

Configure SFP auto-failover

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Enable 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:

SUMMARY STEPS

1. **configure terminal**
2. **interface gigabitethernet** {**slot** | **bay** | **port**}
3. **media-type auto-select**
4. **End**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:**	Enters global configuration mode.

	Command or Action	Purpose
	`Router# configure terminal`	
Step 2	**interface gigabitethernet** {**slot** | **bay** | **port**} **Example:** `Router(config)# interface gigabitethernet 0/0/0`	Enters interface configuration mode.
Step 3	**media-type auto-select** **Example:** `Router(config-if)# media-type auto-select`	Auto-select mode uses whichever connector is attached. The options are: • **rj45**—When you configure the **media-type rj45** command, the combo port operates in RJ-45 mode. • **sfp**—When you configure the **media-type sfp** command, the combo port operates in sfp mode. • **auto-select** or **no select**—When you configure the **media-type auto-select** or **no media-type** command, the combo port operates in SFP mode, if an SFP module is present. If no SFP module is present, the port operates in RJ-45 mode.
Step 4	**End** **Example:** `Router(config-if)#end`	Exits configuration mode.

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:

SUMMARY STEPS

1. **configure terminal**
2. **interface gigabitethernet** {**slot** | **bay** | **port**}
3. **media-type rj45 autofailover**
4. **End**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 2	**interface gigabitethernet** {**slot**	**bay**	**port**} **Example:** `Router(config)# interface gigabitethernet slot/bay/port`	Enters interface configuration mode.
Step 3	**media-type rj45 autofailover** **Example:** `Router(config-if)# media-type rj45 autofailover`	Configures the port with rj45 as the primary media for automatic failover.
Step 4	**End** **Example:** `Router(config-if)#end`	Exits configuration mode.

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
```

Combo ports exceptions

A combo port is a network interface on certain C8100 series router models that provides connectivity through either an RJ45 or SFP interface.

Combo port behavior for these models:

- C8130-VAI-G2—The combo port index is Gi0/1/4
- C8130-VAP-G2—The combo port index is Gi0/1/4
- C8151-CVAI-G2—The combo port index is Gi0/1/8
- C8151-CVAP-G2—The combo port index is Gi0/1/8
- C8130H-G2—The combo port index is Gi0/1/4
- C8151H-C-G2—The combo port index is Gi0/1/8

Combo port behavior for the above models includes:

- Combo port index for these models is located in the last port of subslot 0/1.
- The **media-type xxx auto-failover** command is not supported.
- Operational modes:
  - If **media-type rj45** is configured, the combo port operates in RJ-45 mode.
  - If **media-type sfp** is configured, the combo port operates in SFP mode.
  - If **media-type auto-select** or **no media-type** is configured, the combo port checks for the presence of SFP module. If an SFP module is present, then combo port operates in SFP mode. If no SFP module is present, the combo port operates in RJ-45 mode.
- Dying gasp function is not supported on combo port for these models.