Protection Switch Group

Restrictions for Protection Switch Group

- The rule template and unique template must be configured only after configuring the protection switch group.

- The protection switch group configuration fails if the hardware parameters, for example distance detected by ONT, on both primary and secondary ports are not consistent.

- The hardware parameters of both primary and secondary ports must not be configured after the protection switch group is configured.

Overview of Protection Switch Group

The Protection Switch Group feature ensures port reliability incase there is a port failure. Each protection switch group consists of two ports. One port takes the primary role and the other port the secondary role. The primary port is assigned the working state and the secondary port is assigned the standby state. Traffic always flows between ports that are assigned the working state.

After configuring the protection switch group, the rule template and unique template are configured on the primary port. The template configurations are automatically synchronized to the secondary port.

Configure Protection Switch Group

To configure protection switch group, perform this procedure.

SUMMARY STEPS

1. **enable**
2. **configure terminal**

3. [**no**] **psg** *group-id* **type-b primary interface gpon** *slot-number/port-number* **seconday interface gpon** *slot-number/port-number*

4. **psg** *group-id* **force-switch**

5. **show psg** {*group-id* | **all**}

DETAILED STEPS

	Command or Action	**Purpose**
Step 1	**enable** **Example:** Device> **enable**	Enables privileged EXEC mode. Enter your password, if prompted.
Step 2	**configure terminal** **Example:** Device# **configure terminal**	Enters global configuration mode.
Step 3	[**no**] **psg** *group-id* **type-b primary interface gpon** *slot-number/port-number* **seconday interface gpon** *slot-number/port-number* **Example:** Device(config)# **psg 1 type-b primary interface gpon 0/3** **secondary interface gpon 0/4**	Configures the protection switch group. • *group-id* : The protection switch group ID. The range is from 0 to 7. • *slot-number*: The GPON slot number. The value is 0. • *port-number*: The GPON port number. The range is from 1 to 8. Use the [**no**] **psg** *group-id* command to remove a configured protection switch group.
Step 4	**psg** *group-id* **force-switch** **Example:** Device(config)# **psg 1 force-switch**	Forces port changeover. *group-id* : The protection switch group ID. The range is from 0 to 7.
Step 5	**show psg** {*group-id*	**all**} **Example:** Device(config)# **show psg 1 force-switch**	Displays the protection switch group members, port roles and port states. • *group-id* : The protection switch group ID. The range is from 0 to 7. • **all**: All protection switch groups

Configuration Example: Protection Switch Group

The following example shows how to configure a protection switch group and perform a switch changeover

```
Device> enable
Device# configure terminal
Device(config)# psg 1 type-b primary interface gpon 0/3 secondary interface gpon 0/4
```

```
Config success.
Device(config)# psg 1 force-switch
Switch success.
```

The following example shows how to view the protection switch group configuration

```
Device> enable
Device# configure terminal
Device(config)# show psg 0
GroupID   Member  Role       State
0         0/1     PRIMARY    WORKING
          0/2     SECONDARY  STANDBY
Total: 1.
```