

11.2 CHOOSING LOG OPTIONS

Once the program is loaded into the pawn, the logger displays its options menu. There are three sections to this menu, reflecting the three types of options that must be selected: stepping mode, request type, and log destination.

The user selects a particular option by spacing down to the appropriate line and pressing the INSERT key. When all options have been selected, the user presses the EXECUTE key to start processing.

At the bottom of its options menu, the logger also displays the names of the workstation's physical and currently attached system. Note that if the physical system is running an operating system release prior to version 7.2, double quotes are displayed for both system names.

11.2.1 Stepping Mode

The stepping mode determines how the logger will submit requests to the master from the pawn. The user can select one of three stepping modes.

All Requests

If the user selects "All Requests", the logger will transmit and record pawn requests without interruption, until the user presses the CANCEL key.

Single Request

If the user selects "Single Request", the logger will transmit and record one request at a time. After each request is recorded (to the display and/or the log file), the logger will suspend execution and prompt the user. It will not continue processing until the user presses the EXECUTE key.

n Requests

If the user selects "n Requests", the logger will ask the user to enter a number between 1 and 99 (decimal) specifying the number of requests that the logger should transmit and record before stopping. After "n" requests are recorded, the logger will suspend execution and prompt the user. It will not continue processing until the user presses the EXECUTE key.

11.2.2 Request Types

The user must specify the types of requests that the logger is to display (either on the screen or in a log file). There are ten request types and the user can select any number.

Immediate Requests

If the user selects "Immediate Requests", the function code and data pointer for all immediate requests will be displayed, along with the actual request data. In some cases (such as the Get Drive Vector request), the data will be displayed twice since the original request data is overwritten by the master.

Nonimmediate Requests

If the user selects "Non-Immediate Requests", the function code and RCB pointer for all nonimmediate requests will be displayed, along with the contents of both the original and returned RCBs. Depending on the request, specific information, such as the RN or unit number, will also be displayed.

Namestrings

If the user selects "Namestrings", every time the pawn issues a request that has an associated namestring (such as an Open), the namestring will be displayed.

Data Read

If the user selects "Data Read", any data read by a Read or Read Lock request will be displayed (by sectors).

Data Written

If the user selects "Data Written", any data written with a Write request will be displayed (by sectors).

Open Disk Count

If the user selects "Open Disk Count", a count will be maintained and displayed of all disks that the pawn opens for direct control after the option is selected.

Open File Count

If the user selects "Open File Count", a count will be maintained and displayed of all files that the pawn opens for access after the option is selected.

Open Slave Count

If the user selects "Open Slave Count", a count will be maintained and displayed of all slaves the pawn opens for direct control after the option is selected.

Time Requests

If the user selects "Time Requests", the current system time will be displayed before and after each request logged.

Log Blaster Input File

If the user selects "Log Blaster input file", the following request options are automatically selected: immediate requests, nonimmediate requests, namestrings, and time requests. All other request options are deselected. (This option is designed to create a log file to be used as input to an OIS system utility. Therefore, if the user selects this option, a text file must also be specified as the log file destination. Refer to Section 11.2.3.)

11.2.3 LOG DESTINATION

The user must also specify the log destination. Both the Request Logger's workstation screen and an actual log can be selected simultaneously.

If the user selects "Log", the logger asks the user to enter a namestring specifying the type and name of the log. This namestring must be either a properly formatted and delimited OIS text file name or a properly formatted, but undelimited, queue name (including a system name). A system name is not required with a text file, but if it is omitted, it defaults to the currently attached.

11.3 CHANGING OPTIONS OR TERMINATING LOGGING

Once the logger has started processing, the user can interrupt it at any time by pressing the CANCEL key. Note, however, that the logger may not respond to this immediately. Processing of the current request must complete (including the logging of any data read or written) before the logger will suspend execution.

If the CANCEL key has been pressed, the logger will suspend execution and return to its options menu once the current master request is complete. (Note that this will also temporarily halt the pawn since the logger is no longer intercepting and processing requests to the master.) At this point, the user can change the existing options and then continue logging by pressing the EXECUTE key. Alternately, the user can press the CANCEL key a second time. This causes the logger to close any open log files, release the pawn from direct control, and redisplay its primary menu.

11.4 RESTRICTIONS

While the pawn is running under the control of the Request Logger, the logger processes the following requests directly instead of passing them onto the master:

- o Terminate: When the pawn issues a Terminate request, the logger attempts to close all files currently open by the pawn. It then attempts to reboot the pawn by reinitializing the pawn's page zero and reloading/executing DOS.START.

- o Define File Source Connection: When the pawn issues a Define File Source Connection request, the logger will record the request (if nonimmediate requests have been selected for logging). However, it will send a failure code back to the pawn indicating that the request is unsupported.

- o Supervisory Read: The logger will pass a Supervisory Read request onto the master only if the request is for master performance data. Any other type of Supervisory Read will be recorded (if nonimmediate requests have been selected for logging), but the logger will send a failure code back to the pawn indicating that the request is unsupported.

11.5 EXAMPLE

The following log file example was generated by logging the default startup file DOS.START. The options chosen were: immediate requests, nonimmediate requests, and namestrings. While passwords would normally appear in a log, they do not appear in this example.

```
GET SYSTEM CONFIGURATION
  SCA =04 POINTER = 05EC
  DATA
    0702 2008 504f 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0106 0008 0000 0000 0000

SET CHARACTERISTICS
  SCA = 14 POINTER = 0261
  DATA
    0CFF

OPEN
  SCA = 01 POINTER = 0020
  FILE = ";DOS.START17"
  RCB = 0000 0000 F901 0000 0000 0000 0000 0000
  RCB = 0001 0000 F901 0000 0000 0000 0000 0000

OPEN
  SCA = 01 POINTER = 0020
  FILE = ";DOS.START5"
  RCB = 0000 0000 F901 0000 0000 0000 0000 0000
  RCB = 0001 0000 F901 0000 0000 0000 0000 0000

OPEN
  SCA = 01 POINTER = 0020
  FILE = "DOS.MENU"
  RCB = 0000 0000 1702 0000 0000 0000 0000 0000
  RCB = 0080 ED00 1702 3000 0090 0000 0000 0000
  RN = ED

READ
  SCA = 01 POINTER = 0020
  RN = ED
  RCB = 0100 EDFF 0001 0000 0000 0000 0000 0000
  RCB = 0181 EDFF 0001 0000 0030 0000 0000 0000

CLOSE
  SCA 01 POINTER = 0020
  RN = ED
  RCB = 0400 EDFF 0001 0000 0030 0000 0000 0000
  RCB = 0480 EDFF 0001 0000 0030 0000 0000 0000

SET SLAVE ACTIVITY
  SCA = 0C POINTER = 0822
  DATA
    00
```

```

GET SYSTEM CONFIGURATION
  SCA = 04 POINTER = 2E47
  DATA
    0702 2008 504F 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0106 0008 0000 0000 0000

GET SYSTEM CONFIGURATION
  SCA = 04 POINTER = 2E47
  DATA
    0702 2008 504F 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0106 0008 0000 0000 0000

ATTACH
  SCA = 13 POINTER = 2A78
  DATA
    8009 0000 0000 5A

GET SYSTEM CONFIGURATION
  SCA = 04 POINTER = 2E47
  DATA
    0702 2008 504F 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0106 0008 0000 0000 0000

GET SYSTEM CONFIGURATION
  SCA = 04 POINTER = 2E47
  DATA
    0702 2008 504F 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0106 0008 0000 0000 0000

ATTACH
  SCA = 13 POINTER = 2A78
  DATA
    8009 0000 0677 2F
  SYSTEM = "OZ;"

GET SYSTEM CONFIGURATION
  SCA = 04 POINTER = 2E47
  DATA
    0702 2008 504F 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0106 0008 0000 0000 0000

OPEN
  SCA = 01  POINTER = 2F06
  FILE = "DOS.MENUm"
  RCB = 0000 0000 A00C 0000 0000 0000 0000 0000
  RCB = 0080 ED00 A00C 1400 0000 0000 0000 0000
  RN = ED

READ
  SCA = 01  POINTER = 2F06
  RN = ED
  RCB = 0100 ED14 0033 0000 0000 0000 0000 0000
  RCB = 0180 ED14 0033 0000 0014 0000 0000 0000

```

```

CLOSE
  SCA = 01  POINTER = 2F06
  RN = ED
  RCB = 0400 ED00 0000 0000 0082 0000 0000 0000
  RCB = 0480 ED00 0000 0000 0082 0000 0000 0000

OPEN
  SCA = 01  POINTER = 2F06
  FILE = "OZ;MAILBOX.U23"
  RCB = 0000 0002 CB2E 0000 0000 0000 0000 0000
  RCB = 0080 ED00 CB2E 0000 0000 0000 0000 0000
  RN = ED

REOPEN
  SCA = 01  POINTER = 2F06
  RN = ED
  RCB = 0800 EDFF 0000 0000 0000 0000 0000 0000
  RCB = 0880 ED00 0000 0000 0000 0200 0000 0000

GET SYSTEM CONFIGURATION
  SCA = 04  POINTER = 0823
  DATA
    0702 2008 504F 5A00 0000 0000 0082 00EA
    FFFF FFFF FF42 0107 0008 0000 0000 0000

REOPEN
  SCA = 01  POINTER = 2F06
  RN = ED
  RCB = 0800 EDFF 0000 0000 0000 0000 0000 0000
  RCB = 0880 ED00 0000 0000 0000 0200 0000 0000

GET TIME AND DATE
  SCA = 02  POINTER = 0BB8
  DATA
    3417 0F1C 0352

```

At this point, the main menu loops doing Reopen and Get Time and Date requests until a menu field is chosen.