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Optical line terminals

LTP-16N, LTP-16NT

CLI command reference guide

Firmware version 1.4.0

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1 LTP-16N(T). Introduction

Abstract

This guidance describes CLI commands for LTP-16N optical line terminal (hereinafter referred to as device) administrator.

Command Line Interface (CLI) allows to perform the device management and monitor its operation and status. You will require the PC application supporting Telnet or SSH protocol operation or direct connection via the console port (e.g. Minicom).

Target audience

CLI command reference guide is dedicated to the technical staff that performs the LTP-16N terminal configuration and monitoring using the CLI interface. Qualified technical personnel should be familiar with the operation basics of TCP/IP protocol stacks and Ethernet/GPON networks design concepts.

Notes and warnings

 Notes contain important information, tips or recommendations on device operation and setup.

 Warnings are used to inform the user about harmful situations for the device and the user alike, which could cause malfunction or data loss.

Abbreviations used

- ARP – Address Resolution Protocol
- DBA – Dynamic bandwidth allocation
- DHCP – Dynamic Host Configuration Protocol
- FTP – File Transfer Protocol
- FW – Firmware
- GPON – Gigabit Passive Optical Network
- HTTP – HyperText Transfer Protocol
- ICMP – Internet Control Message Protocol
- IP – Internet Protocol
- MAC – Media Access Control
- OLT – Optical Line Terminal
- ONT – Optical Network Terminal
- ONU – Optical Network Unit
- SFP – Small Form-factor Pluggable
- SSH – Secure Shell
- TFTP – Trivial File Transfer Protocol
- URL – Uniform Resource Locator
- VLAN – Virtual Local Area Network

2 LTP-16N(T). Command system structure

The command system of the LTP-16N command line interface is divided into view sections. The transition between sections is performed by commands. The **exit** command is used to return to the previous level. Some views are an array where a unique index must be used to access a specific object.

Figure 1 shows all the sections and commands to switch between them.

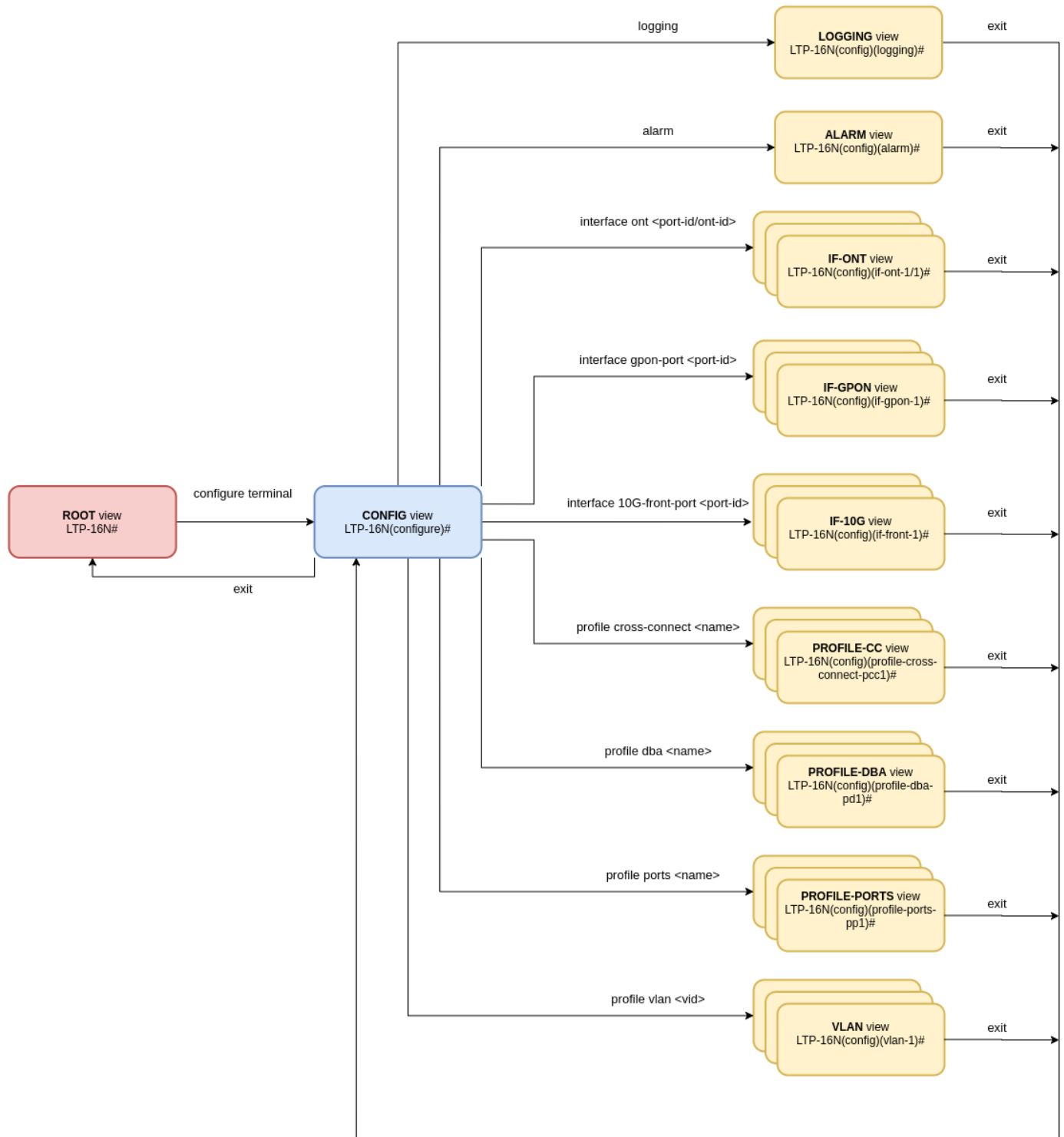


Figure 1 — CLI sections and transitions between them.

3 LTP-16N(T). Command line use specification

To simplify the use of the command line, the interface supports automatic command completion. This function is activated when the command is incomplete and the <Tab> character is entered.

Another function that helps to use the command line is context help. At any stage of entering a command, you can get a prompt about the following command elements by entering <?> character.

To simplify the commands, the whole command system has a hierarchical structure. There are special branch commands for transition between levels of the hierarchy. This allows using brief commands on each level. To designate a current level where a user is located, the system prompt string changes dynamically.

Example

```
LTP-16N#
LTP-16N# configure terminal // switch to the device configuration mode
LTP-16N(configure)#
LTP-16N(configure)# exit // return to the previous level
LTP-16N#
```

The **exit** command is always used to return to the previous level. For convenience, you can also use common commands from the root block using the **do** prefix.

To set a default value or to disable a value, use the **no** prefix.

For the ease of command line use, shortcut keys listed in the Table 1 are supported.

Table 1 – Description of CLI shortcut keys

Shortcut key	Description
Ctrl+D	In a nested command mode – exit to the previous command mode (exit command), in a root command mode – exit from CLI
Ctrl+A	Transition to the beginning of line
Ctrl+E	Transition to the end of line
Ctrl+U	Removal of characters to the left of a cursor
Ctrl+K	Removal of characters to the right of a cursor
Ctrl+C	Line clearing, command execution interruption
Ctrl+W	Removal of a word to the left of a cursor
Ctrl+L	Screen clearing

For ease of reading, page-by-page output of a large of information is added.

Example

```
LTP-16N# show running-config all
configure terminal
  interface pon-port 1
    no shutdown
  exit
  interface pon-port 2
    no shutdown
  exit
  interface pon-port 3
    no shutdown
  exit
  interface pon-port 4
    no shutdown
  exit
  interface pon-port 5
    no shutdown
  exit
  interface gpon-port 6
    no shutdown
  exit
  interface gpon-port 7
    no shutdown
  exit
  interface pon-port 8
    no shutdown
  exit
(Enter:next line Space:next page Q:quit R:show the rest)
```

To disable page-by-page output, use the following command:

```
LTP-16N# terminal datadump
```

Command line interface enables user authorization and restricts access to commands depending on their privilege level, provided by the administrator.

All commands are distributed by preference groups, which can be assigned between preference levels as needed.

A required amount of users can be created in the system. The required privilege level is specified individually for each of them.

- ✓ In factory configuration, the system includes one user with **admin** name and **password** password.

4 LTP-16N(T). Root commands

clear

- [clear alarms](#)
- [clear alarms <FILTER>](#)
- [clear alarms history](#)
- [clear counters interface front-port](#)
- [clear counters interface ont](#)
- [clear counters interface port-channel](#)
- [clear mac](#)
- [clear mac interface include <FILTER>](#)
- [clear log files](#)
- [clear log <FILE_NAME>](#)
- [clear dhcp-sessions](#)

clear alarms

Clear all active alarms.

Syntax

```
clear alarms
```

Parameters

The command does not contain any parameters.

Privilege group

commands-general

Command mode

ROOT

Example

```
LTP-16N# clear alarms
```

clear alarms <FILTER>

Clear all alarms of the specified type.

Syntax

```
clear alarms <FILTER> <VALUE>
```

Parameters

<FILTER> — filters for alarms:

- type — filter alarms by type. <VALUE> values are available for this filter:

- fan — ventilation panel alarms;
- ram — memory lack alarm;
- load-average — CPU load alarm;
- temperature — temperature sensors alarm;
- pon-alarm-los — Loss of Signal pon alarm;
- pon-alarm-losi — Loss of Signal pon alarm for ONUi;
- pon-alarm-lofi — Loss of Frame pon alarm for ONUi;
- pon-alarm-loami — PLOAM Loss pon alarm for ONUi;
- pon-alarm-dowi — Drift of Window pon alarm for ONUi;
- pon-alarm-sdi — Signal Degraded pon alarm for ONUi;
- pon-alarm-sufi — Start-up Failure pon alarm for ONUi;
- pon-alarm-loai — Loss of Acknowledge pon alarm for ONUi;
- pon-alarm-dgi — Dying-Gasp pon alarm for ONUi;
- pon-alarm-dfi — Deactivate Failure pon alarm for ONUi;
- pon-alarm-tiwi — Transmission Interference Warning pon alarm for ONUi;
- pon-alarm-loki — Loss of Key pon alarm for ONUi;
- pon-alarm-lcdgi — Loss of GEM Channel Delineation pon alarm for ONUi;
- pon-alarm-rdii — Remote Defect Indication pon alarm for ONUi;
- login — system login alarm;
- login — system logout alarm;
- config-save — configuration save alarm;
- config-change — configuration change alarm;
- severity — filter alarms by importance. <VALUE> values available for this filter:
 - info;
 - minor;
 - major;
 - critical.

Privilege group

commands-general

Command mode

ROOT

Example

```
LTP-16N# clear alarms type fan
```

clear alarms history

Clear all events.

Syntax

clear alarms history

Parameters

The command does not contain any parameters.

Privilege group

commands-general

Command mode

ROOT

Example

```
LTP-16N# clear alarms history
```

clear counters interface front-port

Clear front-port interface counters.

Syntax

```
clear counters interface 10G-front-port <FRONT-PORT-ID>
```

Parameters

<FRONT-PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (For example: interface 10-front-port 1-5 or interface gpon-port 10,12).

Privilege group

commands-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# clear counters interface front-port 1-4
```

clear counters interface ont

Clear counters on the ONT interfaces.

Syntax

```
clear counters interface ont <PORT-ID>[/ONT-ID] <SIDE>
```

Parameters

<PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (For example: interface ont 1-3 or interface ont 1,3,5,7).

[ONT-ID] – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (For example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

<SIDE> – side on which the counters will be cleared:

- olt-side – clear counters on the OLT side;
- ont-side – clear counters on the ONT side.

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# clear counters interface ont 1/1 olt-side
```

clear counters interface port-channel

Clear aggregated port group counters.

Syntax

```
clear counters interface front-port <PORT-CHANNEL-ID>
```

Parameters

<PORT-CHANNEL-ID> – aggregated port group index [1-32]. The parameter can be set by a range or enumeration (For example: interface port-channel 1-3 or interface port-channel 1,3,5,7).

Privilege group

commands-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# clear counters interface port-channel 1-3
```

clear mac

Clear MAC table.

Syntax

clear mac

Parameters

The command does not contain any parameters.

Privilege group

config-vlan, config-igmp, config-general, config-system, config-logging, config-interface-gpon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port, config-access, config-cli, config-management, config-user

Command mode

ROOT

Example

```
LTP-16N# clear mac
    Clearing MAC table...

    All MAC entries
```

clear mac interface include <FILTER>

Clear MAC table by filter.

Syntax

clear mac interface include <FILTER> <VALUE>

Parameters

<FILTER> — filters for addresses to be cleared:

- interface — clear MAC table by interface. <VALUE> values are available for this filter:
 - front-port — clear MAC addresses of the specified front-ports;
 - pon-port — clear MAC addresses of the specified pon-ports;
 - port-channel — clear MAC addresses of the specified port-channels;
 - ont — clear MAC addresses of the specified ONTs.
- mac — clear a specific MAC address in a AA:BB:CC:DD:EE:FF format;
- svid — clear MAC addresses by vlan. The following <VALUE> values are available for this filter: vlan index [1-4094]. The parameter can be specified as a range or an enumeration (For example: vlan 10-30 or vlan 10,40,70);
- cvid — clear MAC addresses by vlan. The following <VALUE> values are available for this filter: vlan index [1-4094]. The parameter can be specified as a range or an enumeration (For example: vlan 10-30 or vlan 10,40,70);
- gem — clear MAC addresses for a specified port. The following <VALUE> values are available for this filter: vlan index [0-4095].

Privilege group

- clear mac interface: config-vlan, config-igmp, config-general, config-system, config-logging, config-interface-pon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port, config-access, config-cli, config-management, config-user;
- clear mac vlan: view-configuration, view-firmware, config-vlan, config-igmp, config-ppoe, config-general, config-system, config-logging, config-interface-pon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port.

Command mode

ROOT

Example

```
LTP-16N# clear mac interface port-channel 32
Clearing MAC table...

10082 MAC entries
```

clear log files

Clear log files.

Syntax

clear log files

Parameters

The command does not contain any parameters.

Privilege group

config-system

Command mode

ROOT

Example

```
LTP-16N# clear log files
```

clear log <FILE_NAME>

Clear specified log file.

Syntax

```
clear log <FILE_NAME>
```

Parameters

<FILE_NAME> – name of the log file to be cleared.

Privilege group

config-system

Command mode

ROOT

Example

```
LTP-16N# clear log LTP.log
```

clear dhcp-sessions

Clear active DHCP sessions from dhcp-snooping table.

Syntax

```
clear dhcp-sessions interface-ont <PORTID>/<ONT-ID>
```

```
clear dhcp-sessions interface-ont <PORTID>/<ONT-ID> <IP>
```

Parameters

<PORT-ID> – PON port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7);

<ONT-ID> – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

<IP> – IP address specified in AAA.BBB.CCC.DDD format.

Privilege group

commands-general

Command mode

ROOT

Example

```
LTP-16N# clear dhcp-sessions interface-ont 1
```

commit

commit

Applies the current candidate configuration.

Syntax

```
commit
```

Parameters

The command does not contain any parameters.

Privilege group

commands-configuration

Command mode

ROOT

Example

```
LTP-16N# commit
```

configure terminal

configure terminal

Switch to the configuration mode.

Syntax

```
configure terminal
```

Parameters

The command does not contain any parameters.

Privilege group

config-vlan, config-igmp, config-general, config-system, config-logging, config-interface-pon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port, config-access, config-cli, config-management, config-user

Command mode

ROOT

```
LTP-16N# configure terminal
LTP-16N(configure)#
```

copy

copy

Command for uploading and downloading files to devices. Supports TFTP, FTP and HTTP protocols.

Syntax

copy <SRC> <DST>

Parameters

<SRC> – specifies transmission source:

To copy from the remote server:

- tftp://ip[:port]/path/to/file
- http://ip[:port]/path/to/file
- ftp://user:password@ip[:port]/path/to/file

To copy from the device:

- fs://config – copy backup file;
- fs://logfile/filename – copy log file.

<DST> – specifies transmission destination:

To copy to the remote server:

- tftp://ip[:port]/path/to/file
- http://ip[:port]/path/to/file
- ftp://user:password@ip[:port]/path/to/file

To copy from the device:

- fs://config – upload backup;
- fs://ont-firmware – upload firmware for ONT;
- fs://firmware – upload firmware for the device;
- fs://license – upload license.

Privilege group

commands-copy

Command mode

ROOT

```

LTP-16N# copy tftp://192.168.10.60/ltp-16n-1.2.0-build360.fw.bin fs://firmware
  % Total      % Received % Xferd  Average Speed   Time    Time       Time  Current
                             Dload  Upload    Total   Spent    Left   Speed
 100  171M  100  171M    0     0  4464k      0  0:00:39  0:00:39 --:--:-- 4531k

Success!

```

date

date

Sets system date and time.

Syntax

date <VALUE>

Parameters

<VALUE> — date in format of YYYYMMDDhhmm.ss.

Privilege group

commands-system

Command mode

ROOT

Example

```
LTP-16N# date 202004302025.10
Thu Apr 30 20:25:10 UTC 2020
```

default

default

Resets candidate configuration to default value. To apply the default configuration execute the **commit** command.

Syntax

```
default
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-system
```

Command mode

```
ROOT
```

Example

```
LTP-16N# default
  Do you really want to do it? (y/N) y
  Configuration has been reset to default
LTP-16N# commit
```

delete

delete firmware ont <NAME>

Deletes ONT firmware files.

Syntax

```
delete firmware ont <NAME>
```

Parameters

<NAME> – name of the firmware file to delete. Entering the '*' character will delete all files.

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# delete firmware ont *  
All ONT firmwares deleted successfully
```

do

do

A prefix that allows executing commands from the ROOT mode in other modes.

Syntax

do <COMMAND>

Parameters

<COMMAND> – ROOT command.

Privilege group

–

Command mode

All except ROOT

Example

```

LTP-16N(configure)# do
  clear
  commit           Commit changes of configuration
  configure        Enter configuration mode
  copy             Download firmware, license and config via TFTP, FTP, HTTP
  date            Set system date
  default          Reset to default candidate configuration
  firmware         Block of commands for working with firmware
  license          Set new license
  no              Set default setting
  ping            Ping
  reboot          Reboot
  reconfigure      Reconfigure operation
  save            Save configuration on NVRAM
  show
  terminal         Set current session functions

LTP-16N(configure)# do commit

```

exit

exit

Return to the previous command mode. In ROOT mode, exit from the current session.

Syntax

exit

Parameters

The command does not contain any parameters.

Privilege group

–

Command mode

All command modes.

Example

```
LTP-16N(configure)# exit
LTP-16N# exit
```

```
*****
*      Optical line terminal LTP-16N      *
*****
LTP-16N login:
```

firmware

- [firmware select](#)
- [firmware update start](#)
- [firmware update stop](#)

firmware select

Select the partition from which the next boot will be made after reboot. To upload firmware to the devices use the **copy** command.

Syntax

```
firmware select <VALUE>
```

Parameters

<VALUE> — partitions::

- master — current partition;
- slave — redundant partition.

Privilege group

commands-firmware

Command mode

ROOT

Example

```
LTP-16N# firmware select alternate
```

firmware update start

Run ONT firmware update with the specified file. To upload firmware to the devices use the **copy** command.

Syntax

```
firmware update start interface ont <PORT-ID>[/ONT-ID] filename <NAME>
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).
- <NAME> — file name. List of available files can be viewed using **show firmware ont list** command.

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# firmware update start interface ont 1/1 filename ntu-1-3.28.0-build645.fw.bin
```

firmware update stop

Stop ONT firmware updates on the channel.

Syntax

```
firmware update stop interface ont <PORT-ID>[/ONT-ID]
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# firmware update stop interface ont 1
```

license

license set

Set license for ONT. The license file can also be uploaded using the **copy** command.

Синтаксис

```
license set ""<VALUE>""
```

 Note that when entering a license, it must be enclosed in triple quotes (""").

Parameters

<VALUE> — license. Full content of the license file obtained from the representative of Eltex Enterprise Ltd.

Группа привилегий

commands-license

Privilege group

CONFIG

Example

```
LTP-16N# license set "" LICENCE ""
```

no license

Delete the license file from device.

Syntax

```
no license
```

Parameters

The command does not contain any parameters.

Privilege group

commands-license

Command mode

CONFIG

Example

```
LTP-16N# no license
```

ont

ont autofind

Command to manage search of connected ONTs.

Syntax

```
[no] ont autofind interface pon-port <ID>
```

Parameters

<ID> — pon port number or range, from 1 to 16.

Privilege group

commands-configuration

Command mode

ROOT

Example

```
LTP-16N# ont autofind interface pon-port 5
```

ping

ping

Check host availability.

Syntax

ping <IP>

Parameters

<IP> — IP address specified as AAA.BBB.CCC.DDD, where each part takes the value [0..255].

Privilege group

commands-general

Command mode

ROOT

Example

```
LTP-16N# ping 192.168.100.10
PING 192.168.100.10 (192.168.100.10): 56 data bytes
64 bytes from 192.168.100.10: seq=0 ttl=64 time=0.284 ms
64 bytes from 192.168.100.10: seq=1 ttl=64 time=0.221 ms
64 bytes from 192.168.100.10: seq=2 ttl=64 time=0.196 ms

--- 192.168.100.10 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 0.196/0.233/0.284 ms
```

reboot

reboot

Reboot the device.

Syntax

reboot

Parameters

The command does not contain any parameters.

Privilege group

commands-system

Command mode

ROOT

Example

```
LTP-16N# reboot
Do you really want to do it? (y/N)  y
```

reconfigure

reconfigure interface pon-port

Reconfigure PON-port interface.

Syntax

```
reconfigure interface pon-port <PORT-ID>
```

Parameters

<PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (For example: interface pon-port 1-3 or interface pon-port 1,3,5,7).

Privilege group

commands-interface-pon-port

Command mode

ROOT

Example

```
LTP-16N# reconfigure interface pon-port 1
```

reconfigure interface ont

Reconfigure ONT.

Syntax

```
reconfigure interface ont <PORT-ID>[/ONT-ID]
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (For example: interface ont 1-3 or interface ont 1,3,5,7);
- [/ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (For example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# reconfigure interface ont 1/1-5
```

reconfigure olt

Reconfigure OLT.

Syntax

```
reconfigure olt
```

Parameters

The command does not contain any parameters.

Privilege group

commands-system

Command mode

ROOT

Example

```
LTP-16N# reconfigure olt
```

save

save

Saves the current running configuration into non-volatile memory.

Syntax

```
save
```

Parameters

The command does not contain any parameters.

Privilege group

commands-configuration

Command mode

ROOT

Example

```
LTP-16N# save
```

send

send omci reboot interface ont

Reboots ONT.

Syntax

```
send omci reboot interface ont <PORT-ID>[/ONT-ID]
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7);
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send omci reboot interface ont 1/1-5
```

send omci default interface ont

Resets ONT to default settings.

Syntax

```
send omci default interface ont <PORT-ID>[/ONT-ID]
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7);
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send omci default interface ont 1/1-5
```

send ploam disable ont id

Sends a command to a specific (range) ONT to disable ONT laser.

Syntax

```
send ploam disable ont id <PORT-ID>[/ONT-ID]
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7);
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

```
commands-interface-ont
```

Command mode

ROOT

Example

```
LTP-16N# send ploam disable ont id 1/1
```

send ploam disable ont serial-number

Sends a command via pon-serial to disable ONT laser.

Syntax

```
send ploam disable ont serial-number <PON-SERIAL>
```

Parameters

<PON-SERIAL> — ONT pon-serial in the AAAAXXXXXXXXXX format, where A are capital letters, X is a hex character 0-F. Or in the XXXXXXXXXXXXXXXXXXXX format, where X is a hex character 0-F.

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send ploam disable ont serial-number ELTX00000001
```

send ploam disable-all pon-port

Sends a command to disable ONT laser to pon-port.

Syntax

send ploam disable-all pon-port <PORT-ID>

Parameters

<PORT-ID> — pon port index in a range [1-16].

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send ploam disable-all pon-port 4
```

send ploam enable ont id

Sends a command to enable ONT laser to a specific (range) ONT.

Syntax

send ploam enable ont id <PORT-ID>[/ONT-ID]

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 ot interface ont 1,3,5,7);

- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send ploam enable ont id 1/1
```

send ploam enable ont serial-number

Sends a command via pon-serial to enable ONT laser.

Syntax

send ploam enable ont serial-number <PON-SERIAL>

Parameters

<PON-SERIAL> — pon-serial ONT in the AAAAXXXXXXXXXX format, where A are capital letters, X is a hex character 0-F. Or in the XXXXXXXXXXXXXXXX format, where X is a hex character 0-F.

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send ploam enable ont serial-number ELTX00000001
```

send ploam enable-all pon-port

Sends a command to enable ONT laser on pon-port.

Syntax

send ploam enable-all pon-port <PORT-ID>

Parameters

<PORT-ID> — pon port index in the range [1-16].

Privilege group

commands-interface-ont

Command mode

ROOT

Example

```
LTP-16N# send ploam enable-all pon-port 4
```

show

- show uptime
- show alarms active all
- show alarms active <FILTER>
- show alarms history all
- show alarms history all ordering time <FILTER>
- show alarms history all ordering type
- show alarms history all ordering severity <FILTER>
- show alarms history <FILTER>
- show alarms history alarm
- show alarms history alarm ordering time <FILTER>
- show alarms history alarm ordering type <FILTER>
- show alarms history normalized-alarm
- show alarms history normalized-alarm ordering time <FILTER>
- show alarms history normalized-alarm ordering type <FILTER>
- show alarms history normalized-alarm ordering severity <FILTER>
- show candidate-config
- show candidate-config alarm
- show candidate-config cli
- show candidate-config interface front-port
- show candidate-config interface pon-port
- show candidate-config interface ont
- show candidate-config ip dhcp
- show candidate-config ip igmp
- show candidate-config ip pppoe
- show candidate-config ip snmp
- show candidate-config ip ssh
- show candidate-config ip telnet
- show candidate-config ip ntp
- show candidate-config pon
- show candidate-config port-channel
- show candidate-config port-channel load-balance
- show candidate-config logging
- show candidate-config lldp
- show candidate-config management
- show candidate-config privilege
- show candidate-config profile cross-connect
- show candidate-config profile dba
- show candidate-config profile ports
- show candidate-config profile management
- show candidate-config profile dhcp-opt82
- show candidate-config profile pppoe-ia
- show candidate-config qos
- show candidate-config system
- show candidate-config user
- show candidate-config vlan
- show candidate-config lldp
- show date
- show firmware
- show firmware ont list
- show interface front-port <PORT-ID> counters
- show interface front-port <PORT-ID> counters verbose

- show interface front-port <PORT-ID> state
- show interface front-port <PORT-ID> utilization
- show interface ont <PORT-ID> [/ONT-ID] online
- show interface ont <PORT-ID> [/ONT-ID] offline
- show interface ont <PORT-ID> [/ONT-ID] unactivated
- show interface ont <PORT-ID> [/ONT-ID] configured
- show interface ont <PORT-ID> [/ONT-ID] unconfigured
- show interface ont <PORT-ID> [/ONT-ID] connected
- show interface ont <PORT-ID> [/ONT-ID] counters pon
- show interface ont <PORT-ID> [/ONT-ID] counters gem-port
- show interface ont <PORT-ID> [/ONT-ID] rssi
- show interface ont <PORT-ID> [/ONT-ID] data-path
- show interface ont <PORT-ID> [/ONT-ID] counters olt-side pon
- show interface ont <PORT-ID> [/ONT-ID] counters olt-side gem-port
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side gem-port-performance-monitoring
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side gem-port-nctp-performance-monitoring
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data2
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data3
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side gal-ethernet-performance-monitoring-history-data
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side fec-performance-monitoring-history-data
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-frame-extended-performance-monitoring
- show interface ont <PORT-ID> [/ONT-ID] counters ont-side multicast-subscriber-monitor
- show interface port-channel <PORT-CHANNEL-ID> counters
- show interface port-channel <PORT-CHANNEL-ID> counters verbose
- show interface port-channel <PORT-CHANNEL-ID> utilization
- show interface ont <PORT-ID> [/ONT-ID] connections
- show interface ont <PORT-ID> [/ONT-ID] configuration
- show interface ont <PORT-ID> [/ONT-ID] ports
- show interface ont <PORT-ID> [/ONT-ID] laser
- show interface port-channel <PORT-CHANNEL-ID> state
- show interface pon-port <PORT-ID> state
- show interface pon-port <PORT-ID> utilization
- show ip igmp snooping config vlan
- show ip igmp snooping groups
- show ip igmp snooping hosts
- show ip igmp snooping mroute
- show ip dhcp sessions
- show ip dhcp sessions (FILTER)
- show ip dhcp sessions (FILTER)
- show ip pppoe sessions
- show ip pppoe sessions (FILTER)
- show license
- show log buffer
- show log files
- show log (FILENAME)
- show lldp stats [interface front-port <PORT-ID>]
- show lldp local [interface front-port <PORT-ID>]
- show lldp neighbors [interface front-port <PORT-ID>] [verbose]
- show running-config
- show running-config all

- `show running-config alarm`
- `show running-config cli`
- `show running-config interface front-port`
- `show running-config interface pon-port`
- `show running-config interface ont`
- `show running-config ip dhcp`
- `show running-config ip igmp`
- `show running-config ip pppoe`
- `show running-config ip snmp`
- `show running-config ip ssh`
- `show running-config ip telnet`
- `show running-config ip ntp`
- `show running-config port-channel`
- `show running-config port-channel load-balance`
- `show running-config logging`
- `show running-config lldp`
- `show running-config management`
- `show running-config mirror <ID>`
- `show running-config pon`
- `show running-config privilege`
- `show running-config profile cross-connect`
- `show running-config profile dba`
- `show running-config profile ports`
- `show running-config system`
- `show running-config profile management`
- `show running-config profile dhcp-opt82`
- `show running-config profile pppoe-ia`
- `show running-config qos`
- `show running-config user`
- `show running-config vlan`
- `show system environment`
- `show version`
- `show mac`
- `show mac <FILTER>`

show uptime

Displays OLT operating time.

Syntax

`show uptime`

Parameters

The command does not contain any parameters.

Privilege group

`view-general`

Command mode

ROOT

Example

```
LTP-16N# show uptime
up 5 min
```

show alarms active all

Displays all active alarms.

Syntax

```
show alarms active all
```

Parameters

The command does not contain any parameters.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms active all
Active alarms (2):
  ##  type          severity          description
  1   fan           critical         fan slot 1
  2   fan           critical         fan slot 2
```

show alarms active (FILTER)

Displays all active alarms by filter.

Syntax

```
show alarms active <FILTER> <VALUE>
```

Parameters

<FILTER> – filters for alarms:

- type – filter alarms by type. <VALUE> values are available for this filter:
 - fan – ventilation panel alarms;
 - ram – memory lack alarm;
 - load-average – CPU load alarm;
 - temperature – temperature sensors alarm;
 - pon-alarm-loss – Loss of Signal pon alarm;

- pon-alarm-losi — Loss of Signal pon alarm for ONUi;
- pon-alarm-lofi — Loss of Frame pon alarm for ONUi;
- pon-alarm-loami — PLOAM Loss pon alarm for ONUi;
- pon-alarm-dowi — Drift of Window pon alarm for ONUi;
- pon-alarm-sdi — Signal Degraded pon alarm for ONUi;
- pon-alarm-sufi — Start-up Failure pon alarm for ONUi;
- pon-alarm-loai — Loss of Acknowledge pon alarm for ONUi;
- pon-alarm-dgi — Dying-Gasp pon alarm for ONUi;
- pon-alarm-dfi — Deactivate Failure pon alarm for ONUi;
- pon-alarm-tiwi — Transmission Interference Warning pon alarm for ONUi;
- pon-alarm-loki — Loss of Key pon alarm for ONUi;
- pon-alarm-lcdgi — Loss of GEM Channel Delineation pon alarm for ONUi;
- pon-alarm-rdii — Remote Defect Indication pon alarm for ONUi;
- login — system login alarm;
- logout — system logout alarm;
- config-save — configuration save alarm;
- config-change — configuration change alarm;
- ont-no-config — ONUi no configuration alarm;
- ont-valid-config — ONUi-correct configuration received alarm;
- ont-state-changed — ONUi state change alarm;
- ont-link-up — ONUi link up alarm;
- ont-link-down — ONUi link down alarm;
- mac-duplicate — MAC addresses duplication alarm;
- severity — filter alarms by importance. <VALUE> values are available for this filter:
 - info;
 - minor;
 - major;
 - critical.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms active type fan
Active alarms (2):
  ##  type          severity          description
  1   fan           critical         fan slot 1
  2   fan           critical         fan slot 2

LTP-16N# show alarms active severity info
No alarms.

LTP-16N# show alarms active severity critical
Active alarms (2):
  ##  type          severity          description
  1   fan           critical         fan slot 1
  2   fan           critical         fan slot 2
```

show alarms history all

Displays all alarms.

Syntax

```
show alarms history all
```

Parameters

The command does not contain any parameters.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history all
```

Datetime	Severity	Type	Norm	Description
-----	-----	-----	----	-----
13.05.2022 08:18:01	info	fan		Fan 1 speed 6360 rpm
13.05.2022 08:18:31	info	fan	*	Fan 1 speed 6540 rpm is back to normal
13.05.2022 08:19:54	major	ont-link-up		ONT6/2 (ELTX660421C4) link up
13.05.2022 08:19:59	info	ont-state-changed		ELTX660421C4 6 2 OK
				"NTU-RG-1421G-Wac" "3.40.1.1655"
				"2v6" "-19.83"

show alarms history all ordering time <FILTER>

Displays all alarms by time.

Syntax

```
show alarms history all ordering time <FILTER>
```

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history all ordering time
```

Datetime	Severity	Type	Norm	Description
01.06.2022 03:07:04	info	ont-link-down		ONT12/10 (ELTX5C009600) link down
01.06.2022 03:07:04	info	ont-link-down		ONT12/19 (ELTX5C000FB4) link down
01.06.2022 03:07:04	info	ont-link-down		ONT12/11 (ELTX5C0E0AC4) link down

show alarms history all ordering type <FILTER>

Displays all alarms by filter type.

Syntax

show alarms history all ordering type <FILTER>

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history all ordering type fan
```

Datetime	Severity	Type	Norm	Description
13.05.2022 08:18:01	info	fan		Fan 1 speed 6360 rpm
13.05.2022 08:18:31	info	fan	*	Fan 1 speed 6540 rpm is back to normal

show alarms history all ordering severity <FILTER>

Displays all active alarms by severity.

Syntax

show alarms history all ordering severity <FILTER>

Parameters

<FILTER> – filters for alarms:

- desc – filter alarms by time and description;
- none – filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history all ordering severity info
Datetime              Severity    Type        Norm    Description
-----
13.05.2022 08:18:01   info      fan
13.05.2022 08:18:31   info      fan        *      Fan 1 speed 6540 rpm is back to normal
13.05.2022 08:18:31   info      ont-link-up  ONT3/103 (ELTX1A00FA56) link up
```

show alarms history (FILTER)

Displays all active alarms by filter.

Syntax

show alarms history <FILTER> <VALUE>

Parameters

<FILTER> – alarms filters:

- type – filter alarms by type. <VALUE> values are available for this filter:
 - fan – ventilation panel alarms;
 - ram – memory lack alarm;
 - load-average – CPU load alarm;
 - temperature – temperature sensors alarm;
 - pon-alarm-los – Loss of Signal pon alarm;
 - pon-alarm-losi – Loss of Signal pon alarm for ONUi;
 - pon-alarm-lofi – Loss of Frame pon alarm for ONUi;
 - pon-alarm-loami – PLOAM Loss pon alarm for ONUi;
 - pon-alarm-dowi – Drift of Window pon alarm for ONUi;
 - pon-alarm-sdi – Signal Degraded pon alarm for ONUi;
 - pon-alarm-sufi – Start-up Failure pon alarm for ONUi;
 - pon-alarm-loai – Loss of Acknowledge pon alarm for ONUi;
 - pon-alarm-dgi – Dying-Gasp pon alarm for ONUi;
 - pon-alarm-dfi – Deactivate Failure pon alarm for ONUi;
 - pon-alarm-tiwi – Transmission Interference Warning pon alarm for ONUi;
 - pon-alarm-loki – Loss of Key pon alarm for ONUi;

- pon-alarm-lcdgi — Loss of GEM Channel Delineation pon alarm for ONUi;
- pon-alarm-rdii — Remote Defect Indication pon alarm for ONUi;
- login — system login alarm;
- logout — system logout alarm;
- config-save — configuration save alarm;
- config-change — configuration change alarm;
- ont-no-config — ONUi no configuration alarm;
- ont-valid-config — ONUi-correct configuration received alarm;
- ont-state-changed — ONUi state change alarm;
- ont-link-up — ONUi link up alarm;
- ont-link-down — ONUi link down alarm;
- mac-duplicate — MAC addresses duplication alarm;
- severity — filter alarms by importance. <VALUE> values are available for this filter:
 - info;
 - minor;
 - major;
 - critical.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history type fan
Datetime          Severity    Type
-----
13.05.2022 08:18:01  info      fan
13.05.2022 08:18:31  info      fan
Norm              *
Description
-----
Fan 1 speed 6360 rpm
Fan 1 speed 6540 rpm is back to normal

LTP-16N# show alarms history severity info
Datetime          Severity    Type
-----
13.05.2022 08:18:01  info      fan
13.05.2022 08:18:31  info      fan
Norm              *
Description
-----
Fan 1 speed 6360 rpm
Fan 1 speed 6540 rpm is back to normal

LTP-16N# show alarms history severity critical
Datetime          Severity    Type
-----
13.05.2022 08:20:45  critical   ont-link-down
13.05.2022 08:23:32  critical   ont-link-down
Norm
Description
-----
ONT6/2 (ELTX660421C4) link down
ONT6/2 (ELTX660421C4) link down
```

show alarms history alarm

Displays all alarms excluding normalizing ones.

Syntax

show alarms history all

Parameters

The command does not contain any parameters.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history alarm
```

Datetime	Severity	Type	Norm	Description
13.05.2022 08:18:01	info	fan		Fan 1 speed 6360 rpm
13.05.2022 08:18:31	info	fan	*	Fan 1 speed 6540 rpm is back to normal
13.05.2022 08:19:54	major	ont-link-up		ONT6/2 (ELTX660421C4) link up
13.05.2022 08:19:59	info	ont-state-changed		ELTX660421C4 6 2 OK "NTU-RG-1421G-Wac" "3.40.1.1655" "2v6" "-19.83"

show alarms history alarm ordering time <FILTER>

Displays all alarms by time excluding normalizing ones.

Syntax

show alarms history alarm ordering time <FILTER>

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history alarm ordering time
```

Datetime	Severity	Type	Norm	Description
01.06.2022 03:07:04	info	ont-link-down		ONT12/10 (ELTX5C009600) link down
01.06.2022 03:07:04	info	ont-link-down		ONT12/19 (ELTX5C000FB4) link down
01.06.2022 03:07:04	info	ont-link-down		ONT12/11 (ELTX5C0E0AC4) link down

show alarms history alarm ordering type <FILTER>

Displays all alarms by filter excluding normalizing ones.

Syntax

show alarms history alarm ordering type <FILTER>

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history alarm ordering type fan
```

Datetime	Severity	Type	Norm	Description
13.05.2022 08:18:01	info	fan		Fan 1 speed 6360 rpm
13.05.2022 08:18:31	info	fan	*	Fan 1 speed 6540 rpm is back to normal

show alarms history normalized-alarm

Displays all normalizing alarms.

Syntax

show alarms history normalized-alarm

Parameters

The command does not contain any parameters.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history normalized-alarm
Datetime          Severity  Type          Norm  Description
-----
02.06.2022 04:00:08 critical  load-average  *    CPU load average (1m, 5m, 15m):
2.79, 2.32, 1.64 is back to normal
02.06.2022 04:07:38 critical  load-average  *    CPU load average (1m, 5m, 15m):
2.98, 2.43, 1.92 is back to normal
```

show alarms history normalized-alarm ordering time <FILTER>

Displays all normalizing alarms by time.

Syntax

show alarms history normalized-alarm ordering time <FILTER>

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history normalized-alarm ordering time
Datetime          Severity  Type          Norm  Description
-----
02.06.2022 04:00:08 critical  load-average  *    CPU load average (1m, 5m, 15m):
2.79, 2.32, 1.64 is back to normal
02.06.2022 04:07:38 critical  load-average  *    CPU load average (1m, 5m, 15m):
2.98, 2.43, 1.92 is back to normal
```

show alarms history normalized-alarm ordering type <FILTER>

Displays all normalizing alarms by filter.

Syntax

```
show alarms history normalized-alarm ordering type <FILTER>
```

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history normalized-alarm ordering type ram
Datetime          Severity  Type          Norm  Description
-----
09.06.2022 03:42:44 info      ram          *     Free RAM is 81% is back to normal
09.06.2022 03:43:14 info      ram          *     Free RAM is 80% is back to normal
```

show alarms history normalized-alarm ordering severity <FILTER>

Displays all normalizing alarms by severity.

Syntax

```
show alarms history normalized-alarm ordering severity <FILTER>
```

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- none — filter alarms by time.

Privilege group

view-general

Command mode

ROOT

Example

```
LTP-16N# show alarms history normalized-alarm ordering severity
Datetime          Severity    Type          Norm    Description
-----
09.06.2022 03:42:34 info        temperature    *       Sensor PON SFP 1 temperature 30C
                                     is back to normal
09.06.2022 03:42:34 info        temperature    *       Sensor PON SFP 2 temperature 29C
                                     is back to normal
```

show candidate-config

Displays the current candidate configuration. Displays a list of all nonapplied changes in a given session relative to the current configuration.

Syntax

```
show candidate-config
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show candidate-config
configure terminal
    management ip 192.168.1.3
exit
commit
exit
```

show candidate-config alarm

Displays the candidate configuration for alarms.

Syntax

```
show candidate-config alarm
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config alarm
alarm
  system-temperature sensor pon-ports-1 max 60
  system-temperature sensor pon-ports-2 max 60
```

show candidate-config cli

Displays the candidate configuration for CLI.

Syntax

```
show candidate-config cli
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config cli
cli max-sessions 4
```

show candidate-config interface front-port

Displays the candidate configuration for front-port.

Syntax

```
show candidate-config interface front-port <PORT-ID>
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface front-port 1-5 or interface front-port 1,5).

Privilege group

view-configuration, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show candidate-config interface front-port 1
interface front-port 1
    vlan allow 1000
exit
```

show candidate-config interface pon-port

Displays running configuration for pon-port.

Syntax

show candidate-config interface pon-port <PORT-ID>

Parameters

<PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (For example: interface pon-port 1-3 or interface pon-port 1,3,5,7).

Privilege group

view-configuration, config-interface-pon-port

Command mode

ROOT

Example

```
LTP-16N# show candidate-config interface pon-port 15,16
interface pon-port 15
    shutdown
exit
interface pon-port 16
    shutdown
exit
```

show candidate-config interface ont

Display the candidate configuration for ONT.

Syntax

```
show candidate-config interface ont <PORT-ID>[/ONT-ID]
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (For example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (For example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-configuration, config-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show candidate-config interface ont 1/1
interface ont 1/1
  service 1 profile cross-connect "HSI" dba "DBA"
exit
```

show candidate-config ip dhcp

Displays candidate configuration for DHCP.

Syntax

```
show candidate-config ip dhcp
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip dhcp
ip dhcp
    snooping enable
exit
```

show candidate-config ip igmp

Display candidate configuration for IGMP.

Syntax

```
show candidate-config ip igmp
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip igmp
ip igmp snooping
```

show candidate-config ip pppoe

Display candidate configuration for PPPoE.

Syntax

```
show candidate-config ip pppoe
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip pppoe
ip pppoe
    snooping enable
exit
```

show candidate-config ip snmp

Displays candidate configuration for SNMP.

Syntax

```
show candidate-config ip snmp
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip snmp
ip snmp contact Eltex
```

show candidate-config ip ssh

Displays candidate configuration for SSH.

Syntax

```
show candidate-config ip ssh
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip ssh
no ip ssh enable
```

show candidate-config ip telnet

Displays candidate configuration for TELNET.

Syntax

show candidate-config ip telnet

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip telnet
no ip telnet enable
```

show candidate-config ip ntp

Displays candidate configuration for NTP.

Syntax

show candidate-config ip ntp

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip ntp
ip ntp enable
```

show candidate-config pon

Displays candidate configuration for pon network settings.

Syntax

```
show candidate-config pon
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config pon
pon network svlan-ethertype 802.1ad
```

show candidate-config port-channel

Displays candidate configuration for port-channel.

Syntax

```
show candidate-config interface port-channel <PORT-CHANNEL-ID>
```

Parameters

<PORT-CHANNEL-ID> — ID of port-channel. The parameter can be set by a range or enumeration (For example: interface port-channel 1-5 or interface interface port-channel 1,5).

Privilege group

view-configuration, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show candidate-config interface port-channel 1-2
interface port-channel 1
    vlan allow 20,99
exit
interface port-channel 2
    vlan allow 30
exit
```

show candidate-config port-channel load-balance

Displays candidate configuration for port-channel load-balance.

Syntax

show candidate-config interface port-channel load-balance

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show candidate-config interface port-channel load-balance
interface port-channel load-balance hash src-mac dst-mac
interface port-channel load-balance polynomial 0x84a1
```

show candidate-config logging

Displays candidate configuration for logging.

Syntax

show candidate-config logging

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-logging

Command mode

ROOT

Example

```
LTP-16N# show candidate-config logging
logging
  module dna interface ont 1/1 loglevel debug
exit
```

show candidate-config lldp

Displays candidate configuration for LLDP.

Syntax

show candidate-config lldp

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config lldp
no lldp enable
```

show candidate-config management

Displays candidate configuration of network management settings.

Syntax

show candidate-config management

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-management

Command mode

ROOT

Example

```
LTP-16N# show candidate-config management
management ip 192.168.1.100
management gateway 192.168.1.1
management vid 100
```

show candidate-config privilege

Displays candidate configuration for privileges.

Syntax

show candidate-config privilege

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-user

Command mode

ROOT

Example

```
LTP-16N# show candidate-config privilege
privilege 3 view-system
```

show candidate-config profile cross-connect

Displays candidate configuration for cross-connect profile.

Syntax

```
show candidate-config profile cross-connect [NAME]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile cross-connect HSI
profile cross-connect HSI
  bridge enable
  bridge group 10
  outer vid 100
exit
```

show candidate-config profile dba

Displays candidate configuration for DBA profile.

Syntax

```
show candidate-config profile dba [NAME]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile dba DBA
  profile dba DBA
    mode status-reporting
  exit
```

show candidate-config profile ports

Displays candidate configuration for ports profile.

Syntax

```
show candidate-config profile ports [NAME]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile ports
  profile ports pp
    port 1 bridge group 10
  exit
```

show candidate-config profile management

Displays candidate configuration for management interface profile.

Syntax

```
show candidate-config profile management [NAME]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile management
      profile management MANAGEMENT
            iphost id 3
      exit
```

show candidate-config profile dhcp-opt82

Displays candidate configuration for dhcp-opt82 profile.

Syntax

show candidate-config profile dhcp-opt82 [NAME]

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-dhcp

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile dhcp-opt82
      profile dhcp-opt82 DHCP-82
            ont-sn-format numerical
      exit
```

show candidate-config profile pppoe-ia

Displays candidate configuration for pppoe-ai profile.

Syntax

show candidate-config profile pppoe-ia [NAME]

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-pppoe

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile pppoe-ia
profile pppoe-ia PPPOE
  ont-sn-format numerical
exit
```

show candidate-config qos

Displays candidate configuration of QoS.

Syntax

show candidate-config qos

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config qos
qos enable
```

show candidate-config system

Displays candidate of system configuration.

Syntax

```
show candidate-config system
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show candidate-config system
system fan speed 100
```

show candidate-config user

Displays candidate configuration for users.

Syntax

```
show candidate-config user
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration, config-user
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show candidate-config user
user test2 encrypted_password $6$XqyNfsV/
$h.QgxTKh9PFGv05nZ5jSuZq0C4Z274lDbSktK51YX8xmmsFUk9FmIUSqZDC7S0mVAtH3XBIR5b0YY5tra4T8j1
user test2 privilege 0
```

show candidate-config vlan

Displays candidate configuration for VLAN.

Syntax

```
show candidate-config vlan <VID>
```

Parameters

<VID> – VLAN ID, in the range [1-4094].

Privilege group

view-configuration, config-vlan

Command mode

ROOT

Example

```
LTP-16N# show candidate-config vlan 100
vlan 100
    ip igmp snooping enable
exit
```

show candidate-config lldp

Displays candidate configuration of LLDP.

Syntax

```
show candidate-config lldp
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config lldp
lldp enable
```

show date

Displays current date.

Syntax

```
show date
```

Parameters

The command does not contain any parameters.

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show date
Tue Sep  8 08:32:53 UTC 2020
```

show firmware

Display the list of firmware in main and redundant areas. The select field marks which firmware will be loaded after rebooting. To upload firmware to the device use the **copy** command.

Syntax

```
show firmware
```

Parameters

The command does not contain any parameters.

Privilege group

view-firmware

Command mode

ROOT

Example

```
LTP-16N# show firmware
Select   Type      Version    Build    Date
-----
*        master    1.2.0      472      19.05.2021 09:18
-----
         slave     1.2.0      467      17.05.2021 06:53
"*" designates that the image was selected for the next boot
LTP-16N#
```

show firmware ont list

Displays the list of firmware for ONT uploaded to the device. To upload firmware to the device use the **copy** command.

Syntax

```
show firmware ont list
```

Parameters

The command does not contain any parameters.

Privilege group

view-firmware

Command mode

ROOT

Example

```
LTP-16N# show firmware ont list
N      | Firmware
-----
1      | ntu-1-3.28.0-build645.fw.bin
-----
2      | ntu-1-3.26.5.101.fw.bin
-----
3      | ntu-2-3.28.0.2387.fw.bin
-----
4      | ntu-rg-54xx-1.3.0.825.fw.bin
-----
5      | ntu-1-3.28.0-build648.fw.bin
```

show interface front-port (PORT-ID) counters

Displays counters on front ports.

Syntax

```
show interface front-port <PORT-ID> counters
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (For example: interface front-port 1-5 or interface front-port 1,5).

Privilege group

```
view-interface-front-port
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show interface front-port 3 counters
Port  UC packet recv  MC packet recv  BC packet recv  Octets recv  UC packet sent  MC packet
sent  BC packet sent  Octets sent
-----
-----
-----
-----
-----
-----
-----
-----
3      0      0      0      0      0      0
0      0
```

show interface front-port (PORT-ID) counters verbose

Displays counters on front ports in details.

Syntax

```
show interface front-port <PORT-ID> counters
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface front-port 1-5 or interface front-port 1,5).

Privilege group

```
view-interface-front-port
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show interface front-port 8 counters verbose
```

```
front-port 8 statistics
```

```
Rx Bytes                3853048381
Rx Packets              2841701
Rx Unicast Packets      22085
Rx Multicast Packets    2819615
Rx Broadcast Packets    1
Rx Error Packets        0
Rx Unknown Proto Packets 0
Tx Bytes                2299253
Tx Packets              21890
Tx Unicast Packets      21831
Tx Multicast Packets    54
Tx Broadcast Packets    5
Tx Error Packets        0
Rx frames 64            526
Rx frames 65-127        22172
Rx frames 128-255       39
Rx frames 256-511       0
Rx frames 512-1023      0
Rx frames 1024-1518     2818965
Rx frames 1519-2047     0
Rx frames 2048-4095     0
Rx frames 4096-9216     0
Rx frames 9217-16383    0
Tx frames 64            2
Tx frames 65-127        21871
Tx frames 128-255       17
Tx frames 256-511       0
Tx frames 512-1023      0
Tx frames 1024-1518     0
Tx frames 1519-2047     0
Tx frames 2048-4095     0
Tx frames 4096-9216     0
Tx frames 9217-16383    0
```

show interface front-port (PORT-ID) state

Displays front ports state.

Syntax

```
show interface front-port <PORT-ID> state
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface front-port 1-5 or interface front-port 1,5).

Privilege group

view-interface-front-port

Command mode

ROOT

Example

LTP-16N# show interface front-port 1 state

Front-port	Status	Speed	Media
1	up	1G	copper

show interface front-port (PORT-ID) utilization

Displays utilization by front ports.

Syntax

show interface front-port <PORT-ID> utilization

Parameters

<PORT-ID> – port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface front-port 1-5 or interface front-port 1,5).

Privilege group

view-interface-front-port

Command mode

ROOT

ExampleLTP-16N# show **interface** front-port 3 utilization

1 minute utilization average

Port	Tx Kbits/sec	Rx Kbits/sec	Tx Frames/sec	Rx Frames/sec
3	0	16	0	20

5 minute utilization average

Port	Tx Kbits/sec	Rx Kbits/sec	Tx Frames/sec	Rx Frames/sec
3	0	15	0	19

show interface ont <PORT-ID> [/ONT-ID] online

Displays the list of configured and online ONTs.

Syntax

```
show interface ont <PORT-ID>[/ONT-ID] online
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1 online
-----
PON-port 1 ONT online list
-----
      ##          Serial      ONT ID      PON-port      RSSI Status
      1      ELTX6C000090          1          1      -19.96 OK
```

show interface ont <PORT-ID> [/ONT-ID] offline

Displays the list of configured and offline ONTs.

Syntax

```
show interface ont <PORT-ID>[/ONT-ID] offline
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 или interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1 offline
-----
pon-port 1 ONT offline list
-----
      ##          Serial      ONT ID      pon-port      Status
      1      ELTX6C000090          1          1      OFFLINE
```

show interface ont <PORT-ID> [/ONT-ID] unactivated

Displays the list of configured and offline ONTs.

Syntax

show interface ont <PORT-ID> [/ONT-ID] unactivated

Parameters

- <PORT-ID> – pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 unactivated
-----
PON-port 1 ONT unactivated list
-----
      ##          Serial      ONT ID      PON-port      RSSI      Version
EquipmentID      Status
      1      ELTX0600003D      n/a          1          n/a          n/a
n/a      UNACTIVATED
```

show interface ont <PORT-ID> [/ONT-ID] configured

Displays the list of configured ONTs.

Syntax

```
show interface ont <PORT-ID>[/ONT-ID] configured
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

```
view-interface-ont
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show interface ont 1/1 configured
-----
PON-port 1 ONT configured list
-----
  ##          Serial    ONT ID    PON-port    Status
  1      ELTX6C000090      1          1          OK
```

show interface ont <PORT-ID> [/ONT-ID] unconfigured

Displays the list of free indexes on the port.

Syntax

```
show interface ont <PORT-ID>[/ONT-ID] unconfigured
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

```
view-interface-ont
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show interface ont 3 unconfigured
PON-port 3 ONT unconfigured: 1-128
```

show interface ont <PORT-ID> [/ONT-ID] connected

Displays the list of unactivated and online ONTs.

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] connected
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 connected
-----
pon-port 1 ONT connected list
-----
      ##          Serial   ONT ID   PON-port   RSSI       Version
EquipmentID      Status
      1    ELTX0600003D      1         1      -7.44    3.25.1.11    NTP-
RG-1402G          OK
```

show interface ont <PORT-ID> [/ONT-ID] counters pon

Displays PON counters for ONT on the OLT side.

Синтаксис

```
show interface ont <PORT-ID> [/ONT-ID] counters pon
```

Параметры

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters pon
[ONT 1/1] PON statistics

Drift Positive:          0
Drift Negative:         0
Delimiter Miss Detection: 0
BIP Errors:             0
BIP Units:              104238772192
FEC Corrected symbols:  0
FEC Codewords Uncorrected: 0
FEC Codewords Uncorrected: 0
FEC Codewords:          0
FEC Corrected Units:    0
Rx PLOAMs Errors:       0
Rx PLOAMs Non Idle:     15
Rx OMCI:                405
Rx OMCI Packets CRC Error: 0
Rx Bytes:               40262
Rx Packets:              542
Tx Bytes:               19296
Tx Packets:              402
BER Reported:           0
```

show interface ont <PORT-ID> [/ONT-ID] counters gem-port

Displays GEM port counters for ONT on the OLT side.

Syntax

show interface ont <PORT-ID> [/ONT-ID] counters gem-port

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).

- [ONT-ID] – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters gem-port
ONT [1/1] GEM port statistics
```

GEM port id	Rx Packet	Rx Bytes	Tx Packet	Tx Bytes
129	135	20642	0	0
Broadcast	0	0	0	0
Multicast	0	0	13153	17964394

show interface ont <PORT-ID> [/ONT-ID] rssi

Displays the signal power level.

Syntax

show interface ont <PORT-ID> [/ONT-ID] rssi

Parameters

- <PORT-ID> – pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 rssi
-----
[ONT1/1] RSSI
-----
Received signal strength indication:    -19.913998 [dBm]
```

show interface ont <PORT-ID> [/ONT-ID] data-path

Displays the configuration for this ONT.

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] data-path
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```

LTP-16N# show interface ont 1/1 data-path
Service #1:
  outer vid 100
  inner vid 1
  user vid: -1
  replace: ont-side
  bridge_group: 10
  t-cont id: 0
  alloc id: 767
  gem port: 129
  flow id: 11269
  traffic model: N_TO_1
  front-port: 3
Bridge #1:
  service profile id: 0
  broadcast enable: true
  broadcast filters: 100 0 0 0 0 0 0 0 0 0 0 0
  multicast enable: false
  multicast filters: 0 0 0 0 0 0 0 0 0 0 0 0
Port #1:
  bridge group: 0
  multicast enable: false
Port #2:
  bridge group: 0
  multicast enable: false
Port #3:
  bridge group: 0
  multicast enable: false
Port #4:
  bridge group: 0
  multicast enable: false
Virtual ethernet interface pointer:
  bridge group: 0
  vlan operation #1:
    user vid: 100
    replace: ont-side
  multicast enable: false
Alloc base #1:
  scheme: share-t-cont
  alloc ids: 767

```

show interface ont <PORT-ID> [/ONT-ID] counters olt-side pon

Displays pon counters on the olt-side

Syntax

show interface ont <PORT-ID> [/ONT-ID] counters olt-side pon

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).

- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters olt-side pon
-----
[ONT 1/1] PON statistics
-----

Drift Positive:                                0
Drift Negative:                               0
Delimiter Miss Detection:                     0
BIP Errors:                                   0
BIP Units:                                   103150550416
FEC Corrected symbols:                        0
FEC Codewords Uncorrected:                   0
FEC Codewords Corrected:                     0
FEC Codewords:                               0
FEC Corrected Units:                         0
Rx PLOAMs Errors:                            0
Rx PLOAMs Non Idle:                          29
Rx OMCI:                                     447
Rx OMCI Packets CRC Error:                   0
Rx Bytes:                                    21456
Rx Packets:                                  447
Tx Bytes:                                    21312
Tx Packets:                                  444
BER Reported:                                0
```

show interface ont <PORT-ID> [/ONT-ID] counters olt-side gem-port

Отображение счетчиков по gem-портам на olt-side

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters olt-side gem-port
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters olt-side gem-port
```

```
-----
[ONT 1/1] GEM port statistics
-----
```

GEM port id	Rx Packet	Rx Bytes	Tx Packet	Tx Bytes
-----	-----	-----	-----	-----
128	0	0	0	0
Broadcast	0	0	49	12068
Multicast	0	0	297	19008

show interface ont <PORT-ID> [/ONT-ID] counters ont-side gem-port-performance-monitoring

Displays gem-port-performance-monitoring counters (ME class 267)

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side gem-port-performance-monitoring
```

Parameters

- <PORT-ID> – pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side gem-port-performance-monitoring
```

show interface ont <PORT-ID> [/ONT-ID] counters ont-side gem-port-nctp-performance-monitoring

Displays gem-port-nctp-performance-monitoring counters (ME class 341)

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side gem-port-nctp-performance-monitoring
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side gem-nctp-port-performance-monitoring
```

```
-----
```

```
[ONT 1/1] counters
```

```
-----
```

##	Downstream counters for gem:	service 1	BC
1	Finished intervals	104	104
2	Received GEM frames	0	4
3	Received payload bytes	0	1106

##	Upstream counters for gem:	service 1	BC
1	Finished intervals	104	104
2	Transmitted GEM frames	0	0
3	Transmitted payload bytes	0	0

show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data

Displays ethernet-performance-monitoring-history-data counters (ME class 24).

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side ethernet-performance-monitoring-history-data
```

```
-----
```

```
[ONT 1/1] counters
```

```
-----
```

##	Counters for ports:	1	2	3	4
---	-----	-----	-----	-----	-----
1	Finished intervals	105	105	105	105
2	FCS errors	0	0	0	0
3	Excessive collision counter	0	0	0	0
4	Late collision counter	0	0	0	0
5	Frames too long	0	0	0	0
6	Buffer overflow on receive	0	0	0	0
7	Buffer overflow on transmit	0	0	0	0
8	Single collision frame counter	0	0	0	0
9	Multiple collisions frame counter	0	0	0	0
10	SQE counter	0	0	0	0
11	Deferred transmission counter	0	0	0	0
12	Internal MAC transmit error counter	0	0	0	0
13	Carrier sense error counter	0	0	0	0
14	Alignment error counter	0	0	0	0
15	Internal MAC receive error counter	0	0	0	0

show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data2

Displays ethernet-performance-monitoring-history-data2 counters (ME class 89).

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data2
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).

- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side ethernet-performance-monitoring-history-data2
```

show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data3

Displays ethernet-performance-monitoring-history-data3 counters (ME class 296).

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-performance-monitoring-history-data3
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side ethernet-performance-monitoring-history-data3
```

```
-----
[ONT 1/1] counters
-----
```

##	Counters for ports:	1	2	3	4
---	-----	-----	-----	-----	-----
1	Finished intervals	105	105	105	105
2	Drop events	0	0	0	0
3	Octets	960	0	0	0
4	Packets	15	0	0	0
5	Broadcast packets	0	0	0	0
6	Multicast packets	15	0	0	0
7	Undersize packets	0	0	0	0
8	Fragments	0	0	0	0
9	Jabbers	0	0	0	0
10	Packets 64 octets	15	0	0	0
11	Packets 65 to 127 octets	0	0	0	0
12	Packets 128 to 255 octets	0	0	0	0
13	Packets 256 to 511 octets	0	0	0	0
14	Packets 512 to 1023 octets	0	0	0	0
15	Packets 1024 to 1518 octets	0	0	0	0

show interface ont <PORT-ID> [/ONT-ID] counters ont-side gal-ethernet-performance-monitoring-history-data

Displays gal-ethernet-performance-monitoring-history-data counters (ME class 276)

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side gal-ethernet-performance-monitoring-history-data
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side gal-ethernet-performance-monitoring-history-
data
[ONT 1/1] counters
```

##	Counters for gal:	service 1	BC
1	Finished intervals	105	105
2	Discarded frames	0	0

show interface ont <PORT-ID> [/ONT-ID] counters ont-side fec-performance-monitoring-history-data

Displays fec-performance-monitoring-history-data counters (ME class 312)

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side fec-performance-monitoring-
history-data
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side fec-performance-monitoring-history-data
```

show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-frame-extended-performance-monitoring

Displays ethernet-frame-extended-performance-monitoring counters (ME class 334)

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side ethernet-frame-extended-
performance-monitoring
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side ethernet-frame-extended-performance-
monitoring
```

```
-----
[ONT 1/1] counters
-----
```

##	Upstream counters for ports:	1	2	3	4
1	Finished intervals	0	0	0	0
2	Drop events	0	0	0	0
3	Octets	17344	0	0	0
4	Frames	271	0	0	0
5	Broadcast frames	0	0	0	0
6	Multicast frames	271	0	0	0
7	CRC errored frames	0	0	0	0
8	Undersize frames	0	0	0	0
9	Oversize frames	0	0	0	0
10	Frames 64 octets	271	0	0	0
11	Frames 65 to 127 octets	0	0	0	0
12	Frames 128 to 255 octets	0	0	0	0
13	Frames 256 to 511 octets	0	0	0	0
14	Frames 512 to 1023 octets	0	0	0	0
15	Frames 1024 to 1518 octets	0	0	0	0
##	Downstream counters for ports:	1	2	3	4
1	Finished intervals	0	0	0	0
2	Drop events	0	0	0	0
3	Octets	8384	0	0	0
4	Frames	131	0	0	0
5	Broadcast frames	0	0	0	0
6	Multicast frames	131	0	0	0
7	CRC errored frames	0	0	0	0
8	Undersize frames	0	0	0	0
9	Oversize frames	0	0	0	0
10	Frames 64 octets	131	0	0	0
11	Frames 65 to 127 octets	0	0	0	0
12	Frames 128 to 255 octets	0	0	0	0
13	Frames 256 to 511 octets	0	0	0	0
14	Frames 512 to 1023 octets	0	0	0	0
15	Frames 1024 to 1518 octets	0	0	0	0

show interface ont <PORT-ID> [/ONT-ID] counters ont-side multicast-subscriber-monitor

Displays multicast-subscriber-monitor counters (ME class 311)

Syntax

```
show interface ont <PORT-ID> [/ONT-ID] counters ont-side multicast-subscriber-monitor
```

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 counters ont-side multicast-subscriber-monitor
```

show interface port-channel <PORT-CHANNEL-ID> counters

Displays counters by port-channels

Syntax

show interface port-channel <PORT-CHANNEL-ID> counters

Parameters

<PORT-CHANNEL-ID> — ID of port-channel. The parameter can be a range or an enumeration (e.g.: interface interface port-channel 1-5 or interface interface interface port-channel 1,5).

Privilege group

view-interface-front-port, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show interface port-channel 1 counters
Port   UC packet recv   MC packet recv   BC packet recv   Octets recv   UC packet sent   MC
packet sent   BC packet sent   Octets sent
---
-----
1         0         28451         0         2966675         0
3604784         0         4926092069
```

show interface port-channel <PORT-CHANNEL-ID> counters verbose

Displays counters by port-channel in details.

Syntax

```
show interface port-channel <PORT-CHANNEL-ID> counters verbose
```

Parameters

<PORT-CHANNEL-ID> — ID of port-channel. The parameter can be a range or an enumeration (e.g.: interface interface port-channel 1-5 or interface interface interface port-channel 1,5).

Privilege group

view-interface-front-port, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show interface port-channel 32 counters verbose
```

Port-channel 32 statistics

Rx Bytes	4926092069
Rx Packets	3631835
Rx Unicast Packets	27049
Rx Multicast Packets	3604784
Rx Broadcast Packets	2
Rx Error Packets	0
Rx Unknown Proto Packets	0
Tx Bytes	2966675
Tx Packets	28855
Tx Unicast Packets	28451
Tx Multicast Packets	391
Tx Broadcast Packets	13
Tx Error Packets	0
Rx frames 64	560
Rx frames 65-127	27140
Rx frames 128-255	39
Rx frames 256-511	0
Rx frames 512-1023	0
Rx frames 1024-1518	3604094
Rx frames 1519-2047	0
Rx frames 2048-4095	0
Rx frames 4096-9216	0
Rx frames 9217-16383	0
Tx frames 64	2
Tx frames 65-127	28832
Tx frames 128-255	21
Tx frames 256-511	0
Tx frames 512-1023	0
Tx frames 1024-1518	0
Tx frames 1519-2047	0
Tx frames 2048-4095	0
Tx frames 4096-9216	0
Tx frames 9217-16383	0

show interface port-channel <PORT-CHANNEL-ID> utilization

Displays utilization by port-channel.

Syntax

```
show interface port-channel <PORT-CHANNEL-ID> utilization
```

Parameters

<PORT-CHANNEL-ID> – ID port-channel. Параметр можно задавать диапазоном или перечислением (например: interface port-channel 1-5 или interface interface port-channel 1,5).

Privilege group

view-interface-front-port, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show interface port-channel 1 utilization
```

1 minute utilization average

Port	Tx Kbits/sec	Rx Kbits/sec	Tx Frames/sec	Rx Frames/sec
1	500	0	20	0

5 minute utilization average

Port	Tx Kbits/sec	Rx Kbits/sec	Tx Frames/sec	Rx Frames/sec
1	340	0	33	0

show interface ont <PORT-ID>[/ONT-ID] connections

Displays list of last ONT to OLT connection/disconnection.

Syntax

show interface ont <PORT-ID>[/ONT-ID] connections

Parameters

<PORT-ID> – pon port index in the range [1-16]. The parameter can be set by a range or enumeration (e.g.: interface ont 1-3 or interface ont 1,3,5,7);

[ONT-ID] – ONT index in the range [1-128]. The parameter can be set by a range or enumeration (e.g.: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 6/2 connections
```

```
-----  
[ONT 6/2] connections  
-----
```

```
-----  
Serial number:      ELTX660421C4  
Equipment ID:       NTU-RG-1421G-Wac  
Software version:   3.40.1.1655  
LinkUp:             16.05.2022 05:46:39  
LinkDown:           17.05.2022 03:49:04  
Last state:         Disconnected
```

show interface ont <PORT-ID>[/ONT-ID] configuration

Displays current active ONT configuration. Symbol "T" means that the parameter is used from assigned template.

Syntax

```
show interface ont <PORT-ID>[/ONT-ID] configuration
```

Parameters

<PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (e.g.: interface ont 1-3 or interface ont 1,3,5,7);

[ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (e.g.: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

```
view-interface-ont
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show interface ont 3/3 configuration
-----
[ONT 3/3] configuration
-----

Description
Enabled: true
Serial:
Password: 0000000000
Rf port state: disabled
Broadcast filter: true
Multicast filter: true
Profile shaping: n/a
Profile management: n/a
Profile ports: ports1
Service[1]:
[T] Profile cross connect: 333 ONT Profile Cross-Connect 6
[T] Profile dba: 3play_dba ONT Profile DBA 2
Template: two_services
iphost management static ip: 0.0.0.0
iphost management static mask: 0.0.0.0
iphost management static gateway: 0.0.0.0
```

show interface ont <PORT-ID>[/ONT-ID] ports

Displays ONT LAN ports status.

Syntax

show interface ont <PORT-ID>[/ONT-ID] ports

Parameters

<PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (e.g.: interface ont 1-3 or interface ont 1,3,5,7);

[ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (e.g.: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 6/2 ports
```

```
-----
```

```
[ONT 6/2] ports state
```

```
-----
```

UNI ##	1	2	3	4
Link:	up	down	down	down
Speed:	1G	n/a	n/a	n/a
Duplex:	full	n/a	n/a	n/a

show interface ont <PORT-ID>[/ONT-ID] laser

ONT laser status query.

Syntax

```
show interface ont <PORT-ID>[/ONT-ID] laser
```

Parameters

<PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (e.g.: interface ont 1-3 or interface ont 1,3,5,7);

[ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (e.g.: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show interface ont 6/2 laser
```

```
-----
```

```
[ONT 6/2] Laser info
```

```
-----
```

```
Voltage:      3.30 [V]
Bias current:  12.64 [mA]
Temperature:   40.80 [C]
Tx power:      2.47 [dBm]
Rx power:      -17.01 [dBm]
Transceiver P/N: s
```

```
RF port status: n/a
Video power:    n/a
```

show interface port-channel <PORT-CHANNEL-ID> state

Displays state by port-channels.

Syntax

```
show interface port-channel <PORT-CHANNEL-ID> counters verbose
```

Parameters

<PORT-CHANNEL-ID> — ID of port-channel. The parameter can be a range or an enumeration (e.g.: interface interface port-channel 1-5 or interface interface interface port-channel 1,5).

Privilege group

view-interface-front-port, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show interface port-channel 1 state
Port-channel 1 status information:
Status:      up
Common speed: 1G
Front-port from channel status:

Front-port 1
    Status: up
    Media:  copper
    Speed:  1G
```

show interface pon-port <PORT-ID> state

Displays state by pon ports.

Syntax

```
show interface pon <PORT-ID> state
```

Parameters

<ID> — port index in the range [1-16]. The parameter can be set by a range or enumeration (e.g.: interface pon-port 1-5 or interface pon-port 1,5).

Privilege group

view-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show interface pon-port 1 state
```

Port	State	ONT count	SFP vendor	SFP product number	SFP vendor revision
SFP temperature [C]	SFP voltage [V]	SFP tx bias current [mA]	SFP tx power [dBm]		
1	OK	1	Ligent Photonics	LTE3680P-BH	1.0
52		3.27	17.55	5.35	

show interface pon-port (PORT-ID) utilization

Displays pon ports utilization.

Syntax

show interface pon <PORT-ID> utilization

Parameters

<ID> — port index in the range [1-16]. The parameter can be set by a range or enumeration (e.g.: interface pon-port 1-5 or interface pon-port 1,5).

Privilege group

view-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show interface pon-port 3 utilization
```

1 minute utilization average

Port	Tx Kbits/sec	Rx Kbits/sec	Tx Frames/sec	Rx Frames/sec
3	0	16	0	20

5 minute utilization average

Port	Tx Kbits/sec	Rx Kbits/sec	Tx Frames/sec	Rx Frames/sec
3	0	15	0	19

show ip igmp snooping config vlan

Displays IGMP configuration for a given VLAN.

Syntax

```
show ip igmp snooping config vlan <VID>
```

Parameters

<VID> – VLAN ID in the range [1-4094].

Privilege group

view-igmp

Command mode

ROOT

Example

```
LTP-16N# show ip igmp snooping config vlan 99
-----
VLAN 99 IGMP settings
-----
    snooping: enabled
    fast leave: disabled
    querier: enabled
    learning: enabled
    multicast loopback: disabled
    robustness variable: 2
    query interval: 125
    query response interval: 100
    querier ip address: 0.0.0.0
    source ip address: 0.0.0.0
    dscp: 0
    igmp version: V1_V2_V3
        mc router ports: none
```

show ip igmp snooping groups

Displays the multicast group added via IGMP. With VLAN ID filtering capability.

Syntax

```
show ip igmp snooping groups[vlan <VID>]
```

Parameters

<VID> – VLAN ID in the range [1-4094].

Privilege group

view-igmp

Command mode

ROOT

Example

```
LTP-16N# show ip igmp snooping groups
VLAN 99: groups count - 1
  1: 239.25.25.25
      Filter mode EXCLUDE
      Member pon-port 1, expires 00:05:34
      Filter mode EXCLUDE
      Group expires 00:05:34
```

show ip igmp snooping hosts

Displays the list of ports with connected hosts. With VLAN ID filtering capability.

Syntax

```
show ip igmp snooping hosts [vlan <VID>]
```

Parameters

<VID> – VLAN ID in the range [1-4094].

Privilege group

view-igmp

Command mode

ROOT

Example

```
LTP-16N# show ip igmp snooping hosts vlan 99
Hosts ports. VLAN 99.
    pon-port 1 00:00:00
    pon-port 2 00:00:00
    pon-port 3 00:00:00
    pon-port 4 00:00:00
    pon-port 5 00:00:00
    pon-port 6 00:00:00
    pon-port 7 00:00:00
    pon-port 8 00:00:00
    pon-port 9 00:03:15
    pon-port 10 00:00:00
    pon-port 11 00:00:00
    pon-port 12 00:00:00
    pon-port 13 00:00:00
    pon-port 14 00:00:00
    pon-port 15 00:00:00
    pon-port 16 00:00:00
```

show ip igmp snooping mroute

Displays the list of ports with connected mroute. With VLAN ID filtering capability.

Syntax

```
show ip igmp snooping mroute [vlan <VID>]
```

Parameters

<VID> – VLAN ID in the range [1-4094].

Privilege group

view-igmp

Command mode

ROOT

Example

```
LTP-16N# show ip igmp snooping mroute
Multicast routers ports. VLAN 99.
    front-port 1 00:00:00
```

show ip dhcp sessions

Displays active dhcp sessions.

Syntax

```
show ip dhcp sessions
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-dhcp
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show ip dhcp sessions
DHCP sessions (1):
```

##	Serial	PON-port	ONT-ID	Service	IP	MAC	Vid
GEM	Life time						
----	-----	-----	-----	-----	-----	-----	-----
1	ELTX6C000090	1	1	1	192.168.101.75	E0:D9:E3:6A:28:F0	1100
129	3503						

show ip dhcp sessions <FILTER>

Displays active dhcp sessions by filter.

Syntax

```
show ip dhcp sessions <FILTER> <VALUE>
```

Parameters

<FILTER>

show ip dhcp sessions <FILTER>

Displays active dhcp sessions by filter.

Syntax

```
show ip dhcp sessions <FILTER> <VALUE>
```

Parameters

<FILTER> — filters for MAC table:

- interface — filter dhcp sessions by interface type. <VALUE> values are available for this filter:

- gpon-port — filter dhcp sessions of the specified gpon-ports;
- ont- filter dhcp sessions of the specified ont;
- vlan — filter dhcp sessions by vlan. <VALUE> values are available for this filter:
 - vlan index [1-4094]. The parameter can be specified as a range or an enumeration (For example: vlan 10-30 or vlan 10,40,70).

Privilege group

view-dhcp

Command mode

ROOT

Example

```
LTP-16N# show ip dhcp sessions interface ont 1/1
DHCP sessions (1):
##      Serial      PON-port  ONT-ID  Service  IP              MAC              Vid
GEM     Life time
-----
1       ELTX6C000090  1         1       1        192.168.101.75  E0:D9:E3:6A:28:F0  1100
129     3503
```

show ip pppoe sessions

Displays active dhcp sessions.

Syntax

show ip pppoe sessions

Parameters

The command does not contain any parameters.

Privilege group

view-pppoe

Command mode

ROOT

Example

```
LTP-16N# show ip pppoe sessions
```

```
PPPoE sessions (2):
```

##	Serial	PON-port	Ont ID	GEM	Client MAC	Session ID	Duration
Unblock							
1	ELTX74000A34	8	20	882	E0:D9:E3:9C:D4:5B	0x39cf	0:07:02
2	ELTX7400018C	7	31	1190	E0:D9:E3:9C:C3:0C	0x0eb4	0:06:54

show ip pppoe sessions (FILTER)

Displays active dhcp sessions by filter.

Syntax

```
show ip pppoe sessions <FILTER> <VALUE>
```

Parameters

<FILTER> — filters for MAC table:

- interface — filter ppoe sessions by interface type. <VALUE> values are available for this filter:
 - gpon-port — filter ppoe sessions of the specified gpon-ports;
 - ont- filter ppoe sessions of the specified ont;
- vlan — filter ppoe sessions by vlan. <VALUE> values are available for this filter:
 - vlan index [1-4094]. The parameter can be specified as a range or an enumeration (For example: vlan 10-30 or vlan 10,40,70).

Privilege group

```
view-pppoe
```

Command mode

```
ROOT
```

Example

```
LTP-16N# show ip pppoe sessions interface pon 8
```

```
PPPoE sessions (1):
```

##	Serial	pon-port	Ont ID	GEM	Client MAC	Session ID	Duration
Unblock							
1	ELTX74000A34	8	20	882	E0:D9:E3:9C:D4:5B	0x39cf	0:07:02

show license

Displays information on the current license.

Syntax

```
show license
```

Parameters

The command does not contain parameters.

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show license
Active license information:
  License valid:          yes
  Version:                1.2
  Board SN:               GP3D000033
  Licensed vendor:        all
  Licensed ONT count:     unlimited
  Licensed ONT online:    n/a
```

show log buffer

Displays last log from buffer.

Syntax

```
show log buffer
```

Parameters

The command does not contain any parameters.

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show log buffer
09 Sep 11:49:31 NOTICE DNA BCM-API - Device reset: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Device connection is complete system_mode is gpon__16_x
09 Sep 11:49:51 NOTICE DNA BCM-API - Connect to device: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Qumran CLI command (vlan create 3470 pbm=ge140)
execution: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Qumran CLI command (port xe128 speed=1000) execution:
OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Qumran CLI command (vlan add 3470 pbm=xe128) execution:
OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 1 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 2 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 3 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 4 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 5 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 6 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 7 front-port info: OK
09 Sep 11:49:51 NOTICE DNA BCM-API - Getting 8 front-port info: OK
```

show log files

Displays the list of files with logs.

Syntax

show log files

Parameters

The command does not contain any parameters.

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show log files

##      Name                Size in bytes      Date of last modification
1      LTP.log.2            109640            Tue Sep  8 10:11:18 2020
2      LTP.log.3            120404            Tue Sep  8 10:11:18 2020
3      LTP.log               3340             Tue Sep  8 10:27:40 2020
Total files: 3
```

show log <FILENAME>

Displays logs from file.

Syntax

```
show log <FILENAME>
```

Parameters

<FILENAME> — file name from the list that available by the **show log files** command.

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show log LTP.log
09 Sep 11:50:51 NOTICE DNA BCM-API      - ONT 1/1 activation: OK
09 Sep 11:51:01 NOTICE DNA BCM-API      - Found unactivated ONU ELTX6C000090 on PON-PORT 1
09 Sep 11:51:01 NOTICE ONT 1/1         - Activation: OK
09 Sep 11:51:03 NOTICE ONT 1/1         - ONT Vendor: ELTX Type: NTU1421GCWAC (1v1) FW version:
3.40.2.109
09 Sep 11:51:03 NOTICE DNA BCM-API      - Alloc-ID 767 (ONT 1/1) creation: OK
09 Sep 11:51:03 NOTICE DNA BCM-API      - Flow (id 63998, type 0) destruction: OK
09 Sep 11:51:03 NOTICE DNA BCM-API      - Upstream flow 63998 creation: OK
09 Sep 11:51:03 NOTICE FSM-PON         - OLT side datapath configured.
09 Sep 11:51:04 NOTICE ONT 1/1         - ONT_OK Successful activation and configuration
09 Sep 11:51:19 NOTICE DNA BCM-API      - Flow (id 1598, type 2) destruction: OK
09 Sep 11:51:19 NOTICE DNA BCM-API      - Multicast flow 1598 creation: OK
09 Sep 11:51:19 NOTICE DNA BCM-API      - Updating group #0, command - add: OK
09 Sep 11:51:32 NOTICE DNA BCM-API      - Flow (id 63998, type 0) destruction: OK
09 Sep 11:51:32 NOTICE DNA BCM-API      - Alloc-ID 767 (PON port 1) destruction: OK
```

show lldp stats [interface front-port <PORT-ID>]

Displays LLDP statistics. Output is filtered by interface if adding the interface front-port <PORT-ID> parameter.

Syntax

```
show lldp stats
show lldp stats interface front-port <PORT-ID>
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 1,5).

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show lldp stats
Table Last Change Time: 0 days 00:00:00
Table Inserts: 0
Table Deletes: 0
Table AgeOut Count: 0
```

LLDP interface statistics

##	Tx total	Rx total	Rx errors	TLVs discarded	AgeOut count
----	-----	-----	-----	-----	-----
1	0	0	0	0	0
2	0	0	0	0	0
3	15	0	0	0	0
4	0	0	0	0	0
5	15	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0

show lldp local [interface front-port (PORT-ID)]

Displays local information on LLDP. Output is filtered by interface if adding the interface front-port <PORT-ID> parameter.

Syntax

```
show lldp local
show lldp local interface front-port <PORT-ID>
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 1,5).

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show lldp local
Local Interfaces LLDP info
```

##	Chassis ID	Port ID	Capabilities	Management address	TTL
----	-----	-----	-----	-----	-----
1	E4:5A:D4:1A:05:60	front-port 1	Bridge	192.168.10.145	20
2	E4:5A:D4:1A:05:60	front-port 2			20
3	E4:5A:D4:1A:05:60	front-port 3			20
4	E4:5A:D4:1A:05:60	front-port 4			20
5	E4:5A:D4:1A:05:60	front-port 5			20
6	E4:5A:D4:1A:05:60	front-port 6			20
7	E4:5A:D4:1A:05:60	front-port 7			20
8	E4:5A:D4:1A:05:60	front-port 8			20

show lldp neighbors [interface front-port <PORT-ID>] [verbose]

Displays information about neighbors received via LLDP. Output is filtered by interface if adding the interface front-port <PORT-ID> parameter. Adding verbose expands output.

Syntax

```
show lldp neighbors
show lldp neighbors verbose
show lldp neighbors interface front-port <PORT-ID>
show lldp neighbors interface front-port <PORT-ID> verbose
```

Parameters

<PORT-ID> – port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 1,5).

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# show lldp neighbors interface front-port 1
Neighbor Interfaces LLDP info
```

##	Chassis ID	Port ID	Capabilities	Management address	TTL
----	-----	-----	-----	-----	-----
1	A8:F9:4B:84:F5:40	te1/0/2	Bridge, Router	192.168.11.150	37/40

show running-config

Displays current running configuration.

Syntax

```
show running-config
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config
configure terminal
  management ip 192.168.100.1
exit
commit
exit
```

show running-config all

Displays all current running configuration, including default values.

Syntax

```
show running-config all
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config all
configure terminal
  interface pon-port 1
    no shutdown
  exit
  interface pon-port 2
    no shutdown
  exit
  interface pon-port 3
    no shutdown
  exit
  interface pon-port 4
    no shutdown
  exit
  interface pon-port 5
    no shutdown
  exit
  interface pon-port 6
    no shutdown
  exit
  interface pon-port 7
    no shutdown
  exit
  interface pon-port 8
--More--(0%)
```

show running-config alarm

Displays the running configuration for alarms. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config alarm [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```

LTP-16N# show running-config alarm

LTP-16N# show running-config alarm all
alarm
  system-fan max-rpm 12000
  system-fan min-rpm 2000
  system-fan severity critical
  system-fan in true
  system-fan out true
  system-load-average level 0
  system-load-average severity critical
  system-load-average in true
  system-load-average out true
  system-ram free 12
  system-ram severity critical
  system-ram in true
  system-ram out true
  system-temperature sensor pon-ports-1 min 0
  system-temperature sensor pon-ports-1 max 70
  system-temperature sensor pon-ports-2 min 0
  system-temperature sensor pon-ports-2 max 70
  system-temperature sensor front-ports min 0
  system-temperature sensor front-ports max 70
  system-temperature sensor switch min 0
  system-temperature sensor switch max 70
  system-temperature severity critical
--More--(46%)

```

show running-config cli

Displays the running configuration for CLI. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config cli [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config cli all
cli timeout 1800
cli max-sessions 5
```

show running-config interface front-port

Displays the running configuration for front-port. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config interface front-port <PORT-ID> [all]
```

Parameters

<PORT-ID> — port index in the range [1-8]. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 1,5).

Privilege group

view-configuration, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show running-config interface front-port 1-2 all
interface front-port 1
  no shutdown
  no vlan allow 1-4094
  switchport mode trunk
exit
interface front-port 2
  no shutdown
  no vlan allow 1-4094
  switchport mode trunk
exit
```

show running-config interface pon-port

Displays the running configuration for pon-port. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config interface pon-port <PORT-ID> [all]
```

Parameters

<PORT-ID> — port index in the range [1-16]. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 1,3,5,7).

Privilege group

view-configuration, config-interface-pon-port

Command mode

ROOT

Example

```
LTP-16N# show running-config interface pon-port 15,16 all
interface pon-port 15
    no shutdown
exit
interface pon-port 16
    no shutdown
exit
```

show running-config interface ont

Displays the running configuration for ONT. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

show running-config interface ont <PORT-ID>[/ONT-ID] [all]

Parameters

- <PORT-ID> — pon port index in the range [1-16]. The parameter can be set by a range or enumeration (For example: interface ont 1-3 or interface ont 1,3,5,7).
- [ONT-ID] — ONT index in the range [1-128]. The parameter can be set by a range or enumeration (For example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

view-configuration, config-interface-ont

Command mode

ROOT

Example

```
LTP-16N# show running-config interface ont 1/1 all
interface ont 1/1
  service 1 profile cross-connect "" dba ""
  service 2 profile cross-connect "" dba ""
  service 3 profile cross-connect "" dba ""
  service 4 profile cross-connect "" dba ""
  service 5 profile cross-connect "" dba ""
  service 6 profile cross-connect "" dba ""
  service 7 profile cross-connect "" dba ""
  service 8 profile cross-connect "" dba ""
  service 9 profile cross-connect "" dba ""
  service 10 profile cross-connect "" dba ""
  service 11 profile cross-connect "" dba ""
  service 12 profile cross-connect "" dba ""
  service 13 profile cross-connect "" dba ""
  service 14 profile cross-connect "" dba ""
  service 15 profile cross-connect "" dba ""
  service 16 profile cross-connect "" dba ""
  service 17 profile cross-connect "" dba ""
  service 18 profile cross-connect "" dba ""
  service 19 profile cross-connect "" dba ""
  service 20 profile cross-connect "" dba ""
  service 21 profile cross-connect "" dba ""
  service 22 profile cross-connect "" dba ""
--More--(63%)
```

show running-config ip dhcp

Displays running configuration for DHCP. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip dhcp [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip dhcp
ip dhcp
    snooping enable
exit
```

show running-config ip igmp

Displays running configuration for IGMP. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip igmp [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip igmp
ip igmp snooping
```

show running-config ip pppoe

Displays running configuration for PPPoE. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip pppoe [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip pppoe
ip pppoe
    snooping enable
exit
```

show running-config ip snmp

Displays candidate configuration for SNMP. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip snmp [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip snmp
ip snmp contact Eltex
```

show running-config ip ssh

Displays running configuration for SSH. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip ssh [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip ssh
no ip ssh enable
```

show running-config ip telnet

Displays running configuration for TELNET. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip telnet [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip telnet
no ip telnet enable
```

show running-config ip ntp

Displays running configuration for NTP. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config ip ntp [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip ntp all
ip ntp enable
ip ntp server 192.168.100.2
ip ntp interval 1024
ip ntp timezone hours 0 minutes 0
no ip ntp daylightsaving start
no ip ntp daylightsaving end
```

show running-config port-channel

Displays running configuration for port-channel. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

show running-config interface port-channel <PORT-CHANNEL-ID>

Parameters

<PORT-CHANNEL-ID> — ID of port-channel. The parameter can be a range or an enumeration (for example: interface interface port-channel 1-5 or interface interface interface port-channel 1,5).

Privilege group

view-configuration, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show running-config interface port-channel 1
interface port-channel 1
  vlan allow 99
exit
```

show running-config port-channel load-balance

Displays running configuration for port-channel load-balance. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config interface port-channel load-balance
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-interface-front-port

Command mode

ROOT

Example

```
LTP-16N# show running-config interface port-channel load-balance
interface port-channel load-balance hash src-mac dst-mac
interface port-channel load-balance polynomial 0x84a1
```

show running-config logging

Displays running configuration for logging. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config logging [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-logging

Command mode

ROOT

Example

```
LTP-16N# show running-config logging all
logging
  module dna loglevel notice
  module dna bcm-api loglevel notice
  module dna tools loglevel notice
  module dna loglib loglevel notice
  module dna cfgdb loglevel notice
  module dna conf-task loglevel notice
  module dna olt loglevel notice
  module dna pon-port 1 loglevel notice
  module dna pon-port 2 loglevel notice
  module dna pon-port 3 loglevel notice
  module dna pon-port 4 loglevel notice
  module dna pon-port 5 loglevel notice
  module dna pon-port 6 loglevel notice
  module dna pon-port 7 loglevel notice
  module dna pon-port 8 loglevel notice
  module dna pon-port 9 loglevel notice
  module dna pon-port 10 loglevel notice
  module dna pon-port 11 loglevel notice
  module dna pon-port 12 loglevel notice
  module dna pon-port 13 loglevel notice
  module dna pon-port 14 loglevel notice
  module dna pon-port 15 loglevel notice
--More--(1%)
```

show running-config lldp

Displays running configuration for lldp. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config lldp [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config lldp
lldp enable
```

show running-config management

Displays the running configuration of network management settings. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config management [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-management

Command mode

ROOT

Example

```
LTP-16N# show running-config management all
management ip 192.168.1.2
management mask 255.255.255.0
management gateway 0.0.0.0
management vid 1
```

show running-config mirror (ID)

Displays the running configuration of network management settings. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config management [all]
```

Parameters

<ID> – mirror ID. The parameter can be a range or an enumeration (For example: mirror 1-5 or mirror 1,5).

Privilege group

view-configuration

Command mode

ROOT

Example

```

LTP-16N# show running-config mirror 1 all
mirror 1
  no source interface pon-port 1
  no source interface pon-port 2
  no source interface pon-port 3
  no source interface pon-port 4
  no source interface pon-port 5
  no source interface pon-port 6
  no source interface pon-port 7
  no source interface pon-port 8
  no source interface pon-port 9
  no source interface pon-port 10
  no source interface pon-port 11
  no source interface pon-port 12
  no source interface pon-port 13
  no source interface pon-port 14
  no source interface pon-port 15
  no source interface pon-port 16
  no source interface front-port 1
  no source interface front-port 2
  no source interface front-port 3
  no source interface front-port 4
  no source interface front-port 5
  no source interface front-port 6
  no source interface front-port 7
  no source interface front-port 8
  no destination interface
exit
LTP-16N#

```

show running-config pon

Displays the running configuration for pon. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config pon [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config pon all
pon network svlan-ethertype 802.1q
```

show running-config privilege

Displays running configuration for privileges. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config privilege [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-user

Command mode

ROOT

Example

```
LTP-16N# show running-config privilege all
privilege 1 view-interface-ont
privilege 2 view-interface-ont
privilege 2 commands-interface-ont
privilege 4 view-interface-ont
privilege 4 config-general
privilege 4 config-interface-ont
privilege 4 commands-interface-ont
privilege 4 commands-configuration
privilege 5 view-interface-ont
privilege 5 config-general
privilege 5 config-interface-ont
privilege 5 config-interface-ont-profile
privilege 5 commands-interface-ont
privilege 5 commands-configuration
privilege 6 view-interface-ont
privilege 6 config-general
privilege 6 config-interface-pon-port
privilege 6 config-interface-ont
privilege 6 config-interface-ont-profile
privilege 6 commands-interface-ont
privilege 6 commands-configuration
privilege 6 commands-interface-pon-port
privilege 7 view-igmp
--More--(18%)
```

show running-config profile cross-connect

Displays running configuration for cross-connect profile. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config profile cross-connect [NAME] [all]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show running-config profile cross-connect HSI
profile cross-connect HSI
  bridge enable
  bridge group 10
  outer vid 100
exit

LTP-16N# show running-config profile cross-connect all
profile cross-connect HSI
  pon vid no-change
  user vid untagged
  description
  bridge enable
  bridge group 10
  outer vid 100
  traffic-model n-to-1
exit
```

show running-config profile dba

Displays running configuration for DBA profile. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config profile dba [NAME] [all]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show running-config profile dba all
  profile dba dba
    description
    bandwidth besteffort 1244160
    bandwidth guaranteed 512
    allocation-scheme share-t-cont
    mode non-status-reporting
  exit
```

show running-config profile ports

Displays running configuration for ports profile. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config profile ports [NAME] [all]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```

LTP-16N# show running-config profile ports
  profile ports pp
    port 1 bridge group 10
  exit

LTP-16N# show running-config profile ports all
  profile ports pp
    no port 1 multicast
    port 1 bridge group 10
    port 1 igmp downstream priority 0
    port 1 igmp downstream tag-control pass
    port 1 igmp downstream vid 0
    port 1 igmp upstream priority 0
    port 1 igmp upstream tag-control pass
    port 1 igmp upstream vid 0
    no port 2 multicast
    port 2 bridge group 0
    port 2 igmp downstream priority 0
    port 2 igmp downstream tag-control pass
    port 2 igmp downstream vid 0
    port 2 igmp upstream priority 0
    port 2 igmp upstream tag-control pass
    port 2 igmp upstream vid 0
    no port 3 multicast
    port 3 bridge group 0
    port 3 igmp downstream priority 0
    port 3 igmp downstream tag-control pass
    port 3 igmp downstream vid 0
    port 3 igmp upstream priority 0
    port 3 igmp upstream tag-control pass
    port 3 igmp upstream vid 0
    no port 4 multicast
    port 4 bridge group 0
    port 4 igmp downstream priority 0
    port 4 igmp downstream tag-control pass
    port 4 igmp downstream vid 0
    port 4 igmp upstream priority 0
    port 4 igmp upstream tag-control pass
    port 4 igmp upstream vid 0
    igmp mode snooping
    igmp querier
    igmp robustness 2
    igmp version 3
    igmp query interval 125
--More--(94%)

```

show running-config system

Displays running of system configuration. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config system [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config system all
system hostname LTP-16N
system fan speed auto
```

show running-config profile management

Displays running configuration for management interface profile. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config profile management [NAME]
```

Parameters

[NAME] — profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-interface-ont-profile

Command mode

ROOT

Example

```
LTP-16N# show running-config profile management
profile management MANAGEMENT
    iphost id 3
exit
```

show running-config profile dhcp-opt82

Displays running configuration for dhcp-opt82 profile.

Syntax

```
show running-config profile dhcp-opt82 [NAME]
```

Parameters

[NAME] – profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-dhcp

Command mode

ROOT

Example

```
LTP-16N# show running-config profile dhcp-opt82
profile dhcp-opt82 DHCP-82
    ont-sn-format numerical
exit
```

show running-config profile pppoe-ia

Displays running configuration for pppoe-ai profile.

Syntax

```
show running-config profile pppoe-ia [NAME]
```

Parameters

[NAME] – profile name. A set of characters from 1 to 15 in length.

Privilege group

view-configuration, config-pppoe

Command mode

ROOT

Example

```
LTP-16N# show running-config profile pppoe-ia
profile pppoe-ia PPPOE
    ont-sn-format numerical
exit
```

show running-config qos

Displays running configuration for QoS. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config qos [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config qos all
no qos enable
qos type 802.1p
qos 802.1p mode sp
qos 802.1p wfq queues-weight 7 15 23 31 39 47 55 63
qos 802.1p map 0 to 0
qos 802.1p map 1 to 1
qos 802.1p map 2 to 2
qos 802.1p map 3 to 3
qos 802.1p map 4 to 4
qos 802.1p map 5 to 5
qos 802.1p map 6 to 6
qos 802.1p map 7 to 7
```

show running-config user

Displays running configuration for users. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config user [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-user

Command mode

ROOT

Example

```
LTP-16N# show running-config user
user test encrypted_password $6$YocBrXdZ$/QPfwUYYrSdXgTm4YpCvo7D5sxiq0gfQ.Lbf.xaEDMvXLE9DqD/
6HEG4sBSKfbA1uicizAr0SIIJRqgdgeuii0
user test privilege 0
```

show running-config vlan

Displays running configuration for VLAN. When adding an **all** postfix, the whole configuration will be displayed, including the default values.

Syntax

```
show running-config vlan <VID> [all]
```

Parameters

<VID> – VLAN ID in the range [1-4094].

Privilege group

view-configuration, config-vlan

Command mode

ROOT

Example

```

LTP-16N# show running-config vlan 1000
vlan 1000
    ip igmp snooping enable
exit

LTP-16N# show running-config vlan 1000 all
vlan 1000
    name
    ip igmp snooping enable
    ip igmp snooping querier enable
    ip igmp query-interval 125
    ip igmp query-response-interval 100
    ip igmp robustness-variable 2
    ip igmp last-member-query-interval 10
    ip igmp snooping replace source-ip 0.0.0.0
    ip igmp snooping querier ip-address 0.0.0.0
    no ip igmp snooping querier fast-leave
    ip igmp snooping querier dscp 0
    ip igmp version v1-v2-v3
    ip igmp snooping mrouter pon-port 1
    ip igmp snooping mrouter pon-port 2
    ip igmp snooping mrouter pon-port 3
    ip igmp snooping mrouter pon-port 4
    ip igmp snooping mrouter pon-port 5
    ip igmp snooping mrouter pon-port 6
    ip igmp snooping mrouter pon-port 7
    ip igmp snooping mrouter pon-port 8
    ip igmp snooping mrouter pon-port 9
    ip igmp snooping mrouter pon-port 10
--More--(58%)

```

show system environment

Displays device system information.

Syntax

show system environment

Parameters

The command does not contain any parameters.

Privilege group

view-system

Command mode

ROOT

Example

```

LTP-16N# show system environment
System information:
  CPU load average (1m, 5m, 15m):      4.540    2.380    0.960
  Free RAM/Total RAM (Gb):             4.59/7.76
  Free disk space/Total disk space(Gb): 5.73/6.13

Temperature:
  Sensor PON SFP 1 (*C):                50
  Sensor PON SFP 2 (*C):                37
  Sensor Front SFP (*C):                41
  Sensor Switch (*C):                   35

Fan state:
  Fan 1 (rpm):                          offline
  Fan 2 (rpm):                          offline
  Fan 3 (rpm):                          offline
  Fan 4 (rpm):                          offline

Power supply information:
  Module 1:                             offline
  Module 2:                             PM160 220/12 1vX
    Type:                               AC
    Intact:                             true

HW information
  FPGA version:                         2.0
  PLD version:                          2.0

Factory
  Type:                                 LTP-16N
  Revision:                             1v2
  SN:                                   GP3D0000026
  MAC:                                  E0:D9:E3:FF:24:B0

```

show version

Displays current firmware version.

Syntax

show version

Parameters

The command does not contain any parameters.

Privilege group

view-system

Command mode

ROOT

Example

```
LTP-16N# LTP-16N# show version
Eltex LTP-16N: software version 1.0.0 build 1128 on 08.09.2020 05:44
```

show mac

Displays MAC table.

Syntax

```
show mac
show mac verbose <FILTER> <FILTER_TYPE>
show mac <FILTER> <FILTER_TYPE>
```

Parameters

<FILTER> – excluding or including filter – include, exclude.

<FILTER_TYPE> – attribute by which filtering is performed – interface, mac, svid, cvid, gem, type. Multiple attributes for filtering can be specified.

Privilege group

config-vlan, config-igmp, config-general, config-system, config-logging, config-interface-pon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port, config-access, config-cli, config-management, config-user

Command mode

ROOT

Example

```
LTP-16N# show mac verbose
Loading MAC table...
MAC                port                svid    cvid    ONT    gem    type
-----
2C:56:DC:99:8E:63  pon-port 6          1100    ----- 6/2    181    Dynamic
1 MAC entries
```

show mac <FILTER>

Displays MAC table by filter.

Syntax

show mac interface <FILTER> <VALUE>

Parameters

<FILTER> — filters for MAC table:

- interface — filter MAC table by interface type. <VALUE> values are available for this filter:
 - front-port — filter MAC addresses of the specified front-ports;
 - pon-port — filter MAC addresses of the specified pon-ports;
 - port-channel — filter MAC addresses of the specified port-channels;
- vlan — filter MAC table by vlan. <VALUE> values are available for this filter:
 - vlan index [1-4094]. The parameter can be specified as a range or an enumeration (For example: vlan 10-30 or vlan 10,40,70).

Privilege group

- show mac interface: config-vlan, config-igmp, config-general, config-system, config-logging, config-interface-gpon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port, config-access, config-cli, config-management, config-user;
- show mac vlan: view-configuration, view-firmware, config-vlan, config-igmp, config-ppoe, config-general, config-system, config-logging, config-interface-gpon-port, config-interface-ont, config-interface-ont-profile, config-interface-front-port.

Command mode

ROOT

Example

```
LTP-16N# show mac vlan 5
Loading MAC table...

                MAC                port
B4:2E:99:98:0C:76    front-port    5
1 MAC entries
```

terminal datadump

terminal datadump

Disables page output in this session.

Syntax

```
[no] terminal datadump
```

Parameters

The command does not contain any parameters.

Privilege group

commands-general

Command mode

ROOT

Example

```
LTP-16N# terminal datadump
```

5 LTP-16N(T). Configuration commands

AAA configuration

- [enable](#)
- [accounting](#)
- [authentication](#)
- [authorization](#)
- [radius-server host <IP>](#)
- [radius-server host <IP> priority](#)
- [radius-server host <IP> key](#)
- [radius-server host <IP> port](#)
- [radius-server host <IP> timeout](#)
- [tacacs-server host <IP>](#)
- [tacacs-server host <IP> priority](#)
- [tacacs-server host <IP> key](#)
- [tacacs-server host <IP> port](#)
- [tacacs-server <IP> timeout](#)
- [service name](#)
- [service protocol](#)

enable

Enables agent.

Syntax

[no] enable

Default value

no enable

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(config)(aaa)# enable
```

accounting

Enables accounting via TACACS+ or RADIUS server. Command accounting can be set via TACACS+ server.

Syntax

```
accounting radius start-stop  
accounting tacacs+ start-stop  
accounting tacacs+ commands  
no accounting
```

Default value

no accounting

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# accounting radius start-stop
```

authentication

Enables authentication via TACACS+ or RADIUS server.

Syntax

```
authentication radius  
authentication tacacs+  
no authentication
```

Default value

no authentication

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# authentication radius
```

authorization

Enables authorization via TACACS+ or RADIUS server. Command authorization can be set via TACACS+ server.

Syntax

```
authorization radius privilege
authorization tacacs+ privilege
authorization tacacs+ commands
no authorization
```

Default value

```
no authorization
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# authorization tacacs+ privilege
```

radius-server host <IP>

RADIUS server address that will be used for AAA can be specified by this command. Up to three servers can be specified.

Syntax

```
[no] radius-server host <IP>
```

Parameters

<IP> — server IP address in the AAA.BBB.CCC.DDD format.

Default value

```
radius-server host 0.0.0.0
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# radius-server host 192.168.1.1
```

radius-server host <IP> priority

RADIUS server priority from 1 to 3, where 1 is the highest priority, can be specified by this command.

Syntax

```
[no] radius-server host <IP> priority <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — server priority from 1 to 3.

Default value

```
radius-server host 0.0.0.0 priority 1
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# radius-server host 192.168.1.1 priority 2
```

radius-server host <IP> key

Key for encrypting requests to RADIUS servers can be specified by this command.

Syntax

```
[no] radius-server host <IP> key <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — server key from 1 to 64 characters.

Default value

```
radius-server host 0.0.0.0 key secret
```

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# radius-server host 192.168.1.1 key secret12345
```

radius-server host <IP> port

Port that will be used for the RADIUS servers can be specified by this command.

Syntax

```
[no] radius-server host <IP> port <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — the port that will be used to communicate with the server, from 1 to 65535.

Default value

```
radius-server host 0.0.0.0 port 1812
```

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# radius-server host 192.168.1.1 port 345
```

radius-server host <IP> timeout

Timeout for the response from the server can be specified by this command. When the timeout expires, the request will be sent to the next server by priority.

Syntax

```
[no] radius-server host <IP> timeout <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — server response timeout, from 1 to 30 seconds.

Default value

radius-server host 0.0.0.0 timeout 3

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# radius-server host 192.168.1.1 timeout 20
```

tacacs-server host <IP>

TACACS server address that will be used for AAA can be specified by this command. Up to three servers can be specified.

Syntax

[no] tacacs-server host <IP>

Parameters

<IP> – server IP address in the AAA.BBB.CCC.DDD format.

Default value

tacacs-server host 0.0.0.0

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# tacacs-server host 192.168.1.1
```

tacacs-server host <IP> priority

TACACS server priority from 1 to 3, where 1 is the highest priority, can be specified by this command.

Syntax

```
[no] tacacs-server host <IP> priority <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — server priority from 1 to 3.

Default value

```
tacacs-server host 0.0.0.0 priority 1
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# tacacs-server host 192.168.1.1 priority 2
```

tacacs-server host <IP> key

Key for encrypting requests to TACACS servers can be specified by this command.

Syntax

```
[no] tacacs-server host <IP> key <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — server key from 1 to 64 characters.

Default value

```
tacacs-server host 0.0.0.0 key secret
```

Privilege group

```
config-access
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# tacacs-server host 192.168.1.1 key secret12345
```

tacacs-server host <IP> port

Port that will be used for the TACACS servers can be specified by this command.

Syntax

```
[no] tacacs-server host <IP> port <VALUE>
```

Parameters

- <IP> — server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> — the port that will be used to communicate with the server, from 1 to 65535.

Default value

```
tacacs-server host 0.0.0.0 port 49
```

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# tacacs-server host 192.168.1.1 port 345
```

tacacs-server <IP> timeout

Timeout for the response from the server can be specified by this command. When the timeout expires, the request will be sent to the next server by priority.

Syntax

```
[no] tacacs-server host <IP> timeout <VALUE>
```

Parameters

- <IP> – server IP address in the AAA.BBB.CCC.DDD format;
- <VALUE> – server response timeout, from 1 to 30 seconds.

Default value

```
tacacs-server host 0.0.0.0 timeout 3
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# tacacs-server host 192.168.1.1 timeout 20
```

service name

Name that will be substituted in requests to the TACACS server can be specified by this command. Some servers require a different format than the standard.

Syntax

```
service name <VALUE>  
no service name
```

Parameters

<VALUE> – name value to be substituted in requests to the server, from 1 to 32 characters.

Default value

```
service name "shell"
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# service name "test"
```

service protocol

Protocol that will be substituted in requests to the TACACS server can be specified by this command. Some servers require a different format than the standard.

Syntax

```
service protocol <VALUE>  
no service protocol
```

Parameters

<VALUE> – protocol value to be substituted in requests to the server, from 1 to 32 characters.

Default value

```
service protocol ""
```

Privilege group

```
config-access
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# service protocol "test"
```

Alarm configuration

- alarm
 - config-change severity
 - config-change in
 - config-save severity
 - config-save in
 - system-fan severity
 - system-fan in
 - system-fan out
 - system-fan max-rpm
 - system-fan min-rpm
 - system-load-average severity
 - system-load-average in
 - system-load-average out
 - system-load-average level
 - system-login severity
 - system-login in
 - system-logout severity
 - system-logout in
 - system-ram severity
 - system-ram in
 - system-ram out
 - system-ram free
 - system-temperature severity
 - system-temperature in
 - system-temperature out
 - system-temperature sensor <TYPE> max
 - system-temperature sensor <TYPE> min
 - pon-alarm-dfi severity
 - pon-alarm-dfi in
 - pon-alarm-dgi severity
 - pon-alarm-dgi in
 - pon-alarm-dowi severity
 - pon-alarm-dowi in
 - pon-alarm-lcdgi severity
 - pon-alarm-lcdgi in
 - pon-alarm-loai severity
 - pon-alarm-loai in
 - pon-alarm-loami severity
 - pon-alarm-loami in
 - pon-alarm-lofi severity
 - pon-alarm-lofi in
 - pon-alarm-loki severity
 - pon-alarm-loki in
 - pon-alarm-los severity
 - pon-alarm-los in
 - pon-alarm-los out
 - pon-alarm-losi severity
 - pon-alarm-losi in
 - pon-alarm-rdii severity
 - pon-alarm-rdii in
 - pon-alarm-sdi severity

- [pon-alarm-sdi in](#)
- [pon-alarm-sufi severity](#)
- [pon-alarm-sufi in](#)
- [pon-alarm-tiwi severity](#)
- [pon-alarm-tiwi in](#)
- [ont-link-down in](#)
- [ont-link-down severity](#)
- [ont-link-down ttl](#)
- [ont-link-up in](#)
- [ont-link-up severity](#)
- [ont-link-up ttl](#)
- [ont-no-config in](#)
- [ont-no-config severity](#)
- [ont-no-config ttl](#)
- [ont-state-changed in](#)
- [ont-state-changed severity](#)
- [ont-state-changed ttl](#)
- [ont-valid-config in](#)
- [ont-valid-config severity](#)
- [ont-valid-config ttl](#)
- [mac-duplicate in](#)
- [mac-duplicate severity](#)
- [mac-duplicate ttl](#)

alarm

Switch to alarm configuration mode.

Syntax

```
alarm
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-general
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# alarm
```

config-change severity

Setting the category of normalizing alarm when applying the configuration.

Syntax

```
config-change severity <SEVERITY>  
no config-change
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-alarm

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# config-change severity critical
```

config-change in

Configuration of sending normalizing alarm snmp-trap when configuration is applied.

Syntax

```
config-change in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# config-change in true
```

config-save severity

Setting the category of normalizing alarm when saving the configuration.

Syntax

```
config-save severity <SEVERITY>  
no config-save
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# config-save severity critical
```

config-save in

Configuration of sending normalizing alarm snmp-trap when configuration is saved.

Syntax

```
config-save in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# config-save in true
```

system-fan severity

Fan alarm category configuration.

Syntax

```
system-fan severity <SEVERITY>  
no system-fan
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-alarm

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-fan severity major
```

system-fan in

Configuration of sending alarm snmp-trap by fans.

Syntax

system-fan in <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-fan in true
```

system-fan out

Configuration of sending normalizing alarm snmp-trap by fans.

Syntax

system-fan out <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-fan out true
```

system-fan max-rpm

Configuration of the upper value of the fan speed at which an alarm will occur.

Syntax

```
system-fan max-rpm <VALUE>  
no system-fan
```

Parameters

<VALUE> — value in the range [600-20000].

Default value

12000

Privilege group

config-alarm

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-fan max-rpm 1000
```

system-fan min-rpm

Configuration of the lower value of the fan speed at which an alarm will occur.

Syntax

```
system-fan min-rpm <VALUE>  
no system-fan
```

Parameters

<VALUE> — value in the range [600-8000].

Default value

2000

Privilege group

config-alarm

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-fan min-rpm 1000
```

system-load-average severity

Configuration of alarm category by average CPU load.

Syntax

```
system-load-average severity <SEVERITY>  
no load-average
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-alarm

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-load-average severity major
```

system-load-average in

Configuration of sending alarm snmp-trap by average CPU load.

Syntax

```
system-load-average in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-load-average in true
```

system-load-average out

Configuration of sending normalizing alarm snmp-trap by average CPU load.

Syntax

system-load-average out <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-load-average out true
```

system-load-average level

Configuration of the threshold for the average CPU load at which an accident will trigger.

Syntax

```
system-load-average level <VALUE>  
no system-load-average
```

Parameters

<VALUE> — value in the range [0-250].

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-load-average level 100
```

system-login severity

Configuration of the normalizing alarm category by user authentication.

Syntax

```
system-login severity <SEVERITY>  
no system-login
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-login severity major
```

system-login in

Configuration of sending normalizing alarm snmp-trap by user authorization.

Syntax

```
system-login in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-login in true
```

system-logout severity

Configuration of the normalizing alarm category by user disconnection.

Syntax

```
system-logout severity <SEVERITY>  
no system-logout
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-logout severity major
```

system-logout in

Configuration of sending normalizing alarm snmp-trap by user logout.

Syntax

system-logout in <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-logout in true
```

system-ram severity

Memory alarm category configuration.

Syntax

```
system-ram severity <SEVERITY>
no system-ram
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-ram severity major
```

system-ram in

Configuration of sending alarm snmp-trap by memory.

Syntax

```
system-ram in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-ram in true
```

system-ram out

Configuration of sending normalizing alarm snmp-trap by memory.

Syntax

```
system-ram out <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-ram out true
```

system-ram free

Set the alarm threshold value from memory.

Syntax

```
system-ram free <VALUE>  
no system-ram
```

Parameters

<VALUE> — value in the range [0-100].

Default value

12

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-ram free 20
```

system-temperature severity

Temperature sensors alarm category configuration.

Syntax

```
system-temperature severity <SEVERITY>  
no system-temperature
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-temperature severity major
```

system-temperature in

Configuration of sending alarm snmp-trap by temperature sensors.

Syntax

```
system-temperature in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-temperature in true
```

system-temperature out

Configuration of sending normalizing alarm snmp-trap by temperature sensors.

Syntax

system-temperature out <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-temperature out true
```

system-temperature sensor <TYPE> max

Set the maximum temperature at which an accident will trigger at the specified sensor.

Syntax

```
system-temperature sensor <TYPE> max <VALUE>
no system-temperature
```

Parameters

<TYPE> — sensors:

- gpon-ports-1
- gpon-ports-2
- front-ports
- switch

<VALUE> — values from 0 to 100 in Celsius degrees.

Default value

70

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-temperature sensor switch max 80
```

system-temperature sensor <TYPE> min

Set the maximum temperature at which an accident will trigger at the specified sensor.

Syntax

```
system-temperature sensor <TYPE> min <VALUE>
no system-temperature
```

Parameters

<TYPE> — sensors:

- pon-ports-1
- pon-ports-2
- front-ports
- switch

<VALUE> — values from 0 to 100 in Celsius degrees.

Default value

0

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-temperature sensor switch min 5
```

pon-alarm-dfi severity

Configuration of Deactivate Failure pon alarm category for ONUi.

Syntax

```
pon-alarm-dfi severity <SEVERITY>  
no pon-alarm-dfi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-dfi severity major
```

pon-alarm-dfi in

Configuration of sending Deactivate Failure pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-dfi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-dfi in true
```

pon-alarm-dgi severity

Configuration of Dying-Gasp pon alarm category for ONUi.

Syntax

```
pon-alarm-dgi severity <SEVERITY>  
no pon-alarm-dfi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-dgi severity major
```

pon-alarm-dgi in

Configuration of sending Dying-Gasp pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-dgi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-dgi in true
```

pon-alarm-dowi severity

Configuration of Drift of Window pon alarm category for ONUi.

Syntax

```
pon-alarm-dowi severity <SEVERITY>  
no pon-alarm-dowi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-dowi severity major
```

pon-alarm-dowi in

Configuration of sending Drift of Window pon alarm snmp-trap for ONUi.

Syntax

pon-alarm-dowi in <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-dowi in true
```

pon-alarm-lcdgi severity

Configuration of Loss of Channel Delineation pon alarm category for ONUi.

Syntax

```
pon-alarm-lcdgi severity <SEVERITY>  
no pon-alarm-lcdgi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-lcdgi severity major
```

pon-alarm-lcdgi in

Configuration of sending Loss of GEM Channel Delineation pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-lcdgi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-lcdgi in true
```

pon-alarm-loai severity

Configuration of Loss of Acknowledge pon alarm category for ONUi.

Syntax

```
pon-alarm-loai severity <SEVERITY>  
no pon-alarm-loai
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-loai severity major
```

pon-alarm-loai in

Configuration of sending Loss of Acknowledge pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-loai in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-loai in true
```

pon-alarm-loami severity

Configuration of PLOAM loss pon alarm category for ONUi.

Syntax

```
pon-alarm-loami severity <SEVERITY>  
no pon-alarm-loami
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-loami severity major
```

pon-alarm-loami in

Configuration of sending PLOAM loss pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-loami in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

```
true
```

Privilege group

```
config-general
```

Command mode

```
ALARM
```

Example

```
LTP-16N(config)(alarm)# pon-alarm-loami in true
```

pon-alarm-lofi severity

Configuration of Loss of Frame pon alarm category for ONUi.

Syntax

```
pon-alarm-lofi severity <SEVERITY>  
no pon-alarm-lofi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

```
critical
```

Privilege group

```
config-general
```

Command mode

```
ALARM
```

Example

```
LTP-16N(config)(alarm)# pon-alarm-lofi severity major
```

pon-alarm-lofi in

Configuration of sending Loss of Frame pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-lofi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-lofi in true
```

pon-alarm-loki severity

Configuration of Loss of Key pon alarm category for ONUi.

Syntax

```
pon-alarm-loki severity <SEVERITY>  
no pon-alarm-loki
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-loki severity major
```

pon-alarm-loki in

Configuration of sending Loss of Key pon alarm snmp-trap for ONUi.

Syntax

pon-alarm-loki in <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-loki in true
```

pon-alarm-los severity

Configuration of Loss of Signal pon alarm category.

Syntax

```
pon-alarm-los severity <SEVERITY>  
no pon-alarm-los
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-los severity major
```

pon-alarm-los in

Configuration of sending Loss of Signal pon alarm snmp-trap.

Syntax

```
pon-alarm-los in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-los in true
```

pon-alarm-los out

Configuration of sending Loss of Signal normalizing pon alarm snmp-trap.

Syntax

```
pon-alarm-los out <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-los out true
```

pon-alarm-losi severity

Configuration of Loss of Signal pon alarm category for ONUi.

Syntax

```
pon-alarm-losi severity <SEVERITY>  
no pon-alarm-losi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-losi severity major
```

pon-alarm-losi in

Configuration of sending Loss of Signal pon alarm snmp-trap for ONUi.

Syntax

pon-alarm-losi in <SEND>

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-losi in true
```

pon-alarm-rdii severity

Configuration of Remote Defect Indication pon alarm category for ONUi.

Syntax

```
pon-alarm-rdii severity <SEVERITY>  
no pon-alarm-rdii
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-rdii severity major
```

pon-alarm-rdii in

Configuration of sending Remote Defect Indication pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-rdii in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-rdii in true
```

pon-alarm-sdi severity

Configuration of Signal Degraded pon alarm category for ONUi.

Syntax

```
pon-alarm-sdi severity <SEVERITY>  
no pon-alarm-sdi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-sdi severity major
```

pon-alarm-sdi in

Configuration of sending Signal Degraded pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-sdi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-sdi in true
```

pon-alarm-sufi severity

Configuration of Start-up Failure pon alarm category for ONUi.

Syntax

```
pon-alarm-sufi severity <SEVERITY>  
no pon-alarm-sufi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-sufi severity major
```

pon-alarm-sufi in

Configuration of sending Start-up Failure pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-sufi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-sufi in true
```

pon-alarm-tiwi severity

Configuration of Transmission Interference Warning pon alarm category for ONUi.

Syntax

```
pon-alarm-tiwi severity <SEVERITY>  
no pon-alarm-tiwi
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-tiwi severity major
```

pon-alarm-tiwi in

Configuration of sending Transmission Interference Warning pon alarm snmp-trap for ONUi.

Syntax

```
pon-alarm-sufi in <SEND>
```

Parameters

<SEND> — send snmp trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# pon-alarm-tiwi in true
```

ont-link-down in

Configuration of sending SNMP trap on ont-link-down PON alarm. An alarm indicates that link is down on ONT.

Syntax

```
ont-link-down in <SEND>
no ont-link-down
```

Parameters

<SEND> — send SNMP trap or not:

- true
- false

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-down in true
```

ont-link-down severity

Configuration of sending SNMP trap on ont-link-down PON alarm. An alarm indicates that link is down on ONT.

Syntax

```
ont-link-down severity <SEVERITY>  
no ont-link-down severity
```

Parameters

<SEVERITY> – alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-down in true
```

ont-link-down ttl

Configuration of ont-link-down alarm lifetime. An alarm indicates that link is down on ONT.

Syntax

```
ont-link-down ttl <VALUE>  
no ont-link-down ttl
```

Parameters

<VALUE> — parameter is responsible for alarm normalization and storing. From -1 to 2147483647 seconds.

"-1" — send trap and do not save alarm to active;

"0" — store alarm until normalizing event.

Default value

-1

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-down in true
```

ont-link-up in

Configuration of sending SNMP trap on ont-link-up PON alarm. An alarm indicates that link is up on ONT.

Syntax

```
ont-link-up in <SEND>  
no ont-link-up
```

Parameters

<SEND> — send SNMP trap or not:

- true;
- false.

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-up in true
```

ont-link-up severity

Configuration of sending SNMP trap on ont-link-up PON alarm. An alarm indicates that link is up on ONT.

Syntax

```
ont-link-up severity <SEVERITY>
no ont-link-up severity
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-up in true
```

ont-link-up ttl

Configuration of ont-link-up alarm time. An alarm indicates that link is up on ONT.

Syntax

```
ont-link-up ttl <VALUE>
no ont-link-up ttl
```

Parameters

<VALUE> — parameter is responsible for alarm normalization and storing. From -1 to 2147483647 seconds.

"-1" — send trap and do not save alarm to active;

"0" — store alarm until normalizing event.

Default value

-1

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-up in true
```

ont-no-config in

Configuration of sending SNMP trap on ont-no-config PON alarm. An alarm indicates that link is up on ONT.

Syntax

```
ont-no-config in <SEND>  
no ont-no-config
```

Parameters

<SEND> — send SNMP trap or not:

- true;
- false.

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-down in true
```

ont-no-config severity

Configuration of sending SNMP trap on ont-no-config PON alarm. An alarm indicates that there is no configuration on ONT.

Syntax

```
ont-no-config severity <SEVERITY>
no ont-no-config severity
```

Parameters

<SEVERITY> — alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-no-config in true
```

ont-no-config ttl

Configuration of ont-no-config alarm lifetime. An alarm indicates that there is no configuration on ONT.

Syntax

```
ont-no-config ttl <VALUE>
no ont-no-config ttl
```

Parameters

<VALUE> — parameter is responsible for alarm normalization and storing. From -1 to 2147483647 seconds.

"-1" — send trap and do not save alarm to active;

"0" — store alarm until normalizing event.

Default value

-1

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-no-config in true
```

ont-state-changed in

Configuration of sending SNMP trap on ont-state-changed PON alarm. An alarm indicates a state change on ONT.

Syntax

```
ont-state-changed in <SEND>  
no ont-state-changed
```

Parameters

<SEND> — send SNMP trap or not:

- true;
- false.

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-state-changed in true
```

ont-state-changed severity

Configuration of sending SNMP trap on ont-state-changed PON alarm. An alarm indicates a state change on ONT.

Syntax

```
ont-state-changed severity <SEVERITY>  
no ont-state-changed severity
```

Parameters

<SEVERITY> – alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-down in true
```

ont-state-changed ttl

Configuration of ont-state-changed alarm lifetime. An alarm indicates a state change on ONT.

Syntax

```
ont-no-config ttl <VALUE>  
no ont-no-config ttl
```

Parameters

<VALUE> – parameter is responsible for alarm normalization and storing. From -1 to 2147483647 seconds.

"-1" – send trap and do not save alarm to active;

"0" – store alarm until a normalizing event.

Default value

-1

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-state-changed in true
```

ont-valid-config in

Configuration of sending SNMP trap on ont-valid-config PON alarm. An alarm indicates that there is a configuration for ONT.

Syntax

```
ont-valid-config in <SEND>  
no ont-valid-config
```

Parameters

<SEND> — send SNMP trap or not:

- true;
- false.

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-valid-config in true
```

ont-valid-config severity

Configuration of sending SNMP trap on ont-valid-config PON alarm. An alarm indicates that there is a configuration for ONT.

Syntax

```
ont-valid-config severity <SEVERITY>  
no ont-valid-config severity
```

Parameters

<SEVERITY> – alarm severity rating:

- info
- minor
- major
- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-state-changed in true
```

ont-valid-config ttl

Configuration of ont-valid-config alarm lifetime. An alarm indicates that there is a configuration for ONT.

Syntax

```
ont-valid-config ttl <VALUE>
no ont-valid-config ttl
```

Parameters

<VALUE> – parameter is responsible for alarm normalization and storing. From -1 to 2147483647 seconds

"-1" – send trap and do not save alarm to active;

"0" – store alarm until a normalizing event.

Default value

-1

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-valid-config in true
```

mac-duplicate in

Configuration of sending SNMP trap on mac-duplicate PON alarm. An alarm indicates that there is MAC addresses duplication, meaning that one MAC address was learnt on two OLT ports.

Syntax

```
mac-duplicate in <SEND>
no mac-duplicate
```

Parameters

<SEND> — send SNMP trap or not:

- true;
- false.

Default value

true

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-mac-duplicate in true
```

mac-duplicate severity

Configuration of sending SNMP trap on mac-duplicate PON alarm. An alarm indicates that there is MAC addresses duplication, meaning that one MAC address was learnt on two OLT ports.

Syntax

```
mac-duplicate severity <SEVERITY>
no mac-duplicate severity
```

Parameters

<SEVERITY> — категория важности аварии:

- info
- minor
- major

- critical

Default value

info

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# mac-duplicate in true
```

mac-duplicate ttl

Configuration of mac-duplicate alarm lifetime. An alarm indicates that there is MAC addresses duplication, meaning that one MAC address was learnt on two OLT ports.

Syntax

```
mac-duplicate ttl <VALUE>  
no mac-duplicate ttl
```

Parameters

<VALUE> — parameter is responsible for alarm normalization and storing. From -1 to 2147483647 seconds.

"-1" — send trap and do not save alarm to active;

"0" — store alarm until a normalizing event.

Default value

-1

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# mac-duplicate in true
```

CLI configuration

- [cli timeout](#)
- [cli max-session](#)

cli timeout

CLI session timeout configuration (timeout - user inactivity time after which the session ends).

Syntax

```
cli timeout <VALUE>  
no cli timeout
```

Parameters

<VALUE> – timeout value in the range [5-157680000] seconds.

Default value

1800

Privilege group

config-cli

Command mode

CONFIG

Example

```
LTP-16N(configure)# cli timeout 3600
```

cli max-session

Set maximum number of CLI sessions that can be simultaneously connected to the device.

Syntax

```
cli max-sessions <VALUE>  
no cli max-session
```

Parameters

<VALUE> — number of sessions [1-5].

Default value

5

Privilege group

config-cli

Command mode

CONFIG

Example

```
LTP-16N(configure)# cli max-session 2
```

DHCP configuration

- [ip dhcp](#)
 - [opt82 profile \(PROFILE\)](#)
 - [opt82 profile \(PROFILE\) vid \(VID\)](#)
 - [snooping enable](#)
 - [relay enable](#)
 - [relay server-ip](#)

ip dhcp

Switch to DHCP configuration mode.

Syntax

```
ip dhcp
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-dhcp
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# ip dhcp
```

opt82 profile (PROFILE)

Setting the configuration profile assigned to all VLANs. The profile configuration is described in section [dhcp-opt82 profile configuration](#).

Syntax

```
opt82 profile <PROFILE>  
no opt82 profile
```

Parameters

<PROFILE> — name of the set profile. String from 1 to 15 characters long.

Privilege group

```
config-dhcp
```

Command mode

CONFIG-DHCP

Example

```
LTP-16N(config)(dhcp)# opt82 profile DHCP
```

opt82 profile (PROFILE) vid (VID)

Sets the configuration profile for the specified vlan. The profile configuration is described in section [dhcp-opt82 profile configuration](#).

Syntax

```
opt82 profile <PROFILE> vid <VID>  
no opt82 profile vid <VID>
```

Parameters

<PROFILE> – name of the set profile. String from 1 to 15 characters long;

<VID> – VLAN ID of the set profile.

Privilege group

config-dhcp

Command mode

CONFIG-DHCP

Example

```
LTP-16N(config)(dhcp)# opt82 profile DHCP vid 10
```

snooping enable

Enables DHCP snooping mode.

Syntax

```
[no] snooping enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-dhcp

Command mode

CONFIG-DHCP

Example

```
LTP-16N(config)(dhcp)# snooping enable
```

relay enable

Enables DHCP relay mode.

Syntax

[no] relay enable

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-dhcp

Command mode

CONFIG-DHCP

Example

```
LTP-16N(config)(dhcp)# relay enable
```

relay server-ip

Configuring the server address and VLAN ID to which DHCP packets will be relayed.

Syntax

[no] relay server-ip <IP> vid <VID>

Parameters

<IP> — IP address. Specified in AAA.BBB.CCC.DDD format, where each part takes value [0..255];

<VID> — VLAN ID in the range [1-4094].

Privilege group

config-dhcp

Command mode

CONFIG-DHCP

Example

```
LTP-16N(config)(dhcp)# relay server-ip 10.101.11.1 vid 330
```

IGMP configuration

- [ip igmp snooping](#)
- [ip igmp proxy report enable](#)
- [ip igmp proxy report range](#)

ip igmp snooping

Enables global IGMP snooping mode. IGMP snooping configuration for a specific VLAN is located in [VLAN configuration](#).

Syntax

```
[no] ip igmp proxy snooping enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-igmp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip igmp snooping enable
```

ip igmp proxy report enable

Enables IGMP Proxy mode.

Syntax

```
[no] ip igmp proxy report enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-igmp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip igmp proxy report enable
```

ip igmp proxy report range

Setting addresses rang and VLAN for proxying.

Syntax

```
[no] ip igmp proxy report range <MC_IP> <MC_IP> from <<VID>|all> to <VID>
```

Parameters

<MC_IP> – IP address in multicast range;

<VID> – VLAN ID in the range [1-4094].

Privilege group

config-igmp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip igmp proxy report range 224.0.0.1 224.255.255.25 from all to 320
```

Interface front-port configuration

- [interface front-port](#)
 - [channel-group port-channel](#)
 - [shutdown](#)
 - [switchport mode](#)
 - [vlan allow](#)
 - [lldp mode](#)
 - [lldp optional-tlv](#)

interface front-port

Switch to the front ports configuration mode.

Syntax

```
[no] interface front-port <ID>
```

Parameters

<ID> — port index in the range [1-8]. The parameter can be a range or an enumeration (for example: interface front-port 1-5 or interface front-port 1,5).

Privilege group

```
config-interface-front-port
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# interface front-port 1-5
```

channel-group port-channel

Add interface to the aggregation group. When setting force, port settings will be replaced with the group settings.

Syntax

```
[no] channel-group port-channel <ID>
```

Parameters

<ID> — aggregation group index.

Privilege group

```
if-front-view
```

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# channel-group port-channel 1
```

shutdown

Disable interface.

Syntax

```
[no] shutdown
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-port-channel-1)# shutdown
```

switchport mode

Set VLAN operation mode.

Syntax

```
[no] switchport mode <VALUE>
```

Parameters

<VALUE> — operation modes:

- trunk — interface that accepts only tagged traffic.

Default value

trunk

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# switchport mode trunk
```

vlan allow

Allow VLAN passage on the port-channel.

Syntax

[no] vlan allow <VLAN-ID>

Parameters

<VLAN-ID> — vlan id in the range of [1-4094].

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-1)# vlan allow 100
```

lldp mode

Set LLDPDU sending mode.

Syntax

lldp mode <VALUE>
[no] lldp mode

Parameters

<VALUE> — LLDP operation mode. May take values:

- disabled — disabled;
- transmit-only — only transmit packets;
- receive-only — only receive packets;
- transmit-receive — both transmit and receive.

Default value

disabled

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# lldp mode transmit-receive
```

lldp optional-tlv

Add TLV to transmitted LLDPDU.

Syntax

```
lldp optional-tlv <VALUE>  
[no] optional-tlv [<VALUE>|all]
```

Parameters

<VALUE> — LLDP operation mode. May take values:

- port-description;
- system-name;
- system-descriptio;
- system-capabilities;
- management-address.

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# lldp optional-tlv management-address
```

Interface ont configuration

- [interface ont](#)
 - [broadcast-filter](#)
 - [description](#)
 - [multicast-filter](#)
 - [password](#)
 - [profile ports](#)
 - [profile management](#)
 - [serial](#)
 - [service \(ID\) profile cross-connect](#)
 - [service \(ID\) profile dba](#)
 - [rf-port-state](#)
 - [iphost management static \(SETTINGS\)](#)
 - [shutdown](#)

interface ont

Switch to the ont configuration mode.

Syntax

```
[no] interface ont <PORT-ID>[/ONT-ID]
```

Parameters

<PORT-ID> — pon port index in the range of [1-16]. The parameter can be set by a range or enumeration (for example: interface ont 1-3 or interface ont 1,3,5,7);

[ONT-ID] — ONT index in the range of [1-128]. The parameter can be set by a range or enumeration (for example: interface ont 1/5-7 or interface ont 1-7/1,3,5,7).

Privilege group

config-interface-ont

Command mode

CONFIG

Example

```
LTP-16N(configure)# interface ont 1/68,69
```

broadcast-filter

Enable filtering of tagged broadcast traffic on broadcast GEM.

Syntax

```
[no] broadcast-filter
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# broadcast-filter
```

description

Set interface description.

Syntax

```
description <VALUE>  
no description
```

Parameters

<VALUE> — characters set in the range from 1 to 127.

Privilege group

config-interface-ont

Command mode

PROFILE-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# description "VPN"
```

multicast-filter

Enable filtering of tagged multicast traffic on multicast GEM.

Syntax

```
[no] multicast-filter
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# multicast-filter
```

password

Set PON password for ONT.

Syntax

```
password <VALUE>  
no password
```

Parameters

<VALUE> — string of 10 characters length max.

Default value

0000000000

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# password 1111111111
```

profile ports

Set ports profile.

Syntax

```
profile ports <VALUE>
no profile ports
```

Parameters

<VALUE> — profile name.

Default value

```
profile ports ports1
```

Privilege group

```
config-interface-ont
```

Command mode

```
IF-ONT
```

Example

```
LTP-16N(config)(if-ont-1/1)# profile ports HSI-BRIDGE
```

profile management

Set management profile.

Syntax

```
profile management <VALUE>
no profile management
```

Parameters

<VALUE> — profile name.

Privilege group

```
config-interface-ont
```

Command mode

```
IF-ONT
```

Example

```
LTP-16N(config)(if-ont-1/1)# profile management ACS
```

serial

Set ports profile.

Syntax

```
serial <VALUE>
no serial
```

Parameters

<VALUE> — ONT serial number in AAAAXXXXXXXXXX or XXXXXXXXXXXXXXXXXXXX format, where A are latin uppercase letters, X are hexadecimal digits [0-F].

Privilege group

```
config-interface-ont
```

Command mode

```
IF-ONT
```

Example

```
LTP-16N(config)(if-ont-1/1)# serial ELTX6203370C
```

service <ID> profile cross-connect

Set cross-connect profile for service.

Syntax

```
service <ID> profile cross-connect <VALUE>
no service <ID> profile cross-connect
```

Parameters

<ID> — service index [1-32];

<VALUE> — profile name.

Privilege group

```
config-interface-ont
```

Command mode

```
IF-ONT
```

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 profile cross-connect HSI
```

service <ID> profile dba

Set DBA profile for service.

Syntax

```
service <ID> profile dba <VALUE>
no service <ID> profile dba
```

Parameters

<ID> — service index [1-32];

<VALUE> — profile name.

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 profile dba DBA-HSI
```

rf-port-state

ONT RF port management.

Syntax

```
rf-port-state <VALUE>
no rf-port-state
```

Parameters

<VALUE> — RF port state. Possible values:

- disabled;
- enabled;
- no-change.

Default value

Disabled

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# profile management ACS
```

iphost management static (SETTINGS)

Set static iphost network settings for the management ont profile.

Syntax

```
iphost management static <SETTINGS>
no iphost management static <SETTINGS>
```

Parameters

<SETTINGS> – network settings that should be configured:

- ip – management ont profile IP address. Specified in format of AAA.BBB.CCC.DDD;
- mask – management ont profile netmask. Specified in format of AAA.BBB.CCC.DDD;
- gateway – management ont profile gateway address. Specified in format of AAA.BBB.CCC.DDD.

Default values

- ip – 0.0.0.0;
- mask – 0.0.0.0;
- gateway – 0.0.0.0.

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# iphost management static ip 192.168.1.5 gateway 192.168.1.1
```

shutdown

ONT shutdown.

Syntax

```
[no] shutdown
```

Parameters

The command does not contain any parameters.

Privilege group

config-interface-ont

Default value

no shutdown

Command mode

config-interface-ont

Example

```
LTP-16N(config)(if-ont-1/1)# shutdown
```

Interface pon-port configuration

- [interface pon-port](#)
 - [shutdown](#)

interface pon-port

Switch to PON ports configuration mode.

Syntax

```
[no] interface pon-port <ID>
```

Parameters

<ID> — port index in the range of [1-16]. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 10,12).

Privilege group

config-interface-pon-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# interface pon-port 2-4,5
```

shutdown

Disable interface.

Syntax

[no] shutdown

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-interface-pon-port

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# shutdown
```

Interface port-channel configuration

- [interface port-channel](#)
 - [interface port-channel load-balance polynomial](#)
 - [interface port-channel load-balance hash](#)
- [Interface port-channel configuration](#)
 - [shutdown](#)
 - [vlan allow](#)
 - [psc mode round-robin](#)
 - [psc mode smooth-division](#)
 - [psc mode multiplication](#)

interface port-channel

Switch to the port-channel configuration mode.

Syntax

```
[no] interface port-channel <PORT-CHANNEL-ID>
```

Parameters

<PORT-CHANNEL-ID> — port-channel group index in the range of [1-32].

Privilege group

config-interface-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# interface port-channel
```

interface port-channel load-balance polynomial

Sets the polynomial to calculate the CRC.

Syntax

```
interface port-channel load-balance polynomial <POLYNOMIAL>
no interface port-channel load-balance polynomial
```

Parameters

<POLYNOMIAL> — polynomial. May take values:

- 0x8003;
- 0x8101;
- 0x84a1;
- 0x9019.

Privilege group

config-interface-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# interface port-channel load-balance polynomial 0x8101
```

interface port-channel load-balance hash

Sets the fields in the package from which the hash will be calculated.

Syntax

```
interface port-channel load-balance hash <PACKAGE-FIELDS>
no interface port-channel load-balance hash
```

Parameters

<PACKAGE-FIELDS> — fields in the package from which the hash will be calculated. From one to three fields can be selected:

- src-mac — source MAC address;
- dst-mac — destination MAC address;
- vlan — vlan field;
- ethertype — ethertype field.

Privilege group

config-interface-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# interface port-channel load-balance hash src-mac vlan ethertype
```

Interface port-channel configuration

shutdown

Disables port-channel.

Syntax

```
[no] shutdown
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-interface-front-port

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# shutdown
```

vlan allow

Enables VLAN passage on the port-channel.

Syntax

```
[no] vlan allow <VLAN-ID>
```

Parameters

<VLAN-ID> – VLAN ID in the range of [1-4094]. The parameter can be a range or an enumeration (for example: vlan allow 5-7 or vlan allow 1,3,5,7).

Privilege group

config-interface-front-port

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-front-1)# vlan allow 150
```

psc mode round-robin

Selects balancing mode. Each next packet will be used as next LAG port.

Syntax

```
psc mode round-robin
```

Parameters

The command does not contain any parameters.

Default value

```
psc mode smooth-division
```

Privilege group

```
config-interface-front-port
```

Command mode

```
IF-PORT-CHANNEL
```

Example

```
LTP-16N(config)(if-port-channel-1)# psc mode round-robin
```

psc mode smooth-division

Selects balancing mode. This mode is suitable for LAG ports, only when the number is not a not divisible by two.

Syntax

```
psc mode smooth-division
```

Parameters

The command does not contain any parameters.

Default value

```
psc mode smooth-division
```

Privilege group

```
config-interface-front-port
```

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# psc mode smooth-division
```

psc mode multiplication

Selects balancing mode. Balancing according to the *Member-ID = MemberCount* Hash/2^16* formula.

Syntax

```
psc mode multiplication
```

Parameters

The command does not contain any parameters.

Default value

```
psc mode smooth-division
```

Privilege group

```
config-interface-front-port
```

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# psc mode multiplication
```

LLDP configuration

- [lldp enable](#)
 - [lldp timer](#)
 - [lldp hold-multiplier](#)

lldp enable

Enables LLDP processing globally.

Syntax

```
[no] lldp enable
```

Parameters

The command does not contain any parameters.

Default value

Disable

Privilege group

config-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# lldp enable
```

lldp timer

Sets the period for sending updated LLDP information.

Syntax

```
lldp timer <VALUE>  
no lldp timer
```

Parameters

<VALUE> — time in seconds [5-32768].

Default value

30

Privilege group

config-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# lldp timer 100
```

lldp hold-multiplier

Sets the amount of time for the receiving device to hold received LLDP packets before dropping them.

Syntax

```
lldp hold-multiplier <VALUE>  
no lldp hold-multiplier
```

Parameters

<VALUE> — multiplier value in the range of [2-10].

Default value

4

Privilege group

config-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# lldp hold-multiplier 10
```

Logging configuration

- [logging](#)
 - [file size](#)
 - [permanent](#)
 - [remote server](#)
 - [remote loglevel](#)
 - [console loglevel](#)
 - [file loglevel](#)
 - [kernel](#)
 - [module cli](#)
 - [module dna](#)
 - [module fsm-pon](#)
 - [module igmp](#)
 - [module logmgr](#)
 - [module lldp](#)
 - [module usermgr](#)
 - [module dhcp](#)
 - [module snmp](#)
 - [module pppoe](#)

logging

Switch to logging configuration mode.

Syntax

```
logging
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-logging
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# logging
```

file size

Set the system log size.

Syntax

file size <VALUE>
no file size

Parameters

<VALUE> — log size in bytes, range of values [1000-300000].

Default value

3000000

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# file size 20000
```

permanent

Configuring the saving of syslog files to non-volatile memory.

Syntax

[no] permanent

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# permanent
```

remote server

Configuring syslog server address to which the logs will be sent. It is possible to specify up to three servers with unique IP addresses.

Syntax

```
remote server ip <IP> [PORT]
no remote server ip <IP>
```

Parameters

- <IP> — IP address specified as AAA. BBB. CCC. DDD, where each part takes the value [0..255];
- [PORT] — port, may take values [1-65535].

Default value

- <IP> — not specified;
- [PORT] — 514.

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# remote server ip 192.168.100.5 port 1000
```

remote loglevel

Setting the log level to be sent to the syslog server.

Syntax

```
remote loglevel <LOGLEVEL>
no remote loglevel
```

Parameters

<LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# remote loglevel debug
```

console loglevel

Setting the logging level for console connection.

Syntax

```
console loglevel <LOGLEVEL>  
no console loglevel
```

Parameters

<LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# console loglevel debug
```

file loglevel

Setting the log level for syslog file.

Syntax

```
file loglevel <LOGLEVEL>  
no file loglevel
```

Parameters

<LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# file loglevel debug
```

kernel

Setting the log level for kernel.

Syntax

```
kernel loglevel <LOGLEVEL>  
no kernel loglevel
```

Parameters

<LOGLEVEL> – logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# kernel loglevel debug
```

module cli

Setting the log level for CLI module.

Syntax

```
module cli [SUBMODULE] loglevel <LOGLEVEL>  
no cli [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [ipc | cfgdb | hash | log];
- <LOGLEVEL> – logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module cli loglevel debug
LTP-16N(logging)# module cli ipc loglevel debug
```

module dna

Setting the log level for DNA module.

Syntax

```
module dna [SUBMODULE [PORT-ID]] loglevel <LOGLEVEL>
no dna [SUBMODULE [PORT-ID]] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Value: [pon-port | conf-task | olt | ont | bcm-api | tools | loglib | cfgdb];
- [PORT-ID] – interface index for the pon-port and ont submodules:
 - pon-port – value <1-16>. With capability to set ranges and/or enumerations.
 - ont – value <1-16/1-128>. The first number is the port index, the second is the ONT index. With capability to set ranges and/or enumerations.
- <LOGLEVEL> – logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module dna loglevel debug
LTP-16N(logging)# module dna ont 1/1-5,10 loglevel debug
```

module fsm-pon

Setting the log level for FSM module.

Syntax

```
module fsm-pon [SUBMODULE] loglevel <LOGLEVEL>
no fsm-pon [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] — name of the submodule for which the logging will be changed. Values: [main-queue | callback-queue | info-queue | timers | task-queue | omci | listener | cfgdb];
- <LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice — for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module fsm-pon loglevel debug
LTP-16N(logging)# module fsm-pon timers loglevel debug
```

module igmp

Setting the log level for IGMP module.

Syntax

```
module igmp [SUBMODULE] loglevel <LOGLEVEL>
no igmp [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] — name of the submodule for which the logging will be changed. Values: [main-task | conf-task | cfgdb | msg-queue | timers];
- <LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module igmp loglevel debug
LTP-16N(logging)# module igmp conf-task loglevel debug
```

module logmgr

Setting the log level for log-mgr module.

Syntax

```
module logmgr [SUBMODULE] loglevel <LOGLEVEL>
no logmgr [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [cfgdb];
- <LOGLEVEL> – logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module logmgr loglevel debug
LTP-16N(logging)# module logmgr cfgdb loglevel debug
```

module lldp

Setting the log level for lldp module.

Syntax

```
module lldp [SUBMODULE] loglevel <LOGLEVEL>
no lldp [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] — name of the submodule for which the logging will be changed. Values: [cfgdb | task | timers | queue];
- <LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice — for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module lldp loglevel debug
LTP-16N(logging)# module lldp cfgdb loglevel debug
```

module usermgr

Setting the log level for user-mgr module.

Syntax

```
module usermgr [SUBMODULE] loglevel <LOGLEVEL>
no usermgr [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] — name of the submodule for which the logging will be changed. Values: [cfgdb];
- <LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice — for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module usermgr loglevel debug
LTP-16N(logging)# module usermgr cfgdb loglevel debug
```

module dhcp

Setting the log level for DHCP module.

Syntax

```
module dhcp [SUBMODULE] loglevel <LOGLEVEL>
no dhcp [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] — name of the submodule for which the logging will be changed. Values: [cfgdb | task | timers | queue];
- <LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice — for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module dhcp loglevel debug
LTP-16N(logging)# module dhcp cfgdb loglevel debug
```

module snmp

Setting the log level for SNMP module.

Syntax

```
module dhcp [SUBMODULE] loglevel <LOGLEVEL>
no dhcp [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] — name of the submodule for which the logging will be changed. Values: [cfgdb | ipc | custom-layer];
- <LOGLEVEL> — logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module snmp loglevel debug
LTP-16N(logging)# module snmp ipc loglevel debug
```

module pppoe

Setting the log level for PPPoE module.

Syntax

```
module pppoe [SUBMODULE] loglevel <LOGLEVEL>
no pppoe [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [cfgdb | queue | task];
- <LOGLEVEL> – logging level. Values: [critical | error | warning | notice | info | debug].

Default value

notice – for module and all submodules

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# module pppoe loglevel debug
LTP-16N(logging)# module pppoe ipc loglevel debug
```

Mirror configuration

- `mirror(ID)`
 - `destination interface front-port`
 - `source interface`

`mirror(ID)`

Switch to the mirroring configuration mode.

Syntax

```
[no] mirror <ID>
```

Parameters

<ID> — mirror ID in the range of [1-15].

Privilege group

config-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# mirror 2
```

`destination interface front-port`

Set interface to which the mirrored traffic will be redirected. When specifying add-tag option, the mirrored traffic will be marked with additional tag.

Syntax

```
destination interface front-port <PORT-ID> [add-tag <VID>]
no destination interface
```

Parameters

- <ID> — port index in the range of [1-8];
- <VID> — VLAN ID in the range of [1-4094].

Privilege group

config-interface-front-port

Command mode

MIRROR

Example

```
LTP-16N(config)(mirror-1)# destination interface front-port 1 add-tag 444
```

source interface

Set listened interface. If necessary, the direction of the traffic to be mirrored can be selected, as well as mirror a separate VLAN.

Syntax

```
source interface front-port/pon-port <PORT-ID> [vlan <VID> <DIRECTION>]
no source interface front-port/pon-port <PORT-ID>
```

Parameters

- <PORT-ID> — port index. For pon-port in the range of [1-16], for front-port — [1-8];
- <VID> — VLAN ID in the range of [1-4094];
- <DIRECTION> — tx or rx. Direction for the mirrored traffic.

Privilege group

```
config-interface-front-port
```

Command mode

```
MIRROR
```

Example

```
LTP-16N(config)(mirror-1)# source interface front-port 1 vlan 100
```

NTP configuration

- [ip ntp enable](#)
 - [ip ntp interval](#)
 - [ip ntp server](#)
 - [ip ntp timezone](#)
 - [ip ntp daylightsaving start week](#)
 - [ip ntp daylightsaving start day](#)
 - [ip ntp daylightsaving end week](#)
 - [ip ntp daylightsaving end day](#)

ip ntp enable

Enables NTP service.

Syntax

[no] ip ntp enable

Parameters

The command does not contain any parameters.

Default value

Disable

Privilege group

config-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ntp enable
```

ip ntp interval

NTP server polling interval.

Syntax

```
ip ntp interval <VALUE>  
no ip ntp interval
```

Parameters

<VALUE> — time in seconds.

Default value

1024

Privilege group

config-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ntp interval 2048
```

ip ntp server

Sets NTP server address.

Syntax

```
ip ntp server <IP>  
no ip ntp server
```

Parameters

<IP> — IP specified in the AAA.BBB.CCC.DDD format, where each part takes values [0..255].

Privilege group

config-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ntp server 192.168.100.100
```

ip ntp timezone

Timezone configuration.

Syntax

```
ip ntp timezone hours <HOURS> minutes <MIN>  
no ip ntp timezone
```

Parameters

- <HOURS> — timezone hours. May take values: [-12 — +12].
- <MIN> — timezone minutes. May take values: [0 — 59].

Privilege group

config-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ntp timezone hours 7 minutes 30
```

ip ntp daylightsaving start week

Configuration of the beginning of the transition to the daylight saving time period by ordinal week.

Syntax

```
ip ntp daylightsaving start month <MONTH> week <WEEK> weekday <DAY> start-hours <HOUR>
start-minutes <MIN>
no ip ntp daylightsaving start
```

Parameters

- <MONTH> — month in text format.
- <WEEK> — week number in a month.
- <DAY> — day of the week in text format.
- <HOURS> — hours. May take values: [0 — 23].
- <MIN> — minutes. May take values: [0 — 59].

Privilege group

config-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ntp daylightsaving start month July week First weekday Monday start-
hours 1 start-minutes 30
```

ip ntp daylightsaving start day

Configuration of the beginning of the transition to the daylight saving time period by specific date.

Syntax

```
ip ntp daylightsaving start month <MONTH> day <DAY> start-hours <HOUR> start-minutes <MIN>
no ip ntp daylightsaving start
```

Parameters

- <MONTH> — month in text format.
- <WEEK> — week number in a month.
- <DAY> — day of the week in text format.
- <HOURS> — hours. May take values: [0 — 23].
- <MIN> — minutes. May take values: [0 — 59].

Privilege group

```
config-general
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# ip ntp daylightsaving start month November day 1 start-hours 3 start-minutes 4
```

ip ntp daylightsaving end week

Configuration of the end of the transition to the daylight saving time period by ordinal week.

Syntax

```
ip ntp daylightsaving end month <MONTH> week <WEEK> weekday <DAY> end-hours <HOUR> end-minutes <MIN>
no ip ntp daylightsaving end
```

Parameters

- <MONTH> — month in text format.
- <WEEK> — week number in a month.
- <DAY> — day of the week in text format.
- <HOURS> — hours. May take values: [0 — 23].
- <MIN> — minutes. May take values: [0 — 59].

Privilege group

```
config-general
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# ip ntp daylightsaving end month July week First weekday Monday end-hours 1  
end-minutes 30
```

ip ntp daylightsaving end day

Configuration of the end of the transition to the daylight saving time period by specific date.

Syntax

```
ip ntp daylightsaving end month <MONTH> day <DAY> end-hours <HOUR> end-minutes <MIN>  
no ip ntp daylightsaving end
```

Parameters

- <MONTH> – month in text format.
- <WEEK> – week number in a month.
- <DAY> – day of the week in text format.
- <HOURS> – hours. May take values: [0 – 23].
- <MIN> – minutes. May take values: [0 – 59].

Privilege group

config-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ntp daylightsaving end month November day 1 end-hours 3 end-minutes 4
```

PON configuration

- [pon network](#)
- [pon olt unactivated-timeout](#)
- [pon olt ont-block-time](#)

pon network

Ethertype configuration for s-vlan.

Syntax

```
pon network svlan-ethertype <TYPE>
```

```
[no] pon network svlan-ethertype
```

Parameters

<TYPE> — standard type. May take values 802.1q, 802.1ad.

Default value

802.1q

Privilege group

config-switch

Command mode

CONFIG

Example

```
LTP-16N(configure)# pon network 802.1q
```

pon olt unactivated-timeout

Configuration of the ont lifetime in the unactivated status. After the time expires, ont will be removed from monitoring if ont was disabled.

Syntax

```
pon olt unactivated-timeout <TIME>
```

```
[no] pon olt unactivated-timeout
```

Parameters

<TIME> — unactivated ont lifetime. From 5 to 300 seconds.

Default value

60

Privilege group

config-switch

Command mode

CONFIG

Example

```
LTP-16N(configure)# pon olt unactivated-timeout 100
```

pon olt ont-block-time

Configuration of the ont blocking time when a duplication of MAC addresses is detected (learning one MAC address on two OLT ports)

Syntax

```
pon olt ont-block-time <TIME>
```

```
[no] pon olt ont-block-time
```

Parameters

<TIME> — unactivated ont lifetime. From 30 to 86400 seconds.

Default value

60

Privilege group

config-switch

Command mode

CONFIG

Example

```
LTP-16N(configure)# pon olt ont-block-time 100
```

PPPoE configuration

- [ip pppoe](#)
 - [pppoe-ia profile <PROFILE>](#)
 - [snooping enable](#)

ip pppoe

Switch to the PPPoE configuration mode.

Syntax

```
ip pppoe
```

Parameters

The command does not contain any parameters

Privilege group

config-pppoe

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip pppoe
```

pppoe-ia profile <PROFILE>

Setting the configuration profile. The profile configuration is described in section [pppoe-ia profile configuration](#).

Syntax

```
pppoe-ia profile <PROFILE>  
no pppoe-ia profile
```

Parameters

<PROFILE> – name of the set profile. String from 1 to 15 characters long.

Privilege group

config-pppoe

Command mode

CONFIG-PPPOE

Example

```
LTP-16N(config)(pppoe)# pppoe-ia profile PPP0E
```

snooping enable

Enable PPPoE snooping mode.

Syntax

```
[no] snooping enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-pppoe

Command mode

CONFIG-PPPOE

Example

```
LTP-16N(config)(pppoe)# snooping enable
```

Privilege configuration

privilege

Privilege level configuration.

Syntax

```
privilege <LEVEL> <VALUE>  
no privilege <LEVEL>
```

Parameters

- <LEVEL> — privilege level from 1 to 15.
- <VALUE> — privilege group. Values:
 - view-igmp;
 - view-dhcp;
 - view-pppoe;
 - view-system;
 - view-interface-ont;
 - view-interface-front-port;
 - view-configuration;
 - view-firmware;
 - config-vlan;
 - config-igmp;
 - config-dhcp;
 - config-pppoe;
 - config-system;
 - config-general;
 - config-logging;
 - config-interface-pon-port;
 - config-interface-ont;
 - config-interface-ont-profile;
 - config-interface-front-port;
 - config-access;
 - config-cli;
 - config-management;
 - config-user;
 - commands-interface-ont;
 - commands-configuration;
 - commands-copy;
 - commands-firmware;
 - commands-interface-pon-port;
 - commands-license;
 - commands-general;
 - commands-system;
 - commands-interface-front-port.

Privilege group

config-user

Command mode

CONFIG

Example

```
LTP-16N(configure)# privilege 13 view-switch
```

QoS (Quality of service) configuration

- [qos enable](#)
 - [qos type](#)
 - [qos 802.1p map](#)
 - [qos 802.1p mode](#)
 - [qos 802.1p wfq queues-weight](#)

qos enable

Enables traffic processing according to QoS.

Syntax

```
[no] qos enable
```

Parameters

The command does not contain any parameters.

Default value

Disable

Privilege group

commands-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# qos enable
```

qos type

Selects QoS operation mode. Currently, only 802.1p is supported.

Syntax

```
qos type <TYPE>  
no qos type
```

Parameters

<TYPE> — standard type. May take values: 802.1p.

Default value

802.1p

Privilege group`commands-general`**Command mode**`CONFIG`**Example**

```
LTP-16N(configure)# qos type 802.1p
```

qos 802.1p map

Sets the priority queue for this packet type.

Syntax

```
qos 802.1p map <PACKET-QUEUE> to <QUEUE>
no qos 802.1p map
```

Parameters

- <PACKET-QUEUE> — packet queue [0-7]. The parameter can be a range or an enumeration (for example: 1-6 or 0,2).
- <QUEUE> — queue to which packets will be sent.

Default value

By default, all packets are sent to queue 0.

Privilege group`commands-general`**Command mode**`CONFIG`**Example**

```
LTP-16N(configure)# qos 802.1p map 1 to 3
```

qos 802.1p mode

Sets queue operation mode.

Syntax

```
qos 802.1p mode <MODE>
no 802.1p mode
```

Parameters

<MODE> – queue operation mode. The following modes are supported:

- sp – Strict priority;
- wfq – Weighted Fair Queuing.

Default value

sp

Privilege group

commands-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# qos 802.1p mode wfq
```

qos 802.1p wfq queues-weight

Sets queue weight for WFQ operation mode. Set for each queue.

Syntax

```
qos 802.1p wfq queues-weight <WEIGHT> <WEIGHT> <WEIGHT> <WEIGHT> <WEIGHT> <WEIGHT>
<WEIGHT>
no 802.1p wfq queues-weight
```

Parameters

<WEIGHT> – queue weight [0-63].

Default value

7 15 23 31 39 47 55 63

Privilege group

commands-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# qos 802.1p wfq queues-weight 7 15 23 31 39 47 55 63
```

SNMP configuration

- [ip snmp community](#)
 - [ip snmp contact](#)
 - [ip snmp enable](#)
 - [ip snmp engine-id](#)
 - [ip snmp location](#)
 - [ip snmp trap-community](#)
 - [ip snmp traps](#)
 - [ip snmp user](#)

ip snmp community

SNMP community configuration.

Syntax

```
ip snmp community <ID> <NAME> <ACCESS>
no ip snmp community <ID>
```

Parameters

- <ID> — Community ID. May take values from 1 to 6;
- <NAME> — SNMP community name. String from 1 to 64 characters long;
- <ACCESS> — Level of access to SNMP tables. May take two values:
 - ro — read only;
 - rw — read write.

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp community 1 myCommunity access rw
```

ip snmp contact

Sets the SNMP contact.

Syntax

```
ip snmp contact <NAME>
no ip snmp contact
```

Parameters

<NAME> – SNMP community name. String from 1 to 255 characters long.

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp contact ELTEX
```

ip snmp enable

Enable SNMP on the device.

Syntax

[no] ip ssh enable

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp enable
```

ip snmp engine-id

Set SNMP engine ID.

Syntax

```
ip snmp engine-id <ENGINE-ID>  
no ip snmp engine-id
```

Parameters

<ENGINE-ID> — SNMP engine id. Possible values:

- Generate — generate engine-id;
- String of hex numbers from 10 to 64 characters long.

Default value

Enabled

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp engine-id 53e679ad83da7419350904efb9
```

ip snmp location

Sets the device location for SNMP.

Syntax

```
ip snmp location <LOCATION>
no ip snmp location
```

Parameters

<LOCATION> — device location for SNMP. String from 1 to 255 characters long.

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp location Novosibirsk
```

ip snmp trap-community

Sets trap community for SNMP.

 Single SNMP trap community is used for all SNMP trap destination addresses.

Syntax

```
ip snmp trap-community <COMMUNITY>
no ip snmp trap-community
```

Parameters

<COMMUNITY> – SNMP trap community name. String from 1 to 64 characters long.

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp trap-community myCommunity
```

ip snmp traps

Sets destination addresses and types of SNMP traps they accept.

Syntax

```
ip snmp traps <IP-ADDR> type <TYPE>
```

Parameters

- <IP-ADDR> – IP address where the SNMP traps will be sent;
- <TYPE> – type of sent SNMP traps.

Default value

Enabled

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp traps 192.168.1.5 type v2
```

ip snmp user

This command is used to configure SNMPv3 users.

Syntax

```
ip snmp traps <NAME> auth-passssword [AUTH-PASS] enc-password [ENC-PASS] access [ACCESS]
```

Parameters

- <NAME> – user name. String from 1 to 31 characters. Must not contain such characters as: '-', '_', '=', '+';
- [AUTH-PASS] – authentication password. String from 8 to 31 characters long;
- [ENC-PASS] – encryption password. String from 8 to 31 characters long;
- [ACCESS] – user access level. Possible values:
 - ro – read only;
 - rw – read/write.

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp user USER enc-password 1234567890 access rw
```

System configuration

- [system fan speed](#)
- [system hostname](#)

system fan speed

Sets fan rotation speed.

Syntax

```
system fan speed <VALUE>  
no system fan speed
```

Parameters

<VALUE> — fan rotation level percentage [15-100] or automatic mode — auto.

Default value

auto

Privilege group

config-system

Command mode

CONFIG

Example

```
LTP-16N(configure)# system fan speed 65
```

system hostname

Sets device name.

Syntax

```
system hostname <VALUE>  
no system hostname
```

Parameters

<VALUE> — character set from 1 to 64. It cannot start or end with "-" and "_" characters.

Default value

LTP-16N

Privilege group

config-system

Command mode

CONFIG

Example

```
LTP-16N(configure)# system hostname test
```

TELNET/SSH access configuration

- [ip ssh enable](#)
- [ip telnet enable](#)

ip ssh enable

Enables terminal availability via SSH protocol.

Syntax

```
[no] ip ssh enable
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ssh enable
```

ip telnet enable

Enable terminal availability via TELNET protocol.

Syntax

```
[no] ip telnet enable
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip telnet enable
```

VLAN configuration

- [vlan](#)
 - [name](#)
 - [ip igmp last-member-query-interval](#)
 - [ip igmp query-interval](#)
 - [ip igmp querier user prio](#)
 - [ip igmp query-response-interval](#)
 - [ip igmp robustness-variable](#)
 - [ip igmp snooping enable](#)
 - [ip igmp snooping mrouter](#)
 - [ip igmp snooping querier dscp](#)
 - [ip igmp snooping querier enable](#)
 - [ip igmp snooping fast-leave](#)
 - [ip igmp snooping querier ip-address](#)
 - [ip igmp snooping replace source-ip](#)
 - [ip igmp snooping static](#)
 - [ip igmp version](#)

vlan

Switch to the VLAN configuration mode.

Syntax

```
[no] vlan <VID>
```

Parameters

<VID> — VLAN ID in the range of [1-4094]. The parameter can be set by a range or enumeration (for example: vlan 1-100 or vlan 100,200,300).

Privilege group

```
config-vlan
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# vlan 100
```

name

Sets name for VLAN.

Syntax

```
name <VALUE>
no name
```

Parameters

<VALUE> — character set in the range of [1-15].

Privilege group

```
config-vlan
```

Command mode

```
VLAN
```

Example

```
LTP-16N(config)(vlan-100)# name HSI
```

ip igmp last-member-query-interval

Sets the request interval of the last participant for the given VLAN.

Syntax

```
ip igmp last-member-query-interval <VALUE>
no ip igmp last-member-query-interval
```

Parameters

<VALUE> — interval in the range [1-25] in seconds.

Default value

```
10
```

Privilege group

```
config-vlan
```

Command mode

```
VLAN
```

Example

```
LTP-16N(config)(vlan-100)# ip igmp last-member-query-interval 13
```

ip igmp query-interval

Sets General Query sending interval for this VLAN.

Syntax

```
ip igmp query-interval <VALUE>
no ip igmp query-interval
```

Parameters

<VALUE> — interval in the range [30-600] in seconds.

Default value

125

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp query-interval 300
```

ip igmp querier user prio

Sets 802.1p priority for query packets for this VLAN.

Syntax

```
ip igmp snooping querier user-prio <VALUE>
no ip igmp snooping querier user-prio
```

Parameters

<VALUE> — 802.1p priority from 1 to 7.

Default value

0

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping querier user-prio 3
```

ip igmp query-response-interval

Sets Query response wait time for this VLAN.

Syntax

```
ip igmp query-response-interval <VALUE>  
no ip igmp query-response-interval
```

Parameters

<VALUE> — interval in the range of [50-2000] in seconds.

Default value

100

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp query-response-interval 1000
```

ip igmp robustness-variable

Sets reliability variable for this VLAN.

Syntax

```
ip igmp robustness-variable <VALUE>  
no ip igmp robustness-variable
```

Parameters

<VALUE> — value in the range of [2-7].

Default value

2

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp robustness-variable 5
```

ip igmp snooping enable

Enables IGMP snooping for this VLAN.

Syntax

```
[no] ip igmp snooping enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping enable
```

ip igmp snooping mrouter

Sets the port that is connected to a multicast router for the given VLAN.

Syntax

```
[no] ip igmp snooping mrouter <PORT-TYPE> <PORT-ID>
```

Parameters

- <PORT-TYPE> — port type:
 - pon-port;
 - front-port.
- <PORT-ID> — port index. For pon-port — [1-16], front-port — [1-8].

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping mrouter gpon-port 10
```

ip igmp snooping querier dscp

Sets DSCP value for the generated Query for this VLAN.

Syntax

```
ip igmp snooping querier dscp <VALUE>  
no ip igmp snooping querier dscp
```

Parameters

<VALUE> – value in the range of [0-63].

Default value

0

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping querier dscp 10
```

ip igmp snooping querier enable

Enables Query processing for this VLAN.

Syntax

```
[no] ip igmp snooping querier enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping querier enable
```

ip igmp snooping fast-leave

Enables immediate group disconnection for this VLAN.

Syntax

```
[no] ip igmp snooping querier fast-leave
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping querier fast-leave
```

ip igmp snooping querier ip-address

Sets the value of the querier ip address for this VLAN.

Syntax

```
ip igmp snooping querier ip-address <IP>  
no ip igmp snooping querier ip-address
```

Parameters

<IP> — IP address specified as AAA. BBB. CCC. DDD, where each part takes the value [0..255].

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping querier ip-address 192.168.100.1
```

ip igmp snooping replace source-ip

Enables source-ip address spoofing in IGMP packets for this VLAN.

Syntax

```
ip igmp snooping replace source-ip <IP>
no ip igmp snooping replace source-ip
```

Parameters

<IP> — IP address, specified as AAA. BBB. CCC. DDD, where each part takes the value [0..255].

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping replace source-ip 192.168.100.2
```

ip igmp snooping static

Adds a static IGMP group for this VLAN to the specified port.

Syntax

```
[no] ip igmp snooping static <IP> interface <PORT-TYPE> <PORT-ID>
```

Parameters

- <IP> — IP address specified as AAA. BBB. CCC. DDD, where each part takes the value [0..255];
- <PORT-TYPE> — port type:
 - pon-port;
 - front-port.
- <PORT-ID> — port index. For pon-port — [1-16], front-port — [1-8].

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping static 224.224.100.1 interface front-port 3
```

ip igmp version

Sets the IGMP version compatibility for this VLAN.

Syntax

[no] ip igmp version <VALUE>

Parameters

<VALUE> — IGMP versions:

- v1-only
- v2-only
- v3-only
- v1-v2
- v1-v3
- v2-v3
- v1-v2-v3

Default value

v1-v2-v3

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp version v3-only
```

User configuration

user

Switch to the user configuration.

Syntax

```
user <name> <password> <privilege>  
no user <name>
```

Parameters

- <name> — user name from 1 to 31 lowercase and uppercase characters and '-', '_', '=', '+';
- <password> — user password from 8 to 31 characters long;
- <privilege> — privilege level from 0 to 15.

Privilege group

config-user

Command mode

CONFIG

Example

```
LTP-16N(configure)# user Ivanov password password123 privilege 14
```

OLT profiles configuration

dhcp-opt82 profile configuration

- [profile dhcp-opt82](#)
 - [description](#)
 - [circuit-id format](#)
 - [circuit-id mode](#)
 - [name](#)
 - [ont-sn-format](#)
 - [overwrite-opt82 enable](#)
 - [remote-id format](#)
 - [remote-id mode](#)

profile dhcp-opt82

Switch to the dhcp-opt82 profile configuration mode.

Syntax

```
[no] profile dhcp-opt82 <NAME>
```

Parameters

<NAME> — profile name. Set of characters in the range from 1 to 15.

Privilege group

config-dhcp

Command mode

CONFIG

Example

```
LTP-16N(configure)# profile dhcp-opt82 DHCP-PROFILE
```

description

Sets profile description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Privilege group

config-dhcp

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-DHCP82)# description DHCP-OPT82
```

circuit-id format

Sets circuit-id format for the current profile.

Syntax

```
circuit-id format <VALUE>
no circuit-id format
```

Parameters

<VALUE> — format parameter. String 240 characters long max. May take values:

- %HOSTNAME% — LTP host name;
- %MNGIP% — management interface IP address;
- %PON-PORT% — gpon port ID;
- %ONTID% — ONT administrator ID;
- %PONSERIAL% — ONT serial number;
- %GEMID% — GEM port ID;
- %VLAN0% — Outer VLAN ID;
- %VLAN1% — Inner VLAN ID;
- %MAC% — user device MAC address;
- %OLTMAC% — OLT MAC address;
- %OPT60% — Option60 of incoming packets;
- %OPT82_CID% — Option82 Circuit ID of incoming packets;
- %OPT82_RID% — Option82 Remote ID of incoming packets;
- %DESCR% — ONT configuration description.

Any characters except '%' can be between parameter values.

Privilege group

```
config-dhcp
```

Command mode

```
PROFILE-DHCP-OPT82
```

Example

```
LTP-16N(profile-dhcp-opt82-DHCP82)# circuit-id format 'host=%HOSTNAME%,ont=%ONTID%'
```

circuit-id mode

Sets circuit-id mode for the current profile.

Syntax

```
circuit-id mode <VALUE>
no circuit-id mode
```

Parameters

<VALUE> — mode selection parameter. May take values:

- binary;
- text.

Default value

text

Privilege group

config-dhcp

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-DHCP82)# circuit-id mode binary
```

name

Sets profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

name <VALUE>

Parameters

<VALUE> — string from 1 to 15 characters long.

Privilege group

config-dhcp

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-dhcp)# name DHCP82-10
```

ont-sn-format

Sets the ONT serial number format for the current profile.

Syntax

```
ont-sn-format <VALUE>
no ont-sn-format
```

Parameters

<VALUE> — ONT serial number format. May take values:

- literal;
- numerical;
- section-numerical.

Default value

literal

Privilege group

config-dhcp

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-dhcp)# ont-sn-format numerical
```

overwrite-opt82 enable

Sets option 82 overwriting for this profile.

Syntax

```
[no] overwrite-opt82 enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

```
config-dhcp
```

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-dhcp)# overwrite-opt82 enable
```

remote-id format

Sets remote-id format for the current profile.

Syntax

```
remote-id format <VALUE>
no remote-id format
```

Parameters

<VALUE> — format parameter. String, 240 characters max. May take values:

- %HOSTNAME% — LTP host name;
- %MNGIP% — management interface IP address;
- %PON-PORT% — gpon port ID;
- %ONTID% — ONT administrator ID;
- %PONSERIAL% — ONT serial number;
- %GEMID% — GEM port ID;
- %VLAN0% — Outer VLAN ID;
- %VLAN1% — Inner VLAN ID;
- %MAC% — user device MAC address;
- %OLTMAC% — OLT MAC address;
- %OPT60% — Option60 of incoming packets;
- %OPT82_CID% — Option82 Circuit ID of incoming packets;
- %OPT82_RID% — Option82 Remote ID of incoming packets;
- %DESCR% — ONT configuration description.

Any characters except '%' can be between parameter values.

Privilege group

config-dhcp

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(profile-dhcp-opt82-DHCP82)# remote-id format 'host=%HOSTNAME%,ont=%ONTID%'
```

remote-id mode

Sets remote-id mode for the current profile.

Syntax

```
remote-id mode <VALUE>
no remote-id mode
```

Parameters

<VALUE> — Mode selection parameter. May take values:

- binary;
- text.

Default value

text

Privilege group

config-dhcp

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-DHCP82)# remote-id mode binary
```

pppoe-ia profile configuration

- [profile pppoe-ia](#)
 - [circuit-id format](#)
 - [description](#)
 - [name](#)
 - [ont-sn-format](#)
 - [remote-id format](#)

profile pppoe-ia

Switch to the pppoe-ia profile configuration mode.

Syntax

```
[no] profile pppoe-ia <NAME>
```

Parameters

<NAME> – profile name. Set of characters in the range from 1 to 15.

Privilege group

config-pppoe

Command mode

CONFIG

Example

```
LTP-16N(configure)# profile pppoe-ia PPPOE-PROFILE
```

circuit-id format

Sets circuit-id format for the current profile.

Syntax

```
circuid-id format <VALUE>
no circuid-id format
```

Parameters

<VALUE> – format parameter. String 240 characters long max. May take values:

- %HOSTNAME% – LTP host name;
- %MNGIP% – management interface IP address;
- %PON-PORT% – pon port ID;
- %ONTID% – ONT administrator ID;
- %PONSERIAL% – ONT serial number;
- %GEMID% – GEM port ID;
- %VLAN0% – Outer VLAN ID;
- %VLAN1% – Inner VLAN ID;
- %MAC% – user device MAC address;
- %OLTMAC% – OLT MAC address;
- %DESCR% – ONT configuration description.

Any characters except '%' can be between parameter values.

Privilege group

config-pppoe

Command mode

PROFILE-PPPOE-IA

Example

```
LTP-16N(profile-pppoe-ia-PPPOE)# circuit-id format 'host=%HOSTNAME%,ont=%ONTID%'
```

description

Sets the profile description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Privilege group

```
config-pppoe
```

Command mode

```
PROFILE-PPPOE-IA
```

Example

```
LTP-16N(config)(profile-pppoe-ia-PPPOE)# description PPPOE-IA for LTP-16N.
```

name

Setting profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

```
name <VALUE>
```

Parameters

<VALUE> — string from 1 to 15 characters long.

Privilege group

```
config-pppoe
```

Command mode

```
PROFILE-PPPOE-IA
```

Example

```
LTP-16N(config)(profile-pppoe-ia-PPPOE)# name PPPOE-IA
```

ont-sn-format

Set the ONT serial number format for the current profile.

Syntax

```
ont-sn-format <VALUE>
no ont-sn-format
```

Parameters

<VALUE> — ONT serial number format. May take values:

- literal;
- numerical;
- section-numerical.

Default value

literal

Privilege group

config-pppoe

Command mode

PROFILE-PPPOE-IA

Example

```
LTP-16N(config)(profile-pppoe-ia-PPPOE)# ont-sn-format numerical
```

remote-id format

Sets remote-id format for the current profile.

Syntax

```
remote-id format <VALUE>
no remote-id format
```

Parameters

<VALUE> — format parameter. String 240 characters long max. May take values:

- %HOSTNAME% — LTP host name;
- %MNGIP% — management interface IP address;
- %PON-PORT% — pon port ID;
- %ONTID% — ONT administrator ID;
- %PONSERIAL% — ONT serial number;
- %GEMID% — GEM port ID;
- %VLAN0% — Outer VLAN ID;
- %VLAN1% — Inner VLAN ID;
- %MAC% — user device MAC address;
- %OLTMAC% — OLT MAC address;
- %DESCR% — ONT configuration description.

Any characters except '%' can be between parameter values.

Privilege group

config-pppoe

Command mode

PROFILE-PPPOE-IA

Example

```
LTP-16N(config)(profile-pppoe-ia-PPPOE)# remote-id format 'host=%HOSTNAME%,ont=%ONTID%'
```

vendor-id

This command sets the vendor ID for the current profile.

Syntax

```
vendor-id <VALUE>
no vendor-id
```

Parameters

<VALUE> — vendor ID. A 3-byte number from 0x000000 to 0xffffffff.

Privilege group

config-pppoe

Command mode

PROFILE-PPPOE-IA

Example

```
LTP-16N(config)(profile-pppoe-ia-PPPOE)# vendor-id 0x000fff
```

ONT profiles configuration

Cross-connect profile configuration

- [profile cross-connect](#)
 - [bridge group](#)
 - [description](#)
 - [inner vid](#)
 - [iphost enable](#)
 - [iphost id](#)
 - [iphost mode](#)
 - [multicast enable](#)
 - [name](#)
 - [ont-mode](#)
 - [outer vid](#)
 - [user vid](#)
 - [tag-mode](#)
 - [traffic-model](#)
 - [vlan-replace](#)

profile cross-connect

Switch to the cross-connect profile configuration.

Syntax

```
[no] profile cross-connect <NAME>
```

Parameters

<NAME> — profile name. set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

CONFIG

Example

```
LTP-16N(configure)# profile cross-connect HSI
```

bridge group

Sets bridge group index.

Syntax

```
bridge group <ID>
no bridge group
```

Parameters

<ID> — group index, in the range of [1-75].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# bridge group 10
```

description

Sets profile description.

Syntax

```
description <VALUE>  
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# description HSI-100
```

inner vid

Sets inner VLAN ID. Inner tag used in QinQ.

Syntax

```
inner vid <VID>  
no inner vid
```

Parameters

<VID> — VLAN ID in the range of [1-4094].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# description HSI-100
```

iphost enable

Enables iphost for the current profile.

Syntax

```
iphost enable
no iphost enable
```

Parameters

The command does not contain parameters.

Privilege group

```
config-interface-ont-profile
```

Command mode

```
PROFILE-CC
```

Example

```
LTP-16N(config)(profile-cross-connect-cc)# iphost enable
```

iphost id

Sets id of the iphost that will be used for the current profile.

Syntax

```
iphost id <VALUE>
no iphost id
```

Parameters

<VALUE> — id iphost. May take values 1-32.

Default value

```
1
```

Privilege group

```
config-interface-ont-profile
```

Command mode

```
PROFILE-CC
```

Example

```
LTP-16N(config)(profile-cross-connect-cc)# iphost id 31
```

iphost mode

Sets network settings mode for iphost.

Syntax

```
iphost mode <MODE>
```

Parameters

<MODE> — network settings mode:

- dynamic — obtain network settings for iphost via DHCP;

- **static** — use static network settings that are set in interface ont.

Default value

dynamic

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# iphost mode static
```

multicast enable

Enables multicast traffic passing if profile is assigned to a service.

Syntax

```
multicast enable
no multicast enable
```

Parameters

The command does not contain parameters.

Default value

no multicast enable

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# multicast enable
```

name

Sets profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

```
name <VALUE>
```

Parameters

<VALUE> — set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# name HSI-100
```

ont-mode

Set the operation mode for the ONT OMCI interface.

Syntax

```
ont-mode <MODE>
no ont-mode
```

Parameters

<MODE> – OMCI interface operation mode:

- bridge – set omci-bridge mode;
- router – set omci-router mode.

Default value

```
router
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# ont-mode bridge
```

outer vid

Outer VLAN ID configuration.

Syntax

```
outer vid <VID>
no outer vid
```

Parameters

<VID> – VLAN ID in the range of [1-4094].

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# outer vid 100
```

user vid

Sets user VLAN ID, with this VLAN ID, traffic will come from the UNI port of ONT.

Syntax

```
pon vid <VID>
no pon vid
```

Parameters

<VID> – VLAN ID in the range of [1-4094], or **untagged** for untagged traffic.

Default value

untagged

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# user vid 200
```

tag-mode

Sets dot1.q or 802.1q interface operation mode for traffic transmission.

Syntax

```
traffic-model <VALUE>
no traffic-model
```

Parameters

<VALUE> – operation mode, possible values: single-tagged, double-tagged.

Default value

single-tagged

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# tag-mode double-tagged
```

traffic-model

Sets traffic transmission model. Types and differences in models are described in TR-156.

Syntax

```
traffic-model <VALUE>
no traffic-model
```

Parameters

<VALUE> — model type, possible values: 1-to-1, n-to-1, multicast.

Default value

n-to-1

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# traffic-model multicast
```

vlan-replace

Determines on which side the VLAN tag will be replaced. It is possible to change the label on the terminal side or on the ONT side.

Syntax

```
vlan-replace <VALUE>  
no vlan-replace
```

Parameters

<VALUE> — side of tag replacement, possible values: ont-side or olt-side.

Default value

ont-side

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# vlan-replace olt-side
```

DBA profile configuration

- [profile dba](#)
 - [allocation-scheme](#)
 - [bandwidth besteffort](#)
 - [bandwidth guaranteed](#)
 - [description](#)
 - [name](#)
 - [mode](#)

profile dba

Switch to the DBA profile configuration mode.

Syntax

```
[no] profile ports <NAME>
```

Parameters

<NAME> — set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

CONFIG

Example

```
LTP-16N(config)(profile-dba-hsi)# profile dba DBA-HSI
```

allocation-scheme

Sets T-cont distribution type between allocations.

Syntax

```
allocation-scheme <VALUE>
no allocation-scheme
```

Parameters

<VALUE> — **allocate-new-t-cont** or **share-t-cont**. share-t-cont — all T-contents are in one allocation, allocate-new-t-cont — all t-contents are in different allocations.

Default value

share-t-cont

Privilege group

config-interface-ont-profile

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# allocation-scheme allocate-new-t-cont
```

bandwidth besteffort

Sets the maximum bandwidth size for transmission.

Syntax

```
bandwidth besteffort <VALUE>
no bandwidth besteffort
```

Parameters

<VALUE> — bandwidth value in the range [128 — 1244160] kbps. The value should be a multiple of 64 kbps, if the value is not a multiple, it will be automatically rounded to a smaller string.

-  The values for bandwidth besteffort and bandwidth guaranteed are interrelated and must be assigned according to rules:
- The difference between them should be at least 128 kbps;
 - The values should not be equal;
 - besteffort should be larger than guaranteed.

Default value

1244160

Privilege group

config-interface-ont-profile

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# bandwidth besteffort 128
```

bandwidth guaranteed

Sets guaranteed bandwidth size for transmission.

Syntax

```
bandwidth guaranteed <VALUE>
no bandwidth guaranteed
```

Parameters

<VALUE> — bandwidth value in the range [0, 128 — 1244160] kbps. The value should be a multiple of 64 kbps, if the value is not a multiple, it will be automatically rounded to a smaller string.

-  The values for bandwidth besteffort and bandwidth guaranteed are interrelated and must be assigned according to rules:
- The difference between them should be at least 128 kbps;
 - The values should not be equal;
 - besteffort should be larger than guaranteed.

Default value

512

Privilege group

config-interface-ont-profile

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# bandwidth guaranteed 1244160
```

description

Sets profile description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# description HSI
```

name

Sets profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

name <VALUE>

Parameters

<VALUE> — set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# name HSI-100
```

mode

Sets the mode for status reporting.

Syntax

mode <VALUE>

Parameters

<VALUE> — non-status-reporting or status-reporting.

Default value

non-status-reporting

Privilege group

config-interface-ont-profile

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# name HSI-100
```

Management profile configuration

- [profile management](#)
 - [description](#)
 - [iphost id](#)
 - [name](#)
 - [omci-configuration enable](#)
 - [url](#)
 - [password](#)

profile management

Switch to the management profile configuration mode.

Syntax

```
[no] profile management <NAME>
```

Parameters

<NAME> — profile name. Set of characters in the range from 1 to 15.

Privilege group

config-management

Command mode

CONFIG

Example

```
LTP-16N(config)(profile-management-man)# profile management MANAGE-PROFILE
```

description

Sets profile description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — string, from 1 to 127 characters long.

Privilege group

config-management

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# description Profile management for LTP-16N
```

iphost id

Sets iphost index.

Syntax

```
iphost id <ID>
no iphost id
```

Parameters

<ID> — iphost index, in the range of [1-32].

Privilege group

```
config-interface-ont-profile
```

Command mode

```
PROFILE-MANAGEMENT
```

Example

```
LTP-16N(config)(profile-management)# iphost id 1
```

name

Sets profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

```
name <VALUE>
```

Parameters

<VALUE> — string, from 1 to 15 characters long.

Privilege group

```
config-interface-ont-profile
```

Command mode

```
PROFILE-MANAGEMENT
```

Example

```
LTP-16N(config)(profile-management)# name MANAGEMENT-10
```

omci-configuration enable

Enables configuration mode of getting ACS server settings for the current profile.

Syntax

```
omci-configuration enable
no omci-configuration enable
```

Parameters

The command does not contain parameters.

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# omci-configuration enable
```

password

Set password for ACS server. Available only when OMCI mode is enabled.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — string, from 1 to 25 characters long.

Privilege group

```
config-management
```

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# password 1234567890
```

url

Sets URL for ACS server. Available only when OMCI mode is enabled.

Syntax

```
url <VALUE>
no url
```

Parameters

<VALUE> — string in format: http://ipaddr:port, up to 256 characters long.

Privilege group

```
config-management
```

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# url http://192.168.1.51:151
```

password

Sets user name for ACS server. Available only when OMCI mode is enabled.

Syntax

```
username <VALUE>
no username
```

Parameters

<VALUE> – string, from 1 to 25 characters long.

Privilege group

config-management

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# username user
```

Ports profile configuration

- [profile ports](#)
- [description](#)
- [igmp immediate-leave](#)
- [igmp mode](#)
- [igmp querier](#)
- [igmp query interval](#)
- [igmp query response](#)
- [igmp robustness](#)
- [igmp version](#)
- [igmp version](#)
- [port <ID> multicast](#)
- [port <ID>bridge group](#)
- [port <ID>igmp downstream priority](#)
- [port <ID> igmp downstream tag-control](#)
- [port <ID> igmp downstream vid](#)
- [port <ID> igmp upstream priority](#)
- [port <ID> igmp upstream tag-control](#)
- [port <ID> igmp upstream vid](#)
- [name](#)
- [veip multicast enable](#)
- [veip igmp downstream priority](#)
- [veip igmp downstream tag-control](#)
- [veip igmp downstream vid](#)
- [veip igmp upstream priority](#)
- [veip igmp upstream tag-control](#)
- [veip igmp upstream vid](#)

profile ports

Switch to ports profile configuration mode.

Syntax

```
[no] profile ports <NAME>
```

Parameters

<NAME> — set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

CONFIG

Example

```
LTP-16N(config)(profile-port-bridge)# profile ports BRIDGRE
```

description

Sets profile description.

Syntax

```
description <VALUE>  
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-port-bridge)# description omci-bridge
```

igmp immediate-leave

Quick disconnection from multicast group. The last member query is not send to the client.

Syntax

```
[no] igmp immediate-leave
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp immediate-leave
```

igmp mode

Sets IGMP operation mode on the device.

Syntax

```
igmp mode <VALUE>
```

Parameters

<VALUE> — [snooping | spr | proxy].

Default value

snooping

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp mode proxy
```

igmp querier

Sets querier IP address to send IGMP query messages.

Syntax

```
igmp querier <IP>  
no igmp querier
```

Parameters

<IP> — IP address, specified as AAA. BBB. CCC. DDD, where each part takes value [0..255].

Default value

0.0.0.0

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp querirer 192.168.0.1
```

igmp query interval

Sets frequency query sending.

Syntax

```
igmp query interval <VALUE>  
no igmp query interval
```

Parameters

<VALUE> — interval in the range [30-600].

Default value

125

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp query interval 30
```

igmp query response

Sets waiting time of report messages on query.

Syntax

```
igmp query response <VALUE>  
no igmp query response
```

Parameters

<VALUE> — Interval in the range [50-2000].

Default value

100

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp query response 30
```

igmp robustness

Sets number of IGMP message exchange intervals when monitoring multicast groups.

Syntax

```
igmp robustness <VALUE>  
no igmp robustness
```

Parameters

<VALUE> — value in the range [2-7].

Default value

2

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp robustness 5
```

igmp version

Sets IGMP version.

Syntax

```
igmp version <VALUE>  
no igmp version
```

Parameters

<VALUE> — value in the range [1-3].

Default value

3

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp version 2
```

igmp version

Sets multicast addresses range to operate in specified MC VLAN.

Syntax

```
igmp multicast dynamic-entry <ID> vid <VID> group <MC_IP> <MC_IP>
no igmp multicast dynamic-entry <ID>
```

Parameters

<ID> – entry index [1-20];

<VID> – VLAN ID in the range [1-4094];

<MC_IP> – IP address in multicast range.

Default value

3

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# igmp multicast dynamic-entry 1 vid 20 group 224.0.0.1
225.255.255.255
```

port <ID> multicast

Enable processing of multicast traffic on LAN port.

Syntax

```
port <ID> multicast
no port <ID> multicast
```

Parameters

<ID> — port index [1-4].

Default value

Disabled

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 multicast
```

port <ID>bridge group

Sets ONT LAN ports binding to OMCI-bridge.

Syntax

```
port <ID> bridge group <VALUE>
no port <ID> bridge group
```

Parameters

<ID> — port index [1-4];

<VALUE> — bridge group index [1-255].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 bridge group 10
```

port <ID>igmp downstream priority

Sets p-bit value for multicast traffic on LAN interface.

Syntax

```
port <ID> igmp downstream priority <VALUE>
no port <ID> igmp downstream priority
```

Parameters

<ID> — port index [1-4];

<VALUE> — priority [0-7].

Default value

0

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp downstream priority 7
```

port <ID> igmp downstream tag-control

Sets VLAN manipulation rules to transmit downstream multicast traffic on LAN interface.

Syntax

```
port <ID> igmp downstream tag-control <VALUE>
no port <ID> igmp downstream tag-control
```

Parameters

<ID> — port index [1-4];

<VALUE> — [add-tag | pass | remove-tag | replace-tag | replace-vid].

Default value

pass

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp downstream tag-control add-tag
```

port <ID> igmp downstream vid

Sets VLAN ID value for multicast traffic on LAN interface.

Syntax

```
port <ID> igmp downstream vid <VID>
no port <ID> igmp downstream vid
```

Parameters

<ID> — port index [1-4];

<VID> — VLAN ID, in the range [1-4094].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp downstream vid 200
```

port <ID> igmp upstream priority

Sets p-bit value for multicast traffic on LAN interface.

Syntax

```
port <ID> igmp upstream priority <VALUE>
no port <ID> igmp upstream priority
```

Parameters

<ID> — port index [1-4];

<VALUE> — priority [0-7].

Default value

0

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp upstream priority 7
```

port <ID> igmp upstream tag-control

Sets VLAN manipulation rules to transmit upstream multicast traffic on LAN interface.

Syntax

```
port <ID> igmp upstream tag-control <VALUE>
no port <ID> igmp upstream tag-control
```

Parameters

<ID> — port index [1-4];

<VALUE> — [add-tag | pass | replace-tag | replace-vid].

Default value

pass

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp upstream tag-control add-tag
```

port <ID> igmp upstream vid

Sets VLAN ID value for multicast traffic on LAN interface.

Syntax

```
port <ID> igmp upstream vid <VID>
no port <ID> igmp upstream vid
```

Parameters

<ID> — port index [1-4];

<VID> — VLAN ID, in the range [1-4094].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp upstream vid 200
```

name

Sets profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

name <VALUE>

Parameters

<VALUE> — set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# name bridge-100
```

veip multicast enable

Enables multicast traffic processing for Virtual Ethernet Interface Point.

Syntax

veip multicast enable
no veip multicast enable

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip multicast enable
```

veip igmp downstream priority

This command sets the p-bit value for multicast traffic for the Virtual Ethernet Interface Point.

Syntax

```
veip igmp downstream priority <VALUE>  
no veip igmp downstream priority
```

Parameters

<VALUE> — priority [0-7].

Default value

0

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip igmp downstream priority 7
```

veip igmp downstream tag-control

Sets VLAN manipulation rules for downstream multicast traffic for Virtual Ethernet Interface Point.

Syntax

```
veip igmp downstream tag-control <VALUE>  
no veip igmp downstream tag-control
```

Parameters

<VALUE> – [add-tag | pass | remove-tag | replace-tag | replace-vid].

Default value

pass

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip igmp downstream tag-control add-tag
```

veip igmp downstream vid

Sets VLAN ID value for multicast traffic for the Virtual Ethernet Interface Point.

Syntax

```
veip igmp downstream vid <VID>
no veip igmp downstream vid
```

Parameters

<VID> – VLAN ID, in the range [1-4094].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip igmp downstream vid 10
```

veip igmp upstream priority

Sets p-bit value for multicast traffic for the Virtual Ethernet Interface Point.

Syntax

```
veip igmp upstream priority <VALUE>
no veip igmp upstream priority
```

Parameters

<VALUE> — priority [0-7].

Default value

0

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip igmp upstream priority 1
```

veip igmp upstream tag-control

Sets the VLAN manipulation rules for upstream multicast traffic for Virtual Ethernet Interface Point.

Syntax

```
veip igmp upstream tag-control <VALUE>
no veip igmp upstream tag-control
```

Parameters

<VALUE> — [add-tag | pass | remove-tag | replace-tag | replace-vid].

Default value

pass

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip igmp upstream tag-control add-tag
```

veip igmp upstream vid

Sets the VLAN ID value for multicast traffic for the Virtual Ethernet Interface Point.

Syntax

```
veip igmp upstream vid <VID>  
no veip igmp upstream vid
```

Parameters

<VID> – VLAN ID, in the range [1-4094].

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# veip igmp upstream vid 10
```

Shaping profile configuration

- [profile shaping](#)
 - [description](#)
 - [name](#)
 - [upstream shaper](#)
 - [upstream shaper peak-rate](#)
 - [upstream shaper committed-rate](#)

profile shaping

Switch to shaping profile configuration.

Syntax

```
[no] profile shaping <NAME>
```

Parameters

<NAME> — profile name. Set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

CONFIG

Example

```
LTP-16N(configure)# profile shaping shaping1
```

description

Sets profile description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-shaping-shaping1)# description shaping10
```

name

Sets profile name.

 Profile name us a unique identifier to access a specific profile.

Syntax

name <VALUE>

Parameters

<VALUE> — set of characters in the range from 1 to 15.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# name shaping1
```

upstream shaper

Enables shaping.

Syntax

```
[no] upstream <TYPE> <ID> shaper enable
[no] upstream <ID> shaper enable
```

Parameters

<TYPE> — traffic type (broadcast\unicast\multicast);

<ID> — service ID from 1 to 30.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream 1 shaper enable
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast 1 shaper enable
```

upstream shaper peak-rate

Peak-rate configuration, bandwidth peak value

Syntax

```
[no] upstream <TYPE> <ID> shaper peak-rate <VALUE>
[no] upstream <ID> shaper peak-rate <VALUE>
```

Parameters

<TYPE> — traffic type (broadcast\unicast\multicast);

<ID> — service ID from 1 to 30;

<VALUE> — rate value in Kbps from 0 to 1244032, multiple of 64.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream 1 shaper peak-rate 6400
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast 1 shaper peak-rate 6400
```

upstream shaper committed-rate

Committed-rate configuration, bandwidth shaping.

Syntax

```
[no] upstream <TYPE> <ID> shaper committed-rate <VALUE>
[no] upstream <ID> shaper committed-rate <VALUE>
```

Parameters

<TYPE> — traffic type (broadcast\unicast\multicast);

<ID> — service ID from 1 to 30;

<VALUE> — rate value in Kbps from 0 to 1244032, multiple of 64.

Privilege group

config-interface-ont-profile

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream 1 shaper peak-rate 6272
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast 1 shaper peak-rate 6272
```

Configuration templates

- [template](#)
 - [broadcast-filter](#)
 - [description](#)
 - [multicast-filter](#)
 - [profile ports](#)
 - [profile management](#)
 - [profile shaping](#)
 - [service\(ID\)profile cross-connect](#)
 - [service\(ID\)profile dba](#)
 - [rf-port-state](#)
 - [define\(VALUE\)](#)
 - [name](#)

template

Switch to the template configuration mode.

Syntax

```
[no] template <NAME>
```

Parameters

<NAME> — profile name. Set of characters in the range from 1 to 15.

Privilege group

CONFIG_ACCESS

Command mode

CONFIG

Example

```
LTP-16N(configure)# template one_service
```

broadcast-filter

Enables tagged broadcast traffic filtration on broadcast GEM.

Syntax

```
[no] broadcast-filter
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(template-one_service)# broadcast-filter
```

description

Sets interface description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 27.

Privilege group

CONFIG_ACCESS

Command mode

PROFILE-ONT

Example

```
LTP-16N(config)(template-one_service)# description "VPN"
```

multicast-filter

Enables tagged multicast traffic filtration on GEM.

Syntax

```
[no] multicast-filter
```

Parameters

The command does not contain any parameters.

Default value

Enabled

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(template-one_service)# multicast-filter
```

profile ports

Sets ports profile.

Syntax

```
profile ports <VALUE>
no profile ports
```

Parameters

<VALUE> — profile name.

Default value

```
profile ports ports1
```

Privilege group

```
CONFIG_ACCESS
```

Command mode

```
TEMPLATE
```

Example

```
LTP-16N(config)(template-one_service)# profile ports "bridge"
```

profile management

Sets management profile.

Syntax

```
profile management <VALUE>
no profile management
```

Parameters

<VALUE> — profile name.

Privilege group

```
CONFIG_ACCESS
```

Command mode

```
TEMPLATE
```

Example

```
LTP-16N(config)(template-one_service)# profile management ACS
```

profile shaping

Sets bandwidth shaping profile.

Syntax

```
profile shaping <VALUE>
no profile shaping
```

Parameters

<VALUE> — profile name.

Privilege group

```
CONFIG_ACCESS
```

Command mode

TEMPLATE**Example**

```
LTP-16N(config)(template-one_service)# profile shaping "10MB"
```

service(ID)profile cross-connect

Sets cross-connect profile for a service.

Syntax

```
service <ID> profile cross-connect <VALUE>
no service <ID> profile cross-connect
```

Parameters

<ID> — service index [1-32];

<VALUE> — profile name.

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(template-one_service)# profile shaping "10MB"
```

service(ID)profile dba

Sets DBA profile for a service.

Syntax

```
service <ID> profile dba <VALUE>
no service <ID> profile dba
```

Parameters

<ID> — service index [1-32];

<VALUE> — profile name.

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(template-one_service)# service 1 profile dba DBA-HSI
```

rf-port-state

ONT RF port management.

Syntax

```
rf-port-state <VALUE>
no rf-port-state
```

Parameters

<VALUE> — RF port state. Possible values: disabled, enabled, no-change.

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(template-one_service)# profile management ACS
```

define(VALUE)

Configures service redefining from template. When define is configured, a parameter specified in template will be used.

Syntax

```
rf-port-state <VALUE>
no rf-port-state
```

Parameters

<VALUE> — parameter that will be redefined. Broadcast-filter, description, multicast-filter, profile, rf-port-state, service.

Default value

undefine

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(template-one_service)# define service 1
```

name

Sets profile name.

 Profile name is a unique identifier to access a specific profile.

Syntax

name <VALUE>

Parameters

<VALUE> — set of characters in the range from 1 to 15.

Privilege group

CONFIG_ACCESS

Command mode

TEMPLATE

Example

```
LTP-16N(config)(profile-cross-connect-cc)# name HSI-100
```

OLT Management configuration

- [management ip](#)
- [management mask](#)
- [management gateway](#)
- [management vid](#)

management ip

Device IP address configuration.

Syntax

```
management ip <IP>  
no management ip
```

Parameters

<IP> — IP address in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

Default value

192.168.1.2

Privilege group

config-management

Command mode

CONFIG

Example

```
LTP-16N(configure)# management ip 192.168.1.3
```

management mask

Device IP mask configuration.

Syntax

```
management mask <IP>  
no management mask
```

Parameters

<IP> — IP mask in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

Default value

255.255.255.0

Privilege group

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Command mode

CONFIG

Example

```
LTP-16N(configure)# management mask 255.255.0.0
```

management gateway

Sets default gateway address.

Syntax

```
management gateway <IP>  
no management gateway
```

Parameters

<IP> — IP mask in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

Default value

0.0.0.0

Privilege group

config-management

Command mode

CONFIG

Example

```
LTP-16N(configure)# management gateway 192.168.100.1
```

management vid

VLAN configuration to access the device.

Syntax

```
management vid <IP>  
no management vid
```

Parameters

<IP> – VLAN ID in the range [1-4094].

Default value

1

Privilege group

config-management

Command mode

CONFIG

Example

```
LTP-16N(configure)# management vid 100
```

IP source-guard configuration

- [ip source-guard enable](#)
- [ip source-guard mode](#)
- [ip source-guard one-dynamic-binding-for-mac](#)
- [ip source-guard bind](#)

ip source-guard enable

Enables IP source-guard.

Syntax

```
[no] ip source guard enable
[no] ip source guard enable <VLAN>
```

Parameters

<VLAN> — VLAN, в котором нужно включить ip source-guard, значение от 1 до 4094.

Default value

```
no ip source guard enable
```

Privilege group

```
config-dhcp
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# ip source-guard enable vlan
```

ip source-guard mode

Configuration of ip source-guard mode. There are two configuration options — dynamic and static. With the dynamic option, the agent works on dynamic and static entries. With the static option, the agent works only on static entries.

Syntax

```
ip source guard mode <TYPE>
[no] ip source guard mode
```

Parameters

<TYPE> — IP source-guard configuration mode:

- dynamic;
- static.

Default value

ip source guard mode dynamic

Privilege group

config-dhcp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip source-guard mode static
```

ip source-guard one-dynamic-binding-for-mac

There is one-dynamic-binding-for-mac option to ensure DHCP session re-establishment for device with same MAC address. The option will automatically re-write old session with a new one.

Syntax

[no] ip source-guard one-dynamic-binding-for-mac enable

Parameters

The command does not contain any parameters.

Default value

no ip source-guard one-dynamic-binding-for-mac enable

Privilege group

config-dhcp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip source-guard one-dynamic-binding-for-mac enable
```

ip source-guard bind

There is bind option to add static binding of sender IP address to ONT MAC address and service.

Syntax

```
ip source-guard bind ip <IP> mac <MAC> interface-ont <ONT> service <NUM>  
[no] ip source-guard bind ip <IP>
```

Parameters

<IP> – client device IP address in X.X.X.X format;

<MAC> – client device MAC address in XX:XX:XX:XX:XX:XX format;

<ONT> – ONT identifier in X/Y (CNANNEL_ID/ONT_ID) format;

<NUM> – number of service on the ONT through which the traffic with the specified addresses will pass, value in the range 1-30.

Privilege group

config-dhcp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip source-guard one-dynamic-binding-for-mac enable
```

6 LTP-16N(T). List of changes

Document version	Issue date	Revisions
Version 1.3	07.2022	Synchronization with firmware version 1.4.0 Sections added: • Shaping profile configuration • Configuration templates • AAA configuration • Management profile configuration Changes in sections: • Root commands • Root commands
Version 1.2	02.2022	Synchronization with firmware version 1.3.1
Version 1.1	05.2021	Synchronization with firmware version 1.2.0 Sections added: • Interface front-port configuration • Management profile configuration • dhcp-opt82 profile configuration • pppoe-ia profile configuration • DHCP configuration • PPPoE configuration Changes in sections: • clear • LTP-16N(T). Root commands 1 • LTP-16N(T). Configuration commands • Ports profile configuration • Alarm configuration • Cross-connect profile configuration • Interface ont configuration
Version 1.0	12.2020	First issue