

Command Line Interface

ETHERLINE ACCESS M05T/M08T

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Command Line Interface

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Command Modes

CLI (Command Line Interface)

The CLI (command line interface) for LAPP switches can be accessed through either the serial console or Telnet console. For either type of connection, access to the command line interface is generally referred to as an EXEC session.

Configuring a Switch to CLI Mode

The default configuration mode for both the serial console and Telnet console is MENU mode. To change the LAPP switch to CLI configuration mode, **Login Mode** from **Basic Settings** and then press **y** to activate the change. You will then be able to view the CLI display in the console. (Note that the default login user name is **admin**, without a password.)

1. Select **Basic Settings**.

```
ETHERLINE ACCESS M08T V3.7.2 build 17050518
-----
1.Basic Settings      - Basic settings for network and system parameter.
2.SNMP Settings      - The settings for SNMP.
3.Comm. Redundancy    - Establish Ethernet communication redundant path.
4.Traffic Prioritization- Prioritize Ethernet traffic to help determinism.
5.Virtual LAN         - Set up a VLAN by IEEE802.1Q VLAN or Port-based VLAN.
6.Multicast Filtering - Enable the multicast filtering capability.
7.Bandwidth Management - Restrict unpredictable network traffic.
8.Auto Warning        - Warning email and/or relay output by events.
9.Line Swap          - Fast recovery after moving devices to different ports.
a.Set Device IP       - Assign IP addresses to connected devices.
b.Diagnosis           - Ping command and the settings for Mirror port, LLDP.
c.Monitor             - Monitor a port and network status.
d.MAC Address Table   - The complete table of Ethernet MAC Address List.
e.System log          - The settings for Syslog and Event log.
f.Exit               - Exit
                    - Use the up/down arrow keys to select a category,
                    and then press Enter to select. -
```

2. Select **Login mode**.

```
LAPP GROUP ETHERLINE ACCESS M08T
Basic Settings
[System] [Password] [Accessible IP] [Port] [Network] [Time] [DIP] [GARP Timer]
[Backup Media] [Restart] [Factory default] [Login mode] [Activate] [Main menu]

Toggle login mode
ESC: Previous menu  Enter: Select

Basic Settings
```

3. Press **y** to activate.

```

LAPP GROUP ETHERLINE ACCESS M08T
Basic Settings
[System] [Password] [Accessible IP] [Port] [Network] [Time] [DIP] [GARP Timer]
[Backup Media] [Restart] [Factory default] [Login mode] [Activate] [Main menu]

Toggle login mode
ESC: Previous menu  Enter: Select

Current login mode: Menu

Press Y to change to CLI mode? [y/N]

```

4. Now log in to access CLI display mode.

```

login as:

```

After changing to CLI mode, CLI mode will be the default setting for the next reboot.

Basic Operation

The CLI is organized in different configuration levels. When you first enter CLI mode, type **?** to view a quick help panel that shows the basic commands of the first configuration level. Type any of the commands shown on the screen to access the next configuration level. The quick help panel, accessed from any level by typing **?**, is a useful tool for understanding the commands in any level.

```

-----
ETHERLINE ACCESS M08T V3.7.2 build 17050518
-----
ETHERLINE ACCESS M08T#
quit          - Exit command line interface
exit          - Exit command line interface
reload        - Halt and perform a cold restart
terminal      - Configure terminal page length
login         - Change login mode
copy          - Copy from one file to another
save          - Save running configuration to flash
ping          - Send echo messages
clear         - Clear information
show          - Show running system information
configure     - Enter configuration mode
ETHERLINE ACCESS M08T#

```

To enter the next level, type the commands shown in the console.

```

ETHERLINE ACCESS M08T# config
ETHERLINE ACCESS M08T(config)#

```

To leave access the next higher level, type **exit**.

```

ETHERLINE ACCESS M08T(config)# exit
ETHERLINE ACCESS M08T#

```

To jump directly back to the first level, type **Ctrl + z**.

```

ETHERLINE ACCESS M08T(config-vlan)#
ETHERLINE ACCESS M08T#

```

Useful Interactive “Help” Features

The CLI includes several types of interactive commands. The **Help** commands are listed in the following table:

Command	Purpose
?	Provides a brief description of the Help feature in any command level.
Partial command?	Provides a list of commands that begin with the character string (no space between the command and the question mark).
Partial command<Tab>	Completes a partial command name (no space between the command and <Tab>).
Command ?	Lists the keywords, arguments, or both associated with the command (type a space between the command and the question mark).
Command keyword ?	Lists the arguments that are associated with the keyword (type a space between the keyword and the question mark).

Understanding All Commands

To understand all the details of the commands supported in the CLI of LAPP switches, refer to the following table.

Mode	Access Method	Prompt	Exit Method	About This Mode
User EXEC	Begin a session with your switch and login with user .	Switch>	Enter exit or quit.	Use this mode to display system information.
Privileged EXEC	Begin a session with your switch and login with admin .	Switch#	Enter exit or quit.	Use this mode to verify commands that you have entered.
Global configuration	While in privileged EXEC mode, enter the configure command.	Switch(config)#	To exit to privileged EXEC mode, enter exit or press Ctrl-Z.	Use this mode to configure parameters that apply to the entire switch.
Redundancy configuration	From global configuration mode, enter the redundancy command.	Switch(config-rdnt)#	To exit to privileged EXEC mode, press Ctrl-Z. To exit to global configuration mode, enter the exit command.	Use this mode to configure Turbo Ring V1/V2, Turbo Chain, and Spanning Tree parameters.
Interface configuration	From global configuration mode, specify an interface by entering the interface command followed by an interface identification.	Switch(config-if)#	To exit to privileged EXEC mode, press Ctrl-Z. To exit to global configuration mode, enter the exit command.	
Router configuration	From global configuration mode, specify a protocol by entering the router command.	Switch(config-rip)# Switch(config-ospf)#	To exit to privileged EXEC mode, press Ctrl-Z. To exit to global configuration mode, enter the exit command.	

access-ip

Use **access-ip** in the VLAN configuration command as to restrict access to the switch to specified IP addresses. Use the **no** form of this command to disable this feature or to remove the IP addresses from access list.

Commands

access-ip [*ip-address netmask*]

no access-ip [*ip-address netmask*]

Syntax	access-ip	Enable the accessible IP list
Description	<i>ip-address</i>	IP address
	<i>netmask</i>	IP netmask
Defaults	The feature is disabled by default.	
Command Modes	VLAN configuration as management VLAN	
Usage Guidelines	This feature will take effect when the access-ip command is executed.	
Examples	<pre>ETHERLINE ACCESS M08T(config)# interface mgmt ETHERLINE ACCESS M08T(config-vlan)# access-ip 10.10.10.10 255.255.255.0 <IPV4ADDR:ipaddr> - IP address <IPV4ADDR:netmask> - IP netmask ETHERLINE ACCESS M08T(config-vlan)# access-ip</pre>	
Error messages	IP or netmask invalid	
	Access IP list full	
Related commands	show interface mgmt access-ip	

auto-backup

Use **auto-backup** to enable Auto load system configurations when the system boots up. To disable it, use the **no** form of this command.

Commands

auto-backup

no auto-backup

Syntax	auto-backup	Use auto backup configurator to restore configuration
Description		
Defaults	Auto-backup configuration is enabled by default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	

Examples	ETHERLINE ACCESS M08T# configure terminal ETHERLINE ACCESS M08T(config)# auto-backup ETHERLINE ACCESS M08T(config)# no au auto-backup - Deactive auto-backup configurator ETHERLINE ACCESS M08T(config)# no auto-backup
Error messages	N/A
Related commands	N/A

bind vlan

Use the **bind vlan** configuration command on the switch to bind the management address with a specified VLAN ID. Use the **no** form of this command to return to the default.

Commands

bind vlan VLAN-ID

Syntax Description	bind	Bind VLAN as management VLAN
	vlan	VLAN parameters
	VLAN-ID	1 to 4094
Defaults	Default management VLAN ID is 1	
Command Modes	VLAN configuration mode as management VLAN	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# interface mgmt ETHERLINE ACCESS M08T(config-vlan)# bind vlan <UINT:vlanid> - 1 to 4094	
Error messages	L3 interface cannot be assigned as management interface VLAN id is out of range!	
Related commands	show interfaces mgmt	

clear counters

Use the **clear counters** user EXEC command on the switch to clear the switch's statistics counters.

Commands

clear counters

Syntax Description	clear	Clear information
	counters	Clear statistic counters
Defaults	N/A	
Command Modes	Privileged	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# clear counters - Clear statistic counters	
Error messages	N/A	
Related commands	show interfaces counters	

clear logging event-log

Use the **clear logging event-log** user EXEC command on the switch to clear the system log of the switch.

Commands

clear logging event-log

Syntax	clear	Clear information
Description	logging	System event logs
	event-log	System event logs
Defaults	N/A	
Command Modes	Privileged	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# clear logging - System event logs ETHERLINE ACCESS M08T# clear logging event-log - System event logs</pre>	
Error messages	N/A	
Related commands	show logging	

clock set

Use the **clock set** global configuration command on the switch to set the current switch time.

Commands

clock set hh:mm:ss month day year

Syntax Description	clock	Configure time-of-day clock
	set	Adjust the clock
	<i>hh:mm:ss</i>	hh:mm:ss
	<i>month</i>	1 to 12
	<i>day</i>	1 to 31
	<i>year</i>	2000 to 2037
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# clock set 11:11:11 1 1 2010</pre>	
Error messages	Illegal parameters!	
Related commands	show clock	

clock summer-time

Use the **clock summer-time** global configuration command on the switch to enable the daylight saving time offset and set the apply duration. Use the **no** form of this command to disable it.

Commands**clock summer-time start-date** *month week day hour***clock summer-time end-date** *month week day hour***clock summer-time offset** *offset-hour*

Syntax Description	clock	Configure time-of-day clock
	summer-time	Configure Summer time parameter
	start-date	The date when summer time offset start
	end-date	The date when summer time offset end
	<i>month</i>	From 'Jan', 'January' or '1' to 'Dec', 'December', or '12'
	<i>week</i>	From '1st' or '1' to 'Last' or '6'
	<i>day</i>	From 'Sun', 'Sunday' or '1' to 'Sat', 'Saturday' or '7'
	<i>hour</i>	0 to 23
	offset	Summer time offset
	<i>offset-hour</i>	1 to 12
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	When configuring the summer time offset, the start-date and end-date must be configured correctly first.	
Examples	ETHERLINE ACCESS M08T(config)# clock timezone gm -4	
Error messages	Invalid parameter	
	Month must be configured as 'Jan', 'January' or a numerical '1'.	
	Week must be configured as '1st', '2nd', '3rd', '4th', '5th' or 'Last'	
	Day must be configured as 'Sun', 'Sunday' or a numerical '1'.	
	Hour must be in the range from 0 to 23.	
	Please input the correct start/end date of the summer time first!	
	Hour offset is out of range.	
Related commands	show clock	

clock timezone

Use the **clock timezone** global configuration command on the switch to set the current time zone.**Commands****clock timezone gm** *offset-hour*

Syntax Description	clock	Configure time-of-day clock
	timezone	Time zone hour shifting
	gm	Greenwich Mean Time
	<i>offset-hour</i>	-12 to 12
	<i>Half an hour</i>	Only type 30
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# clock timezone gm 5 30	
Error messages	This timezone doesn't support half an hour	
Related commands	show clock	

copy

Use the **copy** privileged command on the switch to copy an image or configuration file from a remote server to the Flash memory or copy the running configuration, startup configuration, or event log to a remote server via TFTP.

Commands

copy tftp device-firmware

copy tftp running-config

copy {running-config|event-log|startup-config} tftp [tftp-address]

Syntax Description	copy	Copy from one file to another
	tftp	Remote server through TFTP
	device-firmware	System firmware
	running-config	Current running configuration of system
	startup-config	System startup configuration
	event-log	Event log file
	<i>tftp-address</i>	TFTP address. E.g., tftp://192.168.127.1/abc.txt
Defaults	N/A	
Command Modes	Privileged EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# copy tftp device-firmware - System firmware running-config - Current running configuration of system ETHERLINE ACCESS M08T# copy tftp running-config Address or name of remote host [192.168.127.1]? 192.168.127.95 Source file name ? cli.ini Save import config to flash ? [Y/n] Saving configuration ...Success</pre>	
Error messages	Input error	
	Invalid TFTP Server IP/Name !!!	
	TFTP Configuration File Download Failed	
	Invalid Config Files Path and Name !!!	
	Invalid Firmware Files Path and Name !!!	
	TFTP Firmware Download Failed !!!	
	TFTP Configuration File Upload Failed !!!	
Related commands	N/A	

dip-switch

Use the **dip-switch** command to disable/enable HW dip-switch function.

Commands

dip-switch

Syntax Description	disable	Disable HW dip-switch function.
	enable	Enable HW dip-switch function.
	mode turbo-ring-v1	set dip-switch function as turbo-ring-v1.
	mode turbo-ring-v2	set dip-switch function as turbo-ring-v2.
Defaults	1.Enable dip-switch. 2.set to turbo-ring-v2.	

Command Modes	Global configuration
Usage Guidelines	N/A
Examples	ETHERLINE ACCESS M08T(config)# dip-switch disable ETHERLINE ACCESS M08T(config-if)# dip-switch mode turbo-ring-v1
Error messages	N/A
Related commands	N/A

eip

Use the **eip** command to disable/enable Ethernet/IP support.

Commands

eip

no eip

Syntax Description	eip	Enable Ethernet/IP
Defaults	Default is disable	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# eip	
Error messages	N/A	
Related commands	show eip	

email-warning account

Use **email-warning account** to configure the account and the password to log in to the remote Mail Server. To clear the setting, use the **no** form of this command.

Commands

email-warning account *name password*

no email-warning account

Syntax Description	email-warning	Email warning setting
	account	Email account on server
	<i>name</i>	User name
	<i>password</i>	User password
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# email-warning account test1 1234 ETHERLINE ACCESS M08T(config)# email-warning account test1	
Error messages	Length of SMTP User name is too long !!!	
	Invalid User name	
	Length of password is too long!!!	

Related commands	show email-warning
------------------	--------------------

email-warning event

Use the **email-warning event** global configuration command to enable the system warning events to send through the email if the event occurs. Use the **no** form of this command to disable the specified warning event notifications.

Commands

email-warning event { all | cold-start | warm-start | power-trans-off | power-trans-on | config-change | auth-fail | topology-change }

no email-warning event { cold-start | warm-start | power-trans-off | power-trans-on | config-change | auth-fail | topology-change }

Syntax Description	Email-warning	Email warning setting
	event	System events
	all	Enable all events
	cold-start	Switch cold start
	warm-start	Switch warm start
	power-trans-off	Power transition (on->off)
	power-trans-on	Power transition (off->on)
	config-change	Configuration changed
	auth-fail	Authentication failed
	topology-change	Topology changed (from redundant protocols)
Defaults	All system events are disabled by default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# email-warning event all - Enable all events cold-start - Switch cold start warm-start - Switch warm start power-trans-off - Power transition (on->off) power-trans-on - Power transition (off->on) config-change - Configuration changed auth-fail - Authentication failed topology-change - Communication redundancy topology changed ETHERLINE ACCESS M08T(config)# email-warning event cold-start ETHERLINE ACCESS M08T(config)# email-warning event topology-change ETHERLINE ACCESS M08T(config)# email-warning event auth-fail ETHERLINE ACCESS M08T(config)# exit ETHERLINE ACCESS M08T# show email-warning config Mail Server and Email Setup SMTP Server IP/Name : msl.hinet.net SMTP Port : 25 Account Name : test1 Account Password : 1234 1st email address: test2@lappkabel.de 2nd email address : 3rd email address: test3@hinet.net 4th email address :</pre>	

	<pre> System Events Cold Start : Enable Warm Start : Disable Conf. Changed : Disable Power On->Off : Disable Power Off->On : Disable Auth. Failure : Enable Topology Changed : Enable --More-- </pre>
Error messages	N/A
Related commands	show email-warning

email-warning event

Use the **email-warning event** interface configuration command to allow interface warning events to be sent through the email if the event occurs. Use the **no** form of this command to disable the specified warning event notifications.

Commands

email-warning event { link-on | link-off }

no mail-warning event { link-on | link-off }

email-warning event traffic-overload [rxThreshold duration]

no email-warning event traffic-overload

Syntax	email-warning	Configure email warning
Description	event	Port events
	link-on	Link ON
	link-off	Link OFF
	traffic-overload	Traffic overloading
	<i>rxThreshold</i>	0 to 100
	<i>duration</i>	1 to 300
Defaults	All port events are disabled by default.	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	<pre> ETHERLINE ACCESS M08T# configure terminal ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# email-warning event - Port events ETHERLINE ACCESS M08T(config-if)# email-warning event link-on - Link ON link-off - Link OFF traffic-overload - Traffic overloading ETHERLINE ACCESS M08T(config-if)# email-warning event link-on ETHERLINE ACCESS M08T(config-if)# email-warning event traffic-overload 80 20 ETHERLINE ACCESS M08T(config-if)# ETHERLINE ACCESS M08T# show email-warning config Mail Server and Email Setup SMTP Server IP/Name : ms1.hinet.net SMTP Port : 25 Account Name : test1 </pre>	

	<pre>Account Password : 1234 1st email address: test2@lappkabel.de 2nd email address : 3rd email address: test3@hinet.net 4th email address : System Events Cold Start : Enable Warm Start : Disable Conf. Changed : Disable Power On->Off : Disable Power Off->On : Disable Auth. Failure : Enable Topology Changed : Enable</pre>
Error messages	<pre>Threshold should be between 0 and 100 Duration should be between 1 and 300</pre>
Related commands	show email-warning

email-warning mail-address

Use **email-warning mail-address** to configure the email address(es) to which warning messages will be sent. To clear the setting, use **no** form of this command.

Commands

email-warning mail-address *mailIndex mailAddress*

no email-warning mail-address *mailIndex*

Syntax Description	email-warning	Email warning setting
	mail-address	Target email address
	<i>mailIndex</i>	1 to 4
	<i>mailAddress</i>	Email address
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# email-warning mail-address <UINT:mailIdx> - 1 to 4 ETHERLINE ACCESS M08T(config)# email-warning mail-address 1 test2@lappkabel.de ETHERLINE ACCESS M08T(config)# email-warning mail-address 3 test3@hinet.net</pre>	
Error messages	Index should be between 1 and 4	
	Length of email address is too long !!!	
	Invalid Email address format	
Related commands	show email-warning	

email-warning send test email

Use **email-warning send test email** to send a test email.

Commands

switch(config)# email-warning send test email

Syntax Description	email-warning	Email warning setting
	send	Send test email
	test	Test email
	email	Test email address
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	The test email will be sent to the mail address that " email-warning mail-address " command configured.	
Examples	<pre>ETHERLINE ACCESS M08T(config)# email-warning server 192.168.127.95 <LF> <UINT:smtpPort> - SMTP Port ETHERLINE ACCESS M08T(config)# email-warning server 192.168.127.95 25 ETHERLINE ACCESS M08T(config)# email-warning account admin 1234 ETHERLINE ACCESS M08T(config)# email-warning mail-address 1 <STRING:mailAddress> - Email address ETHERLINE ACCESS M08T(config)# email-warning mail-address 1 alancc.wu@gmail.com ETHERLINE ACCESS M08T(config)# email-warning send test email Sending test email ... You may check if your dedicated email addresses have received this email! ETHERLINE ACCESS M08T(config)#</pre>	
Error messages	Warning !!! You must first do Email Setup before sending the test email.	
	Warning !!! You must first configure DNS Server IP Address before sending the test email.	
	Sending test email failed !!!	
Related commands	email-warning server email-warning account email-warning mail-address	

email-warning server

Use **email-warning server** to configure Mail Server IP/Name (IP address or name) for the switch. To clear the setting, use the **no** form of this command.

Commands

email-warning server smtpServerIp [smtpPort]

no email-warning server

Syntax Description	email-warning	Email warning setting
	server	Email Server
	<i>smtpServerIp</i>	Email Server name/address
	<i>smtpPort</i>	SMTP Port, 1 to 65535
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	

Examples	ETHERLINE ACCESS M08T(config)# email-warning server mail.hinet.net 25 ETHERLINE ACCESS M08T(config)# email-warning server ms1.hinet.net
Error messages	Length of server address is too long !!!
	Invalid SMTP server name/address
	Invalid Mail Server Port, Range(1 to 65535) !!!
Related commands	show email-warning

exit

Use **exit** to exit the current configuration mode.

Commands

exit

Syntax	exit	Exit from configure mode
Description		Exit from port setting mode
		Exit command line interface
		Exit from management interface setting
Defaults	N/A	
Command Modes	N/A	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# exit ETHERLINE ACCESS M08T #	
Error messages	N/A	
Related commands	quit	

flowcontrol

To set the method of data flow control between the terminal or other device, use the **flowcontrol** interface configuration command. Use the **no** form of this command to disable flow control

Commands

flowcontrol

no flowcontrol

Syntax	flowcontrol	Configure flowcontrol
Description		
Defaults	The default is disable	
Command Modes	Interface configuration	
Usage Guidelines		
Examples	ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# flowcontrol ETHERLINE ACCESS M08T(config-if)# no flowcontrol	
Error messages	Fiber port can not be set flow control!!	
	Force speed can not be set flow control!!	

Related commands	show interfaces ethernet
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gmrp

Use the **gmrp** interface configuration command on the switch to activate the IEEE 802.1D-1998 GMRP (GARP Multicast Registration Protocol). Use the **no** form of this command to stop this function.

Commands

gmrp

no gmrp

Syntax	gmrp	Enable GMRP (GARP Multicast Registration Protocol)
Description		
Defaults	gmrp is default disable	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# gmrp ETHERLINE ACCESS M08T(config-if)# no gmrp	
Error messages	GMRP cannot be enabled on static multicast member port!!!	
Related commands		

gvrp

Use the **gvrp** global configuration command on the switch to enable GVRP. Use the **no** form of this command to disable it.

Commands

gvrp

no gvrp

Syntax	gvrp	Enable/Disable GVRP
Description		
Defaults	The feature is enabled by default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# gvrp gvrp - Enable GVRP	
Error messages	N/A	
Related commands	show gvrp	

hostname

To specify or modify the host name for the network server, use the **hostname** global configuration command. To return to the default, use the no form of this command.

Commands**hostname** *name***no hostname**

Syntax	hostname	Set system's network name (maximum 30 characters)
Description	<i>name</i>	Switch name string
Defaults	Name is the default switch name with the serial number	
Command Modes	Global configuration	
Usage Guidelines	Maximum string tokens are 5. Maximum switch name length is 30 characters.	
Examples	<pre>ETHERLINE ACCESS M08T(config)# hostname LAPP switch ETHERLINE ACCESS M08T(config)# exit ETHERLINE ACCESS M08T# show system System Information System Name : LAPP switch System Location : Switch Location System Description : ETHERLINE ACCESS M08T Maintainer Information : MAC Address : 7C:F9:5C:00:00:00 System Uptime : 0d0h36m57s</pre>	
Error messages	Length of switch hostname is too long	
Related commands	show system	

interface mgmt

Use the **interface mgmt** global configuration command on the switch to enter the VLAN configuration mode of Mgmt-VLAN.

Commands**interface mgmt**

Syntax	interface	Select an interface to configure
Description	mgmt	Configure management VLAN
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# interface mgmt - Configure management VLAN ETHERLINE ACCESS M08T(config)# interface mgmt ETHERLINE ACCESS M08T(config-vlan)#</pre>	
Error messages	N/A	
Related commands	show interfaces mgmt	

ip address

Use the **ip address** VLAN configuration command on the switch to configure the IP retrieve mechanism of the switch. Use **no** form of this command to return to the default.

Commands**ip address** {static *ip-address netmask* | **dhcp** | **bootp** }**no ip address**

Syntax	ip	Configure IP paramters
Description	address	Congiuere IP address
	static	E.g., 11.22.33.44
	<i>ip-address</i>	IP address
	<i>netmask</i>	Subnet mask
	dhcp	Use DHCP to retrieve IP setting automatically
	bootp	Use BOOTP to retrieve IP setting automatically
Defaults	N/A	
Command Modes	VLAN configuration as management VLAN	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config-vlan)# ip address static - Configure static IP dhcp - Use DHCP to retrieve IP setting automatically bootp - Use BOOTP to retrieve IP setting automatically</pre>	
Error messages	N/A	
Related commands	show interfaces mgmt	

ip auto-assign

Use the **ip auto-assign** interface configuration command on the switch to enable and set the auto IP assignment of specified interfaces. Use the **no** form of this command to remove an Ethernet port from a trunk group.

Commands**ip auto-assign** *ipaddr***no ip auto-assign**

Syntax	ip	Configure IP paramters
Description	auto-assign	Automatic port IP assignment through DHCP/BootP/RARP
	<i>ipaddr</i>	E.g., 11.22.33.44
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	This specified IP address must be in the same subnet of the system IP address	
Examples (static IP)	<pre>ETHERLINE ACCESS M08T(config-if)# ip auto-assign <IPV4ADDR:ipaddr> - E.g., 11.22.33.44</pre>	
	This IP address must be in the same subnet of the system IP address	
Related commands	show ip auto-assign	

ip default-gateway

Use the **ip default-gateway** VLAN configuration command on the switch to configure the IP default gateway address. Use the **no** form of this command to return to the default.

Commands**ip default-gateway** *ip-address***no default-gateway**

Syntax	ip	Configure IP paramters
Description	default-gateway	Configure default gateway address
	<i>ip-address</i>	IP address
Defaults	N/A	
Command Modes	VLAN configuration as management VLAN	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-vlan)# ip default-gateway 192.168.1.1	
Error messages	Warning! IP and gateway are not in the same subnet	
Related commands	show interfaces mgmt	

ip dhcp retry

Use **ip dhcp retry** to enable the DHCP request retry for a specified period and times. Use the **no** form of this command to return to the default.

Commands**ip dhcp retry** *times period seconds***no ip dhcp retry**

Syntax Description	ip	Global IP configuration subcommands
	dhcp	DHCP related configuration
	retry	Configure DHCP client request retry paramter
	<i>times</i>	0 - 65535 times, 0 means retry forever
	Period	Retry period
	<i>seconds</i>	1 - 30 seconds
Defaults	Default retry times = 0, retry period=1	
Command Modes	VLAN configuration as management VLAN	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config-vlan)# ip dhcp retry 500 period 30 ETHERLINE ACCESS M08T# show interfaces mgmt IPv4 Management VLAN id : 1 IP configuration : DHCP IP address : 192.168.127.253 Subnet mask : 255.255.255.0 Default gateway : 0.0.0.0 DNS server : Dhcp Retry Periods : 30 seconds Dhcp Retry Times : 500</pre>	
Error messages	Illegal parameter!	
Related commands	show interface mgmt	

ip dhcp-relay server

Use **ip dhcp-relay server** to configure the DHCP server address that the switch will forward DHCP messages to. To remove the DHCP server address, use the **no** form of this command.

Commands

ip dhcp-relay server *serverIndex* *serverAddr*

no ip dhcp-relay server *serverIndex*

Syntax Description	ip	Global IP configuration subcommands
	dhcp-relay	Configure DHCP relay agent parameter
	server	DHCP server IP address
	<i>serverIndex</i>	DHCP server address index, 1 to 4
	<i>serverAddr</i>	DHCP server IP address
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ip dhcp-relay server 1 192.168.127.100 ETHERLINE ACCESS M08T(config)# ip dhcp-relay server 3 192.168.127.200	
Error messages	Invalid server index	
	Invalid IPv4 address	
Related commands	show ip dhcp-relay	

ip dhcp-relay option82

Use the **ip dhcp-relay option82** global and interface configuration command to enable DHCP Relay with Option 82 messages. To disable it, use the **no** form of this command.

Commands

ip dhcp-relay option82

no ip dhcp-relay option82

Syntax Description	ip	Configure IP parameters
	dhcp-relay	Configure DHCP relay agent parameter
	option82	Option 82
Defaults	Default is disabled.	
Command Modes	Global configuration / Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ip dhcp-relay option82 ? <LF> remote-id-type - Remote Id type man-id - Manual remote ID ETHERLINE ACCESS M08T(config)# ip dhcp-relay option82	
Error messages	N/A	
Related commands	N/A	

ip dhcp-relay option82 remote-id-type

Use the **ip dhcp-relay option82 remote-id-type** global configuration command to select the remote ID information of DHCP option82 messages. Use **ip dhcp-relay option82 man-id** to manually set the remote id instead of the predefined ones.

Commands

ip dhcp-relay option82 remote-id-type *remoteIdType*

ip dhcp-relay option82 man-id *manualId*

Syntax	ip	Global IP configuration subcommands
Description	dhcp-relay	Configure DHCP relay agent parameter
	option82	Option 82
	remote-id-type	Remote Id type
	<i>remoteIdType</i>	ip mac client-id other
	man-id	Manual remote ID
	<i>manualId</i>	Manual remote ID, maximum 15 characters
Defaults	DHCP-relay option82 is disable in factory default. Default remote-id-type is IP.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# ip dhcp-relay option82 remote-id-type <STRING:remoteIdType> - ip mac client-id other ETHERLINE ACCESS M08T(config)# ip dhcp-relay option82 remote-id-type mac ETHERLINE ACCESS M08T(config)# ip dhcp-relay option82 remote-id-type other ETHERLINE ACCESS M08T(config)# ip dhcp-relay option82 man-id abcdef</pre>	
Error messages	Invalid remote ID type	
	Manual Id is over 15 characters	
Related commands	N/A	

ip http-server

Use **ip http-server** global configuration commands on the switch to enable HTTP/HTTPS service. Use the **no** form of this command to disable HTTP/HTTPS service.

Commands

ip http-server

ip http-server secure

no ip http-sever

Syntax	ip	Global IP configuration subcommands
Description	http-server	Enable HTTP/HTTPS web service
	secure	HTTPS support only
Defaults	HTTP service is enabled.	
Command Modes	Global configuration	
Usage Guidelines	N/A	

Examples	ETHERLINE ACCESS M08T(config)# ip http-server auto-logout - Web auto-logout timer <LF> secure - HTTPS support only ETHERLINE ACCESS M08T(config)# ip http-server secure ETHERLINE ACCESS M08T(config)# ip http-server ETHERLINE ACCESS M08T(config)# no ip http-server
Error messages	N/A
Related commands	show ip http-server

ip http-server auto-logout

Use **ip http-server auto-logout** global configuration commands on the switch to enable the auto-logout for the HTTP/HTTPS connections with specified seconds. Use the **no** form of this command to disable it.

Commands

ip http-server auto-logout seconds

Syntax	ip	Global IP configuration subcommands
Description	http-server	Enable HTTP/HTTPS web service
	auto-logout	Web auto-logout timer
	seconds	0 for disable, or 60 to 86400 seconds
Defaults	Auto-logout is disabled by default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ip http-server auto-logout 120	
Error messages	Switch Web auto-logout interval should be 0(disable) or 60 to 86400s !!!	
Related commands	show ip http-server	

ip igmp static-group

Use the **ip igmp static-group** global configuration command on the switch to add a static multicast MAC address and its member ports. Use the **no** form of this command to remove the static multicast group or just its member ports.

Commands

ip igmp static-group MAC-address interface module/port

no ip igmp static-group [MAC-address] [interface module/port]

Syntax	Ip	Global IP configuration subcommands
Description	Igmp	IGMP
	static-group	Add New Static Multicast MAC Address
	Mac-address	MAC address XX:XX:XX:XX:XX:XX
	Interface	Binding ports
	Module/port	Port ID or list. E.g., 1/1,2,4-5
Defaults	N/A	
Command Modes	Global configuration	

Usage Guidelines	N/A
Examples	ETHERLINE ACCESS M08T(config)# ip igmp static-group 01:00:00:00:00:01 interface 1/2-3 ETHERLINE ACCESS M08T(config)# no ip igmp static-group
Error messages	Add new static multicast MAC address Fail !!! Please check the multicast mac address's type !!! Add new static multicast MAC address Fail !!! Not enough space to add a new static multicast MAC address !!! The member port should not be GMRP-enabled port !!!
Related commands	show mac-address-table mcast

ip igmp-snooping

Use the **ip igmp-snooping** global configuration command on the switch to globally enable Internet Group Management Protocol (IGMP) snooping on the switch. Use the command with keywords to enable IGMP snooping. Use the **no** form of this command to disable IGMP snooping.

Commands

ip igmp-snooping

no ip igmp-snooping

Syntax	ip	Global IP configuration subcommands
Description	igmp-snooping	IGMP snooping
Defaults	IGMP snooping is globally disable	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ip igmp-snooping ETHERLINE ACCESS M08T(config)# no ip igmp-snooping	
Error messages	IGMP Function is only supported by 802.1Q VLAN mode!	
Related commands	ip igmp-snooping vlan ip igmp-snooping querier ip igmp-snooping query-interval ip igmp-snooping enhanced show ip igmp	

ip igmp-snooping enhanced

Use the **ip igmp-snooping enhanced** global configuration command on the switch to enable the enhanced mode. Use the **no** form of this command to disable the enhanced mode.

Commands

ip igmp-snooping enhanced

no ip igmp-snooping enhanced

Syntax	ip	Global IP configuration subcommands
Description	igmp-snooping	IGMP snooping
	enhanced	IGMP snooping enhanced mode
Defaults	Enhanced mode is globally disabled on the switch	
Command Modes	Global configuration	

Usage Guidelines	The IGMP snooping function must be enabled first.
Examples	ETHERLINE ACCESS M08T(config)# ip igmp-snooping enhanced ETHERLINE ACCESS M08T(config)# no ip igmp-snooping enhanced
Error messages	IGMP Function is Disabled !!! IGMP Function is only supported by 802.1Q VLAN mode!
Related commands	ip igmp-snooping ip igmp-snooping vlan ip igmp-snooping querier ip igmp-snooping query-interval show ip igmp

ip igmp-snooping querier vlan

Use the **ip igmp-snooping querier** global configuration command to enable and configure the IGMP querier feature on a VLAN interface. Use the **no** form of this command to disable the IGMP querier feature.

Commands

ip igmp-snooping querier vlan *vlan-id*

no ip igmp-snooping querier vlan *vlan-id*

Syntax	ip	Global IP configuration subcommands
Description	igmp-snooping	IGMP snooping
	querier	IGMP snooping query enable
	vlan	VLAN parameters
	<i>vlan-id</i>	1 to 4094
Defaults	The IGMP snooping querier feature is globally disabled on the switch	
Command Modes	Global configuration	
Usage Guidelines	The IGMP snooping function must be enabled first.	
Examples	ETHERLINE ACCESS M08T(config)# ip igmp-snooping querier vlan 1 ETHERLINE ACCESS M08T(config)# no ip igmp-snooping querier vlan 1	
Error messages	Vlan entry not found!!!	
	Vlan IGMP Function is Disabled !!!	
	IGMP Function is Disabled !!!	
	IGMP Function is only supported by 802.1Q VLAN mode!	
Related commands	ip igmp-snooping ip igmp-snooping vlan ip igmp-snooping query-interval ip igmp-snooping enhanced show ip igmp	

ip igmp-snooping query-interval

Use the **ip igmp-snooping query-interval** global configuration command on the switch to configure the interval between IGMP queries. Use the **no** form of this command to return to the default.

Commands

ip igmp-snooping query-interval *interval*

Syntax	ip	Global IP configuration subcommands
Description	igmp-snooping	IGMP snooping
	query-interval	IGMP snooping query interval
	<i>interval</i>	20 to 600 seconds
Defaults	Query interval default value is 125 seconds	
Command Modes	Global configuration	
Usage Guidelines	The IGMP snooping function must be enabled first.	
Examples	ETHERLINE ACCESS M08T(config)# ip igmp-snooping query-interval 125	
Error messages	The range of Quierier interval value should be between 20 and 600 !!!	
	IGMP Function is Disabled !!!	
	IGMP Function is only supported by 802.1Q VLAN mode!	
Related commands	ip igmp-snooping ip igmp-snooping vlan ip igmp-snooping querier ip igmp-snooping enhanced show ip igmp	

ip igmp-snooping vlan

Use the **ip igmp-snooping vlan** global configuration command on the switch to globally enable Internet Group Management Protocol (IGMP) snooping on a VLAN. Use the **no** form of this command to disable IGMP snooping on a vlan.

Commands

ip igmp-snooping vlan *vlan-id* [**mrouter** *module/port*]

no ip igmp-snooping vlan *vlan-id* [**mrouter** *module/port*]

Syntax	ip	Global IP configuration subcommands
Description	igmp-snooping	IGMP snooping
	vlan	VLAN parameters
	<i>vlan-id</i>	1 to 4094
	mrouter	IGMP snooping query port enable
	<i>Module/port</i>	Port ID or list. E.g., 1/1,2,4-5
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	The IGMP snooping must be enabled first.	
Examples	ETHERLINE ACCESS M08T(config)# ip igmp-snooping vlan 1 mrouter 1/1 ETHERLINE ACCESS M08T(config)# no ip igmp-snooping vlan 1 mrouter 1/1	
Error messages	Vlan entry not found!!!	
	IGMP Function is Disabled !!!	
	IGMP Function is only supported by 802.1Q VLAN mode!	
Related commands	ip igmp-snooping ip igmp-snooping querier ip igmp-snooping query-interval ip igmp-snooping enhanced show ip igmp	

ip name-server

Use the **ip name-server** VLAN configuration command on the switch to configure the DNS server for the switch. Use the **no** form of this command to return to the default.

Commands

ip name-server *dns-ip-address1* [*dns-ip-address2*]

no name-server

Syntax	ip	Configure IP paramters
Description	name-server	Configure DNS server address
	<i>ip-address</i>	IP address
Defaults	N/A	
Command Modes	VLAN configuration as management VLAN	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-vlan)# ip name-server 192.168.1.1	
Error messages	Warning! IP and gateway are not in the same subnet	
Related commands	show interfaces mgmt	

ipv6 address

Use the **ipv6 address** command in VLAN configuration mode as a management VLAN to set the IPv6 address for the device. Use the **no** form of the command to return to the default.

Commands

ipv6 address *ipv6_prefix*

no ipv6 address

Syntax	ipv6	Configure IPv6
Description	address	IPv6 address setting
	<i>ipv6_prefix</i>	IPv6 address prefix
Command Modes	VLAN configuration as management VLAN	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config-vlan)# ipv6 address 1::1 ETHERLINE ACCESS M08T# show interfaces mgmt IPv4 Management VLAN id : 1 IP configuration : Static IP address : 192.168.127.253 Subnet mask : 255.255.255.0 Default gateway : 0.0.0.0 DNS server : IPv6 Global Unicast Address Prefix : 1:0:0:1:201:2ff:fe03 Global Unicast Address : 1::1:201:2ff:fe03:405 Link-Local Address : fe80::201:2ff:fe03:405</pre>	

Error messages	Invalid prefix!
Related commands	show interface mgmt

line-swap-fast-recovery

Use the **line-swap-fast-recovery** global configuration command on the switch to enable the fast recovery feature of the MAC address table when line swapping. Use the **no** form of this command to disable it.

Commands

line-swap-fast-recovery

no line-swap-fast-recovery

Syntax Description	line-swap-fast-recovery	Enable Line Swap Fast Recovery feature
Defaults	This feature is enabled by default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# line-swap-fast-recovery <LF>	
Error messages	N/A	
Related commands	show mac-address-table	

lldp enable

Use the **lldp enable** global configuration command to enable LLDP. To stop LLDP, use the **no** form of this command.

Commands

lldp run

no lldp run

Syntax Description	lldp	Configure LLDP parameters
	run	Start up
Defaults	LLDP is enable in factory default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# lldp enable ETHERLINE ACCESS M08T(config)# no lldp enable	
Error messages	N/A	
Related commands	show lldp	

lldp timer

Use the **lldp timer** global configuration command to configure the transmission frequency of LLDP messages. To reset the timer to default, use the **no** form of this command.

Commands

lldp timer *transFreq*

no lldp timer

Syntax	lldp	Configure LLDP parameters
Description	timer	Transmission frequency of LLDP updates
	<i>transFreq</i>	5 to 32768 seconds
Defaults	Transmission frequency of LLDP updates is 30 seconds.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# lldp timer <UINT:transFreq> - 5 to 32768 seconds ETHERLINE ACCESS M08T(config)# lldp timer 4 % LLDP transmit frequency should be between 5 to 32768 ETHERLINE ACCESS M08T(config)# lldp timer 50</pre>	
Error messages	LLDP transmit frequency should be between 5 to 32768	
Related commands	show lldp	

logging

Use the **logging** global configuration command on the switch to configure the remote SYSLOG server. Use the **no** form of this command to remove the server.

Commands

logging *ip-address*

no logging *ip-address*

Syntax	logging	Syslog server setting
Description	<i>ip-address</i>	IP or DNS name w/wo. port, Ex:1.2.3.4 or 1.2.3.4:5678
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# logging 192.168.1.1 <LF></pre>	
Error messages	Logging server configurations are full!	
Related commands	show logging	

login mode

Use the **login mode** global configuration command to change the login UI mode from the console or telnet connection of the switch.

Commands

login mode { cli | menu }

Syntax	login	Change login mode
Description	mode	Login mode
	cli	Command line interface
	menu	Legacy Menu Mode
Defaults	Default UI mode is MENU mode	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# login mode menu - Legacy Menu Mode cli - Command line interface ETHERLINE ACCESS M08T(config)# login mode cli ETHERLINE ACCESS M08T(config)# login mode menu</pre>	
Error messages	N/A	
Related commands	N/A	

mac-address-table aging-time

Use the **mac-address-table aging-time** global configuration command on the switch to configure the aging time of the MAC address. Use the **no** form of this command to return to the default.

Commands

mac-address-table aging-time *seconds*

no mac-address-table aging-time

Syntax	mac-address-table	Configure MAC address table
Description	aging-time	Aging time
	<i>seconds</i>	15 to 3825 seconds
Defaults	Default aging time is 300 sec	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# mac-address-table aging-time <UINT:seconds> - 15 to 3825 seconds</pre>	
Error messages	N/A	
Related commands	show mac-address-table aging-time	

media cable-mode

Use the **media cable-mode** interface configuration command on the switch to enable the medium-dependent interface crossover feature on the interface. Use the **no** form of this command to disable Auto-MDIX.

Commands

media cable-mode [mdi | mdix | auto]

no media cable-mode

Syntax Description	media	Select a media
	cable-mode	Select cable mode
	mdi	MDI
	mdix	MDIX
	auto	Auto select MDI/MDIX
Defaults	The default is auto	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# media cable-mode auto ETHERLINE ACCESS M08T(config-if)# no media cable-mode	
Error messages	Fiber port can not be set MDI/MDIX!!	
Related commands	show interface ethernet	

modbus

Use the **modbus** global configuration command on the switch to enable Modbus/TCP industrial Ethernet protocol supported. Use the **no** form of this command to disable Modbus support.

Commands

modbus

no modbus

Syntax Description	modbus	Enable Modbus
Defaults	Default is enable	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# modbus	
Error messages	N/A	
Related commands	show modbus	

monitor

Use **monitor** global configuration commands to enable the monitoring of data transmitted/received by a specific port. Use the **no** form of this command to disable the monitoring.

Commands**monitor source interface** *mod_port* [*direction*]**no monitor source interface****monitor destination interface** *mod_port***no monitor destination interface**

Syntax	monitor	Configure Port mirror
Description	source	Monitored port
	interface	Port
	destination	Mirror port
	<i>modPort</i>	Port ID. E.g., 1/3,...
	<i>direction</i>	tx rx both
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	Traffic send/receive by a source port (Monitored port) will be mirrored to the destination port (Mirror port).	
Examples	<pre>ETHERLINE ACCESS M08T(config)# monitor source interface 1/1 both Warning !!! Mirror Port don't set ! ETHERLINE ACCESS M08T(config)# monitor destination interface <STRING:mirrorPort> - Port ID. E.g., 1/3,... ETHERLINE ACCESS M08T(config)# monitor destination interface 1/1,2 % Invalid format ETHERLINE ACCESS M08T(config)# monitor destination interface 1/1 % Monitored Port is the same with Mirror Port !!! ETHERLINE ACCESS M08T(config)# monitor destination interface 1/2 ETHERLINE ACCESS M08T(config)# monitor source interface 1/1</pre>	
Error messages	Monitored Port is the same with Mirror Port !!!	
	Invalid parameter	
	Warning !!! Mirror Port don't set !	
	Warning !!! Monitored Port don't set !	
Related commands	show port monitor	

name

Use the **name** interface configuration command to configure the interface name. To remove the configuration, use the **no** form of this command.

Commands**name****no name**

Syntax	name	Port name
Description		
Defaults	None	
Command Modes	Interface configuration	
Usage Guidelines	N/A	

Examples	ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# name interfacel_port1 ETHERLINE ACCESS M08T(config-if)# no name
Error messages	The length of port name must between 1 and 63!
Related commands	show interfaces ethernet

network

Use the **network** command in router configuration mode to enable the routing process on the specified interface. Use the **no** form of this command to disable it.

Commands

network *if-name*

no network *if-name*

Syntax	network	Enable dynamic routing on an IP network
Description	<i>if-name</i>	Interface name
Defaults	N/A	
Command Modes	Router configuration of RIP, OSPF, and Static routes	
Usage Guidelines	N/A	
Examples (for RIP settings)	<pre>ETHERLINE ACCESS M08T(config)# vlan create 2 % create vlan id:2 ETHERLINE ACCESS M08T(config)# interface vlan 2 ETHERLINE ACCESS M08T(config-vlan)# ip address 192.168.102.1 255.255.255.0 ETHERLINE ACCESS M08T(config-vlan)# name vlan2if ETHERLINE ACCESS M08T(config-vlan)# exit ETHERLINE ACCESS M08T(config)# router rip ETHERLINE ACCESS M08T(config-rip)# network <STRING:ifname> - Interface name ETHERLINE ACCESS M08T(config-rip)# network vlan2if ETHERLINE ACCESS M08T(config-rip)# ETHERLINE ACCESS M08T# show ip rip RIP Protocol : Enable RIP version : V1 Distribution Connected : Enable Static : Disable OSPF : Disable RIP Enable Table Interface Name IP VID Enable ----- vlan2if 192.168.102.1 2 Enable ETHERLINE ACCESS M08T#</pre>	
Error messages	No such interface existed	
Related commands	show ip rip	

ntp refresh-time

Use the **ntp refresh-time** global configuration command on the switch to configure the interval of each NTP query. Use the **no** form of this command to return to the default.

Commands

ntp refresh-time *seconds*

no ntp refresh-time

Syntax	ntp	Configure Network Time Protocol
Description	refresh-time	Configure NTP query intervals
	<i>seconds</i>	1-9999 seconds
Defaults	Default query interval is 600 sec	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ntp refresh-time 600 <LF>	
Error messages	Time is out of range	
Related commands	show clock	

ntp remote-server

Use the **ntp remote-server** global configuration command on the switch to configure the remote NTP server. Use the **no** form of this command to return to the default.

Commands

ntp remote-server *server-addr-1* [*server-addr-2*]

no ntp remote-server

Syntax	ntp	Configure Network Time Protocol
Description	remote-server	Configure NTP server for time query
	Simple	Configure Simple Network Time Protocol instead of Network Time Protocol
	<i>server-addr-1</i>	IP address or DNS name
	<i>server-addr-2</i>	IP address or DNS name
Defaults	The default configuration contains one time server "time.nist.gov".	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ntp remote-server 192.168.127.1 time.stdtime.gov.tw	
Error messages	N/A	
Related commands	show clock	

ntp server

Use the **ntp server** global configuration command on the switch to enable the switch as an NTP server. Use the **no** form of this command to return to disable it.

Commands

ntp server

no ntp server

Syntax	ntp	Configure Network Time Protocol
Description	server	Enable NTP server
Defaults	Default is disabled	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# ntp server	
Error messages	N/A	
Related commands	show clock	

ping

Use the **ping** user EXEC command on the switch to diagnose the remote host if it is alive.

Commands

ping ip-address

Syntax	ping	Send echo messages
Description	<i>ip-address</i>	E.g., 11.22.33.44
Defaults	N/A	
Command Modes	Privileged	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# ping 192.168.127.1 PING 192.168.127.1, Send/Recv/Lost = 4/4/0	
Error messages	N/A	
Related commands	N/A	

qos default-cos

Use the **qos default-cos** interface configuration command on the switch to configure the default CoS priority of the Ethernet ports. Use the **no** form of this command to return to the default.

Commands

qos default-cos cos-value

no qos default-cos

Syntax	qos	Configure QoS
Description	default-cos	Configure Default CoS of each port
	<i>cos-value</i>	CoS value (0 to 7)
Defaults	Default CoS value is 3	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-if)# qos default-cos <UINT:cos> - CoS value (0 to 7)	
Error messages	N/A	
Related commands	show qos	

qos inspect

Use the **qos inspect** global/interface configuration command on the switch to enable the inspect criteria. Use the **no** form of this command to disable it.

Commands

qos inspect dscp *module_id*

no qos inspect dscp *module_id*

qos inspect cos

no qos inspect cos

Syntax	qos	Configure QoS
Description	inspect	Configure inspection criteria
	dscp	Enable DSCP inspection
	<i>module_id</i>	Module ID from 1 to 4
	cos	Enable CoS inspection of each port
Defaults	N/A	
Command Modes	Global configuration Interface configuration	
Usage Guidelines	In product with 88E6095, the "qos inspect dscp" command is configured in interface configuration mode. In product with BCM5650, the "qos inspect dscp" command is configured in global configuration mode with module index.	
Examples	ETHERLINE ACCESS M08T(config)# qos inspect dscp - Enable DSCP inspection ETHERLINE ACCESS M08T(config-if)# qos inspect cos - Enable CoS inspection of each port	
Error messages	N/A	
Related commands	show qos	

quit

Use **quit** to quit the current configuration mode.

Commands

exit

Syntax	quit	Exit command line interface
Description		
Defaults	N/A	
Command Modes	N/A	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T # quit	
Error messages	N/A	
Related commands	Exit	

rate-limit

Use the **rate-limit** interface configuration command on the switch to configure the traffic rate allowed for the specified port. Use the **no** form of this command to return to the default. For Marvell 88E6095 chipsets, use **rate-limit ingress rate** to set the ingress rate limiting; for Broadcom chipsets, use **rate-limit ingress percentage** to set the ingress rate limiting.

Commands

rate-limit { ingress | egress } percentage *percentage*

no rate-limit { ingress | egress }

rate-limit ingress rate { none | 128k | 256k | 512k | 1M | 2M | 4M | 8M }

rate-limit ingress mode { bcast | bcast-mcast | bcast-mcast-dlf | all }

rate-limit mode { normal | port-disable }

rate-limit normal { ingress | egress } percentage *percentage*

no rate-limit normal { ingress | egress }

rate-limit normal ingress rate { none | 128k | 256k | 512k | 1M | 2M | 4M | 8M }

rate-limit normal ingress mode { bcast | bcast-mcast | bcast-mcast-dlf | all }

rate-limit port-disable period *period*

rate-limit port-disable ingress rate { none | 44640 | 74410 | 148810 | 223220 | 372030 | 520840 | 744050 }

Syntax Description	rate-limit	Rate limiting
	normal	Rate limiting normal mode
	port-disable	Rate limiting port-disable mode
	ingress	Ingress rate limiting
	egress	Egress rate limiting
	percentage	Percentage correspond to current port speed
	<i>percentage</i>	Limit percentage, and will take effect at the percentage 0/3/5/10/15/25/35/50/65/85
	rate	Specify the rate
	mode	Specify the mode
	bcast	Limit broadcast frames
	bcast-mcast	Limit broadcast and multicast frames
	bcast-mcast-dlf	Limit broadcast, multicast and DLF frames

	all	All traffic
	period	Port disable period
	<i>period</i>	Seconds
Defaults	0 or none means unlimiting.	
Command Modes	Interface configuration	
Usage Guidelines	The <i>percentage</i> will only take effect at the 0/3/5/10/15/25/35/50/65/85 %. For port disable mode, the port will be disabled when the ingress rate reach the specified packet rate.	
Examples	ETHERLINE ACCESS M08T(config-if)# rate-limit percentage <UINT:percent> - Limit percentage, and will take effect at the percentage 0/3/5/10/15/25/35/50/65/85 ETHERLINE ACCESS M08T(config-if)# rate-limit ingress rate none none none none ETHERLINE ACCESS M08T(config-if)# rate-limit port-disable ingress period 30 ETHERLINE ACCESS M08T (config-if)# rate-limit port-disable ingress rate 148810	
Error messages	N/A	
Related commands	show interfaces rate-limit	

redundancy

Use the **redundancy** global configuration command on the switch to enter the redundancy configuration mode.

Commands

redundancy

Syntax Description	redundancy	Enter redundancy configuration mode
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# redundancy ETHERLINE ACCESS M08T(config-rdnt)#	
Error messages	N/A	
Related commands	N/A	

redundancy mode

Use the **redundancy mode** global configuration command on the switch to change the redundancy protocol mode.

Commands

redundancy mode { rstp | turbo-ring-v1 | turbo-ring-v2 | turbo-chain }

Syntax Description	redundancy	Enter redundancy configuration mode
	mode	Specify the redundancy protocol
	rstp	Rapid Spanning Tree
	turbo-ring-v1	Turbo ring version 1

	turbo-ring-v2	Turbo ring version 2
	turbo-chain	Turbo chain
Defaults	The default redundancy protocol mode is RSTP.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# redundancy mode rstp - Rapid Spanning Tree turbo-ring-v1 - Turbo ring version 1 turbo-ring-v2 - Turbo ring version 2 turbo-chain - Turbo chain</pre>	
Error messages	N/A	
Related commands	show redundancy mode	

relay-warning config relay

Use **relay-warning config relay** to select relay to trigger when a warning event occurs.

Commands

relay-warning config relay [*relayId*]

Syntax Description	relay-warning	Configure relay warning
	config	Choose which relay to configure
	relay	Relay
	<i>relayId</i>	Relay's ID = 1 or 2
Defaults	N/A	
Command Modes	Global configuration / Interface configuration	
Usage Guidelines	These commands only existed in device with multiple relays.	
Examples	N/A	
Error messages	Please designate the relay ID Invalid relay ID	
Related commands	show relay-warning	

relay-warning event

Use **relay-warning event** global configuration commands to enable the warning events trigger to the relay.
Use the **no** form of this command to disable it.

Commands

relay-warning event { **power-input1-fail** | **power-input2-fail** | **turbo-ring-break** }
no relay-warning event { **power-input1-fail** | **power-intput2-fail** | **turbo-ring-break** }

Syntax Description	relay-warning	Configure relay warning
	event	System events
	power-input1-fail	Power input 1 failure (On->Off)
	power-input2-fail	Power input 2 failure (On->Off)
	turbo-ring-break	Turbo Ring break
Defaults	All system events are disabled by default.	

Command Modes	Global configuration
Usage Guidelines	N/A
Examples	<pre>ETHERLINE ACCESS M08T# configure terminal ETHERLINE ACCESS M08T(config)# relay-warning override - Override the relay warning setting event - System events ETHERLINE ACCESS M08T(config)# relay-warning event power-input1-fail - Power input 1 failure (ON->Off) power-input2-fail - Power input 2 failure (ON->Off) turbo-ring-break - Turbo Ring break ETHERLINE ACCESS M08T(config)# relay-warning event turbo-ring-break</pre>
Error messages	N/A
Related commands	show relay-warning

relay-warning event

Use **relay-warning event** interface configuration commands to enable the warning events trigger to the relay. Use the **no** form of this command to disable it.

Commands

relay-warning event { link-on | link-off }

relay-warning event traffic-overload [rxThreshold duration]

no relay-warning event { link | traffic-overload }

Syntax Description	relay-warning	Configure relay warning
	event	Port events
	link-on	Link ON
	link-off	Link OFF
	traffic-overload	Traffic overloading
	<i>rxThreshold</i>	0 to 100
	<i>duration</i>	1 to 300
	link	All link events
Defaults	All interface events are disabled by default.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# relay-warning event ? link-on - Link ON link-off - Link OFF traffic-overload - Traffic overloading ETHERLINE ACCESS M08T(config-if)# relay-warning event link-off ETHERLINE ACCESS M08T(config-if)# relay-warning event traffic-overload</pre>	
Error messages	Threshold should be between 0 and 100	
	Duration should be between 1 and 300	
Related commands	show relay-warning	

relay-warning override

Use **relay-warning override relay** to override the relay warning setting temporarily. Releasing the relay output will allow administrators to fix any problems with the warning condition. Use the **no** form of this command to disable the override.

Commands

relay-warning override relay [relayId]

no relay-warning override relay [relayId]

Syntax	relay-warning	Configure relay warning
Description	override	Override the relay warning setting
	relay	Relay
	relayId	Relay's ID = 1 or 2
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	relayId will only be used on the product that have multiple relays.	
Examples	ETHERLINE ACCESS M08T(config)# relay-warning override relay	
Error messages	Please designate the relay ID Invalid relay ID	
Related commands	show relay-warning	

reload

Use the **reload** privileged command on the switch to restart the LAPP Switch. Use the **reload factory-default** privileged command to restore the switch configuration to the factory default values.

Commands

reload [factory-default]

Syntax	reload	Halt and perform a cold restart
Description	factory-default	Halt and perform a cold restart with factory default
Defaults	N/A	
Command Modes	Privileged EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# reload <LF> factory-default - Halt and perform a cold restart with factory default ETHERLINE ACCESS M08T# rel reload - Halt and perform a cold restart ETHERLINE ACCESS M08T# reload factory-default <LF> ETHERLINE ACCESS M08T# reload Proceed with reload ? [Y/n] ETHERLINE ACCESS M08T# reload factory-default Proceed with reload to factory default? [Y/n]</pre>	
Error messages	N/A	
Related commands	N/A	

save config

Use the **save config** command to save the running configuration to the startup configuration on flash.

Commands

save config

Syntax	save	Save running configuration to flash
Description	config	Save running configuration to flash
Defaults	N/A	
Command Modes	Privileged EXEC	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# save config Saving configuration ...Success	
Error messages	N/A	
Related commands	N/A	

show clock

Use the **show clock** user EXEC command to display time-related settings.

Commands

show clock

Syntax	clock	Display the system clock
Description		
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# show clock Current Time : Fri Jan 01 08:38:28 2010 Daylight Saving Start Date : End Date : Offset : Time Zone : GMT-4:00 Time Server : Query Period : 600 sec NTP/SNTP Server : Disabled	
Error messages	N/A	

Related commands	clock set clock summer-time clock timezone ntp refresh-time ntp remote-server ntp server
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show eip

Commands

show eip

Syntax	eip	Display Ethernet/IP configuration
Description		
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	ETHERLINE ACCESS M08T# show eip eip disable	
Examples	N/A	
Error messages	N/A	
Related commands	eip	

show email-warning config

Commands

show email-warning config

Syntax	show	Show running system information
Description	email-warning	Display Email warning configuration
Description	config	Email warning configuration
Defaults	N/A	
Command Modes	Privileged EXEC /User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show email-warning config Mail Server and Email Setup SMTP Server IP/Name : SMTP Port : 25 Account Name : Account Password : 1st email address : 2nd email address : 3rd email address : 4th email address : System Events Cold Start : Disable Warm Start : Disable Conf. Changed : Disable Power On->Off : Disable</pre>	

	<pre> Power Off->On : Disable Auth. Failure : Disable Topology Changed : Disable --More-- Port Events Setting Link Link Traffic RX Traffic Port ON OFF Overload Threshold(%) Duration(s) ----- 1-1 Disable Disable Disable 0 1 1-2 Disable Disable Disable 0 1 1-3 Disable Disable Disable 0 1 1-4 Disable Disable Disable 0 1 1-5 Disable Disable Disable 0 1 1-6 Disable Disable Disable 0 1 1-7 Disable Disable Disable 0 1 1-8 Disable Disable Disable 0 1 3-1 Disable Disable Disable 0 1 3-2 Disable Disable Disable 0 1 3-3 Disable Disable Disable 0 1 3-4 Disable Disable Disable 0 1 3-5 Disable Disable Disable 0 1 3-6 Disable Disable Disable 0 1 3-7 Disable Disable Disable 0 1 3-8 Disable Disable Disable 0 1 ETHERLINE ACCESS M08T# </pre>
Error messages	N/A
Related commands	<pre> email-warning event email-warning account email-warning server email-warning mail-address </pre>

show gmrp

Use the **show igmp** user EXEC command to display the GMRP table of the switch.

Commands

show gmrp

Syntax Description	gmrp	Show GMRP Settings
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	<pre> ETHERLINE ACCESS M08T# show gmrp Index Multicast Address Fixed Ports Learned Ports ----- </pre>	
Examples	N/A	
Error messages	N/A	

Related commands	gmrp
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show gvrp

Use the **show gvrp** user EXEC command to display GVRP state information.

Commands

show gvrp

Syntax	show	Show running system information
Description	gvrp	Display GVRP configuration
Defaults	N/A	
Command Modes	Privileged EXEC / User Exec	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# show gvrp gvrp enable	
Error messages	N/A	
Related commands	gvrp	

show interfaces counters

Use the **show interfaces counters** user EXEC command to display traffic statistics information of interfaces.

Commands

show interfaces counters

show interfaces ethernet *port-id* counters

Syntax	interfaces	Interface status and configuration
Description	counters	Display counters
	<i>port-id</i>	Port ID or list. E.g., 1/1,2,3,...
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	Detail counter information will contain the differences information from last query.	
Examples	<pre>ETHERLINE ACCESS M08T# show interfaces counters Port Tx Packets (Load%) Rx Packets (Load%) ----- 1/ 5 662 (0) 364 (0) 1/ 6 0 (0) 0 (0) ETHERLINE ACCESS M08T# show interfaces ethernet 1/5 counters Port 1/5 (last sample time: 16577 sec. ago) - TX - Unicast Packets : 108 +108 Multicast Packets : 553 +553 Broadcast Packets : 2 +2 Collision Packets : 0 +0 - RX - Unicast Packets : 109 +109</pre>	

	<pre> Multicast Packets : 0 +0 Broadcast Packets : 255 +255 Pause Packets : 0 +0 - Error - TX Late : 0 +0 TX Excessive : 0 +0 RX CRC error : 0 +0 RX Discard : 0 +0 RX Undersize : 0 +0 RX Fragments : 0 +0 RX Oversize : 0 +0 RX Jabber : 0 +0 </pre>
Error messages	N/A
Related commands	N/A

show interfaces ethernet

To check the status of interfaces, use the **show interfaces ethernet** command.

Commands

show interfaces ethernet [module/port [config]]

Syntax Description	interfaces	Interface status and configuration
	ethernet	IEEE 802.3/IEEE 802.3z
	<i>module/port</i>	Port ID or list. E.g., 1/1,2,3,...
	config	Show interface module/port settings
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	<pre> ETHERLINE ACCESS M08T# show interfaces ethernet Port Link Description Speed FDX Flow Ctrl MDI/MDIX ----- 1-1 Down 100TX,RJ45. -- -- -- 1-2 Down 100TX,RJ45. -- -- -- 1-3 Down 100TX,RJ45. -- -- -- 1-4 Down 100TX,RJ45. -- -- -- 1-5 Up 100TX,RJ45. 100M-Full Off MDI 1-6 Down 100TX,RJ45. -- -- -- 1-7 Down 100TX,RJ45. -- -- -- 1-8 Down 100TX,RJ45. -- -- -- ETHERLINE ACCESS M08T# show interfaces ethernet 1/1-3 config Port Enable Description Speed FDX Flow Ctrl MDI/MDIX ----- 1-1 Yes 100FX,SC,Single,40. 100M-Full Disable Auto 1-2 Yes 100FX,SC,Single,40. 100M-Full Disable Auto 1-3 Yes 100TX,RJ45. Auto Disable Auto </pre>	
Examples	N/A	
Error messages	N/A	
Related commands	N/A	

show interfaces mgmt

Use the **show interfaces mgmt** user EXEC command to display the Mgmt-VLAN settings.

Commands

show interfaces mgmt

Syntax	interfaces	Interface status and configuration
Description	mgmt	Display management VLAN information
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show interfaces mgmt IPv4 Management VLAN id : 1 IP configuration : Static IP address : 192.168.127.253 Subnet mask : 255.255.255.0 Default gateway : 0.0.0.0 DNS server :</pre>	
Error messages	N/A	
Related commands	ip address ip default-gateway ip name-server bind vlan	

show interfaces mgmt access-ip

Use the **show interfaces mgmt access-ip** user EXEC command to display the settings of accessible IP list.

Commands

show interfaces mgmt access-ip

Syntax	show	Show running system information
Description	interfaces	Interface status and configuration
	mgmt	Display management VLAN information
	access-ip	Display accessible IP list
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show interfaces mgmt access-ip Accessible IP List: Enable Index IP / Netmask 1 192.168.127.253 / 255.255.255.0</pre>	
Error messages	N/A	
Related commands	access-ip	

show interfaces rate-limit

Use the **show interfaces rate-limit** user EXEC command to display the setting of Rate-limiting.

Commands

show interfaces ethernet module/port rate-limit

Syntax	interfaces	Interface status and configuration
Description	ethernet	IEEE 802.3/IEEE 802.3z
	<i>module/port</i>	Port ID or list. E.g., 1/1,2,3,...
	rate-limit	Rate limiting configuration
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show interfaces ethernet 1/1-3 rate-limit Port 1/1: Ingress Limit Mode: Broadcast, Multicast, DLF Ingress Limit Rate: 8M Egress Limit Rate : Not Limited Port 1/2: Ingress Limit Mode: Broadcast Ingress Limit Rate: 8M Egress Limit Rate : Not Limited Port 1/3: Ingress Limit Mode: Broadcast Ingress Limit Rate: 8M Egress Limit Rate : Not Limited</pre>	
Error messages	N/A	
Related commands	rate-limit	

show ip auto-assign

Use the **show ip auto-assign** user EXEC command to display the setting of the Auto IP Assignment feature.

Commands

show ip auto-assign

Syntax	ip	Display IP information
Description	auto-assign	Display automatic ip assignment settings
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	

Examples	ETHERLINE ACCESS M08T# show ip auto-assign Port Device's Current IP Active Function Desired IP ----- 1/ 6 NA -- 192.168.127.8 1/ 7 NA -- 192.168.127.7
Error messages	N/A
Related commands	ip auto-assign

show ip dhcp-relay config

Use the **show ip dhcp-relay config** user EXEC command to display the setting of the DHCP relay feature.

Commands

show ip dhcp-relay config

Syntax Description	show	Show running system information
	ip	Display IP information
	dhcp-relay	Display DHCP relay configuration
	config	DHCP relay configuration
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show ip dhcp-relay config DHCP Relay Agent Setting 1st server IP : 2nd server IP : 3rd server IP : 4th server IP : DHCP Relay Option 82: Enable Remote ID type : Other Remote ID value : 1234567890123 Remote ID display: 31323334353637383930313233 --More-- DHCP Function Table Port Circuit-ID Option 82 ----- 1-1 01000101 Disable 1-2 01000102 Disable 1-3 01000103 Disable 1-4 01000104 Disable 1-5 01000105 Disable 1-6 01000106 Disable 1-7 01000107 Disable 1-8 01000108 Disable 3-1 01000111 Disable 3-2 01000112 Disable 3-3 01000113 Disable 3-4 01000114 Disable 3-5 01000115 Disable</pre>	

	3-6 01000116 Disable 3-7 01000117 Disable 3-8 01000118 Disable ETHERLINE ACCESS M08T#
Error messages	N/A
Related commands	N/A

show ip http-server status

Use **show ip http-server status** to display HTTP server related settings.

Commands

show ip http-server status

Syntax	show	Show running system information
Description	ip	Display IP information
	http-server	HTTP server information
	status	Status
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# show ip http-server status HTTP service is enable HTTP server capability: Present HTTPS secure server capability: Present Auto-logout: disable	
Error messages	N/A	
Related commands	N/A	

show ip igmp

Use the **show ip igmp** user EXEC command to display the Internet Group Management Protocol (IGMP) snooping configuration and IGMP table of the switch.

Commands

show ip igmp

Commands	ip	Display IP information
	igmp	Show IGMP snooping settings
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	

Usage	ETHERLINE ACCESS M08T# show ip igmp
Guidelines	<pre>IGMP Snooping :Enable IGMP Snooping Enhanced Mode :Enable Query Interval :125(sec) VID Static(S) / Learned(L) Active IGMP Groups Multicast Querier Port & IP MAC Members Port Querier(Q) connected Port ----- 1 1-1(S) 224.1.1.8 01-00-5E-01-01-08 1-1 239.255.255.250 01-00-5E-7F-FF-FA 1-1</pre>
Examples	N/A
Error messages	N/A
Related commands	ip igmp ip igmp snooping

show logging

Use the **show logging** user EXEC command to display the setting of the IP filter feature.

Commands

show logging [event-log]

Syntax	logging	Display syslog information
Description	event-log	Display system event logs
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show logging Syslog server #1: Syslog server #2: 192.168.1.2, port: 514 Syslog server #3: 192.168.1.3, port: 514 ETHERLINE ACCESS M08T# show logging event-log Idx Boot Time or Uptime Log ----- 1 337 2037/06/23, 20:46:08 192.168.127.1 admin Auth. ok 2 337 2037/06/23, 20:52:47 Authentication fail 3 338 2037/06/23, 21:51:59 Port 1-1 link on 4 338 2037/06/23, 21:51:59 Port 1-2 link on 5 338 2037/06/23, 21:51:59 Port 1-5 link on 6 338 2037/06/23, 21:52:03 Port 1-5 link off 7 338 2037/06/23, 21:52:03 Warm start by Firmware Upgrade 8 338 2037/06/23, 21:52:04 Port 1-5 link on 9 338 2037/06/23, 22:03:43 192.168.127.1 admin Auth. ok 10 338 2037/06/23, 22:04:04 192.168.127.1 admin Auth. ok 11 338 2037/06/24, 00:02:47 Port 1-5 link off 12 338 2037/06/24, 00:02:48 Port 1-5 link on</pre>	
Error messages	N/A	

Related commands	logging
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show mac-address-table

Use the **show mac-address-table** user EXEC command to display MAC addresses in the MAC address table.

Commands

show mac-address-table [static | learned | mcast]

show mac-address-table [interface{ ethernet module/port }]

Syntax Description	mac-address-table	Display MAC address forwarding table
	static	Retrieve static MAC addresses
	learned	Retrieve learned MAC addresses
	mcast	Retrieve Multicast address
	interface	Retrieve MAC address by interface
	ethernet	Ethernet Port interface
	<i>module/port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show mac-address-table Line Swap Fast Recovery : Enabled MAC Type VLAN Port ----- 00-40-F4-8D-0D-F7 ucast(1) 1 1/5 ETHERLINE ACCESS M08T# show mac-address-table learned MAC Type VLAN Port ----- 00-40-F4-8D-0D-F7 ucast(1) 1 1/5</pre>	
Error messages	N/A	
Related commands	N/A	

show mac-address-table aging-time

Use the **show mac-address-table aging-time** user EXEC command to display the aging time setting of the MAC address table.

Commands

show mac-address-table aging-time

Syntax Description	mac-address-table	Display MAC address forwarding table
	aging-time	MAC entry aging time
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	

Usage Guidelines	N/A
Examples	ETHERLINE ACCESS M08T# show mac-address-table aging-time - MAC entry aging time ETHERLINE ACCESS M08T# show mac-address-table aging-time MAC address aging time: 300 sec
Error messages	N/A
Related commands	mac-address-table aging-time

show mcast-filter

Use the **show mcast-filter** user EXEC command to display the multicast filter configuration.

Commands

show mcast-filter [module/port]

Commands	mcast-filter	Multicast Filtering Behavior
	Module/port	Port ID or list. E.g., 1/1,2,4-5
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	ETHERLINE ACCESS M08T# show mcast-filter Port Multicast Filtering Behavior ----- 1-1 Forward All 1-2 Forward Unknown 1-3 Filter Unknown	
Examples	N/A	
Error messages	N/A	
Related commands	mcast-filter	

show modbus

Use the **show modbus** user EXEC command to display Modbus configuration.

Commands

show modbus

Syntax Description	modbus	Display Modbus configuration
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	ETHERLINE ACCESS M08T# show modbus Modbus enable	
Examples	N/A	
Error messages	N/A	
Related commands	modbus	

show port monitor

Use the **show port monitor EXEC** command to display the port mirror settings.

Commands

show port monitor

Syntax	show	Show running system information
Description	port	Display Port configuration
	monitor	Display Port mirror configuration
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show port monitor Port Being Monitored Direction Mirror Port ----- 1-1 1-2 both 3-2 ETHERLINE ACCESS M08T#</pre>	
Error messages	N/A	
Related commands	monitor	

show qos

Use the **show qos user EXEC** command to display QoS related settings.

Commands

show qos [cos-to-queue | dscp-to-cos | dscp-to-queue]

Syntax	qos	Display QoS configuration
Description	cos-to-queue	CoS to traffic queue mappings
	dscp-to-cos	DSCP to CoS mappings
	dscp-to-queue	DSCP to traffic queue mappings
Defaults	N/A	
Command Modes	Privileged	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show qos Queuing Mechanism : Weighted Fair (1:2:4:8) Int# CoS Inspection CoS ----- 1/3 Enabled 3 1/4 Enabled 3 1/5 Enabled 3 ETHERLINE ACCESS M08T# show qos cos-to-queue CoS Queue #</pre>	

	<pre> ----- 0 Q0 1 Q0 2 Q1 3 Q1 4 Q2 5 Q2 6 Q3 7 Q3 ETHERLINE ACCESS M08T# show qos dscp-to-cos DSCP Cos DSCP Cos DSCP Cos DSCP Cos ----- 0 0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 1 9 1 10 1 11 1 12 1 13 1 14 1 15 1 16 2 17 2 18 2 19 2 20 2 21 2 22 2 23 2 24 3 25 3 26 3 27 3 28 3 29 3 30 3 31 3 32 4 33 4 34 4 35 4 36 4 37 4 38 4 39 4 40 5 41 5 42 5 43 5 44 5 45 5 46 5 47 5 48 6 49 6 50 6 51 6 52 6 53 6 54 6 55 6 56 7 57 7 58 7 59 7 60 7 61 7 62 7 63 7 </pre>
Error messages	N/A
Related commands	<pre> qos mode qos inspect qos mapping qos default-cos </pre>

show redundancy spanning-tree

Use the **show redundancy spanning-tree** user EXEC command to display spanning-tree state information

Commands

show redundancy spanning-tree

Syntax	redundancy	Display redundancy protocol status
Description	spanning-tree	Display spanning tree settings
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	

Examples	<pre> ETHERLINE ACCESS M08T# show redundant spanning-tree Spanning tree status: Enabled Role : Root Bridge priority : 32768 Hello time : 2 sec Forwarding delay: 30 sec Max age time : 20 sec Int# Enable Edge Port Prio Cost Status ----- 1/1 Disabled Auto 128 200000 --- 1/2 Disabled Auto 128 200000 --- 1/3 Disabled Auto 128 200000 --- 1/4 Disabled Auto 128 200000 --- 1/5 Disabled Auto 128 200000 --- 1/6 Disabled Auto 128 200000 --- </pre>
Error messages	N/A
Related commands	<pre> spanning-tree forward-delay spanning-tree hello-time spanning-tree max-age spanning-tree priority spanning-tree spanning-tree cost spanning-tree edge-port spanning-tree priority show redundancy spanning-tree </pre>

show redundancy turbo-chain

Use the **show redundancy turbo-chain** user EXEC command to display turbo-chain state information

Commands

show redundancy turbo-chain

Commands	redundancy	Display redundant settings
	turbo-chain	Display turbo chain status
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	<pre> ETHERLINE ACCESS M08T# show redundancy turbo-chain Role :HEAD ----- Port Role Port Number Port Status ----- Head Port 1-1 Forwarding Member Port 1-2 Forwarding </pre>	
Error messages	N/A	
Related commands	turbo-chain	

show redundancy turbo-ring-v1

Use the **show redundancy turbo-ring-v1** user EXEC command to display Turbo Ring v1 configure and state information.

Commands

show redundancy turbo-ring-v1

Syntax	show	Show running system information
Description	redundancy	Display redundancy protocol status
	turbo-ring-v1	Display turbo ring v1 status
Defaults	N/A	
Command Modes	Privileged EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show redundancy turbo-ring-v1 Turbo Ring V1 settings: Set as master: Disabled 1st port: 4-3 2nd port: 4-4 Ring Coupling: Disabled Coupling Port: 4-1 Coupling Control Port: 4-2 Turbo Ring V1 status: Master/Slave: --- Redundant Ports Status: 1st port: --- 2nd port: --- Ring Coupling Ports Status: --- Coupling Port: --- Coupling Control Port: ---</pre>	
Error messages	N/A	
Related commands	turbo-ring-v1	

show redundancy turbo-ring-v2

Use the **show spanning-tree turbo-ring-v2** user EXEC command to display Turbo Ring v2 configuration and state information.

Commands

show redundancy turbo-ring-v2

Syntax	show	Show running system information
Description	redundancy	Display redundancy protocol status
	turbo-ring-v2	Display turbo ring v2 status
Defaults	N/A	
Command Modes	Privileged EXEC	

Usage Guidelines	N/A
Examples	<pre>ETHERLINE ACCESS M08T# show redundancy turbo-ring-v2 Turbo Ring V2 settings: Ring 1: Enabled Set as master: Disabled 1st port: 4-3 2nd port: 4-4 Ring 2: Disabled Set as master: Disabled 1st port: 4-1 2nd port: 4-2 Ring Coupling: Disabled Primary Port:4-1 Backup Port:4-2 Turbo Ring V2 status: Ring 1: Status:--- Master/Slave:--- 1st Ring Port Status:--- 2nd Ring Port Status:--- Ring 2: Status:--- Master/Slave:--- 1st Ring Port Status:--- 2nd Ring Port Status:--- Coupling: Mode:--- Coupling Port Status: ---</pre>
Error messages	N/A
Related commands	turbo-ring-v2

show relay-warning

Use the **show relay-warning** command to display the Relay Warning settings.

Commands

show relay-warning config

show relay-warning status

Syntax Description	show	Show running system information
	relay-warning	Display relay warning configuration
	config	Relay warning configuration
	status	Current relay warning list
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	

Examples	<pre>ETHERLINE ACCESS M08T# show relay-warning config System Events Setting Override Relay Warning Settings : Disable Power Input 1 failure(On->Off) : Disable Power Input 2 failure(On->Off) : Disable Turbo Ring Break : Disable --More-- Port Events Setting Port Link Traffic RX Traffic Overload Threshold(%) Duration(s) ----- 1-1 Ignore Disable 1 1 1-2 Ignore Disable 1 1 1-3 Ignore Disable 1 1 1-4 Ignore Disable 1 1 1-5 Ignore Disable 1 1 1-6 Ignore Disable 1 1 1-7 Ignore Disable 1 1 1-8 Ignore Disable 1 1 3-1 Ignore Disable 1 1 3-2 Ignore Disable 1 1 3-3 Ignore Disable 1 1 3-4 Ignore Disable 1 1 3-5 Ignore Disable 1 1 3-6 Ignore Disable 1 1 3-7 Ignore Disable 1 1 3-8 Ignore Disable 1 1 ETHERLINE ACCESS M08T#</pre>
Error messages	N/A
Related commands	N/A

show running-config

Use **show running-config** to display the current running configuration of the switch.

Commands

show running-config

Syntax	show	Show running system information
Description	running-config	Current operating configuration
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show running-config Building configuration ... !</pre>	

	<pre> ip telnet ip http-server ip http-server auto-logout 120 ! ntp remote-server time.nist.gov ! ! vlan mode lqvlan gvrp ! snmp-server version v1-v2c snmp-server community public ro snmp-server community private rw snmp-server trap-mode trap ! lldp run lldp timer 30 ! ! dhcp-relay option82 dhcp-relay option82 remote-id-type other dhcp-relay option82 man-id 1234567890123 ! ! interface ethernet 1/1 no shutdown speed-duplex Auto no flowcontrol media cable-mode auto --More-- </pre>
Error messages	N/A
Related commands	show startup-config

show startup-config

Use **show startup-config** to display the system startup configuration of the switch.

Commands

show running-config

Syntax	show	Show running system information
Description	startup-config	Contents of startup configuration
Defaults	N/A	
Command Modes	Privileged EXEC / User EXEC	
Usage Guidelines	N/A	
Examples	<pre> ETHERLINE ACCESS M08T# show startup-config Building configuration ... ! </pre>	

	<pre> ip telnet ip http-server ip http-server auto-logout 120 ! ntp remote-server time.nist.gov ! ! vlan mode lqvlan gvrp ! snmp-server version v1-v2c snmp-server community public ro snmp-server community private rw snmp-server trap-mode trap ! lldp run lldp timer 30 ! ! dhcp-relay option82 dhcp-relay option82 remote-id-type other dhcp-relay option82 man-id 1234567890123 ! ! interface ethernet 1/1 no shutdown speed-duplex Auto no flowcontrol media cable-mode auto --More-- </pre>
Error messages	N/A
Related commands	show running-config

show snmp

To check the status of Simple Network Management Protocol (SNMP) communications, use the **show snmp** command.

Commands

show snmp

Syntax	snmp	Display SNMP configuration
Description		
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	

Usage	ETHERLINE ACCESS M08T# show snmp
Guidelines	SNMP Read/Write Settings SNMP Versions : v1-v2c V1,V2c Read Community : public V1,V2c Write/Read Community: private Trap Settings 1st Trap Server IP/Name : 1st Trap Community : public 2nd Trap Server IP/Name : 2nd Trap Community : public Trap Mode Mode : Trap Private MIB information Switch Object ID : enterprise.8691.7.15
Examples	N/A
Error messages	N/A
Related commands	snmp-server community snmp-server host snmp-server trap-mode snmp-server user snmp-server version

show system

Use the **show system** command to display system identification settings.

Commands

show system

Syntax	show	Show running system information
Description	system	System hardware and software status
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T# show system System Information System Name : Managed Redundant Switch 09458 System Location : Switch Location System Description : LAPP Switch Maintainer Information : 8860289191230 MAC Address : 7C:F9:5C:00:00:00 System Uptime : 0d0h6m46s	
Error messages	N/A	
Related commands	snmp-server description snmp-server contact snmp-server location	

show users

Use the **show users** user EXEC command to display the username/password configuration.

Commands**show users**

Syntax	show	Show running system information
Description	Users	Display login user settings
Defaults	N/A	
Command Modes	Privileged EXEC/ User EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show users Login account information: Name Authority ----- - admin admin user user</pre>	
Error messages	N/A	
Related commands	username	

show vlan

Use the **show vlan** user EXEC command to display VLAN status information.

Commands**show vlan**

Syntax	show	Show running system information
Description	vlan	Display VLAN status
Defaults	N/A	
Command Modes	Privileged EXEC	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T# show vlan vlan mode: 802.1Q vlan mgmt vlan: 1 VLAN 1: Access Ports: 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, Trunk Ports: Hybrid Ports:</pre>	
Error messages	N/A	
Related commands	N/A	

show vlan config

Use the **show vlan** user EXEC command to display VLAN configuration information.

Commands**show vlan config**

Syntax	show	Show running system information
Description	vlan	Display VLAN status
	config	Display VLAN configuration
Defaults	N/A	
Command Modes	Privileged EXEC	
Usage Guidelines	N/A	
Examples	<pre> vlan mode: 802.1Q vlan VLAN Ports (Type) ----- ----- 1 1-1 (A), 1-2 (A), 1-3 (A), 1-4 (A), 1-5 (A), 1-6 (A), 1-7 (A), 1-8 (A), Port Trunk Native vlan Port Fixed VLAN (Tagged) Port Forbidden VLAN Port Fixed VLAN (Untagged) Current VLAN interface vid: 1, 2, </pre>	
Error messages	N/A	
Related commands	interface vlan	

shutdown

To disable an interface, use the **shutdown** interface configuration command. To restart a disabled interface, use the **no** form of this command.

Commands

shutdown

no shutdown

Syntax	shutdown	Shutdown the selected interface
Description		
Defaults	None	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	<pre> ETHERLINE ACCESS M08T(config-if)# shutdown ETHERLINE ACCESS M08T(config-if)# no shutdown </pre>	
Error messages	N/A	

Related commands	show interfaces ethernet
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snmp-server community

To set up the community access string to permit access to the Simple Network Management Protocol (SNMP), use the **snmp-server community** global configuration command.

Commands

snmp-server community *text mode*

Syntax Description	snmp-server	Configure SNMP server
	community	SNMP community setting
	<i>text</i>	SNMP community string
	<i>mode</i>	ro rw
Defaults	Public community is ro Private community is rw	
Command Modes	Global configuration	
Usage Guidelines	Specifies read-only access. Authorized management stations are only able to retrieve MIB objects. Specifies read-write access. Authorized management stations are able to both retrieve and modify MIB objects	
Examples	ETHERLINE ACCESS M08T(config)# snmp-server community public ro	
Error messages	SNMP community mode must be (ro rw)!!	
	The longest snmp community string length is 30!!	
Related commands	show snmp	

snmp-server contact

To set the system contact string, use the **snmp-server contact** global configuration command. To remove the contact string, use the **no** form of this command.

Commands

snmp-server contact *text*

no snmp-server contact

Syntax Description	snmp-server	Configure SNMP server
	contact	Switch maintainer contact information
	<i>text</i>	Maintainer contact information
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	"text" parameter can be set as string separated by space. Maximum string tokens are 5. Maximum length of switch maintainer contact info is 40.	

Examples	ETHERLINE ACCESS M08T(config)# snmp-server contact <STRING:token1> - Maintainer contact information ETHERLINE ACCESS M08T(config)# no snmp-server contact
Error messages	Length of maintainer info is too long
Related commands	show snmp

snmp-server description

To set the system description string, use the **snmp-server description** global configuration command. To remove the description string, use the **no** form of this command.

Commands

snmp-server description *text*

no snmp-server description

Syntax	snmp-server	Configure SNMP server
Description	description	Switch description
	<i>text</i>	Description string
Defaults	The default description is the model name.	
Command Modes	Global configuration	
Usage Guidelines	"text" parameter can be set as string separated by space. Maximum string tokens are 5. Maximum length of switch maintainer contact info is 40.	
Examples	ETHERLINE ACCESS M08T(config)# snmp-server description LAPP Switch ETHERLINE ACCESS M08T(config)# exit ETHERLINE ACCESS M08T# show system System Information System Name : Managed Redundant Switch 09458 System Location : Switch Location System Description : LAPP Switch Maintainer Information : 8860289191230 MAC Address : 7C:F9:5C:00:00:00 System Uptime : 0d0h6m46s	
Error messages	Length of system description is too long	
Related commands	show snmp	

snmp-server host

To specify the recipient of a Simple Network Management Protocol (SNMP) notification operation, use the **snmp-server host** global configuration command. To remove the specified host, use the **no** form of this command

Commands

snmp-server host *host-addr* *community-string*

no snmp-server host [*host-addr*]

Syntax	snmp-server	Configure SNMP server
Description	host	SNMP host setting

	<i>host-addr</i>	SNMP host address
	<i>community-string</i>	SNMP Community string
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# snmp-server host 192.168.127.253 test ETHERLINE ACCESS M08T(config)# no snmp-server host	
Error messages	Trap server are full, please remove at least one first!!!	
Related commands	show snmp	

snmp-server location

To set the system location string, use the **snmp-server location** global configuration command. To remove the location string, use the **no** form of this command.

Commands

snmp-server location *text*

no snmp-server location

Syntax	snmp-server	Configure SNMP server
Description	location	Switch location
	<i>text</i>	Location string
Defaults	The default text is Switch Location	
Command Modes	Global configuration	
Usage Guidelines	"text" parameter can be set as string separated by space. Maximum string tokens are 5. Maximum length of switch location is 80.	
Examples	ETHERLINE ACCESS M08T(config)# snmp-server location <STRING:token1> - Location string token 1 ETHERLINE ACCESS M08T(config)# no snmp-server location	
Error messages	Length of location is too long	
Related commands	show snmp	

snmp-server trap-mode

To enable all Simple Network Management Protocol (SNMP) notifications (traps or informs) available on your system, use the **snmp-server trap-mode** global configuration command. To disable all available SNMP notifications, use the **no** form of this command

Commands

snmp-server trap-mode trap

snmp-server trap-mode trap-v2c

snmp-server trap-mode inform [*retry times timeout seconds*]

no snmp-server trap-mode

Syntax Description	snmp-server	Configure SNMP server
	trap-mode	SNMP Trap/Inform mode setting
	trap	SNMP Trap
	trap-v2c	SNMP Trap v2c instead of v1
	inform	SNMP Inform
	retry	Inform retries times
	<i>times</i>	1 to 99
	timeout	Timeout timer
	<i>seconds</i>	1 to 300 seconds
Defaults	The default mode is "trap"	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# snmp-server trap-mode trap ETHERLINE ACCESS M08T(config)# snmp-server trap-mode inform retry 3 timeout 10 ETHERLINE ACCESS M08T(config)# no snmp-server trap-mode	
Error messages	Invalid inform retries value !!!	
	Invalid inform timeout value !!!	
Related commands	show snmp	

snmp-server user

To configure a user and its authentication type and password to a Simple Network Management Protocol (SNMP), use the **snmp-server user** global configuration command.

Commands

snmp-server user *username* **auth** *auth-type* *password*

Syntax Description	snmp-server	Configure SNMP server
	user	SNMP user setting
	<i>user-privilege</i>	SNMP user privilege
	auth	Specifies which authentication level should be used
	<i>auth-type</i>	no-auth md5 sha
	<i>password</i>	Password (maximum 30 characters)
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	<i>username</i> is only allowed to be set as "admin" or "user" <i>auth-type</i> is only allowed to be set as "no-auth", "md5" or "sha"	
Examples	ETHERLINE ACCESS M08T(config)# snmp-server user admin auth md5 test	
Error messages	SNMP user must be (admin user)!!	
	SNMP authtype must be (no-auth md5 sha)!!	
	Admin/User Password must be at least 8 bytes !!!	
	Admin/User Data Encryption must be at least 8 bytes !!!	
Related commands	show snmp	

snmp-server version

To set up the snmp version, use the **snmp-server version** global configuration command.

Commands

snmp-server version [v1-v2c-v3 | v1-v2c | v3]

Syntax	snmp-server	Configure SNMP server
Description	version	SNMP version setting
	v1-v2c-v3	Version 1, 2C and 3 support
	v1-v2c	Version 1 and 2C support
	v3	Only version 3 support
Defaults	Default version is v1-v2c	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# snmp-server version v1-v2c-v3 - Version 1, 2C and 3 support v1-v2c - Version 1 and 2C support v3 - Only version 3 support</pre>	
Error messages	N/A	
Related commands	show snmp	

spanning-tree forward-delay

Use the **spanning-tree forward-delay** redundancy configuration command on the switch to set the forward-delay time for the spanning-tree. The forwarding time specifies how long each of the listening and learning states last before the interface begins forwarding. Use the **no** form of this command to return to the default setting.

Commands

spanning-tree forward-delay secondsre

no spanning-tree forward-delay

Syntax	spanning-tree	Configure spanning tree
Description	forward-delay	Configure spanning tree BPDU forward delay
	<i>seconds</i>	Range from 4 to 30 seconds
Defaults	Forward delay = 15 sec.	
Command Modes	Redundancy configuration	
Usage Guidelines	$2 * (\text{hello-time} + 1.0 \text{ sec}) \leq \text{max-age} \leq 2 * (\text{forward-delay} - 1.0 \text{ sec})$	
Examples	<pre>ETHERLINE ACCESS M08T(config-rdnt)# spanning-tree forward-delay <UINT:seconds> - Range from 4 to 30 seconds</pre>	
Error messages	The BPDU forward delay time must be in the range from 4 to 30 sec.	
	The formula must be obeyed: $2 * (\text{Hello Time} + 1 \text{ sec}) \leq \text{Max age} \leq 2 * (\text{Forward Delay} - 1 \text{ sec})$	
Related commands	spanning-tree hello-time spanning-tree max-age show redundancy spanning-tree	

spanning-tree hello-time

Use the **spanning-tree hello-time** redundancy configuration command on the switch to set the interval between hello bridge protocol data units (BPDUs) sent by root switch configuration messages. Use the **no** form of this command to return to the default setting.

Commands

spanning-tree hello-time *seconds*

no spanning-tree hello-time

Syntax	spanning-tree	Configure spanning tree
Description	hello-time	Configure spanning tree BPDU hello time
	<i>seconds</i>	Range from 1 to 2 seconds
Defaults	Hello time = 2 sec.	
Command Modes	Redundancy configuration	
Usage Guidelines	$2 * (\text{hello-time} + 1.0 \text{ sec}) \leq \text{max-age} \leq 2 * (\text{forward-delay} - 1.0 \text{ sec})$	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# spanning-tree hello-time <UINT:seconds> - Range from 1 to 2 seconds	
Error messages	BPDU hello time must be in the range from 1 to 2 sec.	
	The formula must be obeyed: $2 \times (\text{Hello Time} + 1 \text{ sec}) \leq \text{Max age} \leq 2 \times (\text{Forward Delay} - 1 \text{ sec})$	
Related commands	spanning-tree forward-delay spanning-tree max-age show redundancy spanning-tree	

spanning-tree max-age

Use the **spanning-tree max-age** redundancy configuration command on the switch to set the interval between messages that the spanning tree receives from the root switch. If a switch does not receive a bridge protocol data unit (BPDU) message from the root switch within this interval, it recomputes the spanning-tree topology. Use the **no** form of this command to return to the default setting.

Commands

spanning-tree max-age *seconds*

no spanning-tree max-age

Syntax	spanning-tree	Configure spanning tree
Description	max-age	Configure spanning tree max age
	<i>seconds</i>	Range from 6 to 40 seconds
Defaults	Forward delay = 20 sec.	
Command Modes	Redundancy configuration	
Usage Guidelines	$2 * (\text{hello-time} + 1.0 \text{ sec}) \leq \text{max-age} \leq 2 * (\text{forward-delay} - 1.0 \text{ sec})$	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# spanning-tree max-age <UINT:seconds> - Range from 6 to 40 seconds	
Error messages	The BPDU forward delay time must be in the range from 4 to 30 sec.	
	The formula must be obeyed: $2 \times (\text{Hello Time} + 1 \text{ sec}) \leq \text{Max age} \leq 2 \times (\text{Forward Delay} - 1 \text{ sec})$	
Related commands	spanning-tree forward-delay spanning-tree max-age show redundancy spanning-tree	

spanning-tree priority

Use the **spanning-tree priority** redundancy configuration command on the switch to set the switch priority for the spanning-tree. Use the **no** form of this command to return to the default setting.

Commands

spanning-tree priority *priority*

no spanning-tree priority

Syntax	spanning-tree	Configure spanning tree
Description	priority	Configure spanning tree bridge priority
	<i>priority</i>	Range from 0 to 61440, and must be the multiples of 4096
Defaults	priority = 32768	
Command Modes	Redundancy configuration	
Usage Guidelines	0 <= priority <= 61440, and must be multiples of 4096.	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# spanning-tree priority <UINT:prio> - Range from 0 to 61440, in steps of 4096	
Error messages	The bridge priority must be in the range from 0 to 61440	
	The bridge priority must be the multiples of 4096	
Related commands	show redundancy spanning-tree	

spanning-tree

Use the **spanning-tree** interface configuration command on the switch to enable the spanning-tree feature of the specified interfaces. Use the **no** form of this command to disable it.

Commands

spanning-tree

no spanning-tree

Syntax	spanning-tree	Enable spanning tree
Description		
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-if)# spanning-tree	
Error messages	N/A	
Related commands	redundancy mode show redundancy spanning-tree	

spanning-tree cost

Use the **spanning-tree cost** interface configuration command on the switch to set the path cost for spanning-tree algorithms calculations. If a loop occurs, spanning tree considers the path cost when selecting an interface to put in the forwarding state. Use the **no** form of this command to return to the default setting.

Commands

spanning-tree cost *cost*

no spanning-tree cost

Syntax	spanning-tree	Enable spanning tree
Description	cost	Configure port path cost
	<i>cost</i>	Range from 1 to 200000000
Defaults	cost = 200000	
Command Modes	Interface configuration	
Usage Guidelines	1 <= Cost <= 200000000	
Examples	ETHERLINE ACCESS M08T(config-if)# spanning-tree cost <UINT:cost> - Range from 1 to 200000000	
Error messages	Cost value must be in the range 1 to 200000000	
Related commands	show redundancy spanning-tree	

spanning-tree edge-port

Use the **spanning-tree edge-port** interface configuration command on the switch to enable the Edge Port feature on an interface in all its associated VLANs. When the Edge Port feature is enabled, the interface changes directly from a blocking state to a forwarding state without making the intermediate spanning-tree state changes. Use the **no** form of this command to disable the feature.

Commands

spanning-tree edge-port { auto | force }

no spanning-tree edge-port

Syntax	spanning-tree	Enable spanning tree
Description	edge-port	Configure as edge port
	auto	Auto determine as edge port
	force	Force the port as edge port
Defaults	port-fast = auto	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-if)# spanning-tree edge-port auto - Auto determine as edge port force - Force the port as edge port	
Error messages	N/A	
Related commands	show redundancy spanning-tree	

spanning-tree priority

Use the **spanning-tree priority** interface configuration command on the switch to set the interfaces priority for the spanning-tree. Use the **no** form of this command to return to the default setting.

Commands

spanning-tree priority priority

no spanning-tree priority

Syntax	spanning-tree	Enable spanning tree
Description	priority	Configure port priority

	<i>priority</i>	Range from 0 to 240, in steps of 16
Defaults	priority = 128	
Command Modes	interface configuration	
Usage Guidelines	0 <= priority <= 240, and must be multiples of 16.	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# spanning-tree priority <UINT:prio> - Range from 0 to 61440, in steps of 4096	
Error messages	The bridge priority must be in the range from 0 to 240	
	The bridge priority must be multiples of 16	
Related commands	show redundancy spanning-tree	

speed-duplex

Use the **speed-duplex** interface configuration command to specify the speed of the interface and its duplex mode. Use the **no** form of this command to return the interface to its default value.

Commands

speed-duplex {10M-Full | 10M-Half | 100M-Full | 100M-Half | 1G-Full | Auto}

no speed-duplex

Syntax Description	speed-duplex	Configure speed and duplex operation
	10M-Full	Speed 10M-full
	10M-Half	Speed 10M-Half
	100M-Full	Speed 100M-Full
	100M-Half	Speed 100M-Half
	1G-Full	Speed 1G-Full
	Auto	Speed Auto
Defaults	The default is Auto	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config)# interface ethernet 1/1 ETHERLINE ACCESS M08T(config-if)# speed-duplex 100M-Full	
Error messages	Fiber port can not be set speed-duplex!!!	
	This port can not be set to 1G!!!	
	Parameter does not be defined!!!	
Related commands	show interfaces ethernet	

switchport access vlan

Use the **switchport access vlan** interface configuration command on the switch to configure a port as a static-access or dynamic-access port. If the switchport mode is set to access, the port operates as a member of the specified VLAN. If set to dynamic, the port starts discovery of VLAN assignment based on the incoming packets it receives. Use the **no** form of this command to reset the access mode to the default VLAN for the switch.

Commands

switchport access vlan *vlan-id*

no switchport access vlan

Syntax Description	switchport	Set switching mode characteristics
	access	Set access mode characteristics of the interface
	vlan	Set (default) pvid in access mode
	<i>vlan-id</i>	1 to 4094
Defaults	<i>vlan-id</i> = 1	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport access vlan 2 <UINT:vlanid> - 1 to 4094	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
Related commands	show vlan show vlan config	

switchport hybrid fixed vlan add

Use the **switchport hybrid fixed vlan add** interface configuration command on the switch to add the trunk hybrid characteristics when the interface is in hybrid mode. Use the **no** form of this command to reset to the default.

Commands

switchport hybrid fixed vlan add *vlan-id-list* **tag**

switchport hybrid fixed vlan add *vlan-id-list* **untag**

no switchport hybrid fixed vlan tag

no switchport hybrid fixed vlan untag

Syntax Description	switchport	Set switching mode characteristics
	hybrid	Set hybrid mode characteristics of the interface
	fixed	Set fixed VLAN characteristics
	vlan	1 to 4094
	add	Add VLANs to the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
	untag	Configure egress traffic as VLAN untagged traffic
	tag	Configure egress traffic as VLAN tagged traffic
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport hybrid fixed vlan add 1,3-5,7 tag <STRING:vlanids> - VLAN IDs of the VLANs	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	
Related commands	show vlan show vlan config	

switchport hybrid forbidden vlan add

Use the **switchport hybrid forbidden vlan add** interface configuration command on the switch to add the trunk forbidden characteristics when the interface is in hybrid mode. Use the **no** form of this command to reset to the default.

Commands

switchport hybrid forbidden vlan add *vlan-id-list*

no switchport hybrid forbidden vlan

Syntax Description	switchport	Set switching mode characteristics
	hybrid	Set hybrid mode characteristics of the interface
	forbidden	Set forbidden VLAN characteristics
	vlan	1 to 4094
	add	Add VLANs to the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport hybrid forbidden vlan add 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	
Related commands	show vlan show vlan config switchport hybrid forbidden vlan remove	

switchport hybrid forbidden vlan remove

Use the **switchport hybrid forbidden vlan add** interface configuration command on the switch to remove the trunk forbidden characteristics when the interface is in hybrid mode. Use the **no** form of this command to reset to the default.

Commands

switchport hybrid forbidden vlan remove *vlan-id-list*

no switchport hybrid forbidden vlan

Syntax Description	switchport	Set switching mode characteristics
	hybrid	Set hybrid mode characteristics of the interface
	forbidden	Set forbidden VLAN characteristics
	vlan	1 to 4094
	remove	Remove VLANs from the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport hybrid forbidden vlan remove 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	

Related commands	show vlan show vlan config switchport hybrid forbidden vlan add
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switchport hybrid native vlan

Use the **switchport hybrid native vlan** interface configuration command on the switch to configure PVID of a port. Use the **no** form of this command to return to the default PVID.

Commands

switchport hybrid native vlan *vlan-id*

no switchport hybrid native vlan

Syntax Description	switchport	Set switching mode characteristics
	hybrid	Set hybrid mode characteristics of the interface
	native	Set trunking native characteristics
	vlan	Set pvid vlanid in hybrid mode
	<i>vlan-id</i>	1 to 4094
Defaults	vlan-id = 1	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport hybrid native vlan 2 <UINT:vlanid> - 1 to 4094	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
Related commands	show vlan show vlan config	

switchport pvlan

Use the **switchport pvlan** interface configuration command on the switch stack to define a port-based VLAN association for an isolated or community port or a mapping for a promiscuous port. Use the **no** form of this command to remove the port-based VLAN association or mapping from the port.

Commands

switchport pvlan *vlan-groups*

no switchport pvlan *vlan-groups*

Syntax Description	switchport	Set switching mode characteristics
	pvlan	Configure port-based vlan
	<i>vlan-groups</i>	Set/unset port-based vlan group
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport pvlan 2,3,4 <STRING:groups> - set port-based vlan group	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
Related commands	show vlan show vlan config	

switchport trunk fixed vlan add

Use the **switchport trunk fixed vlan add** interface configuration command on the switch to add the trunk characteristics when the interface is in trunking mode. Use the **no** form of this command to reset a trunking characteristic to the default.

Commands

switchport trunk fixed vlan add *vlan-id-list*

no switchport trunk fixed vlan

Syntax Description	switchport	Set switching mode characteristics
	trunk	Set trunking mode characteristics of the interface
	fixed	Set fixed VLAN characteristics
	vlan	1 to 4094
	add	Add VLANs to the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport trunk fixed vlan add 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	
Related commands	show vlan show vlan config switchport trunk fixed vlan remove	

switchport trunk fixed vlan remove

Use the **switchport trunk fixed vlan add** configuration command on the switch stack to remove the trunk characteristics when the interface is in trunking mode. Use the **no** form of this command to reset a trunking characteristic to the default.

Commands

switchport trunk fixed vlan remove *vlan-id-list*

no switchport trunk fixed vlan

Syntax Description	switchport	Set switching mode characteristics
	trunk	Set trunking mode characteristics of the interface
	fixed	Set fixed VLAN characteristics
	vlan	1 to 4094
	remove	Remove VLANs from the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport trunk fixed vlan remove 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	

Related commands	show vlan show vlan config switchport trunk fixed vlan add
------------------	--

switchport trunk forbidden vlan add

Use the **switchport trunk forbidden vlan add** configuration command on the switch to add the trunk forbidden characteristics when the interface is in trunking mode. Use the **no** form of this command to reset a trunking characteristic to the default.

Commands

switchport trunk forbidden vlan add *vlan-id-list*

no switchport trunk forbidden vlan

Syntax	switchport	Set switching mode characteristics
Description	trunk	Set trunking mode characteristics of the interface
	forbidden	Set forbidden VLAN characteristics
	vlan	1 to 4094
	add	Add VLANs to the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport trunk forbidden vlan add 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	
Related commands	show vlan show vlan config switchport trunk forbidden vlan remove	

switchport trunk forbidden vlan remove

Use the **switchport trunk forbidden vlan remove** configuration command on the switch stack or on a standalone switch to remove the trunk forbidden characteristics when the interface is in trunking mode. Use the **no** form of this command to reset a trunking characteristic to the default.

Commands

switchport trunk forbidden vlan remove *vlan-id-list*

no switchport trunk forbidden vlan

Syntax	switchport	Set switching mode characteristics
Description	trunk	Set trunking mode characteristics of the interface
	forbidden	Set forbidden VLAN characteristics
	vlan	1 to 4094
	remove	Remove VLANs from the current list
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	

Examples	ETHERLINE ACCESS M08T(config-if)# switchport trunk forbidden vlan remove 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094 vlan interfaces are full, total vlan interface is 64 !!
Related commands	show vlan show vlan config switchport trunk forbidden vlan add

switchport trunk native vlan

Use the **switchport trunk native vlan** interface configuration command on the switch to configure PVID of a port as a trunking port. Use the **no** form of this command to return to the default.

Commands

switchport trunk native vlan *vlan-id*

no switchport trunk native vlan

Syntax Description	switchport	Set switching mode characteristics
	trunk	Set trunking mode characteristics of the interface
	native	Set trunking native characteristics
	vlan	Set pvid vlanid in trunk mode
	<i>vlan-id</i>	1 to 4094
Defaults	vlan-id = 1	
Command Modes	Interface configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	ETHERLINE ACCESS M08T(config-if)# switchport trunk native vlan 2 <UINT:vlanid> - 1 to 4094	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
Related commands	show vlan show vlan config	

turbo-chain

Use the **turbo-chain** redundancy configuration command on the switch stack or on a standalone switch to configure Turbo Chain.

Commands

turbo-chain role {head | member | tail} primary interface *module/port* **secondary interface** *module/port*

Syntax Description	turbo-chain	Configure turbo chain
	role	Turbo chain role setting
	head	Turbo chain role head setting
	member	Turbo chain role member setting
	tail	Turbo chain role tail setting
	primary	Turbo chain primary port setting
	interface	Turbo chain port interface setting
	secondary	Turbo chain secondary port setting
	<i>module/port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	

Command Modes	redundancy configuration
Usage Guidelines	N/A
Examples	ETHERLINE ACCESS M08T(config-rdnt)# turbo-chain role head primary interface 1/1 secondary interface 1/2
Error messages	N/A
Related commands	show redundancy turbo-chain

turbo-ring-v1

Use the **turbo-ring-v1** redundancy configuration command on the switch to enable the Turbo Ring v1 with specified Ring ports.

Commands

turbo-ring-v1 primary interface primary-port secondary interface secondary-port

Syntax Description	turbo-ring-v1	Configure turbo ring v1
	primary	Turbo ring v1 ring ports setting
	interface	Turbo ring v1 ring ports setting
	<i>primary-port</i>	Port ID. E.g., 1/3,...
	secondary	Turbo ring v1 ring ports setting
	interface	Turbo ring v1 ring ports setting
	<i>secondary-port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v1 primary interface 1/1 secondary interface 1/2 <STRING:pri_port> - Port ID. E.g., 1/3, ... <STRING:sec_port> - Port ID. E.g., 1/3, ...	
Error messages	Interface 2-1 not exist	
	One port is the same in ring ports or coupling ports	
Related commands	show turbo-ring-v1	

turbo-ring-v1 coupling

Use the **turbo-ring-v1 coupling** redundancy configuration command on the switch to set the coupling for Turbo Ring v1. Use the **no** form of this command to disable it.

Commands

turbo-ring-v1 coupling interface primary-port coupling-control-port interface secondary-port
no turbo-ring-v1 coupling

Syntax Description	turbo-ring-v1	Configure turbo ring v1
	coupling	Configure ring coupling
	interface	Turbo ring v1 ring ports setting
	<i>primary-port</i>	Primary port ID. E.g., 1/3,...
	coupling-control-port	Turbo ring v1 coupling ports setting

	interface	Turbo ring v1 ring ports setting
	<i>secondary-port</i>	Secondary port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v1 coupling interface 1/1 coupling-control-port interface 1/2 <STRING:pri_port> - Port ID. E.g., 1/3,... <STRING:sec_port> - Port ID. E.g., 1/3,...</pre>	
Error messages	Interface 2-1 not exist One port is the same in ring ports or coupling ports	
Related commands	show turbo-ring-v1	

turbo-ring-v1 master

Use the **turbo-ring-v1 master** redundancy configuration command on the switch to set the switch as the Turbo Ring v1 Master. Use the **no** form of this command to return to the normal Turbo Ring v1 member.

Commands

turbo-ring-v1 master

no turbo-ring-v1 master

Syntax	turbo-ring-v1	Configure turbo ring v1
Description	master	Set ring as master
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v1 master master - Set ring as master</pre>	
Error messages	N/A	
Related commands	show turbo-ring-v1	

turbo-ring-v2

Use the **turbo-ring-v2** redundancy configuration command on the switch to configure the Turbo Ring v2 with specified Ring ports. Use the **no** form of this command to disable the specified ring.

Commands

turbo-ring-v2 ring-id primary interface primary-port secondary interface secondary-port

no turbo-ring-v2 ring-id

Syntax	turbo-ring-v2	Configure turbo ring v2
Description	<i>ring-id</i>	Turbo ring v2 ring id
	primary	Turbo ring v2 ring ports setting
	interface	Turbo ring v2 ring ports setting
	<i>primary-port</i>	Port ID. E.g., 1/3,...
	secondary	Turbo ring v2 ring ports setting

	interface	Turbo ring v2 ring ports setting
	<i>secondary-port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	At least enable one turbo-ring domain or coupling. But cannot enable two turbo-ring domains and coupling in the same time.	
Examples	<pre>ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v2 1 primary interface 1/1 secondary interface 1/2 <STRING:pri_port> - Port ID. E.g., 1/3,... <STRING:sec_port> - Port ID. E.g., 1/3,...</pre>	
Error messages	Turbo ring v2 only supports maximum 2 ring domains	
	Interface 2-1 not exist	
	Ring1: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Ring2: One port couldn't be set as Ring1 redundant port simultaneously !!!	
	Coupling: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Primary port couldn't be set as Ring2 redundant port simultaneously !!!	
	Backup port couldn't be set as Ring2 redundant port simultaneously !!!	
	Coupling port couldn't be set as Ring2 redundant port simultaneously !!!	
	Please select at least one Ring!!!	
Ring1, ring2, coupling couldn't be enabled simultaneously!!!		
Please enable one Ring in "Ring Coupling" mode!!!		
Related commands	show turbo-ring-v2	

turbo-ring-v2 coupling backup

Use the **turbo-ring-v2 coupling** redundancy configuration command on the switch to configure the backup port of Ring coupling for Turbo Ring v2. Use the **no** form of this command to disable the coupling.

Commands

turbo-ring-v2 coupling backup interface *backup-port*

no turbo-ring-v2 coupling

Syntax Description	turbo-ring-v2	Configure turbo ring v2
	coupling	Configure ring coupling
	backup	Configure ring coupling mode
	interface	Turbo ring v2 coupling ports setting
	<i>backup-port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	At least enable one turbo-ring domain or coupling. But cannot enable two turbo-ring domains and coupling in the same time.	
Examples	<pre>ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v2 coupling backup interface 1/1 <STRING:pri_port> - Port ID. E.g., 1/3,...</pre>	
Error messages	Turbo ring v2 only supports maximum 2 ring domains	
	Ring1: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Ring2: One port couldn't be set as Ring1 redundant port simultaneously !!!	
	Coupling: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Primary port couldn't be set as Ring2 redundant port simultaneously !!!	
	Backup port couldn't be set as Ring2 redundant port simultaneously !!!	
Coupling port couldn't be set as Ring2 redundant port simultaneously !!!		

	Please select at least one Ring!!!
	Ring1, ring2, coupling couldn't be enabled simultaneously!!!
	Please enable one Ring in "Ring Coupling" mode!!!
Related commands	show turbo-ring-v2

turbo-ring-v2 coupling dual-homing

Use the **turbo-ring-v2 coupling dual-homing** redundancy configuration command on the switch to enable dual homing feature of Ring coupling for the Turbo Ring v2. Use the no form of this command to disable it.

Commands

turbo-ring-v2 coupling dual-homing primary interface *primary-port* **backup interface** *secondary-port*
no turbo-ring-v2 coupling

Syntax Description	turbo-ring-v2	Configure turbo ring v2
	coupling	Configure ring coupling
	dual-homing	Configure dual homing mode
	primary	Turbo ring v2 ring ports setting
	interface	Turbo ring v2 ring ports setting
	<i>primary-port</i>	Port ID. E.g., 1/3,...
	backup	Turbo ring v2 ring ports setting
	interface	Turbo ring v2 ring ports setting
	<i>secondary-port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	At least enable one turbo-ring domain or coupling. But cannot enable two turbo-ring domains and coupling in the same time.	
Examples	<pre>ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v2 coupling dual-homing primary interface 1/1 secondary interface 1/2 <STRING:pri_port> - Port ID. E.g., 1/3,... <STRING:sec_port> - Port ID. E.g., 1/3,...</pre>	
Error messages	Turbo ring v2 only supports maximum 2 ring domains	
	Ring1: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Ring2: One port couldn't be set as Ring1 redundant port simultaneously !!!	
	Coupling: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Primary port couldn't be set as Ring2 redundant port simultaneously !!!	
	Backup port couldn't be set as Ring2 redundant port simultaneously !!!	
	Coupling port couldn't be set as Ring2 redundant port simultaneously !!!	
	Please select at least one Ring!!!	
Ring1, ring2, coupling couldn't be enabled simultaneously!!!		
Please enable one Ring in "Ring Coupling" mode!!!		
Related commands	show turbo-ring-v2	

turbo-ring-v2 coupling primary

Use the **turbo-ring-v2 coupling primary** redundancy configuration command on the switch to configure the primary port of Ring coupling for Turbo Ring v2. Use the no form of this command to return to the default setting.

Commands**turbo-ring-v2 coupling primary interface** *primary-port***no turbo-ring-v2 coupling**

Syntax	turbo-ring-v2	Configure turbo ring v2
Description	coupling	Configure ring coupling
	primary	Configure ring coupling mode
	interface	Turbo ring v2 coupling ports setting
	<i>primary-port</i>	Port ID. E.g., 1/3,...
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	At least enable one turbo-ring domain or coupling. But cannot enable two turbo-ring domains and coupling in the same time.	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v2 coupling primary interface 1/1 <STRING:pri_port> - Port ID. E.g., 1/3,...	
Error messages	Turbo ring v2 only supports maximum 2 ring domains	
	Ring1: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Ring2: One port couldn't be set as Ring1 redundant port simultaneously !!!	
	Coupling: One port couldn't be set as 1st and 2nd redundant port simultaneously !!!	
	Primary port couldn't be set as Ring2 redundant port simultaneously !!!	
	Backup port couldn't be set as Ring2 redundant port simultaneously !!!	
	Coupling port couldn't be set as Ring2 redundant port simultaneously !!!	
	Please select at least one Ring!!!	
	Ring1, ring2, coupling couldn't be enabled simultaneously!!!	
Please enable one Ring in "Ring Coupling" mode!!!		
Related commands	show turbo-ring-v2	

turbo-ring-v2 master

Use the **turbo-ring-v2 master** redundancy configuration command on the switch to configure the switch as the Ring Master of specified ring for Turbo Ring v2. Use the **no** form of this command to configure the switch as the normal member of specified ring for Turbo Ring v2.

Commands**turbo-ring-v2 ring-id master****no turbo-ring-v2 ring-id master**

Syntax	turbo-ring-v2	Configure turbo ring v2
Description	<i>ring-id</i>	Turbo ring v2 ring id
	master	Set turbo ring v2 ring id as master
Defaults	N/A	
Command Modes	Redundancy configuration	
Usage Guidelines	N/A	
Examples	ETHERLINE ACCESS M08T(config-rdnt)# turbo-ring-v2 1 master master - Set turbo ring v2 ring id as master	
Error messages	Turbo ring v2 only supports maximum 2 ring domains	
Related commands	show turbo-ring-v2	

username

Use the **username** global configuration command on the switch to set the username and password of the local login user. Use the **no** form of this command will clear the password setting of the specified user.

Commands

username { admin | user } **password** password

no username { admin | user } **password**

Syntax Description	username	Configuration for login account authentication
	<i>username</i>	User name
	privilege	Privilege for account
	<i>privilege-level</i>	3 values, "admin" and "user" for account level, "no login" indicates account as non-login user
	password	Specify the password
	<i>password</i>	Password string (Length of password should be from 4 to 16, and empty password is no longer allowed)
Defaults	There is no password for each user	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# username admin password 1234 <LF> ETHERLINE ACCESS M08T(config)# username user password 5678 <LF></pre>	
Error messages	N/A	
Related commands	show users	

vlan create

Use the **vlan create** global configuration command on the switch to create a VLAN in the VLAN database. Use the **no** form of this command to delete a VLAN.

Commands

vlan create vlan-id-list

no vlan create vlan-id-list

Syntax Description	vlan	Configure VLAN parameters
	create	Configure VLAN parameters
	<i>vlan-id-list</i>	VLAN IDs of the VLANs
Defaults	N/A	
Command Modes	Global configuration	
Usage Guidelines	You can only use this command mode for configuring normal-range VLANs, that is, VLAN IDs 1 to 4094.	
Examples	<pre>ETHERLINE ACCESS M08T(config)# vlan create 1,3-5,7 <STRING:vlanids> - VLAN IDs of the VLANs</pre>	
Error messages	vlan 4097 is invalid!! should be range from 1 to 4094	
	vlan interfaces are full, total vlan interface is 64 !!	
Related commands	show vlan config	

vlan mode

Use the **vlan mode** configuration command on the switch to change current VLAN mode operated on the switch. Use the **no** form of this command to return to the default.

Commands

vlan mode { 1qvlan | pvlan }

no vlan mode

Syntax	vlan	Configure VLAN parameters
Description	mode	Set (default) vlan mode
	1qvlan	IEEE 802.1Q
	pvlan	Port-based vlan
	unaware	Unaware vlan
Defaults	The default mode is 802.1Q mode in the product with 802.1Q supported; otherwise is port-based VLAN mode.	
Command Modes	Global configuration	
Usage Guidelines	N/A	
Examples	<pre>ETHERLINE ACCESS M08T(config)# vlan mode 1qvlan 1qvlan - IEEE 802.1Q pvlan - Port-based vlan</pre>	
Error messages	N/A	
Related commands	show vlan	