CFM and Y1731 Configuration Commands

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Chapter 1 Overview

1.1 Stipulation

1.2 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 1～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

Syntax

To add a maintenance domain or enter the already existent maintenance domain, run the following command.

ethernet cfm md mdnf *{string}* **mdn** *<char_string>* [**level** *<0-7>* | **creation**

<MHF_creation_type> | **sit** *<sender_id_type>* | **ip** *<IP_address>*]

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
level	(optional parameter) Stands for the level of a maintenance domain. It is 0 by default.
creation	MIP It is none by default.
sit	Stands for the identifier type of the sender. It is none by default.
ip	(optional parameter) Stands for the IP address reported by the trouble alarm. It is 0.0.0.0 by default.

Command Mode

Global configuration mode

Example

Switch_config#ethernet cfm md mdnf string mdn customer level 5

Related Command

None

2.1.2 Deleting the Maintenance Domain

Syntax

To delete a designated maintenance domain, run the following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.

Command Mode

Global configuration mode

Example

Switch_config#no ethernet cfm md mdnf string mdn customer

Related Command

None

2.1.3 Browsing the Maintenance Domain

Syntax

To browse all the maintenance domains or the designated maintenance domains of the local device, run the following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.

Command Mode

EXEC, global, interface, maintenance domain

Example

Switch_config#show ethernet cfm md mdnf string mdn customer

Related Command

None

2.1.4 Adding a maintenance association

Syntax

To add a maintenance association, run the following command.

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>*]

Parameters

Parameters	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. It is 1 by default.

creation	MIP It is none by default.
sit	Stands for the identifier type of the sender. It is none by default.
ip	(optional parameter) Stands for the IP address reported by the trouble alarm. It is 0.0.0.0 by default.

Command Mode

Maintenance domain mode

Example

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

Related Command

None

2.1.5 Deleting the Maintenance Association

Syntax

To delete a designated maintenance association, run the following command.

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

Parameters

Parameters	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.

Command Mode

Maintenance domain mode

Example

Switch_config_cfm#no ma manf string man customer

Related Command

None

2.1.6 Browsing the Maintenance Association

Syntax

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

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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.

Command Mode

EXEC, global, interface, maintenance domain

Example

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

Related Command

None

2.1.7 Adding MIP

Syntax

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

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

Parameters

Parameters	Description
level	Stands for the level of a maintenance domain.
vlan	Stands for the identifier of the VLAN where the maintenance association is located. It is 1 by default.

Command Mode

Physical interface configuration mode

Example

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

Related Command

None

2.1.8 Deleting MIP

Syntax

To delete a designated MIP, run the following command.

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

Parameters

Parameters	Description
vlan	Stands for the identifier of the VLAN where MIP is located.

Command Mode

Interface configuration mode

Example

Switch_config_g0/1#ethernet cfm mip del vlan 10

Related Command

None

2.1.9 Browsing MIP

【Method 1】

Syntax

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

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

show ethernet cfm mip interface *<interface_name>*

Parameters

Parameters	Description
interface	Stands for a to-be-browsed interface.
vlan	Stands for the identifier of a to-be-browsed VLAN.

Command Mode

EXEC, global, interface, maintenance domain

Example

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

Related Command

None

【Method 2】

Syntax

To browse all MIPs on the current interface of the local device, run the following command.

ethernet cfm mip display

Parameters

None

Command Mode

Physical interface mode

Example

Switch_config_g0/1#ethernet cfm mip display

Related Command

None

2.1.10 Adding MEP

Syntax

To add a MEP, which belongs to a designated maintenance association, on a specific interface, run the following command.

ethernet cfm mep add mdnf *{string}* **mdn** *<char_string>* **manf** *{string}* **man** *<char_string>* **mepid** *<1-8191>* [**direction** *{up | down}* **| ip** *<ip_address>* **| lap** *{all | mac | rCCM | eCCM | xcon | none}*]

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
mepid	Stands for the MEPID of the to-be-added MEP.
direction	(optional parameter) Stands for the direction of the to-be-added MEP. It is down by default.
ip	(optional parameter) Stands for the IP address reported by the trouble alarm. It is 0.0.0.0 by default.
lap	Stands for the lowest priority of trouble report. It is all by default.

Command Mode

Physical interface configuration mode

Example

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

Related Command

None

2.1.11 Deleting MEP

Syntax

To delete a designated MEP, run the following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
mepid	Stands for the MEPID of the to-be-added MEP.

Command Mode

Physical interface configuration mode

Example

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

Related Command

None

2.1.12 Browsing MEP

【Method 1】

Syntax

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 following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be 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.

Command Mode

EXEC, global, interface, maintenance domain

Example

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

Related Command

None

【Method 2】

Syntax

To browse all MEPs on the current interface of the local device, run the following command.

ethernet cfm mep display

Parameters

None

Command Mode

Physical interface mode

Example

Switch_config_g0/1#ethernet cfm mep display

Related Command

None

2.2 Y1731 Configuration Commands

2.2.1 Modifying the transmission interval of the AIS frame

Syntax

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

Parameters

Parameters	Description
time	Stands for the transmission interval of the AIS frame. The value ranges: <1> -- 1 frame per second <2> -- 1 frame per minute. The default transmission value is 1 second.

Default Value

The default transmission interval is one frame every second.

Command Mode

Global configuration mode

Usage Guidelines

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 Enabling the bidirectional delay measurement

Syntax

To enable the bidirectional delay measurement, run the following command.
ethernet y1731 delay-measurement [**-n** *number*]* *MEGID* { **aimmep** *MEPID*| *macaddr* }

Parameters

Parameters	Description
-n *number*	(optional parameter) means the number of the to-be-transmitted LBM packets. Value range: 1-65534 (transmit 5 packets by default)
MEGID	Stands for the name of MEG, which is a character string with a length of 1 to 13.
MEPID	Stands for the identifier of the destination MEP.
macaddr	Stands for the MAC address of the destination of MEP/MIP.

Default Value

Five LBM packets are transmitted by default.

Command Mode

EXEC mode

Usage Guidelines

The frame delay measurement can only be conducted between two peer MEPs. The bidirectional frame delay measurement can be used to measure the bidirectional frame delay and the delay variable.

Example

The following example shows how to create a point-to-point MEG whose local MEP is MEP 111 and whose remote MEP is MEP 222. In this example, MEG first gets its CC function to run, then learns the MAC address of the peer MEP and finally the local MEP executes the bidirectional DM operation towards the remote MEP.
Switch_config#ethernet cfm enable
Switch_config# ethernet cfm md mdnf STRING mdn t level 1
Switch_config_cfm# ma manf STRING man t meps 1-3 ci 10s vlan 1
Switch_config#interface g0/2
Switch_config_g0/2# ethernet cfm ENABLE
Switch_config_g0/2# ethernet cfm mep add mdnf STRING mdn t manf STRING man t mepid 1

Switch_config_g0/2#ethernet cfm mep ENABLE mdnf STRING mdn t manf STRING man t mepid 1
Switch_config_g0/2#ethernet cfm mep cci-ENABLE mdnf STRING mdn t manf STRING man t mepid 1
Switch_config_g0/2#exit
Switch_config#exit

Switch#ethernet y1731 delay-measurement aaa aimmep 2 mac 00E0.0F5F.7459
Two-way delay measurement MEG: aaa Local MEP: 1 Aimaddress: 00E0.0F5F.7459
Switch_config#
-- delay measurement statistics--
Packets: send = 5, Received = 5, Lost = 0(0/5 loss)
-- Approximate round trip times in milli-seconds:
MINFD = 0ms, MAXFD = 0ms, Average = 0ms
MINFDV = 0ms, MAXFDV = 0ms

2.2.3 Enabling the Ethernet loopback function of the unicast

Syntax

To enable the Ethernet loopback function of the unicast (an operation conducted towards the MAC address of the peer MEP/MIP), run the following command.

ethernet y1731 delay-measurement [**-n** *number*]* *MEGID* { **aimmep** *MEPID*| *macaddr* } **one-way**

Parameters

Parameters	Description
-n *number*	(optional parameter) means the number of the to-be-transmitted LBM packets. Value range: 1-65534 (transmit 5 packets by default)
MEGID	Stands for the name of MEG, which is a character string with a length of 1 to 13.
MEPID	Stands for the identifier of the destination MEP.
macaddr	Stands for the MAC address of the destination of MEP/MIP.

Default Value

Five 1DM packets are transmitted by default.

Command Mode

EXEC mode

Usage Guidelines

The frame delay measurement can only be conducted between two peer MEPs. After the one-way delay measurement is enabled, the local MEP will transmit the 1DM packets to the peer MEP continuously. The one-way frame delay measurement can be used to measure the one-way frame delay variable only when the clock systems at two terminals synchronize.

Example

The following example shows how to create a point-to-point MEG whose local MEP is MEP 111 and whose remote MEP is MEP 222. In this example, the MAC address of MEP 222 is 00E0.0F5F.7459, and MEP 111 will conduct the one-way DM operation towards the remote MEP, MEP 222.
Switch#ethernet y1731 delay-measurement aaa 00E0.0F5F.7459 one-way
Switch#
Send 5 packets, One-way ETH-DM Terminate.

2.2.4 Conducting the termination command

Syntax

To conduct the termination command, run the following command
ethernet y1731 terminate

Parameters

None

Default Value

None

Command Mode

EXEC mode

Usage Guidelines

The command is used to disable the delay-measurement function.

Example

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

```
Switch#
Switch#ethernet y1731 terminate
Switch#
```

2.3 CFM Maintenance Commands

2.3.1 loopback

Syntax

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

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>*]

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
mepid	Stands for the MEPID of the local MEP.
mac	Stands for the MAC address of the remote MEP.
number	(optional parameter) Stands for the times of conducting loopback. It is 3 by default.

Command Mode

EXEC

Example

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

Related Command

None

2.3.2 linktrace

Syntax

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

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}*]

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
mepid	Stands for the MEPID of the local MEP.
mac	Stands for the MAC address of the remote MEP.
ttl	(optional parameter) Stands for the tt1 value. It is 64 by default.
fdb-only	(optional parameter) Means to use the forward database or not. It is yes by default.

Command Mode

EXEC

Example

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

ttl 64

Related Command

None

2.3.3 Deleting the Linktrace Result Table

Syntax

To delete the linktrace result table of a designated MEP, run the following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
mepid	Stands for the MEPID of the local MEP.

Command Mode

EXEC

Example

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

Related Command

None

2.3.4 Setting the Size of the Linktrace Result Table

Syntax

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

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

Parameters

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

Command Mode

Global configuration mode

Example

Switch_config#ethernet cfm linktrace table-size 1

Related Command

None

2.3.5 Setting the Number of Entries in the Linktrace Result Table

Syntax

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

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

Parameters

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

Command Mode

Global configuration mode

Example

Switch_config#ethernet cfm linktrace entry-number 2009

Related Command

None

2.3.6 Setting the aging time of the linktrace result table

Syntax

To set the maximum number of entries that are received each time by the linktrace result table(Unit:min), run the following command.

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

Parameters

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

Command Mode

Global configuration mode

Example

Switch_config#ethernet cfm linktrace hold-time 10

Related Command

None

2.3.7 Deleting the MEP Statistics Data

Syntax

To delete the statistics data of a designated MEP, run the following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be capital sensitive.
mepid	Stands for the MEPID of a designated MEP.

Command Mode

Physical interface mode

Example

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

Related Command

None

2.4 CFM Control Commands

2.4.1 CFM Stack Control Command

Syntax

To enable or disable the whole CFM protocol stack, run the following command.

ethernet cfm *{enable | disable}*

Parameters

None

Command Mode

Global configuration mode

Example

Switch_config#ethernet cfm enable

Related Command

None

2.4.2 CFM Interface Control Command

Syntax

To enable or disable the CFM function of the current interface, run the following command.

ethernet cfm *{enable | disable}*

Parameters

None

Command Mode

Physical interface mode

Example

Switch_config_g0/1#ethernet cfm enable

Related Command

None

2.4.3 MIP Control Command

Syntax

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

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

Parameters

None

Command Mode

Physical interface mode

Example

Switch_config_g0/1#ethernet cfm mip enable vlan 1

Related Command

None

2.4.4 MEP Control Command

Syntax

To enable or disable a designated MEP, run the following command.

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

Parameters

None

Command Mode

Physical interface mode

Example

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

Related Command

None

2.4.5 CC Control Command

Syntax

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

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

Parameters

None

Command Mode

Physical interface mode

Example

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

Related Command

None

2.5 CFM Query Commands

2.5.1 Browsing the CFM Protocol Stack

Syntax

To browse the CFM protocol stack, run the following command.

show ethernet cfm stack

Parameters

None

Command Mode

Non-user mode

Example

Switch_config#show ethernet cfm stack

Related Command

None

2.5.2 Browsing the CFM Interface

Syntax

To check the relevant information of CFM interface, run the following command.

show ethernet cfm interface [<*interface_name*>]

Parameters

None

Command Mode

Non-user mode

Example

Switch_config#show ethernet cfm interface g0/1

Related Command

None

2.5.3 Browsing the Locally Stored Information about the Remote MEP

Syntax

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 following command.

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be 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.

Command Mode

Non-user mode

Example

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

Related Command

None

2.5.4 Browsing the LinkTrace Result Table

Syntax

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

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

Parameters

Parameters	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 in character string format with 1 to 42 printable characters and all characters should be 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 in character string format with 1 to 42 printable characters and all characters should be 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.

Command Mode

Non-user mode

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】
```

Related Command

None

2.5.5 Browsing the whole running status of CFM

Syntax

To browse the whole running status of CFM, run the following command.

show ethernet cfm running-info

Parameters

None

Command Mode

All modes except the user mode

Example

Switch_config#show ethernet cfm running-info

Related Command

None

2.6 Y.1731 Show Command

2.6.1 Showing the statistics about the one-way delay measurement

Syntax

To show the statistics about the one-way delay measurement, run the following command.
show ethernet y1731 delay-measurement *MEGID*

Parameters

Parameters	Description
MEGID	Stands for the name of MEG, which is a character string with a length of 1 to 13.

Default Value

None

Usage Guidelines

This command is used to only display the statistics of the one-way delay measurement.

Example

The following example shows how to display the statistics of the one-way delay measurement of MEG aaa in EXEC or global mode.

```
Switch#show ethernet y1731 delay-measurement aaa
MEG    one way delay measurement :
            FDV current: 0ms
            FDV min: 0ms
            FDV max: 0ms
Switch#
```

2.6.2 Showing the information of MEG continuous detection

Syntax

To show the information of MEG continuous detection, run the following command.
show ethernet y1731 detect *MEGID* [*MEPID*]

Parameters

Parameters	Description
MEGID	Displays the detection information about the designated MEG.
MEPID	(optional parameter) Stands for the identifier of MEP should be known well.

Default Value

None

Usage Guidelines

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 the configuration of MEP and MIP on a port

Syntax

To display the configuration of MEP and MIP on a port, run the following command.

show ethernet y1731 interface *interface-name*

Parameters

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

Default Value

None

Usage Guidelines

None

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 about a certain MEG

Syntax

To display the configuration of all MEG or the detailed configuration about a certain MEG, run the following command.

show ethernet y1731 meglist [*MEGID*]

Parameters

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

Default Value

None

Usage Guidelines

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

To display the information about all configured MIPs, run the following command.
show ethernet y1731 miplist

Parameters

None
Default Value
None
Usage Guidelines
None
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 some statistics of Y.1731 module

Syntax

To display some statistics information about the Y.1731 module, including statistics of the received and transmitted OAM packets and the system error, run the following command.

show ethernet y1731 traffic

Parameters

None

Default Value

None

Usage Guidelines

None

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

To delete the transmission statistics information about the OAM packets and the system error information, run the following command.

clear ethernet y1731 counters

Parameters

None

Default Value

None

Usage Guidelines

None

Command Mode

EXEC

Example

The command is used to delete the transmission statistics information about the OAM packets and the system error information.
Switch#clear ethernet y1731 counters

2.7.2 Deleting the statistics information about the one-way delay measurement carried out by a designated MEG

Syntax

To delete the statistics information about the one-way delay measurement carried out by a

designated MEG, run the following command.

clear ethernet y1731 delay-measurement *MEGID*

Parameters

Parameters	Description
MEGID	Stands for the name of MEG, which is a character string with a length of 1 to 13.

Default Value

None

Usage Guidelines

None

Command Mode

EXEC

Example

The following example shows how to delete the statistics information about the one-way delay measurement carried out by MEG aaa.
Switch#clear ethernet y1731 delay-measurement aaa