.
13. If you are scheduling this report for a later time, the **Specify schedule options** page is displayed. Select the start date and time for your report and also how often it should run. Then click **Next**.
14. The **Confirm** page is displayed, summarizing all of the report format options you have selected for this report. Click **Next**.
15. The **Report Generation Complete** page is displayed showing the actual report generation.
16. Click **Done** to display the **Reports** page.

Other Ways to Generate a Report

- In the navigation pane, right-click on **Reports** and select **Generate report**.
- On the **All Devices** page, highlight the device to collect data for a report; and then, in the lower portion of the **All Devices** page, click on the **Reports** tab and then click **Generate report**.

Apply a Report Template

- [Steps for Applying a Report Template](#)
- [Other Ways to Apply a Report Template](#)


A report template contains a set of criteria including the report type, devices, and the report format. After a report template is created, you can apply it to generate a report easily.

Steps for Applying a Report Template

1. Expand the **Reports** menu in the left navigation pane and select **Report Generation**.
In the **Reports - Common Tasks** task module, click **Apply report template**. The **Generate Report** wizard is started with the **Choose report options** page displayed.
2. In the **Use template** drop-down box, highlight the template you want to use and click **Next**. The **Specify date range for report** page is displayed.
3. Specify the date range for the data to be included on the report and click **Next**. The **Select devices** page is displayed.

4. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to **Groups**. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

5. Click **Next**; the **Specify report name** page is displayed. Type the name for this report template and then click **Next**.
6. The **Confirm** page is displayed, summarizing all of the report format options you have selected for this report. Click **Next**.
7. The **Report Generation Complete** page is displayed showing the actual report generation.
8. Click **Done** to display the **Reports** page.


Other Ways to Apply a Report Template

1. Expand the **Reports** menu in the left navigation pane and then right-click on **Report Generation**. Then select **Apply report template**.
2. In the **All Devices** list, highlight a device and right-click. Then select **Reports > Apply report template**.

Schedule a Report

- [Steps for Scheduling a Report](#)
- [Other Ways to Schedule a Report](#)
- [Deleting Scheduled Reports](#)
- [Editing the Schedule for a Report](#)

Reports can be generated as you request them (if data collection has been enabled) or they can be scheduled to be generated at a future time. This might reduce network traffic at particular heavy times, or it might give the data collection process time to collect the data necessary to make the report meaningful.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.


Steps for Scheduling a Report

1. Select **Reports** from the left navigation pane. The **Reports** page is displayed.

In the **Report Management - Common Tasks** task module click **Generate report**. The **Generate Report** wizard is started with the **Choose report options** page displayed.

2. If templates have been created, you can select an existing template from the **Use template** drop-down box.

If there are no existing templates or if you want to request a custom report, select the type of data collection under **Specify settings** and then select the supported reports for that type of data collection from the drop-down box.

 **NOTE:** Be sure and select a report that matches the type of data collection you specified in [Data Collection on page 185](#). If you find you need a different report, you might have to go back to [Data Collection on page 185](#) and select a different type of data collection.

Click **Next**. The **Specify data range for report** page is displayed.


3. **Date range:** specify the date range for the data to be included on the report.

Previous time period: specify the time period covered by the report when it is generated. (For example, if the report is generated on July 1st, you might want to specify the time period for the previous month to include the month of June).

Then click **Next**. The **Select devices** page is displayed.

4. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.



You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

Click **Next**.

5. Now you can actually define what will be included on your report:
- **Report Format:** If applicable for the report being generated, select the chart type for your report from the drop-down box. This criteria varies depending on the report being generated.
 - **Report Columns:**
 - **Device ID Columns:** select the columns to include on the report that identify the devices from the drop-down box.
 - **Available columns** and **Columns to show:** select the columns to include on the report. If you want totals for any specific column, check the box under **Show Totals**.
-
-  **NOTE:** To select multiple columns, use either **Ctrl+Click** or **Shift+Click**.
- You can move the type of column up or down in the list (**Up** and **Down**); this determines its order on the report.
- **Group by:** specify how you want the data grouped by selecting an option from the **Group by** drop-down box.
 - **Sort by:** specify how you want the data sorted by selecting an option from the **Sort by** drop-down box.
- (If applicable) **Display cartridges with percentage below:** select the percentage for ink levels remaining in cartridges.
 - (If applicable) **Order from HP SureSupply?:** check this box if you want to order supplies from HP SureSupply.
6. After you have defined the report format, click **Next**. The **Specify destination options** page is displayed.
7. Select how you want the report displayed (either on the page or directly to email). If sending the report to email addresses, you can either browse for those addresses or you can enter them manually. Separate each address with a semi-colon.
8. Specify the report destination:
- **Display:** displays the report on your page.
 - **Email:** send the report to an email address ([Email Reports on page 205](#)). Type the email address on this page or browse for the correct email address.
9. Specify the file format:
- **HTML:** save the file as an HTML document ([Save Archived Reports on page 205](#)).
 - **CSV:** export the report as a CSV document ([Email Reports on page 205](#)).
- Click **Next**; the **Specify report name** page is displayed.
10. Enter the name for this report and specify how long you want to keep this report.
-
-  **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

11. If you are scheduling this report for a later time, the **Specify schedule options** page is displayed. Select the start date and time for your report and also how often it should run:
 - **Allow start time to occur between the specified hours of:** limits the start time for the report to a specified window of time. The report will only run if able to do so during the time specified here. This is useful for reports that should only occur in low traffic times such as late at night.
 - **Recurrence, Once:** launches only once in the specified schedule.
 - **Recurrence, Daily:** task will recur daily once per day or once per weekday depending on the selected setting.
 - **Recurrence, Weekly:** task will recur once every X weeks on the day specified depending on the setting.
 - **Recurrence, Monthly:** task will recur once every X months on XX day depending on setting; or, task will recur on specified day pattern depending on setting.
12. Click **Next**. The **Confirm** page is displayed, summarizing all of the report format options you have selected for this report.
13. Click **Next**. The **Report Generation Complete** page is displayed showing the actual report generation.
14. Click **Done** to display the **Reports** page.

Other Ways to Schedule a Report

1. Right-click on **Reports** and then select **Schedule report**.
2. Expand the **Reports** menu. Right-click on **Report Generation** and then select **Schedule report**.
3. In the **All Devices** list, highlight a device and right-click. Then select **Reports > Schedule report**.
4. In the **Reports - Report Generation** task module, select the report and click **Schedule**.


Deleting Scheduled Reports

You can delete a report after it has been scheduled, if it has not been generated, through the **Reports - Scheduled Reports** task module.

1. In **Reports**, display the **Reports - Scheduled Reports** task module.
2. Highlight the report to delete and click **Delete**. The **Confirm Delete** message is displayed.
3. Click **Yes**. The previous page is displayed again.

Editing the Schedule for a Report

You can edit the schedule for a report, if the report has not been generated yet, through the **Reports - Scheduled Reports** task module.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

NOTE: All HP Web Jetadmin 10.0 schedules are the date and time at the HP Web Jetadmin install host. The client system being used to access HP Web Jetadmin may or may not be in the same time zone as the HP Web Jetadmin install host. You should be aware of the time and possible date differences when configuring HP Web Jetadmin 10.0 scheduling.

1. Select **Reports** from the left navigation pane. The **Reports** page is displayed.

Display the **Reports - Scheduled Reports** task module. The reports that have been scheduled are listed.
2. Highlight the report click **Edit**. The **Edit Schedule (Report Generation Task)** wizard is displayed.
3. Make changes to the schedule that had been created for the report. When done, click **Next**. The **Confirm** page is displayed.
4. Review your selections and then click **Next**. The **Progress** page is displayed. When done, click **Done**.

Email Reports

You can request that a report be emailed in HTML format if desired. The [SMTP on page 246](#) server must be configured before a report can be emailed.

Save Archived Reports

You can request that a report be saved as an HTML document anywhere on your network. When you select **Save As**, you can type the filename and location or browse for the location. The report will automatically be saved in HTML format.

You can request that a report be exported in comma-separated value (CSV) file format. CSV is a file type that stores tabular data (like in an Excel sheet) and is common on all computer platforms. CSV is one implementation of a delimited text file, which uses a comma to separate values. However, CSV differs from other delimiter separated file formats in using a " (double quote) character around fields that contain reserved characters (such as commas or newlines). Most other delimiter formats either use an escape character such as a backslash, or have no support for reserved characters. In computer science terms, this type of format is called a flat file because only one table can be stored in a CSV file. Most systems use a series of tables to store their information, which must be flattened into a single table often with information repeated over several rows to create a delimited text file.

Create a Report Template

- [Steps for Creating a Report Template](#)
- [Other Ways to Create a Report Template](#)

A report template contains a set of criteria including the report type, devices, and the report format. After a report template is created, you can apply it to generate a report easily.

Any number of templates can be added to the four pre-existing templates that come with HP Web Jetadmin 10.0:

- **Supply Replacement Forecast Template**
- **By User Template: Color verses Black and White**
- **Pages Printed Template: Color verses Black and White**
- **Pages Printed Template: Job Type Template**

Create Report Template is the wizard used to customize and store reports settings. Once the wizard is launched, you can select any one of the available **Report types** and then select settings for this template, including Report Format, Report Columns, Destination Settings, and more.

Steps for Creating a Report Template

1. Expand the **Reports** menu in the left navigation pane and then select **Report Generation**.

In the **Reports - Common Tasks** task module, select **Create report template**. The **Create Report Template** wizard is started with the **Select report type** page displayed.

2. Highlight the report type and click **Next**. (Only one report type may be selected at a time.) The **Specify report settings** page is displayed.

3. Now you can actually define what will be included on your report:

- **Report Format:** If applicable for the report being generated, select the chart type for your report from the drop-down box. This criteria varies depending on the report being generated.

- **Report Columns:**

- **Device ID Columns:** select the columns to include on the report that identify the devices from the drop-down box.
- **Available columns** and **Columns to show:** select the columns to include on the report. If you want totals for any specific column, check the box under **Show Totals**.



NOTE: To select multiple columns, use either **Ctrl+Click** or **Shift+Click**.

You can move the type of column up or down in the list (**Up** and **Down**); this determines its order on the report.

- **Group by:** specify how you want the data grouped by selecting an option from the **Group by** drop-down box.
- **Sort by:** specify how you want the data sorted by selecting an option from the **Sort by** drop-down box.
- (If applicable) **Display cartridges with percentage below:** select the percentage for ink levels remaining in cartridges.
- (If applicable) **Order from HP SureSupply?:** check this box if you want to order supplies from HP SureSupply.

4. After you have defined the report format, click **Next**. The **Specify destination options** page is displayed.

5. Select how you want the report displayed (either on the page or directly to email). If sending the report to email addresses, you can either browse for those addresses or you can enter them manually. Separate each address with a semi-colon.
6. Specify the report destination:
 - **Display:** displays the report on your page.
 - **Email:** send the report to an email address ([Email Reports on page 205](#)). Type the email address on this page or browse for the correct email address.
7. Specify the file format:
 - **HTML:** save the file as an HTML document ([Save Archived Reports on page 205](#)).
 - **CSV:** export the report as a CSV document ([Email Reports on page 205](#)).Click **Next**; the **Specify name** page is displayed.
8. Type the name for this report template and then click **Next**.
9. The **Confirm** page is displayed, summarizing all of the report format options you have selected for this report. Click **Next**.
10. The **Results** page is displayed showing the actual report generation.
11. Click **Done** to display the **Report Generation** page.

Other Ways to Create a Report Template

1. Right-click on **Reports** in the left navigation pane and select **Create report template**.
2. Expand the **Reports** menu in the left navigation pane and right-click on **Report Generation**; then select **Create report template**.

Edit a Report Template


- [Steps for Editing a Report Template](#)
- [Other Ways to Edit a Report Template](#)

After a report template has been created, it can be edited.

Steps for Editing a Report Template

1. Expand the **Reports** menu in the left navigation pane and then select **Report Generation**.
In the **Reports - Common Tasks** task module, select **Edit report template**. The **Edit Report Template** wizard is started with the **Select template** page displayed.
2. Highlight the template to edit and click **Next**. (Only one template may be selected at a time.) The **Specify report settings** page is displayed.

3. You can change what will be included on your report:
 - **Report Format:** If applicable for the report being generated, select the chart type for your report from the drop-down box. This criteria varies depending on the report being generated.
 - **Report Columns:**
 - **Device ID Columns:** select the columns to include on the report that identify the devices from the drop-down box.
 - **Available columns** and **Columns to show:** select the columns to include on the report. If you want totals for any specific column, check the box under **Show Totals**.

 **NOTE:** To select multiple columns, use either **Ctrl+Click** or **Shift+Click**.

You can move the type of column up or down in the list (**Up** and **Down**); this determines its order on the report.

 - **Group by:** specify how you want the data grouped by selecting an option from the **Group by** drop-down box.
 - **Sort by:** specify how you want the data sorted by selecting an option from the **Sort by** drop-down box.
 - (If applicable) **Display cartridges with percentage below:** select the percentage for ink levels remaining in cartridges.
 - (If applicable) **Order from HP SureSupply?:** check this box if you want to order supplies from HP SureSupply.
4. After you have defined the report format, click **Next**. The **Specify destination options** page is displayed.
5. Select how you want the report displayed (either on the page or directly to email). If sending the report to email addresses, you can either browse for those addresses or you can enter them manually. Separate each address with a semi-colon.
6. Specify the report destination:
 - **Display:** displays the report on your page.
 - **Email:** send the report to an email address ([Email Reports on page 205](#)). Type the email address on this page or browse for the correct email address.
7. Specify the file format:
 - **HTML:** save the file as an HTML document ([Save Archived Reports on page 205](#)).
 - **CSV:** export the report as a CSV document ([Email Reports on page 205](#)).

Click **Next**; the **Specify name** page is displayed.
8. Type the name for this report template and then click **Next**.
9. The **Confirm** page is displayed, summarizing all of the report format options you have selected for this report. Click **Next**.
10. The **Results** page is displayed showing the actual report generation.
11. Click **Done** to display the **Report Generation** page.

Other Ways to Edit a Report Template

1. Right-click on **Reports** in the left navigation pane and select **Edit report template**.
2. Expand the **Reports** menu in the left navigation pane and right-click on **Report Generation**. Then select **Edit report template**.
3. In the **Reports - Report Templates** task module, highlight the template to edit and click **Edit**.
4. Expand the **Reports** menu in the left navigation pane and expand **Report Generation**. Then select **Templates**.

Delete a Report Template

- [Steps for Deleting a Report Template](#)
- [Other Ways to Delete a Report Template](#)

A report template can be deleted at any time.

Steps for Deleting a Report Template

1. Expand the **Reports** menu in the left navigation pane and then select **Report Generation**.
In the **Reports - Common Tasks** task module, select **Delete report template**. The **Delete Report Templates** wizard is started with the **Select template** page displayed.
2. Highlight the template to delete and click **Next**. (Only one template may be selected at a time.) The **Confirm** page is displayed.
3. Click **Next**. The **Results** page is displayed.
4. Click **Done** to display the **Report Generation** page.

Other Ways to Delete a Report Template

- Right-click on **Reports** in the left navigation pane and select **Delete report template**.
- Expand the **Reports** menu in the left navigation pane and right-click on **Report Generation**. Then select **Delete report template**.
- In the **Reports - Report Templates** task module, highlight the template to delete and click **Delete**.
- Expand the **Reports** menu in the left navigation pane and expand **Report Generation**. Then select **Templates**.

View a Report Template

- [Steps for Viewing a Report Template](#)

You can view a report template.

Steps for Viewing a Report Template

1. Expand the **Reports** menu in the left navigation pane and then expand **Report Generation**. Then click **Templates**.
2. Click on the template to view.
3. Now you can:
 - **Apply** ([Apply a Report Template on page 200](#)): apply a report template that has already been created to a device or group of devices.
 - **Delete** ([Delete a Report Template on page 209](#)): delete a report template that has previously been created.
 - **Edit** ([Edit a Report Template on page 207](#)): make changes to a report template that has previously been created.
 - **View** ([View a Report Template on page 209](#)): view a report template that has been previously created.

View Reports

- [Steps for Viewing Reports](#)

You can view any report that has already been generated.

Steps for Viewing Reports

1. In the left navigation pane, expand **Reports**. The archived reports are listed on the **Archived Reports** page
2. Select the report. Now you can:
 - **View** the report; the report is then displayed. You can then email, save, or print the report.
 - **Email** the report ([Email Reports on page 205](#)).
 - **Save** the report; then you can specify the directory and filename for the report.
 - **Delete** the report; a confirmation page is displayed.

Archived Reports

- [View Archived Reports](#)
- [Delete Archived Reports](#)

Archived Reports stores all previously-generated reports and gives you a way to display them. You can view archived reports, export them to CSV format, or delete them. An adjustable 90 day time-to-live (TTL) setting erases these reports as they age. Once the report has reached this value, HP Web Jetadmin 10.0 automatically clears it from the archive.

View Archived Reports

- [Steps for Viewing Archived Reports](#)
- [Other Ways to View Archived Reports](#)

You can view any report that has already been generated through **View archived reports**. All reports that have been generated are stored in **Archived Reports**.

Steps for Viewing Archived Reports

1. In the left navigation pane, expand **Reports**.
Select **Archived Reports**. The **Archived Reports** page is displayed.
2. Highlight the report to view and click **View**.
3. Now you can:
 - [Email Reports on page 205](#).
 - [Save Archived Reports on page 205](#).
 - **Print**: select **Print** and then select the printer to send the report to.
4. Click **Close**. The **Archived Reports** page is displayed.

Other Ways to View Archived Reports

- In the **Reports - Archived Reports** task module, highlight the report to view and click **View**.

Delete Archived Reports

- [Steps for Deleting Archived Reports](#)
- [Other Ways to Delete Archived Reports](#)

Reports that have been archived can be deleted.

Steps for Deleting Archived Reports

1. In the left navigation pane, expand **Reports** and then click **Archived Reports**. The **Archived Reports** page is displayed.
2. Highlight the archived report you want to delete and click **Delete**. The **Delete Archived Report** wizard is started with the **Confirm** page displayed.
3. If you need to make changes, click **Back**. If this is the correct report to delete, click **Next**. The **Results** page is displayed.
4. The report you deleted is displayed. Click **Done**.

Other Ways to Delete Archived Reports

- In the **Reports - Archived Reports** task module, highlight the report to view and click **Delete**.

Supplies

- [All About Supplies](#)
- [Task Modules for Supplies](#)
- [Related Application Options for Supplies](#)
- [Creating a Supplies Group](#)
- [Add Devices to a Supplies Group](#)
- [Remove Devices from a Supplies Group](#)
- [Deleting a Supplies Group](#)
- [Shop for Supplies](#)
- [Viewing a Supplies Group](#)

All About Supplies

HP Web Jetadmin 10.0 has several device supply-related features that help you monitor, order, and replenish supplies for your devices. The **Supplies** feature in HP Web Jetadmin 10.0 includes enhanced reporting and alerting functionality.

You can use the **Supplies** feature to keep your devices up and running efficiently. Here are some key feature items for Supplies:

- Quickly display all supplies details for any device list selection using the **Supplies** device tab ([Supplies Tab on page 61](#)).
- Consolidated supplies ordering (available in both Reports and Alerts within Supplies) launches you into HP SureSupply page on <http://www.hp.com>.
- Supplies features enable a variety of monitoring and fulfillment models.

A key feature in HP Web Jetadmin 10.0 is Supplies Groups. These are special groups that only appear in the left navigation pane under **Supplies**. Their purpose is to pull together supplies alerts and supplies reports features for grouped devices.

To ensure this feature works properly, see [Minimum System Requirements for HP Web Jetadmin 10.0 on page 2](#) for HP Web Jetadmin 10.0.

Task Modules for Supplies

- [Supplies - Current Tasks and Supplies - Common Tasks Task Modules](#)
- [Supplies - Group Tools Task Module](#)
- [Supplies - Group Summary Task Module](#)
- [Supplies - Device Status Summary Task Module](#)
- [Supplies - Archived Reports Task Module](#)
- [Supplies - Recent Alerts Task Module](#)
- [Supplies - Scheduled Reports Task Module](#)

The task modules that can be displayed or hidden in **Supplies** are described in the following sections.

Supplies - Current Tasks and Supplies - Common Tasks Task Modules

The **Supplies - Current Tasks** task module can be displayed on the **Supplies** page and includes the following tasks:

- **Create supplies group** ([Creating a Supplies Group on page 215](#))
- **Add devices to supplies group** ([Add Devices to a Supplies Group on page 216](#))
- **Remove devices from supplies group** ([Remove Devices from a Supplies Group on page 217](#))
- **Delete supplies group** ([Deleting a Supplies Group on page 218](#))
- **Shop for supplies** ([Shop for Supplies on page 218](#))

The **Supplies - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Supplies - Common Tasks**.

Supplies - Group Tools Task Module

The **Supplies - Group Tools** task module can be displayed on the **Supplies** page and includes the following tasks:

- **Create** ([Creating a Supplies Group on page 215](#))
- **Add Devices** ([Add Devices to a Supplies Group on page 216](#))
- **Remove Devices** ([Remove Devices from a Supplies Group on page 217](#))
- **Delete** ([Deleting a Supplies Group on page 218](#))
- **View** ([Viewing a Supplies Group on page 219](#))

Supplies - Group Summary Task Module

The **Supplies - Group Summary** task module can be displayed on the **Supplies** page and includes the following information:

- **Supplies group status:** shows how many supplies groups have devices in an **Error**, **Warning**, or **OK** status.
- **Device grouping:** shows how many devices belong to a group and how many do not belong to a group.

Supplies - Device Status Summary Task Module

The **Supplies - Device Status Summary** task module can be displayed on the **Supplies** page and includes the following information:

- **Device supply status:** shows how many devices in an **Error**, **Warning**, or **OK** status are in supplies groups.

Supplies - Archived Reports Task Module

The **Supplies - Archived Reports** task module can be displayed on the **Supplies** page and provides you with access to the following tasks:

- **View** ([View Archived Reports on page 210](#)): review supplies reports that have been produced and archived.
- **Email** ([Email Reports on page 205](#)): email archived supplies reports.
- **Save** ([Save Archived Reports on page 205](#)): save supplies reports that have been produced and archived.
- **Delete** ([Delete Archived Reports on page 211](#)): delete supplies reports that have been produced and archived.

Supplies - Recent Alerts Task Module

The **Supplies - Recent Alerts** task module can be displayed on the **Supplies** page. After selecting a group, the corresponding supplies alerts are displayed.

Supplies - Scheduled Reports Task Module

The **Supplies - Scheduled Reports** task module can be displayed on the **Supplies** page and lists all schedule supplies reports.

Related Application Options for Supplies

- [General](#)
- [Supplies Reordering](#)

The **General** options controls the supply threshold at which devices are placed in the “supply needed” state.

The **Supplies Reordering** option lets you select whether or not to display a **Shop for Supplies** link on the **Supplies Ordering** report; this is a direct link to the HP SureSupply web site.

General

The **General** option controls the supply threshold at which devices are placed in the “supply needed” state.

Follow these steps:

1. On the top menu bar, access **Tools > Options > Device Management > Supplies** and then select **General**.

You can also access this option from a supply group’s **Devices** tab; click **Settings**.

2. Select the percentage of supplies left in the device that you want to be notified.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Supplies Reordering

The **Supplies Reordering** option lets you select whether or not to display a **Shop for Supplies** link on the **Supplies Ordering** report; this is a direct link to the HP SureSupply web site.

Follow these steps:

1. On the top menu bar, access **Tools > Options > Device Management > Supplies** and then select **Supplies Reordering**.

You can also access this option from a supply group's **Devices** tab; click **Settings**.
2. Check the box **Include shop for supplies link in reports** to allow the administrator to enable or disable ordering from SureSupply for the application.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Creating a Supplies Group

- [Steps for Creating a Supplies Group](#)
- [Other Ways to Create a Supplies Group](#)

Supplies groups pull together supplies alerts and supplies reports features for grouped devices.

An example is when someone in one department has responsibility for supplies for a set of devices. This person has the devices grouped in supply group "A". Another person has responsibility for managing supplies for a different part of the company; for this person, supply group "B" is created. These two individuals can manage supplies separately and can also choose specifics such as methods, thresholds, and even unique email addresses.

When devices are added to a supplies group, Supplies polling begins. The polling method used to monitor supplies is sometimes called slow-polling, the same polling as when you view a device list. The default is 4 devices queried every 15 seconds. When supplies polling is enabled devices are polled at all times, not just when you access a device list. Then, when you view the supply group, up-to-date supply details are displayed.


Steps for Creating a Supplies Group

1. In the left navigation pane, click on **Supplies**. In the **Supplies - Common Tasks** task module, select **Create supplies group**. The **Create Supplies Group** wizard is started with the **Specify group name** page displayed.
2. Type the name for the supplies group (up to 48 characters).
3. If you are not adding devices to the group now, click **Next** and go to Step 4.

To add devices to the group now, select **Add devices now** and click **Next**. The **Select devices** page is displayed.

- Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to **Groups**. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

- Click **Next**.
4. The **Confirm** page is displayed. Click **Next**.
 5. The **Results** page is displayed. After the results are displayed, you can choose to open the group when you click **Done**.

Other Ways to Create a Supplies Group

- In the left navigation pane, right-click on **Supplies** and select **Create group**.
- In the **Supplies - Group Tools** task module, click **Create**.
- In any device list, right-click on a device. Select **Supply Groups** and then select **Add devices to new group**.

Add Devices to a Supplies Group


- [Steps for Adding Devices to a Supplies Group](#)
- [Other Ways to Add Devices to a Supplies Group](#)

After a supplies group has been created, devices can be added to that group.

Steps for Adding Devices to a Supplies Group

1. In the left navigation pane, click on **Supplies**. In the **Supplies - Common Tasks** task module, select **Add devices to supplies group**. The **Add Devices to Supplies Group** wizard is started with the **Select groups** page displayed.
2. Select the group and click **Next**. The **Select devices** page is displayed.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

4. Click **Next**. The **Confirm** page is displayed.
5. Click **Next**. The **Results** page is displayed. Click **Done**.

Other Ways to Add Devices to a Supplies Group

- In the left navigation pane, right-click on **Supplies** and select **Add devices to group**.
- In the left navigation pane, expand **Supplies** and right-click on the specific group; then select **Add devices to group**.
- In the **Supplies - Group Tools** task module, click **Add Devices**.
- In any device list, right-click on a device. Select **Supply Groups** and then select **Add devices to group**.

Remove Devices from a Supplies Group


- [Steps for Removing Devices from a Supplies Group](#)
- [Other Ways to Remove Devices from a Supplies Group](#)

After a supplies group has been created and devices have been added, devices can be removed from that group.

Steps for Removing Devices from a Supplies Group

1. In the left navigation pane, click on **Supplies**. In the **Supplies - Common Tasks** task module, select **Remove devices from supplies group**. The **Remove Devices from Supplies Group** wizard is started with the **Select groups** page displayed.
2. Select the group and click **Next**. The **Select devices** page is displayed.
3. Select the device by highlighting it and clicking the arrow buttons between the two lists. To select multiple devices, use either **Ctrl+Click** or **Shift+Click**. To move all devices from one list to the other, use the double arrow buttons. You can sort the list of available devices by clicking the column headers, or view more columns by right-clicking the column headers.

You can also select an entire group instead of individual devices, by changing the selection method to Groups. Tasks (for example configurations and more) can be performed on a single group or a group and all of its subgroups.

 **NOTE:** Including all subgroups can potentially take much longer and cause much more network traffic, so should be used only when appropriate.

If you schedule a task using a group, the task will apply to the devices in the group at the time the task starts. This makes it easy to redefine the devices used in regularly scheduled tasks without having to delete and create a scheduled task.

NOTE: The columns displayed on the **Select Devices** page are defined in **View > Preferences > Device Identification**.

4. Click **Next**. The **Confirm** page is displayed.
5. Click **Next**. The **Results** page is displayed. Click **Done**.

Other Ways to Remove Devices from a Supplies Group

- In the left navigation pane, right-click on **Supplies** and select **Remove devices from group**.
- In the left navigation pane, expand **Supplies**. Select the specific group to remove devices from. Right-click and select **Remove devices from group**.
- In the **Supplies - Group Tools** task module, select the specific group to remove devices from and click **Remove Devices**.

Deleting a Supplies Group

- [Steps for Deleting a Supplies Group](#)
- [Other Ways to Delete a Supplies Group](#)

Deleting a supplies group removes contained devices from the slow poller. It also removes proactive alerts, predictive reports, and data collection.

Steps for Deleting a Supplies Group

1. In the left navigation pane, click on **Supplies**. In the **Supplies - Common Tasks** task module, select **Delete supplies group**. The **Delete Supplies Group** wizard is started with the **Select groups** page displayed.
2. Select the group and click **Next**. The **Confirm** page is displayed.
3. Click **Next**. The **Results** page is displayed. Click **Done**.

Other Ways to Delete a Supplies Group

- In the left navigation pane, right-click on **Supplies** and select **Delete group**.
- In the left navigation pane, expand **Supplies**. Select the specific group to delete. Right-click and select **Delete group**.
- In the **Supplies - Group Tools** task module, select the specific group to delete and click **Delete**.

Shop for Supplies

In any device list, you can select a device or group and then select the **Supplies** device tab. (If the device tabs are hidden, see [Showing and Hiding Device Tabs on page 53](#).) Supplies you need to order can be included on the **Supply Ordering** report if you chose predictive settings ([Predictive Settings](#)

[on page 221](#)). Proactive supplies alerts sends an email with a supply ordering report when a supply meets a threshold.


After you run this report, you can access the HP SureSupply web site to actually order your supplies. (See [Supply Ordering on page 183](#).)

Viewing a Supplies Group

- [Proactive Settings](#)
- [Predictive Settings](#)
- [Steps for Viewing a Supplies Group](#)
- [Other Ways to View a Supplies Group](#)

You can view a supply group. The page displayed is identical to the one displayed when you click the **Supplies** device tab in any device list with a selected device.

Options on the **Supplies** tab page include:

- **Group By:** control how the supplies information is presented: by device, urgency, HP part number, or none.
 - **Device:** shows devices in a collapsed state. Expanding one or more devices reveals supply detail.
 - **Urgency:** groups the devices by **Out**, **Warning**, **Unknown**, and **OK** supply status categories. Expanding these reveals device and supply detail.
 - **Part number:** groups the devices by collapsed supply part number categories. Expanding these reveals device and supply detail.
 - **None:** reveals supply detail in an expanded device list.
 - **View:** choose between two views of the supplies data: the default view or the details view, which includes serial number of the supply, install date, and last used date.
 - + (Expand All): view detail.
 - - (Collapse All): view summary information only and no detail.
 - **Shop for supplies online:** easy access to HP SureSupply to shop for all supplies or just needed supplies (the default). After this selection is made, you are connected to the HP SureSupply web site with either needed or all supplies categories pre-selected to order. You are notified that information will be transferred to the HP SureSupply web site and can approve or disapprove of the information being sent to that web site. Shop for supplies needs to have proxy setup in web browser.
 - **Show all** and **Show only needed:** displays the list in a filtered or unfiltered state. In this way, only devices that are in a “supply needed” state are displayed in the list.
-
-  **NOTE:** The **Show only needed** state is dictated by the setting in **Tools > Options > Device Management > Supplies** ([General on page 214](#)).
-
- **Print shopping list:** prepares a printout of the device list as it is currently displayed.

In the left navigation pane, expand **Supplies** and then select the supplies group. In the bottom portion of this page are the following:

- **Devices:** control how the supplies information is presented: by device, urgency, HP part number, or none. This shows the devices that are in the group (you can add or remove devices).
 - **Settings:** lets you configure supplies in **Tools > Options > Device Management > Supplies**. See [General on page 214](#).
- **Proactive Settings:** leverages HP Web Jetadmin 10.0 alerting features and includes:

Table 4-16 Proactive Settings

Setting	Threshold
Supply refreshed	Fixed 100%
Early warning	Adjustable 0-99%
Supply low	Adjustable 0-50%
Supply out	Adjustable 0-2%

When a supply reaches its threshold, an email will be sent. See [Proactive Settings on page 220](#).

- **Predictive Settings:** starts Reports data collection on all devices contained in the supplies group. See [Predictive Settings on page 221](#).

Proactive Settings

Proactive Settings leverage HP Web Jetadmin 10.0 alerting features.

When supplies alerting is enabled, HP Web Jetadmin 10.0 uses an adaptive polling technique that increases polling frequency as a supply gets closer to the user specified threshold. In this way, HP Web Jetadmin 10.0 can propagate supplies alerts messages accurately and use less network bandwidth than is used with traditional polling methods.

Steps for Configuring Proactive Settings

1. In the left navigation pane, expand **Supplies** and then select the supplies group.
Click the **Proactive Settings** tab.
2. Check **Enable** to enable proactive settings.
3. To see recent supplies alerts for the devices in this specific group, click **Recent alerts**. (For more information, see [Alert History on page 156](#).)
4. To make changes to the settings displayed, click **Edit**. The **Edit Proactive Settings** page is displayed.
5. Select the proactive settings and the threshold for each one selected.

Table 4-17 Proactive Settings

Setting	Threshold
Supply replaced	Fixed 100%
Early warning	Adjustable 0-99%

Table 4-17 Proactive Settings (continued)

Setting	Threshold
Supply low	Adjustable 0-50%
Supply out	Adjustable 0-2%

6. Enter email addresses (separated by a semi-colon). Click **Browse** to search for email addresses already entered. Click **Next**. The **Confirm** page is displayed.
7. Click **Next**. The **Results** page is displayed. Click **Done**.

Predictive Settings

Predictive Settings starts Reports data collection on all devices contained in the supplies group. This setting also leverages the Reports feature by enabling a predictive supplies report for the devices within the supplies group. Here are the details behind the supply group report:

- Fully schedulable report (default: 1st day of each month)
- Archived in Reports
- Optional email recipients
- Report details include Supply, Part number, Estimated replacement date, others
- Report detail can be customized by using the Edit control
- Generated report contains HP SureSupply link

Steps for Configuring Predictive Settings

1. In the left navigation pane, expand **Supplies** and then select the supplies group.
Click the **Predictive Settings** tab.
2. Check **Enable** to enable predictive settings.
3. To view archived report for this specific supply group, click **Archived reports**. (For more information, see [Supply Replacement Forecast on page 183.](#))
4. To make changes to the settings displayed, click **Edit**. The **Edit Predictive Settings** page is displayed with the **Select report settings** page displayed.
5. Select the report settings.

6. Now you can actually define what will be included on your report:

- **Report Format:** If applicable for the report being generated, select the chart type for your report from the drop-down box. This criteria varies depending on the report being generated.
- **Report Columns:**
 - **Device ID Columns:** select the columns to include on the report that identify the devices from the drop-down box.
 - **Available columns** and **Columns to show:** select the columns to include on the report. If you want totals for any specific column, check the box under **Show Totals**.

The selections vary by report type but are representative of the data stored for the corresponding data collection type. These can be enabled and disabled and can also be re-ordered in the report.

 **NOTE:** To select multiple columns, use either **Ctrl+Click** or **Shift+Click**.

You can move the type of column up or down in the list (**Up** and **Down**); this determines its order on the report.

- **Group by:** specify how you want the data grouped by selecting an option from the **Group by** drop-down box. An example of this is **Device Model**. If chosen, HP Web Jetadmin 10.0 groups all of the same device models next to each other in the report.
 - **Sort by:** specify how you want the data sorted by selecting an option from the **Sort by** drop-down box. An example is IP address: when chosen, HP Web Jetadmin 10.0 orders the devices within the report by their IP addresses. Of course, the ordering occurs within the Group by subsets.
- (If applicable) **Display cartridges with percentage below:** select the percentage for ink levels remaining in cartridges.
 - (If applicable) **Order from HP SureSupply?:** check this box if you want to order supplies from HP SureSupply.

7. After you have defined the report format, click **Next**. The **Enter destinations** page is displayed.

8. Complete **Send to** with the email address (or addresses separated by a semi-colon). Click **Browse** to search for the email address.

The SMTP server must be configured before you can send email. Click **SMTP server is not configured**; see [Email on page 245](#).

9. Click **Next**. If you are scheduling this report for a later time, the **Specify schedule options** page is displayed. Select the start date and time for your report and also how often it should run. Then click **Next**.

10. The **Confirm settings** page is displayed, summarizing all of the report format options you have selected for this report.

11. Click **Next**. The **Results** page is displayed showing the actual report generation.

12. Click **Done** to display the supplies group page.

Steps for Viewing a Supplies Group

1. In the left navigation pane, expand **Supplies** and then click the supplies group to view. The **Supply Group** page is displayed.
2. You can choose the following:
 - **Proactive Settings** ([Proactive Settings on page 220](#)).
 - **Predictive Settings** ([Predictive Settings on page 221](#)).
 - **Settings** ([Related Application Options for Supplies on page 214](#)).
 - **Add Devices** ([Add Devices to a Supplies Group on page 216](#)).
 - **Remove Devices** ([Remove Devices from a Supplies Group on page 217](#)).

Other Ways to View a Supplies Group

- In the **Supplies - Group Tools** task module, select the group and click **View**.
- In any device list, click the **Supplies** tab at the bottom of the page.

5 Print Management

- [All About Print Management](#)
- [Print Management Task Modules](#)
- [Print Management Options](#)
- [Create Print Queue](#)
- [Edit Print Queue](#)
- [Delete Print Queue](#)
- [Pre-configure Driver](#)
- [Upload Driver to Available Drivers](#)
- [Delete a Driver](#)
- [Retrieve a Driver](#)

All About Print Management

- [Print Queue Management](#)
- [Driver Management](#)

The **Print Management** view gives you control over remote print queues and drivers. These features can be used to create, edit, and delete existing queues as well as to install or update printer drivers. HP Web Jetadmin 10.0 can act as a driver repository for deploying new HP drivers onto remote systems. And, HP Web Jetadmin 10.0 **Print Management** features use HP's Universal Print Drivers (UPDs).

For example, you can use HP Web Jetadmin 10.0 **Print Management** to locate a workstation or server on the network. Once this host is found, you can add administrative credentials and begin to manage the print queue and drivers on the remote host. Existing queues on the host can have a number of settings and/or the driver changed. Queues can be added or removed. You must have local administrator rights on these remote systems when performing this management activity.

Print Queue Management

- [Fleet Management of Print Queues](#)

Print queue management in HP Web Jetadmin 10.0 includes the following:

- **Create print queue** ([Create Print Queue on page 230](#)).
- **Edit print queue** ([Edit Print Queue on page 232](#)).
- **Delete print queue** ([Delete Print Queue on page 233](#)).

File and printer sharing must be enabled at the remote host where the print queue is to be created.

Fleet Management of Print Queues

Within the **Print Management** view, HP Web Jetadmin 10.0 has the capability of installing queues and drivers onto multiple remote hosts. This fleet queue creation can be done remotely from the HP Web Jetadmin 10.0 client interface and in a configuration session.

Users of the **Print Management** feature could be IT personnel in school districts. These personnel may have responsibility over desktop print functionality and print devices in remote and wide geographic distribution. On top of the remote distribution problem, large numbers of workstations and different restrictions apply. Consider this problem:

- Each school in the district has obtained a color MFP.
- A dozen to several hundred student workstations could exist in each school.
- Staff are allowed to print color but students are not.
- IT has full administrative access to all of the workstations.

HP Web Jetadmin 10.0 could be used in attaining substantial savings in an environment like this one. Pre-configuration could be used on drivers deployed to student workstations. All drivers and queues could be deployed through the **Create Print Queue** tool ([Create Print Queue on page 230](#)) and in very few configuration sessions. Travel to each of the schools could then be reduced to a bare minimum.

Driver Management

- [HP's Universal Print Driver](#)

HP Web Jetadmin 10.0 facilitates driver management. Drivers can be added to the HP Web Jetadmin 10.0 host which acts like a driver repository. These drivers are installed on remote hosts where queue management is being performed. Some of these features can be locked.

Driver management in HP Web Jetadmin 10.0 includes the following:

- **Pre-configure driver** ([Pre-configure Driver on page 234](#)).
- **Upload driver to available drivers** ([Upload Driver to Available Drivers on page 235](#)).
- **Delete driver from available drivers** ([Delete a Driver on page 236](#)).
- **Retrieve driver from available drivers** ([Retrieve a Driver on page 237](#)).

Supported drivers include:

- HP device specific drivers
- .INF install
- UPD packaged for HP Web Jetadmin 10.0 (installed through Product Update, [Product Update Task Modules on page 270](#)).

HP's Universal Print Driver

The HP Universal Print Driver Postscript (UPD-PS) is bundled with HP Web Jetadmin 10.0 software and can be installed from any create or edit queue interface ([Create Print Queue on page 230](#) or [Edit Print Queue on page 232](#)). Universal Print Drivers PCL5 and PCL6 can be added to HP Web Jetadmin through **Product Update** in **Application Management**.

The HP Universal Print Driver has pre-configure capability which enables you to specify print defaults such as duplex or grayscale. Some of these defaults can be locked so that users must always use certain features such as duplex.

When HP Web Jetadmin 10.0 creates a queue using the HP Universal Print Driver, the driver and printer (specified in HP Web Jetadmin 10.0) are installed in traditional mode, which means that the printer and driver have none of the special HP Universal Print Driver features that are available when this driver is installed from install.exe when downloaded from <http://www.hp.com>.

Print Management Task Modules

The following task modules can be displayed or hidden in the **Print Management**.


 **NOTE:** To display the **Task Module docking area**, click **View > Task Module docking area**. This is a toggle selection; if you select it again it closes the **Task Module docking area**.

Table 5-1 Print Management Task Modules

- [Print Management - Current Tasks and Print Management - Common Tasks Task Modules on page 227](#)
- [Print Management - Print Queues Task Module on page 228](#)
- [Print Management - Available Drivers Task Module on page 228](#)
- [Print Management - Active Tasks Task Module on page 228](#)

Print Management and Credentials

HP Web Jetadmin 10.0 requests and utilizes Windows user credentials during print management operations. These credentials are needed for viewing, adding or removing print queues or for modifying print queue driver or queue settings on remote systems. The credentials used during print management must provide local administrator access on the Windows system being managed by HP Web Jetadmin 10.0. These credentials are stored securely by HP Web Jetadmin 10.0 and are re-used when the same Windows user requests further print management operations. These credentials are not reused for other Windows users requesting print management operations; credentials for different Windows users are stored separately and securely for each user requesting print management operations. These credentials can be cleared from the HP Web Jetadmin 10.0 credential-store by using the **Clear all stored credentials** feature within **Tools > Options > Application Management > Credentials**.

 **CAUTION:** **Clear all Credentials** removes all stored credentials including all device credentials. Use caution when performing this operation.

Print Management - Current Tasks and Print Management - Common Tasks Task Modules

The **Print Management - Current Tasks** and **Print Management - Common Tasks** task module can be displayed on the **Overview** page and includes the following tasks:

- **Create print queue** ([Create Print Queue on page 230](#))
- **Edit print queue** ([Edit Print Queue on page 232](#))
- **Delete print queue** ([Delete Print Queue on page 233](#))
- **Pre-configure driver** ([Pre-configure Driver on page 234](#))
- **Upload driver to available drivers** ([Upload Driver to Available Drivers on page 235](#))
- **Delete driver from available drivers** ([Delete a Driver on page 236](#))
- **Retrieve driver from available drivers** ([Retrieve a Driver on page 237](#))

The **Print Management - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Print Management - Common Tasks**.

Print Management - Print Queues Task Module

The **Print Management - Print Queues** task module can be displayed on the **Overview** page. This task module first locates the remote host on the network and then adds the user credentials that will provide administrative access.

This task module includes the following tasks:

- **New** ([Create Print Queue on page 230](#)).
- **Delete** ([Delete Print Queue on page 233](#)).
- **Edit** ([Edit Print Queue on page 232](#)).
- **Test** to print a test page.

Print Management - Available Drivers Task Module

The **Print Management - Available Drivers** task module can be displayed on the **Overview** page and includes the following tasks:

- **Upload** ([Upload Driver to Available Drivers on page 235](#)).
- **Delete** ([Delete a Driver on page 236](#)).
- **Pre-configure** ([Pre-configure Driver on page 234](#)).
- **Retrieve** ([Retrieve a Driver on page 237](#)).

Print Management - Active Tasks Task Module

The **Print Management - Active Tasks** task module can be displayed on the **Overview** page and includes the following tasks:

- **Stop**: stop the currently running tasks which are listed in this task module.
- **View**: displays the progress and results page for the currently running tasks that are listed in this task module ([Add Devices to a Group on page 92](#)).

Print Management Options

There are no configuration options for **Print Management** at this time.

Create Print Queue

- [Steps for Creating a Print Queue](#)
- [Other Ways to Create a Print Queue](#)


Local administrator credentials are required on hosts managed by HP Web Jetadmin 10.0 **Print Management** features. You can have these rights in a number of ways.

- You are a domain administrator.
- Your user domain account exists in the local Administrator group on the remote host.
- You belong to a domain group that exists in the local Administrator group on the remote host.

File and printer sharing must be enabled at the remote host where the print queue is to be created.

It is possible to create queues on many remote hosts in one working session ([Fleet Management of Print Queues on page 225](#)).


Steps for Creating a Print Queue

 **NOTE:** When creating print queues on Windows Server 2003, you may be prompted for credentials repeatedly if there are no shared printers already on that host. In this case, you may have to add a shared printer locally. See Microsoft documentation about enabling the RPC endpoint for the print spooler.

NOTE: **Print Management** features allow the use of HP drivers regardless of the specific printer model selected. In many cases, a printer may only be supported with host-based print drivers or other types of print drivers. In the case where a driver is used in creating a print queue for a device that does not support that driver type, printing may or may not succeed when using that print queue. Always be sure that a supported driver is being used and matches the device for which the print queue is being created.

1. In the left navigation pane, click **Print Management** at the bottom of the screen.

In the **Print Management - Print Queues** task module, click **New**. The **Create Queue** wizard is started with the **Select device** page displayed.
2. Select a device from the list (only one device can be selected). Click **Next**. The **Select server** page is displayed.
3. Select a computer name and a domain. Select **Add** (more than one computer name can be selected). Click **Next**. The **Select driver** page is displayed.
4. The **Credentials** wizard is started if there is only one server selected, if the **Show drivers on server in Available Drivers** is checked, and if you have not entered credentials for that server already. Select the print server and then type your credentials and password. Click **Set** and then click **Finish**. The **Select driver** page is displayed.
5. Select the driver:

 **NOTE:** The drivers on the print server are displayed in the **Available Drivers** list if **Show drivers on server in Available Drivers** is selected on the **Select server** page. Plus, if this feature is selected, all drivers are listed, some of which are not supported.

NOTE: If creating a print queue on multiple servers, only the drivers on the HP Web Jetadmin 10.0 server and the UPD drivers are available.

- **Universal Print Driver:** the Universal Print Driver PostScript is available ([HP's Universal Print Driver on page 226](#)); other Universal Print Drivers can be obtained and installed through **Product Update** ([Product Update on page 270](#)).
- **Known Drivers:** drivers that are already installed on the remote host or drivers that exist on the HP Web Jetadmin 10.0 server (INF driver install base). These drivers, when identified for use with the print queue, are added to the queue as it is being installed ([Create Print Queue on page 230](#)).

To display all drivers (not just the ones that are specific to the selected device), click **Show all drivers**.

Click **Next**. The **Specify print queue options** page is displayed.

6. Type the printer name using Windows naming conventions for print queues. This name must be a unique name on the server.
7. Type the port name. This defaults to the printer's IP Address preceded by **IP**; it is recommended to leave this as the default but you can change it if desired.
8. If you want to share this printer click **Share this printer**.
9. The share name defaults to the printer name but you can change it if desired.
10. You can add a location and any comments. Then click **Next**. The **Confirm** page is displayed.
11. Click **Next**. The **Results** page is displayed.
If the printer was shared, you can print a test page.
12. Click **Done**. The **Print Management** page is displayed.

Other Ways to Create a Print Queue


- In the left navigation pane, right-click on **Overview** and select **Create print queue**.
- In the **Print Management - Print Queue** task module, type a computer name and domain and click **Find**. Enter the credentials to display the queues on the specified server. Then you can click **Add** and create a new print queue on that server.
- In the **Print Management - Common Tasks** task module, select **Create print queue**.

Edit Print Queue

- [Steps for Editing a Print Queue](#)
- [Other Ways to Edit a Queue](#)

Any existing print queue can be edited to change the driver associated with it, whether or not it is shared.

Steps for Editing a Print Queue

 **NOTE:** **Print Management** features allow the use of HP drivers regardless of the specific printer model selected. In many cases, a printer may only be supported with host-based print drivers or other types of print drivers. In the case where a driver is used in creating a print queue for a device that does not support that driver type, printing may or may not succeed when using that print queue. Always be sure that a supported driver is being used and matches the device for which the print queue is being created.

1. In the left navigation pane, click **Print Management** at the bottom of the screen.

In the **Print Management - Print Queues** task module, select the print queue and click **Edit**. The **Edit Print Queue** wizard is started with the **Select driver** page displayed.

2. Select the driver:

- **Universal Print Driver:** the Universal Print Driver PostScript is available ([HP's Universal Print Driver on page 226](#)); other Universal Print Drivers can be obtained and installed through **Product Update** ([Product Update on page 270](#)).
- **Known Drivers:** drivers that are already installed on the remote host or drivers that exist on the HP Web Jetadmin 10.0 server (INF driver install base). These drivers, when identified for use with the print queue, are added to the queue as it is being installed ([Create Print Queue on page 230](#)).

To display all drivers (not just the ones that are specific to the selected device), click **Show all drivers**.

Click **Next**. The **Specify print queue options** page is displayed.

3. If you want to share this printer click **Share this printer**.
4. Click **Next**. The **Results** page is displayed.
5. Click **Done**. The **Print Management** page is displayed.

Other Ways to Edit a Queue

- In the left navigation pane, right-click on **Overview** and select **Edit print queue**.
- In the **Print Management - Print Queues** task module, select **Edit**.
- In the **Print Management - Print Queue** task module, type a computer name and domain and click **Find**. Enter the credentials to display the queues on the specified server. Then you can select a queue and click **Edit**.

Delete Print Queue


- [Steps for Deleting a Print Queue](#)
- [Other Ways to Delete a Print Queue](#)

You can delete print queues from HP Web Jetadmin 10.0.


Steps for Deleting a Print Queue

1. In the left navigation pane, click **Print Management** at the bottom of the screen.

In the **Print Management - Print Queues** task module, click **Delete**. The **Delete Print Queue** wizard is started.
2. Select one of the following to delete:
 - **Driver associated with the print queue:** removes the driver that this queue utilized.

 **NOTE:** When selecting **Driver associated with the print queue**, the driver might not actually be removed; this is due to known problems with Microsoft's Spooler system.

 - **Port associated with the print queue:** removes the port that this queue utilized.

 **NOTE:** When selecting **Port associated with the print queue**, the port might not actually be removed; this is due to known problems with Microsoft's Spooler system.

 - **Purge jobs associated with the print queue:** removes any queued jobs associated with the queue.
3. Click **Next**. The **Confirm** page is displayed.
4. Click **Next**. The **Results** page is displayed. Click **Done** to display the **Print Management** page.

Other Ways to Delete a Print Queue

- In the left navigation pane, right-click on **Overview** and select **Delete print queue**.
- In the **Print Management - Print Queues** task module, select **Delete**.
- In the **Print Management - Print Queue** task module, type a computer name and domain and click **Find**. Enter the credentials to display the queues on the specified server. Then you can select a queue and click **Delete**.

Pre-configure Driver

- [Steps for Pre-configuring a Driver](#)
- [Other Ways to Pre-Configure a Driver](#)


After drivers are listed in **Available Drivers**, they can be pre-configured to contain settings such as duplex-on or grayscale. Many HP drivers can be pre-configured. Typically, PCL5 and PCL6 HP drivers for newer HP devices can be pre-configured in a variety of ways. Some settings can be locked.

Table 5-2 Driver Settings

Setting	Lockable or Not Lockable
Duplex/Simplex	Lockable
Orientation: Portrait/Landscape	Not Lockable
Print in grayscale	Lockable
Print quality	Not Lockable

After a pre-configuration has been added for a driver to HP Web Jetadmin 10.0, whenever that driver is selected you will be asked to select the default or the pre-configured driver.

Steps for Pre-configuring a Driver

 **NOTE:** Users who are not members of the local administrators group on the HP Web Jetadmin 10.0 server host are not able to create driver pre-configuration settings. The **Printing Preferences** tab and the **Device Settings** tab are not displayed for those users not in the local administrators group.

1. In the left navigation pane, click **Print Management** at the bottom of the screen.

In the **Print Management - Common Tasks** task module, click **Pre-configure driver**. The **Driver Pre-configuration** wizard is started with the **Select driver** page displayed.
2. Select the driver and click **Next**. The **Specify Configuration Options** page is displayed.
3. Configure the driver settings and name the pre-configuration for the driver; notice that some might be locked in which cases you cannot adjust them. Click **Next**. The **Confirm** page is displayed.
4. Click **Save Configuration**. The **Results** page is displayed.
5. Click **Done**. The **Print Management** page is displayed.

The new pre-configuration and the default configuration now exist and can either be exported to an INF driver install file set or used in managing print queues.

Other Ways to Pre-Configure a Driver

- In the left navigation pane, right-click on **Overview** and select **Pre-configure driver**.
- In the **Print Management-Available Drivers** task module, select **Pre-configure**.

Upload Driver to Available Drivers

- [Steps for Uploading a Driver to Available Drivers](#)
- [Other Ways to Upload a Driver to Available Drivers](#)

INF install file sets for drivers can be uploaded into the HP Web Jetadmin 10.0 host. These drivers can then be installed onto remote hosts ([Edit Print Queue on page 232](#) or [Create Print Queue on page 230](#)).

All of the files in the directory with the INF file and all files in subdirectories of that directory are copied to the HP Web Jetadmin 10.0 server as part of the upload process. Extra files not related to that driver should not be in that directory or its subdirectories.

Steps for Uploading a Driver to Available Drivers

1. In the left navigation pane, click **Print Management** at the bottom of the screen.
In the **Print Management - Available Drivers** task module, click **Upload**. The **Upload Driver** wizard is started with the **Select INF File** page displayed.
2. Select an INF file and click **Next**. The **Confirm** page is displayed.
3. Click **Start**. The selected driver is copied to the destination specified in the preceding step.
4. Click **Done**. The **Print Management** page is displayed.

Other Ways to Upload a Driver to Available Drivers

- In the left navigation pane, right-click on **Overview** and select **Upload driver**.
- In the **Print Management - Common Tasks** task module, select **Upload driver to available drivers**.

Delete a Driver

- [Steps for Deleting a Driver](#)
- [Other Ways to Delete a Driver](#)

Drivers can be removed from HP Web Jetadmin 10.0 if there is a more current version available or if they are no longer needed.

Steps for Deleting a Driver

1. In the left navigation pane, click **Print Management** at the bottom of the screen.
In the **Print Management - Available Drivers** task module, click **Delete**. The **Delete Driver** wizard is started with the **Confirm** page displayed.
2. Click **Next**. The **Results** page is displayed. Click **Done** to display the **Print Management** page.

Other Ways to Delete a Driver

- In the left navigation pane, right-click on **Overview** and select **Delete driver from available drivers**.
- In the **Print Management - Common Tasks** task module, select **Delete driver from available drivers**.

Retrieve a Driver

- [Steps for Retrieving a Driver](#)
- [Other Ways to Retrieve a Driver](#)

You can copy a driver to any destination.

Steps for Retrieving a Driver

1. In the left navigation pane, click **Print Management** at the bottom of the screen.

In the **Print Management - Available Drivers** task module, click **Retrieve**. The **Get Driver** wizard is started with the **Select driver** page displayed.
2. Select the driver:
 - **Universal Print Driver:** the Universal Print Driver PostScript is available ([HP's Universal Print Driver on page 226](#)); other Universal Print Drivers can be obtained and installed through **Product Update** ([Product Update on page 270](#)).
 - **Known Drivers:** drivers that are already installed on the remote host or drivers that exist on the HP Web Jetadmin 10.0 server (INF driver install base). These drivers, when identified for use with the print queue, are added to the queue as it is being installed ([Create Print Queue on page 230](#)).

To display all drivers (not just the ones that are specific to the selected device), click **Show all drivers**.

Click **Next**.
3. Select the driver and the pre-configuration for the driver and click **Next**. The **Specify destination settings** page is displayed.
4. Select a folder for the driver and click **Next**. The **Confirm** page is displayed.
5. Click **Start**. The selected driver is copied to the destination specified in the preceding step.
6. Click **Done**. The **Print Management** page is displayed.

Other Ways to Retrieve a Driver

- In the left navigation pane, right-click on **Overview** and select **Retrieve driver from available drivers**.
- In the **Print Management - Common Tasks** task module, select **Retrieve driver from available drivers**.

6 Application Management

- [All About Application Management](#)
- [Application Management Task Modules](#)
- [Application Management Options](#)
- [User Security](#)
- [Product Update](#)
- [Web Jetadmin Management](#)

All About Application Management

- [Network Ports](#)

The **Application Management** view provides many features that help you configure and manage devices on your network. The **Overview** page can provide you access to all of these features through the various task modules. (See [Application Management Task Modules on page 241](#).)

Following are some important things to note about HP Web Jetadmin 10.0:

- **Low Privilege User Service:** HP Web Jetadmin 10.0 runs under the low privilege user service Network Service. Many environments require that applications like HP Web Jetadmin 10.0 not have administrative access to the operating system.
- **Database Access and Authentication:** the SQL Server 2005 Express database instance that was created at install time is accessed by the application, HP Web Jetadmin using Windows credentials.
- **File Permissions and NTFS:** the SQL Server 2005 Express database instance that was created at install time is accessed by HP Web Jetadmin using Windows credentials.

Network Ports

HP Web Jetadmin 10.0 opens a number of ports for various reasons. The following table shows the ports.


 **NOTE:** A port number of “0” indicates a random port selected by the operating system or by HP Web Jetadmin 10.0.

Table 6-1 Server-required Ports Opened by HP Web Jetadmin 10.0

Port Number	Type	I/O	Details
0	UDP	I/O	TFTP send/receive request handling
0	UDP	O	SNMP
0	TCP	O	WMI Communication
0	TCP	O	Firmware upgrade
69	UDP	I	TFTP incoming port
427	UDP	I	SLP Listen
3702	UDP	I	WS Discovery Listen*
4088	TCP	I/O	Client Remoting
8000	UDP	I	Web Jetadmin Discovery Listen*
8000	TCP	I	WebServer (http)
8443	TCP	I	WebServer (https)
27892	UDP	I	Traps Listener

* for the discovery of other HP Web Jetadmin servers

Table 6-2 Client-required Ports Opened by HP Web Jetadmin 10.0

Port Number	Type	I/O	Details
161	UDP	I	SNMP
445	UDP	I	WMI communication
9100	TCP	I	Firmware

Application Management Task Modules

- [Application Management - Current Tasks and Common Tasks Task Module](#)
- [Application Management - Active Tasks Task Module](#)
- [Application Management - All Active Tasks Task Module](#)
- [Application Management - Scheduled Tasks Task Module](#)
- [Application Management - All Scheduled Tasks Task Module](#)

The following task modules can be displayed or hidden in the **Overview** section of **Application - Management** and also in the corresponding functional area within HP Web Jetadmin 10.0 by right-clicking within the page and selecting the specific task module.


 **NOTE:** To display the **Task Module docking area**, click **View > Task Module docking area**. This is a toggle selection; if you select it again it closes the **Task Module docking area**.

Table 6-3 Application Management Task Modules

Overview
<ul style="list-style-type: none">• Application Management - Current Tasks and Common Tasks Task Module on page 242• Application Management - Active Tasks Task Module on page 242• Application Management - All Active Tasks Task Module on page 242• Application Management - Scheduled Tasks Task Module on page 242• Application Management - All Scheduled Tasks Task Module on page 242
User Security on page 260
<ul style="list-style-type: none">• User Security - Current Tasks and User Security - Common Tasks Task Modules on page 262• User Security - Roles Task Module on page 263• User Security - Users Task Module on page 263• User Security - Active Clients Task Module on page 263
Product Update on page 270
<ul style="list-style-type: none">• Product Update - Current Tasks and Product Update - Common Tasks Task Modules on page 271• Product Update - Available Packages Task Module on page 271• Product Update - Recommended Packages Task Module on page 271• Product Update - Solutions on page 271
Web Jetadmin Management on page 275
<ul style="list-style-type: none">• Web Jetadmin Installations - Current Tasks and Web Jetadmin Installations - Common Tasks Task Module on page 276• Web Jetadmin - Management Task Module on page 276• Web Jetadmin Installations - Summary Task Module on page 276

Application Management - Current Tasks and Common Tasks Task Module

The **Application Management - Current Tasks** task module can be displayed on the **Application Management - Overview** page and includes the following tasks:

- [Create a Role on page 264](#)
- [Assign Roles to Users on page 267](#)
- [Install Packages on page 271](#)
- [Find Web Jetadmin Installations on page 277](#)

The **Application Management - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Application Management - Common Tasks**.

Application Management - Active Tasks Task Module

The **Application Management - Active Tasks** task module can be displayed on the **Application Management - Overview** page and lists active tasks related to **Application Management**. From this task module you can:

- Stop a task related to **Application Management**.
- View a active task related to **Application Management**.

Application Management - All Active Tasks Task Module

The **Application Management - Active Tasks** task module can be displayed on the **Application Management - Overview** and lists all active tasks within HP Web Jetadmin 10.0. From this task module you can:

- Stop an active task in HP Web Jetadmin 10.0.
- View an active task in HP Web Jetadmin 10.0.

Application Management - Scheduled Tasks Task Module

The **Application Management - Scheduled Tasks** task module can be displayed on the **Application Management - Overview** page and lists scheduled tasks related to **Application Management**. From this task module you can:

- Delete a scheduled task related to **Application Management**.
- View a scheduled task related to **Application Management**.

Application Management - All Scheduled Tasks Task Module

The **Application Management - All Scheduled Tasks** task module can be displayed on the **Application Management - Overview** page and lists all scheduled tasks within HP Web Jetadmin 10.0. From this task module you can:

- Delete any scheduled task in HP Web Jetadmin 10.0.
- View any scheduled task in HP Web Jetadmin 10.0.

Application Management Options

- [Network](#)
- [Email](#)
- [Time Preference](#)
- [IP Ranges](#)
- [Domain Browsing](#)
- [Support](#)
- [Application Log](#)
- [Server Certificates \(or SSL\)](#)
- [User Management](#)
- [Credentials](#)
- [Product Update](#)

The following options can be set for **Application Management** in **Tools > Options > Application Management**

Table 6-4 Application Management Options

Functional Area	Available Options
Network on page 244	<ul style="list-style-type: none"> • SNMP on page 244 • HTTP on page 245 • DNS on page 245
Email on page 245	<ul style="list-style-type: none"> • SMTP on page 246 • Email Addresses Management on page 246 • Custom Email Templates on page 247
Time Preference on page 247	<ul style="list-style-type: none"> • Domain Browsing on page 249
IP Ranges on page 247	<ul style="list-style-type: none"> • IP Ranges - General (Large Subnets) on page 247 • IP Ranges on page 248
Domain Browsing on page 249	<ul style="list-style-type: none"> • Domain Browsing on page 249
Support on page 249	<ul style="list-style-type: none"> • Support on page 249
Application Log on page 250	<ul style="list-style-type: none"> • Application Log on page 250
Server Certificates (or SSL) on page 250	<ul style="list-style-type: none"> • Server Certificates (or SSL) on page 250
User Management on page 251	<ul style="list-style-type: none"> • User Management on page 251
Credentials on page 252	<ul style="list-style-type: none"> • Global Credentials on page 255 • SNMP Get Community Name on page 255 • SNMP Set Community Name on page 256

Table 6-4 Application Management Options (continued)

Functional Area	Available Options
	<ul style="list-style-type: none">• SNMPv3 Credentials on page 257• EWS Password on page 258
Product Update on page 258	<ul style="list-style-type: none">• Product Update on page 258

Network

- [SNMP](#)
- [HTTP](#)
- [DNS](#)


Network settings impact how HP Web Jetadmin 10.0 behaves on your network and how it performs for functions like discovery.

SNMP

- [Steps for Setting SNMP Configuration Options](#)

HP Web Jetadmin 10.0 uses the SNMP protocol to gather information from the devices. You can configure the SNMP timeout value and SNMP retries. On some networks, SNMP timeouts and retries should be increased due to low bandwidth or slow links. Also, some networks might experience improved discovery performance by decreasing SNMP timeouts and retries.

Your network topology might cause slow response times; in this case you would want the timeout configured for a longer time. Or, you might want to set the number of retries to a higher number to protect against packet loss.

 **NOTE:** Increasing SNMP values can increase the amount of time it takes to perform a discovery.

Steps for Setting SNMP Configuration Options

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Network** and then select **SNMP**.
2. Configure the desired settings:
 - **SNMPv1 timeout value:** specify how long HP Web Jetadmin 10.0 should wait for a reply from a network query from SNMPv1 devices (the default is 500ms).
 - **SNMPv3 timeout value:** specify how long HP Web Jetadmin 10.0 should wait for a reply from a network query from SNMPv3 devices (the default is 1,000ms).
 - **SNMP retries:** specify how many times HP Web Jetadmin 10.0 should retry an SNMP communication with devices before giving up once a timeout has occurred (the default is 3 total attempts).
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

HTTP

- [Steps for Configuring HTTP Configuration Options](#)

HTTP options enable you to specify a web proxy server and port number from which a client can access the proxy server. A security barrier is enabled on your internal network while accessing external websites that are required by HP Web Jetadmin 10.0.

Steps for Configuring HTTP Configuration Options

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Network** and then select **HTTP**.
2. Configure the desired settings:
 - **HTTP proxy user settings:** If your environment includes a proxy server, enter the **HTTP proxy address settings**. Identify the address and the port number HP Web Jetadmin 10.0 should use to communicate through the proxy server.
 - **Use HTTP proxy credentials:** check the box to use HTTP proxy user settings and then specify the user and password.
 - **Allow download:** check this box to allow downloads.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

DNS

- [Steps for Configuring DNS Options](#)

By default, HP Web Jetadmin 10.0 enables DNS lookups. You can turn them off here if desired.

Steps for Configuring DNS Options

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Network** and then select **DNS**.
2. Configure the desired settings:
 - **Enable DNS lookups:** check this box to enable HP Web Jetadmin 10.0 to perform DNS lookups.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Email

- [SMTP](#)
- [Email Addresses Management](#)
- [Custom Email Templates](#)

Options in Email provide a way to configure settings to enable email communications from HP Web Jetadmin 10.0 and also to manage email addresses.

SMTP

- [Steps for Configuring SMTP Options for Email](#)

SMTP options sets the SMTP gateway for relaying messages to email user accounts. These types of messages are used to convey Alerts event details to recipients, reports and reports data export details to recipients, and device list export details to recipients.

Steps for Configuring SMTP Options for Email

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Email** and then select **SMTP**. (You might have to expand **Email** twice to see the **SMTP** option.)
2. Configure the desired settings:
 - **SMTP server settings**: enter the IP address or hostname and the port number for the mail server gateway.
 - **SMTP user settings**: enter the user name and password; these are optional user credentials when SMTP authentication exists.
 - **Default 'from' address**: enter the email address. This address exists in each email message sent by the application (the default is `wja@hp.com`). Enter the username and password; these are optional user credentials when SMTP authentication exists.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Email Addresses Management

- [Steps for Managing Email Addresses](#)

This option allows email addresses to be added and maintained for use in [Reports on page 173](#), [Alerts on page 148](#), and [Device Lists on page 67](#).

Steps for Managing Email Addresses

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Email** and then select **Email Addresses**. (You might have to expand **Email** twice to see the **Email Addresses** option.)
2. Configure the desired settings:
 - **New**: type the new email address and select the preferred language. Then click **OK**.
 - **Remove**: select an existing email address and click **Remove**. You will be asked to confirm the action.
 - **Edit**: select an existing email address and click **Edit**. Make changes to the email address and click **OK**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Custom Email Templates

- [Steps for Configuring Custom Email Templates](#)

This option allows custom email templates to be created for use in [Reports on page 173](#), [Alerts on page 148](#), and [Device Lists on page 67](#).

Steps for Configuring Custom Email Templates

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Email** and then select **Custom Email Templates**.
2. To create a new template, click **Create** and complete the displayed pages.
3. To delete or edit an existing template, select the template and then select the action to perform:
 - **Delete**: delete an existing template.
 - **Edit**: make changes to an existing template.
4. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Time Preference

- [Steps for Configuring Time Preference](#)

This option allows you to configure whether the HP Web Jetadmin 10.0 server uses a 24 hour or 12 hour clock when creating email messages and reports. Client-side time display is controlled by the operating system setting on the client running HP Web Jetadmin 10.0.

Steps for Configuring Time Preference

1. On the top menu bar, access **Tools > Options > Application Management** and select **Time Preference**.
2. Select 12 hours or 24 hours.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

IP Ranges

You can search for devices located within a range of IP addresses (multiple IP ranges can be designated).

IP Ranges - General (Large Subnets)

- [Steps for Configuring Large IP Ranges](#)

You can choose to specify a large subnet range using the larger subnet address feature (**Tools > Options > Application Management > IP Ranges > General**). Large networks are considered any network bigger than a Class B network, which has up to 65,000 nodes.

Steps for Configuring Large IP Ranges

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **IP Ranges** and then select **General**.
2. To search for subnets larger than Class B (65,000 nodes), click **Allow large subnet discoveries**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

To define the IP ranges, see [IP Ranges on page 248](#).

IP Ranges

- [Steps for Configuring IP Ranges](#)

HP Web Jetadmin 10.0 can search for devices located within a range of IP addresses (multiple IP ranges can be designated) ([IP Range Discovery on page 107](#)).

Steps for Configuring IP Ranges

On the top menu bar, access **Tools > Options > Application Management**. Expand **IP Ranges** and then select **IP Ranges**.

1. Choose the action to take:
 - Select an IP range.
 - **Add**: add an IP range. Type the range in **First address** and **Last address**; then type a description (if desired) in **Description**. Click **Add**.
Calculate range: to calculate a range, click **Calculate range**. The **Calculate IP Range** page is displayed:
 - **Subnet from my computer**: automatically use IP address ranges currently found on the local subnet of your computer. You can add a description in **Description** if desired.
 - **Subnet from WJA server**: automatically use IP address ranges currently found on the subnet of the HP Web Jetadmin 10.0 server. You can add a description in **Description** if desired.
 - **Subnet from network address**: type a known IP address and subnet mask. You can add a description in **Description** if desired.
 - **Edit**: make changes to IP ranges. Follow the steps in the bullet above for adding an IP range.
 - **Delete**: remove addresses from the list by highlighting the address and clicking **Delete**.
 - **Import**: If desired, import a range list by clicking **Import** and then browse for the range list.
 - **Export**: if desired, export a range list by clicking **Export** and then browse for location you want to store the range list.
2. Click **OK**. The **Select IP Ranges** page is displayed.

Domain Browsing

- [Steps for Configuring Domain Browsing](#)

This option allows you to enter domain credentials when needed.

Steps for Configuring Domain Browsing

1. On the top menu bar, access **Tools > Options > Application Management** and select **Domain Browsing**.
2. Configure the desired settings:
 - **Add Domain:** add a domain. The **Add Domain** dialog is displayed. Type the domain or browse for it. If you browse, you might be asked for credentials.
 - **Set Credential:** enter the username and password. In the **Stored** column, set credentials for any domain with **Yes**.
 - **Remove:** delete a domain; select a domain listed and click **Remove**.
 - **Test:** test the domain. Credentials might be required.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Support

- [Steps for Configuring Support](#)

You can choose to send information to HP about the use of HP Web Jetadmin.

If you choose to allow HP Web Jetadmin to contact <http://www.hp.com>, each time the application communicates with HP it sends 4 pieces of information:

- an identification number unique to the HP Web Jetadmin installation.
- the operating system of the client or host.
- the version of HP Web Jetadmin.
- the current configured language of HP Web Jetadmin.

This information is sent on service start-up and whenever a new client connects to the service.

Steps for Configuring Support

1. On the top menu bar, access **Tools > Options > Application Management**.
Select **Support**.
2. Configure the desired settings:
 - **Provide Web Jetadmin installation information to Hewlett-Packard:** check this box to send information about the HP Web Jetadmin installation back to HP.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Application Log

- [Steps for Configuring Application Log Options](#)

This option lets you set the time for application log data to be saved.

Steps for Configuring Application Log Options

1. On the top menu bar, access **Tools > Options > Application Management**.
Select **Application Log**.
2. Configure the desired settings:
 - **Save log entries for:** select the length of time to save log entries from the drop-down box (the default is 30 days).
 - **Clear Log:** clear the **Application Log**. You must then confirm or cancel your request.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Server Certificates (or SSL)

- [SSL \(Secure Sockets Layer\)](#)
- [Important Points to Remember When Implementing SSL](#)

HP Web Jetadmin 10.0's HTTP service runs without certificates until you add one. After a certificate is added, the HTTP server is running in HTTPS mode which means that SSL (secure sockets layer) communication is enforced. This is a mode in which the user and the HTTP server are authenticated to one another and in which the traffic between the two is encrypted. This adds an extra layer of security to the Smart Client download and other HTTP transactions ([Smart Client Deployment on page 16](#)).

HP Web Jetadmin 10.0 does not self generate certificates as in previous versions of HP Web Jetadmin. Now you have to get one from a CA (certificate authority). You can use the Signing Request to do this. After you generate a signing request, send it to your CA, and then when the CA sends you back your certificate, use the Install Certificate to enable HTTPS. CAs can exist inside or outside of your organization. Many companies have their own CAs.

SSL (Secure Sockets Layer)

HP Web Jetadmin administrators can enable the SSL (secure sockets layer) which forces browser communication to the more secure HTTPS protocol. SSL is enabled by the administrator from the console or host running the application. A notice will occur when users try to enable this feature from a remote client.

In some environments, SSL is required anytime an HTTP interface or service is being used for communication. In these cases, SSL can be enabled and enforced by HP Web Jetadmin 10.0. SSL provides a good deal of assurance in both authentication and encryption aspects of HTTP communication. That is, the user requesting access to the HP Web Jetadmin 10.0 Smart Client download can be reasonably assured that the system hosting HP Web Jetadmin 10.0 is authentic and the communication between the two systems is encrypted so that it cannot be easily read by eavesdroppers ([Smart Client Deployment on page 16](#)).

Certificates are used by the SSL protocol in order to accommodate both authentication and encryption. HP Web Jetadmin 10.0 is capable of generating a signing request that can be used by a CA (certificate

authority) for the purpose of generating a certificate. Using **Tools > Options > Application Management > Server Certificates** area, the user can generate a **Signing Request**.


Once the request has been fulfilled by the CA, the certificate is ready to be installed on HP Web Jetadmin 10.0. Remember, it is not possible to use **Tools > Options > Application Management > Server Certificates** without being at the application console. **Install Certificate** is used to browse and upload the certificate file.

Once the certificate is installed, the HTTP service enforces SSL. Any browser contact with HP Web Jetadmin 10.0 should indicate HTTPS on the URL when a certificate is installed. Using **Remove** uninstalls the certificate and SSL is no longer enforced.

Important Points to Remember When Implementing SSL

Client communication with SSL enforced requires one or more of the following considerations.

- When SSL has been implemented on HP Web Jetadmin 10.0 with an internal CA (certificate authority), the CA's authorizing certificate is required to be installed in the client browser. If this certificate is not installed in the client browser the HP Web Jetadmin 10.0 Smart Client page will fail to load up in SSL mode.
- Proxy servers tend to use the standard SSL port which is 443. If HP Web Jetadmin 10.0's Smart Client page is being called through a proxy server, a redirect error may occur. This is due to the URL being redirected to 443 rather than 8443 which is the port used by HP Web Jetadmin 10.0's SSL. The workaround for this is to place the HP Web Jetadmin 10.0 FQDN into the browsers exceptions list under **Tools > Internet Options > Connections > LAN Settings > Advanced**. This causes the browser to pull http and https content from the HP Web Jetadmin 10.0 server directly.

 **NOTE:** HP Web Jetadmin 10.0 http and https port numbers can be customized to something other than 8000 and 8443.

- When you have implemented SSL on HP Web Jetadmin 10.0, a redirect occurs when the browser URL uses port 8000. Here is an example:

The known URL prior to SSL implementation is `http://servername.domain.xxx:8000`.

After SSL implementation, HP Web Jetadmin 10.0 will redirect this to a new URL: `https://servername.domain.xxx:8443`.

The URLs shown here use FQDN (fully qualified domain name). In most cases the certificate issued and installed in the HP Web Jetadmin 10.0 SSL implementation will contain an FQDN for the host on which HP Web Jetadmin 10.0 is installed. If a non FQDN is used in the browser, certificate failure will occur. As a general rule, form the HP Web Jetadmin 10.0 URL with FQDN when HP Web Jetadmin 10.0 is implemented with SSL.

To configure Server Certifications, access **Tools > Options > Application Management > Server Certificates**.

User Management

- [Steps for Configuring User Management](#)

You can restore default user roles if desired ([Roles on page 263](#)).

Steps for Configuring User Management

1. On the top menu bar, access **Tools > Options > Application Management**.
Select **User Management**.
2. To restore all values for the role **Default Device Admin Role Template**, select **Restore**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

Credentials

- [All About Credentials](#)
- [Global Credentials](#)
- [SNMP Get Community Name](#)
- [SNMP Set Community Name](#)
- [SNMPv3 Credentials](#)
- [EWS Password](#)
- [File System Password](#)

All About Credentials

HP Web Jetadmin 10.0 can configure many devices at once. This saves device administrators from having to contact every device separately for the purpose of assigning configuration items like passwords and other credentials. In many environments, password policies exist which make the device administrator have to reconfigure security credentials periodically. The power of HP Web Jetadmin 10.0 fleet management lends itself to configuration of many devices at once.

The Credentials Store

The concept of a Credential Store is not new to HP Web Jetadmin. Older versions of HP Web Jetadmin stored credentials as they were used and configured onto the devices. This feature keeps HP Web Jetadmin 10.0 users from having to provide a credential every time a device is configured that requires one.

The Credentials Store is a portion of the HP Web Jetadmin 10.0 database that securely encrypts and stores device credentials when ever a correct credential value is authenticated at the device. These values are stored on a per credential and per device basis.

Here is a list of HP device credentials used by HP Web Jetadmin 10.0:

- **EWS Password:** blocks unauthorized access to the device-embedded http interface. It is also synchronized with the HP Jetdirect telnet password.
- **File System Password:** protects the printer disk and other storage facilities from unauthorized access.
- **SNMPv3 Credentials:** consists of user name, passphrase1, and passphrase2 which are all used when SNMPv3 is enabled. This version of SNMP (Simple Network Management Protocol) secures and authenticates communication between management applications like HP Web Jetadmin 10.0 and the device. This protocol is used when strong security is required.

- **SNMP Set Community Name:** a grouping mechanism for SNMPv1/v2 that has been adopted as a security mechanism by many customers. Device configuration is not possible without knowledge of the Set name value. The Set name value traverses the network in clear text and can be “sniffed” by eavesdroppers.
- **SNMP Get Community Name:** sometimes used to prevent device discovery from other HP Web Jetadmin 10.0 installations. Devices only respond to Get packets that have the correct value. The Get name value traverses the network in clear text and can be “sniffed” by eavesdroppers.

Two actions cause the value of any credential to be stored:

- **configuration:** the credential becomes stored once it has been configured onto the device.
- **use:** the credential value, when used successfully, becomes stored.

Stored credentials are reused by HP Web Jetadmin 10.0 any time the requirement for them is encountered. A user configuring a device that has had a credential stored is not required to re-enter the credential into HP Web Jetadmin 10.0. The application uses the credential in the background. In fact, the user is not even required to know the credential since HP Web Jetadmin 10.0 is using stored values.

Credentials Delegation

With credentials stored in the Credentials Store, HP Web Jetadmin 10.0 can apply them transparently any time the need arises. While configuring devices, users do not have to remember or even know the credential to perform the configuration. Users just need access to HP Web Jetadmin 10.0 and device configuration features. This is called credentials delegation; some characteristics of credentials delegation are:

- Only one or a few device administrators know the device credentials.
- Some HP Web Jetadmin 10.0 users are allowed configuration access to the devices via Roles and User Security.
- Users can be added or removed from this delegation via Roles and User Security ([User Security on page 260](#)).
- Other HP Web Jetadmin 10.0 users can be restricted from device configuration.
- Knowledge about device passwords is required before you can change any password value.

Credentials delegation is used to allow configuration of devices without having to share the credential “secrets” across a large distribution. Staffs can control and configure devices while administrators control and configure passwords. Any user with access to devices and configuration features has delegated access to the **Credential Store**.

Credentials Needed

When HP Web Jetadmin 10.0, during an action such as device configuration, encounters a device with a credential such as SNMP Set Community Name, it follows a specific sequence. Here is an over simplification of how HP Web Jetadmin 10.0 attempts to resolve a credential:

- HP Web Jetadmin 10.0 checks the Credential Store for a credential.
- If it exists, HP Web Jetadmin 10.0 attempts the configuration using the credential value.
If it does not exist, HP Web Jetadmin 10.0 checks Global Credentials.
- If the configuration is successful, the credential check is resolved and complete.

If it fails, HP Web Jetadmin 10.0 checks Global Credentials.

During a user-attended configuration session, HP Web Jetadmin 10.0 prompts for credentials. In the case where the user did not supply the credential or the session was not live, the device is flagged as **Credentials Required** and listed in the **Credentials Required** column that can be enabled in any device list ([Columns for Device Lists on page 68](#)). You can right-click the device and add the needed credential to the system in order to resolve this state.

What happened to the HP Jetdirect Device Password?

HP Web Jetadmin 10.0 enables device security by providing management over appropriate, device-based security settings. The HP Jetdirect password that was used by HP Web Jetadmin in the past is a software security solution and not a device-based security solution. That is, the password itself had to be recognized and authenticated by earlier revisions of HP Web Jetadmin software. Other applications did not recognize this password and did not force users to prove knowledge of the password.

As security features have become more sophisticated and device based security has improved, HP Web Jetadmin 10.0 developers have opted out of using the HP Jetdirect device password as a protective mechanism for device authentication. There are two recommendations for providing device security in place of the HP Jetdirect device password:

- **SNMP Set Community Name:** devices will not allow an SNMP Set from any application without the Set Community Name correctly embedded in the SNMP packet. If the Set name in the packet is “public” and the Set name on the device is “George”, the device won’t accept or acknowledge the packet. Set Community Names traverse the network in clear text and can therefore be “sniffed” or viewed by eavesdroppers. In most environments, security provided by Set Community Names may provide adequate security.
- **SNMPv3:** devices configured via SNMPv3 offer significant security benefits. First, SNMPv3 configures a user account and two pass-phrases onto the device which requires the user (or application) to authenticate. This blocks unauthorized management of devices and the account/pass-phrase details do not traverse the network in clear text which makes it difficult for eavesdroppers to learn the “secrets”. Second, the communication between the management application and the device is encrypted using the SNMP credentials so information about the device is protected. SNMPv3 is recommended in security sensitive environments.

Restricting Configuration by Device Group

Within the model of device credential delegation, restriction to specific device configuration can be further defined in **User Security** using the Restriction type **Groups** ([Roles and Restrictions on page 263](#)).

Consider the following layers of security:

- Access to device credential values: Credential Store/selected device administrators ([The Credentials Store on page 252](#)).
- Access to HP Web Jetadmin 10.0: **Users** and **Roles** ([User Security on page 260](#)).
- Access to device credentials store: Roles/Feature Permissions ([Roles on page 263](#)).
- Access to specific devices: Roles/Device Group Membership/Device Feature Permissions ([Roles on page 263](#)).

Each layer uses HP Web Jetadmin 10.0 security to protect against unauthorized access:

1. First, device passwords are protected by one or a few select administrators.
2. Second, **Users** and **Roles** allow only authorized users to log onto HP Web Jetadmin 10.0.
3. Third, **Roles** and **Feature Permissions** allow only authorized users configuration access to all devices.
4. Finally, **Roles**, **Device Group Membership**, and **Device Feature Permissions** allow authorized users to specific devices based on device group membership and specified device configuration features.

All devices and configuration options outside of the **Group Restriction Type** are secured from unauthorized access.

Global Credentials

- [Steps for Configuring Global Credentials](#)

Global credentials are credentials that HP Web Jetadmin 10.0 uses for any device; they are an easy way for you to enter common credentials up front. Global credentials can be set for SNMPv1 Get Community Name, SNMPv1 Set Community Name, SNMPv3 Credentials, and EWS Password. If these credentials have been set, and device operations (for example, device configuration) require credentials in order to succeed, the global credential will be tried. If the operation succeeds for the devices with the global credential, that global credential will be stored with the device. It will still remain a global credential for other devices, but now that specific device has a working credential stored with it.

For example: User “A” enters global credentials for SNMPv1 Get Community Name as “mine” and “yours”. User “B” tries to interact with device “X”, which has a community name already set. HP Web Jetadmin 10.0 first tries global credentials “yours” and “mine”; “yours” works. “Yours” will then be stored as a regular credential for device “X”. The next time any user tries to interact with device “X”, the regular credential for that device (which is now “yours”) will be used by HP Web Jetadmin 10.0 and any global credentials will be ignored. However, if the regular credential “yours” becomes out of date, this process starts all over again.

Steps for Configuring Global Credentials

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Credentials** and then select **Global Credentials**.
2. Configure the desired settings:
 - **Clear global credentials:** clears every temporary, global, device-specific credential.
 - **Clear all stored credentials:** clears every temporary, global, device-specific credential.You must then confirm or cancel your request.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

SNMP Get Community Name

- [Steps for Configuring SNMP Get Community Name](#)

The SNMP Get Community Name object is configurable from within security settings. The problem with Get names is they can cause a device to disappear. For example:

User A is running an instance of HP Web Jetadmin 10.0 known as Web Jetadmin A. This user is managing a set of devices that are also being managed by User B. User B is running another copy of HP Web Jetadmin 10.0 known as Web Jetadmin B. This B copy of HP Web Jetadmin 10.0 is being used at the help desk.

User B decides to change the default Get Community Name on the set of devices from `public` to `private`. He does this using HP Web Jetadmin 10.0. He does this because he has heard that it provides a measure of security. User A opens HP Web Jetadmin 10.0. She notices that all the devices have become non-responsive and show only a `device communication error`. **Quick Device Discovery** does not help. When User A checks the printer itself, she finds it to be powered on. She can also reach the printer web server interface via a browser.

⚠ WARNING! Changing the Get Community Name can cause devices to become unresponsive to management applications like HP Web Jetadmin 10.0. The SNMP protocol will no longer respond to `public` queries and other management applications on the network will not be able to communicate with these devices.

Steps for Configuring SNMP Get Community Name

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Credentials** and then select **SNMPv1 Get Community Name**.
2. To add a community name, click **Add** and type the community name. Enter an associated (or easier) name in **Remember credential as** and click **OK**.
To remove a Get Community Name, click **Remove**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

SNMP Set Community Name

- [Steps for Configuring SNMP Set Community Name](#)

The SNMP Set Community Name is a grouping mechanism for SNMPv1/v2 that has been adopted as a security mechanism by many customers. Device configuration is not possible without knowledge of the Set name value. The Set name value traverses the network in clear text and can be easily detected by eavesdroppers.

Steps for Configuring SNMP Set Community Name

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Credentials** and then select **SNMP Set Community Name**.
2. To add a community name, click **Add** and type the community name. Enter an associated (or easier) name in **Remember credential as** and click **OK**.
To remove a Set Community Name, click **Remove**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

SNMPv3 Credentials

- [SNMPv3 Enabled Devices](#)
- [Steps for Configuring SNMPv3 Credentials](#)

SNMPv3 Credentials consist of user name, passphrase1 and passphrase2 which are used when SNMPv3 is enabled. This version of the Simple Network Management Protocol (SNMP) secures and authenticates communication between management applications like HP Web Jetadmin 10.0 and the device. This protocol is used when strong security is a requirement.

SNMPv3 Enabled Devices

Devices that have SNMPv3 fully enabled can be discovered by HP Web Jetadmin 10.0. You must configure HP Web Jetadmin 10.0 to discover these devices through **Tools > Options > Device Management > Discovery > General**; check the box for **Discover SNMPv3 devices** ([General on page 120](#)). HP Web Jetadmin 10.0 will not discover SNMPv3 devices without this option enabled. However, HP Web Jetadmin 10.0 has this option disabled by default because enabling this option can cause discoveries to take longer to complete.

HP Web Jetadmin requires SNMPv3 credentials for these devices in order for them to be discovered. There are two ways HP Web Jetadmin can become 'aware' of device SNMPv3 credentials:

- HP Web Jetadmin 10.0 is used to enable SNMPv3 and also configure the SNMPv3 credentials onto the devices. In this case, HP Web Jetadmin 10.0 stores the credentials into its credential store and uses them whenever device communication is required. HP Web Jetadmin 10.0 also marks these devices as SNMPv3 enabled and remembers to use the credentials and SNMPv3 whenever communication is required.
- HP Web Jetadmin 10.0 has had SNMPv3 credentials added to the Global credentials store and these credentials match those credential values on the devices. In this case, HP Web Jetadmin 10.0 is being made aware of credential values that work for devices that are SNMPv3 enabled. When one of these devices is encountered, HP Web Jetadmin 10.0 will try the credential values that are configured in **Tools > Options > Application Management > Credentials > SNMPv3 Credentials** ([SNMPv3 Credentials on page 257](#)). If the credential values work and HP Web Jetadmin 10.0 is able to communicate with the devices, the credential values will be stored individually for each device.

Devices that were discovered through SNMPv1 and have had SNMPv3 enabled through some other means such as Embedded Web Server or another instance of HP Web Jetadmin 10.0 will indicate a communication failure when HP Web Jetadmin 10.0 attempts to re-establish communication. The refresh command can be used on these devices to cause HP Web Jetadmin 10.0 to reset them to SNMPv3 enabled devices.

Steps for Configuring SNMPv3 Credentials

1. On the top menu bar, access **Tools > Options > Application Management > Credentials > SNMPv3 Credentials**.
2. To add an SNMPv3 credential, click **Add** and type the username, the authenticated password (must be at least 8 characters), and the private password (must be at least 8 characters). Then enter an associated (or easier) name in **Remember credential as** and click **OK**.

To remove a an SNMPv3 credential, click **Remove**.

3. To save the SNMPv3 credential, click **OK**.
4. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

EWS Password

- [Steps for Configuring the EWS Password](#)

The EWS password blocks unauthorized access to the device-embedded http interface. Also, it is synchronized with the HP Jetdirect telnet password.

Steps for Configuring the EWS Password

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Credentials** and then select **EWS Password**.
2. To add an EWS password, click **Add** and type the username and password. Then enter an associated (or easier) name in **Remember credential as** and click **OK**.
To remove an EWS password, click **Remove**.
3. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

File System Password

- [Steps for Configuring the File System Password](#)

The File system password protects the printer disk and other storage facilities from unauthorized access.

Steps for Configuring the File System Password

1. On the top menu bar, access **Tools > Options > Application Management**.
Expand **Credentials** and then select **File System**.
2. To add a file system password, **Add** and type the password. Then enter an associated (or easier) name in **Remember password as** and click **OK**.
To remove a file system password, click **Remove**.
3. Click **OK**.

Product Update

- [Steps for Configuring Product Update](#)

You can configure the **Product Update** to have HP Web Jetadmin 10.0 check the product update index on <http://www.hp.com> on a scheduled basis. This way, you can go to **Product Update** and see a current listing without having to ask for the list to be updated from <http://www.hp.com> ([Product Update on page 270](#)).

Steps for Configuring Product Update

1. On the top menu bar, access **Tools > Options > Application Management** and select **Product Update**.
2. Select **Enable background checking**.
3. To set or change the schedule click **Change** and then select the time you want HP Web Jetadmin 10.0 to check <http://www.hp.com> for product updates. When new updates are detected, they will be listed on the **Product Update** page ([Product Update on page 270](#)).
4. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

User Security

- [All About User Security](#)
- [User Security Task Modules](#)
- [Roles](#)
- [Users](#)
- [User Security Diagnostics](#)

All About User Security

- [Initial User Security](#)
- [The HP Web Jetadmin 10.0 Administrator Role](#)
- [Domains and Workgroups](#)

Within the **Application Management** view, HP Web Jetadmin 10.0 administrators can assign local or domain users to user-roles. A role is a set of permissions to HP Web Jetadmin 10.0 features. Once a user is assigned to a role, that user will have access to the permissions designated by the role ([Roles on page 263](#)).

HP Web Jetadmin 10.0's security features include:

- Advanced security technologies of the MS .NET platform which provides authentication and encryption of client/server communications.
- Windows Active Directory integrated role-based user authentication secures the application against unauthorized usage.
- Optional SSL (Secure Sockets Layer) communication between client browser and application server ensure data security for application file download.
- Optional Simple Network Management Protocol v3 (SNMPv3) used on devices provides authentication and encryption.
- IPsec plug-in; using HP Web Jetadmin 10.0, you can configure an IPsec policy and then apply it to one or more selected HP Jetdirect devices.
- Running under a low-privilege service account reducing risk of privilege escalation attacks.
- Secure online update features allow a safe easy way to get online patches updates and new features.

You can manage access to HP Web Jetadmin 10.0 in **User Security**. You can control who has access and what they have access to. In **User Security**, you can manage:

- **role templates**: two exist to allow you to create one set of access levels and then apply that template when adding users. You can create, view, edit, and delete role templates.
- **users**: allows you to assign users to a role template. You can create, view, edit, and delete users.

The **Application Management** view provides many features that help you configure and manage devices on your network. The **Overview** page can provide you access to all of these features through the various task modules. (See [Application Management Task Modules on page 241](#).)

Initial User Security

HP Web Jetadmin 10.0 is a multi-user application that can be accessed from remote client-workstations. Users and user-permissions can be administered to control access to the application and specific features within the application. An example of this would be a helpdesk scenario where many users may not require or should not have access to features like, discovery, user permissions or, global application settings.

HP Web Jetadmin 10.0 uses Windows domain identities to authenticate users and grant access to the application or to specified features. HP Web Jetadmin 10.0 provides single-sign-on which means the user is authenticated by virtue of being logged into their client host. They do not have to provide their credentials again when logging into HP Web Jetadmin 10.0.

The HP Web Jetadmin 10.0 Administrator Role

The HP Web Jetadmin 10.0 administrator has full rights to all application settings and features. The person installing HP Web Jetadmin 10.0 software must have local administrative privileges on the install-host and therefore will have initial administrative access to the software. Any identity that is a member of the local administrators group on the local host also has administrative access to the software. The identity must have local administrative privileges on the install-host and therefore will have initial administrative access to the software.

Domains and Workgroups

Normally, HP Web Jetadmin 10.0 will be hosted by a system that is joined to a Windows user-domain. The computer will exist in the list of domain member computers. Also, the user installing HP Web Jetadmin 10.0 must be a member of the local Administrators. This user is also a member of the Windows domain. In some cases, the computer or the user may not be joined to the domain. In these cases, local users can be created and provided access to the application.

In the following example, any user linked to the local administrator group via an account or group has administrative access to the application. In fact, HP Web Jetadmin 10.0 will operate on a Windows workgroup where neither computers or users are controlled by a domain:

- **Local Administrators Group Membership:** Domain user account, Domain user group, Local user account, Local user group.

Workgroups are where either or both computers and users are not domain members. In these cases, HP Web Jetadmin 10.0 client access is possible. Remote client access can be established if the following is true.


In the table below the local user account “Joe” exists on both hosts and the password for that account is the same. On the HP Web Jetadmin 10.0 host, “Joe” is a member of the local administrators group which gives “Joe” rights to all HP Web Jetadmin 10.0 features and settings. “Joe” is an application administrator.

Table 6-5 User Account Example

Item	Web Jetadmin host	Client host
Local user account	“Joe”	“Joe”
Password	“XYZ”	“XYZ”
Local Administrator Membership	Yes	No

In some cases, the workgroups systems hosting both HP Web Jetadmin 10.0 server and client will require some special security settings. Local Security Policy may have to be adjusted on both the HP Web Jetadmin 10.0 and client hosts:

1. Access the Control Panel on the HP Web Jetadmin 10.0 host computer and go to **Administrative Tools > Local Security Policy MMC**.
2. Go to **Local Policies-Security Options**.
3. Locate the item **Network access: Sharing and security model for local accounts**.
4. Change the setting to **Classic - local users authenticate as themselves**.

 **NOTE:** See the Microsoft documentation to learn more about security policy settings.

User Security Task Modules

- [User Security - Current Tasks and User Security - Common Tasks Task Modules](#)
- [User Security - Roles Task Module](#)
- [User Security - Users Task Module](#)
- [User Security - Active Clients Task Module](#)

The following task modules can be displayed or hidden in the **User Security** section of **Application Management** and also in the corresponding functional area within HP Web Jetadmin 10.0 by right-clicking within the page and selecting the specific task module.


 **NOTE:** To display the **Task Module docking area**, click **View > Task Module docking area**. This is a toggle selection; if you select it again it closes the **Task Module docking area**.

Table 6-6 User Security Task Modules

[User Security on page 260](#)

- [User Security - Current Tasks and User Security - Common Tasks Task Modules on page 262](#)
 - [User Security - Roles Task Module on page 263](#)
 - [User Security - Users Task Module on page 263](#)
 - [User Security - Active Clients Task Module on page 263](#)
-

User Security - Current Tasks and User Security - Common Tasks Task Modules

The **User Security - Current Tasks** task module can be displayed on the **User Security** page and includes the following tasks:

- [Create a Role on page 264](#)
- [Assign Roles to Users on page 267](#)

The **User Security - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **User Security - Common Tasks**.

User Security - Roles Task Module

The **User Security - Roles** task module can be displayed on the **User Security** page and includes the following tasks:

- **New** ([Create a Role on page 264](#))
- **Edit** ([Edit a Role on page 264](#))
- **Delete** ([Delete a Role on page 265](#))
- **View** ([Role Templates on page 265](#))

User Security - Users Task Module

The **User Security - Users** task module can be displayed on the **User Security** page and includes the following tasks:

- **Assign Role** ([Assign Roles to Users on page 267](#))
- **Edit** ([Edit Users on page 268](#))
- **Remove Role** ([Remove Roles on page 268](#))
- **Diagnose** ([User Security Diagnostics on page 269](#))

User Security - Active Clients Task Module

The **User Security - Active Clients** task module can be displayed on the **User Security** page.

Roles

- [Roles and Restrictions](#)
- [Create a Role](#)
- [Edit a Role](#)
- [Delete a Role](#)
- [Role Templates](#)

A role is a set of permissions to HP Web Jetadmin 10.0 features. Once a user is assigned to a role, that user will have access to the permissions designated by the role.

Roles and Restrictions

Roles can be created with the **Device Group** Restriction type. These roles have permissions settings that apply only to device management settings. After a role has been established with the **Device Group** Restriction type, it can be assigned to a user and a specific device group. One or more of these can exist to provide different access to users. When you are creating a role you can specify a restriction type (None or Device Group) ([Create a Role on page 264](#)).

After creating a role with the **Device Group** Restriction Type, users can be assigned along with a device group assignment. When a role is selected that has the **Device Group** Restriction Type, one or more groups can be added to the **Restrict Permissions by Groups** list. This will apply device management permissions to the user based on device group membership.


When users have roles assigned that allow device management permissions on a group or groups, they have access to device management features for devices that are members of the associated groups. They don't have access to device management features for devices that are not members of these groups.

HP Web Jetadmin 10.0 **Users** and **Roles** features are designed to be least-restrictive in nature. This means that if a user is assigned to two roles and one allows a feature permission and the other does not allow the same feature permission, the user will have access to the feature. **Diagnostics** is a great way to determine a user's access to features ([User Security Diagnostics on page 269](#)).

Create a Role

- [Steps for Creating a Role](#)

If you have permission to manage users, you can create a role using the **Create Role** wizard. You can also view, edit, and delete roles in the system.

 **NOTE:** Even though you can create, edit, and view role templates, you cannot edit or delete the **HP Web Jetadmin Administrator (Read-Only)** role template.

Steps for Creating a Role

1. In the left navigation pane, click on **User Security**.


Click **Create role**. The **Create Role** wizard is started with the **Specify permissions settings** page displayed.

2. Select the restrictions for the role you are creating:

- **None:** provides permission choices that are global in nature and apply to all parts of the application.
- **Groups:** provides permission choices that are specific to Device Groups ([Device Groups on page 85](#)).

3. Select or deselect each permission for this role. Click **Next**; the **Specify role name** page is displayed.

4. Type the name for this role and click **Next**; the **Confirm** page is displayed.

 **NOTE:** Each role template must have a unique name.

5. Review the selections you have made. If you need to modify any, click **Back**. If they are correct, click **Next**; the **Results** page is displayed.

6. The **Role Template** is complete.

To assign this template to users, check **Assign to users now** ([Assign Roles to Users on page 267](#)).

Edit a Role


- [Steps for Editing a Role](#)

After a role has been created, you can edit it if necessary to change its permissions. The only role you cannot edit is the Administrator role.

 **NOTE:** You cannot change the type of restriction for a role after the role has been created.

Steps for Editing a Role

1. In the left navigation pane, click on **User Security**.
In the **User Security - Roles** task module, select the role to change and click **Edit**. The **Edit Role** wizard is started with the **Specify permissions settings** page displayed.
2. Select or deselect each permission for this role by checking or unchecking each box. Click **Next**; the **Specify role name** page is displayed.
3. Type the name for this role and click **Next**; the **Confirm** page is displayed.

 **NOTE:** Each role template must have a unique name.

4. Review the selections you have made. If you need to modify any, click **Back**. If they are correct, click **Next**; the **Results** page is displayed.
5. The **Role Template** is complete.

To assign this template to users, check **Assign to users now** ([Assign Roles to Users on page 267](#)).

Delete a Role

- [Steps for Deleting a Role](#)

You can delete any role in HP Web Jetadmin 10.0 except for the Administrator role.

Steps for Deleting a Role

1. In the left navigation pane, click on **User Security**.
In the **User Security - Roles** task module, select the role to change and click **Delete**. The **Delete Role** wizard is started with the **Confirm** page displayed.
2. If this is the correct role to delete, click **Next**. The **Results** page is displayed.
3. Click **Done**. The **User Security** page is displayed


Role Templates

- [Steps for Viewing a Role](#)

Two role templates come with HP Web Jetadmin 10.0:

- **Default Device Admin Role:** has limited device management permissions and no application management permissions. You can open this template, rename it, and then change permissions as necessary.
- **HP Web Jetadmin Administrator Role:** a read-only role. Users assigned to this role have full rights to HP Web Jetadmin 10.0. Both users and user-groups can be added to this role. User groups that are added can be either local or domain groups.

For information about assigning a role template or a role to users, see [Assign Roles to Users on page 267](#).

 **NOTE:** Even though you can create, edit, and view role templates, you cannot edit or delete the **HP Web Jetadmin Administrator (Read-Only)** role template.

Steps for Viewing a Role

1. In the left navigation pane, click on **User Security**.

In the **User Security - Roles** task module, select the role to change and click **View**. The role is displayed showing the type of restriction and any permissions set.

2. From this page, you can:
 - [Edit a Role on page 264](#) (if it is not the Administrator role).
 - [Delete a Role on page 265](#) (if it is not the Administrator role).
 - **Add User** ([Assign Roles to Users on page 267](#)).
 - **Remove User** ([Remove Roles on page 268](#)).

Users

- [Managing Users within User Groups](#)
- [Assign Roles to Users](#)
- [Edit Users](#)
- [Remove Roles](#)

If you have permission to manage users in HP Web Jetadmin 10.0 you can add users to a role. A user can be added to a role with all of its permissions, or that user can be added to a role with only a subset of its permissions.

Managing Users within User Groups

Either domain or local user groups can be assigned to an HP Web Jetadmin 10.0 **Role**. Once the assignment is made, the users contained within the user group have privileges that are defined within by the role. Here are some examples of user groups and Role assignment.

- **Example 1:** a domain user group contains users who belong to the Support team. The company adds and removes users as needed when staff changes occur. The Support team's user-group is associated with an HP Web Jetadmin 10.0 Role named HELPDESK.

Domain User Group-Support:

AMERICAS\ralphj

EMEA\rijiminez

ASIAPACIFIC\chansen

Table 6-7 Assignments for Example 1

User	Role
AMERICA\Support	HELPDESK

- **Example 2:** a local group on the system that hosts HP Web Jetadmin 10.0 includes a group named WJAUsers. This group is managed by the HP Web Jetadmin 10.0 administrator who's name is Chester. Chester keeps a few people in the group who help him administer the application. The group is associated with the built-in Role named HP Web Jetadmin 10.0 Administrator (read only).

Local User Group-WJAUsers:

EMEA\Wendt

EMEA\Pacj

ASIAPACIFIC\Hae

Table 6-8 Assignments for Example 2

User	Role
WJA-SYSTEM\WJAUsers	HP Web Jetadmin Administrator (read only)

Assign Roles to Users

- [Steps for Adding Users and Assigning Roles](#)

After role templates are created, you can assign users to them. This lets you manage their set of permissions for HP Web Jetadmin 10.0 easily and quickly. A user can have more than one role assignment.

Steps for Adding Users and Assigning Roles

1. Select **Application Management** from the bottom of the left navigation pane.
Expand **User Security** and click on **Users**. The **User Security - Users** page is displayed.
2. Click **Assign roles to users**.
3. Click **Add** and type the user name and the domain. Click **Add**.
If you need to search for the user, click **Browse**. You can find users on either the HP Web Jetadmin 10.0 host or on the Windows domain. The **Select User** page is displayed. Type the **Object Type** and **Location** and click **OK**. If necessary, you can browse for locations.
4. The information will be validated. If the user is found, it will be listed in the **Selected Users** box at the bottom of this page. If the user is not found, verify the user name and domain and re-enter that information.
5. Review the users assigned to this role shown in **Selected Users**.
If any should be removed, click **Remove**.
If the users assigned to this role template are correct, click **Next**. The **User Security - Users** page is displayed.
6. Select the role from the **Role** drop-down box. One role can be selected for assignment.
7. If any groups have permissions associated with them, they are listed in the **Restrict Permissions by Group** box at the bottom of this page.
If any of the sets of permissions should apply to this user, click **Add**. This means the user will only be allowed to perform actions on the group listed.
If any of the sets of permissions listed should be removed so that the user has access to more groups, click **Remove**.

Click **Next** The **Confirm** page is displayed.

8. Review the selections. If they are correct, click **Next**. The **Results** page is displayed. Click **Done**.

Edit Users

- [Steps for Edit Users](#)

You can change the user and role for an existing assignment.

Steps for Edit Users

1. Select **Application Management** from the bottom of the left navigation pane.
Expand **User Security** and click on **Users**. The **User Security - Users** page is displayed.
2. Select the user or group and click **Edit**. The **Edit User Roles** wizard is started with the **Users** page displayed.
3. To change the user for the role check **Change User** and then type the User name and domain.
If you click **Browse**, the **Select User** page is displayed. Type the **Object Type** and **Location** and click **Next**. If necessary, you can browse for locations.
4. The information will be validated. If the user is found, it will be listed in the **Selected Users** box at the bottom of this page. If the user is not found, verify the user name and domain and re-enter that information.
5. Review the users assigned to this role shown in **Selected Users**.
If any should be removed, click **Remove**.
If the users assigned to this role template are correct, click **Next**. The **User Security - Users** page is displayed again.
6. Select the role from the **Role** drop-down box.
7. If any groups have permissions associated with them, they are listed in the **Restrict Permissions by Group** box at the bottom of this page.
If any of the sets of permissions should apply to this user, click **Add**. This means the user will only be allowed to perform actions on the group listed.
If any of the sets of permissions listed should be removed so that the user has access to more groups, click **Remove**.
Click **Next**. The **Confirm** page is displayed.
8. Review the selections. If they are correct, click **Next**. The **Results** page is displayed. Click **Done**.

Remove Roles

- [Steps for Removing Roles](#)

Following are steps for removing roles.

Steps for Removing Roles

1. Select **Application Management** from the bottom of the left navigation pane.
Expand **User Security** and click on **Users**. The **User Security - Users** page is displayed.
2. Select the user or group and click **Remove Role**. The **Remove User Role** wizard is started with the **Confirm** page displayed.
3. If this is the correct user to delete, click **Next**. The **Results** page is displayed.
4. Click **Done**. The **User Security - Users** page is displayed.

User Security Diagnostics

- [Steps for Diagnostics](#)

User Security - Diagnostics provides analysis of permissions as they exist for an individual user or group. Any domain or local user or group can be chosen and then examined for existing permissions on HP Web Jetadmin 10.0.

Steps for Diagnostics

1. Select **Application Management** from the bottom of the left navigation pane.
Expand **User Security** and click on **Diagnostics**. The **User Security - Diagnostics** page is displayed.
2. Browse for or enter the user name and domain and then click **View Roles**.
3. If desired, select a restriction to filter the list displayed.
4. The role or roles and permissions for the user are displayed.

Product Update


- [All About Product Update](#)
- [Product Update Task Modules](#)
- [Install Packages](#)
- [Upload Packages](#)
- [Remove Packages](#)
- [View Installed Packages](#)
- [Available Packages](#)
- [Installed Packages](#)

All About Product Update

- [HP Web Jetadmin 10.0 and Digital Signatures](#)

HP Web Jetadmin 10.0 **Product Update** features allow the installation of update packages. These updates can include additional functionality, device support, service patches, language support, and more. When HP Web Jetadmin 10.0 has http access to the Internet, it can display available update packages directly in **Product Update**.

These updates can be installed without having to actually visit http://www.hp.com/go/webjetadmin_software. Sometimes connection to the Internet from HP Web Jetadmin 10.0 is not possible. All HP Web Jetadmin 10.0 software is available on http://www.hp.com/go/webjetadmin_software. Once packages are downloaded to a desktop, they can be uploaded through the HP Web Jetadmin 10.0 client and then installed through **Product Update**.

 **NOTE:** To get directed to your local site, access <http://www.hp.com>.

HP Web Jetadmin 10.0 and Digital Signatures

All HP Web Jetadmin 10.0 packages and plug-in descriptor files are signed with digital certificates to ensure the integrity and authenticity of these files on the HP Web Jetadmin server. HP Web Jetadmin 10.0 will not load a file or package if authentication fails.

Product Update Task Modules

- [Product Update - Current Tasks and Product Update - Common Tasks Task Modules](#)
- [Product Update - Available Packages Task Module](#)
- [Product Update - Recommended Packages Task Module](#)
- [Product Update - Solutions](#)

The following task modules can be displayed or hidden in the **Product Update** section of **Application Management** and also in the corresponding functional area within HP Web Jetadmin 10.0 by right-clicking within the page and selecting the specific task module.


 **NOTE:** To display the **Task Module docking area**, click **View > Task Module docking area**. This is a toggle selection; if you select it again it closes the **Task Module docking area**.

Table 6-9 Product Update Task Modules

[Product Update on page 270](#)

- [Product Update - Current Tasks and Product Update - Common Tasks Task Modules on page 271](#)
 - [Product Update - Available Packages Task Module on page 271](#)
 - [Product Update - Recommended Packages Task Module on page 271](#)
 - [Product Update - Solutions on page 271](#)
-

Product Update - Current Tasks and Product Update - Common Tasks Task Modules

The **Product Update - Current Tasks** task module can be displayed on the **Product Update** page.

When you first select **Product Update** from the left navigation pane, the **Product Update** page is displayed. There are three areas that can be displayed or hidden (by clicking the arrows in the title bar for each area):

- **Install packages** ([Install Packages on page 271](#)).
- **Remove packages** ([Remove Packages on page 273](#)).
- **View installed packages** ([View Installed Packages on page 274](#)).

The **Product Update - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Product Update - Common Tasks**.

Product Update - Available Packages Task Module

The **Product Update - Available Packages** task module can be displayed on the **Product Update** page and includes the following tasks:

- **Install packages** ([Install Packages on page 271](#)).
- **Remove packages** ([Remove Packages on page 273](#)).

Product Update - Recommended Packages Task Module

The **Product Update - Recommended Packages** task module can be displayed on the **Product Update** page and includes the following tasks:

- **Install packages** ([Install Packages on page 271](#)).

Product Update - Solutions

The **Product Update - Solutions** task module can be displayed on the **Product Update** page and provides you access to important and useful information such as training, additional software, and services.

Install Packages

- [Steps to Install New Packages](#)
- [Other Ways to Install New Packages](#)

You can install plug-ins and new versions of HP Web Jetadmin 10.0 when they are available. You may want to delay the start of an update so that other users have time to log off. For example, you could send a broadcast message to other users who are logged on saying that an update will run in 5 minutes and to please log off; then configure the update with a five minute timer.

Steps to perform a **Product Update** are:

- Web-connected:
 - Enable HTTP, Allow download ([Network on page 244](#)).
 - View **Available Packages** in **Application Management** ([Available Packages on page 274](#)).
 - Select desired update.
 - Select Install.
 - Supply user credentials (required for Product Updates).
- Manual download:
 - Obtain desired update package file from HP Software and Driver Downloads Web page (http://www.hp.com/go/webjetadmin_software).
 - Upload the package file within **Available Packages** ([Available Packages on page 274](#)).
 - Select the package listed in **Available Packages**.
 - Select **Install**.
 - Supply user credentials (required for Product Updates).

In both cases, a separate Update client will start while the update is in process. Once the update is complete, the HP Web Jetadmin 10.0 client can be started again. The updated package can be viewed in **Installed Packages** within **Application Management** ([Installed Packages on page 274](#)).

Steps to Install New Packages

Before you start installing a new package, it is recommended to access the **Users - Active Clients** task module to confirm that everyone is off the system.

1. In the left navigation pane, click on **Product Update** and select **Available Packages**. If HP Web Jetadmin 10.0 has contact with <http://www.hp.com>, summaries of installed and available packages are displayed. You can install listed packages or remove them.
2. To search <http://www.hp.com> for the latest packages, click **Check for Latest Index**.
3. Select a package and click **Install**. The **Install Packages** wizard is started with the **Update Settings** page displayed.



NOTE: If there are any dependency issues (for example, the selected package depended on one that was not installed), a page is displayed that allows you to install the dependent packages.

4. Enter the server credentials (domain, name, and password). If you want to delay the installation, select the time for delay (up to 5 minutes) in **Start update delay**. Click **Next**.
5. The **HP WJA Update Client** dialog is displayed. When the installation is complete, the **HP WJA Update Client** displays a “successful” message. When available, click **Launch**. The HP Web Jetadmin 10.0 service is started in the background and a new client is started.

Other Ways to Install New Packages

- In the left navigation pane, expand **Product Update** and click **Available Packages**.
- In the left navigation pane, right-click **Product Update** and select **Install packages**.

Upload Packages

- [Steps for Uploading Packages](#)

If HP Web Jetadmin 10.0 does not have access to http://www.hp.com/go/webjetadmin_software, you can browse for the package to install. After you upload the package, you need to actually install it from the list of **Available Packages**.

Steps for Uploading Packages

Before you start uploading a new package, it is recommended to access the **Users - Active Clients** task module to confirm that everyone is off the system.

1. In the left navigation pane, click on **Product Update** and select **Available Packages**. The **Upload Package File Manager** wizard is started with the **Select package file** page displayed.
2. Browse to the package file or type the filename (if known) and then click **OK**. The file will be uploaded to HP Web Jetadmin 10.0.
3. Now you can install the package ([Install Packages on page 271](#)).

Remove Packages

- [Steps for Removing Packages](#)
- [Other Ways to Remove Packages](#)

You can remove packages at any time.

Steps for Removing Packages

Before you start removing a package, it is recommended to access the **Users - Active Clients** task module to confirm that everyone is off the system.

1. In the left navigation pane, click on **Product Update** and select **Installed Packages**.
2. Select a package to remove and click **Remove** (or click **Remove all** to remove all installed packages). The **Remove Packages** wizard is started with the **Update Settings** page displayed.
3. Enter the server credentials (domain, name, and password). If you want to delay the removal, select the time for delay (up to 5 minutes) in **Start update delay**. Click **Next**.
4. The **HP WJA Update Client** dialog is displayed. When the removal is complete, the **HP WJA Update Client** displays a “successful” message. When available, click **Launch**. The HP Web Jetadmin 10.0 service is started in the background and a new client is started.

Other Ways to Remove Packages

- In the left navigation pane, expand **Product Update** and select **Installed Packages**. On that page is an option to **Remove** or **Remove All**.
- In the **Product Update - Common Tasks** task module, click **Remove packages**.

View Installed Packages

You can view the packages installed at any time ([Installed Packages on page 274](#)).

Available Packages

- [Steps for Available Packages](#)

You can view available packages at any time. Packages that have already been installed will not be listed (see [View Installed Packages on page 274](#)).

Steps for Available Packages

1. In the left navigation pane, expand **Product Update** and select **Available Packages**. The **Available Packages** page is displayed.
2. You can view the available packages and: install selected packages, install all packages, upload packages, or refresh list.
 - **Install**: installs the selected package ([Install Packages on page 271](#)).
 - **Install All**: installs all packages listed in the **Available Packages** list ([Install Packages on page 271](#)).
 - **Upload**: if HP Web Jetadmin 10.0 does not have access to http://www.hp.com/go/webjetadmin_software, you can browse for the package to install ([Upload Packages on page 273](#)).
 - **Refresh List**: scan hp.com for the latest online listing of available packages.

Installed Packages

- [Steps for Installed Packages](#)
- [Other Ways to See Installed Packages](#)

You can view all installed packages.

Steps for Installed Packages

1. In the left navigation pane, expand **Product Update** and select **Installed Packages**.
2. From here you can choose to remove selected packages or all packages ([Remove Packages on page 273](#)).

Other Ways to See Installed Packages

- In the **Product Update - Available Packages** task module, click **Installed Packages**.
- In the **Product Update - Common Tasks** task module, click **View installed packages**.

Web Jetadmin Management

- [All About HP Web Jetadmin Management](#)
- [Web Jetadmin Management Task Modules](#)
- [Web Jetadmin Installations](#)
- [Data Synchronization](#)

All About HP Web Jetadmin Management

HP Web Jetadmin 10.0 provides the ability to discover most versions of other HP Web Jetadmin 10.0 installations. HP Web Jetadmin 10.0 can perform a unidirectional synchronization with another HP Web Jetadmin 10.0 **All Devices List** ([Device Lists on page 67](#)). This makes it easy to discover devices that have already been discovered by other installations of HP Web Jetadmin 10.0. Both of these features, synchronization and application discovery are valuable for a variety of reasons:

- An administrator detects others using HP Web Jetadmin 10.0 software to attain understanding of printer management on the network.
- An administrator detects other HP Web Jetadmin 10.0 installations as a matter of security or management policy.
- An administrator is responsible for finding all devices in a distributed environment where others are responsible for managing them in multiple areas.

Web Jetadmin Management Task Modules

- [Web Jetadmin Installations - Current Tasks and Web Jetadmin Installations - Common Tasks Task Module](#)
- [Web Jetadmin - Management Task Module](#)
- [Web Jetadmin Installations - Summary Task Module](#)

The following task modules can be displayed or hidden in the **Web Jetadmin Installations** section of **Application Management** and also in the corresponding functional area within HP Web Jetadmin 10.0 by right-clicking within the page and selecting the specific task module.


 **NOTE:** To display the **Task Module docking area**, click **View > Task Module docking area**. This is a toggle selection; if you select it again it closes the **Task Module docking area**.

Table 6-10 Web Jetadmin Management Task Modules

[Web Jetadmin Management on page 275](#)

- [Web Jetadmin Installations - Current Tasks and Web Jetadmin Installations - Common Tasks Task Module on page 276](#)
- [Web Jetadmin - Management Task Module on page 276](#)
- [Web Jetadmin Installations - Summary Task Module on page 276](#)

Web Jetadmin Installations - Current Tasks and Web Jetadmin Installations - Common Tasks Task Module

The **Web Jetadmin Installations - Current Tasks** task module can be displayed on the **Web Jetadmin Installations** page.

When you first select **Product Update** from the left navigation pane, the **Product Update** page is displayed. There are two areas that can be displayed or hidden (by clicking the arrows in the title bar for each area):

- **Find Web Jetadmin Installations** ([Find Web Jetadmin Installations on page 277](#)).
- **View Web Jetadmin Installations** ([Remove Packages on page 273](#)).

The **Web Jetadmin Installations - Current Tasks** task module can be displayed in other areas of HP Web Jetadmin 10.0; in the other areas it is called **Web Jetadmin - Common Tasks**.

Web Jetadmin - Management Task Module

The **Web Jetadmin - Management** task module can be displayed on the **Web Jetadmin Installations** page and includes the following tasks:

- **Discover** ([Find Web Jetadmin Installations on page 277](#)).
- **Quick Discovery**: enter the IP address or hostname of the Web Jetadmin server and click **OK**.
- **Launch** ([Launching HP Web Jetadmin 10.0 on page 285](#)).

Web Jetadmin Installations - Summary Task Module

The **Web Jetadmin Installations - Summary** task module can be displayed on the **Product Update** page and includes summary information about how many applications were found and which versions were found.

Web Jetadmin Installations

- [Find Web Jetadmin Installations](#)
- [Synchronizing HP Web Jetadmin 10.0 Installations](#)
- [Launching HP Web Jetadmin 10.0](#)
- [Steps for Discovering Web Jetadmin on the Same Network](#)
- [Steps for Removing Web Jetadmin](#)

Sometimes it is advantageous to find other HP Web Jetadmin 10.0 application installations on the network. HP Web Jetadmin 10.0 provides the ability to discover most revisions of HP Web Jetadmin 10.0 software and then synchronize with those other installations. HP Web Jetadmin 8.x can also be found and launched.

Using synchronization and application discovery enables you to:

- detect others using HP Web Jetadmin 10.0 software to attain understanding of printer management on the network.
- detect other HP Web Jetadmin 10.0 installations as a matter of security or management policy.

- schedule the discovery of other HP Web Jetadmin 10.0 installations.
- find all devices in a distributed environment (others might manage them in multiple areas).

Find Web Jetadmin Installations

- [Web Service \(WS\) Discoveries](#)
- [IP Broadcast Discovery](#)
- [IP Range Discovery](#)

HP Web Jetadmin 10.0 instances can be listed for discovery, user viewing, removing, and even launching.

HP Web Jetadmin 10.0 instances can be found on both local and remote networks. The settings for IP Range and IP Broadcast are identical to HP Web Jetadmin 10.0 Discovery settings. In fact, these settings are shared between the two features.

- HP Web Jetadmin 10.0 can discover other instances of HP Web Jetadmin 10.0.
- Discovery is possible with versions as early as 6.5.x.
- IP Range and IP Broadcast discoveries share stored setting with other discovery features.
- HP Web Jetadmin 10.0 instances can be launched directly from the discovery listing.
- The listing can be modified by performing further discoveries or by manually removing the instances.
- Address, URL, hostname, and version information are included in the listing.


Three different discovery features exist for finding HP Web Jetadmin 10.0 instances:

- [Web Service \(WS\) Discoveries on page 277](#)
- [IP Broadcast Discovery on page 277](#)
- [IP Range Discovery on page 279](#)

You can schedule application discovery. If an application discovery is currently running and you try and start another application discovery, you will receive a dialog asking if you want to view the current discovery or schedule a new one.

Web Service (WS) Discoveries

Web Service (WS) discoveries actually find other instances of HP Web Jetadmin 10.0 (not previous versions of HP Web Jetadmin).

 **NOTE:** To discover HP Web Jetadmin 10.0 and previous versions of HP Web Jetadmin, use [IP Broadcast Discovery on page 277](#) or [IP Range Discovery on page 279](#).

IP Broadcast Discovery

- [IP Broadcast Discoveries for Network Devices](#)
- [IP Broadcast Discoveries for PC-Connected Devices](#)
- [Details About Running an IP Broadcast Discovery](#)

IP Broadcast discoveries send SNMP query packets (in the form of IP broadcasts) to one or more IP network(s). These are used in both PC-Connected and network device discoveries.

IP Broadcast Discoveries for Network Devices

An IP Broadcast discovery enables you to find devices or HP Web Jetadmin installations when IP broadcast addressees are known. IP broadcast discoveries send SNMP query packets (in the form of IP broadcasts) to one or more IP network(s). One network-specific broadcast address exists for each IP subnet on an IP intranet. IP subnets are determined by the IP network number and the IP subnet mask. IP calculators, available free on the Internet, are a great way to determine IP broadcast addresses. An all 1s IP broadcast can also be used to query the entire intranet. Broadcasting is typically blocked by routers due to traffic spike concerns.

Characteristics of IP broadcast discoveries for network devices include:

- Sends SNMP queries over one or more IP broadcasts.
- Listens for replies and then qualifies network connected devices.
- Default broadcast is the Global Broadcast Address (255.255.255.255).
- Can use one or more known IP broadcast addresses with optional address descriptions.
- Limited checking is performed to determine if the broadcast address is valid.
- Fast and thorough, especially on a local segment.
- Most modern networks block broadcast traffic.

IP Broadcast Discoveries for PC-Connected Devices

IP broadcast discoveries for PC-Connected devices send an SNMP query to the IP broadcast address specified. An all 1s broadcast is the default. Systems with the SNMP Proxy Agent first answer with the operating system. HP Web Jetadmin 10.0 follows up with queries to both host and to printer specific objects. IP Broadcast discovery does not attempt WMI queries when no SNMP proxy agent exists.

Characteristics of IP broadcast discoveries for PC-Connected devices include:

- Settings are the same as network device.
- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.

Details About Running an IP Broadcast Discovery

1. Click **Edit Addresses**. The **Select IP broadcast addresses** page is displayed.
2. You can:
 - Select a broadcast address.
 - **Add**: add a broadcast. Type the address in **Address** and type a description (if desired) in **Description**. Then click **Add**.
 - **Show favorites only**: view only the broadcast addresses you have added by clicking **Show favorites only** (at the bottom of the page).

- **Delete:** remove addresses from the list by highlighting the address and clicking **Delete**.
- **Customize:** show or hide addresses by clicking **Customize**. Then select an address and click **Show** or **Hide**. When done, click **OK** ([Customizing IP Range Discoveries on page 282](#)).

3. Click **Next**.

IP Range Discovery

- [Setting Realistic Ranges](#)
- [Import and Export Features of IP Range Files](#)
- [IP Range Discoveries for Network Devices](#)
- [Customizing IP Range Discoveries](#)
- [IP Range Discoveries for PC-Connected Devices](#)
- [Steps for Running an IP Range Discovery](#)

In contrast to running a broadcast discovery (where all devices or HP Web Jetadmin installations in the subnet are queried), you can choose to discover a specified IP range or a number of IP ranges. This reduces network traffic and eliminates the possibility of having unwanted devices. HP Web Jetadmin installations show up in the database. IP Range discovery searches for devices or HP Web Jetadmin installations within a range of IP addresses. This type of discovery is accurate and thorough but can be slow for large ranges.

IP Range Discovery is effective when the administrator has knowledge of IP segments. Administrators use IP Range Discovery settings to map IP segments or groups of IP segments into HP Web Jetadmin 10.0 discovery. This method efficiently sweeps selected portions of the network or WAN. IP Range address pairs consist of beginning and ending IP addresses. IP Range discoveries first ping (send ICMP echo requests) specific IP addresses as defined by range address pairs. If the device responds, HP Web Jetadmin 10.0 follows with SNMP queries. Multiple ranges can be specified in IP Range discoveries. HP Web Jetadmin 10.0 pings in bursts of 30 queries to the first set of addresses from the first range and then waits one second before sending the next burst of 30 queries.


Setting Realistic Ranges

- [Setting Ranges Based on Subnets or Contiguous Subnets](#)

Most networks are divided up into subnets, which can be used to describe a network IP addressing scheme and are sometimes referred to as IP maps. A subnet within a large network can be described with a network number and a subnet mask. This is an example of one subnet with an IP range of 15.5.188.1 through 15.5.191.254:

- Network number example: 15.5.188.0
- Subnet mask example: 255.255.252.0

There are 1,022 possible addresses on this subnet. It may take HP Web Jetadmin 10.0 only about 10 minutes to discover devices on this network depending on the network, the number of devices on that network, and the host on which HP Web Jetadmin 10.0 is installed.

 **NOTE:** IP address calculators are an easy way to analyze IP networks. Many free versions of IP calculators exist and can be obtained on the Internet.


IP Range discovery can perform to expectations when the range data has been correctly developed. It is easy to configure ranges that are larger than needed and actually cause the discovery to take a long time and perhaps even yield little in the way of devices. For example, a class A range could easily be developed for the HP intranet but would literally take weeks to complete. On most large networks, the majority of the IP addresses won't answer the HP Web Jetadmin 10.0 query and will cause timeouts to occur; these translate into very long discovery times.

If you specify an IP range that is very large, your network might crash if that IP range is for a class A or class B network (when the first two octets of the IP range are not the same). HP Web Jetadmin 10.0 will display a warning message stating that a large range might cause a large amount of network traffic; you can choose to continue or change the range.

You can choose to specify a large subnet range using the larger subnet address feature (**Tools > Options > Application Management > IP Ranges > General**). Large networks are considered any network bigger than a Class B network, which has up to 65,000 nodes.

Setting Ranges Based on Subnets or Contiguous Subnets

Since large IP ranges can cause HP Web Jetadmin 10.0 discovery to take long periods of time to complete, it can be useful to use subnet ranges rather than the entire network for a discovery. These subnets, when put together into one list, represent an IP map. This type of a map can be obtained from an IT or Network Infrastructure team. It is also a good idea to work with these teams to discuss plans for implementing HP Web Jetadmin 10.0 discoveries.

 **NOTE:** Hewlett-Packard strongly recommends that you discuss HP Web Jetadmin 10.0 discoveries with your information technology or network administration team.

Here is an example of IP range planning. Assume we have 20 subnets on our hypothetical network. All of these subnets use the same subnet mask of 255.255.255.0. Here are the network numbers that represent our 20 subnets:

15.0.1.0, 15.0.2.0, 15.0.3.0, 15.0.4.0, 15.0.5.0, 15.0.30.0, 15.0.31.0, 15.0.32.0, 15.0.33.0, 15.0.34.0, 15.0.35.0, 15.0.36.0, 15.0.37.0, 15.0.38.0, 15.0.39.0, 15.0.55.0, 15.0.64.0, 15.0.65.0, 15.0.66.0, 15.0.67.0, 15.0.68.0, 15.0.69.0, 15.0.70.0, 15.0.71.0, 15.0.72.0, 15.0.73.0, 15.0.74.0

From this information, we can formulate the following IP address ranges and import them into HP Web Jetadmin 10.0:

- 15.0.1.1-15.0.1.254
- 15.0.2.1-15.0.2.254
- 15.0.3.1-15.0.3.254
- 15.0.4.1-15.0.4.254
- 15.0.5.1-15.0.5.254
- 15.0.30.1-15.0.30.254
- 15.0.31.1-15.0.31.254
- 15.0.32.1-15.0.32.254
- 15.0.33.1-15.0.33.254
- 15.0.34.1-15.0.34.254
- 15.0.35.1-15.0.35.254

- 15.0.36.1-15.0.36.254
- 15.0.37.1-15.0.37.254
- 15.0.38.1-15.0.38.254
- 15.0.39.1-15.0.39.254

We can take the formulation one step further and simplify things. Some of the IP ranges are contiguous. These contiguously-addressed subnets are one after the other, in order, making it easy to combine them. The final result would look like this:

- 15.0.1.1-15.0.5.254
- 15.0.30.1-15.0.39.254

This has reduced the number of IP ranges from 15 to 2. We can build this into a form that is easily imported into HP Web Jetadmin 10.0 and also reflects descriptions. Here is an example of data that can be imported via a text file:

- 15.0.1.1-15.0.5.254 = subnet range for western area
- 15.0.30.1-15.0.39.254 = subnet range for central area
- 15.0.55.1-15.0.55.254 = subnet range for branch office
- 15.0.64.1-15.0.74.254 = subnet range for eastern area

Consolidating ranges makes dealing with large quantities of data simpler but may not help when descriptions are needed for the purpose of cataloging ranges.

Import and Export Features of IP Range Files

IP range data can be developed in other tools and imported through text files. In fact, HP Web Jetadmin 10.0 can export IP range data to text files. This makes it easier to deal with large numbers of IP ranges, manipulate complex data and archive data for use in multiple instances. The format for IP Range import and export file format can be broken down as follows:

- 1 range per line
- Each IP address is separated by a hyphen character (-)
- Comment or description strings can be appended to the IP range by using an equal character (=)

Here is an example of 1 IP range with a comment: xxx.xxx.xxx.xxx-xxx.xxx.xxx.xxx=descriptive text string (where xxx represents an octet in the IP address).

There is no known limit to the number of IP ranges manageable within HP Web Jetadmin software. IP ranges are also used by other features like PC-Connected printer discovery and HP Web Jetadmin Installations discovery. All IP ranges entered into HP Web Jetadmin can also be managed globally from within **Tools > Options > Application Management > IP Ranges > IP Ranges**.

IP Range Discoveries for Network Devices

IP Range discoveries for network devices or HP Web Jetadmin installations first send an SNMP query to all addresses within the range. When nodes are discovered, HP Web Jetadmin 10.0 performs queries to determine qualified devices. These qualified devices, when found, are added to the device lists.

Characteristics of IP range discoveries for network devices or HP Web Jetadmin installations include:

- IP ranges are simply two addresses that represent range begin and end points.
- Multiple ranges can be specified in an IP Range discovery.
- IP range data can be manually added through the user interface.
- IP ranges can be imported to HP Web Jetadmin 10.0 from text files.
- Multiple IP ranges can be added and with optional, descriptive tags.
- HP Web Jetadmin 10.0 sends 1 query to each address represented by the range.
- HP Web Jetadmin 10.0 pings the device ranges in bursts of 30.
- HP Web Jetadmin 10.0 has features to calculate IP ranges based on:
 - Local client host
 - WJA server host
 - Device
- HP Web Jetadmin 10.0 IP Range discoveries have proven to be effective, accurate and thorough.
- HP Web Jetadmin 10.0 IP Range discoveries can be very slow if not configured properly.
- HP Web Jetadmin 10.0 IP Range discoveries can draw security attention due to their scanning action.

Customizing IP Range Discoveries

When you are setting up an IP Range discovery, you have the option to customize the IP Ranges. You can customize IP Ranges in two places within HP Web Jetadmin 10.0. In **Device Management > Discovery**, select **IP Ranges** as the type of discovery and then select **Customize**. In **Application Management > Web Jetadmin Management**, in the **Common Tasks** task module click **Find Web Jetadmin installations** and select **IP ranges** as the type of discovery; then select **Customize**. You can choose to add or remove addresses to favorites by selecting an address and clicking **Add Favorite** or **Remove Favorite**.

IP Range Discoveries for PC-Connected Devices

IP Range discoveries for PC-Connected devices first send an SNMP query to all addresses within the range. If SNMP communication is possible on a device, the discovery attempts to find a locally connected printer. If no SNMP communication is possible and if the user provided administrative credentials, the discovery will attempt to find a locally connected printer on the device.

Characteristics of IP range discoveries for PC-Connected devices include:

- IP Range scanning is same as network connected.
- Nodes representing hosts are detected.
- SNMP queries are attempted on discovered nodes.
- If no SNMP Proxy Agent response, WMI queries are performed when credentials exist in settings.

Steps for Running an IP Range Discovery

The **Select IP Ranges** page is displayed when you choose **IP Range** as the discovery method while:

- creating discovery templates ([Create a Discovery Template on page 126](#)).
- editing discovery templates ([Edit a Discovery Template on page 128](#)).
- scheduling a discovery ([Schedule a Discovery on page 123](#)).
- running a Web Jetadmin discovery ([Find Web Jetadmin Installations on page 277](#)).

On the **Select IP Ranges** page, you can select the IP address ranges displayed or you can edit the ranges.

1. Choose the action to take:

- Select an IP range.
- **Add**: add an IP range by clicking **Add**. Type the range in **First address** and **Last address**; then type a description (if desired) in **Description**. Click **Add**.

To calculate a range, click **Calculate range**. The **Calculate IP Range** page is displayed:


- **Subnet from my computer**: automatically use IP address ranges currently found on the local subnet of your computer. You can add a description in **Description** if desired.
- **Subnet from WJA server**: automatically use IP address ranges currently found on the subnet of the HP Web Jetadmin 10.0 server. You can add a description in **Description** if desired.
- **Subnet from network address**: type a known IP address and subnet mask. You can add a description in **Description** if desired.
- **Edit**: make changes to IP ranges by clicking **Edit**. Follow the steps in the bullet above for “Add”.
- **Delete**: remove addresses from the list by highlighting the address and clicking **Delete**.
- **Import Range List**: if desired, import a range list by clicking **Import Range List** and then browse for the range list.
- **Export Range List**: if desired, export a range list by clicking **Export Range List** and then browse for location you want to store the range list.
- **Show favorites only**: view only the IP ranges you have added by clicking (at the bottom of the page).
- **Customize**: show or hide addresses by clicking **Customize**. Then select an address and click **Show** or **Hide**. When done, click **OK**.

2. Click **OK**.

Synchronizing HP Web Jetadmin 10.0 Installations

Once discovered, other HP Web Jetadmin 10.0 device details can be synchronized into the device details of the HP Web Jetadmin 10.0 that performed the discovery. The devices themselves and user-selected attributes will be added to the local **All Devices** list.

The control for this synchronization feature can be found in **Tools > Data Synchronization**. From the Data Synchronization interface you can quick-discover other HP Web Jetadmin 10.0 instances, synchronize the local All Devices list (requires credentials), schedule synchronization and manage existing synchronization schedules.

 **NOTE:** The term “synchronize” is used to show that device details from the remote HP Web Jetadmin 10.0 instance are populated into the device space within the local HP Web Jetadmin 10.0 database. This is not a two-way synchronization; the local HP Web Jetadmin 10.0 Data Synchronization controls facilitate a one-way data transfer ([Data Synchronization on page 35](#)).

Characteristics of this data synchronization between versions of HP Web Jetadmin 10.0 are:

- HP Web Jetadmin 10.0 **Quick Discovery** can have an IP address or IP Hostname applied to it for the purpose of locating other instances of HP Web Jetadmin 10.0 software.
- Once discovery has occurred, instant synchronization can be performed with HP Web Jetadmin 10.0 instances.
- Synchronization requires domain user credentials that have been associated with a role on the remote HP Web Jetadmin 10.0 instance or have administrative rights on the remote system hosting HP Web Jetadmin 10.0.
- Users can select a variety of device details as part of the synchronization.
- A base set of details will always be transferred as part of the synchronization, these include:
 - Serial number
 - Port
 - Model Number
 - Last Discovered
 - Last Communication
 - HP Jetdirect Model
 - IP Hostname
 - IP Address
 - Discovery Date/time

A local user must be in:

- the user group on the HP Web Jetadmin 10.0 host and also be associated to a data synchronization role on that host.
- the user group on the HP Web Jetadmin 10.0 remote Smart Client.
- the admin group on the data synchronization host.

Launching HP Web Jetadmin 10.0

To launch other instances of HP Web Jetadmin 10.0, follow these steps:

1. From the left navigation pane, access **Application Management**.

Expand **Web Jetadmin Management** and click on **Web Jetadmin Installations**. The **Web Jetadmin Installations** page is displayed.

2. To launch a specific instance of HP Web Jetadmin 10.0 in an external browser window, highlight the instance of HP Web Jetadmin 10.0 in the **Installations** page and then click **Launch**.

If the version of HP Web Jetadmin is 8.x, then the user interface will be displayed in the browser.

If you are using HP Web Jetadmin 10.0, then the Smart Client page is displayed; you can run another instance of the client application ([Smart Client Deployment on page 16](#)).

Steps for Discovering Web Jetadmin on the Same Network

To discover other instances of HP Web Jetadmin 10.0 running on the same network, follow these steps:

1. From the left navigation pane, access **Application Management**.

Expand **Web Jetadmin Management** and click on **Web Jetadmin Installations**. The **Web Jetadmin Installations** page is displayed.

2. To discover other instances of HP Web Jetadmin 10.0, click **Discover**. The **Web Jetadmin Discovery** page is displayed.
3. Check one or more types of discovery to run: WS Discovery, IP Broadcast, and IP Range.
4. Click **Next**. The settings page is displayed for the type of discovery; if you selected more than one the different pages will be displayed in order.
5. Complete the settings page:
 - **WS discovery settings** (Web Services Discovery): select the number of routers or hops.
 - **IP broadcast settings**: highlight the addresses.
 - **IP range settings**: select the IP ranges.

After you make your selections, click **Next**. A confirmation page is displayed.

6. Review your selections and click **Start**. A Progress page is displayed, which you can **Hide**. After the discovery has been run, you can review the results and then click **Done**.

Steps for Removing Web Jetadmin

To remove one or more instances of HP Web Jetadmin 10.0 running on the same network, follow these steps:

1. From the left navigation pane, access **Application Management**, expand **Web Jetadmin Management** and click on **Web Jetadmin Installations**. The **Web Jetadmin Installations** page is displayed.
2. To remove one or more instances of HP Web Jetadmin 10.0, click **Remove**. To delete all instances of HP Web Jetadmin 10.0, click **Remove All**. The **Confirm** page is displayed.

3. If you need to make changes to your selections, click **Back**. If your selections are correct, click **Next**.
4. The **Progress** page is displayed. Click **Done**.

Data Synchronization

- [Steps for Data Synchronization](#)

You can synchronize data between HP Web Jetadmin 10.0 servers on your network.


You can either enter the hostname or IP address of the HP Web Jetadmin 10.0 server you want to synchronize with, or you can discover all HP Web Jetadmin 10.0 devices on your network (in **Application Management** under [Web Jetadmin Management on page 275](#)).

A local user must be in:

- the user group on the HP Web Jetadmin 10.0 host and also be associated to a data synchronization role on that host.
- the user group on the HP Web Jetadmin 10.0 remote Smart Client.
- the admin group on the data synchronization host.

Steps for Data Synchronization

1. On the top menu bar, access **Tools > Data Synchronization**.
2. Select the HP Web Jetadmin 10.0 server you want to synchronize with:
 - If you know the hostname or IP address for the HP Web Jetadmin 10.0 server you want to synchronize with, enter it in **WJA Quick Discovery**.
 - If you do not know the hostname or IP address for the HP Web Jetadmin 10.0 server you want to synchronize with, highlight the server or servers in the list.
3. You can:
 - **Synchronize**: synchronize the HP Web Jetadmin 10.0 servers now. Click **Synchronize**.
 - **Schedule**: set up a future time to synchronize the HP Web Jetadmin 10.0 servers. Click **Schedule**.

 **NOTE:** If you schedule a task (for example, a discovery or a configuration or others) using a corresponding template, the task uses the settings defined in the template at the time the task starts. This makes it easy to redefine settings used in a regularly scheduled task without having to delete and create a scheduled task.

 - **Clear Schedule**: clear any synchronization schedules that have been set up already. Click **Clear Schedule**.
4. The **Synchronization Credentials** page is displayed. Enter your password and click **Verify Link** to verify the authentication. The link must be verified before you can proceed.
5. To save these settings and continue setting other options, click **Apply**. Then click the next option to configure in the left menu bar. To save these settings and close this window, click **OK**.

7 Device Configuration Options

- [Configuration Options](#)

Configuration Options

- [Device Configuration Options for Device](#)
- [Device Configuration Options for Copier](#)
- [Device Configuration Options for Network](#)
- [Device Configuration Options for Security](#)
- [Device Configuration Options for Projector](#)
- [Device Configuration Options for Wireless](#)
- [Device Configuration Options for Fax](#)
- [Device Configuration Options for Embedded Web Server](#)
- [Device Configuration Options for File System](#)
- [Device Configuration Options for Digital Sending](#)

Following are the various configuration options for devices. Your device might or might not support all of the options.

Device Configuration Options for Device


- [Asset Number](#)
- [Auto Cleaning Page](#)
- [Auto Continue](#)
- [Auto Tray Select](#)
- [Color/Black Mix](#)
- [Color Supply Out](#)
- [Company Name](#)
- [Control Panel Display](#)
- [Control Panel Language](#)
- [Date and Time](#)
- [Default Input Paper Tray](#)
- [Default Media Size](#)
- [Default Media Type](#)
- [Default Print Density](#)
- [Default Printer Copies](#)
- [Device Location](#)
- [Device Name](#)

- [Device Volumes](#)
- [Duplex Binding](#)
- [Duplex Blank Pages](#)
- [Economode](#)
- [High Capacity Output Mode](#)
- [Input Auto Continue](#)
- [Input Auto Continue Timeout](#)
- [I/O Timeout to End Print Jobs](#)
- [Jam Recovery](#)
- [Job Hold Timeout](#)
- [Job Retention](#)
- [Job Storage Limit](#)
- [Media Administration](#)
- [Optimum Speed/Cost](#)
- [Original Orientation](#)
- [Output Auto Continue Configuration](#)
- [Power Save Timeout](#)
- [Print Courier Font Type](#)
- [Printer Wakeup](#)
- [Replace Supplies](#)
- [Resolution](#)
- [Resolution Enhancement](#)
- [Size/Type Prompt](#)
- [Status Page Language](#)
- [Supplies Status Message on Control Panel](#)
- [Suppress Blank Pages](#)
- [System Contact](#)
- [System Location](#)
- [Time Zone](#)
- [Toner Low Action](#)
- [Toner Out Action](#)

- [Tray 1 Mode](#)
- [Tray Setup Media Type](#)
- [Tray Administration](#)
- [Tray Assign Media Size](#)
- [Tray Setup Media Size](#)
- [User Defined Mode](#)


Configuration options for Devices define general administrative functions for the device including Power Save, Tray Administration, and print defaults.

Asset Number

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The **Asset Number** identifies the device based on the accounting system for your organization. You can use the **Asset Number** to search for and display a list of all of the devices that have specific text in their asset numbers (for example, MKTG).


HP Web Jetadmin 10.0 displays the **Asset Number** on the device lists if you configured this option to be listed ([Device Identification on page 34](#) and [Columns for Device Lists on page 68](#)). You can also choose to have this column display in any custom view ([Customizing Layouts for Device Lists on page 70](#)).

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

Following are steps to configure this option:

1. Type or change the device asset number in the **Asset Number** text box.
2. Choose from the following:
 - **Refresh:** gets the current settings from a single device, or the unspecified settings for multiple devices. Any pending changes which have not been applied will be lost.
 - **Save as Template:** used to capture the selected configuration into an HP Web Jetadmin 10.0 configuration template. This can be done for a variety of reasons:
 - A backup of the device configuration is needed to manage maintenance and risk.
 - A device configuration is deemed as “release accepted” and a template is needed to configure other devices with like-settings.
 - **Schedule:** schedule this configuration for later ([Schedule a Device Configuration on page 139](#)).
 - **Apply:** apply all of the settings to the device or devices now.

Auto Cleaning Page


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option enables and disables the automatic cleaning page. You can specify how often you want to print the automatic cleaning page. If the printer is in the middle of a print job when it reaches the page count that you specify, the printer finishes printing that print job before it starts the cleaning process. The cleaning process takes approximately 2.5 minutes to complete. You can either discard or recycle the cleaning page after it is printed.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable **Auto Cleaning Page**, select **Auto cleaning page enabled**.
2. Select the cleaning frequency.
3. Select the page size (Letter or A4). You must use plain paper.

 **NOTE:** To ensure that the cleaning process runs automatically and without intervention, make sure that the paper size you specify is always available in the printer.

Auto Continue

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


Choose to have a non-critical error message appear for ten seconds before the device resumes operation. Select **Off** for **Auto Continue** to require you to acknowledge non-critical error messages by pressing **Continue** on the device before the device resumes operation.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable **Auto Continue**, select **On**.
2. To disable **Auto Continue**, select **Off**. You will have to acknowledge non-critical error messages by pressing **Continue** on the device before the device resumes operation.

Auto Tray Select


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you use the capacity of both paper trays before generating an out-of-paper alert.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select **Tray Select On** or **Tray Select Off**.

Color/Black Mix

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option optimizes the performance or cost per page depending on the expected color content of typical print jobs. This feature allows you to set printer behavior for printing mostly color or mostly black (monochrome) print jobs.


 **NOTE:** Selecting the **Print In Grayscale** feature from the printer driver overrides these settings for a specific print job.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. **Auto:** (default) best choice for most conditions; it behaves the same as **Mostly Color Pages**.
2. **Mostly Color Pages:** provides the best performance for most conditions, especially when mostly color pages are printed. Under normal usage, there is minimal or no cost per page impact from this selection.
3. **Mostly Black Pages:** provides the best cost per page for users printing mostly monochrome pages on color printers.

Color Supply Out

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how the printer responds when one of the color toners is empty. You can choose to set the printer to continue printing with black toner (for a certain number of pages) or set it to stop printing altogether. In both cases, HP Web Jetadmin 10.0 displays a **Toner Out** message on the device lists.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To stop the printer from printing until the toner is replaced, select **Stop**.
2. To let the printer continue printing with black toner, when one or more of the color toners is out, select **Auto Continue Black**.


Company Name

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The company contact is the name of the organization that owns or is responsible for the device. HP Web Jetadmin 10.0 displays the company contact on the **Status** page for the device and on several of the device lists. You can also search for and display a list of all of the devices for which a specific organization is responsible.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Control Panel Display


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you make specific items appear on the Control Panel Display on the device. The items include IP Address, Hostname, Serial Number, Asset Number, Device Name, System Location, System Contact, Device Location and a short text string that you can define.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites. One option can be selected.

Select the desired option. If you select **Other**, enter the message to display on the control panel.

Control Panel Language


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the language that is displayed on the printer control panel. The drop-down list contains all of the languages that the printer supports. If you have a multilingual workforce, set the control panel language to the one language that your employees prefer.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

Choose the desired language from the drop-down list.

Date and Time


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to remotely specify the time and date for a device or group of devices. When the correct time and date is set on a device, the device can complete time or date dependant operations and add time and date stamps on documents, such as a diagnostic report.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the time and date on a device, type the current year, month, and day in the corresponding fields. Use the 24-hour system. For example, 1 PM is 13:00 hours.

Default Input Paper Tray


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify which tray the device should first get paper from as a default (upper paper tray or lower paper tray).

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select the paper tray you want to use for a default.

Default Media Size

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the default media size. The drop-down list contains all of the media sizes that the printer supports. This option is useful if the people who use the printer typically print on a specific size of media. For example, if the printer is dedicated to the legal department and those users typically print on Legal paper, set the default media size to Legal.

The media size setting that you might select when printing a job overrides the setting specified here.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the default media size, select the media size from the drop-down list labeled **Default Media Size**.

Default Media Type


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option specifies the default media type. The drop-down list contains all of the media types that the printer supports. This option is useful if the people who use the printer typically print on specific media. For example, if the printer is dedicated to the human resources department and they typically print on three-hole punched paper, set the default media type to **Prepunched**.

 **NOTE:** For this option to work, you must specify the media type for each tray under the **Tray Administration** category on the **Device Configuration** page.


The media type setting that a user selects when printing a job overrides the setting specified here.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

To specify the default media type, select the media type from the drop-down list.

Default Print Density


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select the default density for print jobs, which affects all pages printed on the device (host print jobs, received faxes, copies, and internal reports).


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To select this option, select a density from the drop-down box (5 is the darkest, or highest density). For color, select the desired print density for each color. If applicable, you can also select the print density for highlights, midtones, and shadows.

Default Printer Copies

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the default number of copies that are printed for each print job. This option is useful if the people who use the printer typically print a specific number of copies. For example, if the printer is dedicated to the legal department and those users always print three copies of their documents, set the default number of copies to three.

 **NOTE:** The copies setting that you select when printing a job overrides the setting specified here.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the default number of printer copies, type the number of copies into **Default Printer Copies**.

Device Location


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option identifies the device based on its location. You can use the **Device Location** to search for and display a list of all of the devices that have specific text in their device locations (for example, North Building, 3rd Floor).

HP Web Jetadmin 10.0 displays the **Device Location** on the device lists if you configured this option to be listed ([Device Identification on page 34](#) and [Columns for Device Lists on page 68](#)). You can also choose to have this column display in any custom view ([Customizing Layouts for Device Lists on page 70](#)).

Type or change the device location in **Device Location**.

Device Name

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option identifies the device based on its name. You can use the **Device Name** to search for and display a list of all of the devices that have specific text in their device names (for example, Color LaserJet Marketing).

HP Web Jetadmin 10.0 displays the **Device Name** on the device lists if you configured this option to be listed ([Device Identification on page 34](#) and [Columns for Device Lists on page 68](#)). You can also choose to have this column display in any custom view ([Customizing Layouts for Device Lists on page 70](#)).


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set the device name, type or change the device name in **Device Name**.

Device Volumes

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This group of options selects the volumes of certain sounds emitted by the device:


 **NOTE:** Some of the volume options may not be displayed depending on available features of the device being configured.

- **Line monitor:** allows you to set the volume level used during the fax machine to fax machine negotiation for each sent and received fax.
- **Alarm:** allows you to set the volume level used by the device for the beep to indicate an error condition.
- **Ring:** allows you to set the volume level used to indicate an incoming call on the connected phone line.
- **Key press:** allows you to set the volume level used when control panel keys are pressed.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To select the volume options, select **Off**, **Soft**, **Medium**, or **Loud**.

Duplex Binding


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to specify default action about whether to print on both sides of paper when the print job does not specify a preference. Ability to specify the default duplex behavior of the printer can be useful for implementing policy by system administrators where the print job is not particular about this aspect of the job.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To select the default duplex action of the printer, select one of the options from the drop-down box: **None**, **Long Edge** (recommended for portrait print jobs), or **Short Edge** (recommended for landscape print jobs).

Duplex Blank Pages

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you optimize the duplex printing performance.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select **Auto** to enable enhanced print speed in some circumstances by often not taking the time to print blank sides. For paper types that need to print the blank side (like letterhead), **Auto** is smart enough to do so.

Select **Yes** to always print blank sides in duplex jobs. The image will always be on the correct side.


Economode

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to select the **Economode** (toner saving) default for jobs that do not specify an Economode value. This allows the printer to behave in a consistent manner for print jobs which do not specify the Economode setting.

To specify the default Economode value, select the radio button for the desired Economode (**On** or **Off**).

High Capacity Output Mode


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify which high-capacity output accessory the printer directs output to. Directing output to various high-capacity output accessories can help reduce how much time you spend going to the printer and removing output from full bins. This is particularly useful for very large print jobs or busy printers.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set the high-capacity output mode, select one of the output accessory options.

Input Auto Continue


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default action that the printer takes when the specified media size or type is not available. It also lets you specify how long the printer waits before performing the default action. Specifying a default action for the printer to take when the specified media size or type is not available allows the printer to finish printing the current job without user intervention.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the action for the printer if the specified media size or type is not available, select the desired action from the **Input Auto Continue** drop-down list.

Input Auto Continue Timeout


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify how long the printer waits before performing the default action when the specified media size or type is not available. Specifying how long the printer should wait before taking the default action when the specified media size or type is not available allows you time to manually correct the issue.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the action for the printer if the specified media size or type is not available, select how long the printer waits from the drop-down box.

I/O Timeout to End Print Jobs


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select the amount of time the device should wait between packets of data on a print job before canceling that job. You can select any time between 15 seconds and 5 minutes.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select how long the printer waits from the drop-down list.

Jam Recovery

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option allows you to select the default device reprint behavior after a paper jam is cleared on a fax receive, copy, or print job. The settings include:

- **Disabled:** the device will never reprint a page after clearing a paper jam.
- **Enabled:** the device will always reprint a page after clearing a paper jam.
- **Auto:** the device will reprint a page after clearing a paper jam, if the installed memory is greater than 7 MB.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To select the jam recovery behavior, select the desired setting (**Disabled**, **Enabled**, or **Auto**).

Job Hold Timeout

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how long the printer holds a print job that has not printed before automatically deleting the print job.

△ **CAUTION:** Selecting **Never Delete** could cause the printer's hard disk to fill up with print jobs that were held but never released for printing.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select the timeout value from the **Job Hold Timeout** drop-down list.

Job Retention

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you enable and disable the job retention feature. The job retention feature is available on some printers that have mass storage capability. This allows you to store print jobs in the flash memory on a printer. The job retention feature allows you to complete the following tasks:

- Store a print job on the printer. You can then call the print job from the printer control panel as needed. This feature is useful for storing forms and other commonly shared documents.
- Store secure private copies to hold a print job until a user releases it by entering a personal identification number. Print one copy of a multiple-copy print job for proofing. The user can then release the remaining copies for printing or cancel them.


△ **CAUTION:** If the job retention feature is disabled, the option appears on the printer driver user interface but does not store the print job on the printer.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable the job retention feature, click **Enable**.
2. To disable the job retention feature, click **Disable**. If the job retention feature is disabled, the option appears on the printer driver user interface but does not store the print job on the printer.


Job Storage Limit

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify how many jobs can be stored on the printer hard disk at the same time.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Media Administration

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option allows you to enable or disable the media types that the printer uses. You can also define your own media types.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable a media type, select the check box next to the media type.
2. To disable a media type, clear the check box next to the media type.
3. To define a new media type, type the media name in **Media Types**. Select the check box next to the media type to activate it.

Optimum Speed/Cost


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option optimizes the performance or cost per page depending on the expected color content of typical print jobs. You can choose whether print quality is more important or whether speed of the print job is more important.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the optimum speed or cost per page, select one of the options (**Auto**, **Speed**, or **Cost Per Page**).

Original Orientation

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default orientation of the information on the printed page. This is useful if the people who use the printer typically print with a specific orientation. For example, if the printer is dedicated to the accounting department and those users typically print spreadsheets with many columns, set the default orientation to Landscape to show as many columns as possible on one page.


 **NOTE:** The orientation setting that you select when printing a job overrides the setting specified here.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To print across the narrow side of the media, select **Portrait**.
2. To print across the wide side of the media, select **Landscape**.


Output Auto Continue Configuration

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to control the behavior of the device if a print job is submitted which lets you specify a paper tray and/or paper size which does not match the current device configuration. This allows the printer to behave in a consistent manner in case of a conflict between the print job specification and the printer configuration.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:


 **NOTE:** The options available are dependent upon the device.

1. **Output overflow command:** specifies the default action to take when the output bin is full or when the stapler is empty.
2. **Output auto continue timeout:** specifies how long before the device should wait before taking the action specified in the output overflow command.
3. **Output overflow bin:** specifies what bin should be used if the primary bin is full.

Power Save Timeout

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how long the printer can be idle before automatically powering off. **Sleep Delay** mode reduces the printer average power consumption after it has been idle for a specific length of time. This is useful if the printer is not used often.

 **NOTE:** If the printer has an MFP (scanner unit) installed, such as the HP Color LaserJet 8500 or the HP Color LaserJet 8550, the **Power Save Timeout** setting specified on the printer control panel overrides the setting specified on this page.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set the **Sleep Delay**, select the timeout value from the drop-down list.

Print Courier Font Type


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to choose whether the regular courier font or a dark font is used. This setting does not affect fax or copy jobs, but does apply to the internal reports which contain a Courier font. The regular TrueType Courier font prints somewhat lighter than the bitmap fonts for the same.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the courier font type, select **Regular** or **Dark**.

Printer Wakeup

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the time of day that you want the printer to automatically start warming up. This option is useful if you always print a job at a specific time of day and you do not want to wait for the printer to warm up. For example, if you always print a job at 9:00 AM, use this option to have the printer start warming up at 8:30 AM.

 **NOTE:** Make sure that you coordinate the time that you want the printer to start warming up with the **Power Save Timeout** option ([Power Save Timeout on page 301](#)).

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set the automatic warm-up time, select **Wake up printer**.

Replace Supplies

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the behavior of the device when a supply reaches low or out. Configure the device to stop when a supply reaches low or out. The option to **Override at Out** can only be chosen through the device's control panel. HP Web Jetadmin 10.0 will only show this option if it is the current setting.


 **NOTE:** When device is set to **Override at Out**, the device will continue to print when the supply reaches out.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To stop the device when a supply reaches low, select **Stop at Low**.
2. To stop the device when a supply is out, select **Stop at Out**.

Resolution


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select the default resolution for print jobs that do not specify a resolution. This allows the printer to behave in a consistent manner for print jobs which do not specify a resolution.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the desired default resolution.

Resolution Enhancement


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

REt (Resolution Enhancement Technology) is a process that you can turn on and off. Turning on REt will sharpen the resolution but slow down printing. If the resolution selected is 1200 dpi, then REt will not be used regardless of this setting. This setting is not in effect when the resolution used is 1200 dpi.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select whether to turn REt on or off.

Size/Type Prompt

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify what the control panel displays when a paper tray is opened and closed. Configure it to display or not display the message **To change size or type press check** on the control panel. In either case, HP Web Jetadmin 10.0 displays a **Tray empty** message on the device's **Status** page.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. To turn on the display message, select **Display**.
2. To turn off the display message, select **Do Not Display**.

Status Page Language

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the device personality (PCL, PostScript, Text, or HP-GL2) that the HP Jetdirect print server uses when it sends a status page to the device. You might need to change the status page language to accommodate a particular printing device. For example, a PostScript printer might not be able to understand the default PCL print page that an HP Jetdirect print server sends.

 **NOTE:** This option only affects the test page output language, not the spooled print job language.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set the status page language, select one of the status page language options.

Supplies Status Message on Control Panel


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you control whether or not supplies-related status messages will be displayed on the control panel.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To display status messages on the device's control panel, select **Show**. To suppress status messages, select **Do Not Show**.

Suppress Blank Pages

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how the printer responds when a job with blank pages is printed. Allowing the printer to suppress printing blank pages can save you time, toner, and paper.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To allow printing blank pages in a print job, select **No**.
2. To suppress printing blank pages in a print job, select **Yes**.

System Contact


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The system contact is the name of the person who owns or is responsible for the device. HP Web Jetadmin 10.0 displays the system contact on the device **Status** page and on several of the device lists. The system contact is useful when you need to dispatch repair personnel, have questions about device settings or usage, or need to report a problem with a device. You can also search for and display a list of all of the devices that a particular person is responsible for.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To assign or change the system contact, type the name of the person to contact in **System Contact**.


System Location

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option identifies the system based on its location.

Type or change the device location in **System Location**.

Time Zone


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This options lets you specify what time zone the device is in based on hours ahead or behind Greenwich Mean Time.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select the number of hours ahead of or behind Greenwich Mean Time for the device.

Toner Low Action

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how the printer responds when a toner-low condition exists. Set the printer to continue normal operations or set it to stop printing. In either case, HP Web Jetadmin 10.0 displays a Toner Low message on the Device Status page. Allowing the printer to continue printing when the toner is low lets the current print job finish printing and gives the user who is responsible for the printer time to change the toner cartridge. However, this might result in poor print quality.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To let the printer continue printing when the toner is low, select **Continue**.
2. To stop the printer from printing until the toner is replaced, select **Stop**.

Toner Out Action

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how the printer responds when a toner-out condition exists. Set the printer to continue normal operations or set it to stop printing. In either case, HP Web Jetadmin 10.0 displays a **Toner Out** message on the Device Status page. Allowing the printer to continue printing when the toner is out lets the current print job finish printing and gives the user who is responsible for the printer time to change the toner cartridge. However, this might result in poor print quality.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To let the printer continue printing when the toner is out, select **Continue**.
2. To stop the printer from printing until the toner is replaced, select **Stop**.

Tray 1 Mode

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify:

- **Cassette:** let the device prioritize by paper size first.
- **First:** means that the device will always try to use paper from that tray regardless of the media type or size specified.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select the desired option: **Cassette** or **First**.

Tray Setup Media Type

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you select the default paper type to be selected for each tray. The device is capable of using various fuser temperatures for the printing process that are suitable for different types of paper.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


To configure this option, choose the desired paper type for each tray from the drop-down list box for that tray. The available options are:

- **Lightweight** (Less than 60 g/m²), for Transparencies and Thin Paper.
- **Midweight** (60 - 128 g/m²), for Plain Paper, Plain Envelope, and Postcard.
- **Heavyweight** (128 - 225 g/m²), for Bond Paper, Labels, Rough Paper, and Cardstock.
- **ExtraHeavy** (more than 225 g/m²).


Tray Administration

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you assign media sizes and types to input trays.

 **NOTE:** The drop-down list of media types contains all of the media types that are enabled on the **Media Administration** page.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

Following are steps to configure this option:

1. To set the media size and type, select the media size from the **Size** drop-down list next to the tray.
2. Select the media type from the **Type** drop-down list next to the tray.

Tray Assign Media Size

This option lets you assign media sizes and types to input trays. You can also see how much media is in each tray.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To set the media size for Tray 1, select the desired option from the drop-down list. Select **Lock** to prevent this option for Tray 1 from being changed.
2. To set the media size for Tray 2, select the desired option from the drop-down list. Select **Lock** to prevent this option for Tray 2 from being changed.

Tray Setup Media Size


The device is capable of using various fuser temperatures for the printing process that are suitable for different types of paper. This option lets you choose the right fuser temperature for the paper to be used. The available options are:

- **Lightweight** (Less than 68 g/m²) (Transparencies and Thin Paper)
- **Midweight** (68 - 90 g/m²) (Plain Paper, Plain Envelope and Postcard)
- **Heavyweight** (Greater than 90 g/m²) (Bond Paper, Labels, Rough Paper, and Cardstock)

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the desired paper type for each tray from the drop-down list box for that tray.

User Defined Mode

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option is actually the **User Configuration Settings** which are created in the **Options** window and then are displayed in the **User Settings** category after they are defined.


Device Configuration Options for Copier

- [Color Copy Option](#)
- [Copier Reduce/Enlarge](#)
- [Copy Job Auto Interrupt](#)
- [Copy Job Scan Ahead](#)

- [Copy Output Bin](#)
- [Default Copier Copies](#)
- [Default Copy Collation](#)
- [Default Copy Output Media Size](#)
- [Default Edge-to-Edge Setting](#)
- [Default Image Quality](#)
- [Default Number of Copies](#)
- [Default Number of Sides](#)
- [Default Original Content](#)
- [Default Original Density](#)
- [Hold Off Print Jobs During Copy](#)
- [Hold Off Time](#)
- [Interrupt Copy Jobs](#)
- [Reset Copy Send Timeout](#)
- [Reset Copy Timeout](#)

Configuration options for Copiers define functions for the copiers including default copy settings.

Color Copy Option

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The **Color Copy Option** provides an effective way to limit color copying which can serve as a cost control option for you. To provide an option to disable color copies and limit the color copy costs.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To allow color copies, select **Enable**.
2. To disable color copies, select **Disable**.

Copier Reduce/Enlarge

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option enables you to specify reduction/enlargement for copies. The number is represented as a percentage of the original. A value of 100 will make copies with no reduction or enlargement; higher values will make enlargements, while lower values cause a reduction. It is often useful to be able to

make reductions or enlargements if the paper size being copied to is different from the size of the source document. Some useful values for copying from one size to another would be:

- Legal to Letter (78%)
- Letter to A4 (97%)
- A4 to Letter (94%)
- Legal to A4 (83%)

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set this option, enter a number (between 25 and 200) for the percentage of the reduction or enlargement.

Copy Job Auto Interrupt

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The auto job interrupt feature allows the product to automatically interrupt an active network print job between complete sets to print a new copy job. This option lets you specify if the auto job interrupt feature is enabled or disabled. If you enable the auto job interrupt feature, users do not have to wait for large, multi-copy network print jobs to finish printing before they can print a new copy job.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable the auto job interrupt feature, select **On**.
2. To disable the auto job interrupt feature, select **Off**.

Copy Job Scan Ahead

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The walk-up copying feature allows you to walk up to the product and start making a copy while the product is busy printing a network print job. If the walk-up copying feature is enabled and a user initiates a copy job while the product is printing a network print job, the product scans and holds the copy job until it finishes printing the network print job. If the walk-up copying feature is disabled and a user initiates a copy job while the product is printing a network print job, the product waits until it finishes printing the network print job to start scanning the copy job. The product displays a message on the control panel saying that the copy job is blocked and will be processed as soon as the current job finishes printing. The user can choose to cancel the copy job or leave the originals in the automatic document feeder (ADF) or on the scanner glass.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable this feature, select **On**.
2. To disable this feature, select **Off**.

Copy Output Bin

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default output bin where the printed copies are delivered. The output bins that you can select depend on the output device that is configured with the product. If you want to take advantage of the one-touch copying feature, you should change the default to the output bin where the users typically send printed copies. This eliminates the need for the users to specify the output bin at the control panel each time they make copies.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the default output bin for copies, select the output bin from the drop-down list.

Default Copier Copies

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to select the default number of copies that will be generated on each copy job initiated from the control panel.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To select the default number of copies, type the number of copies (between 1 and 99) in the edit box.

Default Copy Collation

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify collation behavior. Since collation does consume additional resources on the device, turning this feature off can sometimes allow the device to complete jobs which otherwise may have failed to complete.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. To enable this feature, select **On** or **Enabled**.
2. To disable this feature, select **Off** or **Disabled**.

Default Copy Output Media Size

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default output media size of copied documents. The paper sensors override the default. If the paper sensors cannot detect the size of the original, the product uses the default. If you want to take advantage of the one-touch copying feature, change the default copy media size to the size of the originals that the users typically copy. This eliminates the need for the users to specify the media size at the control panel each time they make copies.

 **NOTE:** This configuration item is not included in the control panel. The device must have firmware version 03.779.0 or greater in order for the Auto selection to be successfully set.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the media size of the originals, select the media size from the drop-down list.

Default Edge-to-Edge Setting

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify whether copies are printed as close to the edge of the page as possible or printed with the normal unprinted border.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. For a 1 mm (0.04 inch) unprintable border, select the **None**.
2. For a 6.35 mm (0.25 inch) unprintable border, select the **Clip**.

Default Image Quality

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select the default copy quality either for maximum performance, or for more economic operation when the best performance is not needed.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the desired quality level.

Default Number of Copies

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default number of copies that are printed for each copy job. If you want to take advantage of the one-touch copying feature, change the default to the number of copies that the users typically print. This eliminates the need for the users to specify the number of copies at the control panel each time they make copies.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the default number of copies, type the quantity in the text box.

Default Number of Sides

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify if one side or both sides of the original or the copy document are copied.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the desired default number of sides from the drop-down box.

Default Original Content

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default type of information that is on the original document (**Text**, **Graphics**, or **Mixed**). If you want to take advantage of the one-touch copying feature and the users typically copy originals that have only graphics or only text, change the default to the appropriate type of information. This eliminates the need for the users to specify the page content at the control panel each time they make copies.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the information type (**Text**, **Graphics**, or **Mixed**) from the drop-down box.

Default Original Density

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default density and brightness of the copies, making all copies lighter or darker than the original. If you want to take advantage of the one-touch copying feature and the users typically make copies lighter or darker than the original, change the default to the appropriate density setting. This eliminates the need for the users to specify the density at the control panel each time they make copies.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the density of the copies, select the value from the drop-down box. For minimum brightness (darkest), select **0** or **-125**; for maximum brightness (lightest), select **8** or **125**.

Hold Off Print Jobs During Copy

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The hold off print job feature prevents network print jobs from starting within a specified time after the product finishes printing a copy job. This option lets you specify if the hold off print job feature is enabled or disabled. If you want to give walk-up copying users priority over network print jobs, you should configure the [Hold Off Time on page 313](#) option. HP Web Jetadmin 10.0 will not start printing any network print jobs as long as a user is interacting with the control panel. In addition, the product will wait for the amount of time that you specify for the **Hold Off Time** option after a copy job finishes printing before starting to print any network print jobs.

 **NOTE:** If you enable the hold off print job feature, you must also specify a value for the [Hold Off Time on page 313](#) option.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. To enable this feature, select **On**.
2. To disable the hold off print job feature, select **Off**.

Hold Off Time

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default amount of time that network print jobs must wait before starting to print if the [Hold Off Print Jobs During Copy on page 313](#) option is enabled. If you want to give walk-up copying users priority over network print jobs, you should configure the [Hold Off Print Jobs During Copy on page 313](#) option. HP Web Jetadmin 10.0 will not start printing any network print jobs as long as a user is interacting with the control panel. In addition, the product will wait for the amount of time that you specify for the **Hold Off Time** option after a copy job finishes printing before starting to print any network print jobs.

 **NOTE:** If the [Hold Off Print Jobs During Copy on page 313](#) option is not enabled, HP Web Jetadmin 10.0 ignores the **Hold Off Time** value entered for this feature.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify how long HP Web Jetadmin 10.0 waits before starting network print jobs, type the number of seconds in the text box.

Interrupt Copy Jobs

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This feature lets you interrupt an active copy job between complete sets to print a new copy job. This option lets you specify if the copy job interrupt feature is enabled or disabled. If you enable the copy job

interrupt feature, users do not have to wait for large, multi-copy copy jobs to finish printing before they can print a new copy job.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To enable this feature, select **On**.
2. To disable the interrupt copy job feature, select **Off**.

Reset Copy Send Timeout

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default amount of time that HP Web Jetadmin 10.0 waits after any control panel activity completes before it resets the send settings to their defaults. You should set the value to provide users with enough time to set up and complete their digital sending tasks before the product resets their send settings.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, type the number of seconds in the text box.

Reset Copy Timeout

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the default amount of time that HP Web Jetadmin 10.0 waits after any control panel activity completes before it resets the copy settings to their defaults. You should set the value to provide users with enough time to set up and complete their copying tasks before the product resets their copy settings.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, type the number of seconds in the text box.

Device Configuration Options for Network

- [Desired USB Mode](#)
- [DNS Server Configuration](#)
- [Enable Features](#)
- [Encrypt All Web Communications](#)
- [Encryption Strength](#)
- [IP Address](#)
- [IPP Printer Install Wizard](#)

- [IPv6 - Configuration Precedence](#)
- [IPv6 - DHCPv6 Policy](#)
- [IPv6 - Enable](#)
- [IPv6 - Options](#)
- [IPX Ethernet Frame Type](#)
- [IPX - Frame Type Token Ring](#)
- [IPX - Queue Server Job Polling Interval](#)
- [IPX - RCFG Support Enabled](#)
- [IPX - SAP Broadcast Interval](#)
- [IPX - Source Routing](#)
- [Jetdirect DHCP Config](#)
- [Jetdirect External Print Server](#)
- [Job Timeout](#)
- [LAA Address Configuration](#)
- [Link Setting](#)
- [Privacy Setting](#)
- [Protocol Stacks](#)
- [Scan Idle Timeout](#)
- [SNMP Trap Destination Table](#)
- [System Log Server](#)
- [System Name](#)
- [TCP Idle Timeout](#)
- [TCP/IP Configuration Method](#)
- [WINS Server Configuration](#)

Configuration options for Network define network communication functions for the device including TCP/IP setup, and protocols.

Desired USB Mode

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the protocol that the USB uses to interface with this device. HP Jetdirect normally uses the best protocol that the device supports. If a more complex interface does not work with the HP Jetdirect print server, change this option to a simpler interface. If you select **Automatic**, the HP Jetdirect print server uses the best protocol available. If you select **Unidirectional**, the HP Jetdirect

print server uses the forward-data only protocol (USB class 7.1.1). If you select **Bidirectional**, the HP Jetdirect print server uses the simple forward and reverse data protocol (USB class 7.1.2). If you select **Multiple Logical Channels (MLC)**, the HP Jetdirect print server uses the HP-MLC protocol (USB class 7.1.2+).

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To change the protocol, select the option for the protocol that you want this HP Jetdirect print server to use.

DNS Server Configuration

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

If your network uses Domain Name System (DNS) services, use this option to specify the IP address of a primary DNS server for specified devices. If a secondary DNS server is available on your network and can be configured on the device, you may also specify the IP address of the secondary DNS server. A secondary DNS server is used when the primary DNS server is not available. Use **Domain name** to specify a Domain Name for this device. A domain is a set of one or more IP addresses, and the Domain Name identifies the domain in which the device resides (for example, support.hp.com). A Domain Name typically consists of a series of labels separated by the dot (.) character, ending with a predefined suffix to identify its top-level domain. For example, top-level domain .com is used for commercial businesses, .edu for educational institutions, and .org for nonprofit organizations.

Devices on an IP network actually use IP addresses for communications. However, device IP addresses may dynamically change or be difficult to remember, use or manage. Domain Name System (DNS) services are used to automatically translate user-friendly Domain Names to corresponding device IP addresses. A server on the network that provides this service is a DNS server.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Enter the IP address of the primary DNS server in **Primary DNS server IP**.
2. Enter the IP address of the secondary DNS server in the **Secondary DNS server IP**.

 **NOTE:** Some devices may not support configuration of a secondary DNS server.

3. To specify a Domain Name for a device, enter the Domain Name assigned to this device in **Domain name**. (The entry is limited to 254 alphanumeric ASCII characters, including the dash (-) character and dot (.) label separator.)

 **NOTE:** When specifying the Domain Name, do not include the device host name. The entry in **Domain name** is not the fully-qualified host name (for example, printer1.support.hp.com is a fully-qualified host name for a device with host name "printer1" in the domain "support.hp.com").

Enable Features


To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

You can enable or disable various network configuration tools, printing methods, and other features that are supported by the device. Because each device supports different features, the items listed will vary. For example, some devices may allow you to enable or disable network configuration tools such as Telnet or the embedded Web server (EWS). Both Telnet and the embedded Web server provide additional access to print server configuration and management web pages. Or, you may be able to enable or disable printing services through File Transfer Protocol (FTP), Line Printer Daemon (LPD) which provides line printer spooling services for TCP/IP systems, Internet Printing Protocol (IPP), or port 9100 (direct-mode printing). Other features, such as the Service Location Protocol (SLP), used by select client applications to discover and identify the device, may be configurable. Finally, mDNS and IPv4 Multicast can be enabled or disabled. mDNS is typically used on small networks for IP address and name resolution (through UDP port 5353) where a conventional DNS server is not used. IPv4 Multicast, if enabled, allows the print server to send and receive IP version 4 multicast packets.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the feature to enable (or deselect a feature to disable it).

Encrypt All Web Communications

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you to enable or disable the HP Jetdirect card to encrypt any information coming from the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Select **Enabled** to encrypt information or **Disabled** to not encrypt information.

Encryption Strength

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option indicates the SSL encryption strength. For the encryption strength selected, ciphers are displayed that identify the weakest cipher allowed. This only applies if encryption is enabled.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select one of the encryption strengths from the drop-down menu.

IP Address

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Network devices use an IP address to communicate with another network device and the subnet mask to determine the network and host portions of the IP address. The default gateway is the address of a gateway system or a router, which are the nodes that let a network device communicate on other networks or subnets. These options define the IP address, subnet mask, and default gateway address

that the HP Jetdirect print server uses. The IP address, subnet mask, and gateway address are required to communicate with a device that uses the TCP/IP protocol.

△ **CAUTION:** These options are fundamental to TCP/IP-based networks. Before you change these options, make sure that you clearly understand how the network is designed.

📖 **NOTE:** The IP address specified here overrides BOOTP, DHCP, or any previously configured IP address on the HP Jetdirect print server. This is similar to configuring static addresses through Telnet or the device control panel in the case of an internal HP Jetdirect print server. Use the static configuration method if you do not have any automatic or server methods, such as BOOTP or DHCP.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

📖 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

To change the IP address, type the new IP address in **IP Address**. To change the subnet mask, type the new subnet IP address in **Subnet Mask**. To change the gateway address, type the new gateway IP address in **Gateway**.

IPP Printer Install Wizard

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the URL for the Internet Printing Protocol (IPP) Printer Install Wizard link for this printer. When you access this link, an Install Wizard runs that lets you create a print path between your computer and this printer.

△ **CAUTION:** If you change this URL, the availability of the Install Wizard may change. Make sure that the Install Wizard has been properly set up before changing this.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, type the URL for the IPP Printer Install Wizard in the text box.

IPv6 - Configuration Precedence

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

You can set the priority of how a device obtains IP addresses on the network, based on the best method for the network. The priority is determined by the order listed in this list. For example, if DHCP/BOOTP has precedence over DHCPv6, an IP address provided through DHCPv4 will have precedence over an IP address provided by DHCPv6.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To specify the configuration precedence, highlight the method and then click **Move Up** or **Move Down**. To restore the default configuration scheme, click **Reset**.

IPv6 - DHCPv6 Policy

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

You can specify how the Dynamic Host Configuration Protocol version 6 (DHCPv6) functions on the network. DHCPv6 is a protocol for assigning dynamic IP addresses to devices on a network. If you use dynamic addressing, a different IP address is assigned to the device when it connects to the network. A device's IP address can even change while it is still connected. DHCP also supports static IP addresses. Dynamic addressing monitors IP addresses on the network rather than requiring an administrator to manage the task. This means that a new device can be added to a network without manually assigning a unique IP address to the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this feature, select one of the options:

- **Always perform DHCPv6 at startup**
- **Perform DHCPv6 when stateless configuration is unsuccessful**
- **Perform DHCPv6 only when requested by the router**

IPv6 - Enable

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

You can enable or disable an IPv6-capable device to use the IPv6 protocol. IPv6 must be enabled to access other IPv6-capable devices through an IPv6 network.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To enable support for IPv6-capable devices, select **Enable IPv6**. To disable support, deselect this option.


IPv6 - Options

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

You can enable or disable an IPv6-capable device to use the IPv6 protocol. IPv6 must be enabled to access other IPv6-capable devices through an IPv6 network. You can set the priority of how a device obtains IP addresses on the network, based on the best method for the network. The priority is determined by the order listed in this list. For example, if DHCP/BOOTP has precedence over DHCPv6, an IP address provided through DHCPv4 will have precedence over an IP address provided by DHCPv6. You can specify how the Dynamic Host Configuration Protocol version 6 (DHCPv6) functions on the network. DHCPv6 is a protocol for assigning dynamic IP addresses to devices on a network. If you use dynamic addressing, a different IP address is assigned to the device when it connects to the network. A device's IP address can even change while it is still connected. DHCP also supports static IP addresses. Dynamic addressing monitors IP addresses on the network rather than requiring an

administrator to manage the task. This means that a new device can be added to a network without manually assigning a unique IP address to the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

Following are steps to configure this option:

1. Select one of the options:
 - **Always perform DHCPv6 at startup**
 - **Perform DHCPv6 when stateless configuration is unsuccessful**
 - **Perform DHCPv6 only when requested by the router**
2. You can specify a fully qualified domain name (FQDN) for a device. The FQDN corresponds to the TCP/IP address for a networked device. FQDN contains a host name and a domain name. The host name is always first, followed by the domain name, and then the top-level domain name.
3. You can specify the Primary and Secondary DNS servers for the device to be used in IPv6. If the network uses Domain Name System (DNS) services, use this option to specify the IP address of a primary DNS server for this device. If a secondary DNS server is available on the network and can be configured on the device, specify the IP address of the secondary DNS server. A secondary DNS server is used when the primary DNS server is not available.

IPX Ethernet Frame Type

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the Ethernet frame types that the HP Jetdirect print server uses on the network. If you select **Auto**, the HP Jetdirect print server tries all of the frame types until it finds the one that works. If you know that you are only going to use one frame type, selecting that frame type reduces network traffic.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this feature, select one of the Ethernet frame type options:

- **Auto**
- **Ethernet 802.3**
- **Ethernet II**
- **Ethernet 802.2**
- **Ethernet SNAP**


IPX - Frame Type Token Ring

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

IPX protocol is supported by Novell NetWare network OS. This option lets you specify which encapsulation type for IPX to use for a token ring LAN or it can be set to let the device automatically decide which is best to use.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

IPX - Queue Server Job Polling Interval

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

IPX protocol is supported by Novell's NetWare network operating system. This option lets you specify the number of seconds between polling the queue server for jobs.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

IPX - RCFG Support Enabled

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

RCFG (remote configuration protocol) was developed by HP for remote configuration and management of devices on an IPX/SPX network, typically a Novell NetWare network. By factory default, RCFG is enabled. RCFG does not support encrypted communications or authentication, and is not secure. If RCFG is not required for device configuration and management, it should be disabled. Disabling RCFG does not affect the use of IPX/SPX Direct-Mode (peer-to-peer) printing. Use this feature to enable or disable RCFG. If enabled, RCFG (sometimes called RCONFIG) allows the device to be remotely configured on an IPX/SPX network. HP Web Jetadmin 10.0 may use RCFG to configure Novell NetWare queue-server linkages on older HP Jetdirect print servers.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To enable RCFG, select **Enable RCFG support**. To disable RCFG, deselect this field.

IPX - SAP Broadcast Interval

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

By default, the HP Jetdirect print server sends out a Service Advertising Protocol (SAP) broadcast every 60 seconds to advertise itself on the network and make Novell print servers aware of its presence. SAP broadcasts are necessary for the print server services to be located in some Novell NetWare environments. This option lets you specify how often the HP Jetdirect print server sends out a SAP broadcast. If you have many HP Jetdirect print servers on your network, SAP broadcasts can cause network traffic. To reduce the impact that SAP broadcasts have on network traffic, increase the IPX SAP

broadcast interval. You might want to disable HP Jetdirect SAP broadcasts on Novell networks that use Novell Distributed Print Services (NDPS) or on other networks that do not require them.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To assign or change the IPX SAP broadcast interval, type the broadcast interval in minutes in the text box. To disable the IPX SAP broadcast interval, type 0 (zero) in the text box.

IPX - Source Routing

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

IPX protocol is supported by Novell's NetWare network OS. This option lets you set how source routing is handled by the device or allow it to automatically choose.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Jetdirect DHCP Config

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you enable or disable the DHCP configuration feature on the HP Jetdirect print server. If you want to manually control the IP address on the print server, disable the DHCP configuration feature. If you want to have DHCP automatically assign an IP address to the print server, enable the DHCP configuration feature.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To enable DHCP configuration, select **Enabled**. To disable this option, select **Disabled**.

Jetdirect External Print Server

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The HP Jetdirect External Print Server setting allows you to restart the print server remotely. The external print server may not be close or be conveniently positioned for access.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To restart the external print server, select **Restart**.

Job Timeout

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This value represents (in seconds) the maximum time of inactivity which must elapse before the print server card switches from the current network protocol to another when a normal end of job is not detected. For external HP Jetdirect print servers, allowable values are zero, and also within the range 30 to 3600 seconds. For internal HP Jetdirect print servers, allowable values are zero, and also within the range 30 to 127 seconds.

 **NOTE:** If the timeout value is set at zero, the print server will never time out (it will always stay in the current network protocol being used).


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


To specify a new job timeout, enter the timeout in seconds in the text field.

LAA Address Configuration


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Locally administered addresses are only supported in Token Ring HP Jetdirect print servers. The network device manufacturer originally sets the media access control (MAC) address in the device read-only memory. You can change the MAC address for most Token Ring network devices. This option lets you specify the MAC address on the Token Ring HP Jetdirect print server. Some Token Ring environments use the Locally Administered Address feature. While it is not a requirement that you change the MAC address, the Locally Administered Address feature might be implemented in some Token Ring environments. Some administrators find it easier to manage devices if the MAC address for all of the devices of the same type start with specific characters. For example, starting all HP devices with 003.

 **CAUTION:** To prevent potential problems, make sure that the address you assign is not already in use.

 **NOTE:** While the Novell protocol environment on the HP Jetdirect print server can restart and begin printing again after you assign locally administered addresses, you must reconfigure the other protocol environments to acknowledge the new address. This includes the Linux and Microsoft host software.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

To assign or change the locally administered address, type the address in the text box.

Link Setting

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify the link speed (10 or 100 Mbps) and the communication mode (full- or half-duplex) that the device should use when connecting to your 10/100Base-TX network each time it is powered on. To communicate on your network, the device link speed and communication mode must match the operation of your network. If the device setting is **AUTO**, the device will attempt to

autonegotiate its link settings with the network each time it is powered on. If the device successfully links to the network, you can then use this feature to explicitly configure the required link setting on the device. When the device is powered on again, the configured setting will be used directly. However, if the device fails to link using **AUTO**, then the link settings on the device will default to 100 Mbps and half-duplex mode. Communications with the device over the network may, or may not, be possible. The link setting options:

- **AUTO**: link settings are automatically negotiated.
- **10TXFULL**: the link is set to 10 Mbps, full-duplex operation.
- **10TXHALF**: the link is set to 10 Mbps, half-duplex operation.
- **100TXFULL**: the link is set to 100 Mbps, full-duplex operation.
- **100TXHALF**: the link is set to 100 Mbps, half-duplex operation.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select one of the Link Setting options from the drop-down box.

Privacy Setting

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This feature allows you to control whether HP may collect statistical data on product use. By allowing HP to collect this information, improved product features and services can be provided in the future. HP will not collect network-specific or personal data. For information on HP privacy policies, read the Hewlett-Packard Online Privacy Statement available by clicking privacy statement at <http://www.hp.com> in your language. For HP to collect any information, Internet access must be available. If you enable this feature, information collected by HP will be limited to the following items:

- HP Jetdirect product number.
- firmware version and manufacturing date.
- model number of the attached printer or device.
- Web browser and operating system detected.
- local language selections used for viewing.
- web pages Network communications protocols enabled.
- network management interfaces enabled.
- device discovery protocols enabled.
- printing protocols enabled.
- TCP/IP configuration methods enabled.
- SNMP control methods enabled.
- wireless configuration methods enabled.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To allow HP to collect data on the use of this product, select the check box. To disable this feature, clear the check box.

Protocol Stacks

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you enable or disable the various protocol stacks on the HP Jetdirect print server. Many networks only use a few protocols. For example, the AppleTalk and DLC protocols are enabled by default on HP Jetdirect print servers, but many networks do not use them. Although leaving unused protocols active will not harm the network, you might gain the following benefits if you disable them:

- A slight improvement in network performance.
- An additional measure of security and control because each user must access the HP Jetdirect print services centrally instead of establishing a direct connection. For example, a Macintosh user cannot set up a direct AppleTalk connection with the printer, but the user can access centralized print services through TCP/IP or IPX/SPX.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To enable a protocol stack, select the check box next to the protocol stack. To disable a protocol stack, clear the check box next to the protocol stack.

Scan Idle Timeout

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify how long the printer waits before closing an idle connection and going to the next print job. If your network is busy, there may be a delay in the packet transmissions. In this case, you might want to specify a longer timeout value.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To assign or change the scan idle timeout, type the timeout value in seconds in the text field.


SNMP Trap Destination Table

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

HP Web Jetadmin 10.0 runs a background trap-server utility that is used to receive HP Jetdirect traps and alerts, and can route alert notifications to email addresses. However, some networks may require that specific network servers and management applications receive SNMP traps. This feature allows you to specify different trap-management servers along with the use of special trap community names and supported SNMP agents. Specified trap servers are stored in a Trap Destination Table on the print server. The number of trap servers that can be configured (typically 3, 5, 10, or 12) depends on the print

server model. A trap server is specified by its IP address and/or its Fully Qualified Domain Name (FQDN), and a TCP/IP port number used by a management application on the server (a trap server port number). If a port number is not specified, the default port 162 is used. The print server can be configured to use a standard SNMPv1 or SNMPv2c agent, or an optional SNMPv2c Inform agent that requires an acknowledgement from the trap server. The agent selected remains configured when the print server is powered off/on. The default agent is SNMPv1. A trap community name can be specified for the SNMP agent to use when sending traps. By default, the trap community name is “public”. If the Trap Destination Table is empty, traps are not sent unless enabled through HP Web Jetadmin 10.0 running its background trap-server utility. Because trap objects (or pre-defined events) are encoded in each device, the available traps depend on the particular HP Jetdirect print server model and its current firmware version.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

Following are steps to configure this option:

1. For single device configurations:

- To save an entry in the Trap Destination Table, select **Add** and complete the active fields on this page.
- To clear an entry from the Trap Destination Table, clear **Add**.

For multiple device configurations:

- To save an entry in the Trap Destination Table, select **Save entry** and complete the active fields on this page.
- To clear an entry from the Trap Destination Table, select **Clear entry** and complete the active fields on this page.
- To clear all entries from the Trap Destination Table, select **Clear all entries**.

2. Enter the IP address of the desired trap server (to save or clear) in **IP address**, or enter the Fully Qualified Domain Name (FQDN) in **FQDN**.

 **NOTE:** **FQDN** is shown only when FQDN is supported by the print server.

3. If required by the trap server:

- specify a TCP/IP port number for the management application in **Port number**.
- select an SNMP agent version from the **Version** drop-down list.
- specify a trap community name in **Community** (up to 255 alphanumeric and special characters).

System Log Server

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the IP address of the server where you want the HP Jetdirect print server to send system log messages. System log messages identify, for example, when the HP Jetdirect print server was turned on or when a printer problem occurred.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


To assign the system log server, type the IP address of the system log server in the text box.

System Name


To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the system name, sometimes called the host name, for the HP Jetdirect print server. You might want to specify the system name for the HP Jetdirect print server for a variety of reasons, such as the following example:

- The system name is a static name that is saved on the HP Jetdirect print server. Use the system name to identify and track devices on the network. You can also include the system name as a column in device list views. Under some conditions, the system name is visible on the network or the IP name can be resolved through network name services. This typically occurs in a DHCP environment.

 **NOTE:** This option does not change the DNS server entries. If you want to view the system name on the network, you must update network name services, such as DNS, with name and address data.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

To configure this option, type the host name in **System Name**.

TCP Idle Timeout

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify how long TCP/IP stays open when there is no traffic. If the network is busy, there may be a delay in the packet transmissions. In this case, you might want to specify a longer timeout value.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To assign or change the TCP idle timeout, type the timeout value in seconds in the text box.

TCP/IP Configuration Method

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify how the HP Jetdirect print server obtains its TCP/IP configuration. This is a quick method for resetting the IP stack on the HP Jetdirect print server, forcing it to try and obtain an IP configuration through BOOTP or DHCP.

 **NOTE:** The current HP Jetdirect print server TCP/IP configuration is erased.

- **BOOTP Server:** forces the HP Jetdirect print server to obtain its TCP/IP configuration on the network through a BOOTP server, if one exists and if the print server configuration parameters have been defined. When you save the configuration, the HP Jetdirect print server immediately resets its IP address to 0.0.0.0. If a BOOTP configuration does not occur within a short period of time, the IP address defaults to 192.0.0.192.
- **DHCP Server:** forces the HP Jetdirect print server to obtain its TCP/IP configuration on the network through a DHCP server, if one exists and if the print server configuration parameters have been defined. When you save the configuration, the print server immediately resets its IP address to 0.0.0.0. If a DHCP configuration does not occur within a short period of time, the IP address defaults to 192.0.0.192.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To reconfigure the HP Jetdirect print server, select the configuration method option.

WINS Server Configuration

To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this feature to specify the IP address of a primary Windows Internet Naming Service (WINS) server for this device. A secondary WINS server may also be specified, if supported by the device, for use when the primary WINS server is not available. Devices on IP networks actually use IP addresses for communications. A WINS server provides name resolution services, that is, it translates between user-friendly host names and IP addresses for each network computer or device. A WINS server employs a distributed database of host names and associated IP addresses. The database is automatically updated dynamically so that host name and IP address resolution is always current.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Enter the IP address of the primary WINS server in **Primary WINS server IP**.
2. Enter the IP address of the secondary WINS server in **Secondary WINS server IP**.

 **NOTE:** Some devices may not support configuration for a secondary WINS server.


Device Configuration Options for Security

- [Access Control List](#)

- [Authentication Manager](#)
- [Bootloader Password](#)
- [Color Access Control](#)
- [Control Panel Access](#)
- [Disable Direct Ports](#)
- [Embedded Web Server Password](#)
- [Get Community Name](#)
- [Group 1 PIN](#)
- [Group 2 PIN](#)
- [Kerberos - Accessing the Authentication Server](#)
- [Kerberos - Accessing the LDAP Server](#)
- [Kerberos - Searching the LDAP Database](#)
- [LDAP - Accessing the Server](#)
- [LDAP - Searching the Database](#)
- [PJL Password](#)
- [Printer Firmware Update](#)
- [Set Community Name](#)
- [SNMP Version Access Control](#)
- [VuLDAP](#)

Configuration options for Security define functions for the device including authentication methods and access.

Access Control List

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


An access control list (ACL) is used to specify the IP addresses on your network that are allowed access to the device. The list supports up to 10 entries. If the list is empty, then any system is allowed access. By default, host systems with HTTP connections (such as Web browser or Internet Printing Protocol connections) are allowed access regardless of access control list entries. This allows hosts to access the device when Proxy Servers or Network Address Translators are used. However, unfiltered access by HTTP hosts may be disabled by clearing the **Check ACL for HTTP** checkbox.

△ **CAUTION:** You may lose your ability to communicate with the device if your system is not properly specified in the list, or access through HTTP is disabled. If communication with the device is lost, restoring network settings to factory-default values may be required.

The access control list (ACL) is normally used for security purposes. Network administrators can configure the device to limit which systems or management stations have access to the device. The device will block communications from systems that are not configured for access.

Host systems to be allowed access are specified by their IP host or network address. If the network contains subnets, an address mask may be used to specify whether the IP Address entry is for an individual host system or a group of host systems. For an individual host system, the mask 255.255.255.255 is assumed and is not required.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

To add an entry into the **Access Control List**:

1. Enter an IP address in **IP Address**.
2. To identify whether the IP address entry is an individual host or a group of hosts, enter a subnet mask in **Mask**.


For single device configuration, to delete entries from the **Access Control List**, click **Clear all ACL Table entries**.

Authentication Manager


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option enables you to set the authentication method to be used for accessing the device and various functions on the device. The authentication methods are User PIN, Group 1 PIN, Group 2 PIN, LDAP, Kerberos, and HP Digital Send Service. The device functions include walk-up, Copy, Send E-mail, Send Fax, Send to Network folder, DSS Secondary E-mail, DSS Workflow. If another device function becomes available through a 3rd party install, it would appear and be able to have an authentication method enabled for it.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


 **NOTE:** This configuration option will behave differently for single-device configuration than for multiple-device configuration. When capturing device settings into a configuration template via the **Save As Template** feature, this option will fail when the template is used to configure multiple devices. For more information, see [Captured Configurable Options and Configuration Templates on page 142](#).

Bootloader Password

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you configure a password on the bootloader screens for a device. This keeps the user from making any changes when the device first boots up. The **Bootloader PIN** keeps users from

changing the Bootloader Password. You can enter a new 4 digit PIN (or enter the existing 4 digit PIN if it had been set previously) and then enter the Bootloader Password itself.

 **NOTE:** If you forget the **Bootloader PIN**, the Bootloader password can not be changed and could only be cleared (along with the Bootloader PIN) via a service call.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Color Access Control


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify whether to allow jobs to print in color. The **Enable Color** setting will allow all color jobs to print in color. The **Color if Allowed** setting will require the device to check the permissions defined for the user and the application to determine whether each job will be printed in color or not. If either the user or the application has “black-only” permission, then the job will be printed without color. The **Disable Color** setting will result in all color jobs printing in black.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select one of the settings.

Control Panel Access


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option allows you to lock the device control panel, preventing unauthorized users from accessing it and changing the device settings. Users can still read the settings on the device’s control panel. The unlock options that are available depend on the device. For some devices, you can only lock and unlock the control panel. For other devices, you can specify the level of access: minimum, moderate, or maximum. The definitions for the different levels of access also depend on the device. If you install a printer in a public area, you might require additional security. Locking the device control panel prevents unauthorized users from accessing the device settings either at the device or through a software utility that provides control panel access.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To prevent users from changing device settings, select the appropriate lock option. To let users change device settings, select **Unlock**.


Disable Direct Ports

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


Checking the disable direct ports makes the device more secure but it only allows printing through the network connection. If this option is selected, the device must be rebooted afterwards.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Embedded Web Server Password

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


If you are concerned about security, specify a password for the embedded Web server configuration.

 **NOTE:** When setting a password on the device, you must enter the current password, if any, regardless of credentials stored in the application. If you don't, the setting will fail as "Invalid Data".

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To assign the password, type it in **Password**. Type the same password in **Confirm password**. To change the password, type it in **Current EWS password**. Type the same password in **Confirm password**.

Get Community Name


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The Get Community Name password can be set to prevent unauthorized people from using SNMP utilities to access a device and get the device settings.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set a Get Community Name password, type the password and then repeat it for confirmation.

Group 1 PIN


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option enables you to force users to use a pin to access a device. You can then use the Authentication Manager function to specify what features (such as walk-up, copy, send, fax) are restricted by this. You can have two different groups, each with a unique pin.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set this option, type the PIN and then type it again for confirmation.

Group 2 PIN


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option enables you to force users to use a pin to access a device. You can then use the Authentication Manager function to specify what features (such as walk-up, copy, send, fax) are restricted by this. You can have two different groups, each with a unique pin.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set this option, type the PIN and then type it again for confirmation.

Kerberos - Accessing the Authentication Server

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


Configuring the Kerberos Authentication for a device lets you specify which Kerberos server the device should connect to when the user is trying to complete a task that requires Kerberos authentication. Specifying this information allows the user to perform Kerberos authentication tasks on the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Enter the name of the Kerberos realm in **Kerberos default realm (domain)**.
2. Enter the hostname of the Kerberos server in **Kerberos server hostname**.
3. Enter the port number of the Kerberos server in **Kerberos server port**.


Kerberos - Accessing the LDAP Server

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify the attributes used to access the LDAP server.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Kerberos - Searching the LDAP Database

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify how the device will access the LDAP server when using the Kerberos authentication protocol. The user can specify the bind method – Anonymous resets the connection to anonymous state, simple sends the users domain name and password in plain text, Simple over SSL encrypts the domain name and password and Kerberos uses the Kerberos security protocol to secure the communication with the LDAP server. You can also choose to use the device user's credentials or default credentials specified. You must specify the IP address of the LDAP server and the communication port to use.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

LDAP - Accessing the Server


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify how the digital send device accesses the Lightweight Directory Access Protocol (LDAP) server to look up email addresses. To send scanned documents from the digital send device through email, the user must provide an email address. The process of entering email addresses can be simplified by providing an address lookup list and by using an auto-complete feature. Access to the LDAP server email address database provides a way for the digital send device to use the lookup list and the auto-complete feature.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select one of the following server bind methods from **LDAP server bind method**:
 - **Simple**: the digital send device will use credentials to access the LDAP server. You must provide complete information in **Username** and **Password** text boxes when selecting this option.

 **NOTE:** If you select **Simple**, the credentials are sent from the digital send device without encryption. Contact the LDAP server's administrator to determine the most appropriate server bind method settings.
 - **Simple over SSL**: the digital send device will use credentials to access the LDAP server and to enable the Secure Sockets Layer (SSL) protocol for communication between LDAP server and the device. The SSL protocol encrypts the authentication credentials before sending the credentials to the device.
2. Type the IP address or hostname for the LDAP server in **LDAP server**.
3. Type the number of the TCP/IP port on the server that receives LDAP requests in **Port** (usually 389).
4. If you select **Simple**, type the complete specified name of a user who has access to the LDAP server in **LDAP administrator's credentials** and the password for the user name in **Password**.


LDAP - Searching the Database

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify the root and attributes used to search the LDAP database for the user's email.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

PJL Password


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Printer Job Language (PJL) is a command language that enables some features of a device. Setting the PJL password restricts access to those PJL features.

 **NOTE:** This option is only available for HP Jetdirect print servers on a NetWare machine.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Printer Firmware Update

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


Use this option to enable or disable the ability of a device to have its firmware updated remotely. If disabled, the device will not accept RFU firmware update files.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Set Community Name

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


The Set Community Name, which is different than the device password, prevents unauthorized users from using SNMP utilities to access and change device setting. Once you assign a Set Community Name, only users who know the Set Community Name can change the device settings from an SNMP utility.

 **NOTE:** When setting a password on the device, you must enter the current password, if any, regardless of credentials stored in the application. If you don't, the setting will fail as "Invalid Data".


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, type the Set Community Name in **Set community name** and then confirm it by retyping it in **Repeat set community name**. To change the Set Community Name password, type the current one in **Current set community name** and then type the new one in **Set community name**. Confirm it by retyping it in **Repeat set community name**.

SNMP Version Access Control

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

SNMPv3 protects network management information through user authentication and data encryption. You can use SNMPv3 to prevent unauthorized users from viewing or changing device settings. You can require SNMPv3 to view or change information on a device. Or, you can allow SNMPv1 read-only access to the device, while requiring SNMPv3 to change information on a device. Enabling SNMPv3 protects the information sent between HP Web Jetadmin 10.0 and a device by encrypting the data.

 **NOTE:** SNMPv1 does not use data encryption when communicating with HP Web Jetadmin 10.0 and a device.


NOTE: When setting a password on the device, you must enter the current password, if any, regardless of credentials stored in the application. If you don't, the setting will fail as "Invalid Data".

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select **Enable SNMPv3** or **Modify SNMPv3** and complete the fields in the corresponding area.
2. To disable SNMPv3, complete the fields in **Disable SNMPv3**.

VuLDAP

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Configuring the VuLDAP information for a device lets you specify which LDAP server the device should connect to when the user is trying to complete a task that requires LDAP. Specifying this information allows the user to perform LDAP tasks on the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:


1. Select the Configure LDAP Authentication check box. Select the LDAP Server bind method from **LDAP server bind method**.
2. Enter the LDAP server name in **LDAP Server**.
3. Enter the port address in **Port**.
4. Enter the bind prefix in **Bind Prefix**.
5. Enter the root name for binding and searching in **Bind and Search Root**.
6. Enter the name of the LDAP attribute that you want to use for searching in **Match the name entered with the LDAP attribute**.
7. Enter the name of the LDAP attribute that matches the email address in **Retrieve the device user's email address using attribute of**.
8. Enter the name of the LDAP attribute that matches the device user's name in **Retrieve the device user's name using attribute of**.

Device Configuration Options for Projector

- [Auto-search](#)
- [Auto-sync VGA](#)
- [Power](#)
- [Requested Source](#)

Configuration options for Projector define functions specific to projectors.


Auto-search

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

When **Auto Search enabled** is checked, the projector will automatically search for a device connected to it.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Auto-sync VGA

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

When this option is selected, the device will automatically sync up its resolution with the incoming device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Power

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you remotely change the power level of the device. **Standby** uses less power while **Lamp On** will set the projector so it can be used.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Requested Source

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify what video standard source the projector will use for its source. You can also specify the projector to scan for any attached source, and select the source from the drop-down list.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Device Configuration Options for Wireless

- [802.3/802.11 Network Connections](#)

Configuration options for Wireless define wireless communication for the device including setup and encryption.

802.3/802.11 Network Connections

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Selected HP Jetdirect print servers support a network connection using either a wired 802.3 port using a network cable, or a wireless 802.11b/g port. However, only one port can be active at a time. For these print servers, you should specify the active port behavior. Controlling the active wired or wireless port is important to ensure availability for connected users. For example, when using the default setting **Auto (Cable Detect)**, an active wireless network will be disconnected if a network cable is inadvertently connected to the print server.

- **Auto (Cable Detect)** (default setting): automatically detects whether an 802.3 network cable is attached. If a network cable is not attached, only the 802.11 b/g wireless port will be active. However, if a network cable is attached, then only the 802.3 wired port will be active.
- **Disable Radio:** disables the 802.11b/g wireless port. Only the 802.3 wired port will be active.
- **Disable Wire:** disables the 802.3 wired port, whether or not a network cable is attached. Only the 802.11 wireless port will be active.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the appropriate port behavior.


Device Configuration Options for Fax

- [Fax Answer Mode](#)
- [Fax Billing Code](#)
- [Fax General](#)
- [Fax Header](#)
- [Fax Modem Settings](#)
- [Fax Notification](#)
- [Fax Printing](#)
- [Fax Receive](#)
- [Fax Receive - Disposition](#)
- [Fax Receive - Other Options](#)
- [Fax Reporting and Error Corrections](#)
- [Fax Reports and Logs](#)
- [Fax Resolution Quality](#)
- [Fax Send](#)
- [Fax Send - Dialing Mode](#)
- [Fax Send - Other Options](#)

- [Fax Send - Resolution](#)
- [Fax Time Format](#)

Configuration options for Faxes define functions for fax devices including setup and default fax settings.


Fax Answer Mode

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select the answer mode for this device. **Manual** mode requires user input and **Automatic** does not.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Fax Billing Code

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the billing code information for the digital send device. Billing codes provide a way to track faxes from different locations. When supported by the fax method, billing codes can be used to track the fax source to a specific machine or sender.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To allow the user to enter a billing code other than the default, select **Yes** from **Editable by the user**.
2. Type the default billing code value in **Default billing code**.
3. Select the minimum number of characters that a user is allowed to enter as a valid billing code from **Minimum length**. (The maximum number of characters allowed for a billing code is 16.)

Fax General

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify advanced fax settings for the digital send device. You can specify the modem and ringer volumes, whether the header information is overlaid on top of the fax image, and whether the fax device should use JBIG compression or Error Correction Mode (ECM). Printing the header over the top of the fax image instead of above it reduces the chance that each faxed page is larger than the selected paper size and prints as two pages on the receiving fax device.


JBIG compression is a protocol that allows for faster fax sending between two JBIG compliant fax devices. It is possible that older fax machines may fail to connect when JBIG is enabled. Error Correction Mode (ECM) should normally be enabled, except in extreme circumstances where line conditions are too poor to support ECM faxes.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select the fax modem volume from **Modem volume**.
2. Select the fax ringer volume from the **Ringer volume**.
3. The phone number, time, and date are stamped at the top of all outgoing faxes. To print this information over a small portion of the top of the fax image, select the **Overlay header**.
4. To disable JBIG compression, select the **Disable JBIG compression**.
5. To disable Error Correction Mode, select the **Disable error correction**.

Fax Header

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


You can specify the company name and fax number to be included at the top of your faxes.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Type the company name in **Company name**.
2. Type the fax number in **Fax number**.

Fax Modem Settings

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


Similar to a fax machine, the digital send device sends scanned documents to a fax phone number. Specify the fax settings to ensure that the fax line associated with the digital send device is properly configured.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select the country/region of origin from **Country/region**.
2. Optional: Type the name of the company of origin in **Company name**.
3. Type the phone number from which the device is dialing in **Phone number**.
4. If a prefix number is required by the local phone system, select **Enable dialing prefix** and then type it in **Dialing prefix**.

Fax Notification

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The digital send device can generate notification reports to provide further details about the result of a fax send or receive operation. Use this option to specify when the digital send device generates notification reports and how those reports are delivered to the user. Depending on your needs, you can configure the device to deliver notification reports regularly or only when specific types of errors occur.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. Select the condition when fax notifications should be sent from **Condition upon which to notify**.
2. Select the notification delivery method from the **Method used to deliver notification**:

 **NOTE:** The device must be correctly configured to use either option.

- **Print:** print the fax notification report directly at the digital send device.
 - **Email Sender:** send the fax notification report to the user's email address.
3. To include a thumbnail image of each fax with the fax notification report, select **Yes** from **Include thumbnail**.

Fax Printing

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the fax printing settings for the fax capable device. You can specify a PIN to secure incoming fax documents and prevent unauthorized users from printing them. You can also specify whether incoming faxes are printed or stored. For printed faxes, you can schedule when they are printed. If incoming faxes contain sensitive information, securing the fax modem with a PIN prevents unauthorized users from printing those faxes. If the fax device is not attended regularly, storing all received faxes or specifying a printing schedule prevents the faxes from being printed when the device is unattended.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Type a numeric PIN in **PIN number**.

Confirm the numeric PIN by typing it again in **Confirm PIN number**.

2. To specify the Printing Mode settings for the fax, select an option from **Enable mode**:


- **Print All Received Faxes**: print all faxes when they are received.
- **Store All Received Faxes**: store all received faxes on the device. The faxes can only be printed by entering the correct PIN on the device.
- **Use Fax Printing Schedule**: specify the times when incoming faxes can be printed. You can specify the days and times when the device is unlocked.

Select a start time from **Unlock time (print start time)** and a stop time from **Lock time (print end time)**.

Specify the days that the digital send device is unlocked by selecting the appropriate check boxes underneath **Days as scheduled**.

 **NOTE:** If you do not specify a schedule then the device stores all received faxes.

Fax Receive


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify the most efficient fax receive settings for the digital send device. You can specify which bins on the digital send device the faxes are printed from and delivered to, how the faxes are formatted for printing, the number of rings the fax device waits before answering an incoming call, and whether the device should forward the fax document to another fax capable machine. These settings will ensure that the majority of the incoming faxes are received successfully and delivered to the user in the most effective manner.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select the number of the input tray from which the digital send device prints faxes from **Fax paper tray**.
2. Select the number of the output bin to which the digital send device prints faxes from **Fax destination bin**.
3. Select the number of rings that the fax machine waits before answering an incoming call from the **Number of rings before answering**.
4. To stamp received faxes with available information from the sender, select **Stamp received faxes**.
5. To scale the incoming fax image to the size of the paper contained in the input tray, select **Fit image to page size**.
6. To forward incoming faxes on the digital send device to another fax capable machine, type the phone number of the target fax in **Forwarding number**.

 **NOTE:** Even if the digital send device forwards a fax, it will still handle the fax normally by printing it, emailing it, or storing it in memory.


Fax Receive - Disposition

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you define what a device should do when receiving a fax. Either print the fax or forward it to a different fax number.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Fax Receive - Other Options

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select additional options the device can do when receiving a fax. You can allow users to get faxes even when attached to an extension phone, let the device detect if there is silence after the incoming phone is answered, or even force each incoming fax to be time-stamped.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Fax Reporting and Error Corrections

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you set up options with errors and tracking reports. Enabling error correction lets the device automatically attempt error correction with faxes. You can also select how often the fax log is printed by selecting the frequency in the drop-down list. You can also choose to include the first page or not.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Fax Reports and Logs

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify whether to print or clear the fax activity logs. The fax activity log contains a record of all the incoming and outgoing fax calls that have occurred since the last time the fax log was cleared. Periodically, the log should be printed for record-keeping purposes and then cleared. This prevents the log from becoming too large.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. To print the fax activity log, select **Print activity log**. The log is printed when the settings for the digital send device are applied.
2. To clear the fax activity log, select **Clear activity log**. The log is cleared when the settings for the digital send device are applied.

Fax Resolution Quality

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the resolution quality of outbound faxes. Use the resolution setting to manage the efficiency of the fax sending operation. Lower resolution typically results in faster fax send times, but the quality of the fax document is reduced.

 **NOTE:** The resolution setting cannot be changed by the user.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the quality of outbound faxes from the **Resolution** drop-down list.

Fax Send

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the most efficient settings for sending faxes from the digital send device. These settings affect how the device dials outbound faxes and how it behaves when the receiving line fails to answer the fax. These settings will ensure that the majority of the outbound faxes are received successfully while minimizing time spent attempting to send faxes to unreachable recipients.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select the dialing mode from the **Dialing mode** drop-down list.
2. To have the fax wait for a dial tone before dialing for an outbound fax document, select **Yes** from the **Detect dial tone** drop-down list.
3. Select the number of retry attempts when the receiving line is busy from the **Redial on busy** drop-down list.
4. Select the number of retry attempts when the receiving line fails to answer from the **Redial on no answer** drop-down list.
5. Select the number of minutes to wait between retry attempts from the **Redial interval** drop-down list.

Fax Send - Dialing Mode


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you set the default dialing mode for dialing a number on a fax send (**Tone** or **Pulse**). This lets you select the dialing mode that suits the characteristics of the available communication line.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the radio button for the dialing mode.


Fax Send - Other Options

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you define what the device should do if the number dialed is busy or there is no answer.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Fax Send - Resolution


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you set the default resolution that will be used when sending faxes. The available selections are **Standard**, **Fine**, **Superfine**, and **Photo**. This lets you control the quality of the sent faxes when the default setting is used.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the desired resolution.

Fax Time Format

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select the time format this device should use (12 hour or 24 hours).

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Device Configuration Options for Embedded Web Server

- [Embedded Web Server Configuration Options](#)
- [Embedded Web Server Language Settings](#)
- [Embedded Web Server Mail Settings](#)

- [Embedded Web Server Other Links](#)
- [Embedded Web Server URL](#)
- [Time Services](#)

Configuration options for Embedded Web Server define functions for the device's Embedded Web Server.

Embedded Web Server Configuration Options


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you select various features for the embedded Web server. If you have a set of standard configuration options for embedded Web servers, you can direct all of your embedded Web servers to the URL of the printer that has the correct configuration options. This eliminates the need to manually specify the configuration options for each embedded Web server, reducing errors.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To turn a feature on, select the feature check box. To turn a feature off, clear the feature check box.


Embedded Web Server Language Settings

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to specify what language the embedded Web server uses to display Web pages.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

 **NOTE:** If you want to receive HP Web Jetadmin 10.0 alerts, you must use English or the browser language. To do this, set the **Select a language to English** and then specify the language in your browser to the language you need to use. Then select the **View pages in browser language** option.

1. To display the Web pages in a specific language, select **Select a language** and select a language from the drop-down list.
2. To display the Web pages in the language assigned in the user's browser, select **View pages in browser language**.
3. To display the Web pages in the language assigned in the printer, select **View pages in printer language**.

Embedded Web Server Mail Settings

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


Use this option to configure email settings for an individual printer or printers in a device group. You can specify email settings for sending and receiving email messages from the printer.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select **SMTP server** and then type the SMTP server IP address in the text box.
2. Select **Domain name** and then type the SMTP server domain name in the text box.
3. To specify the incoming email options:
 - Select **POP3 server** and then type the POP3 server IP address in the text box.
 - Select **Username** and then type the printer name in the text box.
 - If required, select **Password** and then type a password in the text box. Confirm the password by typing it again in the **Confirm password** text box.

Embedded Web Server Other Links


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to create links to other Web sites. This is a convenient way to quickly browse to a Web site. These links appear on the printer's embedded Web server page. You can create up to five links.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

 **NOTE:** **My Printer**, **Order Supplies**, and **Solve a Problem** links are defaults and cannot be deleted or changed.


Following are steps to configure this option:

 **NOTE:** The following characters are not allowed in a link name or link address: +, =, <, >, &, ", and ;.

1. Type a name for the link in **Link name**.
2. Type the URL in **Link URL** and click **Add Link**.

If you typed a link that you do not want, highlight it in the **User-defined links** box and click **Remove**. If you typed multiple links and you do not want any of them, click **Clear all links** at the top of the page.

Embedded Web Server URL


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Specify a URL where the embedded Web server can retrieve configuration information. If you have a set of standard configuration options for embedded Web servers, you can set up a URL with those configuration options and direct all of your embedded Web servers to that URL. This eliminates the need to manually specify the configuration options for each embedded Web server, reducing errors.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To assign or change the URL, type it in the text box.

Time Services


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to access another machine on the network to obtain the correct time for an individual printer or printers in a device group. HP printers do not have an internal clock to keep track of the time; therefore, they need to connect to another machine on the network to obtain the current time.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To specify the default values, select **Use default values**.
2. **Enable clock drift correction:** the device will check with the server periodically and update its time. This is beneficial because your device is always set to the correct time but it does cause some network traffic.
3. To specify the network time server address select **Network time server address** and type the IP address.

 **NOTE:** The printer receives the time from this machine on the network. For the default value, HP Web Jetadmin 10.0 looks for another machine on the network. If another machine on the network is not found, the value appears as 0.

4. **Local port to receive time from server:** specify the port to use for the device to get data from the time server.
5. To specify an hour for the printer to synchronize with a machine on the network, select **Synchronize time with server every** and type an integer value between 1 and 168 (default is 24 hours).


 **NOTE:** The time synchronizes with another machine on the network at the designated hourly interval and not immediately after saving. For example, if you specify 2 hours, the printer waits 2 hours after you save this configuration.

Device Configuration Options for File System

- [File System External Access](#)
- [Set File System Password](#)
- [Set Secure File Erase Mode](#)

Configuration settings for File System are used to delete files on the device's memory.

File System External Access

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option allows you to manage the access to file systems by various printer communication languages on a device hard drive, which helps protect a device's file system from unauthorized reading or writing of data. If you disable a printer communication language, that printer communication language cannot read or write any data to the file system on a device's hard drive.

 **NOTE:** All printer communication languages are enabled by default.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select the printer communication language or languages to enable.

Set File System Password

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option prevents unauthorized users from changing any file system configuration options and from performing a secure storage erase operation. The file system password must be set to perform a secure storage erase operation and to configure the secure file erase modes and the file system external access.

 **NOTE:** For easier password management, it is recommended to set the same file system password for all devices.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To set the initial file system password for a device, type the password in **File system password**. Type the password again in **Confirm file system password**.

Set Secure File Erase Mode

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option determines the behavior of a secure storage erase operation and the erase operation that a printer automatically performs to make space available on a hard disk drive for incoming print jobs. The erase operations are designed to add available space to a device's hard disk drive and to prevent unauthorized users from accessing confidential information from a device's hard disk drive or other erasable storage device. The following are the supported secure file erase modes:

- **Non-secure Fast Erase:** erases the file system references to operations, such as completed print jobs. By erasing the references, space on the hard disk drive is made available. This is the fastest erase mode and the default mode.
- **Secure Fast Erase:** erases the file system references to operations and provides one layer of masking to hide data stored on the hard disk drive or other erasable storage devices. This mode is slower than the **Non-secure Fast Erase** but more secure.
- **Secure Sanitizing Erase:** erases the file system references to operations and provides multiple layers of masking to hide data stored on the hard disk drive or other erasable storage devices. This mode may introduce a significant performance impact to the device while the process is executing.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


To configure this option, select a file erase mode from the drop-down list.

Device Configuration Options for Digital Sending

- [Activity Log](#)
- [Address Book Management](#)
- [Administrator Information](#)
- [Advanced Search Options](#)
- [Default 'From:' Address](#)
- [Default Scanner Settings](#)
- [Digital Sending - Accessing the LDAP Server](#)
- [Digital Sending Service](#)
- [Email Attachment Settings](#)
- [Email Message Text](#)
- [Send to Network Folder](#)
- [SMTP Gateway Settings](#)
- [Time-outs](#)
- [Use MFP User Credentials](#)

Configuration options for Digital Sending devices define functions for the device including setup and default settings.

Activity Log

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you view the logs for the digital send device. The logs contain digital sending job information and error events associated with the device. You can use this information to check the status of digital send jobs for the device. If there are any errors associated with the jobs, you can also view the specific error messages to begin troubleshooting any issues.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. To save the activity log, select **Save log**.

 **NOTE:** The log is saved when the settings for the digital send device are applied.

2. To clear the activity log, select **Clear log**.


Address Book Management

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

Use this option to import a predefined list of email addresses (500 maximum) from a comma separated value (CSV) file directly into the internal address book of the digital send device. The address book can store up to 2,000 addresses. Once an address file is imported to the digital send device, the addresses can be searched by alias. The alias can be a name or an email address. To ensure that searches are consistent in the digital send device address book, use the same format for all aliases. For example, type the first name and then the last name.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:


 **NOTE:** A digital send device can store up to 2000 entries, but only up to 500 entries can be loaded at a time.

NOTE: The CSV file must have a pair of entries for each new address, where the first entry is the name of the person and the second entry is a valid email address. The CSV file also must have a header entry "name,emailaddress". Following is a sample of a CSV file:

```
name,emailaddress
taylor duggan,taylor.duggan@hp.com
kelly jacobson,kelly.jacobson@hp.com
```

1. To import an address file, select **Import address book**. Click **File** to browse to locate the CSV file using a dialog window.
2. To clear the address book on the digital send device, select **Clear device address book**.

Administrator Information

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the contact information for the administrator of the digital send device. In case of a problem with this device, this administrator should be contacted.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Type the name of the person responsible for maintaining the digital sending features of this device in **Name**.
2. Type the email address of the person responsible for maintaining the digital sending features of this device in **Email address**.

3. Type the phone number of the person responsible for maintaining the digital sending features of this device in **Phone number (optional)**.
4. Type the physical location of the person responsible for maintaining the digital sending features of this device in **Location (optional)**.

Advanced Search Options


 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the settings the digital send device uses to search the LDAP database for email addresses. LDAP servers with large email address databases can take a long time for the digital send device to search. Specify the most efficient search method for the device to ensure the fastest possible search results.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select the maximum number of addresses returned from an LDAP search from **Maximum LDAP addresses**.


 **NOTE:** Smaller values typically result in faster search times, but may not provide the user with all possible matching addresses.

2. Select the maximum amount of time that the digital send device waits for the LDAP search to complete from **Maximum search time**.

 **NOTE:** Smaller values typically result in faster search times, but may not provide the user with all possible matching addresses.

3. Optional: If the LDAP server supports additional search parameters, type a parameter into **LDAP filter condition**. This parameter must be in the form of a valid LDAP filter.
4. Select how thoroughly the search is performed from the **Find entries in the database**.
 - Select **fast mode** to search for only entries that begin with the search string. This option is faster, but may not return all matching entries.
 - Select **verbose mode** to search for any entries that contain the search string. This option is more thorough, but may take longer to complete.
5. If email entries in the LDAP database are alphabetized, select **Enabled** or **Disabled** from the **Entries in database are alphabetized** drop-down list. The digital send device searches the LDAP database more efficiently if this option is selected.

Default 'From:' Address

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the From address and subject information that initially appears in all email messages sent from the digital send device. The digital send device uses these settings as the initial From address and subject line for each email message it generates. You can also specify whether the


digital send device user has permission to change the default From address at the device. For example, you can specify the subject of the email: `Please type in a subject for your message here`. For security reasons, you may not want to allow the user to change the From address provided on the digital send device. You can specify a setting in this section that prevents the user from changing the default From address.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. If desired, select **Prevent user from changing the default 'from:' address**.
2. To specify the default sender, type the email address in the **Email address**.
3. Optional: Type the name you want to appear in the From field of the email in the **Display name**.
4. Type the default subject for emails in **Default subject**. For example, type `Please type in a subject for your message here`.

Default Scanner Settings

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The default scanner settings determine the initial settings used when a user scans a document. These settings apply to both copying and digital sending operations. Set the default scanner settings to the preferences used most often for scanning on the digital send device. This increases user efficiency because the user does not need to spend time manually configuring the scanner settings as often.


 **NOTE:** The digital send device user can override each of the default scanner settings from the device control panel.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. Select the default paper size the device scanner uses when scanning the document from **Document size**.
2. Select the default document type the scanner's image processor uses when scanning the document from the **Document type**:
 - **Text:** for documents consisting mostly of textual information.
 - **Graphics:** for documents consisting mostly of graphical images.
 - **Mixed:** for documents consisting of both text information and graphical images.
3. If the device scanner supports two-sided scanning, select **2 Sided document** to have the scanner device scan both sides of the document.

Digital Sending - Accessing the LDAP Server

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify how the digital send device accesses the Lightweight Directory Access Protocol (LDAP) server to look up email addresses. To send scanned documents from the digital send device through email, the user must provide an email address. The process of entering email addresses can be simplified by providing an address lookup list and by using an auto-complete feature. Access to the LDAP server email address database provides a way for the digital send device to use the lookup list and the auto-complete feature.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. Select one of the following server bind methods from the **LDAP server bind method** drop-down list:
 - **Anonymous:** tells the digital send device to access the LDAP server without using credentials (no user name or password required).
 - **Simple:** tells the digital send device to use credentials to access the LDAP server. You must provide complete information in **Username** and **Password** when selecting this option.
2. If you select **Simple**, type the complete specified name of a user who has access to the LDAP server in **Username** and the password for the user name in **Password** and **Repeat password**.
3. You can specify the LDAP Server IP by providing a valid IP hostname or a valid IP address for the LDAP server. To specify an IP hostname, select **IP Hostname** and type the IP hostname in the corresponding text box.

To specify an IP address, select the **IP Address** and type the full IP address in the corresponding text boxes.


 **NOTE:** Some digital send device models only recognize IP addresses. In this case, the host names are converted to the equivalent IP address.

4. Type the number of the TCP/IP port on the server that receives LDAP requests in **Port**. Typically, the port number is 389.

 **NOTE:** If you are unsure about the correct LDAP server host name or IP address and are configuring a single device, click **Find Server** to search the network for a suitable LDAP server (if one is available). The digital send device searches for all available LDAP servers and the results display in a separate window.

5. Set how you will search through the LDAP database to find the credential.
6. To test the settings, click **Test Settings**.


Digital Sending Service

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The digital sending service is an independent HP product that allows you to configure digital sending. Selecting **Allow use of digital send service** lets the Digital Sending Service manage the device. Selecting **Allow transfer to new digital send service** lets any Digital Send Service manage the device even if another Digital Send Service is currently managing the device

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Email Attachment Settings

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the default email attachment settings for each email sent from the digital send device. The digital send device uses the email attachment settings as the initial settings for each email message the device generates. Set the default attachment settings to the preferences used most often for email attachments on the digital send device. This increases user efficiency because the user does not need to spend additional time manually configuring the attachment settings as often.

 **NOTE:** The default values can be changed as necessary when sending emails from the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. Select the file format used for email attachments from **Default file format**.
2. Select black and white or color from **Default color preference**.

 **NOTE:** Color attachments are larger in size and take more time to send.

3. Select the resolution for email attachments from **Default resolution**.
4. Select the attachment file size from **Default file size**.

Email Message Text

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify the information that initially appears in the body of all email messages sent from the digital send device. The digital send device uses the email message settings as the initial content text for each email message it generates. The initial information provided can serve as a


template for the email or provide instructions to the user. For example, you can type the following message in the body text of the email: `Type the body of the email here.`

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To use the default message for the email, select **Message language** and then select a language from the drop-down list. The device generates an email message containing the default message in the selected language.
2. To compose a custom message, select **Use a custom message** and then type a custom message into the text box.
3. To allow the users to change the message text of the email, select **Editable by user**.

Send to Network Folder

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you send documents to a network folder. There is a list of predefined folders. You can set the default document setting to apply to documents sent to a network folder.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. To enable this option select **Enable send to folder**.
2. To add folders to the list of predefined folders, click **Add** and enter the shared folder or FTP site.
3. To edit an existing folder click **Edit**.
4. To remove all of the predefined folders in the list click **Remove All**.
5. To determine whether you have access to a folder click **Test Folder Access** and enter a domain, username, and password for the credentials to use to access public folders.
6. Select settings from the drop-down lists: **Color preference**, **Resolution**, **Default file size**, **File format**, **TIFF version**, and **NTLM authentication setting**.

SMTP Gateway Settings

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).


This option lets you specify the SMTP gateway settings for the digital send device. The device uses the SMTP gateway settings to connect to an email server to send scanned documents directly from the digital send device to an email address.

 **NOTE:** The SMTP gateway settings of the digital send device must be specified before scanned documents can be sent through email.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.


Following are steps to configure this option:

1. Send emails
2. You can specify the SMTP gateway IP by providing a valid IP hostname or a valid IP address for the gateway server in **IP hostname** or **IP address**.

 **NOTE:** If you are unsure about the correct SMTP gateway IP address or hostname, click **Find Gateway** to search the network for a suitable SMTP gateway server (if one is available).

3. Select the maximum size the SMTP gateway server allows for email attachments from the **Maximum attachment size** drop-down list.
4. To test the connection to the gateway server, click **Test**. The digital send device attempts to connect to the SMTP gateway server using the specified IP hostname or IP address. The results of the test display in a separate window.

Time-outs

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

The timeout settings determine how long the digital send device waits after a digital sending operation is complete to revert to the specified default settings. Some users may need to specify settings other than the default settings for a digital sending operation. If they need to send multiple jobs, it can be very time consuming to specify the settings for each additional job. Setting a timeout allows the user additional time to send another document before the settings revert to default.


Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

Following are steps to configure this option:

1. To have the digital device reset to the default settings immediately after each digital send job, select **Immediately reset to default settings**.

To allow a delay before the digital send device resets to the default settings after each digital send job, select **Delay before resetting the default settings**.
2. If you selected the **Delay before resetting the default settings**, type a timeout value between 10 and 300 seconds in **Number of seconds (10-300) to delay**.

Use MFP User Credentials

 **NOTE:** To see a list of devices that a specific configuration option can apply to, hold your cursor over the configuration option name above where you define the settings (not in the left menu that lists all of the configuration options).

This option lets you specify whether the user is required to provide credentials in order to use the digital send features of the device. For security purposes, you can require that the user provide proper credentials whenever trying to use the digital send features of the device.

Setting this option remotely saves the time it takes to physically go to the printer. This is particularly useful if your organization has multiple buildings or sites.

To configure this option, select **Use MFP user credentials**.

8 End User License Agreement

Following is the End User License Agreement for HP Web Jetadmin 10.0.

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