

# Configuring Remote Printing Services

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The Cisco IOS for S/390 network line printer service looks to the network like a UNIX line printer daemon and is compatible with the UNIX LPR command. This chapter includes these sections:

- **Printing Services**  
Describes how to un-comment and change SERVICE statements.
- **Network Line Printer Segment (LPR)**  
Describes how to define the configuration parameters for the network line printer services.

## Printing Services

The SERVICE statements in the APPCFGxx member of the PARM data set define the user-level services provided by Cisco IOS for S/390 and the well-known port numbers. The most common ones are TELNET, VTAMAPPL, FTP, LPR, and USMTP/SSMTP.

### SERVICE Statement Syntax for LPR

This is the syntax for the LPR SERVICE statement.

```
SERVICE NAME (LPR)
  MODULE (TELNET | FTPS | SSMTP | USPOOL | STECHO |
          SCHARGEN | UDPSERV | SPOOL#4 | VTAMAPPL | USMTP)
```

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**Note** Remove or comment out the SERVICE statement for LPR if EPS is being used to process print requests.

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### Usage Notes for LPR SERVICE Statement

For printing, you may need to set:

- |                             |   |
|-----------------------------|---|
| <b>SERVICE NAME (LPR)</b>   | to specify the name of the service as LPR           |
| <b>MODULE (USPOOL)</b>      | to provide the LPR spooler server                   |
| <b>PORT (<i>number</i>)</b> | to specify the well-known port number for LPR (515) |

## LPR SERVICE Statement Examples

This example shows the use of the SERVICE statement for LPR.

### Line Printer Service (Port 515)

```
SERVICE NAME(LPR)
        MODULE(USPOOL)
        PORT(515)
        TCP
```

The LPR statement defines the line printer services for Cisco IOS for S/390. If you are installing the Enterprise Print Service product, you must comment out or delete the LPR statement for Port 515 as it is used by EPS.

```
LPR PORT(515) TRANTBL(ENGLISH)
LPR PORT(516)
```

On BSD UNIX systems, the file /etc/printcap needs an entry added that reflects your MVS hostname. SVR4 systems require different printer configurations. Consult your SVR4 documentation for specifics.

## Network Line Printer Segment (LPR)

Use the LPR statement to define the configuration parameters for the Cisco IOS for S/390 network line printer services.

### LPR Statement Syntax

```
LPR [ALL | NET | SUBNET]
      [CLASS (class)]
      [DESTID (name)]
      [IBUF (number)]
      [OUTLIM (number)]
      [PORT (port)]
      [SELECT | NOSELECT | FLUSH]
      [TRANTBL (name)]
```

#### Syntax Description

##### ALL | NET | SUBNET

Specifies which hosts can access this service

ALL—Any remote host can access the line printer service.

NET—Only hosts on the local network can access this service.

SUBNET—Only hosts on the local subnetwork can access this service.

Default: ALL

##### CLASS (class)

Specifies JES SYSOUT class to which the print file is written. Only one class is allowed.

Default: A

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<b>DESTID</b> ( <i>name</i> )	Specifies selection of a default local output device destination ID.  Default: LOCAL
<b>IBUF</b> ( <i>number</i> )	Specifies the total amount of input buffer space for receiving from TCP (1:4095).  Default: 3000
<b>OUTLIM</b> ( <i>number</i> )	Specifies the JES OUTLIM parameter to use in creating the output file to JES. This limits a print file to that number of print lines.  Default: 250000
<b>PORT</b> ( <i>port</i> )	Specifies the port number for this LPR server. This must be 515 to operate with the UNIX LPR command.  Default: 515
<b>SELECT   NOSELECT   FLUSH</b>	<p>Specifies whether requested printer queue name of the LPR can be used to override that default. Allows use of printer queue name to point to remote printers. Otherwise, printing is limited to local printer.</p> <p>NOSELECT—Use defined default local output destination ID. The requested printer queue name of the LPR is ignored.</p> <p>SELECT—Allow selection of requested destination ID of the LPR. If printer queue name is omitted or invalid as a destination ID, use the default output destination ID.</p> <p>FLUSH—Allow selection of requested destination ID of the LPR. If printer queue name is omitted or invalid as a destination ID, purge the output.</p> <p>Default: NOSELECT</p>
<b>TRANTBL</b> ( <i>name</i> )	<p>Specifies the name of a translation table used to translate incoming ASCII text into EBCDIC.</p> <p>For more information about special translate tables, read Chapter 19, Translation Tables.</p> <p>Default: ENGLISH</p>

## Usage Notes for LPR Statement

### LPR Parameters of Note

You may need to change the following parameters.

- |               |  |
|---------------|--|
| <b>CLASS</b>  | Specifies what SYSOUT class to use for the printer output. The default is A.                                       |
| <b>SELECT</b> | Allows use of printer queue name to point to remote printers. Otherwise, printing is limited to the local printer. |

## **USPOOL Activation**

A SERVICE statement to activate USPOOL must be used for the LPR server.

## **EPS Usage**

If EPS is installed, the print requests are serviced by EPS rather than the LPR server.

## **LPR Statement Example**

This example shows the usage of the LPR statement:

```
LPR IBUF(3000)
      CLASS(A)
      TRANTBL(ENGLISH)
      ALL
      DESTID(LOCAL)
      OUTLIM(300000)
```