

PLC8 modules GPON configuration settings

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gpon olt authentication

The command sets the ONT authentication mode: by password, by serial number, by a combination of serial number and password. The use of a negative form (no) of the command sets the default value.

Syntax

```
gpon olt authentication <VALUE>
no gpon olt authentication
```

Parameters

<VALUE> – ONT authentication mode:

- password – by password;
- serial – by serial number;
- both – by combination of serial number and password.

Default value:

both – ONT authentication by combination of serial number and password

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt authentication password
```

gpon olt block-duplicated-mac

This command enables protection against duplicate MAC addresses (MAC spoofing).

The use of the negative form (no) disables ONT blocking when duplicated MAC addresses are detected.

Syntax

```
[no] gpon olt block-duplicated-mac
```

Parameters

The command contains no arguments.

Default value:

disable – blocking disabled

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt block-duplicated-mac
```

gpon olt broadcast-gem-port

The command sets the GEM port number for broadcast traffic.

The use of a negative form (no) of the command sets the default value.

Syntax

```
gpon olt broadcast-gem-port <PORT>  
no gpon olt broadcast-gem-port
```

Parameters

<PORT> – number of GEM port for broadcast traffic, may take values [0..4095].

Default value

4095

Command mode

CONFIG

Example

```
ma4000(config)#gpon olt broadcast-gem-port 4095
```

gpon olt dba-reduced-latency

The command enable the mode to lower DBA latency.

The use of a negative form (no) of the command sets the default value.

Syntax

```
[no] gpon olt dba-reduced-latency enable
```

Parameters

The command contains no arguments.

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt dba-reduced-latency enable
```

gpon olt dhcpra-shaper

This command sets the maximum number of DHCP messages per second (for each ONT)

The use of a negative form (no) of the command sets the default value.

Syntax

```
gpon olt dhcpra-shaper <VALUE>  
no gpon olt dhcpra-shaper
```

Parameters

<VALUE> – maximum number of DHCP messages per second for ONT.

Default value:

100

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt dhcpra-shaper 33
```

gpon olt encryption

The command enables GPON traffic encryption.

The use of the negative form (no) of the command disables GPON traffic encryption.

Syntax

```
[no] gpon olt encryption
```

Parameters

The command contains no arguments.

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt encryption
```

gpon olt encryption key-update

The command is used to set an encryption key change period.

The use of a negative form (no) of the command sets the default parameter value.

Syntax

```
gpon olt encryption key-update <TIME>  
no gpon olt encryption key-update
```

Parameters

<TIME> – encryption key update period, may take values [0..65535], in minutes.

Default value:

1 minute

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt encryption key-update 33333
```

gpon olt model

The command sets the datapath construction model – the order of forming rules for traffic transfer.

The use of a negative form (no) of the command sets the default parameter value.

Syntax

```
gpon olt model <VALUE>
no gpon olt model
```

Parameters

<VALUE> – datapath construction model:

1. transmission of Broadcast and unicast packets in one GEM port, VLAN operation (U-VID assignment) is performed on OLT side;
2. transmission of Broadcast traffic in dedicated GEM port, VLAN operation (U-VID assignment) is performed on OLT side;
3. transmission of Broadcast traffic in dedicated GEM port, VLAN operation (U-VID assignment) is performed on ONT side.

Default value

model1

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt model 1
```

gpon olt multicast-gem-port

The command sets the GEM port number for multicast traffic.

The use of a negative form (no) of the command sets the default parameter value.

Syntax

```
gpon olt multicast-gem-port <PORT>
no gpon olt multicast-gem-port
```

Parameters

<PORT> – number of GEM port for multicast traffic, may take values [0..4095].

Default value

4094

Command mode

CONFIG

Example

```
ma4000(config)# gpon olt multicast-gem-port 32
```

gpon olt ont-block-time

This command sets the time to lock the port when duplicate MAC addresses are detected.

The use of a negative form (no) of the command sets the default value.

Syntax

```
gpon olt ont-block-time <TIME>
no gpon olt ont-block-time
```

Parameters

<TIME> – blocking time, may take values in the range [1..2147483647] minutes.

Default value

5 minutes

Command mode

CONFIG

Example

```
ma4000(config)#gpon olt ont-block-time 10
```

gpon olt ont-sn-format

This command sets the format of displaying the ONT serial number.

The use of a negative form (no) of the command sets the default value.

Syntax

```
gpon olt ont-sn-format <VALUE>  
no gpon olt ont-sn-format
```

Parameters

<VALUE> – display format:

- literal – AAAAXXXXXXXXXX, where A is uppercase letter, and X in HEX format [0-F];
- numerical – XXXXXXXXXXXXXXXX, where X in HEX format [0-F];
- section-numerical – XX-XX-XX-XX-XX-XX-XX-XX, where X in HEX format [0-F].

Default value

literal

Command mode

CONFIG

Example

```
ma4000(config)#gpon olt ont-sn-format literal
```

show gpon olt

The command to view the settings of GPON-configuration of PLC8 modules:

- Block duplicated mac – protection against duplicate MAC addresses;
- Ont block time – port blocking time in minutes when detecting duplicate MAC addresses;
- Dhcpna shaper – maximum number of DHCP messages per second for each ONT;
- Datapath – datapath configuration:
- Model – datapath construction model;
- Broadcast gem port – number of GEM port for broadcast traffic;
- Multicast gem port – number of GEM port for multicast traffic;
- Encryption – GPON traffic encryption settings
- Enable – GPON traffic encryption state: enabled, disabled;
- Key update interval – encryption key update period, in minutes;
- ONT authentication mode – ONT authentication mode;
- Auto reconfigure ont – ONT auto reconfiguration state: enabled, disabled;
- Auto reconfigure channel – channel auto reconfiguration state: enabled, disabled;
- Auto reconfigure olt – OLT auto reconfiguration state: enabled, disabled;
- Ont sn format – ONT serial number display format.

Syntax

```
show gpon olt
```

Parameters

Command contains no arguments.

Command mode

ROOT

Example

```
ma4000(config)# showgponolt
Block duplicated mac:                disabled
  Ont block time:                    5
  Dhcpna shaper:                     100
  Datapath:
    Model:                           modell
    Broadcast gem port:               4095
    Multicast gem port:               4094
  Encryption:
    Enable:                           false
    Key update interval:              1
  ONT authentication mode:            both
  Auto reconfigure ont:                true
  Auto reconfigure channel:            true
  Auto reconfigure olt:                true
  Ont sn format:                      literal
```