



# Configuration Management

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This chapter helps you to get started and describes how to configure the initial switch configuration for the Cisco ME 1200 NID. This chapter also describes how to manage Cisco ME 1200 NID configurations.

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## Prerequisites for Managing Configurations

- You must know the default IP address of the Cisco ME 1200 NID device. It is 192.0.2.1.
- NID must be added to the controller.
- NID must be accessible from the controller.

## Restrictions for Managing Configurations

- The option `show run` command is not supported.

## Information About Configuration Management

Configuration management stores the configurations. For more information, see [Assigning the Switch IP Address and Default Gateway](#).

### Understanding the Boot Process

The Cisco ME 1200 NID device is not connected to any network soon after it is unpacked. To start your Cisco ME 1200 NID, you need to follow the procedures in the hardware installation guide about installing and

powering on the switch. This document describes login and setting up the initial configuration (IP address, subnet mask, default gateway, secret and Telnet passwords, and so forth) of the Cisco ME 1200 NID.

The boot loader provides access to the flash file system before the operating system is loaded. Normally, the boot loader is used only to load, uncompress, and launch the operating system. After the boot loader gives the operating system control of the CPU, the boot loader is not active until the next system reset or power-on.

Before you can assign switch information, make sure you have connected a PC or terminal to the console port, and configured the PC or terminal-emulation software baud rate and character format to match those of the switch console port:

- Baud rate default is 115200.
- Data bits default is 8.
- Stop bits default is 1.
- Parity settings default is none.

**Table 1: Default Boot Configuration**

Feature	Default Setting
Operating system software image	<p>The device attempts to automatically boot the system using information in the BOOT environment variable. If the variable is not set, the Cisco ME 1200 NID attempts to load and execute the first executable image it can by performing a recursive, depth-first search throughout the flash file system.</p> <p>The Cisco IOS image is stored in a directory that has the same name as the image file (excluding the .bin extension).</p> <p>In a depth-first search of a directory, each encountered subdirectory is completely searched before continuing the search in the original directory.</p>
Configuration file	<p>Configured devices use the startup-config.xml file stored on the system board in flash memory.</p> <p>A new switch has no configuration file.</p>

## Initial Configuration

The initial configuration for the Cisco ME 1200 NID uses **interface vlan 1** command and 192.0.2.1 as the IP address. It also uses spanning-tree protocol for loop avoidance.

## Getting the Cisco ME 1200 NID Connected to the Controller

To get the Cisco ME 1200 NID connected to the controller, see [Step 1—Adding the Cisco ME 1200 NID to the Controller](#)

## Specifying the Filename to Read and Write the System Configuration

By default, the Cisco IOS software uses the file startup-config.xml file to read and write a nonvolatile copy of the system configuration. To copy the running configurations to the startup-config, see [Step 10—Creating Startup-config.xml File](#).

# Getting Started

Perform the following tasks to get started with Cisco ME 1200 NID:

- 1 Add the Cisco ME 1200 NID using the **platform nid-controller** command on the controller.
- 2 Verify if the NID is added on the controller using the **show platform nid-controller** command on the controller.
- 3 Create VLAN on the controller.
- 4 Create Layer 2 VLANs on the NID.
- 5 Create Layer 2 VLANs on the controller (to access the NID on a different VLAN other than VLAN 1).

**Note**

Steps 1 through 5 are performed to access Cisco ME 1200 NID through the Controller with the default factory IP address 192.0.2.1. The steps 1 to 5 are mandatory and are sufficient to establish the initial connectivity between the controller and the Cisco ME 1200 NID.

Perform the following steps to configure a switchport as Trunk and to establish connectivity on a different switch virtual interface (SVI). You can also configure default IP route to reach various servers.

**Note****Prerequisite for configuring Steps 6 through 10**

1. The controller should be configured with a different VLAN other than VLAN 1.
2. The configuration tasks are explained assuming the controller interface 0/1 is connected to Cisco ME 1200 NID 1/1. Change the interface configurations as applicable.

- 6 Modify switchport mode as Trunk on the NID.
- 7 Create Layer 3 VLANs on the NID.
- 8 Create Layer 3 VLANs on the controller.
- 9 Configure Default IP Route .
- 10 Create Startup-config.xml file.

## Step 1—Adding the Cisco ME 1200 NID to the Controller

**Note**

Effective Cisco IOS Release 15.4(2)SN, Cisco ME3600 switch will act as controller for the Cisco ME 1200 NID.

Effective Cisco IOS Release 15.5(1)SN, the Cisco ASR 920 Series Routers can also act as controller for the Cisco ME 1200 NID.

**Step 2—Verifying the Cisco ME 1200 NID Addition onto the Controller****DETAILED STEPS**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>platform nid-controller add 192.0.2.1</b>  <b>Example:</b> Switch(config)# platform nid-controller add 192.0.2.1	Adds the Cisco ME 1200 NID using the <b>platform nid-controller</b> command on the controller. The Cisco ME 1200 NID is shipped with the factory default IP address 192.0.2.1.
<b>Step 3</b>	<b>end</b>  <b>Example:</b> Switch(config)# end	Exits to the Privileged EXEC mode.

**Configuration Example**

```
Switch# configure terminal
Switch(config)# platform nid-controller add 192.0.2.1
Switch(config)# end
```

**Step 2—Verifying the Cisco ME 1200 NID Addition onto the Controller****DETAILED STEPS**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>show platform nid-controller nids</b>  <b>Example:</b> Switch(config)# show platform nid-controller nids	Displays the Cisco ME 1200 NID IP addresses that are added to the controller.
<b>Step 3</b>	<b>end</b>  <b>Example:</b> Switch(config)# end	Exits to the Privileged EXEC mode.

**Configuration Example**

```

Switch# configure terminal
Switch# show platform nid-controller nids

NID_ID  MAC Address  IP Address    Lease   Physical Port  VLAN/BD  TFTP Server  Type
1        n/a          7.25.16.63    n/a      n/a           n/a       n/a         n/a         static
2        n/a          7.25.17.223   n/a      n/a           n/a       n/a         n/a         static

Switch(config)# end

```

**Step 3—Creating VLAN on the Controller****DETAILED STEPS**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>	Enters global configuration mode.
	<b>Example:</b> Switch# configure terminal	
<b>Step 2</b>	<b>interface vlan <i>vlan_id</i></b>	Creates VLAN 1.
	<b>Example:</b> Switch(config)# interface vlan 1	
<b>Step 3</b>	<b>ip address <i>ip_address subnet-mask</i></b>	Adds the IP address 192.0.2.2 and the subnet mask to the VLAN 1. <ul style="list-style-type: none"> <li>• <b>ip_address</b>—Enter the IP address 192.0.2.2.</li> <li>• <b>subnet-mask</b>—Enter the IP subnet mask.</li> </ul>
<b>Step 4</b>	<b>end</b>	Exits the configure terminal mode.
	<b>Example:</b> Switch(config-if)# end	

**Configuration Example**

```

Switch# configure terminal
Switch(config)# interface vlan 1
Switch(config-if)# ip address 192.0.2.2 255.255.255.0
Switch(config-if)# end

```

**What to Do Next**

Ping the IP address 192.0.2.1 to check for reachability.

## Step 4—Creating Layer 2 VLANs on the NID

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters the global configuration mode.
<b>Step 2</b>	<b>controller nid slot/port</b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch(config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.
<b>Step 4</b>	<b>createVlanCommand createVlanReq vlan_list vlan_list</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createVlanCommand createVlanReq vlan_list 100-105	Creates the VLAN list. The valid values are from 1 to 4095.
<b>Step 5</b>	<b>createVlanCommand review</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createVlanCommand review	Displays the configuration.
<b>Step 6</b>	<b>createVlanCommand commit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createVlanCommand commit	Sends the configuration to the NID.
<b>Step 7</b>	<b>ProvisionPortVlanPortTypeshow</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# showVlans showVlanRequest vlan-id 1 Switch(config-controller-ProvisionPortVlanPortType)# showVlans review	Displays the Vlan lists.
<b>Step 8</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# exit	Exits to the config-controller mode.

**Configuration Example**

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionPortVlanPortType
Switch(config-controller-ProvisionPortVlanPortType)# createVlanCommand createVlanReq vlan_list
100-105
Switch(config-controller-ProvisionPortVlanPortType)# createVlanCommand review

Commands in queue:
    createVlanCommand createVlanReq vlan_list 100-105

Switch(config-controller-ProvisionPortVlanPortType)# createVlanCommand commit

    Vlan Creation Commit Success!!!

Switch(config-controller-ProvisionPortVlanPortType)# exit

```

**Step 5—Creating Layer 2 VLANs on the Controller****DETAILED STEPS**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>	Enters global configuration mode.
	<b>Example:</b> Switch# configure terminal	
<b>Step 2</b>	<b>vlan <i>vlan_id</i></b>	Creates a different VLAN other than VLAN 1 to access the NID.
	<b>Example:</b> Switch(config)# vlan 10	
<b>Step 3</b>	<b>end</b>	Exits to the Privileged EXEC mode.
	<b>Example:</b> Switch(config-vlan)# end	

**Configuration Example**

```

Switch# configure terminal
Switch(config)# vlan 10
Switch(config-vlan)# exit

```

## Step 6—Modifying Switchport Mode as Trunk

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid 1/NID_ID</b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch(config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.
<b>Step 4</b>	<b>modifySwPort modifySWPortConfig interface interface_id</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort modifySWPortConfig interface 4	Configure the switchport configuration on the defined interface.
<b>Step 5</b>	<b>modifySwPort modifySWPortConfig mode trunk {allowed vlan {add {all   vlan_list vlan_list}   remove {all   vlan_list vlan_list}}   {native vlan vlan_list}}</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort modifySWPortConfig mode trunk allowed vlan add vlan_list 100-105	Sets the mode to TRUNK. <ul style="list-style-type: none"> <li>• <b>allowed</b>—Sets the allowed VLAN characteristics when interface is in trunk mode.</li> <li>• <b>add</b>—Adds either all VLANs or specified VLANs to the current list.</li> <li>• <b>remove</b>—Removes either all VLANs or specified VLANs from the current list.</li> <li>• <b>vlan_id</b>—The VLAN ID. The valid values are from 0 to 4095.</li> </ul>
<b>Step 6</b>	<b>modifySwPort review</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort review	Displays the configuration.
<b>Step 7</b>	<b>modifySwPort commit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort commit	Sends the configuration to the NID.

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 8</b>	<b>ProvisionPortVlanPortType show</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # showswPort showSwPortReq all Switch(config-controller-ProvisionPortVlanPortType) # showswPort review	Displays the commit, flush or review commands in queue for switchport configuration.
<b>Step 9</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # exit	Exits to the config-controller mode.

### Configuration Example

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller) # ProvisionPortVlanPortType
Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort modifySWPortConfig
interaface 4
Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort modifySWPortConfig mode
trunk allowed vlan add vlan_list 100-105
Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort review

Commands in queue:
    modifySwPort modifySWPortConfig interaface 4
    modifySwPort modifySWPortConfig mode trunk allowed vlan add vlan_list 100-105

Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort commit

ModifySwPort_Output.modifySwPortConfigResp = 0
Modify SwitchPort Commit Success!!!

Switch(config-controller-ProvisionPortVlanPortType) # exit

```

## (Optional Step) Configuring Native VLAN

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid <i>I/NID_ID</i></b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.

**Step 6—Modifying Switchport Mode as Trunk**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch (config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.
<b>Step 4</b>	<b>modifySwPort modifySWPortConfig mode trunk {allowed   native vlan <i>vlan_id</i>}</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort modifySWPortConfig mode trunk native vlan 110	Assigns a native VLAN. Changing native VLAN is not always necessary. The device may lose connectivity if you change the native VLAN. You cannot access the NID by any way, if you change the native VLAN unless the native VLAN is same on both, the NID and the controller.
<b>Step 5</b>	<b>modifySwPort review</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort review	Displays the configuration.
<b>Step 6</b>	<b>modifySwPort commit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort commit	Sends the configuration to the NID.
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType) # exit	Exits to the config-controller mode.

**Example**

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller) # ProvisionPortVlanPortType
Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort modifySWPortConfig mode
trunk native vlan 110
Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort review

Commands in queue:
    modifySwPort modifySWPortConfig mode trunk native vlan 110

Switch(config-controller-ProvisionPortVlanPortType) # modifySwPort commit

    ModifySwPort_Output.modifySwPortConfigResp = 0
    Modify SwitchPort Commit Success!!!

Switch(config-controller-ProvisionPortVlanPortType) # exit

```

## Step 7—Creating Layer 3 VLANs on the NID

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid 1/NID_ID</b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch (config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.
<b>Step 4</b>	<b>createIntVlan createIntVlanReq vlan_id vlan_id</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq vlan_id 22	Creates the layer 3 VLAN.
<b>Step 5</b>	<b>createIntVlan createIntVlanReq {address {ipv4 {dhcp   ipv4_address}   ipv6 ipv6_address ipv6_address}   vlan-id vlan_id}</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq address ipv4 ipv4_address address 22.22.22.3 Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq address ipv4 ipv4_address mask 255.255.255.0 Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq address ipv6 ipv6_address 2001:4::1/64	Creates the interface VLAN on the specified IPv4 or IPv6 address, or VLAN ID.
<b>Step 6</b>	<b>createIntVlan review</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan review	Displays the configuration.
<b>Step 7</b>	<b>createIntVlan commit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan commit	Sends the configuration to the NID.

**Step 7—Creating Layer 3 VLANs on the NID**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 8</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionPortVlanPortType)# exit	Exits to the config-controller mode.

**Configuration Example**

Example 1: IPv4

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionPortVlanPortType
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq vlan_Id
    22
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq address
    ipv4 ipv4_address address 22.22.22.3
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq address
    ipv4 ipv4_address mask 255.255.255.0
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan review

Commands in queue:
    createIntVlan createIntVlanReq vlan_id 22
    createIntVlan createIntVlanReq address ipv4 ipv4_address address 22.22.22.3
    createIntVlan createIntVlanReq address ipv4 ipv4_address mask 255.255.255.0

Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan commit

CreateIntVlan_Output.createIntVlanResp = 0

Create Interface Vlan Commit Success!!!

Switch(config-controller-ProvisionPortVlanPortType)# exit

```

Example 2: IPv6

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionPortVlanPortType
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq vlan_Id
    22
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan createIntVlanReq address
    ipv6 ipv6_address 2001:4::1/64
Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan review

Commands in queue:
    createIntVlan createIntVlanReq vlan_id 22
    createIntVlan createIntVlanReq address ipv6 ipv6_address 2001:4::1/64

Switch(config-controller-ProvisionPortVlanPortType)# createIntVlan commit

CreateIntVlan_Output.createIntVlanResp = 0

Create Interface Vlan Commit Success!!!

Switch(config-controller-ProvisionPortVlanPortType)# exit

```

## Step 8—Creating Layer 3 VLANs on the Controller

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>interface vlan <i>vlan_interface_number</i></b>  <b>Example:</b> Switch(config)# interface vlan 20	Creates the VLAN interface.
<b>Step 3</b>	<b>ip address <i>IP address IP subnet mask</i></b>  <b>Example:</b> Switch(config-if)# ip address 10.10.10.1 255.255.255.0	Assigns the IP address to the interface VLAN.
<b>Step 4</b>	<b>no shutdown</b>  <b>Example:</b> Switch(config-if)# no shutdown	Performs a no shutdown operation.
<b>Step 5</b>	<b>end</b>  <b>Example:</b> Switch(config-if)# end	Exits to the Privileged EXEC mode.

### Configuration Example

```
Switch# configure terminal
Switch(config)# interface vlan 20
Switch(config)# ip address 10.10.10.1 255.255.255.0
Switch(config)# no shutdown
Switch(config)# end
```

## Step 9—Configuring IP Route

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.

## Step 9—Configuring IP Route

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 2</b>	<b>controller nid 1/NID_ID</b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch(config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.
<b>Step 4</b>	<b>setiproute setIpRouteReq {gateway_ip WORD ipv4_address WORD   ipv4_mask WORD}</b>  <b>Example:</b> Switch(config-controller-ProvisionNIDMgmtType)# setIpRoute setIpRouteReq ipv4_address 10.0.0.144.0 Switch(config-controller-ProvisionNIDMgmtType)# setIpRoute setIpRouteReq ipv4_mask 255.255.255.0 Switch(config-controller-ProvisionNIDMgmtType)# setIpRoute setIpRouteReq gateway_ip 10.0.0.1	Configures the IP Route.  <ul style="list-style-type: none"> <li>• <b>gateway_ip</b>—Specifies the gateway IPv4 address. ◦ <i>WORD</i>—IPv4 address.</li> <li>• <b>ipv4_address</b>—Specifies the IPv4 Network/Address. ◦ <i>WORD</i>—IPv4 Network/Address.</li> <li>• <b>ipv4_mask</b>—Specifies the IPv4 mask. ◦ <i>WORD</i>—IPv4 mask.</li> </ul>
<b>Step 5</b>	<b>setiproute review</b>  <b>Example:</b> Switch(config-controller-ProvisionNIDMgmtType)# setiproute review	Displays the configuration.
<b>Step 6</b>	<b>getiproute commit</b>  <b>Example:</b> Switch(config-controller-ProvisionNIDMgmtType)# setiproute commit	Sends the configuration to the NID.
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionNIDMgmtType)# exit	Exits to the config-controller mode.

**Configuration Example**

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionNIDMgmtType
Switch(config-controller-ProvisionNIDMgmtType)# setIpRoute setIpRouteReq ipv4_address
10.0.0.144.0
Switch(config-controller-ProvisionNIDMgmtType)# setIpRoute setIpRouteReq ipv4_mask
255.255.255.0

```

```

Switch(config-controller-ProvisionNIDMgmtType)# setIpRoute setIpRouteReq gateway_ip 10.0.0.1
Switch(config-controller-ProvisionNIDMgmtType)# setiproute review
Commands in Queue:
    setIpRoute setIpRouteReq ipv4_address 10.0.144.0
    setIpRoute setIpRouteReq ipv4_mask 255.255.255.0
    setIpRoute setIpRouteReq gateway_ip 10.0.0.1

Switch(config-controller-ProvisionNIDMgmtType)# setiproute commit
    Setiproute Commit Success!!!

Switch(config-controller-ProvisionNIDMgmtType)# exit

```

## Step 10—Creating Startup-config.xml File

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid <i>I/NID_ID</i></b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch(config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.
<b>Step 4</b>	<b>copyConfig copyConfigRequest {src {default-config   flash WORD   running-config   startup-config   tftp WORD}   dst {flash WORD   running-config   startup-config   tftp WORD}}</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType)# copyConfig copyConfigRequest src running-config Switch(config-controller-ProvisionConfigMGMTPortType)# copyConfig copyConfigRequest dst startup-config	Copies the configuration. <ul style="list-style-type: none"> <li>• <b>src</b>—Specifies the source location. <ul style="list-style-type: none"> <li>◦ <b>default</b>—Copies to the default-config file.</li> <li>◦ <b>flash</b>—Copies onto the flash.</li> <li>◦ <i>WORD</i>—Filename. The format is flash:&lt;filename&gt;. For example, flash:ToTest.</li> </ul> </li> <li>◦ <b>running-config</b>—Copies to the running-config file.</li> <li>◦ <b>startup-config</b>—Copies to the startup-config file.</li> <li>◦ <b>tftp</b>—Copies to the TFTP server.</li> <li>◦ <i>WORD</i>—TFTP filename. The format is tftp://server/path-and-filename. For example, tftp://10.0.0.221/ToTest.</li> </ul>

## Step 10—Creating Startup-config.xml File

	Command or Action	Purpose
		<ul style="list-style-type: none"> <li>• <b>dst</b>—Specifies the destination location.           <ul style="list-style-type: none"> <li>◦ <b>flash</b>—Copies onto the flash.</li> <li>◦ <i>WORD</i>—Filename. The format is flash:&lt;filename&gt;. For example, flash:ToTest.</li> </ul> </li> <li>◦ <b>running-config</b>—Copies to the running-config file.</li> <li>◦ <b>startup-config</b>—Copies to the startup-config file.</li> <li>◦ <b>tftp</b>—Copies to the TFTP server.</li> <li>◦ <i>WORD</i>—TFTP filename. The format is tftp://server/path-and-filename. For example, tftp://10.0.0.221/ToTest.</li> </ul>
<b>Step 5</b>	<b>copyConfig review</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig review	Displays the configuration.
<b>Step 6</b>	<b>copyConfig commit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig commit	Sends the configuration to the NID.
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # exit	Exits to the config-controller mode.

**Configuration Example**

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType)#
copyConfig copyConfigRequest src
running-config
Switch(config-controller-ProvisionConfigMGMTPortType)#
copyConfig copyConfigRequest dst
startup-config

Switch(config-controller-ProvisionConfigMGMTPortType)#
copyConfig review
Commands in Queue:
copyConfig copyConfigRequest src running-config
copyConfig copyConfigRequest dst startup-config

```

```

Switch(config-controller-ProvisionConfigMGMTPortType)# copyConfig commit
CopyConfig Commit Success!!!
Switch(config-controller-ProvisionConfigMGMTPortType)# exit

```

# How to Manage Configurations

## Listing Configurations

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>	Enters global configuration mode.
	<b>Example:</b> Switch# configure terminal	
<b>Step 2</b>	<b>controller nid I/NID_ID</b>	Enters the controller configuration mode.
	<b>Example:</b> Switch(config)# controller nid 1/1	
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>	Enters the ProvisionPortVlanPortType mode.
	<b>Example:</b> Switch(config-controller)# ProvisionPortVlanPortType	
<b>Step 4</b>	<b>listConfigs listConfigsReq</b>	Lists the configuration.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType)# listConfigs listConfigsReq	
<b>Step 5</b>	<b>listConfigs review</b>	Displays the configuration.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType)# listConfigs review	
<b>Step 6</b>	<b>listConfigs commit</b>	Fetches listing of flash configuration on the NID.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType)# listConfigs commit	
<b>Step 7</b>	<b>exit</b>	Exits to the config-controller mode.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType)# exit	

### Configuration Example

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionConfigMGMPortType
Switch(config-controller-ProvisionConfigMGMPortType)# listConfigs listConfigsReq
Switch(config-controller-ProvisionConfigMGMPortType)# listConfigs review

Commands in Queue:
    listConfigs listConfigsReq

Switch(config-controller-ProvisionConfigMGMPortType)# listConfigs commit

ListConfigs_Output.configFiles.files[0].fileName = 'default-config'
ListConfigs_Output.configFiles.files[0].fileSize = ' 1100'
ListConfigs_Output.configFiles.files[0].timeStamp = '1970-01-01 00:00:00'
ListConfigs_Output.configFiles.files[0].permissions = 'r-'
ListConfigs_Output.configFiles.files[1].fileName = 'startup-config'
ListConfigs_Output.configFiles.files[1].fileSize = ' 1552'
ListConfigs_Output.configFiles.files[1].timeStamp = '1970-01-01 00:04:44'
ListConfigs_Output.configFiles.files[1].permissions = 'rw'
ListConfigs_Output.configFiles.files[2].fileName = 'startup-config.xml'
ListConfigs_Output.configFiles.files[2].fileSize = ' 149016'
ListConfigs_Output.configFiles.files[2].timeStamp = '2014-03-25 10:15:58'
ListConfigs_Output.configFiles.files[2].permissions = 'rw'
ListConfigs_Output.configFiles.files[3].fileName = 'Totest'
ListConfigs_Output.configFiles.files[3].fileSize = ' 149016'
ListConfigs_Output.configFiles.files[3].timeStamp = '2014-03-25 10:20:31'
ListConfigs_Output.configFiles.files[3].permissions = 'rw'

ListConfigs Commit Success!!!

Switch(config-controller-ProvisionConfigMGMPortType)# exit

```

## Verifying Configuration Version

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>	Enters global configuration mode.
	<b>Example:</b> Switch# configure terminal	
<b>Step 2</b>	<b>controller nid <i>I/NID_ID</i></b>	Enters the controller configuration mode.
	<b>Example:</b> Switch(config)# controller nid 1/1	
<b>Step 3</b>	<b>ProvisionConfigMGMPortType</b>	Enters the ProvisionConfigMGMPortType mode.
	<b>Example:</b> Switch(config-controller)# ProvisionConfigMGMPortType	
<b>Step 4</b>	<b>showVersion showVersionReq</b>	Displays the version.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMPortType)# showVersion showVersionReq	

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 5</b>	<b>showVersion review</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # showVersion review	Displays the configuration.
<b>Step 6</b>	<b>showVersion commit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # showVersion commit	Sends the configuration to the NID.
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # exit	Exits to the config-controller mode.

### Configuration Example



**Note** The Active.Image is the current image and Alternative.Image is the backup image. While upgrading the image, you can choose to swap Active.Image with Alternate.Image.

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller) # ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType) # showVersion showVersionReq
Switch(config-controller-ProvisionConfigMGMTPortType) # showVersion review

Commands in Queue:
    showVersion showVersionReq

Switch(config-controller-ProvisionConfigMGMTPortType) # showVersion commit

ShowVersion_Output.showVersionResp.Active.Image = 'me1200-universal-mz.154-2.SN.dat'
ShowVersion_Output.showVersionResp.Active.Version = 'ME1200 OS Software Build 15.4-2.SN'

ShowVersion_Output.showVersionResp.Active.Date = 'Fri Mar 21 10:08:34 PDT 2014'
ShowVersion_Output.showVersionResp.Alternative.Image = 'me1200-universal-mz.dat'
ShowVersion_Output.showVersionResp.Alternative.Version = 'ME1200 OS Software Build
15.4-2.SN'
ShowVersion_Output.showVersionResp.Alternative.Date = 'Fri Mar 21 05:56:50 PDT 2014'

ShowVersion Commit Success!!!

Switch(config-controller-ProvisionConfigMGMTPortType) # exit

```

# Copying Configuration

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid 1/NID_ID</b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionConfigMGMPortType</b>  <b>Example:</b> Switch(config-controller)# ProvisionConfigMGMPortType	Enters the ProvisionConfigMGMPortType mode.
<b>Step 4</b>	<b>copyConfig copyConfigRequest {src {default-config   flash WORD   running-config   startup-config   tftp WORD}   dst {flash WORD   running-config   startup-config   tftp WORD}}</b>  <b>Example:</b>  Switch(config-controller-ProvisionConfigMGMPortType) # copyConfig copyConfigRequest src running-config Switch(config-controller-ProvisionConfigMGMPortType) # copyConfig copyConfigRequest dst startup-config  In this example, the Source is the running-config, and the Destination is the startup-config. When you use these commands for the first time on the Cisco ME 1200 NID, the NID creates the startup-config.xml file in the flash, which is used during the device boot-up. When the device reloads for the first time, it uses the startup-config.xml file.	<p>Copies the configuration.</p> <ul style="list-style-type: none"> <li>• <b>src</b>—Specifies the source location.           <ul style="list-style-type: none"> <li>◦ <b>default</b>—Copies to the default-config file.</li> <li>◦ <b>flash</b>—Copies onto the flash.               <ul style="list-style-type: none"> <li>◦ <i>WORD</i>—Filename. The format is flash:&lt;filename&gt;. For example, flash:ToTest.</li> </ul> </li> <li>◦ <b>running-config</b>—Copies to the running-config file.</li> <li>◦ <b>startup-config</b>—Copies to the startup-config file.</li> <li>◦ <b>tftp</b>—Copies to the TFTP server.               <ul style="list-style-type: none"> <li>◦ <i>WORD</i>—TFTP filename. The format is tftp://server/path-and-filename. For example, tftp://10.0.0.221/ToTest.</li> </ul> </li> </ul> </li> <li>• <b>dst</b>—Specifies the destination location.           <ul style="list-style-type: none"> <li>◦ <b>flash</b>—Copies onto the flash.               <ul style="list-style-type: none"> <li>◦ <i>WORD</i>—Filename. The format is flash:&lt;filename&gt;. For example, flash:ToTest.</li> </ul> </li> </ul> </li> </ul>

	<b>Command or Action</b>	<b>Purpose</b>
		<ul style="list-style-type: none"> <li>◦ <b>running-config</b>—Copies to the running-config file.</li> <li>◦ <b>startup-config</b>—Copies to the startup-config file.</li> <li>◦ <b>tftp</b>—Copies to the TFTP server.           <ul style="list-style-type: none"> <li>◦ <i>WORD</i>—TFTP filename. The format is tftp://server/path-and-filename. For example, tftp://10.0.0.221/ToTest.</li> </ul> </li> </ul>
<b>Step 5</b>	<b>copyConfig review</b>	Displays the configuration.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig review	
<b>Step 6</b>	<b>copyConfig commit</b>	Sends the configuration to the NID.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig commit	
<b>Step 7</b>	<b>exit</b>	Exits to the config-controller mode.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # exit	

### Configuration Example

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig copyConfigRequest src
running-config
Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig copyConfigRequest dst
startup-config
Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig review

Commands in Queue:
  copyConfig copyConfigRequest src running-config
  copyConfig copyConfigRequest dst startup-config

Switch(config-controller-ProvisionConfigMGMTPortType) # copyConfig commit

CopyConfig Commit Success!!!

Switch(config-controller-ProvisionConfigMGMTPortType) # exit

```

**Note**

When the running-config file is copied to the TFTP server, by default, it stores the file in the XML format. You need not mention the XML extension explicitly. This holds good vice versa as well.

**Note**

When the Source is TFTP and the Destination is running-config, the TFTP file *appends* to the existing running-config, and does not overwrite the running-config file.

## Deleting Configuration

### DETAILED STEPS

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>	Enters global configuration mode.
	<b>Example:</b> Switch# configure terminal	
<b>Step 2</b>	<b>controller nid I/NID_ID</b>	Enters the controller configuration mode.
	<b>Example:</b> Switch(config)# controller nid 1/1	
<b>Step 3</b>	<b>ProvisionConfigMGMPortType</b>	Enters the ProvisionConfigMGMPortType mode.
	<b>Example:</b> Switch(config-controller)# ProvisionConfigMGMPortType	
<b>Step 4</b>	<b>deleteConfFile configName {configFileWORD}</b>	Deletes the configuration.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # deleteConfFile configName configFile flash:ToTest	<ul style="list-style-type: none"> <li>• <b>configFile</b>—Specifies the configuration file to be deleted.</li> <li>◦ <i>WORD</i>—File name. The format is <b>flash:filename</b>.</li> </ul>
<b>Step 5</b>	<b>deleteConfFile review</b>	Displays the configuration.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # deleteConfFile review	
<b>Step 6</b>	<b>deleteConfFile commit</b>	Sends the configuration to the NID.
	<b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # deleteConfFile commit	

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # exit	Exits to the config-controller mode.

## Configuration Example

```
Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType)# deleteConfFile configName configFile
flash:ToTest
Switch(config-controller-ProvisionConfigMGMTPortType)# deleteConfFile review

Commands in Queue:
  deleteConfFile configName configFile flash:ToTest

Switch(config-controller-ProvisionConfigMGMTPortType)# deleteConfFile commit

  DeleteConfFile Commit Success!!!

Switch(config-controller-ProvisionConfigMGMTPortType)# exit
```

## **What to Do Next**

Use the `listConfigs` `listConfigsReq` command to verify the delete action.

```
Switch(config-controller-ProvisionConfigMGMTPortType)# listConfigs listConfigsReq  
Switch(config-controller-ProvisionConfigMGMTPortType)# listConfigs review  
Switch(config-controller-ProvisionConfigMGMTPortType)# listConfigs commit
```

## **Reloading the System**

## **DETAILED STEPS**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid 1/NID_ID</b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionPortVlanPortType</b>  <b>Example:</b> Switch(config-controller)# ProvisionPortVlanPortType	Enters the ProvisionPortVlanPortType mode.

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 4</b>	<b>reloadSystem reloadSystemReq {last_saved}</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # reloadSystem reloadSystemReq last_saved	Reloads the configuration.  • <b>last_saved</b> —Reloads from the last saved configuration.
<b>Step 5</b>	<b>reloadSystem review</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # reloadSystem review	Displays the configuration.
<b>Step 6</b>	<b>reloadSystem commit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # reloadSystem commit	Sends the configuration to the NID.
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # exit	Exits to the config-controller mode.

### Configuration Example

```

Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller) # ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType) # reloadSystem reloadSystemReq last_saved
Switch(config-controller-ProvisionConfigMGMTPortType) # reloadSystem review

Commands in Queue:
    reloadSystem reloadSystemReq last_saved

Switch(config-controller-ProvisionConfigMGMTPortType) # reloadSystem commit

    ReloadSystem Commit Success!!!

Switch(config-controller-ProvisionConfigMGMTPortType) # exit

```



**Note**

To reboot the system with the last saved changes, copy the configurations from running-config (source) to startup-config.xml (destination) file before you reload the system. This ensures the system boots-up with the latest configuration.

# Upgrading Configuration

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b>  <b>Example:</b> Switch# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>controller nid <i>1/NID_ID</i></b>  <b>Example:</b> Switch(config)# controller nid 1/1	Enters the controller configuration mode.
<b>Step 3</b>	<b>ProvisionConfigMGMPortType</b>  <b>Example:</b> Switch(config-controller) # ProvisionConfigMGMPortType	Enters the ProvisionConfigMGMPortType mode.
<b>Step 4</b>	<b>upgradeImage upgradeImageRequest {swap   upgrade {tftp WORD}}</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # upgradeImage upgradeImageRequest upgrade tftp tftp://<TFTP Server address>/<Path and file name>	Upgrades the configuration. <ul style="list-style-type: none"> <li>• <b>swap</b>—Swaps the configuration between Active and Alternate firmware images.</li> </ul> <p><b>Note</b> When the Cisco ME1200 NID is upgraded, the previous image is stored as a Backup image in the flash. Use the <b>upgradeImage upgradeImageRequest swap</b> command to load the system with the old image. To view the Active and Alternative (backup) firmware images, see the <a href="#">Verifying Configuration Version</a>.</p> <ul style="list-style-type: none"> <li>• <b>upgrade</b>—Upgrades the image.               <ul style="list-style-type: none"> <li>◦ <b>tftp</b>—Specifies the TFTP location.</li> <li>◦ <b>WORD</b>—TFTP details. Enter the tftp://server/path-and-filename.</li> </ul> </li> </ul>
<b>Step 5</b>	<b>upgradeImage review</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # upgradeImage review	Displays the configuration.
<b>Step 6</b>	<b>upgradeImage commit</b>  <b>Example:</b> Switch(config-controller-ProvisionConfigMGMTPortType) # upgradeImage commit	Sends the configuration to the NID.

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 7</b>	<b>exit</b>  <b>Example:</b> <pre>Switch(config-controller-ProvisionConfigMGMTPortType)#   exit</pre>	Exits to the config-controller mode.

### Configuration Example

Example 1: Upgrade

```
Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType)#
upgradeImage upgradeImageRequest
upgrade tftp tftp://<TFTP Server address>/<Path and file name>
Switch(config-controller-ProvisionConfigMGMTPortType)#
upgradeImage review

Commands in Queue:
  upgradeImage upgradeImageRequest upgrade tftp tftp://<TFTP Server add>/<Path and file
name>

Switch(config-controller-ProvisionConfigMGMTPortType)#
upgradeImage commit

UpgradeImage Commit Success!!!

Switch(config-controller-ProvisionConfigMGMTPortType)#
exit
```

Example 2: Swap

```
Switch# configure terminal
Switch(config)# controller nid 1/1
Switch(config-controller)# ProvisionConfigMGMTPortType
Switch(config-controller-ProvisionConfigMGMTPortType)#
upgradeImage upgradeImageRequest
swap
Switch(config-controller-ProvisionConfigMGMTPortType)#
upgradeImage review

Commands in Queue:
  upgradeImage upgradeImageRequest swap

Switch(config-controller-ProvisionConfigMGMTPortType)#
upgradeImage commit

UpgradeSwap commit success !!!!

Switch(config-controller-ProvisionConfigMGMTPortType)#
exit
```