



ONT Log Management

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Overview of ONT Log Management

The ONT Log Management feature records information related to an ONT, such as the registration status and the port status. If the ONT registration status is abnormal, an alarm is raised. You can view the cause of the alarm by checking the log.

You can configure the following log management settings.

- **Buffer logs:** Configuring buffer logs saves the ONT logs to a buffer. Log buffering is enabled by default.
- **Monitor logs:** Configuring monitor logs saves the ONT logs to a console or a Telnet terminal. By default, log monitoring is disabled and logs are output to a buffer.
- **Log prefixes:** Configuring log prefixes adds an ONT ID or serial number prefixes to the logs. Log prefixing is enabled by default.
- **Log timestamps:** Configuring log timestamping adds a timestamp to the logs. The default added timestamp is the ONT uptime duration.

How to Configure Log Management

The following sections provide configuration information about log management.

Configure an ONT Buffer Log

To configure an ONT buffer log, perform this procedure.



Note ONT log buffering is enabled by default.

Procedure

	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] ont-logging buffer {ont_id_list all} Example: Device(config)# ont-logging buffer 0/1/1	Enables ONT log buffering: <ul style="list-style-type: none"> • <i>ont_id_list</i>: The list of ONT IDs. The format is in string. The string length range is from 1 to 256. • all: All ONTs. Use the no ont-logging buffer {ont_id_list all} command to disable this feature.
Step 4	clear ont-logging buffer {ont_id_list all} Example: Device(config)# clear ont-logging buffer all	(Optional) Clears the ONT logging buffer function. <ul style="list-style-type: none"> • <i>ont_id_list</i>: The list of ONT IDs. The format is in string. The string length range is from 1 to 256. • all: All ONTs.

Configure an ONT Monitor Log

To configure an ONT monitor log, perform this procedure.

Procedure

	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] ont-logging monitor {monitor_num all} {ont_id_list all} Example: Device(config)# ont-logging monitor all all	Enables the ONT logging monitor function. <ul style="list-style-type: none"> • <i>monitor_num</i>: The range is from 0 to 5, where 0 is the console and 1 to 5 is the telnet terminal. • <i>ont_id_list</i>: The list of ONT IDs. The format is in string. The string length range is from 1 to 256.

	Command or Action	Purpose
		<ul style="list-style-type: none"> • all: All ONTs. Use the no ont-logging monitor { <i>monitor_num</i> all } { <i>ont_id_list</i> all } command to disable this feature.

Configure an ONT Log Prefix

To configure an ONT log prefix, perform this procedure.

Procedure

	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] ont-logging prefix { <i>ontid</i> <i>sn</i> } Example: Device(config)# ont-logging sn ontid	Enables the ONT log prefixes. <ul style="list-style-type: none"> • ontid: ONT ID • sn: Serial number of ONT. Use the no ont-logging prefix { <i>ontid</i> <i>sn</i> } command to disable this feature.

Configure an ONT Timestamp

To configure an ONT timestamp, perform this procedure.

Procedure

	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	ont-logging timestamps { <i>uptime</i> <i>notime</i> <i>datetime</i> }	Enables the ONT log timestamps.

Command or Action	Purpose
Example: Device(config)# <code>ont-logging timestamps datetime</code>	<ul style="list-style-type: none"> • uptime: The ONT uptime duration. • notime: No timestamp. • datetime: The ONT with date and time information.

Monitor ONT Logging

Use the following commands to monitor ONT logging

Table 1: Commands to Monitor ONT Logging

Command	Purpose
<code>show ont-logging</code>	Displays information about ONT log.
<code>show ont-logging buffer {ont_id_list all}</code>	Displays information about ONT logging buffer.

Configuration Example: Configuring ONT Logging

The following example shows how to configure ONT logs:

```
Device> enable
Device# configure terminal
Device(config)# ont-logging
Device(config)# ont-logging buffer all
Device(config)# ont-logging monitor 0 all
Device(config)# ont-logging prefix ontid sn
Device(config)# ont-logging timestamps datetime
```

The following example shows how to view ONT logs:

```
Device(config)# show ont-logging
logging state: on
logging timestamps: datetime
logging prefix: ontid:on; sn:on
logging buffer: 0/1/1-0/16/128
logging monitor:
 0: 0/1/1-0/16/128
 1: off
 2: off
 3: off
 4: off
 5: off

Device(config)# show ont-logging buffer 0/1/4
Sep 12 10:01:09 0/1/4 GPON-012bd318: offline, reason: LOFI.
Sep 12 10:01:08 0/1/4 GPON-012bd318: LOAMi on.
Sep 12 10:01:08 0/1/4 GPON-012bd318: LOFi on.
Sep 12 09:40:21 0/1/4 GPON-012bd318: eth port 2 los on.
```

```
Sep 12 09:40:21 0/1/4 GPON-012bd318: eth port 1 los on.  
Sep 12 09:40:14 0/1/4 GPON-012bd318: online.  
Device(config)# clear ont-logging buffer 0/1/4  
Device(config)# show ont-logging buffer 0/1/4
```

