

LLDP Configuration Commands (GTL-2091)



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Chapter 1 LLDP Configuration Commands

1.1 LLDP Commands

1.1.1 lldp run

Description

lldp run

no lldp run

To start up LLDP, run **lldp run**; to shut down LLDP, run **no lldp run**.

Parameter

None

Default

Shut down

Explanation

None

Command mode

Global configuration mode

Example

The following command is used to start up LLDP.

```
Console_config# lldp run
```

1.1.2 lldp holdtime

Description

lldp holdtime *time*

no lldp holdtime

To configure the ttl value of LLDP, run **lldp holdtime** *time*. To resume the default transmission delay, run **no lldp holdtime**.

Parameter

Parameter	Description
<i>time</i>	Storage time of the transmitted message, ranging between zero to 65535 seconds

Default

120s

Explanation

None

Command mode

Global configuration mode

Example

The following example shows how to set the ttl value of LLDP to 100 seconds.

```
Console_config# lldp holdtime 100
```

```
Console_config#
```

1.1.3 lldp timer

Description

lldp timer *time*

no lldp timer

To configure the transmission delay of LLDP, run **lldp timer** *time*. To resume the default transmission delay, run **no lldptimer**.

Parameter

Parameter	Description
<i>time</i>	Interval for transmitting the LLDP message, ranging between 5 to 65534 seconds.

Default

30s

Explanation

The transmission interval of the LLDP message must be shorter than its storage time, ensuring multiple updates in the storage time and preventing error which is led by packet loss.

Command mode

Global configuration mode

Example

The following example shows how to configure the transmission interval of LLDP to 24 seconds.

```
Console_config# lldp timer 24
Console_config#
```

1.1.4 lldp reinit

Description

lldp reinit time**no lldp reinit**

To configure the transmission delay of LLDP, run **lldp reinit time**. To resume the default transmission delay, run **no lldp reinit**.

Parameter

Parameter	Description
<i>time</i>	Transmission delay of LLDP, whose values range from two to five seconds

Default

2 s

Explanation

None

Command mode

Global configuration mode

Example

The following example shows how to set the transmission delay of LLDP to five seconds.

```
Console_config# lldp reinit 5
Console_config#
```

1.1.5 lldp tlv-select

Description

lldp tlv-select *tlv-type*

no lldp tlv-select *tlv-type*

To add TLV which is transmitted by the LLDP message, run **lldp tlv-select** *tlv-type*. To delete TLV which is transmitted by the LLDP message, run **no lldp tlv-select** *tlv-type*.

Parameter

Parameter	Description
<i>tlv-type</i>	TLV that can be sent or not whose values are: macphy-config ,management-address port-description ,port-vlan ,system-capabilities system-description ,system-name

Default

All TLVs are sent.

Explanation

Three mandatory TLVs must be sent.

Command mode

Global configuration mode

Example

The following example shows how to enable the port description not to be transmitted in the message.

```
Console_config#no lldp tlv-select port-description
Console_config#
```

1.1.6 lldp transmit

Description

lldp transmit

no lldp transmit

To set the port to send the LLDP message, run **lldp transmit**. To forbid receiving the LLDP message, run **no lldp transmit**.

Parameter

None

Default

Transmittable LLDP message mode

Explanation

Only after the LLDP module is started can the command be valid.

Command mode

Port configuration mode

Example

The following example shows how to set port f0/0 not to send the LLDP message.

```
Console_config_f0/0# no lldp transmit
```

Console_config_f0/0#

1.1.7 lldp receive

Description

lldp receive

no lldp receive

To set the port to the receivable LLDP message mode, run **lldp receive**. To forbid receiving the LLDP message, run **no lldp receive**.

Parameter

None

Default

Receivable LLDP message mode

Explanation

Only after the LLDP module is started can the configuration be valid.

Command mode

Port configuration mode

Example

The following example shows how to set port f0/0 to the LLDP message mode.

```
Console_config_f0/0# no lldp receive
```

```
Console_config_f0/0#
```

1.1.8 Show lldp errors

Description

Show lldp errors

It is used to display the error information about the LLDP module.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC/Global configuration mode

Example

The following example shows how to set port f0/0 to the LLDP message mode.

Console_config#show lldp errors

LLDP errors/overflows:

Total memory allocation failures: 0

Total encapsulation failures: 0

Total table overflows: 0

Console_config#

1.1.9 Show lldp interface

Description

Show lldp interface *interface-name*

To check the transmission and reception mode, run **show lldp interface interface name**.

Parameter

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

Default

None

Explanation

After LLDP is started, you can check the state of the port.

Command mode

EXEC/global configuration mode

Example

The following example shows how to check the transmission and reception mode of port f0/1.

```
Console_config#show lldp interface f0/1
FastEthernet0/1:
Rx: enabled
Tx: enabled
Console_config#
```

1.1.10 show lldp neighbors**Description**

show lldp neighbors

It is used to display the simple information about neighbors.

Parameter

None

Default

None

Explanation

The command is used to display the simple information about neighbors.

Command mode

EXEC / global configuration mode

Example

Console_config#show lldp neighbors

Capability Codes:

(R)Router,(B)Bridge,(C)DOCSIS Cable Device,(T)Telephone
(W)WLAN Access Point, (P)Repeater,(S)Station,(O)Other

Device-ID	Local-Intf	Hldtme	Port-ID	Capability
switch	Fas0/2	115	Fas0/32	B
switch	Fas0/32	114	Fas0/2	B

Total entries displayed: 2

Console_config#

1.1.11 Show lldp neighbors detail

Description

Show lldp neighbors detail

It is used to display the detailed information about the neighbor.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC/global configuration mode

Example

Console_config#show lldp neighbors detail

chassis id: 00e0.0f61.ca53

port id: Fas0/32

port description: FastEthernet0/32

system name: switch.

system description: (tm) S3448 Software, Version 2.0.1K

Serial: S35000456

Copyright by Shanghai Baud Data Communication CO. LTD.

Compiled: 2008-11-13 13:33:36 by 16170F032B9F

Time remaining: 98

system capabilities: R B

enabled capabilities: B

Managment Address:

IP: 192.168.213.62

Auto Negotiation -- supported,enabled

Physical media capabilitise:

100baseTX(FD)

100baseTX(HD)

10baseT(FD)

10baseT(HD)

Media Attachment Unit type: 16

chassis id: 00e0.0f61.ca35

port id: Fas0/2

port description: FastEthernet0/2

system name: switch.

system description: (tm) S3448 Software, Version 2.0.1K

Serial: S35000456

Copyright by Shanghai Baud Data Communication CO. LTD.

Compiled: 2008-11-13 13:33:36 by 16170F032B9F

Time remaining: 95
system capabilities: R B
enabled capabilities: B
Management Address:
IP: 90.0.0.66

Auto Negotiation -- supported,enabled
Physical media capabilities:
100baseTX(FD)
100baseTX(HD)
10baseT(FD)
10baseT(HD)
Media Attachment Unit type: 16

Total entries displayed: 2
Console#

1.1.12 Show lldp traffic

Description

Show lldp traffic

To display all statistics information about LLDP, run **show lldp traffic**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC/global configuration mode

Example

```
Console_config#show lldp traffic
LLDP traffic statistics:
  Total frames out: 1599
  Total entries aged: 0
  Total frames in: 624
  Total frames received in error: 0
  Total frames discarded: 0
  Total TLVs unrecognized: 0
Console_config#
```

1.1.13 clear lldp counters

Description

clear lldp counters

To clear the statistics information, run **clear lldp counters**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC

Example

```
Console#clear lldp counters
Console#
```

1.1.14 clear lldp table

Description

clear lldp table

To remove the neighbor list, run **clear lldp table**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC

Example

```
Console#clear lldp table
Console#
```

1.1.15 debug lldp errors

Description

debug lldp errors

To report some error information about the LLDP module, run **debug lldp errors**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC

Example

```
Console#debug lldp errors
debug lldp errors on
Console#show debug
lldp errors debugging is on
Console#Nov 14 09:39:04LLDP recive a bad frame on interface FastEthernet0/2
Nov 14 09:49:44LLDP transmit fail on interface FastEthernet0/2
```

1.1.16 debug lldp events**Description****debug lldp events**

To report some special events about the LLDP module, run **debug lldp events**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC

Example

```
Console#debug lldp events
debug lldp events on
Console#show debug
```



```
lldp event debugging is on
Console#config
Console_config#int f0/2
Console_config_f0/2#no lldp tr
Console_config_f0/2#Nov 14 09:39:04 LLDP transmit a end packet on interface FastEthernet0/2
Nov 14 09:44:08LLDP recive a unrecognized tlv frame on interface FastEthernet0/2
```

1.1.17 debug lldp packets

Description

debug lldp packets

To report the message transmission event of the LLDP module, run **debug lldp packets**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC

Example

```
Console#debug lldp packets
debug lldp packets on
Console#show debug
lldp packet debugging is on
Console#Nov 13 16:38:20 LLDP advertisement packet TX'd on intf FastEthernet0/2
Nov 13 16:38:20 LLDP advertisement packet RX'd on intf FastEthernet0/32
```

1.1.18 debug lldp states

Description

debug lldp states

To report the information about the state of the LLDP port, run **debug lldp states**.

Parameter

None

Default

None

Explanation

None

Command mode

EXEC

Example

```
Console#debug lldp states
debug lldp states on
Console#show debug
lldp state debugging is on
Console#Nov 13 16:39:51 LLDP transmit state on FastEthernet0/2 set to TX FRAME
Nov 13 16:39:51 LLDP transmit state on FastEthernet0/2 set to IDLE
Nov 13 16:39:51 LLDP receive state on FastEthernet0/32 set to RX FRAME
Nov 13 16:39:51 LLDP receive state on FastEthernet0/32 set to WAIT FOR FRAME
```