



**GEL-2060**

ELPS Configuration Commands

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# Chapter 1 ELPS Configuration Commands

## 1.1 Global Commands

### 1.1.1 **elps** *id*

To set an instance of ELPS node and enter the node mode, run the following command:

**elps** *id*

To cancel an instance of ring, run the following command:

**no elps** *id*

#### Parameter

Parameter	Description
id	Stands for the node instance ID, which ranges from 0 to 7.

#### Default value

By default, the ELPS node instance is not configured.

#### Command mode

Global configuration mode

#### Explanation

N/A.

#### Example

```
S1_config#elps 1
S1_config_elps1#
```

#### Related command

N/A.

### 1.1.2 **working-vlanmap** *vlanmap*

To set the working vlan map of the ELPS node, run the following command:

**working-vlanmap** *vlanmap*

#### Parameter

Parameter	Description
vlanmap	Stands for the VLAN range table (1-4094), which is similar with (1,3,5,7), (1,3-5,7) or (1-7).

#### Default value

By default, the working vlan map of a node is not configured.

#### Command mode

EPLS node configuration mode

#### Explanation

1. Configuring working VLAN does not mean creating this VLAN, so you have to establish the control VLAN manually. .
2. After working-vlanmap, protection-mode, revertive-mode and detect-fault are configured, the ELPS configuration mode exits and the ELPS node is started, the working-vlanmap cannot be modified.

#### Example

```
S1_config#elps 1
S1_config_elps1#working-vlanmap 1-10
S1_config_elps1#
```

#### Related command

protection-mode {1plus1-bidirectional | 1plus1-unidirectional | 1to1-bidirectional}

revertive-mode {revertive | nonrevertive}

detect-fault {physical-port-check| continuity-check | both-check}

### 1.1.3 **protection-mode** {1plus1-bidirectional | 1plus1-unidirectional | 1to1-bidirectional}

To set the protection mode of the ELPS node to be the 1plus1-bidirectional mode, run the following command:

**protection-mode 1plus1-bidirectional**

To set the protection mode of the ELPS node to be the 1plus1-unidirectional mode, run the following command:

**protection-mode 1plus1-unidirectional**

To set the protection mode of the ELPS node to be the 1to1-bidirectional mode, run the following command:

**protection-mode 1to1-bidirectional****Parameter**

N/A.

**Default value**

By default, the ELPS node's protection mode is not configured.

**Command mode**

ELPS node configuration mode

**Explanation**

1. When the ELPS node's protection mode is set to **1plus1-bidirectional** or **1plus1-unidirectional**, the revertive mode of node is **non-revertive** by default; the protection mode is **1to1-bidirectional**, it is **revertive** by default.
2. After working-vlanmap, protection-mode, revertive-mode and detect-fault are configured, the ELPS configuration mode exits and the ELPS node is started, the working-vlanmap cannot be modified.

**Example**

```
S1_config#elps 1
S1_config_elps1#working-vlanmap 1-10
S1_config_elps1#protection-mode 1plus1-bidirectional
S1_config_elps1#
```

**Related command**

working-vlanmap vlanmap

revertive-mode {revertive | nonrevertive}

detect-fault {physical-port-check| continuity-check | both-check}

### 1.1.4 **revertive-mode {revertive | nonrevertive}**

To set the mode of the ELPS to **revertive**, run the following command:

**revertive-mode revertive**

To set the mode of the ELPS to **non-revertive**, run the following command:

**revertive-mode nonrevertive**

#### Parameter

N/A.

#### Default value

By default, the ELPS node's mode is not configured.

#### Command mode

ELPS node configuration mode

#### Explanation

1. When the ELPS node's protection mode is set to **1plus1-bidirectional** or **1plus1-unidirectional**, the revertive mode of node is **non-revertive** by default; the protection mode is **1to1-bidirectional**, it is **revertive** by default. The two cases change after the configuration of the revertive mode.

2. After working-vlanmap, protection-mode, revertive-mode and detect-fault are configured, the ELPS configuration mode exits and the ELPS node is started, the working-vlanmap cannot be modified.

#### Example

```
S1_config#elps 1
S1_config_elps1#working-vlanmap 1-10
S1_config_elps1#protection-mode 1plus1-bidirectional
S1_config_elps1#revertive-mode revertive
S1_config_elps1#
```

#### Related command

working-vlanmap vlanmap

protection-mode {1plus1-bidirectional | 1plus1-unidirectional | 1to1-bidirectional}

detect-fault {physical-port-check| continuity-check | both-check}

### 1.1.5 **detect-fault {physical-port-check| continuity-check | both-check}**

To set the trouble monitoring mode of the ELPS node to **physical-port-check**, run the following command:

**detect-fault physical-port-check**

To set the trouble monitoring mode of the ELPS node to **continuity-check**, run the following command:

**detect-fault continuity-check**

To set the trouble monitoring mode of the ELPS node to **both-check**, run the following command:

**detect-fault both-check**

#### Default value

By default, the ELPS node's trouble monitoring mode is not configured.

#### Command mode

ELPS node configuration mode

#### Explanation

1. After working-vlanmap, protection-mode, revertive-mode and detect-fault are configured, the ELPS configuration mode exits and the ELPS node is started, the working-vlanmap cannot be modified.

#### Example

```
S1_config#elps 1
S1_config_elps1#working-vlanmap 1-10
S1_config_elps1#protection-mode 1plus1-bidirectional
S1_config_elps1#revertive-mode revertive
S1_config_elps1#detect-fault continuity-check
S1_config_elps1#
```

#### Related command

working-vlanmap vlanmap

protection-mode {1plus1-bidirectional | 1plus1-unidirectional | 1to1-bidirectional}

revertive-mode {revertive | nonrevertive}

### 1.1.6 WTR-time

To set the WTR time of the ELPS node, run the following command:

**WTR-time** *value*

To resume the default WTR time of the ELPS node, run the following command:

**no WTR-time**

#### Parameter

Parameter	Description
value	Stands for the WTR time, which ranges from 5 to 12 minutes. Its step is 1 minute and its default value is 5 minutes.

#### Default value

By default, the WTR-time is 5 minutes.

#### Command mode

ELPS node configuration mode

#### Explanation

N/A.

#### Example

```
S1_config#elps 1
S1_config_elps1#working-vlanmap 1-10
S1_config_elps1#protection-mode 1plus1-bidirectional
S1_config_elps1#revertive-mode revertive
S1_config_elps1#detect-fault continuity-check
S1_config_elps1#WTR-time 6
S1_config_elps1#
```

#### Related command

N/A

### 1.1.7 hold-off-time

To set the hold-off time of the ELPS node, run the following command:



**hold-off-time** *value*

To resume the default hold-off time of the ELPS node, run the following command:

**no hold-off-time**

## Parameter

Parameter	Description
value	Stands for the hold-off time, which ranges from 1 to 10 seconds. Its step is 100ms and its default value is 1 second.

## Default value

By default, the hold-off time is one second.

## Command mode

ELPS node configuration mode

## Explanation

N/A.

## Example

```
S1_config#elps 1
S1_config_elps1#working-vlanmap 1-10
S1_config_elps1#protection-mode 1plus1-bidirectional
S1_config_elps1#revertive-mode revertive
S1_config_elps1#detect-fault continuity-check
S1_config_elps1#hold-off-time 2
S1_config_elps1#
```

## Related command

N/A

## 1.2 Port Configuration Commands

### 1.2.1 **elps** *id* {**working-transport** | **protection-transport**}

To set a port where the ELPS working transport entity is located, run the following command:

**elps id working-transport**

To delete the ELPS working transport entity configuration on a port, run the following command:

**no elps id working-transport**

To set a port where the ELPS protection transport entity is located, run the following command:

**elps id protection-transport**

To delete the ELPS protection transport entity configuration on a port, run the following command:

**no elps id protection-transport**

## Parameter

Parameter	Description
id	ID of the node

## Default value

No ELPS configuration exists on ports by default.

## Command mode

The physical port configuration mode and the converged port configuration mode

## Explanation

The port cannot be configured until working-vlanmap, protection-mode, revertive-mode and default-fault are all configured.

## Example

```
S1_config#interface GigaEthernet 0/1
S1_config_g0/1# elps 1 working-transport
S1_config_g0/1#exit
```

## Related command

elps id mep md md-string ma ma-string level level-id local local-id remote remote-id

### 1.2.2 **elps id mep md md-string ma ma-string level level-id local local-id remote remote-id**

To set the MEP information about the ELPS port, run the following command:

```
elps id mep md md-string ma ma-string level level-id local local-id remote remote-id
```

To delete the MEP information about the ELPS port, run the following command:

```
no elps id mep
```

#### Parameter

Parameter	Description
id	ID of the node
md-string	MEP maintenance domain
ma-string	MEP maintenance link
level-id	MEP level
local-id	Local MEP ID
remote-id	Remote MEP ID

#### Default value

No MEP information exists on ports by default.

#### Command mode

The physical port configuration mode and the converged port configuration mode

#### Explanation

The port cannot be configured until working-vlanmap, protection-mode, revertive-mode and default-fault, transport entity of the ELPS port are all configured.

#### Example

```
S1_config#interface GigaEthernet 0/1
S1_config_g0/1#elps 1 working-transport
S1_config_g0/1#elps 1 mep md x ma x level 1 local 1 remote 2
S1_config_g0/1#exit
```

#### Related command

```
elps id {working-transport | protection-transport}
```

## 1.3 Control Commands

### 1.3.1 **elps id LockOut**

To set the protection lockout of ELPS, run the following command:

**elps id LockOut**

Parameter

Parameter	Description
Id	ID of the node

Default value

N/A.

Command mode

Monitoring mode

Explanation

N/A.

Example

N/A.

Related command

elps id ForcedSwitch

elps id ManualSwitch

elps id ManualSwitch-Working

elps id Exercise

elps id CLEAR

### 1.3.2 **elps id ForcedSwitch**

To set the forced switching operation of ELPS, run the following command:

**elps id ForcedSwitch**

Parameter

Parameter	Description
Id	ID of the node

Default value

N/A.

Command mode

Monitoring mode

Explanation

N/A.

Example

N/A.

Related command

[elps id LockOut](#)

[elps id ManualSwitch](#)

[elps id ManualSwitch-Working](#)

[elps id Exercise](#)

[elps id CLEAR](#)

### 1.3.3 **elps id ManualSwitch**

To set the manual switching operation of ELPS, run the following command:

**elps id ManualSwitch**

## Parameter

Parameter	Description
Id	ID of the node

## Default value

N/A.

## Command mode

Monitoring mode

## Explanation

N/A.

## Example

N/A.

## Related command

elps id LockOutelps id ForcedSwitchelps id ManualSwitch-Workingelps id Exerciseelps id CLEAR

### 1.3.4 **elps id ManualSwitch-Working**

To switch to the working entity of ELPS manually, run the following command:

**elps id ManualSwitch-Working**

## Parameter

Parameter	Description
Id	ID of the node

**Default value**

N/A.

**Command mode**

Monitoring mode

**Explanation**

N/A.

**Example**

N/A.

**Related command**

[elps id LockOut](#)

[elps id ForcedSwitch](#)

[elps id ManualSwitch](#)

[elps id Exercise](#)

[elps id CLEAR](#)

### 1.3.5 **elps id Exercise**

To set the exercise operation of ELPS, run the following command:

**elps id Exercise**

**Parameter**

Parameter	Description
Id	ID of the node

**Default value**

N/A.

Command mode

Monitoring mode

Explanation

N/A.

Example

N/A.

Related command

[elps id LockOut](#)

[elps id ForcedSwitch](#)

[elps id ManualSwitch](#)

[elps id ManualSwitch-Working](#)

[elps id CLEAR](#)

### 1.3.6 **elps id CLEAR**

To clear the control command of ELPS, run the following command:

**elps id CLEAR**

Parameter

Parameter	Description
Id	ID of the node

Default value

N/A.

Command mode

Monitoring mode



**Explanation**

N/A.

**Example**

N/A.

**Related command**

[elps id LockOut](#)

[elps id ForcedSwitch](#)

[elps id ManualSwitch](#)

[elps id ManualSwitch-Working](#)

[elps id Exercise](#)

## 1.4 Show

### 1.4.1 **show elps**

To display the summary information about the ELPS node, run the following command:

**show elps *id***

To display the detailed information about the ELPS node, run the following command:

**show elps *id* detail**

To display the information about the ELPS port, run the following command:

**show elps *id* interface *intf-name***

To display the summary information about all ELPS nodes, run the following command:

**show elps**

**Parameter**

Parameter	Description
id	ID of the node
intf-name	Name of an interface

Default value

N/A.

Command mode

Monitoring mode, global configuration mode, node configuration mode or port configuration mode

Explanation

N/A.

Example

N/A.

Related command

N/A.