



# Configuring SFP Auto-Failover

This chapter contains the following sections:

- [Enabling Auto-Detect, on page 1](#)

## Enabling Auto-Detect

When the media-type is not configured, the Auto-Detect feature is enabled by default. The Auto-Detect feature automatically detects the media that is connected and links up. If both the media are connected, whichever media comes up first is linked. By default, the media-type on FPGE ports is set to auto-select. User can overwrite the media-type configuration to either RJ-45 or SFP using the **media-type rj45/sfp** command under the FPGE interface. The media type configuration also falls back to “Auto-select” mode when the **no media-type** command is configured. You can use the **no media-type** command in interface configuration mode to enable the Auto-Detect feature.

## Configuring Auto-Detect

The Auto-Detect feature is enabled by default on the Front Panel Gige Ports. Auto-Failure is enabled by default when auto-select is enabled. To configure the Auto-Detect, perform these steps:

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Router# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>interface gigabitethernet {slot   bay   port}</b> <b>Example:</b> Router(config)# interface gigabitethernet 0/0/0	Enters interface configuration mode.
<b>Step 3</b>	<b>media-type auto-select</b> <b>Example:</b>	Auto-select mode uses whichever connector is attached. The options are:

	Command or Action	Purpose
	Router(config-if)# media-type auto-select	<ul style="list-style-type: none"> <li>• <b>rj45</b>—Uses RJ45 connector.</li> <li>• <b>sfp</b>—Uses SFP connector.</li> <li>• <b>auto-select</b></li> </ul>
<b>Step 4</b>	<b>End</b> <b>Example:</b> Router(config-if)#end	Exits configuration mode.

### Examples

The following example shows the default configuration and the show running configuration does not show any media type when the no media-type is selected.

```
Router(config)# show running interface gigabitethernet 0/0/0
Building configuration...

Current configuration : 71 bytes
!
interface GigabitEthernet0/0/0
 no ip address
 negotiation auto
end
```

## Configuring the Primary and Secondary Media

When the router receives an indication that the primary media is down, the secondary failover media is enabled. After the switchover, the media does not switch back to primary media when the primary media is restored. You need to use either **shut** or **no shut** command or reload the module to switch the media-type back to primary(preferred) media.

To assign the primary or secondary failover media on the GE-SFP port, perform these steps:

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Router# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>interface gigabitethernet {slot   bay   port}</b> <b>Example:</b> Router(config)# interface gigabitethernet slot/bay/port	Enters interface configuration mode.

	Command or Action	Purpose
<b>Step 3</b>	<b>media-type rj45 autofailover</b> <b>Example:</b> Router(config-if)# media-type rj45 autofailover	Configures the port with rj45 as the primary media for automatic failover.
<b>Step 4</b>	<b>End</b> <b>Example:</b> Router(config-if)#end	Exits configuration mode.

### Examples

The following example shows the primary configuration.

```
Router(config)# show running interface gigabitethernet 0/0/0
Building configuration...

Current configuration : 102 bytes
!
interface GigabitEthernet0/0/0
 no ip address
 media-type rj45 auto-failover
 negotiation auto
end
```

