Configuring LST

This chapter describes how to configure Link State Tracking on theCisco ME 1200 NID

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Prerequisites for Configuring LST

- Configure UP MEP using ProvisionMepPortType template. To know more, refer creating MEP configuration.
- Configure ccmTLV in UP MEP in LSTPortType template.

Note While configuring UP MEP, the ports should be of same VLAN.

Understanding How Link State Tracking Works

Link-state tracking, also known as trunk failover, is a feature that binds the link state of multiple interfaces. When LST is enabled in an instance, Local SF or received 'isDown' in CCM Interface Status TLV, will bring down the residence port. Only valid in Up-MEP. The CCM rate must be 1 f/s or faster.

Configuring mepTLV

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 2	**controller nid** *1/NID_ID* **Example:** `Switch(config)# controller nid 1/1`	Enters the controller configuration mode.
Step 3	**LSTPortType** **Example:** `Switch(config-controller)# LSTPortType`	Enters LST Port Type configuration mode.
Step 4	**mepTLVConfiguration** **Example:** `Switch(config-controller-LSTPortType)# mepTLVConfiguration`	Enters mepTLVConfiguration mode.

Step 5	**ccmTLVConfigccmEnabled**{**enable**|**disable**}
	
	Example:
	`Switch(config-controller-LSTPortType)# mepTLVConfiguration`
	`Switch# mepTLVConfiguration ccmTLVConfig ccmEnabled enable`
		Enables or Disables ccmTLVConfig.

Step 6	**mepTLVConfigurationccmTLVConfigmepInstance***mepInstance_id*
	
	Example:
	`Switch(config-controller-LSTPortType)# mepTLVConfiguration`
	`Switch(config-controller-LSTPortType)# mepTLVConfiguration ccmTLVConfig mepInstance 1-100`
		Creates Link State Tracking Configuration at MEP instance number. The valid number is 1 to 100.

Step 7	**mepTLVConfiguration review** **Example:** `Switch(config-controller-LSTPortType)# mepTLVConfiguration review`	Reviews the mepTLVConfiguration mode.
Step 8	**mepTLVConfiguration commit** **Example:** `Switch(config-controller-LSTPortType)# mepTLVConfiguration commit`	Sends the mepTLVConfiguration to the controller.

	Command or Action	Purpose
Step 9	**exit** **Example:** `Switch(config-controller-LSTPortType)# exit`	Exits the config controller mode.

Checking ccmTLV Configuration

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 2	**controller nid** *1/NID_ID* **Example:** `Switch(config)# controller nid 1/1`	Enters the controller configuration mode.
Step 3	**LSTPortType** **Example:** `Switch(config-controller)# LSTPortType`	Enters LST Port Type configuration mode.

Step 4	**LinkStateTrackingConfigurationlinkStateTrackingConfigmepInstance***mepInstance_id*
	
	Example:
	`Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration`
	`Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration linkStateTrackConfig mepInstance 1-100`
		Creates Link State Tracking Configuration at MEP instance number. The valid number is 1 to 100.

Step 5	**getmepTLVConfiguration review** **Example:** `Switch(config-controller-LSTPortType)# getmepTLVConfiguration review`	Reviews the mepTLVConfiguration mode.
Step 6	**getmepTLVConfiguration commit** **Example:** `Switch(config-controller-LSTPortType)# getmepTLVConfiguration commit`	Sends the mepTLVConfiguration to the controller.

Configuring LST

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 2	**controller nid** *1/NID_ID* **Example:** `Switch(config)# controller nid 1/1`	Enters the controller configuration mode.
Step 3	**LSTPortType** **Example:** `Switch(config-controller)# LSTPortType`	Enters LST Port Type configuration mode.
Step 4	**LinkStateTrackingConfiguration** **Example:** `Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration`	Enters LinkStateTrackingConfiguration mode.

Step 5	**LinkStateTrackingConfigurationlinkStateTrackingConfigmepInstance***mepInstance_id*
	
	Example:
	`Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration`
	`Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration linkStateTrackConfig mepInstance 1-100`
		Creates Link State Tracking Configuration at MEP instance number. The valid number is 1 to 100.

Step 6	**LinkStateTrackingConfigurationlinkStateTrackingConfiglstEnabled**{**disable**|**enable**}
	
	Example:
	`Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration`
	`Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration linkStateTrackConfig lstEnabled enable/disable`
		Sets up LSTPortType configuration.
		• enable- Enables the LST configuration on the ports.
		• disable- Disables the LST configuration on the ports.

Step 7	**LinkStateTrackingConfiguration review** **Example:** `Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration review`	Reviews the LinkStateTrackingConfiguration mode.
Step 8	**LinkStateTrackingConfiguration commit** **Example:** `Switch(config-controller-LSTPortType)# LinkStateTrackingConfiguration commit`	Sends the LinkStateTrackingConfiguration to thecontroller.

	Command or Action	Purpose
Step 9	**exit** **Example:** `Switch(config-controller-LSTPortType)# exit`	Exits the config controller mode.

Checking LST Configuration

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 2	**controller nid** *1/NID_ID* **Example:** `Switch(config)# controller nid 1/1`	Enters the controller configuration mode.
Step 3	**LSTPortType** **Example:** `Switch(config-controller)# LSTPortType`	Enters LST Port Type configuration mode.
Step 4	**getLSTConfiguration** **Example:** `Switch(config-controller-LSTPortType)# getLSTConfiguration`	Gets the link state tracking configuration response.

Step 5	**getLSTConfigurationmepInstance***mepInstance_id*
	
	Example:
	`Switch(config-controller-LSTPortType)#getLSTConfiguration`
	`Switch(config-controller-LSTPortType)#getLSTConfiguration mepInstance 1-100`
		Creates Link State Tracking Configuration at MEP instance number. The valid number is 1 to 100.

Step 6	**getLSTConfiguration review** **Example:** `Switch(config-controller-LSTPortType)# getLSTConfiguration review`	Reviews the LSTConfiguration mode.

	Command or Action	Purpose
Step 7	**getLSTConfiguration commit** **Example:** `Switch(config-controller-LSTPortType)# getLSTConfiguration commit`	Sends the LSTConfiguration mode to the controller.

Viewing LST Configuration

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 2	**controller nid** *1/NID_ID* **Example:** `Switch(config)# controller nid 1/1`	Enters the controller configuration mode.
Step 3	**LSTPortType** **Example:** `Switch(config-controller)# LSTPortType`	Enters LST Port Type configuration mode.
Step 4	**displayLSTConfiguration** **Example:** `Switch(config-controller-LSTPortType)# displayLSTConfiguration`	Displays the link state tracking configuration response.

Step 5	**displayLSTConfigurationmepInstance***mepInstance_id*
	
	Example:
	`Switch(config-controller-LSTPortType)# displayLSTConfiguration`
	`Switch(config-controller-LSTPortType)# displayLSTConfiguration mepInstance 1-100`
		Displays Link State Tracking Configuration at MEP instance number. The valid number is 1 to 100.

Step 6	**displayLSTConfiguration review** **Example:** `Switch(config-controller-LSTPortType)# displayLSTConfiguration review`	Display the LSTConfiguration mode.

	Command or Action	Purpose
Step 7	**displayLSTConfiguration commit** **Example:** `Switch(config-controller-LSTPortType)# displayLSTConfiguration commit`	Display the LSTConfiguration mode in the controller.