CONVERGENT TECHNOLOGIES

RELEASE NOTICE FOR
1.0 CHART DESIGNER (STA-5200)

Revised January 9, 1986

SECTION   TITLE   PAGE

1.0 Description of Program

This Release Notice describes the Chart 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 Chart Designer.

Chart Designer is a flexible graphics package for the creation of business charts from spreadsheet data. Its icon-based interface allows users to quickly 'point and pick' each icon with the mouse. The Chart Designer creates and combines text, and business charts generated from spreadsheet data using Extended Multiplan. Pictures created by Art Designer may be read into Chart Designer for combination with charts. These pictures can then be integrated into a document using Convergent's Document Designer.

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

2.0 Changes from Prior Version

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

3.0 Contents of Distribution Diskette

The Chart 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 levels, do so before installing the Chart Designer. If you use the Context Manager, you should install Context Manager 2.2 or higher prior to installing Chart Designer.

There are 2 distribution diskettes supplied for the Chart Designer.

Chart 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

Chart Designer Diskette 2 of 2:

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

ChartDesigner.run

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

ChartCmInstall.sub

4.0 Installation Procedures

The Chart 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 Chart 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 Chart Designer with the
    Document Designer or the Context Manager, and
    your system has Context Manager version 2.2 or
    higher installed, your Context Manager config-
    uration file can be updated with the Submit
    command set up at the end of the installation.

    If you plan to run Chart Designer with the
    Document Designer, edit the command as fol-
    lows. 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>ChartCmInstall.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 Chart Designer Distribution Diskettes
    as archives.

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 Chart Designer Distribution Diskette 1 of 2 into drive [f0]. (Do **NOT** press the RESET button.)

D.   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.

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

If you plan to run Chart Designer with the
Document Designer, edit the command as fol-
lows. 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>ChartCmInstall.sub** RETURN
  [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 Chart Designer Distribution Diskettes as archives.

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

4.3 MegaFrame Systems

The Chart 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 Chart 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?]

F. Save the Chart Designer Distribution Diskettes
    as archives.

    Installation through MfInstall.sub does not
    provide the user with the ability to automati-
    cally add Chart Designer to your CmConfig
    file.

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 Chart 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 Chart Designer to
be invoked from the Document Designer or Extended
Multiplan.   Insert Chart Designer Distribution
diskette 2 into drive [fØ] and issue the following
submit command:

```
Command       Submit      RETURN
Submit
   File list        [fØ]<Sys>ChartCmInstall.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 Chart Designer in this environment,
the file [Sys]<Sys>DDConfig.sys is required. This
file must include an entry for Chart Designer as
follows:

```
:CommandName:Chart Designer
:RunFileName:[Sys]<Sys>ChartDesigner.run
:DDObjectEdited:257
:XMpGraphics:1
```

5.0 Required Files

The files required to run the Chart Designer should all reside in the system's [Sys]<Sys> directory. The following files will reside in [Sys]<Sys> after installation of the Chart Designer:

ArtChartMsg.bin   Graphics.fonts
ChartDesigner.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
GC001sys.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 running with version 2.2 of the Context Manager.

This version of the Chart 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

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

Chart 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 Chart 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 Chart 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 Chart 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 Chart 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.

10.0 Supplementary Information

10.1 Accessing the Chart Designer From OEM Applications

Any OEM application can use the Chart Designer by creating a data file and chaining to the file [Sys]<Sys>ChartDesigner.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.

Output Device	Comm Config File
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

Output Device	Printer Config File
HP7470A	HPPlotterConfig.sys
HP7220C	HPPlotterConfig.sys
HP7475A	HPPlotterConfig.sys
HP7220T	HPPlotterConfig.sys
Gould DS10	HPPlotterConfig.sys
Strobe	StrobePlotterConfig.sys
Printronix	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 Multi-
plan and the Chart Designer to describe the print-
er 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 Chart 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 worksta-
tion), the specification is a configuration file
(i.e., [COMM]B&[Sys]<Sys>PlotterConfig.sys). If
the device is a spooled device, then the specifi-
cation will be a queue name such as [SPL]. Either
or both kinds of specifications may be defined for
each printer or plotter. The Chart 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 Chart Designer to
determine the type of graphics formatting infor-
mation 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 de-
scribed 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 Chart
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, Chart
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 Chart De-
signer 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 speci-
fications for the print queues; 1 is the number of
sectors per entry; and 1 specifies spooler queue.
(See the Executive Manual, Spooled Printing sec-
tion 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 de-
scribed 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 Chart 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, Chart 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 Chart 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, Chart 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 Chart 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 Chart 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, usually speeds printing, and is a technology that Imagen is very proud of. 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 Chart 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 prcessing power and speed) should generally be configured with "preRasterization" and maximum memory.

Line types selected in the Chart 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 Chart 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 Chart 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 Chart 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 Chart 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 Chart Designer
                   is passed data for a pie chart in
                   which the maximum number of seg-
                   ments is exceeded. This maximum is
                   currently 8.

Error 7674:   ercTooManyLineLegends

                   This error occurs if Chart 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 Chart Designer
                   when specifying a pie chart.

Error 7676:   ercBadPaletteSignature

                   This error occurs if a file speci-
                   fied 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 under-
                   stand from the Inter-Context Mes-
                   sage 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 recgonized 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 al-
                   lowed 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 ob-
                   jects allowed at one time was
                   exceeded.

Error 7715:   ercNoMouseServer

                   The Mouse Server was not installed
                   on the workstation. This is re-
                   quired to run Art and Chart Design-
                   er.

Error 7717:   ercNoChartsPicked

                No chart was picked in the current
                work area for the operation per-
                taining to a chart.

Error 7718:   ercMoreThanOneChartPicked

                A chart format file can only con-
                tain 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 possi-
                ble.

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 terminat-
                ed before Chart Designer trans-
                ferred back the object being edit-
                ed.

13.0 Known Errors and Omissions

A. In Pie and Bar charts: when graphing only one entry with a zero value, Chart Designer will begin to graph the data but will return to Multiplan.

B. Chart Designer will give error 219 when the SignOn user file is password protected.

C. Chart 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 Chart 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 Chart 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. It is possible to add text close enough to the boundary of the work area so that is not pickable to modify.

G. Real decimal numbers entered in menu fields are rounded so nonzero values close to zero are indicated as zero.

H. There is no interactive way to change the color palette.

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

J.   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 do not contain any text.
      Therefore, it is recommeded 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.