

# Customer Tips

dc02cc0278  
January 28, 2004

... for the user

## *VMS/OpenVMS Printing to Port 9100*

### Purpose

This document includes prerequisites and a procedure to enable port 9100 printing (instead of lpr/lpd) from a VMS/OpenVMS (VAX or Alpha) system to any Xerox multifunction device with port 9100 capability. The procedure uses TELNETSYM to create a queue for port printing.

**NOTE:** Do not use DCPS to configure Xerox multifunction device printing. A replacement for DCPS called PrintKit and other third-party printing software, as well as lpr/lpd printing, are discussed in another Customer Tip, *Printing from VMS/OpenVMS*.

### Prerequisites

1. Before creating a print queue, start TCP/IP services for OpenVMS. Use the command:

```
$ @SYS$STARTUP:TCPIP$STARTUP
```

**NOTE:** You can shut down and start the TELNETSYM independently of TCP/IP services. Use the following files when you change parameters or logical names that require the service to restart.

- **SYS\$STARTUP:TCPIP\$TELNETSYM\_STARTUP.COM** allows you to start up the TELNETSYM service independently.
- **SYS\$STARTUP:TCPIP\$TELNETSYM\_SHUTDOWN.COM** allows you to shut down the TELNETSYM service independently.

To preserve site-specific parameter settings and commands, create the following files. These files are not overwritten when you reinstall TCP/IP services:

- **SYS\$STARTUP:TCPIP\$TELNETSYM\_SYSTARTUP.COM** - Invoke this file when TELNETSYM starts to use as a repository for site-specific definitions and parameters.
- **SYS\$STARTUP:TCPIP\$TELNETSYM\_SYSHUTDOWN.COM** - Invoke this file when TELNETSYM shuts down to use as a repository for site-specific definitions and parameters.

2. At the Xerox multifunction device, or from the multifunction device's Configuration Report, verify that **Port 9100 Enabled** is enabled.

This document applies to these **Xerox** products:

x	WC Pro 32/40 Color
x	WC Pro 65/75/90
x	WC Pro 35/45/55
	WC M35/M45/M55
x	DC 555/545/535
x	DC 490/480/470/460
x	DC 440/432/425/420
x	DC 332/340
x	DC 265/255/240
x	DC 220/230
	DCCS 50

## Procedure for Creating a Print Queue

The following commands create both a host name and a print queue called XEROX for a multifunction device with an ip address of 13.234.167.189

VMS commands that you enter are shown in bold type.

1. Enter the following command to create the queue:

```
$ INITIALIZE/QUEUE /PROCESSOR=TCPIP$TELNETSYM -  
_ $ /ON="13.234.167.189:9100"  
_Queue: XEROX
```

2. Start the print queue:

```
$ START XEROX
```

3. Use the following command to suppress an initial blank page caused by a form feed control character:

```
$ TCPIP$TELNETSYM_SUPPRESS_FORMFEEDS
```

```
TCPIP> EXIT
```

4. If necessary, use the following command to suppress any formatting by TELNETSYM (you may need to do so if PCL or Postscript print-ready files spool to this queue):

```
$ TCIP$TELNETSYM_RAW_TCP
```

```
TCPIP> EXIT
```

```
$
```

5. When done, examine the queue status and test the queue by printing a test file to the Xerox multifunction device. The following examples request the status of print queue "XEROX" and initiate a print job to print queue XEROX.

```
$ SHOW QUEUE XEROX
```

```
Server queue XEROX, idle, on 1A::, mounted form DEFAULT
```

```
$ PRINT WELCOME.TXT /QUEUE=XEROX
```

```
Job WELCOME (queue XEROX, entry 1) started on XEROX
```

```
$ PRINT LOGIN.COM /QUEUE=XEROX
```

```
Job LOGIN (queue XEROX, entry 2) started on XEROX
```

**NOTE:** Only lpr/lpd print queues require the TELNETSYM "relay queue" method for filtering a print queue. The relay queue method is not necessary for port 9100 printing using TELNETSYM.

## Deleting a Print Queue

Use the following commands to delete the XEROX queue:

```
$ SHOW QUEUE XEROX
```

```
$ STOP/QUEUE/MANAGER
```

```
$ DELETE/QUEUE XEROX
```

```
$ START/QUEUE/MANAGER
```

```
$ START/QUEUE remaining_queue(s)
```

## Eliminate "Stairstepping" Text

To eliminate the "stairstepping text" problem caused by LF (line feed) control characters at the end of lines, instead of CRLF (carriage return line feed) characters use the PCL code <esc>&k3G. This code attaches to the beginning of every spooled file to translate each LF control character to CRLF.

1. In the HP table (HP.TLB) in SYS\$LIBRARY, use EDT (or E) to create the file "ESC.TXT" which contains the pcl escape sequence for translating LF to CRLF. To insert the <esc> escape character, hold down the Control key and press the left square bracket [ twice. The file should contain the following line:

```
<esc>&k3G
```

2. Use the SHOW command to get a list of current forms with form names and descriptions:

```
SHOW QUEUE/FULL/FORM
```

Various listings appear. Look for the following:

```
/PROCESSOR=UCX_LPD  
/LIBRARY=HP
```

3. Enter the following command(s) to setup the module in the device control library:

```
INIT/QUEUE/START/DEFAULT= (FORM=ESC.TXT)/LIB=HP QNAME
```

**NOTE:** If necessary, you can extract the form from SYS\$LIB using this command:

```
/LIBR/EXTR = /ESC/OUT=ESC.TXT SYS$LIB:HP.TLB
```

4. Enter the following command to verify the library:

```
SHOW QUEUE/FULL  
/LIBRARY= /LIBRARY=HP
```

5. Restart the print queue:

```
STOP QUEUE RESET  
START/QUEUE/LIBRARY=HP QNAME
```

Documentation reference: *VMS System Manager's Manual*, "Chapter 13 Essentials," "Defining Forms and Creating Customized Forms" and "Using Device Control Libraries."

## Fixing Queue Problems

- Use the following command to start the queue "XEROX" if this message appears: "TCP/IP-E-QMANNOTRUN, *queue manager* is not running."  

```
$ START/QUEUE/MANAGER  
$ START/QUEUE XEROX
```
- The following commands may be useful if the following message(s) appears: "JBC-E-QMANNOTSTARTED, queue manager could not be started," or "JBC-E-OPENERR, error opening SYS\$COMMON:[SYSEXE]QMAN\$MASTER.DAT." These commands may not correct print queue problems without involving other steps. If you cannot readily resolve a problem, contact VMS support.

```
$ START SYS$PRINT  
$ ENABLE AUTOSTART/QUEUES  
$ STOP/QUEUE/MANAGER  
$ START/QUEUE/MANAGER  
$ SHOW QUEUE/FULL
```

## Additional Information

SOURCE: Compaq Computer Corporation (document number C000629-2589)  
[TCPIP] *Compaq TCP/IP Services for OpenVMS Management*  
(taken from sections on TELNETSYM)

Xerox Customer Service welcomes feedback on all documentation - send feedback via e-mail to: [USA.DSSC.Doc.Feedback@mc.usa.xerox.com](mailto:USA.DSSC.Doc.Feedback@mc.usa.xerox.com).

You can reach Xerox Customer Support at 1-800-821-2797 (USA),  
TTY 1-800-855-2880 or at <http://www.xerox.com>.

Other Tips about Xerox multifunction devices are available at the following URL:  
<http://www.xerox.com/DocumentCentreFamily/Tips>.

XEROX®, The Document Company®, the digital X®, and all Xerox product names are trademarks of XEROX CORPORATION. Other trademarks belong to their respective owners.

Copyright © XEROX CORPORATION 2004. All Rights Reserved.

THE DOCUMENT COMPANY  
**XEROX**®