Adding a New Switch to an Existing Virtual Chassis Configuration (CLI Procedure)

You can add one or more EX4200 switches to an existing Virtual Chassis configuration. Up to ten EX4200 switches can be included within a Virtual Chassis configuration. You can add the new switches to either type—nonprovisioned or preprovisioned—of Virtual Chassis configuration. See Configuring a Virtual Chassis (CLI Procedure) for descriptions of these types.

To add a switch to an existing Virtual Chassis configuration, use the procedure that matches what you need to accomplish:

Adding a New Switch to an Existing Virtual Chassis Configuration Within the Same Wiring Closet

Before you begin, be sure you have:

- Mounted the new switch in a rack.
- Confirmed that the new switch is powered off.
- If you are expanding a preprovisioned configuration, made a note of the serial number (on the back of the switch). You will need to edit the Virtual Chassis configuration to include the serial number of the new member switch.
- If you are expanding a preprovisioned configuration, edited the existing Virtual Chassis configuration to include the serial number of the new member switch. You can specify the role of the new member switch when you add its serial number in the Virtual Chassis configuration file. The parameters specified in the master Virtual Chassis configuration file are applied after the new member switch has been interconnected to an existing member switch.

NOTE: After you have created a preprovisioned Virtual Chassis configuration, you can use the autoprovisioning feature to add member switches to that configuration.

To add a new member switch to an existing Virtual Chassis configuration within the same wiring closet:

1. If the new member switch has been previously configured, revert that switch's configuration to the factory defaults. See Reverting to the Default Factory Configuration for the EX Series Switch.
2. Interconnect the unpowered new switch to at least one member of the existing Virtual Chassis configuration using the dedicated Virtual Chassis ports (VCPs).

3. Power on the new switch.
4. Confirm that the new member switch is now included within the Virtual Chassis configuration by checking the front-panel display for the member ID. It should display a member ID that is higher than 0 (1 through 9), because there is already at least one member of the Virtual Chassis configuration.

NOTE: If you are using a preprovisioned configuration, the member ID is automatically assigned to the member's serial number in the configuration file.

Adding a New Switch from a Different Wiring Closet to an Existing Virtual Chassis Configuration

To add a new switch from a different wiring closet to an existing Virtual Chassis configuration, you must use a long cable to connect the new member switch across wiring closets. You can use a port on an SFP, SFP + or XFP uplink module, or an SFP network port on an EX4200-24F switch, and a fiber-optic cable for this purpose.

Before you begin, be sure you have:

- Installed the uplink modules needed for the Virtual Chassis configuration.
- Mounted the new switch in a rack.
- If the new member switch has been previously configured, reverted its configuration to the factory defaults. See Reverting to the Default Factory Configuration for the EX Series Switch.
- Powered on the new member switch as a standalone switch and configured its uplink module ports as VCPs. Otherwise, it cannot be recognized as a member switch by the master.
- If you are expanding a preprovisioned configuration, made a note of the serial number (on the back of the switch). You will need to edit the Virtual Chassis configuration to include the serial number of the new member switch.
- If you are expanding a preprovisioned configuration, edited the existing Virtual Chassis configuration to include the serial number of the new member switch. You can specify the role of the new member switch when you add its serial number in the Virtual Chassis configuration file. The parameters specified in the master Virtual Chassis configuration file are applied after the new member switch has been interconnected with its uplink VCP to an existing member switch.
- Confirmed that the new, currently standalone switch is powered off.
- Prepared an existing member switch for interconnecting with the new switch through an uplink module port by configuring an uplink module port as a VCP on the existing member switch.

NOTE: After you have created a preprovisioned Virtual Chassis configuration, you can use the autoprovisioning feature to add member switches to that configuration.

To add a new member switch that is going to be interconnected with the existing Virtual Chassis configuration across wiring closets:

1. Power on the new switch.
2. Connect a laptop or terminal to the console port of the switch, or use EZSetup on the standalone switch to specify temporary identification parameters. (When you interconnect the new member switch with the existing Virtual Chassis configuration, the master will overwrite and disable any specified parameters that conflict with the Virtual Chassis parameters or assigned member configuration.)
3. Use the CLI or the J-Web interface to set the uplink module ports as VCPs.

NOTE: If you are using a nonprovisioned configuration, you might configure the new member switch with a mastership priority value that is less than that of the existing member switches. Doing so ensures that the new member switch will function in a linecard role when it is included within the Virtual Chassis configuration.

4. Power off the new switch.
5. Interconnect the new member switch to at least one member of the existing Virtual Chassis configuration using the uplink module ports on each of the switches that have been configured as VCPs.
6. Power on the new member switch.
7. Confirm that the new member switch is now included within the Virtual Chassis configuration by checking the front-panel display for the member ID. It should display a member ID that is higher than 0 (1 through 9), because there is already at least one member of the Virtual Chassis configuration.

NOTE: If you are using a preprovisioned configuration, the member ID is automatically assigned to the member's serial number in the configuration file.

Adding a New Switch to an Existing Preprovisioned Virtual Chassis Configuration Using Autoprovisioning

Before you begin, be sure you have:

- Installed the uplink modules needed for the Virtual Chassis configuration.
- Mounted the new switch in a rack.
- Ensured that the preprovisioned Virtual Chassis configuration has an active master. For more information, see Example: Configuring a Virtual Chassis Using a Preprovisioned Configuration File.
- On the master, configured the Link Level Discovery Protocol (LLDP) on the uplink module ports that will be used as VCPs. LLDP is configured by default but might have been disabled. To configure LLDP, see Configuring LLDP (CLI Procedure) or Configuring LLDP (J-Web Procedure).

- Ensured that the new member switch has the factory-default configuration. If the new member switch has been previously configured, revert its configuration to the factory defaults. See Reverting to the Default Factory Configuration for the EX Series Switch.
- Made a note of the serial number (on the back of the switch). You will need to edit the Virtual Chassis configuration to include the serial number of the new member switch.
- Edited the existing Virtual Chassis preprovisioned configuration to include the serial number of the new member switch. You can specify the role of the new member switch when you add its serial number to the Virtual Chassis configuration file. The parameters specified in the master Virtual Chassis configuration file are applied to the new member switch after it has been interconnected through its uplink VCP to an existing member switch.
- Prepared an existing member switch to interconnect with the new switch through an uplink module port by configuring an uplink module port as a VCP on the existing member switch.
- Ensured that the operational modes of the uplink modules on the existing member switch and the new member switch match.
- Confirmed that the new member switch is powered off.
- Interconnected the existing switch with the new switch using the appropriate cable.

If these conditions are not met, autoprovisioning will not work and you will need to manually configure uplink module ports on the switch to be added to the configuration to be VCPs. For more information, see Setting an Uplink Module Port as a Virtual Chassis Port (CLI Procedure).

To add a switch to an existing preprovisioned Virtual Chassis configuration using the autoprovisioning feature:

1. Power on the new member switch.
2. Confirm that the new member switch is now included in the Virtual Chassis configuration by checking the front-panel display for the member ID. It should display a member ID in the range from 0 through 9 because there was already at least one member of the Virtual Chassis configuration. The member ID is automatically assigned to the new member switch's serial number in the configuration file.

Related Topics

- Example: Expanding a Virtual Chassis Configuration in a Single Wiring Closet
- Example: Setting Up a Multimember Virtual Chassis Access Switch with a Default Configuration
- Example: Configuring a Virtual Chassis Interconnected Across Multiple Wiring Closets
- Example: Configuring a Virtual Chassis Using a Preprovisioned Configuration File
- Monitoring Virtual Chassis Configuration Status and Statistics

- Replacing a Member Switch of a Virtual Chassis Configuration (CLI Procedure)
- Reverting to the Default Factory Configuration for the EX Series Switch

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