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New BACNAT for System Manager (SCO Unix)

This bulletin is to announce the release of a new BACNAT (variant V3.115) for System Manager (SCO Unix). The new software fixes two problems in the DIRECT printer controller. Both problems result in spurious NOT READY errors during printing.

The System Manager (Unix) DIRECT printing interface is complex (refer to Appendix D of the Global Operating manual (Unix) V8.0 for more details). The printer controller within the *glintd* background process passes print lines to the *glprid* printer daemon via a Unix named pipe (aka FIFO). The *glprid* daemon writes the print lines to the Unix device specified in the PRINTER section of the $GLDIR/sys/Systems file. If *glintd* were to write data to the Unix device directly, System Manager would hang whenever a full output queue caused the Unix write system call to block.

The first problem that results in spurious NOT READY errors during DIRECT printing is caused by the *glprid* daemon occasionally failing to inform the printer controller, within *glintd*, that a new print line is required. If a request for a new print line is not received by the printer controller within the Time–Out period specified in the configuration file, a NOT READY error is reported. This problem has been fixed by the V3.115 BACNAT software.

The second problem that results in spurious NOT READY errors during DIRECT printing is more involved and only occurs when an attempt is made to start a new print while a previous file is being printed (e.g. when the Global spooler, $SP, is being used to print several reports). The problem only occurs if the time taken by *glprind* to flush the contents of the intermediate Unix FIFO exceeds the Time–Out period specified in the configuration file. For example, this problem is more likely to occur on slow printers when a large FIFO is created. For most versions of Unix, the size of the FIFO is fixed (e.g. for SCO Unix, the size is 8Kb). In order to overcome this problem the DIRECT printer controller within the V3.115 BACNAT software recognises a new prompt in the DIRECT printer controller of the configuration file:

> Maximum FIFO buffering/256 (0):

Set this value to *N* to limit the maximum number of characters placed in the FIFO to *N* * 256 (e.g. to limit the number of characters to 1024 bytes, use Global Configurator to set the value to 4). If this value is left at 0, the default Unix FIFO size – normally 8Kb, but refer to the PIPE_BUF definition in the */usr/include/limits.h* file – will be used.

GSM (UNIX) FOR QIC-120 TAPES

System Manager (Unix) for SCO Unix is now available on QIC–120 tapes (configuration code 5545). Please find attached the configuration details.