

## ***57- NGpon2 Channel Group/Sub Channel Group Configuration Commands***

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## 57.1 NGpon2 Channel Group/Sub Channel Group Configuration Command Tree

### Description

This chapter gives an overview of nodes that are handled by "NGpon2 Channel Group/Sub Channel Group Configuration Commands".

### Command Tree

```
----configure
  ----channel-group
    ----[no] id
      - (channel-group-id)
      - [no] name
      - [no] polling-period
      - [no] raman-reduct
      - [no] ng2sys-id
      - [no] admin-state
    ----[no] channel-pair
      - (channel-pair)
    ----subchannel-group
      ----[no] id
        - (subchannel-group)
        - [no] name
        - [no] auth-method
        - [no] mcast-encrypt
        - [no] fec-dn
        - [no] closest-ont
        - [no] diff-reach
        - [no] admin-state
        - [no] cpi
      ----[no] channel-pair
        - (channel-pair)
```

## 57.2 NGpon2 Channel Group Configuration Command

### Command Description

*This command configures a NGpon2 Channel Group.*

### User Level

*The command can be accessed by operators with equipment privileges, and executed by operators with equipment privileges.*

### Command Syntax

The command has the following syntax:

```
> configure channel-group ( no id (channel-group-id) ) | ( id (channel-group-id) [ no name | name <Ng2::Label> ] [ no polling-period | polling-period <Ng2::ChanGrpPollingPeriod> ] [ no raman-reduct | raman-reduct <Ng2::RamanReduction> ] [ no ng2sys-id | ng2sys-id <Ng2::SysId> ] [ no admin-state | admin-state <Gpon::ItfAdminStatus> ] )
```

### Command Parameters

**Table 57.2-1 "NGpon2 Channel Group Configuration Command" Resource Parameters**

Resource Identifier	Type	Description
(channel-group-id)	Format: <Ng2::ChannelGroup> Field type <Ng2::ChannelGroup> - channel group number	identification of the channel group index

**Table 57.2-2 "NGpon2 Channel Group Configuration Command" Command Parameters**

Parameter	Type	Description
[no] name	Parameter type: <Ng2::Label> Format: - a printable string - length: x<=50	<i>optional parameter with default value: ""</i> textual string that can be used to label this channel group
[no] polling-period	Parameter type: <Ng2::ChanGrpPollingPeriod> Format: - period between autodetection procedure on each pair in the group - unit: 1/10 sec - range: [1...864000]	<i>optional parameter with default value: 100</i> period between autodetection procedure on each pair in the group
[no] raman-reduct	Parameter type: <Ng2::RamanReduction> Format: ( enable   disable ) Possible values:	<i>optional parameter with default value: "disable"</i> enable/disable Raman Reduction code for this channel group

Parameter	Type	Description
	- enable : raman reduction code enabled - disable : raman reduction code disabled	
[no] ng2sys-id	Parameter type: <Ng2::SysId> Format: - ng2sysid - 5 hex characters - length: x<=5	<i>optional parameter with default value: "00000"</i> ng2sysid
[no] admin-state	Parameter type: <Gpon::ItfAdminStatus> Format: ( up   down ) Possible values: - up : set the admin-state to up - down : set the admin-state to down	<i>optional parameter with default value: "down"</i> <i>The parameter is not visible during creation.</i> administrative status of the channel group

## Command Output

Table 57.2-3 "NGpon2 Channel Group Configuration Command" Display parameters

Specific Information		
name	Type	Description
oper-state	Parameter type: <Itf::ifOperStatus> ( up   down   testing   unknown   dormant   no-value ) Possible values: - up : up,traffic can pass - down : down,no traffic is passing - testing : testing,no traffic is passing - unknown : unknown - dormant : dormant,no traffic is passing - no-value : no entry in the table	operational state of the channel group <i>This element is always shown.</i>

## 57.3 NGpon2 Channel Group Member Association Command

### Command Description

*This command associates a NGpon2 Channel Pair with a Channel Group.*

### User Level

*The command can be accessed by operators with equipment privileges, and executed by operators with equipment privileges.*

### Command Syntax

The command has the following syntax:

```
> configure channel-group id (channel-group-id) ( no channel-pair (channel-pair) ) | ( channel-pair (channel-pair) )
```

### Command Parameters

**Table 57.3-1 "NGpon2 Channel Group Member Association Command" Resource Parameters**

Resource Identifier	Type	Description
(channel-group-id)	Format: <Ng2::ChannelGroup> Field type <Ng2::ChannelGroup> - channel group number	identification of the channel group index
(channel-pair)	Format: <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::ChannelPairId> Field type <Eqpt::RackId> - the rack number Field type <Eqpt::ShelfId> - the shelf number Field type <Eqpt::SlotId> - the LT slot number Field type <Eqpt::ChannelPairId> - the channel pair identifier	channel-pair associated with this channel-group

## 57.4 NGpon2 Sub Channel Group Configuration Command

### Command Description

*This command configures a NGpon2 Sub Channel Group.*

*Note: The value of sig-degrade-th must be greater than sig-fail-th (i.e. sig-degrade-th must represent a lower BER value)*

*The value of closest-ont can be changed only after setting the administrative status to down.*

*The value of diff-reach can be changed only after setting the administrative status to down. When an ONT is located at a greater distance than is configured, its reply will be delayed and may disturb other PON traffic.*

*The value of fec-dn can be changed only after setting the administrative status to down. If the FEC change is made while the admin status is up, then it must be set to down and then put back to up for the change to take place.*

*The value of auth-method can be changed only after setting the administrative status to down.*

### User Level

*The command can be accessed by operators with equipment privileges, and executed by operators with equipment privileges.*

### Command Syntax

The command has the following syntax:

```
> configure channel-group id (channel-group-id) subchannel-group ( no id (subchannel-group) ) | ( id (subchannel-group) [ no name | name <Ng2::Label> ] [ no auth-method | auth-method <Ng2::SubChanAuthMethod> ] [ no mcast-encrypt | mcast-encrypt <Ng2::MCastEncryption> ] [ no fec-dn | fec-dn <Gpon::FecDn> ] [ no closest-ont | closest-ont <Ng2::OntDistance> ] [ no diff-reach | diff-reach <Ng2::PonDiffReach> ] [ no admin-state | admin-state <Gpon::ItfAdminStatus> ] [ no cpi | cpi <Ng2::SubchannelGroupCpi> ] )
```

### Command Parameters

**Table 57.4-1 "NGpon2 Sub Channel Group Configuration Command" Resource Parameters**

Resource Identifier	Type	Description
(channel-group-id)	Format: <Ng2::ChannelGroup> Field type <Ng2::ChannelGroup> - channel group number	identification of the channel group index
(subchannel-group)	Format: - subchannel group number - range: [1...4]	identification of the subchannel group index

**Table 57.4-2 "NGpon2 Sub Channel Group Configuration Command" Command Parameters**

## 57 NGpon2 Channel Group/Sub Channel Group Configuration Commands

Parameter	Type	Description
[no] name	Parameter type: <Ng2::Label> Format: - a printable string - length: x<=50	<i>optional parameter with default value: ""</i> textual string that can be used to label this subchannel group
[no] auth-method	Parameter type: <Ng2::SubChanAuthMethod> Format: ( sn-slid   logical   loidpre   logical-std   loidpre-std ) Possible values: - sn-slid : Serial Number and SLID authentication - logical : logical authentication - loidpre : loid precedence mix authentication - logical-std : standard logical authentication - loidpre-std : standard loid precedence mix authentication	<i>optional parameter with default value: "sn-slid"</i> authentication method used for ONTs in this subchannel group
[no] mcast-encrypt	Parameter type: <Ng2::MCastEncryption> Format: ( enable   disable ) Possible values: - enable : multicast encryption enabled - disable : multicast encryption disabled	<i>optional parameter with default value: "disable"</i> enable/disable downstream multicast GEM encryption mode
[no] fec-dn	Parameter type: <Gpon::FecDn> Format: ( enable   disable ) Possible values: - enable : fec is enabled - disable : fec is disabled	<i>optional parameter with default value: "enable"</i> use of fec in downstream direction for all olt transmissions
[no] closest-ont	Parameter type: <Ng2::OntDistance> Format: - closest ont distance - unit: km - range: [0,20]	<i>optional parameter with default value: 0L</i> the distance of the closest ont on the pon
[no] diff-reach	Parameter type: <Ng2::PonDiffReach> Format: - pon differential reach - unit: km - range: [20,40]	<i>optional parameter with default value: 20L</i> the maximum differential logical reach on the PON
[no] admin-state	Parameter type: <Gpon::ItfAdminStatus> Format: ( up   down ) Possible values: - up : set the admin-state to up - down : set the admin-state to down	<i>optional parameter with default value: "down"</i> <i>The parameter is not visible during creation.</i> administrative status of the subchannel group
[no] cpi	Parameter type: <Ng2::SubchannelGroupCpi> Format: - channel partition index - range: [0...15]	<i>optional parameter with default value: 0L</i> channel partition index of the subchannel group

## Command Output

**Table 57.4-3 "NGpon2 Sub Channel Group Configuration Command" Display parameters**

Specific Information		
name	Type	Description
oper-state	<p>Parameter type: &lt;Itf::ifOperStatus&gt; ( up   down   testing   unknown   dormant   no-value ) Possible values: - up : up,traffic can pass - down : down,no traffic is passing - testing : testing,no traffic is passing - unknown : unknown - dormant : dormant,no traffic is passing - no-value : no entry in the table</p>	<p>operational state of the subchannel group <i>This element is always shown.</i></p>



## 57.5 NGpon2 Sub Channel Group Member Association Command

### Command Description

*This command associates a NGpon2 Channel Pair with a Sub Channel Group.*

*This will only be possible if the channel-pair has the same channel-speed as the rest of the members*

### User Level

*The command can be accessed by operators with equipment privileges, and executed by operators with equipment privileges.*

### Command Syntax

The command has the following syntax:

```
> configure channel-group id (channel-group-id) subchannel-group id (subchannel-group) ( no channel-pair (channel-pair) ) | ( channel-pair (channel-pair) )
```

### Command Parameters

**Table 57.5-1 "NGpon2 Sub Channel Group Member Association Command" Resource Parameters**

Resource Identifier	Type	Description
(channel-group-id)	Format: <Ng2::ChannelGroup> Field type <Ng2::ChannelGroup> - channel group number	identification of the channel group index
(subchannel-group)	Format: - subchannel group number - range: [1...4]	identification of the subchannel group index
(channel-pair)	Format: <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::ChannelPairId> Field type <Eqpt::RackId> - the rack number Field type <Eqpt::ShelfId> - the shelf number Field type <Eqpt::SlotId> - the LT slot number Field type <Eqpt::ChannelPairId> - the channel pair identifier	channel-pair associated with this subchannel-group