

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.