CFM and Y1731 Configuration Commands

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Chapter 1 Overview

1.1 Stipulations

1.1.1 Format Stipulation in the Command Line

Syntax	Meaning
Bold	Stands for the keyword in the command line, which stays unchanged and must be entered without any modification. It is presented as a bold in the command line.
{italic}	Stands for the parameter in the command line, which must be replaced by the actual value. It must be presented by the italic in the brace.
<*italic*>	Stands for the parameter in the command line, which must be replaced by the actual value. It must be presented by the italic in the point bracket.
[ ]	Stands for the optional parameter, which is in the square bracket.
{ x | y | ... }	Means that you can choose one option from two or more options.
[x | y | ...]	Means that you can choose one option or none from two or more options.
{ x | y | ... } *	Means that you has to choose at least one option from two or more options, or even choose all options.
[x | y | ...] *	Means that you can choose multiple options or none from two or more options.
&<1-n>	Means that the parameter before the “&” symbol can be entered *n* times.
#	Means that the line starting with the “#” symbol is an explanation line.

Chapter 2 CFM and Y1731 Configuration Commands

2.1 CFM Configuration Commands

2.1.1 Adding the Maintenance Domain and Entering the Maintenance Domain Mode

1. Syntax

ethernet cfm md mdnf *{string}* **mdn** <*char_string*> [**level** <*0-7*> | **creation** <*MHF_creation_type*> | **sit** <*sender_id_type*> | **ip** <*IP_address*>]

2. Function

To add a maintenance domain or enter the already existent maintenance domain, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
level	Stands for the level of the maintenance domain, which is optional. If it is not chosen, its default value is 0.
creation	Stands for the creation mode of MIP, which is optional. If it is not chosen, its default value is **none**.
sit	Stands for the type of sender ID, which is optional. If it is not chosen, its default value is **none**.
ip	Stands for IP address of the trouble alarm server, which is optional. If it is not chosen, its default value is 0.0.0.0.

4. Mode

Global configuration mode

5. Example

Switch_config#ethernet cfm md mdnf string mdn customer level 5

6. Related command

N/A

2.1.2 Deleting the Maintenance Domain

1. Syntax

no ethernet cfm md mdnf *{string}* **mdn** <*char_string*>

2. Function

To delete a designated maintenance domain, run the above-mentioned command.

3. Parameter

Parameter	Description
Mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
Mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.

4. Mode

Global configuration mode

5. Example

Switch_config#no ethernet cfm md mdnf string mdn customer

6. Related command

N/A

2.1.3 Browsing the Maintenance Domain

1. Syntax

show ethernet cfm md [mdnf *{string}* **mdn** <*char_string*>**]**

2. Function

To browse all the maintenance domains or the designated maintenance domains of the local device, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of a to-be-browsed designated maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of a to-be-browsed designated maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.

4. Mode

EXEC, global, interface, maintenance domain

5. Example

Switch_config#show ethernet cfm md mdnf string mdn customer

6. Related command

N/A

2.1.4 Adding a Maintenance Association

1. Syntax

ma manf *{string}* **man** <*char_string*> **ci** *{100ms* | *1s* | *10s* | *1min* | *10min}* **meps** <*mepids*> [**vlan** <*1-4094*> | **creation** <*MHF_creation_type*> | **sit** <*sender_id_type*> | **ip** <*IP_address*>]

2. Function

To add a maintenance association, run the above-mentioned command.

3. Parameter

Parameter	Description
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is in character string mode.
ci	Stands for the transmission interval of CCM. The shortest transmission interval which is supported presently is 100ms.
meps	Stands for the MEPID of all MEPs in the local maintenance domain.
vlan	Stands for the identifier of the VLAN where the maintenance association is located, which is optional. If it is not chosen, its default value is 1.
creation	Stands for the creation mode of MIP, which is optional. If it is not chosen, its default value is **none**.
Sit	Stands for the type of sender ID, which is optional. If it is not chosen, its default value is **none**.
ip	Stands for IP address of the trouble alarm server, which is optional. If it is not chosen, its default value is 0.0.0.0.

4. Mode

Maintenance domain mode

5. Example

Switch_config_cfm#ma manf string man customer1 ci 1s meps 1-2,2009 vlan 10

6. Related command

N/A

2.1.5 Deleting the Maintenance Association

1. Syntax

no ma manf *{string}* man <*char_string*>

2. Function

To delete a designated maintenance association, run the above-mentioned command.

3. Parameter

Parameter	Description
Manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
Man	Stands for the name of the maintenance association. It is in character string mode.

4. Mode

Maintenance domain mode

5. Example

Switch_config_cfm#no ma manf string man customer

6. Related command

N/A

2.1.6 Browsing the Maintenance Association

1. Syntax

show ethernet cfm ma mdnf *{string}* **mdn** <*char_string*> [**manf** {string} **man** <char_string>]

2. Function

To browse all or designated maintenance associations in a designated maintenance domain on the local device, run the above-mentioned command.

3. Parameter

Parameter	Description

Mdnf	Stands for the format of the name of the maintenance domain where the to-be-browsed maintenance association is located. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain where the to-be-browsed maintenance association is located. It is a character string with 1 to 43 printable characters, capital sensitive.
Manf	Stands for the format of the name of a to-be-browsed maintenance association. At present only the char-string format is supported.
man	Stands for the name of a to-be-browsed maintenance association. It is in character string mode.

4. Mode

EXEC, global, interface, maintenance domain

5. Example

Switch_config#show ethernet cfm ma mdnf string mdn customer manf string man customer1

6. Related command

N/A

2.1.7 Adding MIP

1. Syntax

ethernet cfm mip add level <*0-7*> [**vlan** <*1-4094*>]

2. Function

To add an MIP of a specific level, which belongs to a designated VLAN, on a specific interface, run the above-mentioned command.

3. Parameter

Parameter	Description
Level	Stands for the level of a maintenance domain.
vlan	Stands for the identifier of the VLAN where the maintenance association is located,

	which is optional. If it is not chosen, its default value is 1.

4. Mode

   Physical interface configuration mode

5. Example

   Switch_config_g0/1#ethernet cfm mip add level 1 vlan 10

6. Related command

   N/A

2.1.8 Deleting MIP

1. Syntax

   ethernet cfm mip del vlan *<1-4094>*

2. Function

   To delete a designated MIP, run the above-mentioned command.

3. Parameter

Parameter	Description
Vlan	Stands for the identifier of the VLAN where MIP is located.

4. Mode

   Interface configuration mode

5. Example

   Switch_config_g0/1#ethernet cfm mip del vlan 10

6. Related command

   N/A

2.1.9 Browsing MIP

【Method 1】

1. Syntax

show ethernet cfm mip vlan <*1-4094*> **interface** <*interface_name*>

show ethernet cfm mip interface <*interface_name*>

2. Function

To browse all MIPs of a designated interface in the local device or MIPs in a specific VLAN, run the above-mentioned command.

3. Parameter

Parameter	Description
interface	Stands for a to-be-browsed interface.
Vlan	Stands for the identifier of a to-be-browsed VLAN.

4. Mode

EXEC, global, interface, maintenance domain

5. Example

Switch_config#show ethernet cfm mip vlan 1 interface g0/1

6. Related command

N/A

【Method 2】

1. Syntax

ethernet cfm mip display

2. Function

To browse all MIPs on the current interface of the local device, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Physical interface mode

5. Example

Switch_config_g0/1#ethernet cfm mip display

6. Related command

N/A

2.1.10 Adding MEP

1. Syntax

ethernet cfm mep add mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*> [**direction** *{up* | *down}* **| ip** <*ip_address*>]

2. Function

To add an MEP, which belongs to a designated maintenance association, on a specific interface, run the above-mentioned command.

3. Parameter

Parameter	Description
Mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
Mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43

	printable characters, capital sensitive.
Manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
Man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
Mepid	Stands for the MEPID of the to-be-added MEP.
direction	Stands for the direction of the to-be-added MEP. If it is not chosen, its default value is **down**.
ip	Stands for IP address of the trouble alarm server, which is optional. If it is not chosen, its default value is 0.0.0.0.

4. Mode

Physical interface configuration mode

5. Example

Switch_config_g0/1#ethernet cfm mep add mdnf string mdn customer manf string man customer1 mepid 2009 direction up

6. Related command

N/A

2.1.11 Deleting MEP

1. Syntax

ethernet cfm mep del mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*>

2. Function

To delete a designated MEP, run the above-mentioned command.

3. Parameter

Parameter	Description
Mdnf	Stands for the format of the name of the maintenance domain. At present only the

	char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
Manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
Mepid	Stands for the MEPID of the to-be-added MEP.

4. Mode

Physical interface configuration mode

5. Example

Switch_config_g0/1#ethernet cfm mep del mdnf string mdn customer manf string man customer1 mepid 2009

6. Related command

N/A

2.1.12 Browsing MEP

【Method 1】

1. Syntax

show ethernet cfm mep mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> [**mepid** <*1-8191*>] [**view** *{detail* | *brief}*]

2. Function

To browse the detailed or brief information about all MEPs in the designated maintenance domain of the local device, or that about a specific MEP, run the above-mentioned command.

3. Parameter

Parameter	**Description**

mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the to-be-browsed MEP.
view	Means to browse the detailed information or the brief information. It is the detailed information that will be browsed by default.

4. Mode

EXEC, global, interface, maintenance domain

5. Example

Switch_config#show ethernet cfm mep mdnf string mdn x manf string man x view brief

6. Related command

N/A

【Method 2】

1. Syntax

ethernet cfm mep display

7. Function

To browse all MEPs on the current interface of the local device, run the above-mentioned command.

8. Parameter

N/A

9. Mode

Physical interface mode

10. Example

Switch_config_g0/1#ethernet cfm mep display

11. Related command

N/A

2.2 Y1731 Configuration Commands

2.2.1 Modifying the Transmission Interval of the AIS Frame

Syntax

ethernet y1731 ais-mep timer *time*
To modify the transmission interval of the AIS frame, run the above-mentioned command:
[**no**] **ethernet y1731 ais-mep timer**
To resume the default transmission interval, run the above-mentioned command.

Parameter

Parameter	Description
time	Stands for the transmission interval of the AIS frame. <1> -- 1 frame per second <2> -- 1 frame per minute

Default value

The default transmission interval is one frame every second.

Command mode

Global configuration mode

Explanation

If a current device supports Eth-AIS and have to go through 4094 VLANs, the AIS frames it sends every second may cause tension. Therefore the current device has to support another AIS transmission period based on one minute. The AIS frame exchanges the AIS transmission interval through its period field.

Example

The following example shows how to modify the transmission interval of the AIS frame to 1 minute.

```
Switch#
Switch#config
Switch_config#ethernet y1731 ais-mep timer 2
Switch_config#
```

2.2.2 Performing the Termination Command

Syntax

ethernet y1731 terminate

The above-mentioned command is used to conduct the termination command.

Parameter

N/A

Default value

N/A

Command mode

Global configuration mode

Explanation

This command can be used to terminate the running **delay-measurement** command:

Example

The following example shows how to terminate the operation which is running in global configuration mode:

```
Switch#
Switch#config
Switch_config#ethernet y1731 terminate
Switch_config#
```

2.3 CFM Maintenance Commands

2.3.1 loopback

1. Syntax

ethernet cfm loopback mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*> **mac** <*AA:BB:CC:DD:EE:FF*> [**number** <*1-64*>]

2. Function

To use a designated MEP at the local terminal to conduct loopback towards another designated MEP at the remote terminal, run the above-mentioned command.

3. Parameter

Parameter	Description
Mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
Mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
Manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
Man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP.
mac	Stands for the MAC address of the remote MEP.
number	Stands for the loopback times, which is optional. If it is not chosen, its default value is 3.

4. Mode

EXEC

5. Example

Switch#ethernet cfm loopback mdnf string mdn x manf string man x mepid 1 mac 00:15:E9:43:AD:E3 number 3

6. Related command

N/A

2.3.2 linktrace

1. Syntax

ethernet cfm linktrace mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man**

<*char_string*> **mepid** <*1-8191*> **mac** <*AA:BB:CC:DD:EE:FF*> [**ttl** *{1-255}* | **fdb-only** *{yes}*]

2. Function

To use a designated local MEP to conduct linktrace towards a designated remote MEP, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP.
mac	Stands for the MAC address of the remote MEP.
ttl	Stands for the TTL value, which is optional. If it is not chosen, its default value is 64.
fdb-only	Means whether LTM forwarding is only via MAC address, which is optional. If it is not chosen, its default value is **yes**.

4. Mode

EXEC

5. Example

Switch#ethernet cfm linktrace mdnf s mdn x manf string man x mepid 1 mac 00:15:E9:43:AD:E3 ttl 64

6. Related command

N/A

2.3.3 Deleting the Linktrace Result Table

1. Syntax

clear ethernet cfm linktrace mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> [**mepid** <*1-8191*>]

2. Function

To delete the linktrace result table of a designated MEP, run the above-mentioned command.

3. Parameter

Parameter	Description
Mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
Mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
Manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
Man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
Mepid	Stands for the MEPID of the local MEP.

4. Mode

EXEC

5. Example

Switch#clear ethernet cfm linktrace mdnf string mdn x manf string man x mepid 1

6. Related command

N/A

2.3.4 Setting the Size of the Linktrace Result Table

1. Syntax

ethernet cfm linktrace table-size <*1-16*>

2. Function

To set the size of the linktrace result table (that is, the number of linktraces which can be conducted concurrently), run the above-mentioned command.

3. Parameter

Parameter	Description
table-size	Stands for the size of the linktrace result table.

4. Mode

Global configuration mode

5. Example

Switch_config#ethernet cfm linktrace table-size 1

6. Related command

N/A

2.3.5 Setting the Number of Entries in the Linktrace Result Table

1. Syntax

ethernet cfm linktrace entry-number <*2-4095*>

2. Function

To set the maximum number of entries that are received each time by the linktrace result table, run the above-mentioned command.

3. Parameter

Parameter	Description
entry-number	Stands for the number of the entries in the linktrace result table.

4. Mode

Global configuration mode

5. Example

Switch_config#ethernet cfm linktrace entry-number 2009

6. Related command

N/A

2.3.6 Setting the Aging Time of the Linktrace Result Table

1. Syntax

ethernet cfm linktrace hold-time *<1-29>*

2. Function

It is used to set the saving time of the LTR table after the first Linktrace (unit: minute).

3. Parameter

Parameter	Description
hold-time	Stands for the aging time of the linktrace result table. Unit: minute

4. Mode

Global configuration mode

5. Example

Switch_config#ethernet cfm linktrace hold-time 10

6. Related command

N/A

2.3.7 Deleting the MEP Statistics Data

1. Syntax

ethernet cfm mep clear mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*>

2. Function

To delete the statistics data of a designated MEP, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of a designated MEP.

4. Mode

Physical interface mode

5. Example

Switch_config_g0/1#ethernet cfm mep clear mdnf string mdn x manf string man x mepid 1

6. Related command

N/A

2.3.8 Conducting the Loss Measurement Command

1. Syntax

ethernet cfm lm-start mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*> **mac** <*AA:BB:CC:DD:EE:FF*> [**number** <*1-64*>]

2. Function

To use a designated MEP at the local terminal to conduct the LM operation towards another designated MEP at the remote terminal, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP.
mac	Stands for the MAC address of the remote MEP.
number	Stands for the LM times, which is optional. If it is not chosen, its default value is 0, which means the LM operation always continues.

4. Mode

EXEC

5. Example

Switch#ethernet cfm lm-start mdnf string mdn x manf string man x mepid 1 mac 00:15:E9:43:AD:E3 number 3

6. Related Command

N/A

2.3.9 Disabling the Loss Measurement Command

1. Syntax

ethernet cfm lm-stop mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*>

2. Function

To stop the LM operation of a designated MEP, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP.

4. Mode

EXEC

5. Example

Switch#ethernet cfm lm-stop mdnf string mdn x manf string man x mepid 1

6. Related command

N/A

2.3.10 Enabling the Delay Measurement Command

1. Syntax

ethernet cfm dm-start mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*> **mac** <*AA:BB:CC:DD:EE:FF*> [**number** <*1-64*>]

2. Function

To use a designated MEP at the local terminal to conduct the DM operation towards another designated MEP at the remote terminal, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP.
mac	Stands for the MAC address of the remote MEP.
number	Stands for the DM times, which is optional. If it is not chosen, its default value is 0, which means the LM operation always continues.

4. Mode

EXEC

5. Example

Switch#ethernet cfm dm-start mdnf string mdn x manf string man x mepid 1 mac 00:15:E9:43:AD:E3 number 3

6. Related command

N/A

2.3.11 Disabling the Delay Measurement Command

1. Syntax

ethernet cfm dm-stop mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*>

2. Function

停止指定的 MEP 的 LM 操作。

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP.

4. Mode

EXEC

5. Example

Switch#ethernet cfm dm-stop mdnf string mdn x manf string man x mepid 1

6. Related command

N/A

2.4 CFM Control Commands

2.4.1 CFM Stack Control Command

1. Syntax

ethernet cfm *{enable* | *disable}*

2. Function

To enable or disable the whole CFM protocol stack, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Global configuration mode

5. Example

Switch_config#ethernet cfm enable

6. Related command

N/A

2.4.2 CFM Interface Control Command

1. Syntax

ethernet cfm *{enable* | *disable}*

2. Function

To enable or disable the CFM function of the current interface, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Physical interface mode

5. Example

Switch_config_g0/1#ethernet cfm enable

6. Related command

N/A

2.4.3 MIP Control Command

1. Syntax

ethernet cfm mip *{enable* | *disable}* **vlan** *<1-4094>*

2. Function

To enable or disable the MIP of a designated VLAN on the current interface, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Physical interface mode

5. Example

Switch_config_g0/1#ethernet cfm mip enable vlan 1

6. Related command

N/A

2.4.4 MEP Control Command

1. Syntax

ethernet cfm mep *{enable* | *disable}* **mdnf** *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*>

2. Function

To enable or disable a designated MEP, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Physical interface mode

5. Example

Switch_config_g0/1#ethernet cfm mep enable mdnf string mdn x manf string man x mepid 1

6. Related command

N/A

2.4.5 CC Control Command

1. Syntax

ethernet cfm mep *{cci-enable* | *cci-disable}* **mdnf** *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*>

2. Function

To enable or disable the CCM transmission function of a designated MEP, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Physical interface mode

5. Example

Switch_config_g0/1#ethernet cfm mep cci-disable mdnf string mdn x manf string man x mepid 1

6. Related command

N/A

2.5 CFM Query Commands

2.5.1 Browsing the CFM Protocol Stack

1. Syntax

show ethernet cfm stack

2. Function

To browse the CFM protocol stack, run the above-mentioned command.

3. Parameter

N/A

4. Mode

Non-user mode

5. Example

Switch_config#show ethernet cfm stack

6. Related command

N/A

2.5.2 Browsing the CFM Interface

1. Syntax

show ethernet cfm interface [<*interface_name*>]

2. Function

This command can be used to browse the information about a designated CFM interface.

3. Parameter

N/A

4. Mode

Non-user mode

5. Example

Switch_config#show ethernet cfm interface g0/1

6. Related command

N/A

2.5.3 Browsing the Locally Stored Information About the Remote MEP

1. Syntax

show ethernet cfm rmep mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> [**mepid** <*1-8191*>] [**rmepid** <*1-8191*>] [**view** *{detail* | *brief}*]

2. Function

To browse the detailed or brief information about all remote MEPs, which together with a designated local MEP belong to the same maintenance association, or about a designated remote MEP, run the above-mentioned command.

3. Parameter

Para	Description

meter	
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP, which together with the to-be-browsed remote MEP belongs to the same maintenance association.
rmepid	Stands for the MEPID of the to-be-browsed remote MEP.
view	Means to browse the detailed information or the brief information. It is the detailed information that will be browsed by default.

4. Mode

Non-user mode

5. Example

Switch_config#show ethernet cfm rmep mdnf string mdn x manf string man x mepid 1 rmepid 2 view brief

6. Related command

N/A

2.5.4 Browsing the LinkTrace Result Table

1. Syntax

show ethernet cfm linktrace mdnf *{string}* **mdn** <*char_string*> **manf** *{string}* **man** <*char_string*> **mepid** <*1-8191*> **tid** <*0-4294967295*>

2. Function

To browse the linktrace result table which is carried out by a specified TID of a specific MEP, run the above-mentioned command.

3. Parameter

Parameter	Description
mdnf	Stands for the format of the name of the maintenance domain. At present only the char-string format is supported.
mdn	Stands for the name of the maintenance domain. It is a character string with 1 to 43 printable characters, capital sensitive.
manf	Stands for the format of the name of the maintenance association. At present only the char-string format is supported.
man	Stands for the name of the maintenance association. It is a character string with 1 to 43 printable characters, capital sensitive.
mepid	Stands for the MEPID of the local MEP, which together with the to-be-browsed remote MEP belongs to the same maintenance association.
tid	Stands for the TID that is returned during linktrace.

4. Mode

Non-user mode

5. Example

Switch_config#show ethernet cfm linktrace mdnf string mdn x manf string man x mepid 1 tid 19830719

```
**** [RESULT FOR READING LINKTRACE REPLY] ****

                ================================================
                                ID :0x12E97BF (19830719)【Event ID of the presently running LT】
                                TTL :0x00000004(4)  【TTL value of the presently running LT】
                            TOTAL LTRs:1【LTRs returned by the remote terminal of the result table】
                              MAX LTRs:100【receiving at most 100 LTRs】
                            NEXT ORDER:2【The next expected LTR order ID】

                                【The total information of one Linktrace is shown above】
                ================== LTRs ===================

                                order:1【Order ID of this LTR】
                                  TTL:3【TTL vlaue in the responsed LTRs】
                               FwdYes:NO【Whether the local node forwards LTM】
                           TerminalMEP:NO【Whether the local node is the terminal MEP】
                         Last Egress ID:0 - 00:E0:0F:DC:02:11【MAC of the previous hop】
                         Next Egress ID:0 - 00:00:00:00:00:00【MAC of the next hop, and if the result is 0 it
means there is no next hop】
                           Relay Action:(1)HIT【Field of the Relay action: HIT means just hitting successively】
                        Ingress Action:OK(1)【state of the ingress port: OK】
                    Ingress MAC Address:00:E0:0F:81:11:1C【MAC of the ingress port】
                  Ingress Port ID format:MAC-ADDRESS(3)【ID format of the ingress port: MAC format】
                   Ingress Port ID (hex):00 E0 0F 81 11 1C【Identifier of the ingress port：00 E0 0F 81 11 1C】
```

6. Related command

N/A

2.5.5 Browsing the Whole Running Status of CFM

1. Syntax

show ethernet cfm running-info

2. Function

To browse the whole running status of CFM, run the above-mentioned command.

3. Parameter

N/A

4. Mode

All modes except the user mode

5. Example

Switch_config#show ethernet cfm running-info

6. Related command

N/A

2.6 Y1731 Show Commands

2.6.1 Displaying the MEPs That Can Transmit AIS Frames

Syntax

show ethernet y1731 ais-mep

The above-mentioned command is used to show the MEPs that can transmit AIS frames.

Parameter

N/A

Default value

N/A

Remarks

N/A

Example

```
Switch_config#show ethernet y1731 ais-mep
AIS MEP:
MEGID          MEPID   Level   VLAN    Port      MAC              Direction
aaa            2       3       1       Fas0/8    00E0.0F5F.745D   UP
```

2.6.2 Displaying the Information About Continuous MEG Detection

Syntax

show ethernet y1731 detect *MEGID* **[***MEPID* **]**

To display the information about continuous MEG detection, run the above-mentioned command.

Parameter

Parameter	Description
MEGID	Displays the detection information about the designated MEG.
MEPID	It is an optional parameter and the identifier of MEP should be known well.

Default value

N/A

Remarks

When MEPID is not entered, the detection information about all local MEPs of MEG will be shown.

Example

The following example shows the fault detection of MEP 111 of MEG aaa.

```
Switch_config#show ethernet y1731 detect bbb 2
Ethernet Continuity Check:
        (F)Fail,stand for defect exist
        (N)Normal,stand for defect inexistence
LocMEP CC-Status   SFAIL LOC    MIS    UMEP   UMEL   UPER   AIS    RDI    LCK
2      Enabled     N     N      N      N      N      N      N      N      N
```

```
LocMEP   PeerMEP RDI      LOC      MAC
2        1           N        N        00E0.0FD2.FE17
```

2.6.3 Displaying MEP and MIP Configurations on a Port

Syntax

show ethernet y1731 interface *interface-name*

The above-mentioned command is used to display the configurations of MEP and MIP on a port.

Parameter

Parameter	Description
interface-name	Name of the interface, such as f0/1 and fastethernet0/1

Default value

N/A

Remarks

N/A

Example

```
Switch_config#show ethernet y1731 interface g0/4
GigaEthernet0/4:
MEP list:
    MEGID            MEPID    Level    Vlanid   MAC                Direction
    bbb              2        3        1        00E0.0F68.7FBA     DOWN
MIP list:
    Type     Level    MAC
    MIP      4        00E0.0F68.7FBE
Switch_config#
```

2.6.4 Displaying the Configuration of all MEG or the Detailed Configuration of a Certain MEG

Syntax

show ethernet y1731 meglist [*MEGID* **]**

The above-mentioned command is used to display the configuration of all MEG or the detailed configuration about a certain MEG.

Parameter

Parameter	Description
MEGID	Displays the detailed information about the designated MEG.

Default value

N/A

Remarks

If MEGID is not entered, the information about all MEGs will be displayed.

Example

```
Switch_config#show ethernet y1731 meglist
MEG list:
    MEGID              Level    Vlan
    aaa                3        1
    bbb                3        1
    ccc                1        1
Total entries displayed: 3
Switch_config#show ethernet y1731 meglist aaa
MEG ID: aaa          Level: 3   Vlan: 1      CC-Status: Enabled
MEP mep: 1-2
Local MEP list:
    MEPID    Port       MAC                Direction
    2        Fas0/8     00E0.0F5F.745D     UP
```

2.6.5 Displaying the Information About All Configured MIPs

Syntax

show ethernet y1731 miplist

The above-mentioned command is used to display the information about all configured MIPs.

Parameter

N/A

Default value

N/A

Remarks

N/A

Example

```
Switch_config#
Switch_config#show ethernet y1731 miplist
MIP list:
Type      Level     Port         MAC
MIP       7         Fas0/4       00E0.0FC1.003A
MIP       5         Fas0/1       00E0.0FC1.0037
```

2.6.6 Displaying the Statistics Information About the Y1731 Module

Syntax

show ethernet y1731 traffic

The above-mentioned command is used to display some statistics information about the Y.1731 module, including statistics of the received and transmitted OAM packets and the system error.

Parameter

N/A

Default value

N/A

Remarks

N/A

Example

```
Switch_config#
Switch_config#show ethernet y1731 traffic
ethernet y1731 traffic/errors:
        Total output CCM frames: 223933
        Total output LBM frames: 67
        Total output LTM frames: 41
        Total output AIS frames: 0
        Total output 1DM frames: 1067
        Total output DMM frames: 60
        Total input CCM frames: 160778
```

Total input LBM frames: 30
Total input LBR frames: 67
Total input LTM frames: 0
Total input LTR frames: 41
Total input AIS frames: 0
Total input 1DM frames: 0
Total input DMM frames: 0
Total input DMR frames: 60
Total memory allocation failures: 0
Total system failures: 0
Switch_config#

2.7 Y1731 Clear Command

2.7.1 Deleting the Transmission Statistics Information About the OAM Packets and the System Error Information

Syntax

clear ethernet y1731 counters

The above-mentioned command is used to delete the transmission statistics information about the OAM packets and the system error information.

Parameter

N/A

Default value

N/A

Explanation

N/A

Command mode

EXEC

Example

The following example shows how to delete the transmission statistics information about the OAM packets and the system error information.

Switch#clear ethernet y1731 counters