

CONVERGENT TECHNOLOGIES

RELEASE NOTICE FOR 1.0 ART DESIGNER (STA-5300)

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1.0 Description of Program

This Release Notice describes the Art Designer version 1.0. This section and the sections that follow provide a description of the product, contents of the Distribution Diskette, installation procedures, and other information pertinent to this release of Art Designer.

Art Designer is a flexible graphics package for the non artist in the office. Its icon-based interface allows users to quickly 'point and pick' each icon with the mouse. The Art Designer creates and combines free form drawings, text, and business charts generated from spreadsheet data using Extended Multiplan. These pictures can then be integrated into a document using Convergent's Document Designer.

Instructions on how to use the Art Designer are given in the Getting Started with Drawings Manual and the Art Designer Reference Manual.

2.0 Changes from Prior Version

The Art Designer is a new product therefore there are no changes from a prior version.

3.0 Contents of Distribution Diskette

The Art Designer Distribution Diskettes are your master copies, and have been shipped write-protected. They should not be write-enabled, nor should they be used as working copies.

This product requires CTOS 9.6 or higher and Mouse Services 1.0 or higher to function correctly. If you have not yet installed these at such a revision level, do so before installing the Art Designer. If you use the Context Manager, you should install Context Manager 2.2 or higher prior to installing Art Designer.

There are 3 distribution diskettes supplied for the Art Designer.

Art Designer Diskette 1 of 2:

The following files will be contained in the <CT> directory:

ArtChartMsg.bin	Graphics.fonts
Bar.fm	Line.fm
ColorBar.fm	LineInterp.fm
ColorLine.fm	Pie.fm
ColorLnInterp.fm	PlotterConfig.sys
ColorPie.fm	SalesByRegion.mp
ColorStacked.fm	SalesByRegion.bar.pic
ComplexRoman.font	SalesByRegion.line.pic
DuplexRoman.font	SalesByRegion.pie.pic
GC001sys.font	Stacked.fm
Gothic.font	StrobeConfig.sys
HPPlotterConfig.sys	StrobePlotterConfig.sys

In addition to various standard system files, the following files will be in the <Sys> directory:

HdInstall.sub	Sys.printers
MfInstall.sub	

The following file will be in the <GPS> directory:

OpaqueImagen8300DD.run

The following file will be in the
<ReleaseNote> directory:

ReleaseNotice

Art Designer Diskette 2 of 2:

The following file will be contained in the
<CT> directory:

ArtDesigner.run

The following file will be contained in the
<Sys> directory:

ArtCmInstall.sub

Picture Library Diskette 1 of 1:

The following files will be contained in the
<CT> directory:

Arrows1.pic	OfficeObjects2.pic
Arrows2.pic	OfficeObjects3.pic
Bugs.pic	OfficeObjects4.pic
ElectronicSymbols1.pic	OfficeObjects5.pic
FlowChartSymbols.pic	People1.pic
Hardware1.pic	People2.pic
MiscSymbols1.pic	Rodents.pic
Money1.pic	Technology1.pic
Money2.pic	Technology2.pic
OfficeObjects1.pic	

The following files will be contained in the
<Sys> directory:

HdInstall.sub	PicMakeDir.sub
MfInstall.sub	

4.0 Installation Procedures

The Art Designer should only be used on Convergent Information Processing Systems which are equipped with hard disk or in clusters where the master is equipped with hard disk.

Use the installation procedures described below (after updating the Standard Software revision level, if required). Characters that you must type are shown in **boldface**. Special keys, such as RETURN and GO, are shown in upper case.

4.1 Stand-Alone Hard Disk Systems

- A. Signon and set path at the stand-alone workstation. If the Signon form is displayed, fill it in and press GO. Set the path as follows:

Command	Path	RETURN	
Path			
	[Volume]		Sys RETURN
	[Directory]		Sys RETURN
	[Default file prefix]		RETURN
	[Password]		(if any) GO
	[Node]		

If your hard disk has a volume password on [Sys], fill this password into the [Password] field before pressing GO.

- B. Insert the Art Designer Distribution Diskette 1 of 2 into drive [f0]. (Do **NOT** press the RESET button.)
- C. Install the product as follows:

If 10.0 Standard Software has been installed then issue the following:

Command	Install	GO	
			otherwise

Command	Submit	RETURN	
Submit			
	File list	[f0]<Sys>HdInstall.sub	GO
	[Parameters]		
	[Force Expansion?]		
	[Show Expansion?]		

Follow the directions displayed on the screen for modification of forms and insertion of the next diskette.

- D. If you plan to use Art Designer with Document Designer or the Context Manager, and your system has Context Manager version 2.2 or higher installed, your Context Manager configuration file can be updated with the Submit command set up at the end of the installation.

If you plan to run Art Designer with Document Designer, edit the command as follows. Note that you do not need to edit this form unless your configuration file is not [Sys]<Sys>CmConfig.sys.

Command **Submit** RETURN
Submit

```
File list [f0]<Sys>ArtCmInstall.sub
[Parameters] [Sys]<Sys>CmConfig.sys GO
[Force Expansion?]
[Show Expansion]
```

- E. If you wish to replace the Sys.printers file on your system, copy the file Sys.printers from Distribution Diskette #1 as follows:

Command **Copy** RETURN
Copy

```
File from [f0]<Sys>Sys.printers RETURN
File to [Sys]<Sys>Sys.printers GO
[Overwrite ok?]y
[Confirm each?]
```

- F. If you wish to replace the Graphics.fonts file on your system, copy the file Graphics.fonts from Distribution Diskette #1 as follows:

Command **Copy** RETURN
Copy

```
File from [f0]<CT>Graphics.fonts RETURN
File to [Sys]<Sys>Graphics.fonts GO
[Overwrite ok?]y
[Confirm each?]
```

- G. Save the Art Designer Distribution Diskettes as archives.

- H. The third diskette in the Art Designer set is not installed automatically. This diskette contains pictures that you may wish to use in the creation of other pictures. If you wish to install these on your hard disk, insert the third diskette into drive [f0] and do as follows:

If 1.0 Standard Software has been installed then issue the following:

Command **Install** GO

otherwise

Command **Submit** RETURN

Submit

File list [f0]<Sys>HdInstall.sub GO

[Parameters]

[Force Expansion?]

[Show Expansion?]

4.2 Master Hard Disk Systems

- A. Signon and set path at the master workstation. If the Signon form is displayed, fill it in and press GO. Set the path as follows:

Command **Path** RETURN

Path

[Volume] **Sys** RETURN

[Directory] **Sys** RETURN

[Default file prefix] RETURN

[Password] **(if any)** GO

[Node]

If your hard disk has a volume password on [Sys], fill this password into the [Password] field before pressing GO.

- B. Disable the cluster workstations by using one of the following methods:

Method 1: Use the Disable Cluster command.

Command **Disable Cluster** GO

Disable Cluster

[Time interval (seconds)]

At the conclusion of the installation procedure, you may resume cluster operation with the Resume Cluster command.

Command **Resume Cluster** GO

Method 2: Turn off power to all cluster workstations but leave the master workstation powered up. At the conclusion of the installation procedure, you may restore power to the cluster workstations.

- C. Insert the Art Designer Distribution Diskette 1 of 2 into drive [f0]. (Do **NOT** press the RESET button.)
- D. Install the product as follows:

If 1.0 Standard Software has been installed then issue the following:

Command **Install** GO

otherwise.

Command **Submit** RETURN

Submit

File list [f0]<Sys>HdInstall.sub GO
[Parameters]
[Force Expansion?]
[Show Expansion?]

Follow the directions displayed on the screen for modification of forms and insertion of the next diskette.

- E. If you plan to use Art Designer with the Document Designer or the Context Manager, and your system has Context Manager version 2.2 or higher installed, your Context Manager configuration file can be updated with the Submit command set up at the end of the installation.

If you plan to run Art Designer with the Document Designer, edit the command as follows. Note that you do not need to edit this form unless your configuration file is not [Sys]<Sys>CmConfig.sys.

Command **Submit** RETURN

Submit

File list [f0]<Sys>ArtCmInstall.sub

[Parameters] [Sys]<Sys>CmConfig.sys GO

[Force Expansion?]

[Show Expansion]

- F. If you wish to replace the Sys.printers file on your system, copy the file Sys.printers from Distribution Diskette #1 as follows:

Command **Copy** RETURN

Copy

File from [f0]<Sys>Sys.printers RETURN

File to [Sys]<Sys>Sys.printers GO

[Overwrite ok?]

[Confirm each?]

- G. If you wish to replace the Graphics.fonts file on your system, copy the file Graphics.fonts from Distribution Diskette #1 as follows:

Command **Copy** RETURN

Copy

File from [f0]<CT>Graphics.fonts RETURN

File to [Sys]<Sys>Graphics.fonts GO

[Overwrite ok?]y

[Confirm each?]

- H. Save the Art Designer Distribution Diskettes as archives.

I. The third diskette in the Art Designer set is not installed automatically. This diskette contains pictures that you may wish to use in the creation of other pictures. If you wish to install these on your hard disk, insert the third diskette into drive [f0] and do as follows:

If 1.0 Standard Software has been installed then issue the following:

Command Install GO

otherwise

Command Submit RETURN

Submit

File list [f0]<Sys>HdInstall.sub GO

[Parameters]

[Force Expansion?]

[Show Expansion?]

J. Resume cluster operations. (See step B above.)

4.3 MegaFrame Systems

The Art Designer is a workstation only product and uses the MegaFrame SRP only as a master. The run files may be installed on the MegaFrame in one of the two following ways: If using a dual-floppy system without any hard disk, to install the files use the same procedure as explained under section 4.1. If installing on a system with a hard disk use the following steps:

- A. Signon and set path at the workstation. If the Signon form is displayed, fill it in and press GO. Set the path as follows:

```
Command  Path  RETURN
Path
[Volume]                !Sys RETURN
[Directory]             Sys RETURN
[Default file prefix]  RETURN
[Password]              (if any) GO
[Node]
```

If your MegaFrame has a volume password on [Sys], fill this password into the [Password] field before pressing GO.

- B. Insert the Art Designer Distribution Diskette 1 of 2 into drive [f0]. (Do NOT press the RESET button.)
- C. Install the product as follows:

```
Command  Submit  RETURN
Submit
File list      [f0]<Sys>MfInstall.sub  GO
[Parameters]
[Force Expansion?]
[Show Expansion?]
```

Follow the directions displayed on the screen for modification of forms and insertion of the next diskette.

- D. If you wish to replace the Sys.printers file on your system, copy the file Sys.printers from the Distribution Diskette as follows:

```
Command  Copy  RETURN
Copy
File from  [f0]<Sys>Sys.printers  RETURN
File to    [!Sys]<Sys>Sys.printers  GO
[Overwrite ok?]y
[Confirm each?]
```

- E. If you wish to replace the Graphics.fonts file on your system, copy the file Graphics.fonts from the Distribution Diskette as follows:

```
Command  Copy  RETURN
Copy
File from  [f0]<CT>Graphics.fonts  RETURN
File to    [!Sys]<Sys>Graphics.fonts  GO
[Overwrite ok?]y
[Confirm each?]
```

Note: Installation through MfInstall.sub does not provide the user with the ability to automatically add Art Designer to your CmConfig file.

- F. Save the Art Designer Distribution Diskette as archives.
- G. The third diskette in the distribution is not installed automatically. This diskette contains pictures that you may wish to use in the creation of other pictures. If you wish to install these on your hard disk, insert the Picture Library diskette into drive [f0] and perform the following:

```
Command  Submit  RETURN
Submit
File list [f0]<Sys>MfInstall.sub  GO
[Parameters]
[Force Expansion?]
[Show Expansion?]
```

4.4 Stand-Alone Floppy Disk Systems

This product is not supported on floppy-only disk systems.

4.5 Document Designer/Multiplan Recognition

If you plan to use Art Designer with Document Designer, Extended Multiplan and Context Manager, the Context Manager configuration file used must contain a command for Art Designer with the new fields :DDObjectEdited:257 and :XmpGraphics:1. If Context Manager version 2.2 has been installed, the appropriate Context Manager configuration file can be easily updated to allow Art Designer to be invoked from the Document Designer or Extended Multiplan. Insert Art Designer Distribution diskette 2 into drive [f0] and issue the following submit command:

```
Command      Submit      RETURN
Submit
  File list   [f0]<Sys>ArtCmInstall.sub  RETURN
  [Parameters] [Sys]<Sys>CmConfig.sys    GO
  ...
```

When using Document Designer and Extended Multiplan without Context Manager, the chaining mode of communication is supported. For correct functioning of Art Designer in this environment, the file [Sys]<Sys>DDConfig.sys is required. This file must include an entry for Art Designer as follows:

```
:CommandName:Art Designer
:RunFileName:[Sys]<Sys>ArtDesigner.run
:DDObjectEdited:257
:XmpGraphics:1
```

5.0 Required Files

The files required to run the Art Designer should all reside in the system's [Sys]<Sys> directory.

The following files will reside in [Sys]<Sys> after installation of the Art Designer:

ArtChartMsg.bin	Graphics.fonts
ArtDesigner.run	Gothic.font
Bar.fm	HPPlotterConfig.sys
ColorBar.fm	Line.fm
ColorLine.fm	LineInterp.fm
ColorLnInterp.fm	Pie.fm
ColorPie.fm	PlotterConfig.sys
ColorStacked.fm	Stacked.fm
ComplexRoman.font	StrobeConfig.sys
DuplexRoman.font	StrobePlotterConfig.sys
GCØØlsys.font	Sys.printers

6.0 System Software Compatibility

6.1 Workstation Environment

This product requires CTOS 9.6 or higher and Mouse services 1.0 or higher to function correctly.

This product is compatible with version 1.0 of the Document Designer and with version 2.2. of the Context Manager.

This version of the Art Designer is also compatible with version 8.2 or higher of Multiplan and version 1.1 or higher of Extended Multiplan.

7.0 Hardware Information

7.1 Hardware Configurations Supported

Art Designer version 1.0 runs on the graphics NGEN Workstation. Art Designer is not supported on IWS, AWS or CWS workstations.

Art Designer will support printing through the XC-002 when a serial device is attached.

The workstation requires access to a hard disk.

7.2 Special Hardware Requirements

The Art Designer requires an NGEN graphics module and a color or monochrome monitor. The mouse pointing device is recommended.

8.0 Resource Requirements/Utilization

8.1 Memory Requirements/Utilization

The minimum memory size required for running the Art Designer on a Graphics workstation is 350K. However, performance is improved if the system has increased memory. Also the complexity of pictures you will be allowed to create is increased with more memory. An average memory size for the Art Designer is 400K. The complexity of pictures is increased with use of circles and complicated fonts such as Gothic, Complex and Bold.

8.2 Disk Requirements/Utilization

This product requires 1000 sectors of disk space. This includes the run file, font files, charting format files, and hardcopy configuration files.

An average picture file requires about 10 sectors of disk space. The actual size of the picture file will vary with the complexity of the data.

9.0 Restrictions

Pie Charts	A maximum of eight segments per pie chart are allowed.
Line Charts	A maximum of five legends per line chart are allowed.
Bar Charts	A maximum of five legends per bar chart are allowed, and only thirteen data groups per bar chart are allowed.
Axes Labels	If the Art Designer is to be used to modify the minimum and maximum axes values, the strings are limited to 13 characters.
Filenames	Picture filenames can have a maximum of 42 characters.
View Files	A maximum of 200 filenames can be displayed while Viewing Files.

10.0 Supplementary Information

10.1 Accessing the Art Designer From OEM Applications

Any OEM application can use the Art Designer by creating a data file and chaining to the file [Sys]<Sys>ArtDesigner.run. Details for implementing such a system may be found in the Graphics Programmer's Guide.

10.2 Plotter and Printer Support

In this release the plotters and printers supported include the HP7470A plotter, the HP7220C plotter, the HP7220T plotter, the HP7475A plotter, the Gould DS10 plotter, the Strobe Model 100 plotter, the Printronix MVP printer, the Envision 420 printer, the IDS Prism printer, the Anadex 9620 printer, the Okidata Microline 93 printer, and the Dataproducts SPG-8010 and Dataproducts SPG-8050 printers. The files included here (StrobePlotterConfig.sys, HPPlotterConfig.sys, StrobeConfig.sys, and PlotterConfig.sys) are the configuration files for these plotters and printers.

<u>Output Device</u>	<u>Comm Config File</u>
HP7470A	PlotterConfig.sys
HP7220C	PlotterConfig.sys
HP7475A	PlotterConfig.sys
HP7220T	PlotterConfig.sys
Gould DS10	PlotterConfig.sys
Strobe	StrobeConfig.sys
Printronix	none
Anadex	none
Envision	none
Prism	none
Okidata	none
Dataproducts 8010	none
Dataproducts 8050	none

<u>Output Device</u>	<u>Printer Config File</u>
HP7470A	HPPlotterConfig.sys
HP7220C	HPPlotterConfig.sys
HP7475A	HPPlotterConfig.sys
HP7220T	HPPlotterConfig.sys
Gould DS10	HPPlotterConfig.sys
Strobe	StrobePlotterConfig.sys
Printronic	LPTConfig.sys
Anadex	LPTConfig.sys
Envision	LPTConfig.sys
Prism	LPTConfig.sys
Okidata	LPTConfig.sys
Dataproducts 8010	LPTConfig.sys
Dataproducts 8050	LPTConfig.sys

When using a plotter, the 'Comm Config File' should be used when going directly to the plotter and the 'Printer Config File' should be used when spooling to the plotter. The designations for printer type are described later in this section.

The file Sys.printers is now used by both Multiplan and the Art Designer to describe the printer and plotter configuration for a system. The new format for this file is as follows:

```
Name1:Spec1[,Spec1a]:TextType:GraphicsType RETURN
Name2:Spec2[,Spec2a]:TextType:GraphicsType RETURN
```

The name field is a nickname or alias for the printer. This can be any character or string such as 'Spool' or 'Printer A', etc. This field is used by the Art Designer or Multiplan when specifying a printer or plotter.

The specification is a device specification. If the device is to be connected directly (rather than spooled locally or through a master workstation), the specification is a configuration file (i.e., [COMM]B&[Sys]<Sys>PlotterConfig.sys). If the device is a spooled device, then the specification will be a queue name such as [SPL]. Either or both kinds of specifications may be defined for each printer or plotter. The Art Designer will determine whether the output device is installed as a spooled device (and if so, spool to it) or local device (and if so, print or plot directly to it).

Text type is used by Multiplan to determine the type of text printer; that is, to differentiate a printer used to produce draft copy (such as a Centronix) from one used to produce real formatted output (such as a Diablo). For a plotter which has no text capabilities, this field must be blank to indicate to Multiplan that this device is unsuitable for printing.

Graphics type is used by the Art Designer to determine the type of graphics formatting information that must be sent to the output device. This field is ignored by Multiplan. For a Diablo or Centronix, this field is blank. For a device such as a Printronix MVP or Anadex 9620 (which has both text and graphics capabilities), there can be entries for both text type and graphics type.

The possible entries for graphics type are as follows:

- HP7470A** for the HP7470A 2 pen plotter.
- HP7220C** for the HP7220C 8 pen plotter.
- Strobe** for the Strobe Model 100 1 pen plotter.
- Anadex** for the Anadex 9620 dot matrix printer.
- Printronix** for the Printronix MVP dot matrix printer.
- HP7475A** for the HP7475A 6 pen plotter.
- HP7220T** for the HP7220T 8 pen plotter.
- HP7220C** for the Gould DS10 plotter.
- Envision** for the Envision 420 printer.
- Prism** for the IDS Prism printer.
- Oki** for the Okidata Microline 93 printer.
- Prism** for the Dataproducts SPG-8050 printer.
- 8010** for the Dataproducts SPG-8010 printer.

The following examples illustrate how to customize your own Sys.printers file.

If you are using the HP7470A plotter and are connecting directly to Channel B of your system without using the Spooler, you should add the following entry to your Sys.printers file:

```
HP2Pen:[COMM]B&[Sys]<Sys>PlotterConfig.sys:  
:HP7470A
```

This adds an entry for a plotter whose nickname is HP2Pen, uses the configuration file PlotterConfig.sys, is connected through Channel B, and is of type HP7470A.

If you want to use the same environment as described above but may sometimes be spooling, the following entry must be added to Sys.printers instead of the one described above:

```
HP2Pen:[COMM]B&[Sys]<Sys>PlotterConfig.sys,  
[HP7470A]: :HP7470A
```

This entry is the same as the previous one except that the queue name HP7470A has been added. In this case, when specifying HP2Pen to the Art Designer, it will see if the spooler is installed. If it is not, the output will be sent directly through Channel B using the file [Sys]<Sys>PlotterConfig.sys. If the Spooler is installed and that queue is installed, Art Designer will spool the output to that queue. If the Spooler is installed and that queue is not installed, the output will be sent directly through Channel B using the file [Sys]<Sys>PlotterConfig.sys.

If the spooler is to be used with the Art Designer for spooling to plotters, then the spooler must be installed with a spooler configuration file other than the default. This configuration file must specify the queue name to be used for the plotter, its matching printer configuration file, and its channel. In addition, the queue.index file must be modified to include this new queue, the system must be rebooted, and the Queue Manager and Spooler must be installed.

The spooler configuration file which must be specified for this example should have an entry for Channel B as follows:

```
B/HP7470A/HP7470A/[Sys]<Sys>HPPlotterConfig.sys/64/n
```

where

- B specifies the channel;
- HP7470A is the printer name;
- HP7470A is the queue name; and
- [Sys]<Sys>HPPlotterConfig.sys is the printer configuration file.

The following lines would also be added to the queue.index file:

```
HP7470A/[Sys]<Sys>HP7470A.Queue/1/1
HP7470AControl/[Sys]<Sys>HP7470AControl.Queue/1/1
```

Where HP7470A and HP7470AControl are the names of the print queues; [Sys]<Sys>HP7470A.Queue and [Sys]<Sys>HP7470AControl.Queue are the file specifications for the print queues; 1 is the number of sectors per entry; and 1 specifies spooler queue. (See the Executive Manual, Spooled Printing section for more information.)

The above configuration can be done in the same way for channel A by using 'A' in place of 'B' where channel references are made.

If you are using the Printronix MVP dot matrix printer and are connecting it directly to the parallel port on your system without using the Spooler, you should add the following entry to your Sys.printers file:

```
MVP:[LPT] : Draft : Printronix
```

This adds an entry for a printer whose nickname is MVP, uses the default line printer configuration file, is connected through the parallel port, has draft output for text, and is a graphics type Printronix.

If you want to use the same environment as described above but may sometimes be spooling, the following entry must be added to Sys.printers instead of the one described above:

```
MVP:[LPT], [SPL] : Draft : Printronix
```

This entry is the same as the previous one except that the queue name SPL has been added. In this case, when specifying MVP to the Art Designer, it will see if the spooler is installed. If it is not, the output will be sent directly through Channel B using the file [Sys]<Sys>LPTConfig.sys. If the Spooler is installed and that queue is installed, Art Designer will spool the output to that queue. If the Spooler is installed and that queue is not installed, the output will be sent directly through Channel B using [Sys]<Sys>LPTConfig.sys.

When spooling to either the Printronix or Anadex from the Art Designer, the standard parallel port line printer configuration and spooler files may be used.

While the default file specification for this configuration file is [Sys]<Sys>Sys.printers, another file may be specified. This is done by adding a line to the user configuration file (using the keyword SysPrinters) as follows:

```
:SysPrinters:NewSpecification
```

where **NewSpecification** is the alternative file specification.

Special Note: When using the Printronix MVP in graphics mode, it should be set to mode 1. See the Printronix MVP manual for instructions on how to do this.

In addition to the devices listed above, Art Designer 1.0 will also provide hardcopy on the Imagen laser printer. The installation of the Generic Print System and the Imagen printer driver is required. See the documentation provided with the Generic Print System.

10.3 The Imagen Laser Printer

Included on the Art Designer Distribution Diskette 1 is a new Imagen driver which provides opaque support. This means that pictures that have overlapping area fills will appear the same on both the screen and the Imagen if you use this new driver. Previous Imagen drivers will cause the filled areas to be see through. Refer to the documentation for the Generic Print System for installation of this driver.

You may discover that pictures printed from Art Designer may sometimes "break up". "Breaking up" means that pieces of lines are printed elsewhere on the page (or not at all). Usually, the Imagen does not generate an entire page-bit-map before it begins printing a page -- rather it converts the page's vectors into raster lines only for the band of the page that is currently being printed. This saves a lot of memory, and usually speeds printing. But sometimes there are just too many vectors for the Imagen processor to convert "on the

fly." And by the time that the vectors have been converted to raster lines, the page is well beyond where the rasters were meant to go. So portions of the picture appear "broken up".

Imagen has provided some relief from this problem -- it is called the "preRasterization" option. When this option is selected, an entire (compressed) page-bit-map is constructed before the page is printed, so no pieces of vectors get misplaced. The disadvantages of using this option are: 1) printing is a bit slower; 2) the maximum number of pages that can be reversed (to get the pages to come out in the correct order) is drastically reduced; and 3) more memory is generally required to print a full page of text. Where we have usually encountered rasterization problems is with the text in pictures from graphics applications. If this text, drawn by an application such as Art Designer, is in Complex or Gothic font, Imagen's normal "rasterization on the fly" cannot handle it, and the picture "breaks up". "PreRasterization" is then needed. So, if you are going to be printing such documents, the Imagen printer should be configured for "preRasterization".

For the IP-2 run the configurator program, and add the phrase "prerasterization on" to the default job-control statement.

For the IP-3 "PreRasterization" is selected by setting configuration option 25 to 1. The IP-3 (because of its reduced processing power and speed) should generally be configured with "preRasterization" and maximum memory.

Line types selected in the Art Designer appear not as dotted, dashed lines shown on the screen, but as different line widths on the Imagen. You can use this to good advantage.

11.0 Documentation Updates

None

12.0 Error Codes

The following are the Art Designer error codes and their explanations:

Error 7602: ercInternalGraphicsError

This error occurs if an error occurs internal to the graphics library.

Error 7649: ercInsufficientMemory

There was not enough memory for the last graphics operation performed. The system does not have enough memory to hold more picture information.

Error 7670: ercFormatAndDataInconsistent

This error occurs if Art Designer is passed inconsistent data and format files. For instance, the format file specifies a pie chart but the data file specifies a bar chart.

Error 7671: ercTooManyBarLegends

This error occurs if Art Designer is passed data for a bar chart in which the maximum number of legends is exceeded. This maximum is currently 5.

Error 7672: ercTooManyBarGroups

This error occurs if Art Designer is passed data for a bar chart in which the maximum number of data groups is exceeded. The maximum is currently 13.

- Error 7673:** **ercTooManyPieSegments**
- This error occurs if Art Designer is passed data for a pie chart in which the maximum number of segments is exceeded. This maximum is currently 8.
- Error 7674:** **ercTooManyLineLegends**
- This error occurs if Art Designer is passed data for a line chart in which the maximum number of legends is exceeded. This maximum is currently 5.
- Error 7675:** **ercNegativeNumberInPie**
- This error occurs if a negative value is passed to Art Designer when specifying a pie chart.
- Error 7676:** **ercBadPaletteSignature**
- This error occurs if a file specified as a palette file does not contain the proper signature for a palette file.
- Error 7677:** **ercOnlyOneValueForLine**
- This error occurs if a line chart is specified in which one of the lines contains only one data point. Each line must contain a minimum of 2 data points.
- Error 7678:** **ercBadMsgType**
- This is a system error which occurs if the application received a type of message that it does not understand from the Inter-Context Message Service (ICMS).
- Error 7690:** **ercBadPrinterSpecification**
- This error occurs if a printer is specified incorrectly.

Error 7691: ercBadFontSpecification
 This error occurs if a font is
 specified incorrectly.

Error 7692: ercStandardFontNotSpecified
 This error occurs if the standard
 font, SimplexRoman, is not speci-
 fied in the Graphics.fonts file.

Error 7693: ercBadOutputDevice
 This error occurs if an invalid
 output device is specified.

Error 7700: ercNoDevices
 There are no graphics hardcopy
 devices recognized on the system.

Error 7701: ercNoPrinterConfig
 There was no [sys]<sys>sys.printers
 file on the system.

Error 7702: ercNoSpooler
 There is no spooler defined for the
 selected hardcopy device.

Error 7703: ercNoPicFiles
 There are no picture files in the
 current directory.

Error 7704: ercBadInput
 Illegal input was given for the
 menu field.

Error 7705: ercBadChartMin
 An illegal axes minimum value was
 given.

Error 7706: ercBadChartMax
 An illegal axes maximum value was
 given.

Error 7707: ercBadChartLabelSpacing
An illegal value was specified for axes label spacing.

Error 7708: ercBadChartTicks
An illegal value was specified for the number of axes ticks.

Error 7709: ercBadParmSignature
An unrecognized signature was in the parameter file passed in from the spreadsheet application to Art/Chart Designer.

Error 7710: ercTooManyCharts
The maximum number of charts allowed in an Art/Chart Designer picture file was exceeded.

Error 7711: ercTooManyPoints
A connected line or sketched line was drawn with too many points.

Error 7712: ercBadGridSize
Specified grid size must be between 1 and 30.

Error 7713: ercChartLabelOutOfBounds
A chart label which was to be drawn would have gone outside of the chart's boundaries. Must replace the label if it is to be moved outside of the chart's limits.

Error 7714: ercPickedTooManyPolys
The maximum number of picked objects allowed at one time was exceeded.

Error 7715: ercNoMouseServer
The Mouse Server was not installed on the workstation. This is required to run Art and Chart Designer.

Error 7717: ercNoChartsPicked

No chart was picked in the current work area for the operation pertaining to a chart.

Error 7718: ercMoreThanOneChartPicked

A chart format file can only contain the format of one chart. Make sure only one chart is picked before saving the chart format file.

Error 7719: ercNoPickLabel

No text was found in the pick box. When using Text Tools, only text labels can be picked. Use Drawing or Charts Tools to pick other objects.

Error 7720: ercNoPick

No objects were found in the pick box. Pick box must include an edge or surround an object.

Error 7722: ercCantWindowMore

Already zoomed in as far as possible.

Error 12002: ercOnlyOneGraphicsContextAllowed

The Context Manager will only allow one graphics context on IWS or AWS graphics workstations.

Error 12098: ercParentDied

The Document Designer was terminated before Art Designer transferred back the object being edited.

13.0 Known Errors and Omissions

- A. In Pie and Bar charts: when graphing only one entry with a zero value, Art Designer will begin to graph the data but will return to Multiplan.
- B. Art Designer will give error 219 when the SignOn user file is password protected.
- C. Art Designer has a new halftone and opaque fill patterns and opaque line type that will not show when pictures are transferred to Document Designer 1.0. These pictures will print correctly however if using the new Imagen driver.
- D. This release of Art Designer will only accept Art Designer or Chart Designer pictures, and charts made by the Business Graphics Package. Picture files produced by other programs or text only pictures will not be accepted.
- E. Charts produced by the Business Graphics Package and brought into Art Designer may exhibit some labels being displayed in different positions in the Chart. These labels may have to be moved into their desired positions.
- F. When using Drawing Tools, the current attributes of the picked object is not reflected in the menu.
- G. Sculpting may not work as expected when used on sharp corners. Sculpting does not work on picked text.
- H. Connected Move does not operate on picked text.
- I. It is possible to add text close enough to the boundary of the work area so that it is not pickable to modify.
- J. Real decimal numbers entered in menu fields are rounded so nonzero values close to zero are indicated as zero.
- K. There is no interactive way to change the color palette.

- L. The one quarter, one half, cent sign, and underscore characters are not included in the text fonts.

- M. Whenever a font is used in a picture, it takes up approximately 10K of memory. The font then remains for all the pictures created during that session, even if future pictures saved does not contain any text. Therefore it is recommended that a user configure their Context Manager partition large enough to accomodate these fonts by defining the partition to be at least 40K larger than what is expected for use with the largest picture to be made.