Optical line terminals

LTP-8(16)N(T) and LTX-8(16)

CLI command reference guide

Firmware version 1.7.0

Contents

1 LTP-8(16)N(T) and LTX-8(16). Introduction

Abstract

This guidance describes CLI commands for administrator of LTP-8(16)N(T) and LTX-8(16) optical line terminals.

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

Target audience

CLI command reference guide is dedicated to the technical staff that performs the configuration and monitoring of LTP-8(16)N(T) and LTX-8(16) terminals 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-8(16)N(T) and LTX-8(16). Command system structure

The command system of the command line interface of the devices 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 a graph of some modes, as well as commands for transitioning between them.

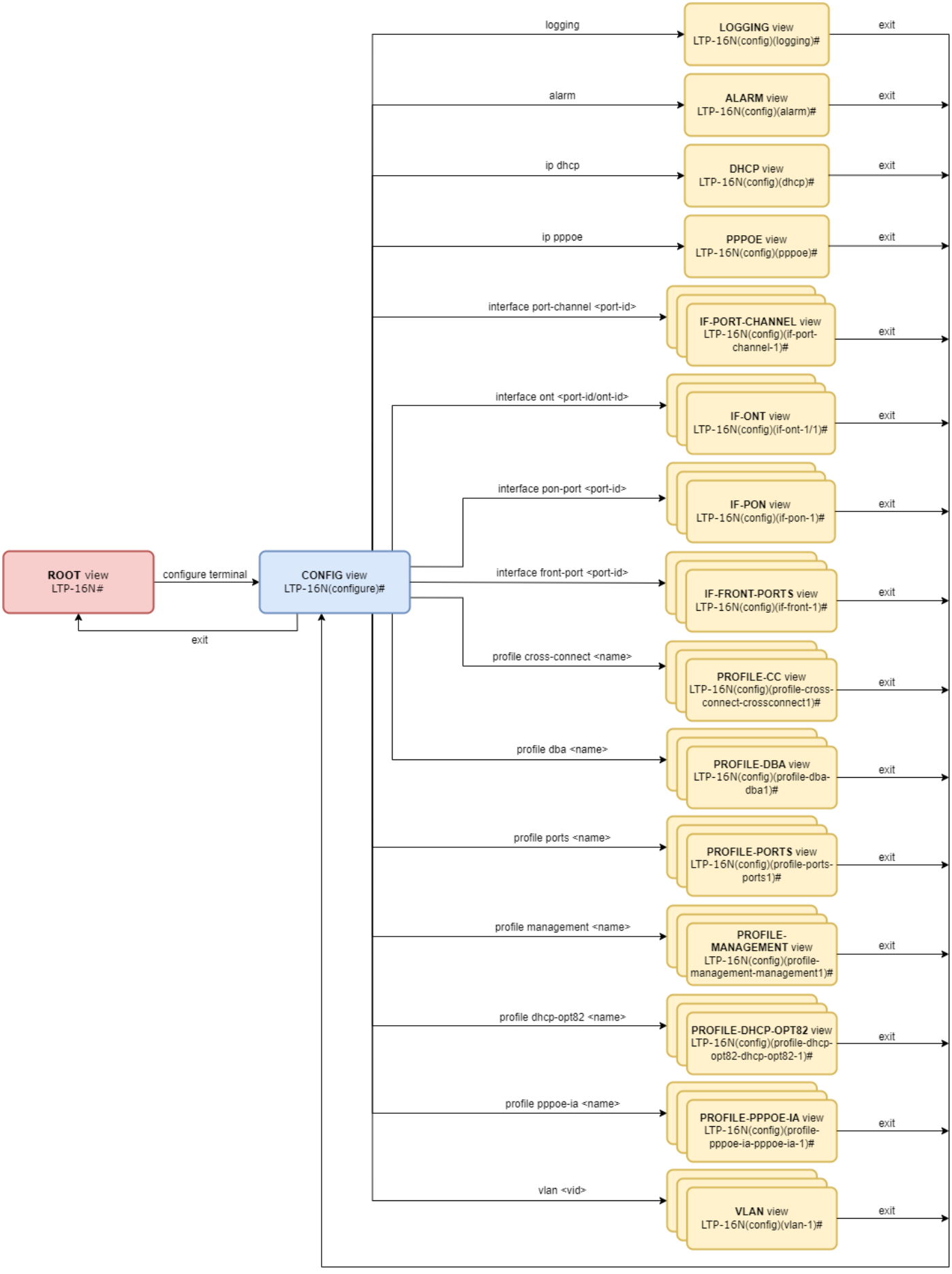

Figure 1 — CLI sections and transitions between them

3 LTP-8(16)N(T) and LTX-8(16). Working with the command line

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-8(16)N(T) and LTX-8(16). Root commands

clear

clear alarms

Clear all active alarms.

Syntax

```
clear alarms
```

Parameters

- 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 severity info
```

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;
  - logout — system logout alarm;
  - config-save — configuration save alarm;
  - config-change — configuration change alarm;
  - ont-no-config – ONUi missing configuration alarm;
  - ont-valid-config – alarm about receiving ONUi-correct configuration;
  - ont-state-changed – ONUi status change alarm;
  - ont-link-up – ONUi link up alarm;
  - ont-link-down – ONUi link down alarm;
  - mac-duplicate – MAC address duplication 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 front-port <FRONT-PORT-ID>
```

Parameters

<FRONT-PORT-ID> — port index in the range [1-8] for LTP-16N and LTX-8(16). 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] for LTP-16N and LTX-8(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] for GPON and [1-256] for XGS-PON. 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 [1-10]. 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 include ⟨FILTER⟩

Clear MAC table by filter.

Syntax

`clear mac 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 include interface port-channel 10
    Clearing MAC table...

    10082 MAC entries
```

clear log acs

Clear ACS log files.

Syntax

`clear log acs`

Parameters

The command does not contain any parameters.

Privilege group

`config-system`

Command mode

ROOT

Example

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

clear log dhcp

Clear DHCP log files.

Syntax

`clear log dhcp`

Parameters

The command does not contain any parameters.

Privilege group

`config-system`

Command mode

ROOT

Example

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

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 ltp

Clear all LTP log files.

Syntax

`clear log ltp`

Parameters

The command does not contain any parameters.

Privilege group

`config-system`

Command mode

ROOT

Example

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

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] for LTP-16N and LTX-16, [1-8] for LTX-8. 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] for GPON and [1-256] for XGS-PON. 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, config-dhcp, config-ppppoe, config-alarm,
configswitch.
```

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;
- fs://alarm-history – copy alarm log;
- fs://coredump/name – copy process failure log;
- fs://information – copy general information about the device.

<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 to 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
```

default acs

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

Syntax

```
default acs
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-acs
```

Command mode

ROOT

Example

```
LTP-16N# default acs
```

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

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-image <VALUE>
```

Parameters

<VALUE> — partitions::

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

Privilege group

```
commands-firmware
```

Command mode

ROOT

Example

```
LTP-16N# firmware select-image 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] for LTP-16N and LTX-16, [1-8] for LTX-8. 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] — index in the range [1-128] for GPON and [1-256] for XGS-PON. 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] for LTP-16N and LTX-16, [1-8] for LTX-8. 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] — index in the range [1-128] for GPON and [1-256] for XGS-PON. 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.

Syntax

```
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.

Privilege group

```
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, [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N и LTX-8.

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] for LTP-16N and LTX-16, [1-8] for LTX-8. 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] for LTP-16N and LTX-16, [1-8] for LTX-8. 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] for GPON and [1-256] for XGS-PON. 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
```

rollback candidate-config

rollback candidate-config

Clear changes in candidate-config, result in running-config state.

Syntax

```
rollback candidate-config
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-system
```

Command mode

ROOT

Example

```
LTP-16N# rollback candidate-config
    Candidate configuration is rolled back successfully
```

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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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] for GPON and [1-256] for XGS-PON. 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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] for GPON and [1-256] for XGS-PON. 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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] for GPON and [1-256] for XGS-PON. 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 AAAAXXXXXXXX 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 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8.

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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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] for GPON and [1-256] for XGS-PON. 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 AAAAXXXXXXXX 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8.

Privilege group

`commands-interface-ont`

Command mode

ROOT

Example

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

show

- show firmware
- show firmware ont list
- show interface front-port sfp
- show interface front-port sfp verbose
- show interface ont ⟨VALUE⟩ counters olt-side pon
- show interface ont ⟨VALUE⟩ counters ont-side gem-port-performance-monitoring
- show interface ont ⟨VALUE⟩ counters ont-side gem-port-nctp-performance-monitoring
- show interface ont ⟨VALUE⟩ counters ont-side ethernet-performance-monitoring-history-data
- show interface ont ⟨VALUE⟩ counters ont-side ethernet-performance-monitoring-history-data2
- show interface ont ⟨VALUE⟩ counters ont-side ethernet-performance-monitoring-history-data3
- show interface ont ⟨VALUE⟩ counters ont-side gal-ethernet-performance-monitoring-history-data
- show interface ont ⟨VALUE⟩ counters ont-side fec-performance-monitoring-history-data
- show interface ont ⟨VALUE⟩ counters ont-side ethernet-frame-extended-performance-monitoring
- show interface ont ⟨VALUE⟩ counters ont-side multicast-subscriber-monitor
- show interface ont services-utilization
- show interface ont ⟨VALUE⟩ connections
- show interface ont ⟨VALUE⟩ configuration
- show interface ont configuration verbose
- show interface ont ⟨VALUE⟩ ports
- show interface ont ⟨VALUE⟩ rssi
- show interface ont ⟨VALUE⟩ firmware update status
- show interface pon-port ⟨PORT-ID⟩ ont-autofind
- show interface port-channel counters
- show interface port-channel counters verbose
- show interface port-channel utilization
- show interface port-channel state
- show interface port-oob state
- show interface port-oob counters
- show ip acs-server
- show ip arp-inspection
- show ip dhcp sessions
- show ip dhcp sessions ⟨FILTER⟩
- show ip igmp snooping config vlan
- show ip igmp snooping groups
- show ip igmp snooping hosts
- show ip igmp snooping mroute
- show ip pppoe sessions
- show ip source-guard binds ⟨FILTER⟩ ⟨VALUE⟩
- show isolation group ⟨ID⟩
- show license
- 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 log backup-config
- show log buffer
- show log files
- show log startup-config
- show mac
- show mac ⟨FILTER⟩
- show running-config
- show running-config aaa
- show running-config access-list
- show running-config alarm
- show running-config all
- show running-config auto-activation-ont

- show running-config auto-update-ont
- show running-config backup
- show running-config cli
- show running-config firmware
- show running-config interface front-port
- show running-config interface ont
- show running-config interface pon-port
- show running-config interface port-channel
- show running-config interface port-channel load-balance
- show running-config interface port-oob
- show running-config ip acs
- show running-config ip dhcp
- show running-config ip igmp
- show running-config ip ntp
- show running-config ip pppoe
- show running-config ip routes
- show running-config ip snmp
- show running-config ip source-guard
- show running-config ip ssh
- show running-config ip telnet
- show running-config isolation
- show running-config lldp
- show running-config logging
- show running-config mac
- show running-config management
- show running-config pon
- show running-config privilege
- show running-config profile
- show running-config profile cross-connect
- show running-config profile dba
- show running-config profile ports
- show running-config profile shaping
- show running-config profile management
- show running-config profile dhcp-opt82
- show running-config profile pppoe-ia
- show running-config qos
- show running-config system
- show running-config template
- show running-config user
- show running-config vlan
- show startup-config
- show system environment
- show uptime
- show version

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 all ⟨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-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 — cofiguration 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 all type system-fan
    Active alarms (2):
        ##  type           severity           description
        1   fan            critical           fan slot 1
        2   fan            critical           fan slot 2

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

LTP-16N# show alarms active all 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 ordering time <FILTER>`

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- normalized-alarm – filter by non-active alarms;
- severity – filter by severity;
- alarm – filter by active alarms;
- all – show all events;
- type – filter by alarm type.

Privilege group

`view-general`

Command mode

ROOT

Example

```
LTP-16N# show alarms history ordering time all
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 events by type.

Syntax

```
show alarms history ordering type <FILTER>
```

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- normalized-alarm – filter by non-active alarms;
- severity – filter by severity;
- alarm – filter by active alarms;
- all – show all events;
- type – filter by alarm type.

Privilege group

```
view-general
```

Command mode

ROOT

Example

```
LTP-16N# show alarms history ordering type type system-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 ordering severity <FILTER>
```

Parameters

<FILTER> — filters for alarms:

- desc — filter alarms by time and description;
- normalized-alarm – filter by non-active alarms;
- severity – filter by severity;
- alarm – filter by active alarms;
- all – show all events;
- type – filter by alarm type.

Privilege group

`view-general`

Command mode

ROOT

Example

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

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

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

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

show alarms history alarm

Displays all alarms excluding normalizing ones.

Syntax

```
show alarms history alarm
```

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 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 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 aaa

Displays aaa candidate configuration.

Syntax

```
show candidate-config aaa
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config aaa
```

show candidate-config access-list

Displays access-list candidate configuration.

Syntax

show candidate-config access-list [ip | mac]

Parameters

- ip [WORD] – display of access-list ip candidate configuration or access-list ip <WORD> candidate configuration;
- mac [WORD] – display of access-list mac candidate configuration or access-list mac <WORD> candidate configuration;
- all – detailed rules display in access-list candidate configuration.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config access-list access-list ip ptip
permit tcp 5.0.5.0 255.255.255.0 any any any index 10
exit
```

show candidate-config alarm

Displays the candidate configuration of 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 auto-activation-ont

Displays candidate configuration for ONT automatic activation.

Syntax

```
show candidate-config auto-activation-ont
```

Parameters

The command does not contain any parameters.

Privilege group

```
auto-activation-view
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config auto-activation-ont
 auto-activation-ont
    enable
    default template "template1"
 exit
```

show candidate-config auto-update-ont

Displays candidate configuration for automatic update of ONT firmware.

Syntax

```
show candidate-config auto-update-ont
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config auto-update-ont
 auto-update-ont mode postpone
```

show candidate-config backup

Displays candidate configuration of backup automatic download.

Syntax

```
show candidate-config backup
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config backup
 backup
    enable on save
 exit
```

show candidate-config cli

Displays 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 firmware

Displays firmware candidate configuration.

Syntax

```
show candidate-config firmware
```

Parameters

The command does not contain any parameters.

Privilege group

`view-configuration`

Command mode

ROOT

Example

```
LTP-16N(configure)# do show candidate-config
configure terminal
    firmware ont auto-replace enable
exit
commit
exit
```

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] for LTP-16N and [1-4] for LTX-8(16). 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
    lldp optional-tlv system-name
 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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] for GPON and [1-256] for XGS-PON. 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 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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 port-channel

Displays candidate configuration for port-channel.

Syntax

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

Parameters

<PORT-CHANNEL-ID> – ID port-channel. The parameter can be set by a range or enumeration (for example: interface port-channel 1-5 *или* 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 interface 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 interface port-oob

Displays running configuration for port-oob.

Syntax

`show candidate-config interface port-oob`

Parameters

The command does not contain any parameters.

Privilege level

`view-configuration, config-interface-port-oob`

Command mode

ROOT

Example

```
LTP-16N# show candidate-config interface port-oob
 interface port-oob
    shutdown
 exit
```

show candidate-config ip acs

Display candidate configuration ACS.

Syntax

```
show candidate-config ip acs
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip acs
 ip acs
    acs-server vlan 4094
 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 ntp

Displays candidate configuration 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 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 routes

Displays candidate configuration of the created routes.

Syntax

```
show candidate-config ip routes
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip routes
    ip route address 1.1.1.1 mask 255.255.255.255 gateway 10.10.10.1 name test_route
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 source-guard

Displays ip source-guard candidate configuration.

Syntax

```
show candidate-config ip source-guard
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config ip source-guard
```

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 isolation

Displays isolation candidate configuration.

Syntax

```
show candidate-config isolation
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration, view-switch
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config isolation
```

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 logging

Displays logging candidate configuration.

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 mac

Displays mac candidate configuration.

Syntax

```
show candidate-config mac
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config mac
 mac age-time 315
```

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 mirror ⟨ID⟩

Displays candidate configuration of network management settings.

Syntax

```
show candidate-config management
```

Parameters

<ID> – ID of a mirror. The parameter can be set by a range or enumeration (for example: mirror 1-5 or mirror 1,5).

Privilege group

`view-configuration`

Command mode

ROOT

Example

```
LTP-16N# show candidate-config mirror 1
```

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 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

Displays candidate configuration of all created profiles.

Syntax

`show candidate-config profile`

Parameters

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

Privilege group

`view-configuration, config-interface-ont-profile`

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile
```

show candidate-config profile cross-connect

Displays candidate configuration of cross-connect profile.

Syntax

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

Parameters

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

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 of DBA profile.

Syntax

`show candidate-config profile dba [NAME]`

Parameters

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

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.

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 shaping

Displays candidate configuration of shaping profile.

Syntax

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

Parameters

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

Privilege group

```
view-configuration, config-interface-ont-profile
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config profile shaping 1
 profile shaping 1
    description "test"
 exit
```

show candidate-config profile management

Displays candidate configuration of management interface profile.

Syntax

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

Parameters

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

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.

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.

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 template

Displays template candidate configuration.

Syntax

```
show candidate-config template
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show candidate-config template
```

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.QgxTKh9PFGvO5nZ5jSuZqOC4Z274lDbSktK51YX8xmmsFUk9FmIUSqZDC7SOmVAtH3XBIR5bOYY5tra4T8j1
 user test2 privilege 10
```

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 coredump list

Displays list of current coredump archives.

Syntax

```
show coredump list
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-system
```

Command mode

ROOT

Example

```
LTP-16N# show coredump list
##    Name                                                          Size               Date
---   ------------------------------------------------------------  -----------------
-------------------------
  1   /data/crash/ZMQbg!IO!0_2023-02-13_04-33-27.tar.gz                      18122445
13-02-2023 04:33:27
  2   /data/crash/ZMQbg!IO!0_2023-03-29_11-00-02.tar.gz                       1018055
29-03-2023 11:00:02
  3   /data/crash/sys-cfg-mgr_2023-02-20_17-09-47.tar.gz                       418216
20-02-2023 17:09:47
```

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
Image   Running   Boot   Version   Build   Date
-----   -------   ----   -------   -----   ----------------
1       yes       *      1.5.0     682     17.03.2023 10:12
2       no                1.6.0     167     05.05.2023 03:15
"*" designates that the image was selected for the next boot
```

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] for LTP-16N and [1-4] for LTX-8(16). 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 verbose
```

Parameters

<PORT-ID> — port index in the range [1-8] for LTP-16N and [1-4] for LTX-8(16). 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] for LTP-16N and [1-4] for LTX-8(16). 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] for LTP-16N and [1-4] for LTX-8(16). 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 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 front-port <PORT-ID> sfp

Displays information on SFP modules by front ports.

Syntax

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

Parameters

<PORT-ID> – port index in the range [1-8] for LTP-16N and [1-4] for LTX-8(16). 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 sfp

SFP status:

Port   SFP Vendor          SFP part number     SFP media type   SFP temperature [C]   SFP
voltage [V]   SFP tx bias current [mA]   SFP tx power [mW]
----   ----------------   -----------------   --------------   -------------------
---------------   ------------------------   -----------------
3      FANGHANG            FH-ST2              copper           n/s                   n/s
n/s                        n/s
```

show interface front-port <PORT-ID> sfp verbose

Displays detailed information on SFP modules by front ports.

Syntax

```
show interface front-port <PORT-ID> sfp verbose
```

Parameters

<PORT-ID> – port index in the range [1-8] for LTP-16N and [1-4] for LTX-8(16). 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 sfp verbose

Front port 3
-------------
    Transceiver information:
        Vendor:         FANGHANG
        Part number:    FH-ST2
        Revision:       A
        Trx type:       300 pin XBI
        Connector type: RJ45
        Media type:     copper
        Rate [MBd]:     1300
        Temperature [C]:n/s
        Voltage [V]:    n/s
        Current [mA]:   n/s
        Power [mW]:     n/s
```

show interface ont ⟨VALUE⟩ online

Displays the list of configured and online ONTs.

Syntax

```
show interface ont <VALUE> online
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ offline

Displays the list of configured and offline ONTs.

Syntax

```
show interface ont <VALUE> offline
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ unactivated

Displays the list of configured and offline ONTs.

Syntax

```
show interface ont <VALUE> unactivated
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ configured

Displays the list of configured ONTs.

Syntax

```
show interface ont <VALUE> configured
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ unconfigured

Displays the list of free indexes on the port.

Syntax

`show interface ont <VALUE> unconfigured`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
    - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ connected

Displays the list of unactivated and online ONTs.

Syntax

```
show interface ont <PORT-ID> connected
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters olt-side gem-port

Displays GEM port counters for ONT on the OLT side.

Syntax

```
show interface ont <VALUE> counters gem-port
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters olt-side pon

Displays PON counters for ONT on the OLT side.

Syntax

```
show interface ont <VALUE> counters pon
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).

- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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:                 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 ⟨VALUE⟩ counters ont-side gem-port-performance-monitoring

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

Syntax

`show interface ont <VALUE> counters ont-side gem-port-performance-monitoring`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).

- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side gem-port-nctp-performance-monitoring

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

Syntax

`show interface ont <VALUE> counters ont-side gem-port-nctp-performance-monitoring`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side ethernet-performance-monitoring-history-data

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

Syntax

```
show interface ont <VALUE> counters ont-side ethernet-performance-monitoring-history-data
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side ethernet-performance-monitoring-history-data2

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

Syntax

```
show interface ont <VALUE> counters ont-side ethernet-performance-monitoring-history-data2
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side ethernet-performance-monitoring-history-data3

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

Syntax

```
show interface ont <VALUE> counters ont-side ethernet-performance-monitoring-history-data3
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side gal-ethernet-performance-monitoring-history-data

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

Syntax

```
show interface ont <VALUE> counters ont-side gal-ethernet-performance-monitoring-history-data
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side fec-performance-monitoring-history-data

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

Syntax

```
show interface ont <VALUE> counters ont-side fec-performance-monitoring-history-data
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

Privilege group

```
view-interface-ont
```

Command mode

ROOT

Example

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

##   Counters:
--   ------------------------   ----------
 1   Finished intervals                 91
 2   Corrected bytes                  2222
 3   Corrected code words             2222
 4   Uncorrectable code words            0
 5   Total code words            119952000
 6   FEC seconds                         0
```

show interface ont ⟨VALUE⟩ counters ont-side ethernet-frame-extended-performance-monitoring

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

Syntax

```
show interface ont <VALUE> counters ont-side ethernet-frame-extended-performance-
monitoring
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ counters ont-side multicast-subscriber-monitor

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

Syntax

```
show interface ont <VALUE> counters ont-side multicast-subscriber-monitor
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

Privilege group

`view-interface-ont`

Command mode

ROOT

Example

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

show interface ont <VALUE> services-utilization

Displays utilization by ONT services.

Syntax

`show interface ont <VALUE> services-utilization`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

Privilege group

`view-interface-ont`

Command mode

ROOT

Example

```
LTP16-N#show interface ont 1/1 services-utilization
-----------------------------------
  [ONT 1/1] services utilization
-----------------------------------

Services                  1
Upstream, Kb/s (30 s)     49976
Downstream, Kb/s (30 s)   49994
Upstream, Kb/s (5 m)      652857
Downstream, Kb/s (5 m)    683895
```

show interface ont ⟨VALUE⟩ connections

Displays list of last ONT to OLT connection/disconnection.

Syntax

```
show interface ont <VALUE> connections
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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
```

⚠ The Last State field can take the following values:
- Auth – ONT is in authentication state;
- Blocked – ONT is blocked;
- Configuration – ONT is in configuration state;
- Disable – ONT was disabled with 'send ploam';
- Disconnected – ONT was deactivated;
- Dying Gasp – ONT sent a dying gasp;
- Failed – ONT is in FAIL state;
- Firmware Updating – firmware update is in progress on the ONT;
- Loss of Signal – ONT sent Loss-of-Signal;
- Reconfigure – ONT was reconfigured;
- Working – ONT is in OK state.

show interface ont ⟨VALUE⟩ configuration

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

Syntax

```
show interface ont <VALUE> configuration
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 <VALUE> configuration verbose

Displays detailed information on currently used ONT configuration. The "T" character means that the parameter is used from assigned template.

Syntax

`show interface ont <VALUE> configuration verbose`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

Privilege group

`view-interface-ont`

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 configuration verbose
-----------------------------------
  [ONT 1/1] configuration
-----------------------------------

    Description
    Enabled:                            true
    Serial:                             ELTX8300010C
    Password:                           0000000000
    Rf port state:                      disabled
    Broadcast filter:                   true
    Multicast filter:                   true
    Profile shaping:                    n/a
    Profile management:                 n/a
    Profile ports:                      ports_0
        port 1 bridge group 10
        port 2 bridge group 10
    Service[1]:
        Profile cross-connect:          1
            ont-mode bridge
            bridge group 10
            outer vid 1101
        Profile dba:                    dba1
    Template:                           n/a
    FEC:                                false
    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 ⟨VALUE⟩ data-path

Displays the configuration for this ONT.

Syntax

`show interface ont <VALUE> data-path`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ ports

Displays ONT LAN ports status.

Syntax

```
show interface ont <VALUE> ports
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ laser

ONT laser status query.

Syntax

```
show interface ont <VALUE> laser
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ont ⟨VALUE⟩ rssi

Displays the signal power level.

Syntax

`show interface ont <VALUE> rssi`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

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 ⟨VALUE⟩ state

Displays ONT state.

Syntax

`show interface ont <VALUE> state`

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

Privilege group

`view-interface-ont`

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 state
-----------------------------------
[ONT 1/1] state
-----------------------------------
Serial number:        ELTX8300010C
Pon-password:         0000000000
Pon-port:             1
ONT ID:               1
Equipment ID:         NTU-RG-5421G-Wac:rev.B
Hardware version:     3v2
Software version:     2.5.8.1066
Equalization delay:   259252
FEC state:            Disable
Alloc IDs:            n/a
State:                OK
ONT distance:         0.101 [km]
RSSI:                 -10.55 [dBm]
```

show interface ont ⟨VALUE⟩ firmware update status

Displays current ONT firmware update status.

Syntax

```
show interface ont <VALUE> firmware update status
```

Parameters

<VALUE> may take the following values:

- <PORT-ID>[/ONT-ID], where:
  - <PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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).
- <PON_SERIAL> – ONT serial number in the AAAAXXXXXXXX format, where A are capital letters, X are hex characters [0-F].

Privilege group

```
view-interface-ont
```

Command mode

ROOT

Example

```
LTP-16N# show interface ont 1/1 firmware update status
There are no ONT that update the firmware at the moment
```

show interface pon-port ⟨PORT-ID⟩ counters

Displays counters by pon ports.

Syntax

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

Parameters

<ID> — port index in the range [1-8]. 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-pon-port
```

Command mode

ROOT

Example

```
LTP-16N# show interface pon-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 pon-port ⟨PORT-ID⟩ counters verbose

Displays detailed counters information by pon ports.

Syntax

```
show interface pon-port <PORT-ID> counters verbose
```

Parameters

<ID> — port index in the range [1-8]. 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-pon-port`

Command mode

ROOT

Example

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

  pon-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 pon-port ⟨PORT-ID⟩ counters optical

Displays detailed information on optical counters by pon ports.

Syntax

```
show interface pon-port <PORT-ID> counters optical
```

Parameters

<ID> — port index in the range [1-8]. 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-pon-port
```

Command mode

ROOT

Example

```
LTP-16N# show interface pon-port 8 counters optical

  pon-port 8 optical statistics

FEC Codewords                                    0
FEC Codewords Uncorrected                        0
BIP Units                                        0
BIP Errors                                       0
Rx GEM                                           0
Rx GEM Dropped                                   0
Rx GEM Idle                                      0
Rx GEM Corrected                                 0
Rx CRC Errors                                    0
Rx Fragment Errors                               0
Rx Packets Dropped                               0
Rx Dropped Too Short                             0
Rx Dropped Too Long                              0
Rx Key Errors                                    0
Rx CPU OMCI Packets Dropped                      0
Rx PLOAMS Dropped                                0
Rx Allocations Valid                             0
Rx Allocation Invalid                            0
Rx Allocation Disabled                           0
Rx PLOAMS                                        0
Rx PLOAMS Non Idle                               0
Rx PLOAMS Error                                  0
Rx CPU                                           0
Rx OMCI                                          0
Rx OMCI Packets CRC error                        0
Rx XGTC Headers                                  0
Rx XGTC Corrected                                0
Rx XGTC Uncorrected                              0
Rx GEM Illegal                                   0
Rx Packets                                       0
Tx PLOAMS                                        0
Tx Packets                                       0
Tx GEM                                           0
Tx CPU                                           0
Tx OMCI                                          0
Tx Dropped Illegal Length                        0
Tx Dropped TPID Miss                             0
Tx Dropped VID Miss                              0
Tx Dropped Total                                 0
```

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 [1-8]. 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-pon-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⟩ ont-autofind

Displays autofind state. If autofind is disabled, activation of connected ONTs will be disabled as well. Activated ONTs will continue to operate. Configuration of autofind is not part of the configuration, so the current status is requested.

Syntax

`show interface pon <PORT-ID> ont-autofind`

Parameters

<ID> — port index in the range [1-8]. 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-pon-port`

Command mode

ROOT

Example

```
LTP-16N# show interface pon-port 1 ont-autofind
    ONT autofind status:
    pon-port  1: enable
```

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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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-pon-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 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 (for example: 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-channels 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 (for example: 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. 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-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 port-channel <PORT-CHANNEL-ID> state

Displays port-channel state.

Syntax

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

Parameters

<PORT-CHANNEL-ID> – ID port-channel. 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-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 port-oob state

Displays OOB port state.

Syntax

```
show interface port-oob state
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-interface-port-oob
```

Command mode

ROOT

Example

```
LTP-16N# show interface port-oob state
Port        Status      Speed
---------   ---------   ---------
OOB         down        1000
```

show interface port-oob counters

Displays counters for OOB port.

Syntax

```
show interface port-oob counters
```

Parameters

The command does not contain any parameters.

Privilege group

`view-interface-port-oob`

Command mode

ROOT

Example

```
LTP-16N# show interface port-oob counters
Port   Packet recv      Bytes recv       Error recv       Packet sent      Bytes sent
Error sent       Multicast
----   --------------   --------------   --------------   --------------   --------------
--------------   --------------
OOB                0                0                0                0                0
0                0
```

show ip acs-server

Displays information on internal ACS.

Syntax

`show ip acs-server`

Parameters

The command does not contain any parameters.

Privilege group

`config-general`

Command mode

ROOT

Example

```
LTP-16N# show ip acs-server
ACS server:
         Enabled:             false
         IP:                  192.168.200.1
         Mask:                255.255.248.0
         Port:                9595
         Vlan:                2
         Scheme:              'http'
         Login:               'acs'
         Password:            'acsacs'
ACS DHCP server:
         Enabled:             false
         Lease time:          86400
         Insert option 43:    false
         First IP:            0.0.0.0
         Last IP:             0.0.0.0
DHCP option 43 (will be generated automatically):
         URL:                 'http://192.168.200.1:9595'
         Login:               'acs'
         Password:            'acsacs'
```

show ip arp-inspection

Displays active ip arp-inspection bindings.

Syntax

```
show ip arp-inspection
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-dhcp
```

Command mode

ROOT

Example

```
LTP-16N# show ip arp-inspection
    IP ARP Inspection:
        Enabled on vlans: 131
        Binds(2):
##     PON-port    ONT-ID   Service   IP               MAC                VLAN
----   ---------   ------   -------   --------------   ----------------   ----
1      1           3        1         192.168.135.12   F6:78:AF:07:BF:31  131
2      1           1        1         192.168.131.1    84:84:84:84:84:01  131
```

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> — filters for MAC table:

- interface — filter dhcp sessions by interface type. <VALUE> values are available for this filter:
  - pon-port — filter DHCP sessions of the specified pon-ports;
  - ont — filter DHCP sessions of the specified onts.
- 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 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 mrouters
Multicast routers ports. VLAN 99.
        front-port 1 00:00:00
```

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
0:00:00
   2   ELTX7400018C   7           31       1190   E0:D9:E3:9C:C3:0C   0x0eb4       0:06:54
0:00:00
```

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 PPPoE sessions by interface type. <VALUE> values are available for this filter:
  - gon-port — filter PPPoE sessions of the specified pon-ports;
  - ont — filter PPPoE sessions of the specified ont.
- vlan — filter PPPoE 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
0:00:00
```

show ip source-guard binds ⟨FILTER⟩ ⟨VALUE⟩

Displays active ip source-guard bindings by filter.

Syntax

```
show ip source-guard binds <FILTER> <VALUE>
```

Parameters

<FILTER> — filters for MAC table:

- interface — filter DHCP sessions by interface type. <VALUE> values are available for this filter:
  - pon-port — filter DHCP sessions of the specified pon-ports;
  - ont — filter DHCP sessions of the specified onts.
- 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 source-guard binds interface ont 1/1
    IP Source Guard:
        Enabled:        true
        Mode:           dynamic
        Binds(2):
##     PON-port    ONT-ID   Service   IP               MAC                VLAN   Type
----   ---------   ------   -------   --------------   ----------------   ----   --------
1      1           1        1         192.168.101.190  0C:9D:92:BE:C3:36  1102   Static
2      1           1        1         192.168.102.135  0C:9D:92:BE:C3:40  1102   Dynamic
```

show isolation group ⟨ID⟩

Displays settings of the selected isolation group.

Syntax

show isolation group <ID>

Parameters

<ID> – isolation group number<1-30>.

Privilege group

view-switch

Command mode

ROOT

Example

```
LTP-16N# show isolation group 1
Group   Destination       Action
-----   ---------------   ------
1       pon-port 1        Allow
        pon-port 2        Allow
        pon-port 3        Allow
        pon-port 4        Deny
        pon-port 5        Deny
        pon-port 6        Deny
        pon-port 7        Deny
        pon-port 8        Deny
        pon-port 9        Deny
        pon-port 10       Deny
        pon-port 11       Deny
        pon-port 12       Deny
        pon-port 13       Deny
        pon-port 14       Deny
        pon-port 15       Allow
        pon-port 16       Deny
        front-port 1      Deny
        front-port 2      Deny
        front-port 3      Deny
        front-port 4      Deny
        front-port 5      Deny
        front-port 6      Deny
        front-port 7      Deny
        front-port 8      Deny
        port-channel 1    Deny
        port-channel 2    Deny
        port-channel 3    Deny
        port-channel 4    Deny
        port-channel 5    Deny
        port-channel 6    Deny
        port-channel 7    Deny
        port-channel 8    Deny
        port-channel 9    Deny
        port-channel 10   Deny
```

show isolation vlan ⟨ID⟩

Displays vlan isolation settings.

Syntax

`show isolation vlan <ID>`

Parameters

<ID> – VLAN number <1-4094>.

Privilege group

`view-switch`

Command mode

ROOT

Example

```
LTP-16N# show isolation vlan 1100
Vid    State      Interface         Destination group
----   --------   ---------------   -----------------
1100   Enabled    pon-port 1
                  pon-port 2
                  pon-port 3
                  pon-port 4
                  pon-port 5
                  pon-port 6
                  pon-port 7
                  pon-port 8
                  pon-port 9
                  pon-port 10
                  pon-port 11
                  pon-port 12
                  pon-port 13
                  pon-port 14
                  pon-port 15
                  pon-port 16
                  front-port 1
                  front-port 2
                  front-port 3
                  front-port 4
                  front-port 5      2
                  front-port 6
                  front-port 7
                  front-port 8
                  port-channel 1
                  port-channel 2
                  port-channel 3
                  port-channel 4
                  port-channel 5
                  port-channel 6
                  port-channel 7
                  port-channel 8
                  port-channel 9
                  port-channel 10
```

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 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] for LTP-16N and [1-4] for LTX-8(16). 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] for LTP-16N and [1-4] for LTX-8(16). 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] for LTP-16N and [1-4] for LTX-8(16). 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 log backup-config

Displays downloaded backup application log.

Syntax

```
show log backup-config
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-system
```

Command mode

ROOT

Example

```
LTP-16N# show log backup-config
```

show log buffer

Displays last log from buffer.

Syntax

```
show log buffer <NUMBER>
```

Parameters

<NUMBER> – 1-5000, parameter to display a specific number of lines.

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 startup-config

Displays startup-config application log.

Syntax

```
show log startup-config
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-system
```

Command mode

ROOT

Example

```
LTP-16N# show log startup-config
(null)configure terminal
(null)management ip 192.168.1.2
(null)management mask 255.255.255.0
(null)management gateway 192.168.1.1
(null)management vid 100
```

show log ⟨FILENAME⟩

Displays logs from file.

Syntax

```
show log <FILENAME> [last [<VALUE>]]
```

Parameters

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

[last] – display last 500 lines of log file.

<VALUE> – display last N lines of log file [1-5000].

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 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, uvid, 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     uvid     ONT      gem       type
-------------------   ------------------   ------   ------   ------   ------   -------
---------
E0:D9:E3:6A:C0:37     pon-port 16          1105     15                16/3     206       Dynamic
34:A0:33:25:80:C2     front-port 1         3470                                          Dynamic
08:C6:B3:D3:C3:DB     pon-port 16          1105     15       9        16/124   3837      Dynamic
    3 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-pon-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-pon-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
```

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 aaa

Displays aaa running configuration. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

The command does not contain any parameters.

Privilege group

`view-configuration`

Command mode

ROOT

Example

```
LTP-16N# show running-config aaa all
 aaa
    no enable
    no authentication
    no authorization
    no accounting
    service name "shell"
    service protocol ""
    tacacs-server timeout 3
    tacacs-server host 0.0.0.0 priority 1 port 49 key secret
    tacacs-server host 0.0.0.0 priority 1 port 49 key secret
    tacacs-server host 0.0.0.0 priority 1 port 49 key secret
    radius-server host 0.0.0.0 priority 1 port 1812 key secret timeout 3
    radius-server host 0.0.0.0 priority 1 port 1812 key secret timeout 3
    radius-server host 0.0.0.0 priority 1 port 1812 key secret timeout 3
 exit
```

show running-config access-list

Displays user running configuration. Adding the **all** postfix will display the entire configuration, including the default values.
A separate request for ip/mac access-list and a request to display a specific list by name is possible.

Syntax

`show running-config access-list [ip | mac] [all]`

Parameters

- ip [WORD] – display of access-list ip candidate configuration or access-list ip <WORD> candidate configuration;
- mac [WORD] – display of access-list mac candidate configuration or access-list mac <WORD> candidate configuration;
- all – detailed rules display in access-list candidate configuration;
- <WORD> – access-list name.

Privilege groups

`view-configuration`

Command mode

ROOT

Example

```
LTP-16N# show running-config access-list
    access-list mac permit_mac
        permit A8:F9:4B:AA:00:00 FF:FF:FF:FF:00:00 any index 1
        permit any A8:F9:4B:FF:24:86 FF:FF:FF:FF:00:00 index 2
        permit any any vlan 6 index 3
        permit any any cos 5 5 index 4
        permit any any ethertype 0xAB00 0xFFFF index 5
        deny any any vlan 6 index 6
        deny any any index 7
    exit
    access-list ip permit_tcp_ip
        permit tcp 5.0.5.0 255.255.255.0 any any any index 1
        permit tcp any any 5.0.6.0 255.255.255.0 any index 2
        permit tcp any 4321 any any index 3
        permit tcp any any any 8765 index 4
        permit tcp any any any any dscp 48 index 5
        permit tcp any any any any precedence 7 index 6
        permit tcp 192.168.10.0 255.255.255.0 any any any index 7
        permit tcp any any 192.168.10.0 255.255.255.0 any index 8
        deny tcp any any any any index 9
    exit
```

show running-config alarm

Displays the running configuration for alarms. Adding the **all** postfix will display the entire configuration, 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 all

Displays all current running configuration, including the 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 auto-activation-ont

Displays running configuration for ONT automatic activation. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

```
show running-config auto-activation-ont
```

Parameters

The command does not contain any parameters.

Privilege group

```
auto-activation-view
```

Command mode

ROOT

Example

```
LTP-16N# show running-config auto-activation-ont all
 auto-activation-ont
    no enable
    no default template
    no interface pon-port 1 default template
    no interface pon-port 2 default template
    no interface pon-port 3 default template
    no interface pon-port 4 default template
    no interface pon-port 5 default template
    no interface pon-port 6 default template
    no interface pon-port 7 default template
    no interface pon-port 8 default template
    no interface pon-port 9 default template
    no interface pon-port 10 default template
    no interface pon-port 11 default template
    no interface pon-port 12 default template
    no interface pon-port 13 default template
    no interface pon-port 14 default template
    no interface pon-port 15 default template
    no interface pon-port 16 default template
 exit
```

show running-config auto-update-ont

Displays running configuration for automatic update of ONT firmware. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

```
show running-config auto-update-ont [all]
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show running-config auto-update-ont all
 auto-update-ont mode postpone
 auto-update-ont NTU-1
    fw-version match 3.26.5.101 filename ntu-1-3.28.6-build152.fw.bin mode global downgrade
disable
    fw-version not-match 3.28.6.152 filename ntu-1-3.28.6-build152.fw.bin mode global downgrade
disable
 exit
```

show running-config backup

Displays running configuration of backup automatic download. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show running-config backup all
 backup
    no enable on save
    no enable on timer
    timer period 3600
    uri ""
 exit
```

show running-config cli

Displays the running configuration for CLI. Adding the **all** postfix will display the entire configuration, 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 firmware

Displays firmware running configuration.

Syntax

`show running-config firmware [all]`

Parameters

The command does not contain any parameters.

Privilege group

`view-configuration`

Command mode

ROOT

Example

```
LTP-16N# show running-config firmware
 firmware ont auto-replace enable
```

show running-config interface front-port

Displays the running configuration for front-port. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

<PORT-ID> — port index in the range [1-8] for LTP-16N and [1-4] for LTX-8(16). 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 all
 interface front-port 1
    no shutdown
    no channel-group
    no access-list ip
    no access-list mac
    no vlan allow 1-4094
    no bridge allow 1-4094
    lldp mode transmit-receive
    no lldp optional-tlv port-description
    no lldp optional-tlv system-name
    no lldp optional-tlv system-description
    no lldp optional-tlv system-capabilities
    no lldp optional-tlv management-address
    no lldp optional-tlv 802.1 management-vid
    no lldp optional-tlv 802.1 vlan-name 1-4094
    no lldp optional-tlv 802.1 link-aggregation
    no lldp optional-tlv 802.1 pvid
    no lldp optional-tlv 802.1 vid-usage-digest
    no lldp optional-tlv 802.1 protocol lacp
    no lldp optional-tlv 802.1 protocol stp
    no lldp optional-tlv 802.3 max-frame-size
    no lldp optional-tlv 802.3 mac-phy
    lacp mode active
    lacp rate fast
    lacp port-priority 32768
    description ""
    switchport mode general
    pvid 1
    speed auto
 exit
```

show running-config interface ont

Displays the running configuration for ONT. Adding the **all** postfix will display the entire configuration, 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] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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
    description ""
    no shutdown
    serial
    password 0000000000
    rf-port-state disabled
    broadcast-filter
    multicast-filter
    no profile shaping
    no profile management
    profile ports "ports1"
    no service 1 custom inner vid upstream cos
    no service 1 custom outer vid upstream cos
    no service 1 custom mac-table-limit
    no service 2 custom inner vid upstream cos
    no service 2 custom outer vid upstream cos
    no service 2 custom mac-table-limit
    no service 3 custom inner vid upstream cos
    no service 3 custom outer vid upstream cos
    no service 3 custom mac-table-limit
    no service 4 custom inner vid upstream cos
    no service 4 custom outer vid upstream cos
    no service 4 custom mac-table-limit
    no service 5 custom inner vid upstream cos
    no service 5 custom outer vid upstream cos
    no service 5 custom mac-table-limit
    no service 6 custom inner vid upstream cos
    no service 6 custom outer vid upstream cos
    no service 6 custom mac-table-limit
    no service 7 custom inner vid upstream cos
    no service 7 custom outer vid upstream cos
    no service 7 custom mac-table-limit
    no service 8 custom inner vid upstream cos
    no service 8 custom outer vid upstream cos
    no service 8 custom mac-table-limit
    no service 9 custom inner vid upstream cos
    no service 9 custom outer vid upstream cos
    no service 9 custom mac-table-limit
    no service 10 custom inner vid upstream cos
    no service 10 custom outer vid upstream cos
    no service 10 custom mac-table-limit
    no service 11 custom inner vid upstream cos
    no service 11 custom outer vid upstream cos
    no service 11 custom mac-table-limit
    no service 12 custom inner vid upstream cos
    no service 12 custom outer vid upstream cos
    no service 12 custom mac-table-limit
    no service 13 custom inner vid upstream cos
    no service 13 custom outer vid upstream cos
    no service 13 custom mac-table-limit
    no service 14 custom inner vid upstream cos
    no service 14 custom outer vid upstream cos
    no service 14 custom mac-table-limit
    no service 15 custom inner vid upstream cos
```

```
    no service 15 custom outer vid upstream cos
    no service 15 custom mac-table-limit
    no service 16 custom inner vid upstream cos
    no service 16 custom outer vid upstream cos
    no service 16 custom mac-table-limit
    no service 17 custom inner vid upstream cos
    no service 17 custom outer vid upstream cos
    no service 17 custom mac-table-limit
    no service 18 custom inner vid upstream cos
    no service 18 custom outer vid upstream cos
    no service 18 custom mac-table-limit
    no service 19 custom inner vid upstream cos
    no service 19 custom outer vid upstream cos
    no service 19 custom mac-table-limit
    no service 20 custom inner vid upstream cos
    no service 20 custom outer vid upstream cos
    no service 20 custom mac-table-limit
    no service 21 custom inner vid upstream cos
    no service 21 custom outer vid upstream cos
    no service 21 custom mac-table-limit
    no service 22 custom inner vid upstream cos
    no service 22 custom outer vid upstream cos
    no service 22 custom mac-table-limit
    no service 23 custom inner vid upstream cos
    no service 23 custom outer vid upstream cos
    no service 23 custom mac-table-limit
    no service 24 custom inner vid upstream cos
    no service 24 custom outer vid upstream cos
    no service 24 custom mac-table-limit
    no service 25 custom inner vid upstream cos
    no service 25 custom outer vid upstream cos
    no service 25 custom mac-table-limit
    no service 26 custom inner vid upstream cos
    no service 26 custom outer vid upstream cos
    no service 26 custom mac-table-limit
    no service 27 custom inner vid upstream cos
    no service 27 custom outer vid upstream cos
    no service 27 custom mac-table-limit
    no service 28 custom inner vid upstream cos
    no service 28 custom outer vid upstream cos
    no service 28 custom mac-table-limit
    no service 29 custom inner vid upstream cos
    no service 29 custom outer vid upstream cos
    no service 29 custom mac-table-limit
    no service 30 custom inner vid upstream cos
    no service 30 custom outer vid upstream cos
    no service 30 custom mac-table-limit
    no template
    no fec
    iphost management static ip 0.0.0.0
    iphost management static mask 0.0.0.0
    iphost management static gateway 0.0.0.0
  exit
```

show running-config interface pon-port

Displays the running configuration for pon-port. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

<PORT-ID> — PON port index in the range [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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 all
 interface pon-port 15
    no shutdown
    no encryption enable
    encryption key-exchange interval 1
    no access-list ip
    no access-list mac
    no bridge allow 1-4094
    no fec
    sfp-type auto
    range 20
    no block-rogue-ont enable
    no arp-proxy enable
 exit
```

show running-config interface port-channel

Display running configuration for port-channel. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

<PORT-CHANNEL-ID> – ID port-channel. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or 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 interface port-channel load-balance

Displays running configuration for port-channel load-balance. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

```
show running-config interface port-channel load-balance [all]
```

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 interface port-oob

Displays running configuration for port-oob. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

```
show running-config interface port-oob [all]
```

Parameters

The command does not contain any parameters.

Privilege group

view-configuration, config-interface-port-oob

Command mode

ROOT

Example

```
LTP-16N# show running-config interface port-oob all
 interface port-oob
    description ""
    speed auto
    no shutdown
    ip 192.168.100.2 mask 255.255.255.0 vid 1
    no include management
 exit
```

show running-config ip acs

Displays ACS running configuration. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

show running-config ip acs [all]

Parameters

The command does not contain any parameters.

Privilege group

view-configuration

Command mode

ROOT

Example

```
LTP-16N# show running-config ip acs all
 ip acs
    no acs-server enable
    acs-server login "acs"
    acs-server password "acsacs"
    acs-server ip 192.168.200.1
    acs-server mask 255.255.248.0
    acs-server port 9595
    acs-server vlan 2
    acs-server scheme http
    no dhcp-server enable
    no dhcp-server option-43 enable
    dhcp-server lease-time 86400
    dhcp-server range 0.0.0.0 0.0.0.0
 exit
```

show running-config ip dhcp

Displays running configuration for DHCP. Adding the **all** postfix will display the entire configuration, 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. Adding the **all** postfix will display the entire configuration, 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 ntp

Displays running configuration for NTP. Adding the **all** postfix will display the entire configuration, 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 ip pppoe

Displays running configuration for PPPoE. Adding the **all** postfix will display the entire configuration, 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 routes

Displays running configuration of the created routes.

Syntax

```
show running-config ip routes
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show running-config ip routes
    ip route address 1.1.1.1 mask 255.255.255.255 gateway 10.10.10.1 name test_route
exit
```

show running-config ip snmp

Displays candidate configuration for SNMP. Adding the **all** postfix will display the entire configuration, 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 source-guard

Displays running configuration of the ip source-guard. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

```
show running-config ip source-guard [all]
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show running-config ip source-guard
 ip source-guard enable vlan 1-4094
```

show running-config ip ssh

Displays running configuration for SSH. Adding the **all** postfix will display the entire configuration, 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. Adding the **all** postfix will display the entire configuration, 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 isolation

Displays running configuration of the isolation group. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

`show running-config isolation [all]`

Parameters

The command does not contain any parameters.

Privilege group

`view-configuration, view-switch`

Command mode

ROOT

Example

```
LTP-16N# show running-config isolation
    isolation group 1
        allow pon-port 1
        allow pon-port 2
        allow pon-port 15
    exit
    isolation group 2
        allow front-port 1
    exit
    isolation group 10
        allow pon-port 1
        allow front-port 2
        allow port-channel 1
    exit
LTP-16N#
```

show running-config lldp

Displays running configuration for lldp. Adding the **all** postfix will display the entire configuration, 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 all
 no lldp enable
 lldp timer 30
 lldp hold-multiplier 4
 lldp tx-delay 2
 lldp reinit 2
```

show running-config logging

Displays running configuration for logging. Adding the **all** postfix will display the entire configuration, 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
    module dna interface pon-port 16 loglevel notice
    module dna interface ont 1/1 loglevel notice
    module dna interface ont 1/2 loglevel notice

...

    no permanent
    file size 3000000
    file loglevel notice
    console loglevel debug
    remote server ip 0.0.0.0 port 514
    remote server ip 0.0.0.0 port 514
    remote server ip 0.0.0.0 port 514
    remote loglevel notice
    kernel loglevel notice
    rsh loglevel critical
 exit
LTP-16N#
```

show running-config mac

Displays mac running configuration. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

The command does not contain any parameters.

Privilege group

`view-configuration`

Command mode

ROOT

Example

```
LTP-16N# show running-config mac
 mac age-time 300
```

show running-config management

Displays the running configuration of network management settings. Adding the **all** postfix will display the entire configuration, 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. Adding the **all** postfix will display the entire configuration, 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. Adding the **all** postfix will display the entire configuration, 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
 pon olt unactivated-timeout 60
 pon olt ont-block-time 120
 pon olt authentication serial
 no pon olt password-in-trap
```

show running-config privilege

Displays running configuration for privileges. Adding the **all** postfix will display the entire configuration, 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

Displays running configuration of all created profiles. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

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

Privilege group

```
view-configuration, config-interface-ont-profile
```

Command mode

ROOT

Example

```
LTP-16N# show running-config profile
 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 cross-connect

Displays running configuration for cross-connect profile. Adding the **all** postfix will display the entire configuration, 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.

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
    ont-mode bridge
    bridge group 10
    outer vid 100
 exit

LTP-16N# show running-config profile cross-connect all
 profile cross-connect HSI
        description "ONT Profile Cross-Connect 1"
        ont-mode bridge
        bridge group 10
        tag-mode single-tagged
        outer vid 100
        vlan-replace ont-side
        no inner vid
        user vid untagged
        no mac-table-limit
        no outer upstream cos
        no inner upstream cos
        no multicast enable
        no iphost enable
        iphost id 1
        iphost mode dynamic
        traffic-model n-to-1
 exit
```

show running-config profile dba

Displays running configuration for DBA profile. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

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

Privilege group

```
view-configuration, config-interface-ont-profile
```

Command mode

ROOT

Example

```
LTP-16N# show running-config profile dba dba1 all
 profile dba dba1
    description "ONT Profile DBA 1"
    cbr-rt bandwidth 0
    no cbr-rt compensation
    cbr-nrt bandwidth 0
    guaranteed bandwidth 512
    maximum bandwidth 1244160
    additional-eligibility best-effort
    allocation-scheme share-t-cont
    mode non-status-reporting
    t-cont-type 5
 exit
```

```
LTX-16# show running-config profile dba dba1 all
 profile dba dba1
    description "ONT Profile DBA 1"
    pon-type xgs-pon
    cbr-rt bandwidth 0
    no cbr-rt compensation
    cbr-nrt bandwidth 0
    guaranteed bandwidth 2048
    maximum bandwidth 9820160
    additional-eligibility best-effort
    allocation-scheme share-t-cont
    mode non-status-reporting
    t-cont-type 5
 exit
```

show running-config profile ports

Displays running configuration for ports profile. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

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

Privilege group

`view-configuration`

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 profile shaping

Display running configuration of the shaping profile. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

```
show running-config profile shaping [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 shaping 1
 profile shaping 1
    upstream multicast storm-control enable
    upstream multicast storm-control rate-limit 2000
    upstream multicast storm-control logging shutdown
    upstream broadcast storm-control enable
    upstream broadcast storm-control rate-limit 2000
    upstream broadcast storm-control logging shutdown
 exit
```

show running-config profile management

Displays running configuration for management interface profile. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

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

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. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

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

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. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

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

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. Adding the **all** postfix will display the entire configuration, 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 system

Displays running of system configuration. Adding the **all** postfix will display the entire configuration, 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 ont-sn-format literal
 system hostname LTP-16N
 system reset-button enabled
 system fan speed auto
```

show running-config template

Displays template running configuration. Adding the **all** postfix will display the entire configuration, including the default values.

Syntax

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

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show running-config template all
    template template1
        description "ONT Template Profile 1"
        service 1 profile cross-connect "crossconnect1" dba "dba1"
        undefine service 1 profile cross-connect
        undefine service 1 profile dba
        profile ports "ports1"
        undefine profile ports
        profile management "management1"
        undefine profile management
        profile shaping "shaping1"
        undefine profile shaping
        broadcast-filter
        undefine broadcast-filter
        multicast-filter
        undefine multicast-filter
        rf-port-state disabled
        undefine rf-port-state
    exit
```

show running-config user

Displays running configuration for users. Adding the **all** postfix will display the entire configuration, 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. Adding the **all** postfix will display the entire configuration, 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 startup-config

Displays startup-config.

Syntax

```
show startup-config
```

Parameters

The command does not contain any parameters.

Privilege group

```
view-configuration
```

Command mode

ROOT

Example

```
LTP-16N# show startup-config
configure terminal
    management ip 192.168.1.2
    management mask 255.255.255.0
    management gateway 192.168.1.1
    management vid 100
```

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:                                GP3D000026
            MAC:                               E0:D9:E3:FF:24:B0
```

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 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
```

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-8(16)N(T) and LTX-8(16). Configuration commands

AAA configuration

enable

Enables AAA operation.

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 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"
```

ACL configuration

access-list ip configuration

Configuration of access control lists with filtering by IP addresses.

- access-list ip
  - permit
  - deny
  - remove

access-list ip

Switch to IP access-list configuration mode.

Syntax

```
[no] access-list ip <Word>
```

Parameters

<Word> – list name (from 1 to 15 characters).

Privilege group

```
config-acl
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# access-list ip ip1
```

permit

Adding an allow rule to access-list or replacing an existing rule.

Syntax

```
[no] permit <protocol> <Source IP address> [<port_src>] <Destination IP address>
[<Port_dst>] [dscp <DSCP>] [ mac <Source mac> <Destination mac> [vlan <Vlan>] [ <Cos>]
[<Ethertype> ] ] [index <Index_id>]
```

Parameters

- <protocol> – protocol type [tcp | udp | proto <proto_id> | any];
- <proto_id> – protocol number [0-255];
- <Source IP address> – source IP address [<IP> <mask> | any];
- <IP> – IP address [xxx.xxx.xxx.xxx];
- <mask> – IP address mask [xxx.xxx.xxx.xxx];
- <Port_src> – source port [0-65535] [<IP> <mask> | any];
- <Destination IP address> – destination IP address;
- <Port_dst> – destination port [0-65535];

- <DSCP> – Differenciated Services Code Point in decimal format [0-63];
- <Source mac> – source MAC address[<mac> <mac_mask> | any];
- <Destination mac> – destination MAC address [<mac> <mac_mask> | any];
- <mac> – MAC address [XX:XX:XX:XX:XX:XX];
- <mac_mask> – MAC address mask [XX:XX:XX:XX:XX:XX];
- <vlan> – vlan [1-4094];
- <Cos> – [cos <cos_id> <cos_mask> | any];
- <cos_id> – Class of Service in decimal format [0-7];
- <cos_mask> – Class of Service mask in decimal format [0-7];
- <Ethertype> – [ethertype <ethertype_id> <ethertype_mask> | any];
- <ethertype_id> – EtherType – two byte field [0x0000 - 0xFFFF];
- <ethertype_mask> – EtherType mask – two byte field [0x0000 - 0xFFFF];
- <index_id> – rule number [1-20].

Privilege group

`config-acl`

Command mode

CONFIG-ACL

Example

```
LTP-16N(configure)(access-list-ip-ip1)# permit proto 1 192.168.133.0 255.255.255.0 any
LTP-16N(configure)(access-list-ip-ip1)# permit udp 5.1.5.0 255.255.255.0 any any any
LTP-16N(configure)(access-list-ip-ip1)# permit udp any any 5.3.6.0 255.255.255.0 any dscp any
mac any any vlan any cos any ethertype any index 3
LTP-16N(configure)(access-list-ip-ip1)# permit udp any any any any dscp 63 mac
AA:BB:CC:DD:EE:FF FF:FF:FF:FF:FF:FF FF:EE:DD:CC:BB:AA FF:FF:FF:FF:FF:FF vlan 4094 cos 7 1 index
8
LTP-16N(configure)(access-list-ip-ip1)# permit any any any dscp any mac any any
ethertype 0xAB00 0xFFFF
LTP-16N(configure)(access-list-ip-ip1)# permit any any any dscp any mac any any cos 2 3
```

deny

Adding deny rule to access-list or replacing an existing rule.

Syntax

```
[no] deny <protocol> <Source IP address>  [<port_src>] <Destination IP address>
[<Port_dst>] [dscp <DSCP>] [ mac <Source mac> <Destination mac>   [vlan <Vlan>]
[ <Cos>]  [<Ethertype> ] ] [index <Index_id>]
```

Parameters

- <protocol> – protocol type [tcp | udp | proto <proto_id> | any];
- <proto_id> – protocol number [0-255];
- <Source IP address> – source IP address [<IP> <mask> | any];
- <IP> – IP address [xxx.xxx.xxx.xxx];
- <mask> – IP address mask [xxx.xxx.xxx.xxx];
- <Port_src> – source port [0-65535] [<IP> <mask> | any];
- <Destination IP address> – destination IP address;
- <Port_dst> – destination port [0-65535];
- <DSCP> – Differenciated Services Code Point in decimal format [0-63];
- <Source mac> – source MAC address [<mac> <mac_mask> | any];
- <Destination mac> – destination MAC address [<mac> <mac_mask> | any];
- <mac> – MAC address [XX:XX:XX:XX:XX:XX];

- <mac_mask> – MAC address mask [XX:XX:XX:XX:XX:XX];
- <vlan> – vlan [1-4094];
- <Cos> – [cos <cos_id> <cos_mask> | any];
- <cos_id> – Class of Service in decimal format [0-7];
- <cos_mask> – Class of Service mask in decimal format [0-7];
- <Ethertype> – [ethertype <ethertype_id> <ethertype_mask> | any];
- <ethertype_id> – EtherType – two byte field [0x0000 - 0xFFFF];
- <ethertype_mask> – EtherType mask – two byte field [0x0000 - 0xFFFF];
- <index_id> – rule number [1-20].

Privilege group

`config-acl`

Command mode

CONFIG-ACL

Example

```
LTP-16N(configure)(access-list-ip-ip1)# deny proto 1 192.168.133.0 255.255.255.0 any
LTP-16N(configure)(access-list-ip-ip1)# deny udp 5.1.5.0 255.255.255.0 any any any
LTP-16N(configure)(access-list-ip-ip1)# deny udp any any 5.3.6.0 255.255.255.0 any dscp any mac
any any vlan any cos any ethertype any index 3
LTP-16N(configure)(access-list-ip-ip1)# deny udp any any any any dscp 63 mac AA:BB:CC:DD:EE:FF
FF:FF:FF:FF:FF:FF FF:EE:DD:CC:BB:AA FF:FF:FF:FF:FF:FF vlan 4094 cos 7 1 index 8
LTP-16N(configure)(access-list-ip-ip1)# deny any any any dscp any mac any any ethertype 0xAB00
0xFFFF
LTP-16N(configure)(access-list-ip-ip1)# deny any any any dscp any mac any any cos 2 3
```

remove

Removing rule from access-list.

Syntax

`remove index <Index_id>`

Parameters

<index_id> – rule number [1-20].

Privilege group

`config-acl`

Command mode

CONFIG-ACL

Example

```
LTP-16N(config)(access-list-ip-duip)# remove index 11
```

access-list mac configuration

Configuration of access control lists with filtering by MAC addresses.

- access-list mac
  - permit
  - deny
  - remove

access-list mac

Switch to MAC access-list configuration mode.

Syntax

```
[no] access-list mac <Word>
```

Parameters

<Word> – list name (from 1 to 15 characters).

Privilege group

```
config-acl
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# access-list mac list1
```

permit

Adding an allow rule to access-list or replacing an existing rule.

Syntax

```
[no] permit  <Source mac> <Destination mac>   [vlan <Vlan>]  [ <Cos>]  [<Ethertype> ]
[index <Index_id>]
```

Parameters

- <Source mac> – source MAC address [<mac> <mac_mask> | any];
- <Destination mac> – destination MAC address [<mac> <mac_mask> | any];
- <mac> – MAC address [XX:XX:XX:XX:XX:XX];
- <mac_mask> – MAC address mask [XX:XX:XX:XX:XX:XX];
- <vlan> – vlan [1-4094];
- <Cos> – [cos <cos_id> <cos_mask> | any];
- <cos_id> – Class of Service in decimal format [0-7];
- <cos_mask> – Class of Service mask in decimal format [0-7];
- <Ethertype> – [ethertype <ethertype_id> <ethertype_mask> | any];
- <ethertype_id> – EtherType – two byte field [0x0000 - 0xFFFF];
- <ethertype_mask> – EtherType mask – two byte field [0x0000 - 0xFFFF];
- <index_id> – rule number [1-20].

Privilege group

config-acl

Command mode

CONFIG-ACL

Example

```
LTP-16N(configure)# access-list mac mac1
LTP-16N(config)(access-list-mac-mac1)# permit A8:F9:4B:AA:00:00 FF:FF:FF:FF:00:00 any
LTP-16N(config)(access-list-mac-mac1)# permit  D8:F9:4B:00:00:44 FF:FF:00:00:00:00 any vlan 11
cos 7 7 ethertype 0xAB00 0xFFFF index 4
LTP-16N(config)(access-list-mac-mac1)# permit any any cos 5 5 index 4
LTP-16N(config)(access-list-mac-mac1)# permit any any vlan 7
```

deny

Adding deny rule to access-list or replacing an existing rule.

Syntax

```
[no] permit  <Source mac> <Destination mac>   [vlan <Vlan>]  [ <Cos>]  [<Ethertype> ]
[index <Index_id>]
```

Parameters

- <Source mac> – source MAC address [<mac> <mac_mask> | any];
- <Destination mac> – destination MAC address [<mac> <mac_mask> | any];
- <mac> – MAC address [XX:XX:XX:XX:XX:XX];
- <mac_mask> – MAC address mask [XX:XX:XX:XX:XX:XX];
- <vlan> – vlan [1-4094];
- <Cos> – [cos <cos_id> <cos_mask> | any];
- <cos_id> – Class of Service in decimal format [0-7];
- <cos_mask> – Class of Service mask in decimal format [0-7];
- <Ethertype> – [ethertype <ethertype_id> <ethertype_mask> | any];
- <ethertype_id> – EtherType – two byte field [0x0000 - 0xFFFF];
- <ethertype_mask> – EtherType mask – two byte field [0x0000 - 0xFFFF];
- <index_id> – rule number [1-20].

Privilege group

config-acl

Command mode

CONFIG-ACL

Example

```
LTP-16N(configure)# access-list mac mac1
LTP-16N(config)(access-list-mac-mac1)# permit A8:F9:4B:AA:00:00 FF:FF:FF:FF:00:00 any
LTP-16N(config)(access-list-mac-mac1)# permit  D8:F9:4B:00:00:44 FF:FF:00:00:00:00 any vlan 11
cos 7 7 ethertype 0xAB00 0xFFFF index 4
LTP-16N(config)(access-list-mac-mac1)# permit any any cos 5 5 index 4
LTP-16N(config)(access-list-mac-mac1)# permit any any vlan 7
```

remove

Removing rules from access-list.

Syntax

`remove index <Index_id>`

Parameters

<index_id> – rule number [1-20].

Privilege group

`config-acl`

Command mode

CONFIG-ACL

Example

```
LTP-16N(config)(access-list-mac-duip)# remove index 11
```

ACSD and DHCPD configuration

ip acs

Switch to ACS configuration mode.

Syntax

```
ip acs
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-general
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip acs
```

acs-server enable

Enabling built-in server of ONT automatic configuration.

Syntax

```
acs-server enable
no acs-server enable
```

Parameters

The command does not contain any parameters.

Privilege group

`config-general`

Default value

`no acs-server enable`

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server enable
```

acs-server ip

Configuring IP address for ACS.

Syntax

```
acs-server ip <IP>
no acs-server ip
```

Parameters

<IP> – IP address specified in AAA.BBB.CCC.DDD format, where each part takes value [0-255].

Privilege group

`config-general`

Default value

`acs-server ip 192.168.200.1`

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server ip 192.168.200.2
```

acs-server login

Configuring user name for ACS.

Syntax

```
acs-server login <LOGIN>
no acs-server login
```

Parameters

<LOGIN> – set user name for ACS: from 1 to 31 text symbols, including '-', '_', '=', '+'.

Privilege group

config-general

Default value

```
acs-server login acs
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server login acsacs
```

acs-server mask

Configuring IP mask for ACS.

Syntax

```
acs-server mask <IP>
no acs-server mask
```

Parameters

<IP> – IP mask specified in AAA.BBB.CCC.DDD format, where each part takes value [0-255].

Privilege group

```
config-general
```

Default value

```
acs-server mask 255.255.248.0
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server mask 255.255.255.0
```

acs-server password

Configuring password for ACS.

Syntax

```
acs-server password <PASSWORD>
no acs-server password
```

Parameters

<PASSWORD> – set password for ACS: from 1 to 31 text symbols, including "-", "_", "=", "+".

Privilege group

```
config-general
```

Default value

```
acs-server password acsacs
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server login acs
```

acs-server port

Configuring port for ACS.

Syntax

```
acs-server port <PORT>
no acs-server port
```

Parameters

<PORT> – ID port in range [1-65535].

Privilege group

```
config-general
```

Default value

```
acs-server port 9595
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server port 333
```

acs-server scheme

Configuring protocol for ACS.

Syntax

```
acs-server scheme <VALUE>
no acs-server scheme
```

Parameters

<VALUE> – specify protocol for ACS operation.

Privilege group

```
config-general
```

Default value

```
acs-server scheme http
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server port http
```

acs-server vlan

Configuring VLAN for ACS.

Syntax

```
acs-server vlan <VID>
no acs-server vlan
```

Parameters

<VID> – VLAN ID in range [1-4094].

Privilege group

```
config-general
```

Default value

```
acs-server vlan 2
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# acs-server vlan 100
```

dhcp-server enable

Enabling built-in DHCP server for ACS operation.

Syntax

```
[no] dhcp-server enable
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-general
```

Default value

```
no dhcp-server enable
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# dhcp-server enable
```

dhcp-server lease-time

Configuring lease time for DHCP server.

Syntax

```
dhcp-server lease-time <TIME>
no dhcp-server lease-time
```

Parameters

<TIME> – set lease time in seconds [600–2678400].

Privilege group

```
config-general
```

Default value

```
dhcp-server lease-time 86400
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# dhcp-server lease-time 90000
```

dhcp-server option-43 enable

Enabling option 43 generation for DHCP packets.

Syntax

```
dhcp-server option-43 enable
no dhcp-server option-43 enable
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-general
```

Default value

```
no dhcp-server option-43 enable
```

Command mode

ACS

Example

```
LTP-16N(config)(acs)# dhcp-server option-43 enable
```

dhcp-server range

Configuring address pool for DHCP server.

Syntax

```
dhcp-server range <IP1> <IP2>
no dhcp-server range
```

Parameters

<IP1> – initial IP address for DHCP server address pool in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

<IP2> – end IP address for DHCP server address pool in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

Privilege group

`config-general`

Default value

`dhcp-server range 192.168.200.10 192.168.200.150`

Command mode

ACS

Example

```
LTP-16N(config)(acs)# dhcp-server range 192.168.200.2 192.168.200.100
```

dhcp-server static-route

Configuring a static route passed in option 121.

Syntax

```
dhcp-server static-route network <IP> mask <MASK> gateway <GATEWAY>
no dhcp-server static-route
```

Parameters

<IP> – IP address in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

<MASK> – IP mask in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

<GATEWAY> – gateway IP address in AAA.BBB.CCC.DDD format, where each part takes values [0-255].

Privilege group

`config-general`

Default value

`no dhcp-server static-route`

Command mode

ACS

Example

```
LTP-16N(config)(acs)# ip dhcp server static-route net 172.20.240.0 mask 255.255.255.0 gateway
172.20.40.1
```

Alarm configuration

- ont-firmware-delete severity
- ont-firmware-delete in
- ont-firmware-delete ttl
- ont-firmware-update-complete severity
- ont-firmware-update-complete in
- ont-firmware-update-complete ttl
- ont-firmware-update-progress severity
- ont-firmware-update-progress in
- ont-firmware-update-progress ttl
- ont-firmware-update-start severity
- ont-firmware-update-start in
- ont-firmware-update-start ttl
- ont-firmware-update-stop severity
- ont-firmware-update-stop in
- ont-firmware-update-start ttl
- 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-multicast-storm severity
- ont-multicast-storm in
- ont-multicast-storm out
- ont-multicast-storm ttl
- ont-no-config in
- ont-no-config severity
- ont-no-config ttl
- ont-rogue in
- ont-rogue severity
- ont-rogue 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
- olt-firmware-update severity
- olt-firmware-fail-update in
- olt-firmware-update ttl
- olt-firmware-fail-update severity
- olt-firmware-fail-update in
- olt-firmware-fail-update 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

Configuring the category of normalizing alarm when applying the configuration.

Syntax

```
[no] config-change severity <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)# config-change severity critical
```

config-change in

Configuring normalizing alarm SNMP trap sending when configuration is applied.

Syntax

```
[no] 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-change ttl

Configuring config-change alarm life time.

Syntax

```
[no] config-change ttl <VALUE>
```

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)# config-change ttl 0
```

config-rollback severity

Configuring normalizing alarm category when canceling changes in configuration.

Syntax

```
[no] config-rollback severity <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)# config-rollback severity critical
```

config-rollback in

Configuring normalizing alarm SNMP trap sending when canceling changes in configuration.

Syntax

```
[no] config-rollback 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-rollback in true
```

config-rollback ttl

Configuring config-rollback alarm life time.

Syntax

`[no] config-rollback ttl <VALUE>`

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)# config-rollback ttl 0
```

config-save severity

Configuring normalizing alarm category when saving the configuration.

Syntax

```
[no] config-save severity <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)# config-save severity critical
```

config-save in

Configuring normalizing alarm SNMP trap sending when configuration is saved.

Syntax

```
[no] 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
```

config-save ttl

Configuring config-save alarm life time.

Syntax

```
[no] config-save ttl <VALUE>
```

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)# config-save ttl 0
```

config-save-failed severity

Configuring normalizing alarm category at configuration saving error.

Syntax

```
[no] config-save-failed severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity raiting:

- info;
- minor;
- major;
- critical.

Default value

`info`

Privilege group

`config-general`

Command mode

ALARM

Example

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

config-save-failed in

Configuring normalizing alarm SNMP trap sending at configuration sending error.

Syntax

`[no] config-save-failed 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-failed in true
```

config-save-failed ttl

Configuring config-save-failed alarm life time.

Syntax

```
[no] config-save-failed ttl <VALUE>
```

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)# config-save-failed ttl 0
```

system-fan severity

Configuring fan alarm category.

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

Configuring normalizing alarm SNMP trap sending 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

Configuring normalizing alarm SNMP trap sending 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

Configuring 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

Configuring 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-fan ttl

Configuring system-fan alarm life time.

Syntax

```
system-fan ttl <VALUE>
no system-fan 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)# system-fan ttl 0
```

system-load-average severity

Configuring alarm category on 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

Configuring the sending of 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

Configuring the sending of 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

Configuring the threshold for the average CPU load at which an alarm will be triggered.

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-load-average ttl

Configuring system-load-average alarm life time.

Syntax

```
system-load-average ttl <VALUE>
no system-load-average 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)# system-load-average ttl 0
```

system-login severity

Configuring 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

Configuring the normalizing alarm SNMP trap sending on 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-login ttl

Configuring system-login alarm life time.

Syntax

```
system-login ttl <VALUE>
no system-login 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)# system-login ttl 0
```

system-logout severity

Configuring normalizing alarm category on 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

Configuring the sending of 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-logout ttl

Configuring system-logout alarm life time.

Syntax

```
system-logout ttl <VALUE>
no system-logout 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)# system-logout ttl 0
```

system-power-supply severity

Configuring power sources alarm category.

Syntax

```
system-power-supply severity <SEVERITY>
no system-power-supply
```

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-power-supply severity major
```

system-power-supply in

Configuring SNMP trap sending on power supply alarm.

Syntax

```
[no] system-power-supply 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-power-supply in true
```

system-power-supply out

Configuring the sending of an SNMP trap normalizing a power supply alarm.

Syntax

```
[no] system-power-supply 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-power-supply out true
```

system-power-supply ttl

Configuring system-power-supply alarm life time.

Syntax

`[no] system-power-supply ttl <VALUE>`

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)# system-power-supply ttl 0
```

system-ram severity

Configuring the memory alarm category.

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

Configuring the 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

Configuring the 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 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-ram ttl

Configuring system-ram alarm life time.

Syntax

```
[no] system-ram ttl <VALUE>
```

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)# system-ram ttl 0
```

system-temperature severity

Configuring temperature sensors alarm category.

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

Configuring the sending alarm SNMP trap on 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

Configuring the sending normalizing alarm SNMP trap on 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

Setting the maximum temperature at which an alarm will be 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

Setting the maximum temperature at which an an alarm will be triggered 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
```

system-temperature ttl

Configuring system-temperature alarm life time.

Syntax

```
[no] system-temperature ttl <VALUE>
```

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)# system-temperature ttl 0
```

pon-alarm-dfi severity

Configuring Deactivate Failure PON alarm category for ONUi.

Syntax

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

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

Configuring the sending of 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-dfi ttl

Configuring pon-alarm-dfi alarm life time.

Syntax

```
[no] pon-alarm-dfi ttl <VALUE>
```

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)# pon-alarm-dfi ttl 0
```

pon-alarm-dgi severity

Configuring the Dying-Gasp PON alarm category for ONUi.

Syntax

`[no] pon-alarm-dgi severity <SEVERITY>`

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

Configuring the sending of Dying-Gasp PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-dgi ttl

Configuring pon-alarm-dgi alarm life time.

Syntax

```
[no] pon-alarm-dgi ttl <VALUE>
```

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)# pon-alarm-dgi ttl 0
```

pon-alarm-dowi severity

Configuring the Drift of Window PON alarm category for ONUi.

Syntax

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

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

Configuring the sending Drift of Window PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-dowi ttl

Configuring pon-alarm-dowi alarm life time.

Syntax

`[no] pon-alarm-dowi ttl <VALUE>`

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)# pon-alarm-dowi ttl 0
```

pon-alarm-lcdgi severity

Configuring the Loss of Channel Delineation PON alarm category for ONUi.

Syntax

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

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

Configuring the sending Loss of GEM Channel Delineation PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-lcdgi ttl

Configuring pon-alarm-lcdgi alarm life time.

Syntax

```
[no] pon-alarm-lcdgi ttl <VALUE>
```

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)# pon-alarm-lcdgi ttl 0
```

pon-alarm-loai severity

Configuring the Loss of Acknowledge PON alarm category for ONUi.

Syntax

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

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

Configuring the sending Loss of Acknowledge PON alarm SNMP trap for ONUi.

Syntax

`[no] 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-loai ttl

Configuring pon-alarm-loai alarm life time.

Syntax

```
[no] pon-alarm-loai ttl <VALUE>
```

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)# pon-alarm-loai ttl 0
```

pon-alarm-loami severity

Configuring the PLOAM loss PON alarm category for ONUi.

Syntax

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

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

Configuring the sending of PLOAM loss PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-loami ttl

Configuring pon-alarm-loami alarm life time.

Syntax

```
[no] pon-alarm-loami ttl <VALUE>
```

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)# pon-alarm-loami ttl 0
```

pon-alarm-lofi severity

Configuring Loss of Frame PON alarm category for ONUi.

Syntax

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

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

Configuring the sending of Loss of Frame PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-lofi ttl

Configuring pon-alarm-lofi alarm life time.

Syntax

`[no] pon-alarm-lofi ttl <VALUE>`

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)# pon-alarm-lofi ttl 0
```

pon-alarm-loki severity

Configuring the Loss of Key PON alarm category for ONUi.

Syntax

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

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

Configuring the sending of 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-loki ttl

Configuring pon-alarm-loki alarm life time.

Syntax

```
[no] pon-alarm-loki ttl <VALUE>
```

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)# pon-alarm-loki ttl 0
```

pon-alarm-los severity

Configuring Loss of Signal PON alarm category.

Syntax

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

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

Configuring the sending of Loss of Signal PON alarm SNMP trap.

Syntax

`[no] 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

Configuring the sending of Loss of Signal normalizing PON alarm SNMP trap.

Syntax

```
[no] 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-los ttl

Configuring pon-alarm-los alarm life time.

Syntax

```
[no] pon-alarm-los ttl <VALUE>
```

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)# pon-alarm-los ttl 0
```

pon-alarm-losi severity

Configuring Loss of Signal PON alarm category for ONUi.

Syntax

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

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

Configuring the sending of Loss of Signal PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-losi ttl

Configuring pon-alarm-losi alarm life time.

Syntax

`[no] pon-alarm-losi ttl <VALUE>`

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)# pon-alarm-losi ttl 0
```

pon-alarm-rdii severity

Configuring the Remote Defect Indication PON alarm category for ONUi.

Syntax

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

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

Configuring the sending of Remote Defect Indication PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-rdii ttl

Configuring pon-alarm-rdii alarm life time.

Syntax

```
[no] pon-alarm-rdii ttl <VALUE>
```

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)# pon-alarm-rdii ttl 0
```

pon-alarm-sdi severity

Configuring the Signal Degraded PON alarm category for ONUi.

Syntax

```
[no] pon-alarm-sdi severity <SEVERITY>
```

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

Configuring the sending of Signal Degraded PON alarm SNMP trap for ONUi.

Syntax

`[no] 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-sdi ttl

Configuring pon-alarm-sdi life time alarm.

Syntax

```
[no] pon-alarm-sdi ttl <VALUE>
```

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)# pon-alarm-sdi ttl 0
```

pon-alarm-sufi severity

Configuring the Start-up Failure PON alarm category for ONUi.

Syntax

```
[no] pon-alarm-sufi severity <SEVERITY>
```

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

Configuring the sending of Start-up Failure PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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-sufi ttl

Configuring pon-alarm-sufi alarm life time.

Syntax

```
[no] pon-alarm-sufi ttl <VALUE>
```

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)# pon-alarm-sufi ttl 0
```

pon-alarm-tiwi severity

Configuring the Transmission Interference Warning PON alarm category for ONUi.

Syntax

```
[no] pon-alarm-tiwi severity <SEVERITY>
```

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

Configuring the sending of Transmission Interference Warning PON alarm SNMP trap for ONUi.

Syntax

```
[no] 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
```

pon-alarm-tiwi ttl

Configuring pon-alarm-tiwi alarm life time.

Syntax

`[no] pon-alarm-tiwi ttl <VALUE>`

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)# pon-alarm-tiwi ttl 0
```

pon-port-ont-count-overflow severity

Configuring the normalizing alarm category when the connected ONTs are full for pon-port.

Syntax

```
[no] pon-port-ont-count-overflow severity <SEVERITY>
```

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-port-ont-count-overflow severity major
```

pon-port-ont-count-overflow in

Configuring the sending of SNMP trap the connected ONTs are full for pon-port.

Syntax

```
[no] pon-port-ont-count-overflow 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-port-ont-count-overflow in true
```

pon-port-ont-count-overflow out

Configuring the sending of SNMP trap the connected ONTs are full for pon-port.

Syntax

```
[no] pon-port-ont-count-overflow 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-port-ont-count-overflow out true
```

pon-port-ont-count-overflow ttl

Configuring pon-port-ont-count-overflow alarm life time.

Syntax

```
[no] pon-port-ont-count-overflow ttl <VALUE>
```

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)# pon-port-ont-count-overflow ttl 0
```

pon-port-state-change severity

Configuring the normalizing alarm category when changing pon-port state.

Syntax

`[no] pon-port-state-change severity <SEVERITY>`

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-port-state-change severity major
```

pon-port-state-change in

Configuring the sending of SNMP trap when changing the pon-port state.

Syntax

```
[no] pon-port-state-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)# pon-port-state-change in true
```

pon-port-state-change ttl

Configuring pon-port-state-change alarm life time.

Syntax

```
[no] pon-port-state-change ttl <VALUE>
```

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)# pon-port-state-change ttl 0
```

system-disk-space severity

Configuring the normalizing alarm category when OLT memory is full.

Syntax

```
[no] system-disk-space severity <SEVERITY>
```

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-disk-space severity major
```

system-disk-space in

Configuring the SNMP trap sending when OLT memory is full.

Syntax

```
[no] system-disk-space 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-disk-space in true
```

system-disk-space out

Configuring the sending of SNMP trap normalizing alarm when OLT memory is full.

Syntax

`[no] system-disk-space out <SEND>`

Parameters

<SEND> – sending SNMP trap or not:

- true;
- false.

Default value

`true`

Privilege group

`config-general`

Command mode

ALARM

Example

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

system-disk-space ttl

Configuring system-disk-space alarm life time.

Syntax

`[no] system-disk-space ttl <VALUE>`

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)# system-disk-space ttl 0
```

system-disk-space free

Configuring system-disk-space alarm start threshold.

Syntax

`[no] system-disk-space free <VALUE>`

Parameters

<VALUE> – parameter indicates the OLT memory fill level, set as a percentage. From 0 to 100 percent.

Default value

`-1`

Privilege group

`config-general`

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# system-disk-space free 50
```

ont-broadcast-storm severity

Configuring normalizing alarm category at the begging of broadcast storm on ONT.

Syntax

```
[no] ont-broadcast-storm severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

```
critical
```

Privilege group

```
config-general
```

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-broadcast-storm severity major
```

ont-broadcast-storm in

Configuring the sending of SNMP trap at the beginning of the broadcast storm on the ONT.

Syntax

```
[no] ont-broadcast-storm 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)# ont-broadcast-storm in true
```

ont-broadcast-storm out

Configuring the sending of SNMP trap at the end of broadcast storm on ONT.

Syntax

```
[no] ont-broadcast-storm 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)# ont-broadcast-storm out true
```

ont-broadcast-storm ttl

Configuring ont-broadcast-storm alarm life time.

Syntax

```
[no] ont-broadcast-storm ttl <VALUE>
```

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-broadcast-storm ttl 0
```

ont-config-change severity

Configuring normalizing alarm category when changing ONT configuration.

Syntax

`[no] ont-config-change severity <SEVERITY>`

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

`critical`

Privilege group

`config-general`

Command mode

ALARM

Example

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

ont-config-change in

Configuring the sending of SNMP trap when changing the ONT configuration.

Syntax

```
[no] ont-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)# ont-config-change in true
```

ont-config-change ttl

Configuring ont-config-change alarm life time.

Syntax

```
[no] ont-config-change ttl <VALUE>
```

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-config-change ttl 0
```

ont-firmware-delete severity

Configuring normalizing alarm category when deleting ONT firmware file.

Syntax

```
[no] ont-firmware-delete severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

```
critical
```

Privilege group

```
config-general
```

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-firmware-delete severity major
```

ont-firmware-delete in

Configuring the sending of SNMP trap when deleting ONT firmware file.

Syntax

```
[no] ont-firmware-delete 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)# ont-firmware-delete in true
```

ont-firmware-delete ttl

Configuring ont-firmware-delete alarm life time.

Syntax

`[no] ont-firmware-delete ttl <VALUE>`

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-firmware-delete ttl 0
```

ont-firmware-update-complete severity

Configuring normalizing alarm category at successful ONT update.

Syntax

```
[no] ont-firmware-update-complete severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

```
critical
```

Privilege group

```
config-general
```

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-firmware-update-complete severity major
```

ont-firmware-update-complete in

Configuring the sending of SNMP trap at successful ONT update.

Syntax

```
[no] ont-firmware-update-complete 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)# ont-firmware-update-complete in true
```

ont-firmware-update-complete ttl

Configuring ont-firmware-update-complete alarm life time.

Syntax

```
[no] ont-firmware-update-complete ttl <VALUE>
```

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-firmware-update-complete ttl 0
```

ont-firmware-update-progress severity

Configuring normalizing alarm category when updating ONT.

Syntax

```
[no] ont-firmware-update-progress severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

`critical`

Privilege group

`config-general`

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-firmware-update-progress severity major
```

ont-firmware-update-progress in

Configuring the sending of SNMP trap when updating ONT.

Syntax

`[no] ont-firmware-update-progress 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)# ont-firmware-update-progress in true
```

ont-firmware-update-progress ttl

Configuring ont-firmware-update-progress alarm life time.

Syntax

```
[no] ont-firmware-update-progress ttl <VALUE>
```

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-firmware-update-progress ttl 0
```

ont-firmware-update-start severity

Configuring normalizing alarm category at ONT update start.

Syntax

```
[no] ont-firmware-update-start severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

```
critical
```

Privilege group

```
config-general
```

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-firmware-update-start severity major
```

ont-firmware-update-start in

Configuring the sending of SNMP trap at ONT update start.

Syntax

```
[no] ont-firmware-update-start 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)# ont-firmware-update-start in true
```

ont-firmware-update-start ttl

Configuring ont-firmware-update-start alarm life time.

Syntax

```
[no] ont-firmware-update-start ttl <VALUE>
```

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-firmware-update-start ttl 0
```

ont-firmware-update-stop severity

Configuring normalizing alarm category at ONT update stop.

Syntax

```
[no] ont-firmware-update-stop severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

critical

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-firmware-update-stop severity major
```

ont-firmware-update-stop in

Configuring the sending of SNMP trap at ONT update stop.

Syntax

```
[no] ont-firmware-update-stop 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)# ont-firmware-update-stop in true
```

ont-firmware-update-start ttl

Configuring ont-firmware-update-start alarm life time.

Syntax

`[no] ont-firmware-update-start ttl <VALUE>`

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-firmware-update-start ttl 0
```

ont-link-down in

Configuring the sending of 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

Configuring normalizing alarm category when 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 severity major
```

ont-link-down ttl

Configuring 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

-1ont-link-down severity

Privilege group

config-general

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-link-down ttl 0
```

ont-link-up in

Configuring the sending of 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

Configuring normalizing alarm category when 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 severity major
```

ont-link-up ttl

Configuring 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 ttl 0
```

ont-multicast-storm severity

Configuring normalizing alarm category at the beginning of multicast storm on ONT.

Syntax

```
[no] ont-multicast-storm severity <SEVERITY>
```

Parameters

<SEVERITY> – alarm severity rating:

- info;
- minor;
- major;
- critical.

Default value

`critical`

Privilege group

`config-general`

Command mode

ALARM

Example

```
LTP-16N(config)(alarm)# ont-multicast-storm severity major
```

ont-multicast-storm in

Configuring the sending of SNMP trap at the beginning of multicast storm on ONT.

Syntax

`[no] ont-multicast-storm 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)# ont-multicast-storm in true
```

ont-multicast-storm out

Configuring the sending of SNMP trap at the end of multicast storm on ONT.

Syntax

```
[no] ont-multicast-storm 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)# ont-multicast-storm out true
```

ont-multicast-storm ttl

Configuring ont-multicast-storm alarm life time.

Syntax

```
[no] ont-multicast-storm ttl <VALUE>
```

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-multicast-storm ttl 0
```

ont-no-config in

Configuring the sending of 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

Configuring the sending of 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 severity major
```

ont-no-config ttl

Configuring 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 ttl 0
```

ont-rogue in

Configuring the sending of SNMP trap on ont-rogue PON alarm. An alarm indicates that ONT transmitter is malfunctioned.

Syntax

```
[no] ont-rogue 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)# ont-rogue in true
```

ont-rogue severity

Configuring normalizing alarm category for ONT optical transmitter malfunction.

Syntax

```
[no] ont-no-config severity <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-rogue severity major
```

ont-rogue ttl

Configuring ont-rogue alarm life time.

Syntax

```
[no] ont-rogue ttl <VALUE>
```

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-rogue ttl 0
```

ont-state-changed in

Configuring the sending of 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

Configuring normalizing alarm category when ONT status is changed.

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-state-changed severity major
```

ont-state-changed ttl

Configuring 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 ttl 0
```

ont-valid-config in

Configuring the sending of 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

Configuring normalizing alarm category if 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-valid-config severity major
```

ont-valid-config ttl

Configuring 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 ttl 0
```

olt-firmware-update severity

Configuring normalizing alarm category at OLT update.

Syntax

`[no] olt-firmware-update severity <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)# olt-firmware-update severity critical
```

olt-firmware-fail-update in

Configuring the sending of normalizing alarm SNMP trap at OLT update.

Syntax

```
[no] olt-firmware-update 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)# olt-firmware-update in true
```

olt-firmware-update ttl

Configuring olt-firmware-update alarm life time.

Syntax

```
[no] olt-firmware-update ttl <VALUE>
```

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)# olt-firmware-update ttl 0
```

olt-firmware-fail-update severity

Configuring normalizing alarm category at OLT update error.

Syntax

```
[no] olt-firmware-fail-update severity <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)# olt-firmware-fail-update severity critical
```

olt-firmware-fail-update in

Configuring the sending of normalizing alarm SNMP trap at OLT update error.

Syntax

```
[no] olt-firmware-fail-update 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)# olt-firmware-fail-update in true
```

olt-firmware-fail-update ttl

Configuring olt-firmware-fail-update alarm life time.

Syntax

`[no] olt-firmware-fail-update ttl <VALUE>`

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)# olt-firmware-fail-update ttl 0
```

mac-duplicate in

Configuring the sending of SNMP trap of 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

Configuring the sending of SNMP trap of 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> — alarm severity rating:

- 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

Configuring mac-duplicate alarm life time. 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
```

Automatic backup download configuration

backup

Switching to the automatic backup download configuration mode.

Syntax

`backup`

Parameters

The command does not contain any parameters.

Privilege group

`config-general`

Command mode

`CONFIG`

Example

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

enable on save

Enabling automatic backup download by the **save** command.

Syntax

`[no] enable on save`

Parameters

The command does not contain any parameters.

Privilege group

`config-general`

Command mode

`backup-view`

Example

```
LTP-16N(config)(backup)# enable on save
```

enable on timer

Enabling automatic backup download by timer.

Syntax

```
[no] enable on timer
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-general
```

Command mode

```
backup-view
```

Example

```
LTP-16N(config)(backup)# enable on timer
```

timer period

Configuring a timer for automatic backup download.

Syntax

```
timer period <VALUE>
no timer period
```

Parameters

<VALUE> – value in the range [600-300000], in seconds.

Privilege group

```
config-general
```

Command mode

```
backup-view
```

Example

```
LTP-16N(config)(backup)# timer period 86400
```

uri

Configuring an address to which backups will be sent.

Syntax

```
uri <VALUE>
no uri
```

Parameters

<VALUE> – URL of the directory into which configurations will be automatically uploaded.

Privilege group

config-general

Command mode

backup-view

Example

```
LTP-16N(config)(backup)# uri tftp://192.168.1.1/backup
```

CLI configuration

cli display

Configuring the display of ONT PLOAM password in lists.

Syntax

```
[no] cli display <VALUE>
```

Parameters

<VALUE> – may take values:

- config-password – display in the list ONT configured to OLT for ONT PLOAM password
- received-password – display in the list ONT received from ONT PLOAM password.

Default value

```
no cli display config-password
no cli display received-password
```

Privilege group

```
config-cli
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# cli display config-password
```

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

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.

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.

Syntax

```
opt82 profile <PROFILE> vid <VID>
no opt82 profile vid <VID>
```

Parameters

<PROFILE> — name of the set profile. String from 1 to 15 characters;

<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
```

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 giaddr

Configuring the address to be substituted in the giaddr field for relay DHCP packets.

Syntax

`[no] relay giaddr <IP> vlan <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 giaddr 10.101.11.1 vlan 330
```

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
```

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
```

Firmware configuration

- firmware ont auto-replace enable

firmware ont auto-replace enable

Activating the functionality to automatically replace ONT firmware files when there is insufficient free space available

Syntax

```
firmware ont auto-replace enable
[no] firmware ont auto-replace enable
```

Parameters

The command does not contain any parameters.

Default value

```
no firmware ont auto-replace enable
```

Privilege group

```
commands-interface-ont
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# firmware ont auto-replace enable
```

IGMP configuration

ip igmp snooping enable

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 range 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

Switch to the front ports configuration mode.

Syntax

```
[no] interface front-port <ID>
```

Parameters

<ID> — port index in the range [1-8] for LTP-16N and [1-4] for LTX-8(16) and LTP-8N. 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
```

access-list

Enable filtering on the interface by assigning access-list to it.

Syntax

[no] access-list <type> <WORD>

Parameters

<type> – specify access-list type: **ip** or **mac**;
<WORD> – name from 1 to 15 characters.

Example

```
LTP-16N(config)(if-front-1)# access-list ip ip1
LTP-16N(config)(if-front-1)# access-list mac mac1
```

bridge allow

Creating a bridge between front-ports in specified VLAN.

Syntax

```
[no] bridge allow <VID>
```

Parameters

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

Default value

```
no bridge allow 1-4094
```

Privilege group

```
if-front-view
```

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# bridge allow 100
```

⚠ The maximum number of VLANs on a port in which bridging can be enabled is 10.

channel-group port-channel

Adding an 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

A command to 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-front-3)# shutdown
```

speed

Setting a port operation rate.

Syntax

`[no] speed <VALUE>`

Parameters

<VALUE> – auto/1000/10G port rate value for LTP-16N auto/10G/40G/100G for LTX-8(16).

Privilege group

`if-front-view`

Default value

`speed auto`

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# speed 1000
```

switchport mode

Setting VLAN operation mode.

Syntax

`[no] switchport mode <VALUE>`

Parameters

<VALUE> — operation modes:

- trunk — interface that transmits and accepts only tagged traffic;
- access — interface that transmits and accepts only untagged traffic;
- general — interface that transmits and accepts both tagged and untagged 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 <VID>
```

Parameters

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

Privilege group

```
if-front-view
```

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# vlan allow 100
```

pvid

Setting VID that will be used to mark incoming untagged traffic.

Syntax

```
[no] pvid <VID>
```

Parameters

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

Privilege group

```
if-front-view
```

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# pvid 1234
```

lacp mode

Setting the mode of interaction between the port and neighboring ports when establishing and configuring aggregated links using the LACP protocol.

Syntax

```
lacp mode <STATUS>
[no] lacp mode
```

Parameters

<STATUS> – LACP operation mode. Values:

- active – in this mode, the port initiates the LACP connections formation process;
- passive – in this mode, the port responds to LACPDU packets received from active ports.

Default value

```
lacp mode active
```

Privilege group

```
if-front-view
```

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)#  lacp mode active
```

lacp port-priority

Setting the priority value for selecting a port participating in an LACP port aggregation group.

Syntax

```
lacp port-priority <VALUE>
[no] lacp port-priority
```

Parameters

<VALUE> – may take values: 0-65535. A lower number means higher priority.

Default value

```
lacp port-priority 32768
```

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)#  lacp port-priority 1
```

lacp rate

Setting the LACPDU rate of an interface participating in a port aggregation group using the LACP protocol.

Syntax

```
lacp rate <MODE>
[no] lacp rate
```

Parameters

<MODE> – traffic switching mode. Values:

- fast – control packet sending interval once per second;
- slow – control packet sending interval once per 30 seconds.

Default value

```
lacp rate fast
```

Privilege group

```
if-front-view
```

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)#  lacp rate slow
```

lldp mode

Setting 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

Adding optional TLV to transmitted LLDPDU.

Syntax

```
lldp optional-tlv <VALUE>
[no] optional-tlv [<VALUE>|all]
```

Parameters

<VALUE> — LLDP operation mode. May take values:

- port-description – TLV containing port description;
- system-name – TLV containing information about system name (hostname);
- system-description – TLV containing detailed information about system;
- system-capabilities – TLV containing information about what network functions the device supports;
- management-address – TLV containing control address that the device has.

Privilege group

if-front-view

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# lldp optional-tlv management-address
```

lldp optional-tlv 802.1

Adding IEEE 802.1 specific TLVs to the transmitted LLDPDU.

Syntax

```
lldp optional-tlv 802.1 <VALUE>
[no] optional-tlv 802.1 <VALUE>
```

Parameters

<VALUE> – LLDP operation mode. Values:

- management-vid – TLV containing information about the VLAN ID value used for device management;
- vlan-name <1-4094> – TLV containing information about the assigned name of any VLAN configured on the device;
- pvid – TLV containing information about PVID assigned on a port;
- protocol <stp> – TLV containing information about specific protocols available through port;
- link-aggregation – TLV containing the following information: whether the link can be aggregated, whether the link is currently in aggregation, the identifier of the aggregated port.

Privileged group

`if-front-view`

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# lldp optional-tlv 802.1 vlan-name 1234
```

lldp optional-tlv 802.3

Adding IEEE 802.3-specific TLVs to the transmitted LLDPDU.

Syntax

```
lldp optional-tlv 802.3 <VALUE>
[no] optional-tlv 802.3 <VALUE>
```

Parameters

<VALUE> – LLDP operation mode. Values:

- max-frame-size – TLV containing information about the maximum frame size of implemented MAC/PHY;
- mac-phy – TLV containing the following information:
  - duplex capabilities and data transfer rates of the transmitting node connected to the physical medium;
  - current settings of duplex and data transfer speed of the transmitting node;
  - whether these settings are the result of automatic negotiation during communication initiation.

Privilege group

`if-front-view`

Command mode

IF-FRONT

Example

```
LTP-16N(config)(if-front-3)# lldp optional-tlv 802.3 max-frame-size
```

Interface ont configuration

interface ont

Switching 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] for LTP-16N and LTX-16, and [1-8] for LTX-8 and LTP-8N. 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] for GPON and [1-256] for XGS-PON. 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

Enabling 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

Setting 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"
```

fec

Enabling error correction feature at upstream direction.

Syntax

```
[no] fec
```

Parameters

The command does not contain any parameters.

Privilege group

`config-interface-ont`

Default value

```
no fec - для LTP-8(16)N
fec - для LTX-8(16)
```

Command mode

config-interface-ont

Example

```
LTP-16N(config)(if-ont-1/1)# fec
```

iphost management static ⟨SETTINGS⟩

Setting static iphost network settings for management ont profile.

Syntax

```
iphost management static <SETTINGS>
no iphost management static <SETTINGS>
```

Parameters

<SETTINGS> – network settings that should be set:

- ip – IP address of management ont profile. In AAA.BBB.CCC.DDD format;
- mask – network mask of management ont profile. In AAA.BBB.CCC.DDD format;
- gateway – gateway address of management ont profile. In AAA.BBB.CCC.DDD format.

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
```

multicast-filter

Enabling 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

Setting 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

Setting 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

Setting 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

Setting ports profile.

Syntax

```
serial <VALUE>
no serial
```

Parameters

<VALUE> — ONT serial number in AAAAXXXXXXXX or XXXXXXXXXXXXXXXX format, where A are latin uppercase letters, and 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⟩ custom outer vid

Redefining outer (service) VLAN for the service.

Syntax

```
service <ID> custom outer vid <VALUE>
no service <ID> custom outer vid
```

Parameters

<ID> – service index [1-30];

<VALUE> – VLAN number [1-4094].

Privilege group

```
config-interface-ont
```

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 custom outer vid 96
```

service ⟨ID⟩ custom inner vid

Redefining inner (client) VLAN for the service.

Syntax

```
service <ID> custom inner vid <VALUE>
no service <ID> custom inner vid
```

Parameters

<ID> – service index [1-30];

<VALUE> – VLAN number [1-4094].

Privilege group

```
config-interface-ont
```

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 custom inner vid 960
```

service ⟨ID⟩ custom outer upstream cos

Redefining CoS value markings for outer vid.

Syntax

```
service <ID> custom outer upstream cos <VALUE>
no service <ID> custom outer upstream cos
```

Parameters

<ID> – service index [1-30];

<VALUE> – COS priority value [0-7].

Privilege group

```
config-interface-ont
```

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 custom outer upstream cos 7
```

service ⟨ID⟩ custom inner upstream cos

Redefining CoS value markings for inner vid.

Syntax

```
service <ID> custom inner upstream cos <VALUE>
no service <ID> custom inner upstream cos
```

Parameters

<ID> – service index [1-30];

<VALUE> – COS priority value [0-7].

Privilege group

```
config-interface-ont
```

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 custom inner upstream cos 7
```

⚠ **custom inner upstream cos** is an optional parameter that is used if the **tag-mode double-tagged** is configured.

service ⟨ID⟩ custom mac-table-limit

Redefining values for limiting the number of MAC addresses for Service.

Syntax

```
service <ID> custom mac-table-limit <VALUE>
no service <ID> custom mac-table-limit
```

Parameters

<ID> – service index [1-30];

<VALUE> – MAC address number [1-126].

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 custom mac-table-limit 12
```

service ⟨ID⟩ mapping

Adding VLAN translation rules through an existing GEM port. Using the command with 'no' without specifying vid allows removing all mapping rules for the selected service.

Syntax

```
service <ID> mapping outer vid <VALUE> [inner vid <VALUE>] user <VALUE>
no service <ID> mapping [outer vid <VALUE> [inner vid <VALUE>] user <VALUE>]
```

Parameters

<ID> – service index [1-30];

<VALUE> – VLAN number [1-4094].

Privilege group

config-interface-ont

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 mapping outer vid 2 inner vid 3 user vid 4
LTP-16N(config)(if-ont-1/1)# service 2 mapping outer vid 5 user vid 7
```

⚠ **inner vid** is an optional parameter that is used if the **tag-mode double-tagged** is configured.

service ⟨ID⟩ profile cross-connect

Setting 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

Setting 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
```

service ⟨ID⟩ utilization-enable

Enabling utilization for the service.

Syntax

```
service <ID> utilization-enable
no service <ID> utilization-enable
```

Parameters

<ID> – service index [1-30].

Privilege group

`config-interface-ont`

Command mode

IF-ONT

Example

```
LTP-16N(config)(if-ont-1/1)# service 1 utilization-enable
```

shutdown

Disabling ONT.

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
```

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
```

Interface pon-port configuration

interface pon-port

Switching to PON ports configuration mode.

Syntax

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

Parameters

<ID> — port index in the range of [1-16] for LTP-16N and LTX-16, [1-8] for LTP-8N and LTX-8. 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
```

access-list

Enabling filtering on the interface by assigning an access-list to it.

Syntax

[no] access-list <type> <WORD>

Parameters

<type> – specify access-list type: **ip** or **mac**;

<WORD> – name from 1 to 15 characters.

Example

```
LTP-16N(config)(if-pon-1)# access-list ip ip1
LTP-16N(config)(if-pon-1)# access-list mac mac1
```

arp-proxy enable

Enabling ARP packets passing on the interface between ONTs.

Syntax

[no] arp-proxy enable

Parameters

<type> – specify access-list type: **ip** or **mac**;

<WORD> – name from 1 to 15 characters.

Example

```
LTP-16N(config)(if-pon-1)# arp-proxy enable
```

⚠ For traffic passing between ONTs enable **bridging** for vlan on PON interface.

block-rogue-ont

Enabling rogue ONT blocking.

Syntax

`[no] block-rogue-ont enable`

Parameters

The command does not contain any parameters.

Default value

`Disabled`

Privilege group

`config-interface-pon-port`

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# block-rogue-ont enable
```

bridge allow

Command for configuring pon-to-pon bridging. Allows traffic passing between pon ports in specified VLANs.

Syntax

```
[no] bridge allow <VID>
```

Parameters

<VID> – VLAN ID in range [1-4094].

Default value

```
no bridge allow 1-4094
```

Privilege group

```
config-interface-pon-port
```

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1,5)# bridge allow 111
```

⚠ The maximum number of VLANs on a port in which bridging can be enabled is 10.

encryption enable

Enabling traffic encryption mode.

Syntax

```
[no] encryption enable
```

Parameters

The command does not contain any parameters.

Default value

```
Disabled
```

Privilege group

`config-interface-pon-port`

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# encryption enable
```

encryption key-exchange interval

Setting the time interval for exchanging encryption keys.

Syntax

`[no] encryption key-exchange interval <VALUE>`

Parameters

<VALUE> – time in minutes [1-60].

Default value

`1`

Privilege group

`config-interface-pon-port`

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# encryption key-exchange interval 5
```

fec

Enabling fec error correction mode.

Syntax

`[no] fec`

Parameters

The command does not contain any parameters.

Default value

```
Disabled for LTP-8(16)N
Enabled for LTX-8(16)
```

Privilege group

```
config-interface-pon-port
```

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# fec
```

pon-type

Indicating the technology by which further operation of the customized pon-port will be carried out. This setting is only available for the **LTX-8(16)**.

Syntax

```
[no] pon-type <TYPE>
```

Parameters

<TYPE> – configuring the protocol for PON port operation. **gpon** or **xgs-pon**.

Default value

```
pon-type xgs-pon
```

Privilege group

```
config-interface-pon-port
```

Command mode

IF-PON

Example

```
LTX-16(config)(if-pon-1)# pon-type gpon
```

range

Setting range value to ONT.

Syntax

```
[no] range <VALUE>
```

Parameters

<VALUE> – range value to ONT in km (20/40/60).

Default value

`20`

Privilege group

`config-interface-pon-port`

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# range 40
```

sfp-type

Changing BCM profile for SFP module.

Syntax

`[no] sfp-type <VALUE>`

Parameters

<VALUE> – BCM profile for SFP module (auto/reset-guard/reset-preamble/general-1/.../general-11).

Default value

`auto`

Privilege module

`config-interface-pon-port`

Command mode

IF-PON

Example

```
LTP-16N(config)(if-pon-1)# sfp-type general-6
```

shutdown

Disabling 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-oob configuration

interface port-oob

Switching to OOB port configuration mode.

Syntax

```
[no] interface port-oob
```

Privilege group

```
config-interface-port-oob
```

Command mode

IF-PORT-OOB

Example

```
LTP-16N(configure)# interface port-oob
```

include management

Adding OOB interface to the management bridge.

Syntax

[no] include management

Default value

```
no include management
```

Command mode

IF-PORT-OOB

Example

```
LTP-16N(config)(if-port-oob)# include management
```

ip

Configuring IP address/mask/vid of the OOB interface.

Syntax

```
[no] ip <IP> mask <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].

Default value

```
ip 192.168.100.2 mask 255.255.255.0 vid 1
```

Command mode

IF-PORT-OOB

Example

```
LTP-16N(config)(if-port-oob)# ip 192.168.100.3 mask 255.255.255.0 vid 1111
```

speed

Setting port rate for OOB interface.

Syntax

```
[no] speed <VALUE>
```

Parameters

<VALUE> – port rate value (auto/10/100/1000).

Privilege group

```
config-interface-port-oob
```

Default value

```
speed auto
```

Command mode

IF-PORT-OOB

Example

```
LTP-16N(config)(if-port-oob)# speed 1000
```

description

Setting description for OOB interface.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> – set of characters in the range from 1 to 127.

Privilege group

```
config-interface-port-oob
```

Command mode

IF-PORT-OOB

Example

```
LTP-16N(config)(if-port-oob)# description "OOB"
```

shutdown

Disabling OOB interface.

Syntax

```
[no] shutdown
```

Parameters

The command does not contain any parameters.

Default value

```
Enabled
```

Privilege group

```
config-interface-port-oob
```

Command mode

IF-PORT-OOB

Example

```
LTP-16N(config)(if-port-oob)# shutdown
```

Interface port-channel configuration

interface port-channel load-balance polynomial

Setting 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

Setting 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;
- dst-ip-v-4 – destination IP address.
- src-ip-v-4 – source IP address.
- ip-proto – protocol IP.
- dst-port – destination port.
- src-port – source port.

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

Switching 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 [1-10].

Privilege group

```
config-interface-front-port
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# interface port-channel
```

description

Setting interface description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> – characters set in the range from 1 to 127.

Privilege group

config-interface-front-port

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# description "VPN"
```

bridge allow

Creating bridge between front-ports in specified VLANs.

Syntax

```
[no] bridge allow <VID>
```

Parameters

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

Privilege group

config-interface-front-port

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# bridge allow 100
```

mode

Setting port aggregation mode (LACP enable/disable).

Syntax

```
mode <type>
no mode
```

Parameters

<type> – Link Aggregation operation mode. Values:

- static – parameters of connections between ports are set statically;
- lacp – parameters of connections between ports are set by the LACP protocol.

Default value

```
mode static
```

Privilege group

```
config-interface-front-port
```

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# mode lacp
```

psc mode round-robin

Selecting balancing mode. Each next packet will use 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

Selecting balancing mode. This mode is suitable for balancing with a small number of LAG ports, only when the number is not a multiple of 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

Selecting balancing mode. Balancing according to the following formula: Member-ID = MemberCount* Hash/ 2^16.

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
```

pvid

Setting the vid that will be used to mark incoming untagged traffic.

Syntax

`[no] pvid <VID>`

Parameters

<VID> – VLAN ID in the range [1-4094]

Privilege group

`config-interface-front-port`

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# pvid 1234
```

shutdown

Disabling 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
```

speed

Setting port-channel interface rate.

Syntax

[no] speed <VALUE>

Parameters

<VALUE> – port rate value: auto/1000/10G for LTP-16N and auto/40G/100G for LTX-8(16).

Default value

speed auto

Privilege group

config-interface-front-port

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# speed 1000
```

switchport mode

Setting operation mode of the interface with VLAN.

Syntax

[no] switchport mode <VALUE>

Parameters

<VALUE> – operation modes:

- trunk – interface that transmits and accepts only tagged traffic;
- access – interface that transmits and accepts only untagged traffic;
- general – interface that transmits and accepts both tagged and untagged traffic.

Default value

`general`

Privilege group

`if-front-view`

Command mode

IF-PORT-CHANNEL

Example

```
LTP-16N(config)(if-port-channel-1)# switchport mode trunk
```

vlan allow

Enabling 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-port-channel-1)# vlan allow 150
```

IP arp-inspection configuration

ip arp-inspection enable

Enabling IP arp-inspection.

Syntax

```
[no] ip arp-inspection enable
[no] ip arp-inspection enable <VLAN>
```

Parameters

<VLAN> – VLAN in which ip arp-inspection needs to be enabled. Takes values from 1 to 4094.

Default value

```
no ip arp-inspection enable
```

Privilege group

```
config-dhcp
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip arp-inspection enable vlan 131
```

ip arp-inspection bind

Adding static bindings of the sender's IP address to the MAC address and service on the ONT.

Syntax

```
ip arp-inspection bind ip <IP> mac <MAC> interface-ont <ONT> service <NUM>
[no] ip arp-inspection bind ip <IP>
```

Parameters

<IP> – client device IP address in the X.X.X.X format;
<MAC> – client device MAC address in the XX:XX:XX:XX:XX:XX format;
<ONT> – ONT identifier in the 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

Default value

None

Privilege group

config-dhcp

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip arp-inspection bind ip 192.168.131.1 mac 84:84:84:84:84:01 interface-ont
1/1 service 1
```

IP source-guard configuration

ip source-guard enable

Enabling IP source-guard.

Syntax

```
[no] ip source guard enable
[no] ip source guard enable <VLAN>
```

Parameters

<VLAN> — VLAN in which ip source-guard needs to be enabled. Takes values from 1 to 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

Configuring the 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 the X.X.X.X format;
<MAC> — client device MAC address in the XX:XX:XX:XX:XX:XX format;
<ONT> — ONT identifier in the 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
```

Isolation group configuration

Configuring permissions for traffic passing through OLT interfaces.

isolation group

Switching to the isolation group configuration.

Syntax

```
[no] isolation group <ID>
```

Parameters

<ID> – isolation group ID in range [1-30].

Privilege group

```
config-switch
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# isolation group 1
```

allow

Allow traffic passing through the port.

Syntax

```
allow <PORT> <ID>
[no] allow
```

Parameters

<PORT> – pon-port/front-port/port-channel;
<ID> – interface number.

Default value

```
no allow
```

Privilege group

config-switch

Command mode

isolation group view

Example

```
LTP-16N(config)(isolation-group-1)# allow pon-port 1
```

LACP configuration

lacp system-priority

Global configuration of system prioritization when selecting ports that are in an aggregation group using the LACP protocol.

Syntax

```
lacp system-priority <VALUE>
[no] lacp system-priority
```

Parameters

VALUE – takes value from 0 to 65535. A lower number means higher priority.

Default value

lacp system-priority 32768

Privilege group

`config-front-port`

Command mode

CONFIG

Example

```
LTP-16N(configure)# lacp system-priority 64000
```

LLDP configuration

lldp enable

Enabling LLDP global processing.

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

Setting 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

Setting 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
```

lldp tx-delay

Setting interval to delay LLDP advertisements that are sent due to changes in the LLDP MIB.

Syntax

```
lldp tx-delay <VALUE>
no lldp tx-delay
```

Parameters

<VALUE> – time in seconds [1-8192].

Default value

2

Privilege group

config-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# lldp tx-delay 10
```

lldp reinit

Setting the timeout after turning off LLDP, a port, or when rebooting the switch before re-initializing LLDP.

Syntax

```
lldp reinit <VALUE>
no lldp reinit
```

Parameters

<VALUE> – time in seconds [1-10].

Default value

2

Privilege group

config-front-port

Command mode

CONFIG

Example

```
LTP-16N(configure)# lldp reinit 5
```

Logging configuration

logging

Switching 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
```

console loglevel

Setting the log 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
```

file size

Setting the system log size.

Syntax

```
file size <VALUE>
no file size
```

Parameters

<VALUE> — log size in bytes, range of values [1000-5000000].

Default value

3000000

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(config)(logging)# file size 20000
```

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(config)(logging)# kernel loglevel debug
```

module aaa

Setting the log level for AAA module.

Syntax

```
module aaa [SUBMODULE] loglevel <LOGLEVEL>
no module aaa [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 aaa loglevel debug
LTP-16N(logging)# module aaa cfgdb loglevel debug
```

module acs-custom

Setting logging level for acs-custom module.

Syntax

```
module aaa [SUBMODULE] loglevel <LOGLEVEL>
no module aaa [SUBMODULE] loglevel
```

Parameters

[SUBMODULE] – name of the submodule for which the logging will be changed. Values: [ipc];

<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 acs-custom loglevel debug
LTP-16N(logging)# module acs-custom ipc loglevel debug
```

module cli

Setting the log level for CLI module.

Syntax

```
module cli [SUBMODULE] loglevel <LOGLEVEL>
no module 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 module 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> for LTP-16N and LTX-16, <1-8> for LTP-8N and LTX-8. With capability to set ranges and/or enumerations.
  - ont — value <1-16/1-128> for LTP-16N, <1-16/1-256> для LTX-16, <1-8/1-128> for LTP-8N, <1-8/1-256> for LTX-8. 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 module 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 module 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 ipsg

Setting the log level for ipsg module.

Syntax

```
module ipsg [SUBMODULE] loglevel <LOGLEVEL>
no module ipsg [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [task | 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 ipsg loglevel debug
LTP-16N(logging)# module ipsg task loglevel debug
```

module l3-agent

Setting the log level for l3-agent module.

Syntax

```
module l3-agent [SUBMODULE] loglevel <LOGLEVEL>
no module l3-agent [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [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 l3-agent loglevel debug
LTP-16N(logging)# module l3-agent task loglevel debug
```

module lacp

Setting the log level for lacp module.

Syntax

```
module lacp [SUBMODULE] loglevel <LOGLEVEL>
no module lacp [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [task, queue, 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 lacp loglevel debug
LTP-16N(logging)# module lacp cfgdb loglevel debug
```

module logmgr

Setting the log level for log-mgr module.

Syntax

```
module logmgr [SUBMODULE] loglevel <LOGLEVEL>
no module 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 module 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 module 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 switch

Setting the log level for switch module.

Syntax

```
module switch [SUBMODULE] loglevel <LOGLEVEL>
no module switch [SUBMODULE] loglevel
```

Parameters

- [SUBMODULE] – name of the submodule for which the logging will be changed. Values: [cfgdb | mac | ipc];
- <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 switch loglevel debug
LTP-16N(logging)# module switch cfgdb loglevel debug
```

module dhcp

Setting the log level for DHCP module.

Syntax

```
module dhcp [SUBMODULE] loglevel <LOGLEVEL>
no module 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 module 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 module 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 task loglevel debug
```

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)# permnanent
```

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
```

remote server

Configuring the 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
```

rsh

Configuring the log level for Telnet/SSH remote session.

Syntax

```
rsh loglevel <LOGLEVEL>
no rsh loglevel
```

Parameters

<LOGLEVEL> – logging level. Values: [critical | error | warning | notice | info | debug].

Default value

critical

Privilege group

config-logging

Command mode

LOGGING

Example

```
LTP-16N(logging)# rsh loglevel debug
```

Mac age-time configuration

mac age-time

Configuring the MAC addresses lifetime on the device.

Syntax

```
mac age-time <VALUE>
no mac age-time
```

Parameters

<VALUE> – time in seconds from 10 to 1600.

Default value

600

Privilege group

config-system

Command mode

CONFIG

Example

```
LTP-16N(configure)# mac age-time 300
```

Mirror configuration

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
```

Mirror configuration

destination interface front-port

Setting the 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] for LTP-16N and [1-4] for LTX-8(16);
- <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 LTP-16N and LTX-16, [1-8] for front-port for LTP-16N, [1-4] for LTX-8(16) and LTP-8N;
- <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

Enabling 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

Setting 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

Configuring the timezone.

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

Configuring 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

Configuring 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

Configuring 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

Configuring 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;
- <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
```

ONT automatic activation configuration

auto-activation-ont

Switching to the ONT automatic activation mode.

Syntax

```
auto-activation-ont
```

Parameters

The command does not contain any parameters.

Privilege group

```
auto-activation-view
```

Command mode

```
CONFIG
```

Example

```
LTP-16N(configure)# auto-activation-ont
```

enable

Managing the enabling of the ONT auto-activation function.

Syntax

```
[no] enable
```

Parameters

The command does not contain any parameters.

Privilege group

```
auto-activation-view
```

Command mode

```
auto-activation-ont
```

Example

```
LTP-16N(config)(auto-activation-ont)# enable
```

interface pon-port

Enabling automatic ONT activation on the pon interface and assigning specific templates taking into account applied filters.

Syntax

```
interface pon-port <n> default template <WORD>

no interface pon-port <n> default template

interface pon-port <n> ont type <Equipment ID> template <WORD>

no interface pon-port <n> ont type <Equipment ID>
```

Parameters

<n> – port/ports number: [1-16] for LTP-16 and LTX-16, [1-8] for LTX-8 and LTP-8N;

<Equipment ID> – assigning template to all ONTs with matching Equipment IDs;

<WORD> – name of the existing template that will be assigned;

default template – template that will be assigned by default to all ONTs that are not falling under any "ont type <Equipment ID>" rules.

Privilege group

```
auto-activation-view
```

Command mode

```
auto-activation-ont
```

Example

```
LTP-16N(config)(auto-activation-ont)# interface pon-port 1 default template template1
LTP-16N(config)(auto-activation-ont)# interface pon-port 1 ont type NTU-RG-5420G-Wac template
template5420
```

default template

Enabling automatic ONT activation on all pon interfaces. Assigning by default specified template to all ports which do not have their default template specified (interface pon-port <N> default template).

Syntax

```
default template <WORD>

no default template
```

Parameters

<WORD> – name of the existing template.

Privilege group

auto-activation-view

Command mode

auto-activation-ont

Example

```
LTP-16N(config)(auto-activation-ont)# default template template1
```

ONT automatic update configuration

auto-update-ont mode

Configuring global mode of ONT firmware automatic update.

Syntax

```
[no] auto-update-ont mode <update_mode>
```

Parameters

<update_mode> – global mode of operation of auto-update rules:

- immediate – enable immediate ONT auto-update. The update is performed at the operator's command;
- postpone – enable postponed ONT auto-update. The update is performed upon next ONT authorization;
- disable – disable ONT auto-update.

Privilege group

```
config-general
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# auto-update-ont mode immediate
```

auto-update-ont clear

Deleting all rule lists for ONT firmware automatic update.

Syntax

```
auto-update-ont clear
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-general
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# auto-update-ont clear
```

auto-update-ont

Switching to the mode for editing the list of ONT automatic activation rules.

Syntax

```
[no] auto-update-ont <EquipmentID>
```

Parameters

<EquipmentID> – name of the list of ONT automatic activation rules, must match the ONT EquipmentID. Set of characters from 1 to 24 in length.

Privilege group

```
config-general
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# auto-update-ont NTU-1
```

fw-version

Adding rule to the list for automatic ONT software updates.

Syntax

```
fw-version [not-]match <version> filename <filename> mode <update_mode> downgrade
<downgrade_mode>
no fw-version <match/not-match> <version>
```

Parameters

<version> – ONT firmware version;

<filename> – name of preloaded ONT firmware file;

<update_mode> – auto-update operating rule:

- immediate – enable immediate ONT auto-update. The update is performed at the operator's command;

- postpone – enable postponed ONT auto-update. The update is performed upon next ONT authorization;
- disable – disable ONT auto-update;
- global – update in accordance with global mode.

<downgrade_mode> – possibility of updating to an earlier version:

- disable – deny downgrade;
- enable – allow downgrade.

Privilege group

`config-general`

Command mode

AUTO-UPDATE-ONT

Example

```
LTP-16N(config)(auto-update-ont-NTU-1)# fw-version match 3.26.5.101 filename ntu-1-3.28.6-
build152.fw.bin mode immediate downgrade disable
```

PON configuration

pon network

Configuring the ethertype 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 authentication

Configuring the ONT authentication method. It is possible to authorize ONT using a password, serial number, or both parameters.

Syntax

pon olt authentication <MODE>

`no pon olt authentication`

Parameters

<MODE> – ONT authentication method:

- serial – set ONT authentication mode by a serial number;
- password – set ONT authentication mode by a password;
- both – set ONT authentication mode by a serial number and a password.

Default value

`serial`

Privilege group

`config-general`

Command mode

CONFIG

Example

```
LTP-16N(configure)# pon olt authentication both
```

pon olt ont-block-time

Configuring 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
```

pon olt password-in-trap

Configuring the sending of PON-password of unconfigured ONTs to ALARM-trap.

Syntax

```
[no] pon olt password-in-trap
```

Parameters

The command does not contain any parameters.

Default value

```
no pon olt password-in-trap
```

Privilege group

```
config-general
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# pon olt password-in-trap
```

pon olt unactivated-timeout

Configuring 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-general
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# pon olt unactivated-timeout 100
```

PPPoE configuration

ip pppoe

Switching 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 PPPOE
```

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

Configuring the privilege level.

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-general;
  - view-system;
  - view-interface-ont;
  - view-ports;
  - view-interface-front-port;
  - view-configuration;
  - view-firmware;
  - view-switch;
  - view-acs;
  - 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;
  - config-switch;
  - config-acl;
  - config-acs;
  - 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

Enables traffic processing according to QoS. The functionality will work only if the entire port capacity is occupied. The pon-port is used for transmitting traffic to downstream; the front port is used for transmitting traffic to upstream.

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

Selecting 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

Setting 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). The 7 queue has the highest priority, 0 queue has the lowest priority.
- <QUEUE> — queue to which packets will be sent.

Default value

By default, queues are not mapped.

Privilege group

commands-general

Command mode

CONFIG

Example

```
LTP-16N(configure)# qos 802.1p map 1 to 3
```

qos 802.1p mode

Setting 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

Setting 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
```

Routes configuration

ip route address

Routes configuration. OLT allows creating up to 32 entries.

Syntax

```
ip route address <IP> mask <MASK> gateway <GATEWAY> [name <NAME>]
[no] ip route address <IP> mask <MASK> gateway <GATEWAY>
```

Parameters

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

<MASK> – IP mask specified as AAA.BBB.CCC.DDD, where each part takes value [0-255].

<GATEWAY> – gateway IP address specified as AAA.BBB.CCC.DDD, where each part takes value [0-255].

<NAME> – route name from 1 to 15 characters.

Default value

None

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip route address 192.168.6.1 mask 255.255.255.255 gateway 10.10.10.1
name test_route
```

SNMP configuration

ip snmp access-control

Enabling restriction of access to the terminal according to the list for the SNMP protocol.

Syntax

```
[no] ip snmp access-control
```

Parameters

The command does not contain any parameters.

Default value

no ip snmp access-control

Privilege group

```
config-access
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp access-control
```

ip snmp allow ip

Managing the allowed list of IP addresses for the SNMP protocol.

Syntax

```
[no] ip snmp allow <IP> mask <mask>
```

Parameters

<IP> – IP address included in the access list by this protocol;
<mask> – address mask that defines the covered range of allowed addresses.

Default value

None

Privilege group

`config-access`

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp allow ip 192.168.111.0 mask 255.255.255.0
```

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

Setting the SNMP contact.

Syntax

```
ip snmp contact <NAME>
no ip snmp contact
```

Parameters

<NAME> — SNMP community name. String from 1 to 255 characters long.

Default value

ip snmp contact "admin"

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp contact ELTEX
```

ip snmp enable

Enabling SNMP on the device.

Syntax

```
[no] ip snmp enable
```

Parameters

The command does not contain any parameters.

Default value

ip snmp enable

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp enable
```

ip snmp engine-id

Setting SNMP engine ID.

Syntax

```
ip snmp engine-id <ENGINE-ID>
no ip snmp engine-id
```

Parameters

<ENGINE-ID> — SNMP engine id. Takes value 'generate': generates engine-id. A string of 10 to 64 characters in length, consisting of hexadecimal numbers.

Default value

ip snmp engine-id 000000000000000000000000000

Privilege group

```
config-access
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp engine-id 53e679ad83da7419350904efb9
```

ip snmp location

Setting 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.

Default value

ip snmp location "unknown"

Privilege group

`config-access`

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp location Novosibirsk
```

ip snmp transport

Setting transport layer protocol for SNMP packets transmission.

Syntax

```
ip snmp transport <PROTOCOL>
no ip snmp transport
```

Parameters

<PROTOCOL> – transport layer protocol for SNMP packets transmission. May take values: udp, tcp, both.

Default value

UDP

Privilege group

`config-access`

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp transport both
```

ip snmp trap-community

Setting 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

Setting destination addresses and types of SNMP traps they accept.

Syntax

```
[no] ip snmp traps <IP-ADDR> type <TYPE> port <PORT>
```

Parameters

- <IP-ADDR> — IP address where the SNMP traps will be sent;
- <TYPE> — type of sent SNMP traps;
- <PORT> — port for receiving SNMP traps.

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip snmp traps 192.168.1.5 type v2
```

ip snmp user

Configuring SNMPv3 users.

Syntax

```
ip snmp user <NAME> auth-passsword [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

Setting 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 ont-sn-format

Configuring the Serial ONT format in the CLI and when sending snmp-trap.

Syntax

```
system ont-sn-format <VALUE>
no system ont-sn-format
```

Parameters

<VALUE> – format:

- literal – string display;
- numerical – serial in HEX format;
- section-numerical – serial display in HEX format with separators.

Default value

`literal`

Privilege group

`config-system`

Command mode

CONFIG

Example

```
LTP-16N(configure)# system ont-sn-format numerical
```

system hostname

Setting the 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
```

system reset-button

Configuring the operating mode of the F function button.

Syntax

```
system reset-button <STATUS>
no system reset-button
```

Parameters

<STATUS> – action when pressing the reset button. Values: [disabled | enabled | reset-only].

Default value

enabled

Privilege group

config-system

Command mode

CONFIG

Example

```
LTP-16N(configure)# system reset-button disabled
```

⚠ Value is applied after rebooting the device.

Telnet/SSH access configuration

ip ssh allow ip

Managing the list of allowed IP addresses for SSH protocol.

Syntax

```
[no] ip ssh allow ip <IP> mask <mask>
```

Parameters

<IP> – IP address included in the access list by this protocol;
<mask> – address mask defining covered range of allowed addresses.

Default value

None

Privilege group

```
config-access
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ssh allow ip 192.168.111.0 mask 255.255.255.0
```

ip ssh access-control

Enabling restriction of access to the terminal according to the list for the SSH protocol.

Syntax

```
[no] ip ssh access-control
```

Parameters

The command does not contain any parameters.

Default value

no ip ssh access-control

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ssh access-control
```

ip ssh enable

Enabling terminal availability via SSH protocol.

Syntax

```
[no] ip ssh enable
```

Parameters

The command does not contain any parameters.

Default value

ip ssh enable

Privilege group

config-access

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip ssh enable
```

ip telnet allow ip

Managing the list of allowed IP addresses for Telnet protocol.

Syntax

```
[no] ip telnet allow ip <IP> mask <mask>
```

Parameters

<IP> – IP address included in the access list by this protocol;
<mask> – address mask defining covered range of allowed addresses.

Default value

None

Privilege group

`config-access`

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip telnet allow ip 192.168.111.0 mask 255.255.255.0
```

ip telnet access-control

Enabling restriction of access to the terminal according to the list for the Telnet protocol.

Syntax

`[no] ip telnet access-control`

Parameters

The command does not contain any parameters.

Default value

no ip telnet access-control

Privilege group

`config-access`

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip telnet access-control
```

ip telnet enable

Enabling terminal availability via Telnet protocol.

Syntax

```
[no] ip telnet enable
```

Parameters

The command does not contain any parameters.

Default value

```
ip telnet enable
```

Privilege group

```
config-access
```

Command mode

CONFIG

Example

```
LTP-16N(configure)# ip telnet enable
```

User configuration

user

Configuring system users.

Syntax

```
user <name> password <password> privilege <privilege>
no user <name>
```

Parameters

- <name> — user name from 1 to 31 lowercase and uppercase characters and '-' , '_' , '=', '+';
- <password> — user password from 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
```

VLAN configuration

vlan

Switching 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

Setting 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
```

mac duplication allow

Allowing the same MAC addresses to pass through the same VLAN.

Syntax

```
mac duplication allow
no mac duplication allow
```

Parameters

The command does not contain any parameters.

Privilege group

```
config-vlan
```

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# mac duplication allow
```

ip igmp last-member-query-interval

Setting 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

Setting 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 query-response-interval

Setting 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

Setting 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

Enabling 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 querier user prio

Setting 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 0 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 snooping querier dscp

Setting 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

Enabling 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 querier fast-leave

Enabling 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

Setting 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

Enabling 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

Adding 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] for LTP-16 and LTX-16, [1-8] for LTX-8 and LTP-8N. Front-port: [1-8] for LTP-16 and LTX-16, [1-4] for LTX-8 and LTP-8N.

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 snooping pon-port

Configuring pon-port interface for work with IGMP in specified VLAN.

Syntax

```
[no] ip igmp snooping pon-port <ID> mode <MODE>
```

Parameters

- <ID> – port index in the range [1-16] for LTP-16 and LTX-16, [1-8] for LTX-8 and LTP-8N. The parameter can be set by a range or enumeration (for example: interface pon-port 1-5 or interface pon-port 10,12);
- <MODE> – port operation mode relative to the passage of IGMP packets. May take values: mrouter, host, learning.

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping pon-port 4 mode host
```

ip igmp snooping front-port

Configuring front-port interface for work with IGMP in specified VLAN.

Syntax

```
[no] ip igmp snooping front-port <ID> mode <MODE>
```

Parameters

- <ID> – port index in the range [1-8] for LTP-16N and [1-4] for LTX-8(16). The parameter can be set by a range or enumeration (for example: interface front-port 1-5 or interface front-port 1,7);

- <MODE> – port operation mode relative to the passage of IGMP packets. May take values: mrouter, host, learning.

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping front-port 4 mode host
```

ip igmp snooping port-channel

Configuring port-channel interface for work with IGMP in specified VLAN.

Syntax

```
[no] ip igmp snooping port-channel <ID> mode <MODE>
```

Parameters

- <ID> – port index in the range [1-32]. The parameter can be set by a range or enumeration (for example: interface port-channel 1-5 or interface port-channel 1,7);
- <MODE> – port operation mode relative to the passage of IGMP packets. May take values: mrouter, host, learning.

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip igmp snooping port-channel 4 mode host
```

ip igmp version

Setting 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
```

ip interface address

Setting IP address and IP mask for interface-vlan.

Syntax

```
ip interface address <IP> mask <MASK>
no ip interface address
```

Parameters

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

Default value

`no ip interface address`

Privilege group

`config-vlan`

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip interface addresss 192.168.5.5 mask 255.255.255.0
```

ip interface management access allow

Configuring access via interface-vlan.

Syntax

```
[no] ip interface management access allow
```

Parameters

The command does not contain any parameters.

Default value

```
no ip interface management access allow
```

Privilege group

```
config-vlan
```

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-100)# ip interface management access allow
```

isolation enable

Activating traffic isolation rules.

Syntax

```
[no] isolation enable
```

Parameters

The command does not contain any parameters.

Default value

Disabled

Privilege group

```
config-vlan
```

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-5)# isolation enable
```

isolation assign group

Assigning traffic isolation groups to a port.

Syntax

```
isolation assign group <ID> to <PORT> <PORT_ID>
no isolation assign group to <PORT> <PORT_ID>
```

Parameters

- <ID> – isolation group number;
- <PORT> – pon-port/front-port/port-channel;
- <PORT_ID> – port number.

Default value

Disabled

Privilege group

config-vlan

Command mode

VLAN

Example

```
LTP-16N(config)(vlan-5)# isolation assign group 1 to pon-port 1
```

OLT profiles configuration

dhcp-opt82 profile configuration

profile dhcp-opt82

Switching 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

Setting 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

Setting 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% — 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

Setting 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

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-dhcp`

Command mode

PROFILE-DHCP-OPT82

Example

```
LTP-16N(config)(profile-dhcp-opt82-dhcp)# name DHCP82-10
```

ont-sn-format

Setting 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

Configuring option 82 overwriting mode 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

Setting 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

Setting 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

Switching 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

Setting 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

Setting 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

Setting 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

Setting 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

Setting 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 0xffffff.

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

Switching 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

Setting bridge group index.

Syntax

```
bridge group <ID>
no bridge group
```

Parameters

<ID> — group index, in the range of [1-75].

Default value

75

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# bridge group 10
```

description

Setting 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

Setting inner VLAN ID. Inner tag used in double-tagged mode.

Syntax

```
inner vid <VID>
no inner vid
```

Parameters

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

Default value

1

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# inner vid 100
```

iphost enable

Enabling 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

Setting 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

Setting 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
```

mac-table-limit

Setting the MAC address limit for a CrossConnect profile.

Syntax

```
mac-table-limit <VALUE>
```

Parameters

<VALUE> – MAC addresses value in the range of 1-126.

Default value

```
no mac-table-limit
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# mac-table-limit 15
```

multicast enable

Enabling multicast traffic passing if profile is assigned to a service.

Syntax

```
multicast enable
no multicast enable
```

Parameters

The command does not contain any 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

Changing 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

Setting the operation mode for the ONT OMCI interface.

Syntax

```
ont-mode <MODE>
no ont-mode
```

Parameters

<MODE> — OMCI interface operation mode. May take values:

- bridge — omci-bridge mode;
- router — 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

Configuring outer VLAN ID.

Syntax

```
outer vid <VID>
no outer vid
```

Parameters

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

Default value

1

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# outer vid 100
```

outer upstream cos

Setting CoS value for outer vid.

Syntax

```
outer upstream cos <VALUE>
no outer upstream cos
```

Parameters

<VALUE> – cos value in the range [0-7].

Default value

no outer upstream cos

Privilege group

config-interface-ont-profile

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# outer upstream cos 7
```

inner upstream cos

Setting CoS value for inner vid.

Syntax

```
inner upstream cos <VALUE>
no inner upstream cos
```

Parameters

<VALUE> – cos value in the range [0-7].

Default value

no inner upstream cos

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-CC

Example

```
LTP-16N(config)(profile-cross-connect-cc)# inner upstream cos 7
```

user vid

Setting user VLAN ID, with this VLAN ID, traffic will come from the UNI port of ONT.

Syntax

```
user vid <VID>
no user 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

Setting dot1.q interface operation mode for traffic transmission.

Syntax

```
tag-mode <VALUE>
```

Parameters

<VALUE> — operation mode, possible values: single-tagged, double-tagged, tunnel.

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
```

⚠ The tag-mode tunnel mode is available only for traffic-model 1-to-1.

traffic-model

Setting 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.

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

Configuring VLAN tag replace mode. 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

Switching 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> — allocations distribution scheme:

- allocate-new-t-cont – all T-CONTs in different allocations;
- share-t-cont – all T-CONTs in one allocation.

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
```

additional-eligibility

Setting the dynamically assigned bandwidth allocation parameter.

Syntax

additional-eligibility <VALUE>
no additional-eligibility

Parameters

<VALUE> – dynamically assigned bandwidth allocation mode:

- none – band is not assigned;
- non-assured – assigned proportionally to guaranteed bandwidth;
- best-effort – assigned proportionally to non-guaranteed part of the maximum bandwidth.

Default value

`best-effort`

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# additional-eligibility non-assured
```

cbr-nrt bandwidth

Setting a fixed bandwidth size that does not require precise bandwidth allocation.

Syntax

```
cbr-nrt bandwidth <VALUE>
no cbr-nrt bandwidth
```

Parameters

<VALUE> – bandwidth value in kbps. For GPON in the range [0, 128–1112064], it must be a multiple of 64 kbps, otherwise it will be automatically rounded down. For XGS-PON, the value in the range [0, 1024–88166640] must be a multiple of 1024 kbps, otherwise it will be automatically rounded down.

Default value

`0`

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# cbr-nrt bandwidth 1024
```

cbr-rt bandwidth

Setting a fixed bandwidth size that requires precise bandwidth allocation.

Syntax

```
cbr-rt bandwidth <VALUE>
no cbr-rt bandwidth
```

Parameters

<VALUE> – bandwidth value in kbps. For GPON in the range [0, 128–1112064], it must be a multiple of 64 kbps, otherwise it will be automatically rounded down. For XGS-PON, the value in the range [0, 1024–88166640] must be a multiple of 1024 kbps, otherwise it will be automatically rounded down.

Default value

```
0
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# cbr-rt bandwidth 1024
```

maximum bandwidth

Setting maximum bandwidth size for transmission.

Syntax

```
maximum bandwidth <VALUE>
no maximum bandwidth
```

Parameters

<VALUE> – bandwidth value in kbps. For GPON in the range [0, 128–1112064], it must be a multiple of 64 kbps, otherwise it will be automatically rounded down. For XGS-PON, the value in the range [0, 1024–88166640] must be a multiple of 1024 kbps, otherwise it will be automatically rounded down.

Default value

```
maximum bandwidth 1244160 для gpon
maximum bandwidth 9820160 для xgs-pon
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# maximum bandwidth 1244160
```

guaranteed bandwidth

Setting guaranteed bandwidth size for transmission.

Syntax

```
guaranteed bandwidth <VALUE>
no guaranteed bandwidth
```

Parameters

<VALUE> – bandwidth value in kbps. For GPON in the range [0, 128–1112064], it must be a multiple of 64 kbps, otherwise it will be automatically rounded down. For XGS-PON, the value in the range [0, 1024–88166640] must be a multiple of 1024 kbps, otherwise it will be automatically rounded down.

Default value

```
guaranteed bandwidth 512 для gpon
guaranteed bandwidth 2048 для xgs-pon
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# guaranteed bandwidth 1024
```

pon-type

Selecting the technology that the custom DBA profile will operate on. This parameter is configured only for LTX-8(16). The operating mode must match in the DBA profile and interface pon-port configuration.

Syntax

```
pon-type <VALUE>
no allocation-scheme
```

Parameters

<VALUE> – allocation operation scheme:

- gpon – 1G pon;
- xgs-pon – 10G pon.

Default value

```
xgs-pon
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# pon-type gpon
```

t-cont-type

Selecting the t-cont-type to use for DBA.

Syntax

```
t-cont-type <VALUE>
no t-cont-type
```

Parameters

`<VALUE> - 1-5.`

Drfault value

`t-cont-type 5`

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# t-cont-type 1
```

description

Setting the profile description.

Syntax

```
description <VALUE>
no description
```

Parameters

<VALUE> — set of characters in the range from 1 to 127.

Default value

`no description`

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-DBA

Example

```
LTP-16N(config)(profile-dba-hsi)# description HSI
```

name

Setting the 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

Setting 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)# mode status-reporting
```

Management profile configuration

profile management

Switching 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(configure)# profile management MANAGE-PROFILE
```

description

Setting the 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

Setting the iphost index.

Syntax

```
iphost id <ID>
no iphost id
```

Parameters

<ID> — iphost index, in the range of [1-32].

Default value

1

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management)# iphost id 1
```

name

Setting the 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

Configuration the 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.

Default value

Enabled

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# omci-configuration enable
```

password

Setting the password for ACS server. Available only when OMCI mode is enabled.

Syntax

```
password <VALUE>
no password
```

Parameters

<VALUE> — string, from 1 to 25 characters long.

Default value

Empty value

Privilege group

`config-management`

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# passsword 1234567890
```

url

Setting the 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.

Default value

Empty value

Privilege group

`config-management`

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# url http://192.168.1.51:151
```

username

Setting the 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.

Default value

Empty value

Privilege group

`config-management`

Command mode

PROFILE-MANAGEMENT

Example

```
LTP-16N(config)(profile-management-man)# username user
```

Ports profile configuration

profile ports

Switching to the 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(configure)(profile-port-bridge)# profile ports BRIDGRE
```

description

Setting the 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

Configuring of 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

Setting 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

Setting IP address querier to send IGMP query messages.

Syntax

```
igmp querirer <IP>
no igmp querirer
```

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

Setting the frequency of 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

Setting the 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

Setting the 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

Setting the 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 multicast dynamic-entry

Setting the 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

Disabled

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

Enabling the processing mode of multicast traffic on LAN port.

Syntax

```
port <ID> multicast enable
no port <ID> multicast enable
```

Parameters

<ID> — port index [1-24].

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

Setting the ONT LAN ports binding to OMCI-bridge.

Syntax

```
port <ID> bridge group <VALUE>
no port <ID> bridge group
```

Parameters

<ID> — port index [1-24];

<VALUE> — bridge group index [0-75].

Default value

`0`

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

Setting the 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 [1-24];

<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

Setting the 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 [1-24];

<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

Setting the 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 [1-24];

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

Default value

1

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

Setting the 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 [1-24];

<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

Setting the 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 [1-24];

<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 [1-24];

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

Default value

1

Privilege group

config-interface-ont-profile

Command mode

PROFILE-PORTS

Example

```
LTP-16N(config)(profile-ports-bridge)# port 1 igmp upstream vid 200
```

name

Setting the 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

Enabling the 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

Setting 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

Setting the 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

Setting the 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].

Default value

```
1
```

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

Setting the 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

Setting 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

Setting 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].

Default value

1

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

Switching to the 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

Setting the 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

Setting the 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

Enabling the upstream shaper functionality.

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.

Default value

```
Disabled
```

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

Configuring the peak-rate, 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 1244160, multiple of 64.

Default value

```
1244160
```

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 commited-rate

Configuring the commited-rate, bandwidth shaping.

Syntax

```
[no] upstream <TYPE> <ID> shaper commited-rate <VALUE>
[no] upstream <ID> shaper commited-rate <VALUE>
```

Parameters

<TYPE> — traffic type (broadcast/unicast/multicast);

<ID> — service ID from 1 to 30;

<VALUE> — rate value in Kbps from 0 to 1244160, multiple of 64.

Default value

```
1244160
```

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream 1 shaper commited-rate 6272
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast 1 shaper commited-rate 6272
```

upstream storm-control

Enabling the strorm-control on ONT

Syntax

[no] upstream <TYPE> storm-control enable

Parameters

<TYPE> – traffic type (broadcast/multicast).

Default value

Disabled

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast storm-control enable
```

upstream storm-control rate-limit

Configuring the storm-control trigger threshold in packets per second.

Syntax

```
upstream <TYPE> storm-control rate-limit <VALUE>
no upstream <TYPE> storm-control rate-limit
```

Parameters

<TYPE> – traffic type (broadcast/multicast);
<VALUE> – value from 1 to 10000 packets per second.

Default value

1000

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast storm-control rate-limit 2000
```

upstream storm-control logging

Configuring event logging when a “storm” is detected and ONT is blocked.

Syntax

```
upstream <TYPE> storm-control logging [shutdown]
no upstream <TYPE> storm-control logging
```

Parameters

<TYPE> – traffic type (broadcast/multicast);

shutdown – when specifying the parameter, in case of detection of a "storm", the ONT will be blocked for the time specified in **pon olt ont-block-time**.

Default value

Disabled

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-shaping1)# upstream broadcast storm-control logging shutdown
```

downstream policer

Enabling downstream policer functionality.

Syntax

```
[no] downstream policer enable
[no] downstream <ID> policer enable
```

Parameters

<ID> – service ID from 1 to 30.

Default value

no downstream policer enable

Privilege group

```
config-interface-ont-profile
```

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-1)# downstream policer enable
LTP-16N(config)(profile-shaping-1)# downstream 1 policer enable
```

downstream policer peak-rate

Configuring the peak-rate, peak bandwidth value.

Syntax

```
[no] downstream policer peak-rate <VALUE>
[no] downstream <ID> policer peak-rate <VALUE>
```

Parameters

<ID> – service ID from 1 to 30;

<VALUE> – rate value in Kbps from 0 to 2488320, multiple of 64.

Default value

2488320

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-1)# downstream policer peak-rate 100000
    The rate must be a multiple of 64. 100000 will be automatically adjusted to 99968
LTP-16N(config)(profile-shaping-1)# downstream 1  policer peak-rate 100000
    The rate must be a multiple of 64. 100000 will be automatically adjusted to 99968
```

downstream policer commited-rate

Configuring the commited-rate, bandwidth limitations.

Syntax

```
[no] downstream policer commited-rate <VALUE>
[no] downstream <ID> policer commited-rate <VALUE>
```

Parameters

<ID> – service ID from 1 to 30;

<VALUE> – rate value in Kbps from 0 to 2488320, multiple of 64.

Default value

2488320

Privilege group

`config-interface-ont-profile`

Command mode

PROFILE-SHAPING

Example

```
LTP-16N(config)(profile-shaping-1)# downstream policer commited-rate 100000
    The rate must be a multiple of 64. 100000 will be automatically adjusted to 99968
LTP-16N(config)(profile-shaping-1)# downstream 1  policer commited-rate 100000
    The rate must be a multiple of 64. 100000 will be automatically adjusted to 99968
```

Templates configuration

template

Switching 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

Enabling 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

Setting the 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

Enabling 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

Assigning the 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

Assigning the 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

Assigning the 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

Assigning the 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-template1)# service 1 profile cross-connect crossconnect1
```

service ⟨ID⟩ profile dba

Assigning the 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

Managing the ONT RF port.

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-template1)# rf-port-state enabled
```

define ⟨VALUE⟩

Configuring the service redefining from template. When define is configured, a parameter specified in template will be used.

Syntax

```
define <VALUE>
undefine <VALUE>
```

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

Setting the 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)(template-template1)# name HSI-100
```

OLT management configuration

management ip

Configuring the device IP address.

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

Configuring the device IP mask.

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

config-management

Command mode

CONFIG

Example

```
LTP-16N(configure)# management mask 255.255.0.0
```

management gateway

Setting the 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

Configuring VLAN to access the device.

Syntax

```
management vid <VID>
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
```

6 LTP-16N(T). List of changes

Document version	Issue date	Revisions
Version 1.7.0	12.2023	Synchronization with firmware version 1.7.0 **Sections added:** • Firmware configuration • IP arp-inspection configuration • Isolation group configuration • Routes configuration **Sections changed:** Root commands: • copy • show Configuration commands: • Interface ont configuration • Interface pon-port configuration • VLAN configuration • Cross-connect profile configuration • Shaping
Version 1.6.3	10.2023	Synchronization with firmware version 1.6.3 • The ont-sn-format moved to the system section • Removed the command to configure the pon serial format for SNMP • Added the cli display command
Version 1.6.2	09.2023	Synchronization with firmware version 1.6.2 Added support for LTP-8N. Added port indexes for LTP-8N.

Document version	Issue date	Revisions
Version 1.6	08.2023	Synchronization with firmware version 1.6.0 **Sections added:** • LACP configuration **Sections changed:** Root commands: • clear • show Configuration commands: • Interface front-port configuration • Interface ont configuration • Interface port-channel • Logging configuration • PON configuration • Privilege configuration • SNMP configuration • Telnet/SSH access configuration • Cross-connect profile configuration • DBA profile configuration • Management profile configuration • Ports profile configuration • Shaping profile configuration
Version 1.5	05.2023	Synchronization with firmware version 1.5.1 Added support for LTX-8(16)

Document version	Issue date	Revisions
Version 1.4	04.2023	Synchronization with firmware version 1.5.0 **Sections added:** LTP-16N(T). Configuration commands: • ACL configuration • ACSD and DHCPD configuration • Interface port-oob configuration • Mac age-time configuration • ONT automatic activation configuration • Automatic backup download configuration • ONT automatic update configuration **Sections changed:** LTP-16N. Root commands: • clear • copy • default • show LTP-16N. Configuration commands: • AAA configuration • Alarm configuration • CLI configuration • DHCP configuration • IGMP configuration • Interface front-port configuration • Interface ont configuration • Interface pon-port configuration • Interface port-channel configuration • LLDP configuration • Logging configuration • SNMP configuration • System configuration • VLAN configuration • Cross-connect profile configuration • DBA profile configuration • Shaping profile configuration • Templates configuration

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