

# GRAPH\$ - Display Graph on GX

The GRAPH\$ routine can be used to display a graph, in a wide variety of formats, on GX.

## 1. Invocation

To display a graph on GX code:

```
CALL GRAPH$ USING gr call_back_routine
```

where *gr* is a control block described in GRINI\$.DOC and *call\_back\_routine* is a routine that must be coded to supply the data and data formats required by GRAPH\$ to draw the graph.

## 2. STOP Codes and Exception Conditions

The following STOP codes may be generated by GRAPH\$:

STOP code	Description
14401	GRAPH\$ has been called by an application that is not running on GX.

The following EXIT codes may be returned by GRAPH\$:

EXIT code	\$\$COND	Description
14401	1	Unable to allocate temporary data page
14402	2	The total length of the GX command block has exceeded 8192.
14404	4	GRAPH\$ interface is not supported by GX

## 3. Programming Notes

GRAPH\$ is one of 5 related routines that are used to draw graphs on GX. The general format of a graph-drawing section is of code is always:

```

CALL GRINI$ USING GR          * Initialise GR-block
CALL GRAPH$ USING GR GRPLOT   * Plot the graph
EXIT

*
SECTION GRPLOT
REPEAT
    CALL GRXAX$ USING XA      * Supply data etc. to GRAPH$
COUNT ON ???               * Set up X-axis
REPEAT                       * set up each X-axis point
    CALL GRZAX$ USING ZA      * number of X-axis points
    CALL GRPLT$ USING PT      * Set up Z-axis and plot points
COUNT ON ???               * set up each Z-axis point
EXIT                         * plot each data item
                             * number of Z-axis points
                             * return back to GRAPH$

```

## 4. Examples

None.

## 5. Copy-Books

See copy-book "G\$" in copy-library S.SYS32. Note that this copy-book **MUST** be expanded using a SUBSTITUTING clause. For example:

```
COPY "G$" USING "GR"
```

## 6. See Also

GRINI\$	Initialise GRAPH\$ GR Block With Default Settings
GRZAX\$	Define Z-axis graph details
GRXAX\$	Define X-axis graph details
GRPLT\$	Plot data item on graph