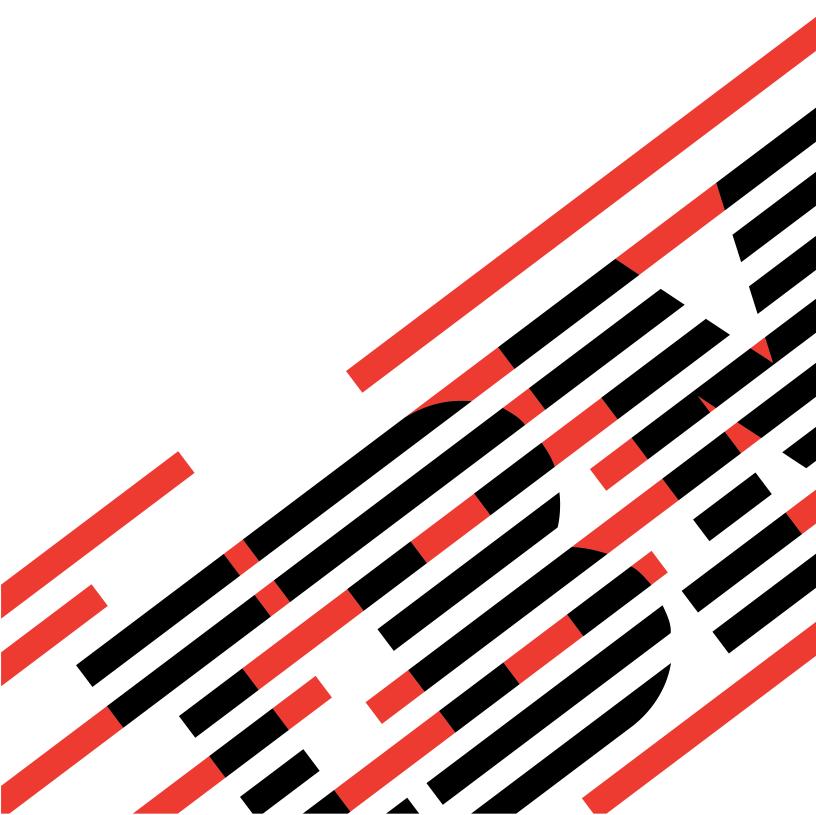


IBM Systems - iSeries Business Graphics Utility for AS/400 Commands

Version 5 Release 4





IBM Systems - iSeries Business Graphics Utility for AS/400 Commands

Version 5 Release 4

Note Before using this information and the product it supports, be sure to read the information in "Notices," on page 23.

Second Edition (February 2006)

This edition applies to version 5, release 4, modification 0 of Business Graphics Utility for AS/400 (product number 5722-DS1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CICS models.

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Create Graphics Data File (CRTGDF)

Where allowed to run: All environments (*ALL) Threadsafe: No

Parameters Examples Error messages

The Create Graphics Data File (CRTGDF) command creates a graphics data file (GDF) from a chart format and a data file defined by the Business Graphics Utility (BGU).

Error messages for CRTGDF

*ESCAPE Messages

BGU0670

BGU is already active.

Top

Parameters

Keyword	Description	Choices	Notes	
FILE	File	Qualified object name	Required,	
	Qualifier 1: File	Name	Positional 1	
	Qualifier 2: Library	Name, *LIBL, *CURLIB		
MBR	Member	Name, *FIRST	Optional, Positional 2	
MBROPT	Member option	*NOREPLACE, *REPLACE	Optional	
AUT	Authority	Name, *LIBCRTAUT, *CHANGE, *ALL, *EXCLUDE, *USE	Optional	
TEXT	Text	Character value, *CHTHDG	Optional	
СНТЕМТ	Chart format	Single values: *DFT, *GDF Other values: Qualified object name	Optional	
	Qualifier 1: Chart format	Name		
	Qualifier 2: Library	Name, *LIBL, *CURLIB		
CHTDTAFILE	Chart data file	Single values: *DFT Other values: Qualified object name	Optional	
	Qualifier 1: Chart data file	Name		
	Qualifier 2: Library	Name, *LIBL, *CURLIB	1	
CHTDTAMBR	Chart data member	Name, *FIRST	Optional	
RCDFMT	Record format	Name, *FIRST	Optional	
DTAFMT	Data format	*FILEDFT, *NONPAIR, *PAIR	Optional	
FROMRCD	Starting record number	1-2147483647, *FIRST	Optional	
NBRRCDS	Number of records	1-999, <u>100</u> , *END	Optional	
CHTHDG	Chart heading	Character value, *CHTFMT	Optional	

File (FILE)

Specifies the data file and the library to be used to store the GDF. If the graphics data file does not exist, BGU creates it. If the graphics data file exists, BGU proceeds to process the MBR parameter.

file-name

The qualified name of an existing GDF.

The possible library values are:

*LIBL The library list is used to locate the GDF.

*CURLIB

The current library for the job locates the GDF. If no current library entry exists in the library list, QGPL is used.

library-name

Specify the name of the library where the GDF is located.

Top

Member (MBR)

Specifies the database file member in which the GDF is to be stored. If the database file member already exists, you must specify *REPLACE in the MBROPT parameter to have the member replaced. If the member does not exist, it will be created.

The possible values are:

*FIRST

The first member in the database file specified in the FILE parameter is used.

member name

Specify the name of the file member in the GDF file.

Top

Member option (MBROPT)

Specifies to replace the database file member if the member specified in the MBR parameter already exists.

The possible values are:

*NOREPLACE

Specifies that the database file member is not replaced. This is the default option. If you select it, BGU issues an error message stating that the member already exists.

*REPLACE

Specifies that the existing database file member is replaced.

Top

Authority (AUT)

Specifies the authority to the graphics data file.

The possible values are:

*LIBCRTAUT

Specifies the use of the create authority previously defined for the target library. If the CRTAUT value for the library changes after the file is created, the new value will not affect access to this, or other existing files.

*CHANGE

Specifies that the public has all data rights and object management rights.

*ALL Specifies that the public has all data and object rights.

*EXCLUDE

Specifies that the public has no data or object rights.

Specifies that the public has read data rights and management rights.

authorization-list-name

Specifies that the object has the same rights as specified in the authorization list.

Top

Text (TEXT)

Describes the contents of the GDF member. The text string can be up to and including 50 characters.

The possible values are:

*CHTHDG

The default uses the string &sdq.GDF - &sdq. as the prefix for the chart heading of the GDF. It is then truncated at 50 characters to form the member text.

text A text string of up to 50 characters for the member text is used.

Top

Chart format (CHTFMT)

Specifies the chart format that will be used to create the GDF. The GDF is created by using the chart format and the data in the file and member specified by the CHTDTAFILE and CHTDTAMBR parameters.

The possible values are:

The default chart format of BGU is used to create the GDF.

*GDF Specifies the use of the GDF member name and library name to form the name of an existing chart format.

format-name

Specify the qualified name of an existing chart format to be used to chart the data.

The possible library values are:

*LIBL The library list is used to locate the chart format.

*CURLIB

The current library for the job is used to locate the chart format. If no current library entry exists in the library list, QGPL is used.

library-name

Specify the name of the library where the chart format is located.

Chart data file (CHTDTAFILE)

Specifies the database file (physical or logical) that contains the data that will be used to create the GDF. The GDF is created by using the chart data and the chart format specified in the CHTFMT parameter.

The possible values are:

*DFT The default data values created by BGU and the specified chart format are used to create the GDF

file-name

Specify the qualified name of an existing database file containing the data to be charted.

The possible library values are:

*LIBL The library list is used to locate the file.

*CURLIB

The current library for the job is used to locate the file. If no current library entry exists in the library list, QGPL is used.

library-name

Specify the name of the library where the file is located.

Top

Chart data member (CHTDTAMBR)

Specifies the database file member that contains the data that will be used to create the GDF. The GDF is created by using the chart data and the chart format specified in the CHTFMT parameter.

The possible values are:

*FIRST

The first member in the database file specified in the FILE parameter is used.

member-name

Specify the name of the file member to be used to chart the data.

Top

Record format (RCDFMT)

Specifies the record format to be used to describe the physical database file named in the CHTDTAFILE parameter.

The possible values are:

*FIRST

The first record format containing any numeric fields in the file is used.

record-format-name

Specify the name of the record format to be used.

Data format (DTAFMT)

Specifies how the data fields from the files specified in the CHTDTAFILE parameter are selected for creating the GDF.

The possible values are:

*FILEDFT

The data fields are selected in the manner specified in the data file.

*NONPAIR

The data fields are selected in a nonpaired manner. The first numeric field represents the X value (the independent variable) and all remaining numeric fields represent the Y values dependent on

*PAIR The data fields are selected in a paired manner. For example, the first numeric field represents the independent variable X1, and the second numeric field represents the variable Y1 dependent on X1. The third numeric field represents the independent variable X2, and the fourth numeric field represents the variable Y2 dependent on X2 and so on.

Top

Starting record number (FROMRCD)

Specifies the record number in the file member where data charting begins. The total number of records is specified by the NBRRCDS parameter.

The possible values are:

*FIRST

Charting begins with the first record in the specified file member.

record-number

Specify the number of the record in the database file member from which charting begins.

Top

Number of records (NBRRCDS)

Specifies the number of records that are used as data for the chart to be stored as a GDF. The number of records to be used begins at the record specified by the FROMRCD parameter.

The possible values are:

100 100 records are used to create your chart.

*END The records charted end at the last record of the file.

number-of-records

Specify the number of records used as data for the chart. Valid values are from 1 to 999.

Chart heading (CHTHDG)

Specifies a chart heading to override the existing chart heading in the chart you are using to create the GDF. The text string can contain up to 132 characters.

The possible values are:

*CHTFMT

The heading defined in the chart format specified.

chart-heading-text

Specify a character string of up to 132 characters to override the existing chart heading. A semicolon (;) in the text string indicates to BGU to start a new line in the heading.

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Examples

None

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Error messages

*ESCAPE Messages

BGU0670

BGU is already active.

Delete Chart Format (DLTCHTFMT)

Where allowed to run: All environments (*ALL) Threadsafe: No

Parameters Examples Error messages

The Delete Chart Format (DLTCHTFMT) command deletes a chart format or a group of chart formats from one or more libraries.

Error messages for DLTCHTFMT

*ESCAPE Messages

CPF2105

Object &1 in &2 type *&3 not found.

CPF2110

Library &1 not found.

CPF2113

Cannot allocate library &1.

CPF2114

Cannot allocate object &1 in &2 type *&3.

CPF2117

&4 objects type *&3 deleted. &5 objects not deleted.

CPF2182

Not authorized to library &1.

CPF2189

Not authorized to object &1 in &2 type *&3.

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Parameters

Keyword	Description	Choices	Notes
CHTFMT	Chart format	Qualified object name	Required,
	Qualifier 1: Chart format	Generic name, name	Positional 1
	Qualifier 2: Library	Name, *LIBL, *ALL, *ALLUSR, *USRLIBL, *CURLIB	

Top

Chart format (CHTFMT)

Specifies the name of the chart formats to be deleted. You can stipulate a specific chart format or a generic chart format; either type can be qualified by a library name.

The possible values are:

chart-format-name

The qualified name of the chart format to be deleted.

generic*-chart-format-name

The name of the chart format to be deleted. You can specify a generic name as a character string containing one or more characters followed by an asterisk (*). If you specify a generic name, all chart formats that have names with the same prefix as the generic chart format are deleted.

Depending on the library qualifier specified or assumed, the following libraries are searched for the specified chart formats. You must have authority to the library.

*LIBL Specifies all the libraries in the user and system portions of the job's library list.

*CURLIB

Specifies that the current library for the job is used to locate the chart formats. If no current library entry exists in the library list, QGPL is used.

*USRLIBL

Specifies only the libraries listed in the user portion of the job's library list.

*ALL Specifies all the libraries in the system, including QSYS.

*ALLUSR

Specifies all user-defined libraries and the QGPL library, not just those in the job's library list. Libraries other than QGPL whose names start with the letter Q are not included.

library-name

Specify only the library name in this parameter. You must have object operational authority for the library specified.

Top

Examples

None

Top

Error messages

*ESCAPE Messages

CPF2105

Object &1 in &2 type *&3 not found.

CPF2110

Library &1 not found.

CPF2113

Cannot allocate library &1.

CPF2114

Cannot allocate object &1 in &2 type *&3.

CPF2117

&4 objects type *&3 deleted. &5 objects not deleted.

CPF2182

Not authorized to library &1.

CPF2189

Not authorized to object &1 in &2 type *&3.

Display Chart (DSPCHT)

Where allowed to run: All environments (*ALL) Threadsafe: No

Parameters Examples Error messages

The Display Chart (DSPCHT) command displays a chart defined by the Business Graphics Utility (BGU). You can type this command to display a chart on a graphics-capable work station without starting BGU.

Error messages for DSPCHT

*ESCAPE Messages

BGU0670

BGU is already active.

BGU9002

BGU session ended abnormally.

BGU9003

Unrecoverable error detected during BGU operation.

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Parameters

Keyword	Description	Choices	Notes
CHTFMT	Chart format	Single values: *DFT Other values: Qualified object name	Optional, Positional 1
	Qualifier 1: Chart format	Name	
	Qualifier 2: Library	Name, *LIBL, *CURLIB	
FILE	File	Single values: *DFT Other values: Qualified object name	Optional, Positional 2
	Qualifier 1: File	Name	
	Qualifier 2: Library	Name, *LIBL, *CURLIB	
MBR	Member	Name, *FIRST	Optional
OUTPUT	Output	*, *PLOT, *PRINT	Optional
RCDFMT	Record format	Name, *FIRST	Optional
DTAFMT	Data format	*FILEDFT, *NONPAIR, *PAIR	Optional
FROMRCD	Starting record number	1-2147483647, *FIRST	Optional
NBRRCDS	Number of records	1-999, <u>100</u> , *END	Optional
CHTHDG	Chart heading	Character value, *CHTFMT	Optional
DEVTYPE	Device type	<u>7372</u> , 7371, 5224, 5225, 4234, IPDS, 4214, 6180, 6182	Optional
PENRATE	Plotter pen rate	1-100, <u>100</u>	Optional
PENWTH	Plotter pen width	1-10, <u>3</u>	Optional
PLTADR	Plotter address	1-31, <u>*SEARCH</u>	Optional
HRZPPR	Plotter paper horizontal	<u>*YES</u> , *NO	Optional
CHRSHAPE	Maintain character shape	*YES, <u>*NO</u>	Optional
PPRSIZE	Plotter paper size	*SMALL, *LARGE	Optional
FORMFEED	Form feed	*AUTOCUT, *CUT	Optional

Chart format (CHTFMT)

Specifies the chart format to be used to chart the data found in the file and member specified by the FILE and MBR parameters.

The possible values are:

*DFT The default data to be used for your chart format.

The possible library values are:

*LIBL The library list is used to locate the chart format.

*CURLIB

The current library for the job is used to locate the chart format. If no current library entry exists in the library list, QGPL is used.

library-name

Specify the library where the chart format is located.

format-name

Specify the qualified name of an existing chart format used to chart the data.

Top

File (FILE)

Specifies the database file (physical or logical) containing the data to be charted. The data is charted using the format specified in the CHTFMT parameter.

The possible values are:

*DFT The default data to be used for your chart.

file-name

The qualified name of an existing database file containing the data to be charted.

The possible library values are:

*LIBL The library list is used to locate the file.

*CURLIB

The current library for the job is used to locate the file. If no current library entry exists in the library list, QGPL is used.

library-name

Specify the library where the file is located.

Top

Member (MBR)

Specifies the database file member containing the data to be charted. The data is charted using the format specified in the CHTFMT parameter.

The possible values are:

*FIRST

The first member in the database file specified in the FILE parameter is used.

member-name

Specify the name of the file member used to chart the data.

Top

Output (OUTPUT)

Specifies that the chart is either displayed (at a graphics-capable work station), plotted, or printed.

The possible values are:

* The output is displayed at the graphics-capable work station.

*PLOT

The output is plotted on one of the available plotters.

*PRINT

The output is printed on either the 5224/5225, 4214, 4234, or IPDS printers.

Top

Record format (RCDFMT)

Specifies the record format used to describe the physical database file named in the FILE parameter.

The possible values are:

*FIRST

The first record format containing numeric fields in the file is used.

record-format-name

The name of the record format to be used.

Top

Data format (DTAFMT)

Specifies how the data fields are selected for charting.

The possible values are:

*FILEDFT

The data fields are selected in the manner specified in the data file.

*NONPAIR

The data fields are selected in a nonpaired manner. This means that the first numeric field represents the X value (independent variable) and all remaining numeric fields represent the Y values dependent on it.

*PAIR The data fields are selected in a paired manner. For example, the first numeric field represents the independent variable X1, and the second numeric field represents the variable Y1 dependent on X1. The third numeric field represents the independent variable X2, and the fourth numeric field represents the variable Y2 dependent on X2 and so on.

Starting record number (FROMRCD)

Specifies the record number in the file member where data charting begins. The total number of records is specified by the NBRRCDS parameter.

The possible values are:

*FIRST

Charting begins with the first record in the specified file member.

record-number

The number of the record in the database file member from which charting begins.

Top

Number of records (NBRRCDS)

Specifies the number of records that are used as data for the chart. The number of records to be used begins at the record specified by the FROMRCD parameter.

The possible values are:

100 100 records are used to create your chart.

*END The records charted end at the last record of the file.

number-of-records

The number of records used as data for the chart. Valid values are from 1 to 999.

Top

Chart heading (CHTHDG)

Specifies a chart heading to override the existing chart heading while the chart is displayed, printed, or plotted.

The possible values are:

The heading defined in the chart format is used when you plot, print or display the chart.

chart-heading-text

A character string of up to 132 characters to override the existing chart heading. A semicolon (;) in the text string signifies to BGU to start a new line in the heading.

Note: This parameter overrides the chart heading only. To change the chart heading permanently, you must select option 3 (Chart change format) from the Business Graphics Utility (BGU) menu.

Top

Device type (DEVTYPE)

Specifies the device type to be used for the printing or plotting of your chart. This parameter is relevant only if OUTPUT(*PLOT) or OUTPUT(*PRINT) is specified.

The possible values are:

7372 The 7372 plotter that plots your chart.

- 7371 The 7371 plotter that plots your chart.
- 6180 The 6180 plotter that plots your chart.
- 6182 The 6182 plotter that plots your chart.
- 5224 The 5224 printer that prints your chart.
- 5225 The 5225 printer that prints your chart.
- 4214 The 4214 printer that prints your chart.
- 4234 The 4234 printer that prints your chart.
- **IPDS** Any graphics-capable Intelligent Printer Data Stream (IPDS) printer installed at your location. Specify this parameter when using either the 4224, 4028 3812, or 3816 printers.

Top

Plotter pen rate (PENRATE)

Specifies the speed of the pens on the plotter when your chart is being plotted.

The possible values are:

100 The pens plot your chart at 100% speed.

pen-rate

The speed, specified as a percentage, of the pens on the plotter.

Top

Plotter pen width (PENWTH)

Specifies the width of the strokes of the pens when your chart is plotted.

The possible values are:

The stroke of the pens is 0.3 millimeters.

pen-width

A number that specifies the stroke of the pens (between 0.1 and 1.0 millimeters).

Top

Plotter address (PLTADR)

Specifies the plotter address where the plotter is located.

The possible values are:

*SEARCH

The chart is at the first address for plotting.

plotter-address

A number, between 1 and 31, that specifies the plotter location.

Plotter paper horizontal (HRZPPR)

Specifies the position of the paper in the plotter.

The possible values are:

***YES** The long side of the paper is horizontal.

*NO The short side of the paper is horizontal.

Top

Maintain character shape (CHRSHAPE)

Specifies the shape of the characters on a chart that is plotted vertically.

The possible values are:

*NO Character shape is not maintained as it would appear on a chart plotted horizontally.

*YES Character shape is maintained as it would appear on a chart plotted horizontally.

Top

Plotter paper size (PPRSIZE)

Specifies the size of the paper on which you plot your chart.

The possible values are:

*SMALL

Your chart is plotted on paper 8.5 by 11 inches (210 by 297 millimeters).

*LARGE

Your chart is plotted on paper 11 by 17 inches (297 by 420 millimeters).

Top

Form feed (FORMFEED)

Specifies that the plotter automatically loads the paper.

The possible values are:

*AUTOCUT

The plotter automatically loads the paper.

*CUT You must manually load the paper before plotting.

Top

Examples

None

Error messages

*ESCAPE Messages

BGU0670

BGU is already active.

BGU9002

BGU session ended abnormally.

BGU9003

Unrecoverable error detected during BGU operation.

Display Graphics Data File (DSPGDF)

Where allowed to run: All environments (*ALL) Threadsafe: No

Parameters Examples Error messages

The Display Graphics Data File (DSPGDF) command displays, prints, and plots a graphics data file defined by the Business Graphics Utility (BGU), by a system graphics application, or by an application on a different system that produces the graphics-data-file-orders which are compatible with the system.

Error messages for DSPGDF

*ESCAPE Messages

BGU0670

BGU is already active.

BGU9002

BGU session ended abnormally.

BGU9003

Unrecoverable error detected during BGU operation.

Top

Parameters

Keyword	Description	Choices	Notes	
FILE	File	Qualified object name	Required,	
	Qualifier 1: File	Name	Positional 1	
	Qualifier 2: Library	Name, *LIBL, *CURLIB		
MBR	Member	Name, *FIRST	Optional, Positional 2	
OUTPUT	Output	*, *PLOT, *PRINT	Optional	
DEVTYPE	Device type	7372, 7371, 5224, 5225, 4234, IPDS, 4214, 6180, 6182	Optional	
PENRATE	Plotter pen rate	1-100, <u>100</u>	Optional	
PENWTH	Plotter pen width	1-10, <u>3</u>	Optional	
PLTADR	Plotter address	1-31, <u>*SEARCH</u>	Optional	
HRZPPR	Plotter paper horizontal	*YES, *NO	Optional	
PPRSIZE	Plotter paper size	*SMALL, *LARGE	Optional	
FORMFEED	Form feed	*AUTOCUT, *CUT	Optional	

Тор

File (FILE)

Specifies the physical database file containing the graphics data to be displayed.

The possible library values are:

*LIBL The library list is used to locate the database file.

*CURLIB

The current library for the job locates the database file. If no current library entry exists in the library list, QGPL is used.

library-name

Specify the library where the database file is located.

Top

Member (MBR)

Specifies the database file member containing the data to be displayed.

The possible values are:

*FIRST

The first member in the database file specified in the FILE parameter is used.

member name

The name of the file member used to display the data.

Top

Output (OUTPUT)

Specifies that the file is either displayed (at a graphics-capable work station), plotted, or printed.

The possible values are:

* The file is displayed at the graphics-capable work station.

*PLOT

The file is plotted on one of the available plotters.

*PRINT

The file is printed on one of the available printers.

Top

Device type (DEVTYPE)

Specifies the device type that prints or plots the file. This parameter is relevant only if OUTPUT(*PLOT) or OUTPUT(*PRINT) is specified.

The possible values are:

7372 The 7372 plotte	r that plots the file.
-----------------------------	------------------------

7371 The 7371 plotter that plots the file.

6180 The 6180 plotter that plots the file.

6182 The 6182 plotter that plots the file.

5224 The 5224 printer that prints the file.

5225 The 5225 printer that prints the file.

4214 The 4214 printer that prints the file.

4234 The 4234 printer that prints the file.

IPDS Any graphics-capable Intelligent Printer Data Stream (IPDS) printer installed at your location. Specify this parameter when using either the 4234, 4028 3812, or 3816 printers.

Top

Plotter pen rate (PENRATE)

Specifies the speed of the pens on the plotter when the file is being plotted.

The possible values are:

The pens plot at 100% speed.

pen-rate

The speed, specified as a percentage, of the pens on the plotter.

Top

Plotter pen width (PENWTH)

Specifies the width of the strokes of the pens when the file is plotted.

The possible values are:

The stroke of the pens is 0.3 millimeters.

pen-width

A number that specifies the stroke of the pens (between 0.1 and 1.0 millimeters).

Тор

Plotter address (PLTADR)

Specifies the plotter address where the plotter is located.

The possible values are:

*SEARCH

The file is plotted on the first plotter located by the address specified.

plotter-address

A number, between 1 and 31, that specifies the plotter location.

Top

Plotter paper horizontal (HRZPPR)

Specifies the position of the paper in the plotter.

The possible values are:

***YES** The long side of the paper is horizontal.

*NO The short side of the paper is horizontal.

Plotter paper size (PPRSIZE)

Specifies the size of the paper where you plot the file.

The possible values are:

*SMALL

The file is plotted on paper 210 by 297 millimeters (8.5 by 11 inches).

*LARGE

The file is plotted on paper 297 by 420 millimeters (11 by 17 inches).

Top

Form feed (FORMFEED)

Specifies that the plotter automatically loads the paper.

The possible values are:

*AUTOCUT

The plotter automatically loads the paper.

*CUT You must manually load the paper before plotting.

Top

Examples

None

Top

Error messages

*ESCAPE Messages

BGU0670

BGU is already active.

BGU9002

BGU session ended abnormally.

BGU9003

Unrecoverable error detected during BGU operation.

Тор

Start BGU (STRBGU)

Where allowed to run: Interactive environments (*INTERACT *IPGM *IREXX *EXEC)
Threadsafe: No

Parameters Examples Error messages

The Start Business Graphics Utility (STRBGU) command starts the Business Graphics Utility (BGU).

There are no parameters for the STRBGU command.

Error messages for STRBGU

*ESCAPE Messages

BGU0670

BGU is already active.

BGU9002

BGU session ended abnormally.

BGU9003

Unrecoverable error detected during BGU operation.

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Parameters

None

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Examples

None

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Error messages

*ESCAPE Messages

BGU0670

BGU is already active.

BGU9002

BGU session ended abnormally.

BGU9003

Unrecoverable error detected during BGU operation.

Appendix. Notices

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