

Configuring FDDI Software

This chapter describes how to configure the FDDI software of the Cisco Catalyst 1800 Token Ring switch. It contains the following sections:

- Accessing the Configuration Menu
- Configuring FDDI MAC Parameters
- Configuring FDDI Path Parameters
- Configuring FDDI Port Parameters
- Configuring FDDI SMT Parameters

Accessing the Configuration Menu

The Configuration menu allows you to define the nonsecurity functions available on the FDDI board. Normally, the default for each parameter is listed on the corresponding menu.

To use the Configuration menu, type the following from the Main menu:

```
Configure
```

The Configuration menu appears, followed by a prompt for a menu selection:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink
```

```
      Select From
```

```
      Bridge
      IP
      Logical Segments
      NetBIOS
      Physical Ports
      Port Priority
      Prompt
      Serial Port
      SNMP
      STP Ports
      System
      TFTP
```

```
Catalyst 1800> Configure
Enter Next Configuration Menu Selection
```

From this menu you can access the submenus that allow you to change various configuration parameters. We recommend you use the abbreviated text recognition feature described in the section “Abbreviated Text Recognition” in the chapter “Getting Started.” For example, to access the configuration menu for the FDDI port, type the following command from the Main menu:

```
c ph fddi_port #
```

Configuring FDDI MAC Parameters

The MAC menu allows you to configure FDDI-specific media access control (MAC) parameters. To access the MAC menu, follow these steps.

Step 1 Type this command from the Main menu:

```
Configure Physical Ports
```

The system displays the following prompt:

```
Enter port number or 0 for setting all ports (FDDI Port = 5)
```

Step 2 Enter **5**, the FDDI port number. The prompt reminds you that the FDDI port number is 5.

The Configuring Physical Port menu appears:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink
```

```
      Select From
```

```
Active Monitor  
Address  
Direct Attach  
Early Release  
MAC (FDDI)  
Path (FDDI)  
Port (FDDI)  
Ring Speed  
SMT (FDDI)  
State  
Display
```

```
Catalyst 1800>con phy 5 MAC
```

From this menu, you can select any FDDI parameter. You can also type the Display command to display 802.5 configuration information.

The following table describes the FDDI parameters on this menu and points to where you can find procedures describing their use.

Table 7-1 Configuration Menu Selections

Parameter	Allows you to . . .	For more information, see . . .
MAC (FDDI)	Set FDDI MAC parameters	“Configuring FDDI MAC Parameters”
Path (FDDI)	Set FDDI Path parameters	“Configuring FDDI Path Parameters”
Port (FDDI)	Set FDDI Port Parameters	“Configuring FDDI Port Parameters”
SMT (FDDI)	Set FDDI SMT Parameters	“Configuring FDDI SMT Parameters”

Step 1 To change a FDDI MAC parameter on this menu, use this command:

```
c ph 5 m
```

Note The numeral 5 is a constant, because the FDDI port is always port 5.

The Configuring Physical Ports FDDI MAC menu appears, followed by a prompt for a menu item:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink
      Select From
      Address
      RequestedPaths
      UnitDataEnable
      Display
```

```
Catalyst 1800>con phy 5 MAC
Enter Next Menu Selection
```

Configuring FDDI MAC Parameters

When you specify one of the preceding parameters, the FDDI Configuration screen appears:

Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink

FDDI Configuration

MAC			PATH	Primary (Nanosecs)	Secondary (Nanosecs)
Address:	00-05-77-ff-ff-06		MaxTReq:	165000000	165000000
RequestedPaths:	LO, SA, PA		TMaxLowerBound:	165000000	165000000
UnitDataEnable:	True		TVXLowerBound:	2500000	2500000
PORT	A	B	SMT		
Action/State:	PC_Enable	PC_Enable	Action/State:	Connect	
ConnectPolicy:	None	None	Bypass:	Disable	
LERAlarm:	8	8	RPTPolicy:	True	
LERCutoff:	7	7	Tnotify:	30 sec	
ConnectPolicy:	None	None	TraceMaxExp:	7000 ms	
RequestedPaths:			UserData:	FDDI SMT v7.3	
	*None: LO	LO	ConnectPolicy:	AA,AS,BB,BS,SA,SB,MM	
	*Tree: LO,CA,SP	LO,CA,PP			
	*Peer: LO,CA,SP,TH	LO,CA,PP,TH			

Catalyst 1800> c ph 5 m a

The following table explains the MAC parameters on the FDDI Configuration screen. Other parameters are explained in subsequent sections.

Table 7-2 FDDI Configuration Parameters

Title	Description																		
Address	The MAC address for the FDDI port. The system accepts any valid MAC address. The default is the MAC address shipped with the product.																		
RequestedPaths	The list of permitted paths that specifies the path(s) into which the MAC address may be inserted. They are the following types:																		
	<table border="1"> <thead> <tr> <th data-bbox="500 611 613 632">Path Type</th> <th data-bbox="716 611 813 632">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="500 653 532 674">LO</td> <td data-bbox="716 653 1284 737">Local. The local path refers to the segment(s) of ring(s), excluding the primary and secondary rings that pass through this node.</td> </tr> <tr> <td data-bbox="500 758 532 779">SA</td> <td data-bbox="716 758 1263 831">Secondary-Alternate. The secondary path refers to the segment(s) of the secondary ring(s) that pass through this node.</td> </tr> <tr> <td data-bbox="500 852 532 873">PA</td> <td data-bbox="716 852 1268 926">Primary-Alternate. The primary path refers to the segment(s) of the primary ring(s) that passes through this node.</td> </tr> <tr> <td data-bbox="500 947 532 968">CA</td> <td data-bbox="716 947 1247 1031">Concatenated-Alternate. Concatenated refers to the port inserted into both the primary and secondary paths in a concatenated wrap configuration.</td> </tr> <tr> <td data-bbox="500 1052 532 1073">SP</td> <td data-bbox="716 1052 911 1073">Secondary-Preferred</td> </tr> <tr> <td data-bbox="500 1094 532 1115">PP</td> <td data-bbox="716 1094 889 1115">Primary-Preferred</td> </tr> <tr> <td data-bbox="500 1136 532 1157">CP</td> <td data-bbox="716 1136 1247 1220">Concatenated-Preferred. Concatenated refers to the port inserted into both the primary and secondary paths in a concatenated wrap configuration.</td> </tr> <tr> <td data-bbox="500 1241 532 1262">TH</td> <td data-bbox="716 1241 1268 1293">Thru. Thru refers to the port inserted into both the primary and secondary paths in a thru configuration.</td> </tr> </tbody> </table>	Path Type	Meaning	LO	Local. The local path refers to the segment(s) of ring(s), excluding the primary and secondary rings that pass through this node.	SA	Secondary-Alternate. The secondary path refers to the segment(s) of the secondary ring(s) that pass through this node.	PA	Primary-Alternate. The primary path refers to the segment(s) of the primary ring(s) that passes through this node.	CA	Concatenated-Alternate. Concatenated refers to the port inserted into both the primary and secondary paths in a concatenated wrap configuration.	SP	Secondary-Preferred	PP	Primary-Preferred	CP	Concatenated-Preferred. Concatenated refers to the port inserted into both the primary and secondary paths in a concatenated wrap configuration.	TH	Thru. Thru refers to the port inserted into both the primary and secondary paths in a thru configuration.
Path Type	Meaning																		
LO	Local. The local path refers to the segment(s) of ring(s), excluding the primary and secondary rings that pass through this node.																		
SA	Secondary-Alternate. The secondary path refers to the segment(s) of the secondary ring(s) that pass through this node.																		
PA	Primary-Alternate. The primary path refers to the segment(s) of the primary ring(s) that passes through this node.																		
CA	Concatenated-Alternate. Concatenated refers to the port inserted into both the primary and secondary paths in a concatenated wrap configuration.																		
SP	Secondary-Preferred																		
PP	Primary-Preferred																		
CP	Concatenated-Preferred. Concatenated refers to the port inserted into both the primary and secondary paths in a concatenated wrap configuration.																		
TH	Thru. Thru refers to the port inserted into both the primary and secondary paths in a thru configuration.																		
	Three default values are enabled: LO, SA, and PA																		
UnitDataEnable	Controls access of high-level protocols to the frame transmission and reception services of the port. To allow higher level protocols to transmit and receive frames, set UnitDataEnable to True. The default value is True.																		

Address

Step 1 To change the Address parameter (that is, the FDDI MAC address), type this command:

```
cfma
```

The system displays the following prompt:

```
Enter 12-digit hex MAC address (ex. 0102030a0b0c)
```

Step 2 Type the new MAC address in noncanonical format (MSB) for the FDDI port and press **Return**.

The new parameter value appears on the FDDI Configuration screen (shown before Table 7-2).

RequestedPaths

Step 1 To change the RequestedPaths parameter, type this command:

```
c ph 5 m r
```

The system displays the following prompt:

```
Enter CA,CP,LO,PS,PP,SA,SP, or TH
```

Step 2 Choose the specific FDDI MAC RequestedPaths type you want to change. For example, to change the local from enable to disable, type this command:

```
c ph 5 m r l
```

The system displays the following prompt:

```
Enter Enable or Disable
```

Step 3 Type **enable** or **disable** and press **Return**.

The new parameter value appears on the FDDI Configuration screen (shown before Table 7-2).

UnitDataEnable

Step 1 To change the UnitDataEnable parameter, type this command:

```
c ph 5 m u
```

The system displays the following prompt:

```
Enter True or False
```

Step 2 Type **True** or **False** and press **Return**.

The new parameter value appears on the FDDI Configuration screen (shown before Table 7-2).

Configuring FDDI Path Parameters

The FDDI Path menu allows you to configure path parameter values. To access this menu, follow these steps.

Step 1 Type this command from the Main menu:

```
Configure Physical Port 5 Path
```

The system displays the following prompt:

```
Enter Primary or Secondary
```

Step 2 Enter **Primary** or **Secondary** and press **Return**.

Note We will use the primary path in all subsequent examples, although you can use the secondary path in the same manner.

The Configuring Physical Port menu appears, followed by a prompt for a menu selection:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink
```

```
    Select From
```

```
Active Monitor  
Address  
Direct Attach  
Early Release  
MAC (FDDI)  
Path (FDDI)  
Port (FDDI)  
Ring Speed  
SMT (FDDI)  
State  
Display
```

```
Catalyst 1800>con phy 5 MAC  
Enter Next Menu Selection
```

Step 3 To change a parameter on this menu, use this syntax:

```
c ph 5 pa p
```

The Configuring Physical Ports FDDI Path menu appears:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink

      Select From

      MaxTReq
      TMaxLowerBound
      TVXLowerBound
      Display
```

```
Catalyst 1800>c ph 5 pa p
```

The system prompts you to type the appropriate value for the Token Rotation Timer (TRT). Each MAC address has a TRT used to control ring scheduling during normal operation. A TRT can also be used to detect and recover from serious ring error situations.



Caution Be *very* careful changing any FDDI Path parameters. They can seriously affect performance.

The following table describes the parameters on this screen.

Table 7-3 Physical Ports FDDI Path Menu Selections

Selection	Description
MaxTReq	The maximum time value of the requested target token rotation time (TTRT). For more information, see the section “MaxTReq.” The range is TVXLowerBound < MaxTReq <=TMaxLowerBound. The default is 165,000,000 nsec.
TMaxLowerBound	Specifies the minimum time value of the maximum TTRT this station supports. The time value range is MaxTReq <= TMaxLowerBound. The default is 165,000,000 nsec.
TVXLowerBound	Specifies the minimum time value of the maximum available time between valid transmissions. The station uses this value to recover from ring error conditions. The value range is 0 to 2147483647. The default is 2,500,000 nsec.

MaxTReq

The MaxTReq parameter specifies the maximum time value of the requested target token rotation time (TTRT), in nanoseconds, for this station's synchronous traffic. The TTRT is the time limit within which the station expects to receive and use the token. The TTRT for the ring is determined at ring initialization, when each station declares what it wants the TTRT to be. (This process is called bidding.)

Step 1 To change the MaxTReq parameter value, type this command:

```
c ph 5 pa p m
```

The system displays the following prompt:

```
Enter MaxTReq (range: TVXLowerBound < MaxTReq <= TMaxLowerBound)
```

Step 2 Type the new FDDI Primary Path MaxTReq value for the FDDI port and press **Return**. The value must be greater than that of the TMaxLowerBound parameter and less than or equal to that of the TMaxLowerBound parameter.

The new parameter value appears on the FDDI Configuration screen.

TMaxLowerBound

Step 1 To change the TMaxLowerBound parameter, type this command:

```
c ph 5 pa p tm
```

The system displays the following prompt:

```
Enter TMaxLowerBound (range: MaxTReq <= TMaxLowerBound)
```

Step 2 Type the new value and press **Return**. The value must be greater than or equal to that of the MaxTReq parameter.

The new parameter value appears on the FDDI Configuration screen.

TVXLowerBound

Step 1 To change the TVXLowerBound parameter, type this command:

```
c ph 5 pa p tv
```

The system displays the following prompt:

```
Enter TVXLowerBound (range: 0 < TVXLowerBound < MaxTReq)
```

Step 2 Enter the new value and press **Return**. The value must be greater than 0 and less than that of the MaxTReq parameter. The new parameter value appears on the FDDI Configuration screen.

Configuring FDDI Port Parameters

The FDDI Port menu allows you to configure FDDI Port parameters. To access this menu, follow these steps.

Step 1 Type this command from the Main menu:

```
con phy 5 po a
```

The system displays the following prompt:

```
Enter Port number A or B
```

Note In the following examples, we use port A. However, you can perform the same procedures with port B.

The FDDI Port Configuration menu appears, followed by a prompt for a menu selection:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink

          Select From

          Action
          ConnectionPolicy
          LERAlarm
          LERCutoff
          RequestedPaths
          Display
```

```
Catalyst 1800>con phy 5 po a
```

Step 2 To change a parameter for port A on this menu, type this command:

```
c ph 5 po a menu_selection
```

The following table describes the parameters.

Table 7-4 FDDI Port Configuration Parameters

Title	Description												
Action/State	A value representing the type of action taken on the port. The hardware port is implemented through a physical connection management (PCM) state machine that defines the rules governing the allowable topologies in an FDDI ring. You can perform the following actions:												
	<table border="1"> <thead> <tr> <th>Action</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>PC_Maint</td> <td>Generates a signal to PCM indicating that the PCM state machine should enter the maint state. This value causes a transition to maint state only when the signal is issued while the PCM state machine is in the off state.</td> </tr> <tr> <td>PC_Enable</td> <td>Generates a signal to PCM indicating that the PCM state machine should cause a transition from maint state to the off state.</td> </tr> <tr> <td>PC_Disable</td> <td>Generates a signal to PCM indicating that the PCM state machine should cause a transition to the maint state. This value causes a transition to the maint state from any state of the PCM.</td> </tr> <tr> <td>PC_Start</td> <td>Generates a signal to PCM indicating that the PCM state machine should enter the break state. ECM signals PC_Start to start the PCM state machine.</td> </tr> <tr> <td>PC_Stop</td> <td>Generates a signal to PCM indicating that the PCM state machine should enter the off state. This value causes a transition to the off state from any state of the PCM except the maint state.</td> </tr> </tbody> </table>	Action	Meaning	PC_Maint	Generates a signal to PCM indicating that the PCM state machine should enter the maint state. This value causes a transition to maint state only when the signal is issued while the PCM state machine is in the off state.	PC_Enable	Generates a signal to PCM indicating that the PCM state machine should cause a transition from maint state to the off state.	PC_Disable	Generates a signal to PCM indicating that the PCM state machine should cause a transition to the maint state. This value causes a transition to the maint state from any state of the PCM.	PC_Start	Generates a signal to PCM indicating that the PCM state machine should enter the break state. ECM signals PC_Start to start the PCM state machine.	PC_Stop	Generates a signal to PCM indicating that the PCM state machine should enter the off state. This value causes a transition to the off state from any state of the PCM except the maint state.
Action	Meaning												
PC_Maint	Generates a signal to PCM indicating that the PCM state machine should enter the maint state. This value causes a transition to maint state only when the signal is issued while the PCM state machine is in the off state.												
PC_Enable	Generates a signal to PCM indicating that the PCM state machine should cause a transition from maint state to the off state.												
PC_Disable	Generates a signal to PCM indicating that the PCM state machine should cause a transition to the maint state. This value causes a transition to the maint state from any state of the PCM.												
PC_Start	Generates a signal to PCM indicating that the PCM state machine should enter the break state. ECM signals PC_Start to start the PCM state machine.												
PC_Stop	Generates a signal to PCM indicating that the PCM state machine should enter the off state. This value causes a transition to the off state from any state of the PCM except the maint state.												
	There is no default value.												

Title	Description								
ConnectionPolicy	A value representing the port's connection policies desired in the node.								
	<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>There is no connection policy.</td> </tr> <tr> <td>LCT</td> <td>The link confidence test. The MAC is used to run the link confidence test to determine if the test passed or failed.</td> </tr> <tr> <td>Loop</td> <td>The local loop test. Run this test before a connection is made active to determine if the test passed or failed.</td> </tr> </tbody> </table>	Value	Meaning	None	There is no connection policy.	LCT	The link confidence test. The MAC is used to run the link confidence test to determine if the test passed or failed.	Loop	The local loop test. Run this test before a connection is made active to determine if the test passed or failed.
	Value	Meaning							
	None	There is no connection policy.							
LCT	The link confidence test. The MAC is used to run the link confidence test to determine if the test passed or failed.								
Loop	The local loop test. Run this test before a connection is made active to determine if the test passed or failed.								
The default value is None.									
LERAlarm	<p>The link error rate at which a link connection exceeds a preset alarm threshold. It ranges from 10^{-4} to 10^{-15} and is reported as the absolute value of the base 10 logarithm.</p> <p>The range is 4 to 15.</p> <p>The default is 8.</p> <p>For example, a value of 4 indicates that the link error rate is 10^{-4} or one error in 10,000 frames.</p>								
LERCutoff	<p>The link error rate estimate at which a link connection will be broken. It ranges from 10^{-4} to 10^{-15} and is reported as the absolute value of the base 10 logarithm.</p> <p>The default is 7.</p> <p>The range is 4 to 15.</p> <p>For example, a value of 4 indicates that the link error cutoff rate is 10^{-4} or one error in 10,000 frames.</p>								
RequestedPaths	A list of permitted paths where each list element defines the port's permitted paths. For descriptions of these port defaults, see Table 7-2.								
	<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Peer(P)</td> <td>Neither the port currently under control nor the port at the other end of the connection is of type M (an FDDI concentrator).</td> </tr> <tr> <td>Tree(T)</td> <td>A port at one end of the connection is of type M.</td> </tr> <tr> <td>None (N)</td> <td>Nothing has been established.</td> </tr> </tbody> </table>	Value	Meaning	Peer(P)	Neither the port currently under control nor the port at the other end of the connection is of type M (an FDDI concentrator).	Tree(T)	A port at one end of the connection is of type M.	None (N)	Nothing has been established.
	Value	Meaning							
	Peer(P)	Neither the port currently under control nor the port at the other end of the connection is of type M (an FDDI concentrator).							
	Tree(T)	A port at one end of the connection is of type M.							
	None (N)	Nothing has been established.							
	<table border="1"> <thead> <tr> <th>Port A Defaults</th> <th>Port B Defaults</th> </tr> </thead> <tbody> <tr> <td>None: LO</td> <td>LO</td> </tr> <tr> <td>Tree: LO, CA, SP</td> <td>LO, CA, PP</td> </tr> <tr> <td>Peer: LO, CA, SP, TH</td> <td>LO, CA, PP, TH</td> </tr> </tbody> </table>	Port A Defaults	Port B Defaults	None: LO	LO	Tree: LO, CA, SP	LO, CA, PP	Peer: LO, CA, SP, TH	LO, CA, PP, TH
	Port A Defaults	Port B Defaults							
None: LO	LO								
Tree: LO, CA, SP	LO, CA, PP								
Peer: LO, CA, SP, TH	LO, CA, PP, TH								

Action



Caution Be careful changing any FDDI port action parameter. If you want to enable or disable the FDDI port, refer to the SMT section called "Action."

Step 1 To change the Action parameter value for port A, type this command:

```
c ph 5 po a a
```

The system displays the following prompt:

```
Enter PC_Enable,PC_Disable,PC_Maint,PC_Start,or PC_Stop
```

- Step 2** Type the new Action parameter value for the FDDI port and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

ConnectPolicy

- Step 1** To change the ConnectPolicy parameter value for port A, type this command:
`c ph 5 po a c`
The system displays the following prompt:
Enter LCT or Loop
- Step 2** Type **LCT** to indicate the link confidence test or **Loop** to indicate a local loop test.
The system displays the following prompt:
Enter Enable or Disable
- Step 3** Type **Enable** or **Disable** and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

LERAlarm

- Step 1** To change the LERAlarm parameter value for port A, type this command:
`c ph 5 po a lera`
The system displays the following prompt:
Enter Link Error Rate Alarm (range: 4-15)
- Step 2** Type the new parameter value and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

LERCutoff

- Step 1** To change the LERCutoff parameter value for port A, type this command:
`c ph 5 po a lerc`
The system displays the following prompt:
Enter Link Error Rate Cutoff (range: 4-15)
- Step 2** Type the new parameter value and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

RequestedPaths

- Step 1** To change the RequestedPaths parameter value for port A, type this command:
`c ph 5 po a r`
The system displays the following prompt:
Enter None, Tree, or Peer
- Step 2** Type **none**, **tree**, or **peer** and press **Return**.

The system responds:

```
Enter CA,CP,LO,PA,PP,SA,SP, or TH
```

Step 3 Enter the path value and press **Return**. The system displays the following prompt:

```
Enter Enable or Disable
```

Step 4 Type **Enable** or **Disable** and press **Return**.

The new parameter value appears on the FDDI Configuration screen.

Configuring FDDI SMT Parameters

The FDDI SMT menu allows you to configure FDDI SMT parameters. To access this menu, follow these steps.

Step 1 Type this command from the Main menu:

```
con phy 5 sm
```

The Configuring Physical Ports FDDI SMT menu appears, followed by a prompt for a menu selection:

```
Cisco Systems Catalyst 1800 Token Ring/FDDI Uplink
```

```
Select From
```

```
Action
Bypass
ConnectPolicy
RTPolicy
TNotify
TraceMaxExp
UserData
Display
```

```
Catalyst 1800> con phy 5 sm
Enter Next Menu Selection
```

Note From this menu you can select any SMT parameter. You can also type the Display command.

Step 2 To change a parameter on this menu, use this syntax:

```
c ph 5 smt parameter_name
```

The system prompts you to type the appropriate value.

The following table describes the parameters.

Table 7-5 Physical Ports FDDI SMT Menu Selections

Selection	Description																																		
Action/State	<p>A value representing the type of action taken on the station. The following actions are available:</p> <table border="1" data-bbox="472 394 1502 800"> <thead> <tr> <th data-bbox="472 394 553 424">Action</th> <th data-bbox="667 394 743 424">Result</th> </tr> </thead> <tbody> <tr> <td data-bbox="472 438 558 468">Connect</td> <td data-bbox="667 438 1463 493">Generates a connect message for this station to join the ring. To enable both port A and B of the FDDI port, issue a Connect action.</td> </tr> <tr> <td data-bbox="472 508 570 537">DisableA</td> <td data-bbox="667 508 1474 562">Generates a PC-stop signal to port A. To disable only port A of the FDDI port, issue a DisableA action.</td> </tr> <tr> <td data-bbox="472 577 570 606">DisableB</td> <td data-bbox="667 577 1474 632">Generates a PC-stop signal to port B. To disable only port B of the FDDI port, issue a DisableB action.</td> </tr> <tr> <td data-bbox="472 646 586 676">Disconnect</td> <td data-bbox="667 646 1474 701">Generates a disconnect sequence to remove this station from the ring. To disable both port A and B of the FDDI port, issue a Disconnect action.</td> </tr> <tr> <td data-bbox="472 716 561 745">PathTest</td> <td data-bbox="667 716 1146 745">Generates a message to perform a station path test</td> </tr> <tr> <td data-bbox="472 760 558 789">SelfTest</td> <td data-bbox="667 760 1138 789">Generates a message to perform a station self test</td> </tr> </tbody> </table>	Action	Result	Connect	Generates a connect message for this station to join the ring. To enable both port A and B of the FDDI port, issue a Connect action.	DisableA	Generates a PC-stop signal to port A. To disable only port A of the FDDI port, issue a DisableA action.	DisableB	Generates a PC-stop signal to port B. To disable only port B of the FDDI port, issue a DisableB action.	Disconnect	Generates a disconnect sequence to remove this station from the ring. To disable both port A and B of the FDDI port, issue a Disconnect action.	PathTest	Generates a message to perform a station path test	SelfTest	Generates a message to perform a station self test																				
Action	Result																																		
Connect	Generates a connect message for this station to join the ring. To enable both port A and B of the FDDI port, issue a Connect action.																																		
DisableA	Generates a PC-stop signal to port A. To disable only port A of the FDDI port, issue a DisableA action.																																		
DisableB	Generates a PC-stop signal to port B. To disable only port B of the FDDI port, issue a DisableB action.																																		
Disconnect	Generates a disconnect sequence to remove this station from the ring. To disable both port A and B of the FDDI port, issue a Disconnect action.																																		
PathTest	Generates a message to perform a station path test																																		
SelfTest	Generates a message to perform a station self test																																		
Bypass	<p>If set to Enable, the bypass switch is enabled, if present. If set to Disable, the bypass switch is disabled. The default is Disable.</p>																																		
ConnectPolicy	<p>The rejection list of connection types. The connection rules matrix that follows summarizes the validity of, and the action to be taken for, each type of connection. For more information, see the section entitled "ConnectionPolicies."</p> <table border="1" data-bbox="472 953 1502 1673"> <thead> <tr> <th data-bbox="472 953 548 982">Policy</th> <th data-bbox="667 953 721 982">Rule</th> </tr> </thead> <tbody> <tr><td data-bbox="472 997 509 1026">AA</td><td data-bbox="667 997 776 1026">Reject A-A</td></tr> <tr><td data-bbox="472 1041 509 1071">AB</td><td data-bbox="667 1041 776 1071">Reject A-B</td></tr> <tr><td data-bbox="472 1085 509 1115">AS</td><td data-bbox="667 1085 776 1115">Reject A-S</td></tr> <tr><td data-bbox="472 1129 509 1159">AM</td><td data-bbox="667 1129 781 1159">Reject A-M</td></tr> <tr><td data-bbox="472 1173 509 1203">BA</td><td data-bbox="667 1173 776 1203">Reject B-A</td></tr> <tr><td data-bbox="472 1218 509 1247">BB</td><td data-bbox="667 1218 776 1247">Reject B-B</td></tr> <tr><td data-bbox="472 1262 509 1291">BS</td><td data-bbox="667 1262 776 1291">Reject B-S</td></tr> <tr><td data-bbox="472 1306 509 1335">BM</td><td data-bbox="667 1306 781 1335">Reject B-M</td></tr> <tr><td data-bbox="472 1350 509 1379">SA</td><td data-bbox="667 1350 776 1379">Reject S-A</td></tr> <tr><td data-bbox="472 1394 509 1423">SB</td><td data-bbox="667 1394 776 1423">Reject S-B</td></tr> <tr><td data-bbox="472 1438 509 1467">SS</td><td data-bbox="667 1438 776 1467">Reject S-S</td></tr> <tr><td data-bbox="472 1482 509 1512">SM</td><td data-bbox="667 1482 781 1512">Reject S-M</td></tr> <tr><td data-bbox="472 1526 509 1556">MA</td><td data-bbox="667 1526 781 1556">Reject M-A</td></tr> <tr><td data-bbox="472 1570 509 1600">MB</td><td data-bbox="667 1570 781 1600">Reject M-B</td></tr> <tr><td data-bbox="472 1614 509 1644">MS</td><td data-bbox="667 1614 781 1644">Reject M-S</td></tr> <tr><td data-bbox="472 1659 509 1688">MM</td><td data-bbox="667 1659 781 1688">Reject M-M</td></tr> </tbody> </table> <p>The default is AA, AS, BB, BS, SA, SB, and MM. This means that these seven connection types are excluded from the connection and that the remaining connection types (such as MS) are valid.</p>	Policy	Rule	AA	Reject A-A	AB	Reject A-B	AS	Reject A-S	AM	Reject A-M	BA	Reject B-A	BB	Reject B-B	BS	Reject B-S	BM	Reject B-M	SA	Reject S-A	SB	Reject S-B	SS	Reject S-S	SM	Reject S-M	MA	Reject M-A	MB	Reject M-B	MS	Reject M-S	MM	Reject M-M
Policy	Rule																																		
AA	Reject A-A																																		
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SA	Reject S-A																																		
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SS	Reject S-S																																		
SM	Reject S-M																																		
MA	Reject M-A																																		
MB	Reject M-B																																		
MS	Reject M-S																																		
MM	Reject M-M																																		
RPTPolicy	<p>If you specify True, the node sends a status reporting frame when there is a change in configuration. The valid values are True or False. The default value is True.</p>																																		
TNotify	<p>Causes a neighbor notification frame to be sent in the specified time interval. The range is from 2 to 30 seconds. The default value is 30 seconds.</p>																																		

Selection	Description
TraceMaxExp	The maximum propagation time for a trace on an FDDI ring
UserData	This variable contains 32 characters of user-defined information. The information is expressed in an ASCII string, which you can modify to reflect your needs. The range is from 1 to 32 characters. The default value is FDDI SMT v7.3.

Action

Step 1 To change the value of the Action parameter, type this command:

```
c ph 5 sm a
```

The system displays the following prompt:

```
Enter Connect, Disconnect, DisableA, DisableB, PathTest, or SelfTest
```

Step 2 Enter an action from the Configuring Physical Ports FDDI SMT Action menu and press **Return**.

The new parameter value appears on the FDDI Configuration screen.

Bypass

Step 1 To change the value of the Bypass parameter, type this command:

```
c ph 5 sm b
```

The system displays the following prompt:

```
Enter Enable or Disable
```

Step 2 Enter **Enable** or **Disable** and press **Return**.

The new parameter value appears on the FDDI Configuration screen.

ConnectionPolicies

The ConnectionPolicies parameter specifies the rejection list of connection types for ports at both ends of a physical connection. The types of ports (A, B, S, or M) determine the characteristics of the physical connection. These characteristics include whether the connection is accepted or rejected, whether SMT is notified of potential connection problems, and the connection mode that is established.

A connection may be rejected to prevent the establishment of illegal or undesirable topologies. It may also be rejected by a neighboring node because of that node's inability to support the connection.

Step 1 To change the value of the ConnectionPolicies parameter, type this command:

```
c ph 5 sm conn
```

The system displays the following prompt:

```
Enter AA, AB, AS, AM, BA, BB, BS, BM, SA, SB, SS, SM, MA, MB, or MS
```

Step 2 Enter the new ConnectionPolicies value and press **Return**.

For example, enter **c ph 5 sm conn AA** and press **Return**.

The system displays the following prompt:

```
Enter Enable or Disable
```

- Step 3** Type the new parameter value and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

RptPolicy

- Step 1** To change the value of the RptPolicy parameter, type this command:

```
c ph 5 sm rpt
```


The system displays the following prompt:

```
Enter True or False
```
- Step 2** Type **True** or **False** and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

TNotify

- Step 1** To change the value of the TNotify parameter, type this command:

```
c ph 5 sm tn
```


The system displays the following prompt:

```
Enter Tnotify (range 2-30 seconds)
```
- Step 2** Enter the value and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

TraceMaxExp

- Step 1** To change the value of the TraceMaxExpirations parameter, type this command:

```
c ph 5 sm tr
```


The system displays the following prompt:

```
Enter TraceMaxExpiration (range: >6001773 micro sec)
```
- Step 2** Enter the value and press **Return**.
The new parameter value appears on the FDDI Configuration screen.

UserData

- Step 1** To change the value of the UserData parameter, type this command:

```
c ph 5 sm u
```


The system displays the following prompt:

```
Enter User Data (range: 0-32 characters)
```
- Step 2** Enter the value and press **Return**.
The new parameter value appears on the FDDI Configuration screen.