

Use Cases

This section presents a few essential use cases for configuring in the ME 1200 Cisco Ethernet Switch Web GUI Interface.

- Configuring Y.1731, page 1
- Configuring RFC2544, page 5

Configuring Y.1731

This use case describes the flow of configurations that are required to configure the Y.1731 feature in the Cisco ME 1200 Web GUI Interface.

Prerequisites for ITU-T Y.1731 Performance Monitoring In a Service Provider Network

• IEEE-compliant Connectivity Fault Management (CFM) must be configured and enabled for Y.1731 performance monitoring to function.



Note If we are configuring MEP in EVC domain, EVC must be configured. If we are configuring MEP in VLAN domain, VLAN must be created.

Steps to Configure Y1731

Step 1

To configure ECE, click **Configurations** > **Ethernet Services** > **ECE**. For more information, ECE Control List Configuration.

1

(11 1) CISCO		ME1200™ GigaBit Ethernet S	witch 🕋 🕞
Configuration	ECE Configuration		
POST	Loc comparaton		
 Information 	UNI Ports		
NIP	1 2 3 4 5 6		
• Time			
Green Ethernet			
Thermal Protection			
Ports	Ingress Matching	Actions	
DHCP Security	Lashus Racia M	Disastian Dath M	
Aggregation	Lookup Bosic V	Direction Both	
Link OAM	VI AN ID Eliter Specific V	TX Lookup V/D Y	
Loop Protection	VI AN ID Value 20	12CP Mode Ensward Y	
Spanning Tree	PCP Any Y	L2CP DMAC Custom	
MVR	DEL Any Y	EVC ID Filter Specific V	
IPMC	Inner Tag Type Any	EVC ID Value 1	
LLDP	Frame Type Any	Policer ID Filter Specific V	
EPS		Policer ID Value 2	
MEP		Tag Pop Count 0	
ERPS		Policy ID 0	
MAC Table		Class 2	
VLANS		Drop Precedence Disabled V	
Private VLANS			
VCL			
Voice VLAN Ethernet Services	MAC Parameters		
Ports			
• L2CP	SMAC Filter Any V		
 EVCs 	DMAC Filter Any		
• ECEs			
Monitor			
 Configuration 	Egress Outer Tag	Egress Inner Tag	(
Transfer Mode	Mode Disabled V	Type None V	0
HQoS	VLAN ID 1	VLAN ID 1	5
Mirroring	PCP Mode Classified V	PCP Mode Classified V	2

Step 2 To configure EVC, click Configuration > Ethernet Services > EVCs. For more information, see EVC Port Configuration



uluih cisco										ME	1200	™ Giga	aBit E	thernet Switch	fi ()
Configuration System	^	EVC Cor	ntrol L	ist Co	onfiguratio	n								Auto-refresh	Remove All
POST Information		-	100		Langelow	DeFerrelD	MILE Durate		Leaf	-	110				
• IP		EVCID	VID	IVID	Learning	PolicerID	NNI Ports	VID	IVID	Ports	1 HC	102 102			
• NTP • Time • Log	l	1	20	20	Disabled	None	6	0	0	None	None	Configure	● 8		88
Green Ethernet Thermal Protectic Ports DHCP Security	r si														4097

Step 3 To configure MEP, click **Configuration** > **MEP**. For more information, see Maintenance Entity Point

cisco								М	E1200™ Gi	gaBit Ethe	rnet Switch		ff ()
 Configuration System 	^	Mainten	ance Enti	ty Point									Refresh
POST Information	1	Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm	
·P			1	Evc	Mep	Down	6	3	1		B8-38-61-68-7E-1A		
Time			2	Evc	Mep	Up	3	4	1		88-38-61-68-7E-17		0
Log Green Ethernet Thermal Protectio Ports DHCP	-	Add Nev	MEP	Save R	eset								40978

Step 4 Click on the instance number which is created in the above step to configure MEP parameters.

iliilii cisco	ME1200™ GigaBit Ethernet Switch	6 0
ofiguration System • POST	MEP Configuration	Refresh
· P • NTP • Time	Instance Domain Mode Direction Residence Port Flow Instance EPS Instance This MAC 1 Evc Mep Down 6 1 0 88-38-61-68-7E-1A	
Green Ethernet Thermal Protection	Instance Configuration	
HCP	Level Format Domain Name MEG id MEP id 190E Systog cLevel eMEG eMEP calls ELCK cLoop Contig eSSF abLk	atsr
dy gation	Peer MEP Configuration	
Protection ing Tree Profile	Delete Peer MEP ID Unicast Peer MAC cLOC cRDI cPeriod cPriority 2 00.3A/99-FD-4B-52 0 0 0 0 0 0	
	Add New Peer MEP	
	Functional Configuration	
	Continuity Check APS Prioricy Cast Type Last Octet	
	Ø 2 1 time ✓ Ø Multi v [LAPS v] 1	
	Fault Management Performance Monitoring	
	TLV Configuration	
ices	Organization Specific TLV (Global) OUI Flirst OUI Second OUI Third Sub-Type Value	
	The status	
mance X	Daar Miller ID CP Presselvation Searchin CP Deat Status CP Instandans Status	
guration	OUI First OUI Scond OUI Third Sub-Type Value Last RX Value Last RX	0
	2 0 0 12 1 2 Blocked Up	6
	Link State Tracking	4097

Step 5To configure the Performance Monitoring session and storage, click Configuration > Performance Monitor >
Configuration. This enables the session and storage parameters which stores session data in the RAM storage data in
the flash respectively. For more information, see Performance Monitor Configuration

cisco					ME1200™ Gig	aBit Ethernet Switch	fi (}
 Configuration System 	^	PM Session and Storag	e Configuration				
POST Information		Туре	Enable Session	Enable Storage	Measurement Interval(mins)		
• 1P		Loss Measurement	8	2	60		
• Time		Delay Measurement	2	8	60		
+ Log		Delay Measurement Binning			Second Second		
Thermal Protectio	e -	EVC	8	2	60		91
Ports DHCP Security Aggregation		Save Reset			,		4097

Step 6To transfer performance monitoring data to a tftp/http server, click Configuration > Performance Monitor > TransferMode. For more information, see Performance Monitor Transfer Configuration

cisco	2	ME1200™ GigaBit Ethernet Switch	ff (}
Configuration System Post Post	PM Transfer Configurat PM Transfer Mode : Scheduled hours: T500 FRS 1000 FRS 2000 FRS Server Directory URL :	Ion Enabled ▼] Scheduled minutes: Ø Every 00:00 Pevery 00:15 Ø Every 00:30 Ø Every 00:45 [thp://202.153.144.25/eutolthp-bir-users1/sharh/preveen]	
EPNC Synce EPS MEP	Transfer Interval Mode :	All available intervals New intervals since last transfer Fixed number of intervals Number of intervals 32	
ERPS MAC Table VLAN Translation VLANs Private VLANs VCL Voice VLAN	Transfer Option : Save Reset	☑ Include intervals from previous incomplete transfers	409792

Step 7 To enable Performance Monitoring, click **Configuration** > **MEP** > **MEP instance** > **Performance Monitoring**. For more information, see Maintenance Entity Point

)• >									1	AE1200	™ GigaE	Bit E	thern	et Switch					fit (+
	▲ Perfor Ø Me	mance M asurement l	Ionitor De Interval ID 6	lay Measure	ment Sta	tistics tance		<) One	way ® Two	way O Both	vela	A MEP (uto-refresh 🗆 Detailed Info,	Refresh	Delote All	[<<	<<] >	» >	2
	Meas	urement rval ID	MEP	Residence Port	Priority	Rate	Unit	TX	RX	Average	Average Delay Variation	Min.	Max.	Bin						4
		<u>ର</u> ଇ	1	63	22	10 10	US US	643 587	603 585	07	0	6	9	binning.63 binning.63						40979

Step 8 To enable Fault Management, click **Configuration** > **MEP** > **MEP** instance > Fault Management.For more information, see Maintenance Entity Point

	ME1200 GigaBit Ethernet Switch	10 U
Fault Management - Instance 1 - MEP id 1		Refresh
Loop Back		03 3
Enable Dei Priority Cast Peer MEP Unicast MAC T	o Send Size Interval	
☑ 2 Multi ♥ 2 00-00-00-00 10	0 64 100	
Loop Back State		
Transaction ID Transmitted Reply MAC Received	Out Of Order	
1 0 00-00-00-00-00 0	0	
Link Trace		
Enable Priority Peer MEP Unicast MAC Time To Live		
2 2 00-00-00-00 1		
Link Trace State		
Transaction ID Time To Live Mode Direction Forwarded No Transactions	Relay Last MAC Next MAC	
Test Signal		
The second s		
Tx Rx Dei Priority Peer MEP Rate Size Pattern	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern Size Size Pattern Size Size </td <td>Sequence Number</td> <td></td>	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern 0 0 1 1 64 All Zero ✓	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern 0 1 1 64 All Zero ✓ Test Signal State TX frame count TX Rx Test time Clear	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern □ <	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern Image: Ima	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern □ □ □ 1 1 64 All Zero ✓ Test Signal State TX frame count RX frame count RX rate Test time Clear □ □ 0 0 0 □ Client Configuration Flow	Sequence Number	
Tx Rx Del Priority Peer MEP Rate Size Pattern 0 1 1 64 All Zero ✓ Test Signal State TX frame count RX frame count RX rate Test time Clear 0 0 0 0 0 O O Client Configuration Domain Flow Flow Ever 0 <td></td> <td></td>		
Tx Rx Del Priority Peer MEP Rate Size Pattern 0 1 1 64 All Zero ✓ Test Signal State TX frame count RX frame count RX rate Test time Clear 0 <	0 0 0 0 0 0	
Tx Rx Del Priority Peer MEP Rate Size Pattern 0 1 1 64 All Zero ✓ Test Signal State Tx frame count RX frame count RX rate Test time Clear 0 0 0 0 0 0 Client Configuration Domain Flow Ever 0 0 0 0 0 Level 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Tx Rx Del Priority Peer MEP Rate Size Pattern 0 1 1 64 All Zero ✓ Test Signal State TX frame count RX frame count RX rate Test time Clear 0 0 0 0 0 0 O O Client Configuration Domain Flow Ever 0 0 0 0 0 Client Configuration Domain 0 0 0 0 0 0 0 0 Client Configuration Domain 0 0 0 0 0 0 0 0 0 Client Configuration	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

Configuring RFC2544

This use case describes the flow of configurations that are required to configure the RFC2544 feature in the Cisco ME 1200 Web GUI Interface.

Steps to Configure RFC2544

Step 1To configure RFC2544, click Configuration > Traffic Test > RFC2544 > Profiles. This option provides an overview
of the defined profiles along with options for editing and deleting them and creating new one. For more information,
RFC2544 Profile Overview

)' >				ME1	200™ GigaBit	t Ethe	ernet
	FC2544 Prof	ile Config	uration				
E			Common	Parameters		110	
	Profile Name		abcd				
	Description		abcd				
	MEG Level	1	5			V	
	Egress Port		Port 3			V	
	Sequence Num	ber Check				10	I
lation	Dwell Time		2			5-6	es
NS	Туре		Port Down-MEP			V	
	VLAN ID		1				
	PCP		0			~	
ices	DEI		0			~	
	DMAC		00-00-00-00-00-01				
	-		Fram	e Sizes	1222	20	
1	64	128	256	₹ 512	1024		
1	1280	1518	2000	9600			
		1100	Tests	to Run			
1	Throughput	⊡La	itency DF	rame Loss	Back-to-Back		
			1 - 1 M - 1 - 1 - 1				
			Throughput T	est Parameters		_	
	Trial Duration		60			se	ecs
	Minimum Rate		800			%	
	Maximum Rate		1000			%	·
	Accuracy		2			%	
	Allowed Frame	Loss	0			%	
	T-110		Latency Tes	st Parameters		-	
	Trial Duration		120			50	ICS
>	Delay Meas. Int	erval	10			Se	ecs

Step 2 To disable Port 3 in STP, click **Configuration** > **Spanning Tree** > **CIST Ports**. The STP option allows you to inspect the current STP CIST port configurations and change them. For more information, see **STP CIST Port Configuration**

dge Settings TI Mapping	Port	STP Enabled		Path C	ost	Prior	rity	Admin Ed	ige	Auto Edge	Restr	TCN	BPDU Guard	Point	nt
TI Priorities		2	<>	~		0	~	0	~	2				0	~
ITI Ports	1	•	Auto	~		128	~	Non-Edge	~	2				Auto	~
Profile	2	2	Auto	~		128	×	Non-Edge	~	2				Auto	~
	3		Auto	~		128	×	Non-Edge	V	2		0		Auto	v
e l	4	Ø	Auto	~		128	×	Non-Edge	~	2				Auto	×
-	5	Ø	Auto	~		128	×	Non-Edge	Y	Ø				Auto	~
•	6	2	Auto	V		128	×	Non-Edge	×	2				Auto	~
Table Is Translation Ite VLANs	Save	Reset													

Step 3 To disable LLDP on Port 3, click **Configuration** > **LLDP** > **LLDP Port Configuration**. The LLDP option allows you to inspect and configure the current LLDP port settings. For more information, see LLDP Configuration

I

 MSTI Priorities 					C	Optional TLV	5	
MSTI Ports	Port	Mode	CDP aware	Port Descr	Sys Name	Sys Descr	Sys Capa	Mgmt Add
IPMC Profile	*	<> V			V	V	×	•
MVR	1	Enabled V				1		
PMC	2	Enabled V						•
LLDP	3	Disabled V						•
LLDP-MED	4	Enabled V						
PS	5	Enabled V						
/IEP	6	Enabled V			•			
ERPS MAC Table /LANs /LAN Translation Private VLANs	Save	Reset						

 Step 4
 To configure VLAN settings, click Configuration > VLAN > VLAN Configuration. For more information on configuring VLANs, see VLAN Configuration

Port	Mode	VLAN	Port Type	Filtering	Acceptance	Egress Tagging		Allowed VLANs	Forbidd
•	0 V	1	0 V		0 V	0	Y	1	
1	Access 🗸	1	C-Port V	2	Tagged and Untagged V	Untag All	×	1	
2	Access ♥	1	C-Port V	8	Tagged and Untagged V	Untag All	V	1	
3	Trunk 🗸	3	C-Port V	8	Tagged Only 🗸	Tag All	×	1-4095 ×	
4	Access ₩	1	C-Port V	8	Tagged and Untagged V	Untag All	V	1	
5	Access ₩	1	C-Port V	R	Tagged and Untagged V	Untag All	¥	1	
6	Access V	1	C-Port V	V	Tagged and Untagged V	Unteg All	V	1	

Step 5 To execute a test run of RFC2455 configuration, click **Configuration** > **Traffic Test** > **RFC2544** > **Reports**. For more information, see RFC2544 Report Overview

- LLDP		Report Name	xyz	
LLDP LLDP-MED		Description	report	×
 SyncE 		Profile	abcd	~
EPS MEP ERPS MAC Table VLANs Configuration SVL	ł	Run Cance	L	

Step 6 To configure on a remote nid to Loop, click **Configuration** > **Traffic Test** > **RFC2544** > **Loop**. For more information, see **TT-LOOP**

cisco							м	IE12	00™ (GigaBit I	Ethe	rnet Switch	ଳ ତ (
+LLDP +LLDP	^	Traffic Test Loop										Refresh	
- SyncE		Delete	Instance	Name	Domain	Flow	Туре	D	irection	Residence	Port	Operational State	
• EPS • MEP		Delete	1		Port V	1	Mac-Loop	✓ Fa	icility 🗸	6]		
ERPS MAC Table VLANs Configuration SVL		Add New	TT-LOOP	Save	Reset								409949

1



Step 7 The loopback must be enabled in the remote end and port should be *Active*. For more information, see Maintenance Entity Point