

Token Ring configuration

When the Token Ring card is installed in the printer, you can configure the Token Ring parameters listed in the following table.

Token Ring parameters

Parameter	Description	Choices
Address	Token Ring Address (by default, this is a bit swapped version of the printer's Printer ID, and it is a unique address on the network). You can supply a Locally Administered Address. See Appendix D for more information about the Token Ring address.	Any valid token ring address between 04.xx.xx.xx.xx and 07.xx.xx.xx.xx.
All Routes Broadcast	Changes the default frame type for source route broadcasts. All Routes Broadcast is ignored if Bridging is set to Transparent . NOTE: Some protocols (for example, IP and ARP) always use all routes, so they are not affected by this parameter.	False (the default). The printer uses single-route broadcasts for most source route broadcasts. True. The printer uses all-routes broadcasts for all broadcasts.
Bridging	Token Ring source routing.	Transparent (no source routing) SourceRoute (use source routing) Adaptive (default; printer determines whether or not to use source routing based on the data)
Early Token Release	The printer releases the token at the end of the last byte transmitted (not applicable at 4 Mbps).	On (default) Off

There are several ways to configure the Token Ring parameters:

- On UNIX systems, you can use the script *config-TokenRing*, which is provided on the UNIX version of the printer's network utilities diskettes.
- On PCs, you can edit the PostScript utility file *TOKNCFG.PS* and send it to the printer.
- On a Macintosh, you can edit the PostScript utility file *Configure Token Ring* and send it to the printer.
- Under NetWare, you can use the Advanced Configuration Tool.

Note *The All Routes Broadcast parameter is not supported in the Advanced Configuration Tool.*

Windows users on NetWare networks can use the PhaserShare Administrator.

- With a TCP/IP connection and a World Wide Web browser, you can use PhaserLink.

Whichever method you use, you must reset the printer before the changes take effect.

Using the PostScript utility files TOKNCFG.PS and Configure Token Ring

You can use the following files to configure the printer for Token Ring networks from PCs and Macintosh computers:

- For PCs: The file *TOKNCFG.PS* is in the directory *NET-UTIL* on the PC version of your printer's network utilities diskettes. Copy the file to your hard disk before you begin.
- For Macintosh: The file *Configure Token Ring* is available on the Macintosh version of your printer's network utilities diskettes.

To configure your printer for Token Ring using one of these files, you must edit the file and send it to the printer. When you edit the file, you need to supply the information listed in the table [“Token Ring parameters”](#).

To use this file, first open the file using any text editor. Make the appropriate changes to the file according to the instructions contained in the file. Send the file to the printer by any convenient method. Use a parallel, NetWare, TCP/IP, or TokenTalk connection.

If you send the file to the printer from a PC over a parallel connection, you must add Control-D characters to the beginning and end of the file. You can use the batch file *ADDCTRLD.BAT* in the *NET-UTIL* directory to do this. The files *ADDCTRLD.BAT*, *CTRLD.PS*, and *TOKNCFG.PS* must all be in the same directory. Copy the files to your hard disk before you begin. To use *ADDCTRLD.BAT* to add Control-D's to the file *TOKNCFG.PS*, type the following command:

```
ADDCTRLD TOKNCFG.PS
```

Using the config-TokenRing script

The shell script *config-TokenRing* is provided on the UNIX version of the printer's network utilities diskettes. The script creates a PostScript file containing the Token Ring parameters. You set the Token Ring parameters by sending the PostScript file to the printer.

Before performing this procedure, you must install the script from the UNIX version of your printer's network utilities diskettes on to your host computer.

1. Make sure that the printer is connected to the network. ARP (Address Resolution Protocol) requires that the printer be connected on the same physical network segment as the host.
2. Log in.
3. Run the script *config-TokenRing*:
 - a. Change (**cd**) to the *bin* subdirectory in the directory where you placed your printer's network utilities.
 - b. Type the name of the script, redirecting the output to a file.
Type:

```
config-TokenRing > filename
```

4. When prompted:

```
Will the printer be using early Token Release?  
[Yes]
```

press **Enter** to accept the default (or type **n** for **no**).

Note *Early Token Release is not applicable to 4 Mbps rings.*

5. When prompted:

```
What type of bridging support do you want?  
Source Routing  
Transparent Routing  
Adaptive Routing  
Please enter (S,T, or A) [A]
```

press **Enter** to accept the default, or make another choice.

6. When prompted:

```
Will the printer be using All Routes  
Broadcasts ? [No]
```

press **Enter** to accept the default (or type **y** for **yes**).

7. When prompted:

```
Using the default address will overwrite any  
currently  
    assigned Locally Administered Address  
(LAA)  
Do you want to use the printer's default  
address? [Yes]
```

press **Enter** to accept the default (or type **n** for **no**).

8. Log in as **root**.

9. Make an entry into the host's ARP (Address Resolution Protocol) table defining the printer's Printer Name/Token Ring address pair. In general, this requires a command corresponding to one of the following syntax examples:

```
arp -s printer-name Token-Ring-address (for BSD systems)  
    or  
arp -s ether printer-name Token-Ring--address (for  
System V)
```

See the documentation for your host system for specifics of this command.

10. Turn on the printer.
11. Use the host spooling system (for example, **lpr** or **lp**) to send the file you created in Step 3b to the printer. This stores the Token Ring information in the printer's internal memory, where it is retained over a reset or power cycle.
12. Reset the printer.