

1.0 Deliverables

Table 1: Currently shipping functionality vs. version 3.5

Anything that is not marked Primer in V 3.5 is an Add-on.

Version 3.41 does not have any add-on support.

Version 3.42 has limited (refer to the list of add-ons provided before).

Unless the version number is on the list, the version has not changed from version 3.41 to V3.5

Standard Firmware Features from the factory	v3.41_369	v3.42	v3.5
Platforms <ul style="list-style-type: none"> • T1000 • T1010-8/32 • T1010-16/48 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •
Internet Browser <ul style="list-style-type: none"> • IE4 4.01 • Print Spooler 		<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • •
Network <ul style="list-style-type: none"> • 10Mbps • 100Mbps • Network Time Services • Lucent ORINOCO Wireless • Cisco Aironet Wireless 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • • • • 	<ul style="list-style-type: none"> Primer Primer Primer • •
Communication <ul style="list-style-type: none"> • ICA • RDP • TEC • RAS Dialup • Token Ring • Built in Ethernet • DHCP • SNMP 	<ul style="list-style-type: none"> • 4.0 • • 1.4.0 • • • • • SP3 • 	<ul style="list-style-type: none"> • 4.0 • • 1.4.0 • • • • • • 	<ul style="list-style-type: none"> • 6.0 • • 1.4.5 • • Primer Primer Primer
USB Support <ul style="list-style-type: none"> • Modem • Printer/Spooler 		<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • •
Touch screen <ul style="list-style-type: none"> • Mocrotouch • ELO touch 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • •
Video Color Depth <ul style="list-style-type: none"> • 8-bit • 16-bit 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • the browser only 	<ul style="list-style-type: none"> Primer Primer ICA & browser
Virtual Port Services (VPS)		<ul style="list-style-type: none"> • 	removed
Limited Scroll Mouse wheel support			Primer
Memory Configuration <ul style="list-style-type: none"> • 8MB Flash (min) • 16MB Flash (min) • 48MB Flash (max) • 160MB RAM (max) 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> Primer Primer Primer Primer
Localized Keyboard			

• Belgian Dutch	•	•	Primer
• Belgian French	•	•	Primer
• Brazilian (ABNT)	•	•	Primer
• Canadian Eng. (Multi)	•	•	Primer
• Canadian Fr (Multi)	•	•	Primer
• Canadian French	•	•	Primer
• Danish	•	•	Primer
• Dutch	•	•	Primer
• English (UK)	•	•	Primer
• English (US)	•	•	Primer
• Finnish	•	•	Primer
• French	•	•	Primer
• German	•	•	Primer
• Italian	•	•	Primer
• Italian (142)	•	•	Primer
• Japanese	•	•	Primer
• Latin American	•	•	Primer
• Norwegian	•	•	Primer
• Portuguese	•	•	Primer
• Spanish	•	•	Primer
• Spanish Variation	•	•	Primer
• Swedish	•	•	Primer
• Swiss French	•	•	Primer
• Swiss German	•	•	Primer
• US International	•	•	Primer
• Czech		•	Primer
• Hungarian		•	Primer
• Romanian		•	Primer
• Slovak		•	Primer
• Polish (214)		•	Primer
• Polish (Programmer)		•	Primer
• Russian		•	Primer
• Turkish-F		•	Primer
• Turkish-Q		•	Primer
• Greek		•	Primer
• Croatian			Primer
• Slovenian			Primer

Table 2: Version 3.5 add-ons that can be install on top of version 3.42

Add-ons	3.42 Compatible	3.5 Compatible	Flash Size (MBytes)
ICA 6.0	•	•	1.450
RDP 5.0	present	•	0.500
TEC 1.4.5	•	•	1.250
IE 4.0	present	•	3.400
USB Modem	present	•	0.021
JVM 1.7	•*	•*	2.900
Media Player	•	•	2.500
USB Printer/Spooler (JetCet)	present	•	0.370
RAS Dialup	present	•	0.110

Add-ons	3.42 Compatible	3.5 Compatible	Flash Size (MBytes)
Microtouch	present	•	0.035
ELO touch	present	•	0.045
T/R	present	•	0.110
Lucent Wireless Oronico	present	•	0.052
Cisco Aironet Wireless	present	•	0.345
Microsoft Screen Saver	present	•	0.170

* Will not be available on announce.

Table 3. Pre-configured version 3.5 WEB releases

	Estimated Size (MB)	Bundles offered on WEB			Components offered separately on WEB
		8MB Bundle #1	8MB Bundle #2	16MB+ Bundle #1	
F/W components					
Primer 3.5	5.000	•	•	•	•
ICA 6.0	1.450		•	•	•
RDP 5.0	0.500	•		•	•
TEC Tandem 1.4.5	1.250	•	•	•	•
IE 4.0	3.400			•	•
USB Modem	0.021			•	•
JVM*	2.900				•
Media Player	2.500				•
JETCET	0.370			•	•
DIALUP	0.110			•	•
Microtouch	0.035			•	•
ELOTOUCH	0.045			•	•
Token Ring	0.110			•	•
Lucent Wireless Oronico	0.052			•	•
AIRONET	0.345	**	**	•	•
Microsoft Screen Saver	0.170			•	•
Total Flash Memory needed		6.750MB	7.700MB	12.858MB	18.258MB

* Will not be available on announce.

** Aironet Wireless is not supported on T1000

Firmware 3.5 bundled images Released on Compaq.com:

Bundle #1 for T1000: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16856.exe>
Bundle #2 for T1000: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16855.exe>
Only Primer for T1000: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16857.exe>
Bundle #1 for T1010-8/32: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16859.exe>
Bundle #2 for T1010-8/32: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16858.exe>
Only Primer for T1010-8/32 & 16/48: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16860.exe>
Bundle #3 for T1010-16/48: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16861.exe>

Add-ons: <ftp://ftp.compaq.com/pub/softpaq/sp16501-17000/sp16854.exe>

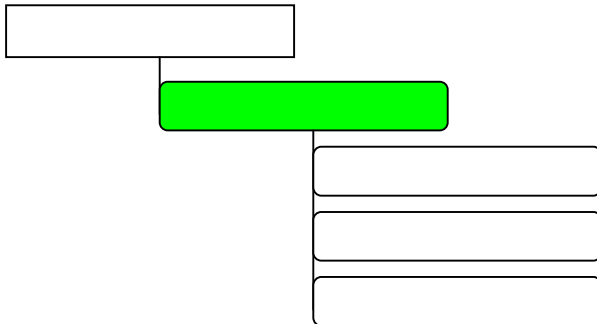
2.0 Add-on Dependencies

The only “hard” prerequisite for any Add-on is the Primer. That is, any Add-on will not run without the Primer.

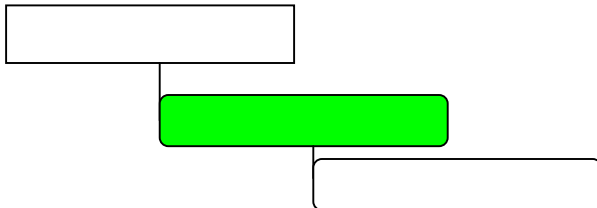
However, there are some “soft” prerequisites for some Add-ons. That is, a particular Add-on will offer no functional benefit until another Add-on is installed. For example, the JVM Add-on is useless until the IE4 Add-on is installed. There is nothing that prevents the user from installing JVM Add-on without the IE4 Add-on. And that goes for any Add-ons with soft dependencies.

This section will identify these “soft” dependencies.

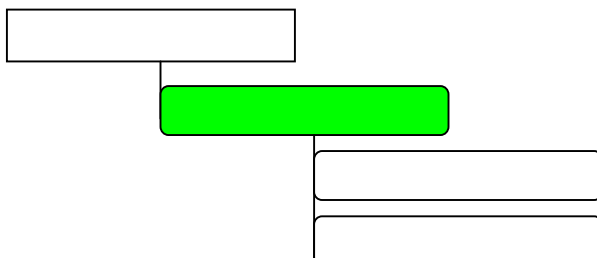
1: ICA 6.0 Add-on



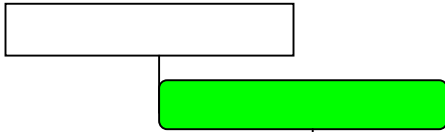
2: RDP 5.0 Add-on



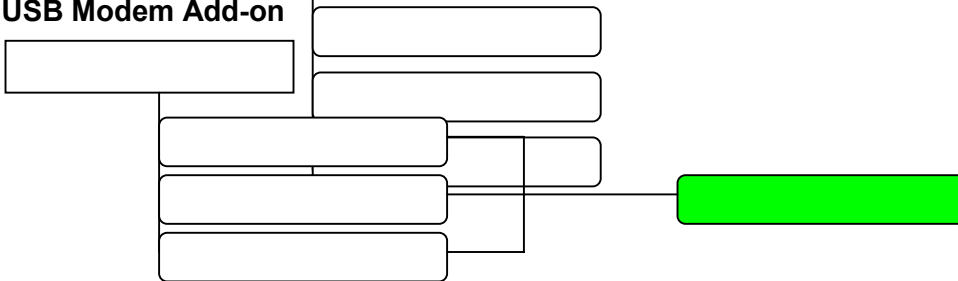
3: TEC 1.4.5 Add-on



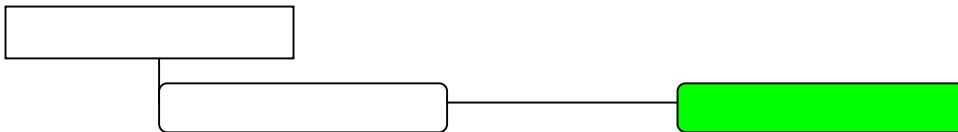
4: IE 4.0 Add-on



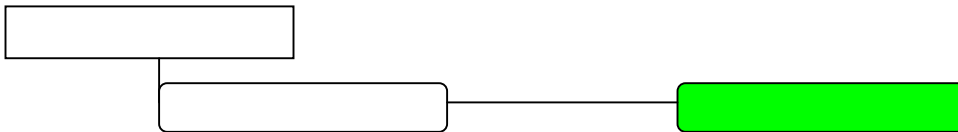
5: USB Modem Add-on



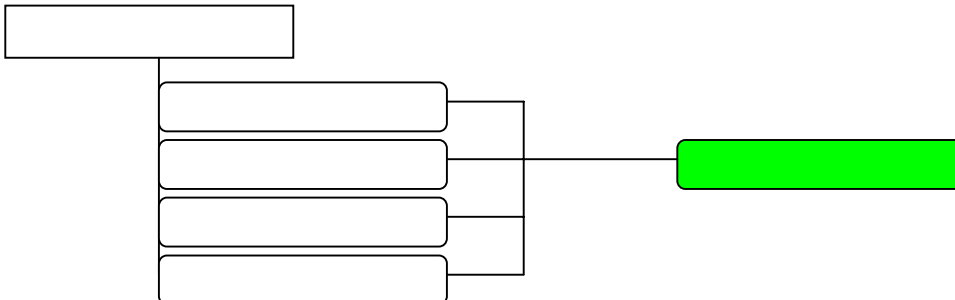
6: JVM 1.7 Add-on



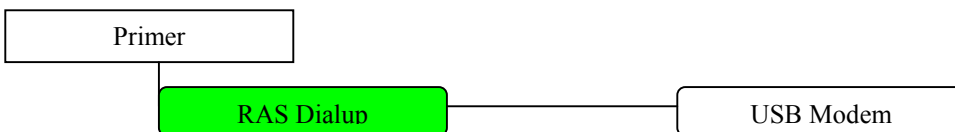
7: Media Player Add-on



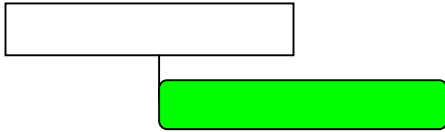
8: Spooler/USB Printer Add-on



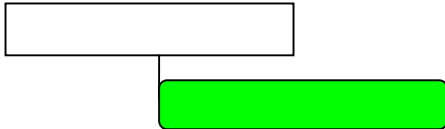
9: RAS Dialup Add-on



10: MicroTouch Add-on



11: ELO Touch Add-on



12: Token Ring Add-on



13: Lucent Wireless Add-on



14: Cisco Aironet Wireless Add-on



15: Microsoft WBT Logo Screen Saver Add-on



3.0 Installation instructions

3.1 Firmware upgrade

Thin Client Manager (remote administrator tool) Firmware upgrade

NT 4.0/W2K SERVER SETTINGS

- TCP/IP services installed
- SNMP services installed
- Thin Client Manager (TCM) installed
- Firmware files loaded on server

How to setup TCM firmware upgrade

- T10X0 clients should be power on and connected to the network.

From the NT 4.0/W2K Server

Thin Client Manager

Utilities > Upload/Download > Download Firmware

Download/Upgrade Firmware

Select Client (Select one or more clients)
Enter Firmware Path (Browse Button)
(OK)

Download Client Manager

Message – Download Firmware Request
(OK)

1. The firmware is downloaded to the T10X0
2. T10X0 reads file into memory
3. T10X0 erases flash.
4. T10X0 reboots
5. T10X0 is now set to defaults, with the new firmware installed
6. Configure the T10X0 settings

FTP Firmware upgrade

NT 4.0/W2K SERVER SETTINGS

- Microsoft Internet Information Server installed and setup
- TCP/IP services installed
- Setup FTP sever to accept Anonymous users (If needed, secure users can be setup.)
- Verify that read and write access has been granted for the FTP Root Directory

How to setup FTP firmware upgrade Directory

1. In the FTPRoot, create a directory for the firmware. (ie. ..\FTPRoot\Director))
2. Copy the firmware *.zip file to this new directory.
3. Unzip the firmware in the new directory.
4. This should create a new sub-dir with at least 2 files. (*.bin or *.CPQ and params.ini)

Note: Firmware upgrades can be obtained by contacting Compaq Technical Support for Web site Login instructions.

T10X0 FTP TERMINAL SETTINGS

- T10X0 must be connected to the Network

How to setup a FTP Terminal Upgrade

Compaq Connection Manager

Press (F2)

Terminal Properties

Upgrade (Tab)

Upgrade

Use Local FTP Information (Button)

Server Name: (IP Address is preferred or Server name)

Server Directory: (Enter complete path from FTP Root. ie: \(\Directory)\(New Sub-Dir))

(Apply)

(Upgrade)

Firmware Upgrade Warning

(Start)

1. The Firmware upgrade will start.
2. T10X0 reads file into memory.
3. T10X0 erases flash.
4. T10X0 reboots.
5. T10X0 is now set to defaults, with the new firmware installed
6. Configure the T10X0 settings

XFER Firmware upgrade

XFER PREREQUISITES

- Laplink parallel cable
- Workstation with MSDOS or WIN 95/98 (Xfer will not work under NT)
- Xfer program loaded on local workstation
- New firmware downloaded to local workstation (Unzipped)

Note: Firmware upgrades and the Xfer program can be obtained by contacting Compaq Technical Support for Web site Login instructions.

LOCAL WORK STATION SETTINGS

- The file may have a *.BIN or *.CPQ extension, either will work.
- The firmware file will begin with M, L, or a D.
- The file name may be more than 8 characters. Rename the file to a standard DOS name size, but leave the extension the same.
- If you are having a problem using a DOS Window, boot just to DOS and try again.

How to Setup the Local Workstation

1. Connect the Laplink cable from the local workstation to the T10X0
2. Boot to MS/DOS or exit to MS/DOS Window
3. At the DOS prompt type ie: C:\(Director)\Xfer (Drive):\(Director)\(Filename.BIN)
4. (Enter)
5. Download Utility will start: Message ...waiting to download data...
6. Proceed to T10X0 FIRMWARE UPGRADE step

T10X0 FIRMWARE UPGRADE

How to setup the T10X0

1. Record terminals current settings. (If you need them, this process will set all settings to Default.)
2. Power off the T10X0 (Wait at least 5 seconds before turning on)
3. Power on the T10X0
4. The Download will start
5. T10X0 reads file into memory and erases flash
6. T10X0 reboots
7. Power off the T10X0
8. Disconnect the Laplink
9. Reconnect the parallel peripheral (Optional)
10. Power on the T10X0
11. Configure the T10X0 settings

PROBLEMS

Current products have wake-on-LAN feature, this may require unplugging the power plug since these units may be in a sleep mode. A complete power cycle is necessary for the terminal to see data coming in the port.

Flash card Firmware upgrade

LAPTOP PREREQUISITES

- Laptop with PCMCIA slots
- Win 95/98 w/Socket Services Installed
- TFFS (True Flash File System) Installed
- Firmware files loaded on Laptop (*.BIN or *.CPQ)

How to load firmware upgrade on flash card

From the Laptop

1. Insert the Flash card in the PCMCIA slot (Note Drive Letter assigned to flash card. X:)
2. Exit to a MS/DOS Window
3. At the DOS prompt Type ie: C:\(Directory)\Tformat X: /S:C:\(Directory)\(Filename.xxx)
4. The firmware is downloaded to the flash card
5. Stop services on flash when it is done and remove the card

How to install firmware upgrade on T10X0

From the T10X0

1. Power off the T10X0

2. Insert the new created flash card in the PCMCIA slot.
3. Turn on the T10X0
4. T10X0 writes to flash.
5. Firmware upgrade done
6. Power off the T10X0, and take the flash card out
7. Turn on the T10X0
8. T10X0 is now set to defaults, with the new firmware installed
9. Configure the T10X0 settings

3.2 Add-on installation

NT 4.0/W2K SERVER SETTINGS

- TCP/IP services installed
- SNMP services installed
- Thin Client Manager (TCM) installed
- Firmware files loaded on server

How to setup TCM Add-On

- T10X0 clients should be power on and connected to the network.

From the NT 4.0/W2K Server

Thin Client Manager

Utilities > Upload/Download > Download Firmware

Download/Upgrade Firmware

Select Client (Select one or more clients)

Enter Firmware Path (Browse Button) - This is the path where the Add-on is located.

(OK)

Download Client Manager

Message – Download Firmware Request

(OK)

1. The firmware is downloaded to the T10X0
2. T10X0 reads file into memory
3. T10X0 erases flash.
4. T10X0 reboots
5. T10X0 is now set to defaults, with the new firmware installed
6. Configure the T10X0 settings

3.3 Printer installation

ICA printing

NT 4.0/W2K SERVER SETTINGS

- TCP/IP printer services installed

- Citrix Metaframe installed
- Network printers setup and installed

T10X0 ICA TERMINAL SETTINGS

- Setup a T10X0 with default settings
- Setup a ICA connection on T10X0

How to Setup an ICA Connection On T10X0

Compaq Connection Manager

Configure (Tab)
Add (Button)

New Connection

Citrix ICA Client (OK) – From Drop Down Menu

Specify Connection Type

Network Connection (Next) - Default

Select a Citrix Server

Citrix Server (Button) - Default
Select your Citrix Server (Next)

Select a Title for the ICA Connection Note: This will be the icon name in Compaq connection manager.
Type a name. (Next)

Specify an Application

(Next)

Specify Login Information Note: If desired, you can specify login information.

User Name:
Password:
Domain: (Next)

Select Windows Options Note: These specify how the Application will appear.

256 (Next) – Default

Compression, Encryption and Sound

Use Printer Configuration Utility (Next) – Default

Firewall Setting

(Finish)

NETWORK PRINTING/T10X0

Prerequisites

- NT 4.0/W2K Server Settings - Section Complete
- T10X0 ICA Terminal Settings – Section Complete

How to setup Network Printing on a T10X0

Compaq Connection Manager

Connections (Tab)
Select your new ICA Icon
Connect (Button)
Login to your Server

Desktop

Start > Settings > Printers
All of you network printers will be displayed.

LOCAL PRINTING/T10X0

Prerequisites

- NT 4.0/W2K Server Settings - Section Complete
- Install the local printer drivers on the server
- T10X0 ICA Terminal Settings – Section Complete
- Local Printer Attached to T10X0

How to setup local ICA printer on a T10X0

Compaq Connection Manager

Connections (Tab)
Select your new ICA Icon
Connect (Button)
Login to your Server

Desktop

Start > Programs > MetaFrame Tools > ICA Client Printer Configuration

ICA Client Printer Configuration

Printer > New

Add ICA Client Printer Wizard

- Chose printer type (Next)
- Chose printer port (Next)
- Printer Name (Next) – Except Default or Rename
- Check Settings (Finish)

ICA Client Printer Configuration

Do you want to connect? (Yes)

Desktop

Start > Settings > Printers

All of the network printers will be displayed including the new local printer.

RDP printing

W2K SERVER SETTINGS

- TCP/IP printer services installed
- Network printers setup and installed

T10X0 RDP TERMINAL SETTINGS

- Setup a T10X0 with default settings
- Naming the T10X0 Terminal
- Setup a RDP connection on T10X0

How to name the T10X0 Terminal

Compaq Connection Manager

Press (F2)

Terminal Properties

Network (Tab)

Network

Terminal Name – Write down the name or rename to something you will remember.
(Apply)
(Close)
(Restart)

How to Setup a RDP Connection On T10X0

Compaq Connection Manager

Configure (Tab)
Add (Button)

New Connection

Microsoft Remote Desktop Client (OK) – From Drop Down Menu

WTS Connection Wizard

Name Note: This will be the icon name in Compaq connection manager.
Server Note: This is the name of the W2K server. Entering the IP address of the server will make sure it connects.

(Next)

WTS Connection Wizard

Username: Note: If desired, you can specify logon information.
Password:
Domain:
(Next)

WTS Connection Wizard

Desktop (Next) – Default

WTS Connection Wizard

Check Information (Finish)

NETWORK PRINTING/T10X0

Prerequisites

- W2K Server Settings - Section Complete
- T10X0 RDP Terminal Settings – Section Complete

How to setup Network Printing on a T10X0

Compaq Connection Manager

Connections (Tab)
Select your new RDP Icon

Connect (Button)
Login to your Server

Desktop

Start > Settings > Printers
All of you network printers will be displayed.

LOCAL PRINTING/T10X0

Prerequisites

- W2K Server Settings - Section Complete
- Install the local printer drivers on the server
- T10X0 RDP Terminal Settings – Section Complete
- Local Printer Attached to T10X0
- Naming the T10X0 Terminal

How to setup local RDP printer on a T10X0

Compaq Connection Manager

Connections (Tab)
Select your new ICA Icon
Connect (Button)
Login to your Server

Desktop

Start > Settings > Printers

Printer

Add Printer Icon (Click)

Add Printer Wizard

(Next)

Local or Network Printer

Local Printer
Automatically detect printer (Next) – Default

New Printer Detection

If it does not detect printer click...(Next)

Select the Printer Port

The local printer port will show up as TS00? port. The Printer Description will show the name of the T10X0 Client. (Next)

Add Printer Wizard

Select the printer (Next)

Name Your Printer

Printer Name – Give the Printer a Name or accept defaults.
Do you want this printer to be the Default Printer (Y/N) (Next)

Printer Sharing

If desired, you can share this printer with other T10X0 user on the Network. (Next)

Location and Comment Note: These Windows will only show if you share the printer.

Location
Comment
(Next)

Print Test Page

Yes (Next)

All of the network printers will be displayed including the new local printer.

LPD printing

NT 4.0/W2K SERVER SETTINGS

- TCP/IP printer services installed
- Telnet services installed
- Network printers setup and installed
- DOS Command Prompt – “net start lpdsvc”

T10X0 TEC TERMINAL SETTINGS

- Setup a T10X0 with default settings
- Setup a TEC connection on T10X0

How to Setup a TEC Connection On T10X0

Compaq Connection Manager

Configure (Tab)
Add (Button)

New Connection

Terminal Emulation (OK) – From drop down menu

Connection Information Note: This will be the icon name in Compaq connection manager.

Connection Name (Next)

Host Information

TCP/IP (Button)
Hostname: - IP address of server is preferred

(Next)

Automate Login Process

(Next)

Note: If desired, you can specify login information.

Printer Port Settings

Use Network Printer (LPR) - (Check this Box)

LPD Hostname: – IP address of Server printer is attached to

FormFeed Terminator - (Check this box)

Configure (Button)

Network Printer (LPR) Options

Printer Name: - Printer Share name on Server (OK)

(Next)

GUI Overrides

(Finish)

NETWORK PRINTING/T10X0

Prerequisites

- NT 4.0/W2K Server Settings - Section Complete
- T10X0 TEC Terminal Settings – Section Complete

How to setup Network Printing on a T10X0

Compaq Connection Manager

Connections (Tab)

Select your new TEC Icon

Connect (Button)

Login to your Server

Click the printer Icon and the information on the screen will be printed.

LOCAL PRINTING/T10X0

Prerequisites

- NT 4.0/W2K Server Settings - Section Complete
- T10X0 TEC Terminal Settings – Section Complete
- Local Printer Attached to T10X0

How to setup local LPR printer on a T10X0

Compaq Connection Manager

Connections (Tab)
Select your new TEC Icon
Connect (Button)
Login to your Server

File

Printer Setup – (Click)

Terminal Emulation Setup

Via LPD – Uncheck this box
Parallel Cable on LPT1 – From drop down menu
(OK)

Click the printer Icon and the information on the screen will be printed.

3.4 Firmware and Add-on upgrade rules

The introduction of Add-ons complicates the process of upgrading and downgrading software. It is no longer a simple matter of replacing the entire firmware content. It is no longer a simple matter of preserving user settings between upgrades. Now there is an extra dimension of synchronization between disparate software components that must be managed across upgrades and downgrades.

It is no longer clear to continue calling our software product as ‘firmware’ or ‘code’. To be clear we need to distinguish between Add-ons and whatever is left behind, called *Primer*. The main difference between Add-ons and the Primer, is that you need the Primer before you can install the Add-on. [Just as you need primer paint before applying the color coating.] The combination of Primer and Add-on will be called *Padded*.

As an easy comparison, observe the old rules of upgrading/downgrading:

- 1) If the firmware is newer or the same version, the user settings are preserved.
- 2) If the firmware is older, the user settings are lost.

Because of Add-ons, the rules are adjusted and expanded as follows:

- 1) If the Primer is newer or the same, all user settings and Add-ons files are preserved.
- 2) If the Primer is older, all user settings and Add-ons files are lost.
- 3) Installing a new Add-on will preserve existing user settings and any other different Add-ons.
- 4) Replacing an Add-on with another of the same type depends as follows:
 - a) If the replacing Add-on is newer or the same, all user settings are preserved.
 - b) If the replacing Add-on is older, only the user settings specific to the Add-on are lost.
- 5) Installing Padded code will depend as follows:
 - a) If the Primer and all Add-ons are new, newer or the same version, then user settings and existing Add-ons files are preserved.
 - b) If the Primer is newer or the same version and any one of the Add-ons is older, then only the user settings specific to the Add-on being replaced are lost.
 - c) If the Primer is older, then all user settings and Add-on files are lost. (doesn't matter what version the Add-ons are)

Installing Add-ons to 3.41 or older is invalid, and the software will prevent that from occurring.

Uninstall Rules:

There is a new Add-on Icon in the Devices Tab under Terminal Properties. This applet is responsible for presenting Add-on inventory with versioning info for each Add-on, and also the ability to remove Add-ons.

Removing an Add-on also removes any user settings that were specific to the Add-on. Some visible user settings may not be completely removed, but rather disabled to reflect the feature is no longer supported. For example, if the RDP Client is removed, then the Printers Tab under Terminal Properties will become disabled.