

XEROX

Information Products Group
Systems Development Division
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To: Mesa Users
From: Tools Group
Subject: Release of Tools Environment Version 1.0
Filed on: <Tools>Release.bravo

XEROX SDD ARCHIVES
I have read and understood
Pages _____ To _____
Reviewer _____ Date _____
of Pages _____ Ref. 113DD-754

This memo describes the initial release of the Tools Environment.

What is it?

The Tools Environment Release is the first step toward an integrated Mesa development environment. Our goal in building this system was to supply a framework that would allow us (all Mesa users) to build software tools that execute in a common operating environment, and feature a uniform and consistent user interface. We also hope to promote the general sharing of programs and hacks.

A key element of this system is that it presents the possibility of simultaneous execution of a number of tools. In its simplest form this system is a complete replacement for the currently available Mesa Windows facilities. It solves many of the major difficulties found with those facilities.

Where is it?

The Tools Environment system is primarily stored on IFS. A dump file will be maintained on MAXC1 for the minimum runnable system as well as a press file of the documentation. If you need anything more than this you must obtain it from IFS. The IFS directory <Tools> is organized as follows:

```
<Tools>0100>*          -- all of Tools Environment version 1.0
<Tools>0100>Sources>*  -- Mesa and Config
<Tools>0100>BCDs>*    -- object files
<Tools>0100>Documents>* -- documentation
```

Getting Started

Get a copy of the documentation:

OIS SOFTWARE TOOLS

Tools Environment: Functional Specification for Tool Writers

You can get it from either:

```
[MAXC1]<Tools>Tools-FS.press
[IFS]<tools>0100>Tools-FS.press.
```

Get a copy of the system.

It is stored on both MAXC1 and IFS as:

```
[MAXC1]<Tools>ToolsSystem.dm
[IFS]<tools>0100>ToolsSystem.dm
```

If you retrieve the minimum tools system (.dm file sans symbol files and SampleTool.*) it will take 331 pages on your disk.

You will need to get <Mesa>BasicMesa.image. This is Mesa.image without the *built-in* display and window modules. Tools does not need any of the Mesa window stuff. If you have no need of Mesa.image you may delete it from your "Tools" disk.

User.cm Options.

The tools environment processes your User.cm file at startup time. Valid entries are as follows:

```
[TOOLS]
Bitmap: [x: #, y: #, w: #, h: #]
ToolsFont: "STRING"
Debug: Yes/No
LibrarianServer: "STRING"
```

To run the Tools Environment:

Type to the Alto Executive

```
>mesa Basicmesa.image Tools<cr> -- or of course for /1007 types
>Basicmesa.image Tools <cr>
```

You are now *inside*. You should try doing some of the following:

- o Change the cursor -- Move the mouse in or out of the "TEX tool" window. The cursor will change from a "textPointer" to a "?".
- o Type on the keyboard -- With the cursor inside TEX tool's window you can type on the keyboard. The characters should be echoed in the window.

- o Display menus -- Depress the *blue* (rightmost) mouse button, a menu will appear. If you were inside TEX tools' window when you depressed the button, you will see two menus displayed, otherwise there will be only one.
- o Alter TEX Tools window -- With the cursor in TEX Tools window depress the *menu* (blue) mouse button. Move the cursor over the name stripe of the menu *in-back* (WindowMgr). Now depending upon your mouse ability

Let up on the menu mouse button with the cursor positioned over the menu *in-back*. Now depress the menu mouse button again. This time the WindowMgr menu will be on-top.

Click the red mouse button while holding down blue. The menus will be immediately be redisplayed with the WindowMgr menu on-top.

Now you can *execute* a command by either the click-red or let-up blue method. Some WindowMgr commands require a screen position after the command has been selected. The cursor shape will change to indicate the *corner*. *Clicking-red* will confirm the position and cause command completion.

- o Create a new Tool -- Type "SampleTool". Now depress the menu mouse button. As above get to the TEX Tool menu and execute the "Create-Tool" command.

SampleTool

Of special interest is the file SampleTool.mesa. This is an annotated template for building a tool.

Known Deficiencies and Glitches.

In the Documentation

Sections 5.4.4 and 5.4.7 - Version 1.0 does not implement "Menu Subwindows".

Section 5.8.3 - FTP is not used in Version 1.0

Change Requests

To report any problems or request changes to the Tools Environment please use the SDSupport change request system.

ToolsSystem.dm File Contents

The dump file ToolsSystem.dm contains the following.

<u>System Files</u>	
LibrarianCommon.bcd	13
TimeConvert.bcd	12

Tools.bcd	94
TypeScriptTool.bcd	20
UserCm.bcd	<u>13</u>
	152 pages

Defs Files

LibrarianDefs.bcd	15
PupDefs.bcd	31
TexDefs.bcd	17
TexProcDefs.bcd	19
UiContextDefs.bcd	6
UiCursorDefs.bcd	6
UiDefs.bcd	22
UiDisplayDefs.bcd	5
UIFontDefs.bcd	6
UiMenuDefs.bcd	12
UiMiscDefs.bcd	7
UiSelectionDefs.bcd	5
UiUasDefs.bcd	6
UiWindowDefs.bcd	17
UserCmDefs.bcd	<u>5</u>
	179 pages

Symbols Files

Pup.symbols	158
LibrarianCommon.symbols	51
ToolsExecutive.symbols	109
UserInterface.symbols	<u>151</u>
	469 pages