

Printer Setup (Server - AIX)

This document describes a "typical" AIX printer setup. Since many settings are printer-dependent, the printer and AIX documentation should be consulted for alternatives specific to your printer hardware.

1. Open an AIX window and enter:

```
% su
```

2. The system displays:

```
root's Password:
```

3. Enter your system's root password, then enter at the prompt:

```
# smit
```

4. The System Management Interface Tool starts. Click on *Devices*, then on *Printer/Plotter*, then on *Printer/Plotter Devices*, then if no listing exists for your printer, contact the printer manufacturer to obtain an AIX driver. If no AIX driver is available, check the AIX documentation as to which available driver will yield the best results. Click on *Add Printer/Plotter*. Select your printer from the list.

5. Select the interface used to connect the printer to the server. This connection is mostly likely *Parallel*, although RS232 is often used for printers designed for UNIX or Apple systems. RS432 is not often used.

6. Select the adapter connecting the printer. Parallel printers typically have only a single adapter. If the adapter is an RS232 (serial) port, choose between COM1 and COM2.

7. The printer characteristic defaults appear. The only option requiring entry is the *Port Number*. Click the *List* button next to the field, and select the proper port number or letter from the list. If no port number is listed, exit this procedure and consult your AIX manual for directions concerning port number setup.

8. When finished, click *OK*. This issues the AIX command to configure the printer.

9. After successful completion, click *Done*, then *Cancel*. If the configuration action is unsuccessful, note the error message, then consult the SMIT and AIX documentation for resolution. The most likely cause of failure is the existence of a previously configured printer on the port; if present, it will have to be removed prior to completing this installation procedure.

10. Click *Devices* in the top section of the SMIT window. Click on *Printer/Plotter*, then on *Print Spooling*, then on *List All Print Queues*. If no print queues are listed, follow the *Print Queue Setup* procedure outlined later in this chapter.

11. Make a notation of the name of the print queue most appropriate for your printer, then exit SMIT. The print queue determines if the printer is host- or network-attached. If either creating a print queue, use the appropriate smit command to create a host attached or network print queue. Enter the following:

```
# vi /usr/oracle_dev/guicommon2/tk23/admin/uiprint.txt
```

12. Read the instructions contained in the file. Using the proper vi editor commands, enter the following line at the end of the file in the following format. NOTE: The vi text editor, supplied with all UNIX systems, is NOT user-friendly. Enter vi only if you have already read the UNIX online vi documentation (using the command % manvi or have another vi reference source at hand.

```
queue name:print option:driver number:descriptive remark:driver name
```

The *Queue Name* is that noted in step (10) above.

- The *Print Option* is the printer language type. Valid entries are *Postscript* or *ASCII*. If a printer is a postscript printer, this fact is usually made obvious either on the printer itself or in the documentation. If in doubt, choose ASCII
- The *Driver Number* describes the driver version number. 1 or 2 are valid for Postscript; 1 is valid for ASCII;
- Enter any appropriate comment you desire in the *Descriptive Remark* area.
- The *Driver Name* is selected from the following. Choose the one appropriate for your printer. Printer designations are given when known:

```
aplwiig1.ppd (Apple LaserWriter)
dcln03r1.ppd (DEC generic line printer)
hpljet41.ppd (HP LaserJet 4)
l530_523.ppd
nccps801.ppd
appl230.ppd (Apple 230 line printer)
dclps321.ppd (DEC postscript laser)
hpljet42.ppd (HP LaserJet 4)
lw13.ppd (Apple LaserWriter 1.3)
tkphzr33.ppd (Tektronix Phaser 330)
datap462.ppd (Dataproducts 462)
default.ppd (generic Epson line printer)
l300_493.ppd
lwntx470.ppd (Apple LaserWriter 4)
```

13. After all changes are made, exit vi, saving the file. At the prompt:

```
# exit
```

14. From the DCS, execute DEVICES-NETWORK STATIONS PRINTERS. Complete the form.

Field Descriptions

Field Name Database Name Length/Type	Remarks
Printer Name DEV_NM 15 character	Required. Use the same name of the printer queue as displayed in step 10 of the previous procedure, or as created in step 5 of the following printer. The descriptive name to be used for the printer.

Reception List RCL_NM 20 character	Required. Determines which alarms will print to the printer. List of values constructed from entries in SYSADMIN - RECEPTION LIST.
Server Name PRP_SERVER_N M 16 character	Required. The name of the server to which the printer is connected. Default is prtsvr.
Port Number PRP_PORT_NO 5 numeric	Required. The port address on the server to which the printer is connected. The entry must match the operating system print queue entry made into the uiprint.txt file. Default is 2100.

Print Queue Setup

This procedure is followed when the *List All Print Queues* command in step 10 of section 10.1 fails to display any print queues.

1. After smit displays the *No Print Queues Found* message, click *Done*, then on *Add a Print Queue*.
2. Click on *Local*. Select the *Manufacturer* of your printer, then on the *Model* of the printer you are installing.
3. Select the *Interface* the printer will attach to. This should match the interface selected in step 5 above.
4. Select the *Adapter* the printer will attach to. This should match the adapter selected in step 6 above.
5. The *Add Print Queue* dialog box will appear. Enter a name for the print queue, leaving all other defaults untouched. This is typically lp0 for an ASCII printer, lp0ps for a postscript printer. If the printer connects to a serial port, this print queue name will be entered in the textbox following the printer protocol understood by your printer. See your printer documentation for this information. Printers that accept Postscript are usually clearly marked as doing so. PCL is the typical Hewlett-Packard protocol for non-Postscript business printers.
6. Click OK. The print queue will be added to the system. Return to step 11 above.

Print Queue Operational Considerations

- For queues attaching transaction printers, transactions are held until either 60 messages (1 page) are queued, or a 10 minute interval is reached; printing then commences.
- Print queues will store print output while the printer is off. The print utilities found later in this chapter may be used to verify and activate queues which have been left off.
- It is inadvisable to allow printed messages to queue over long periods of time.
- Print queues are located in the directory /var/spool/qdaemon; Print queue names are located in /var/spool/lpd/qdir.
- Alarm transactions are queued in the file tmp_event.log.queuename located in the directory /usr/amm/process.

Utilities for Print Queue Management

UNIX provides the following utilities for the management of print queues. The qadm utility requires login as root to function; all others may be executed as sysmgr.

Command	Description
lpstat	Lists the printer status and files in the queue
qadm -U <u>queuename</u>	Starts up the queue <u>queuename</u>
qadm -K <u>queuename</u>	Stops the queue <u>queuename</u>
qadm -X <u>queuename</u>	Deletes all files in <u>queuename</u>
qadm -D <u>queuename</u>	Stops the queue <u>queuename</u>
qcan -P <u>queuename</u> -x <u>jobid</u>	Cancels the job <i>jobid</i> stored in the queue <u>queuename</u>
qchk -P <u>queuename</u>	Shows the status of print jobs stored in <u>queuename</u>
lpr -d <u>queuename</u> < <u>filename</u> >	Prints the file <u>filename</u> through the queue <u>queuename</u>