



# Upgrading Memory to 256MB in VPN 3000 Series Concentrators

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Follow these instructions to add a 128-MB memory module to your VPN 3000 Concentrator.

## Before You Begin

Save the current VPN 3000 Concentrator configuration file and copy it to a remote system before you proceed. See the Administration | File Management | TFTP Transfer screen in the VPN Concentrator Manager.



**Caution**

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The VPN Concentrator and the memory module contain electronic components that are sensitive to electrostatic discharge (ESD). Improper handling could damage components. Leave the module in its protective ESD-shielded envelope until instructed to remove it, and handle it only as instructed. If you have reservations about installing the module, ask for assistance from a qualified technician.

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## Parts Cisco Supplies

The upgrade kit includes these parts:

- 128-MB memory module.
- Disposable wrist strap ESD protection kit.

## Tools You Need

No. 2 Phillips screwdriver.



## Shutting Down and Powering Off

*Shut down and power off the VPN 3000 Concentrator before you install the module.*

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- Step 1** Using the VPN Concentrator Manager, shut down the VPN Concentrator (see the Administration | System Reboot screen).
  - Step 2** Turn power off: press **O** on the power switch on the rear of the chassis.
  - Step 3** Disconnect power cord from the system and the power outlet.
  - Step 4** Disconnect all network cables and the console cable.
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### Warning

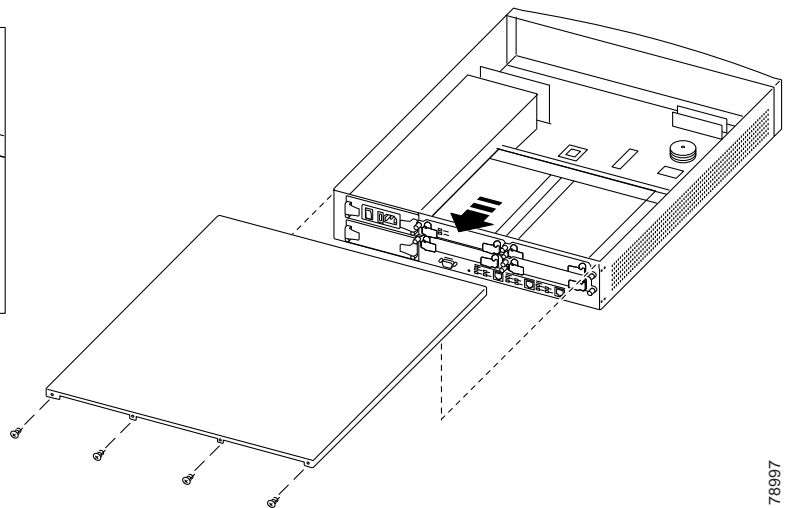
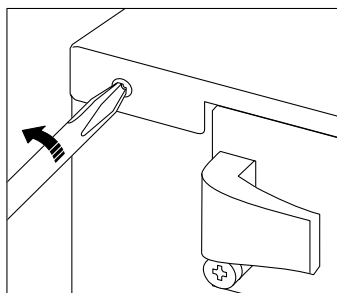
Hazardous voltages and the risk of electrical shock may be present inside the VPN Concentrator chassis. Always disconnect the power cord before removing the chassis cover. Never operate the VPN Concentrator with the cover removed.

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## Adding the Memory Module

After you shut down the VPN 3000 Concentrator and disconnect the power cord, you can add the memory module, following these steps:

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- Step 1** Remove the VPN 3000 Concentrator chassis cover. Four screws hold it in place. Pull the cover back and lift it off. Do not let screws fall into the unit.



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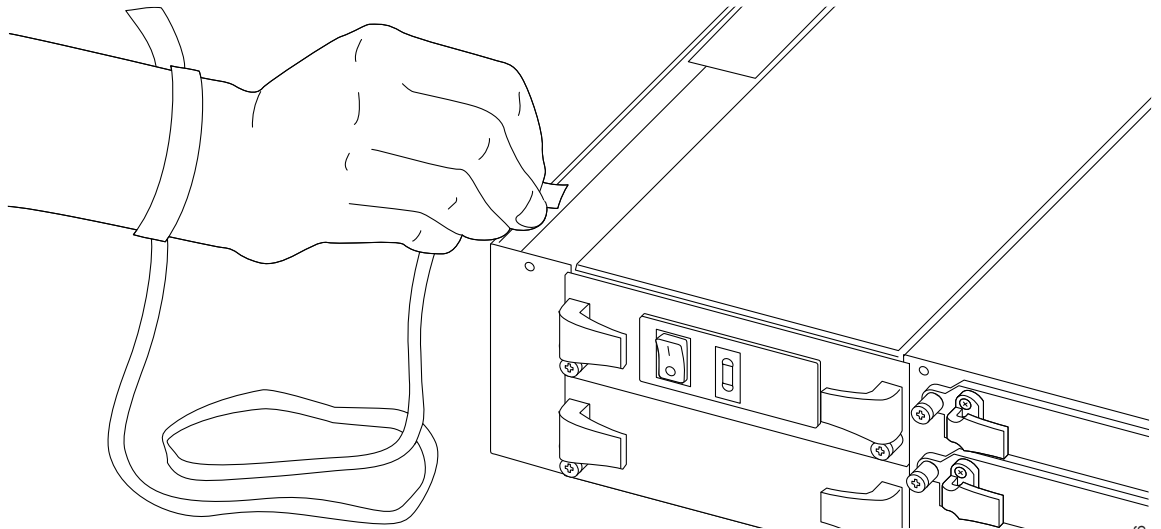


### Caution

The memory module contains electronic components that are sensitive to electrostatic discharge (ESD). Improper handling could damage the module. Leave the module in its protective ESD-shielded envelope until instructed to remove it, and handle it only as instructed.

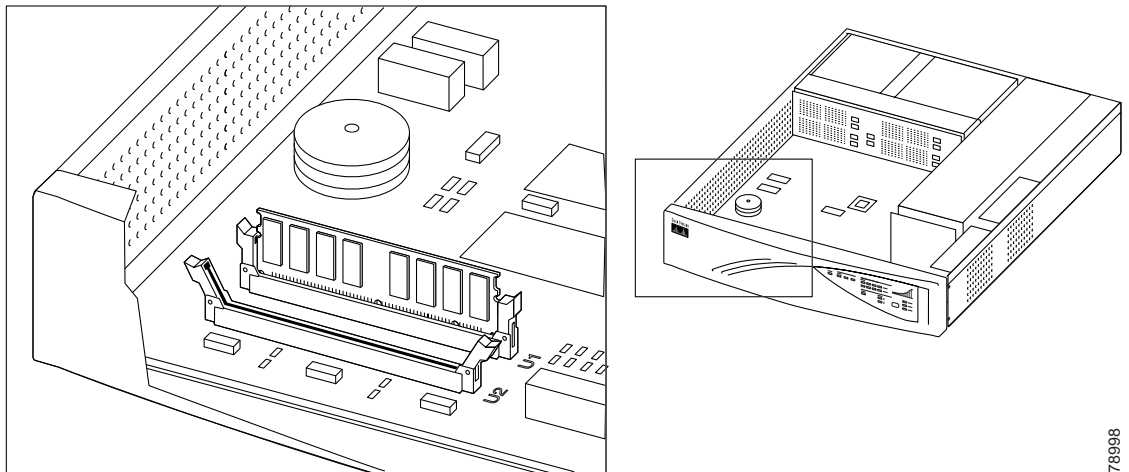
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- Step 2** Put on disposable wrist strap from an ESD kit according to package instructions. Be sure to attach ground connector to *bare* metal (unpainted metal) on the VPN Concentrator chassis.



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- Step 3** Locate the empty memory module slot.

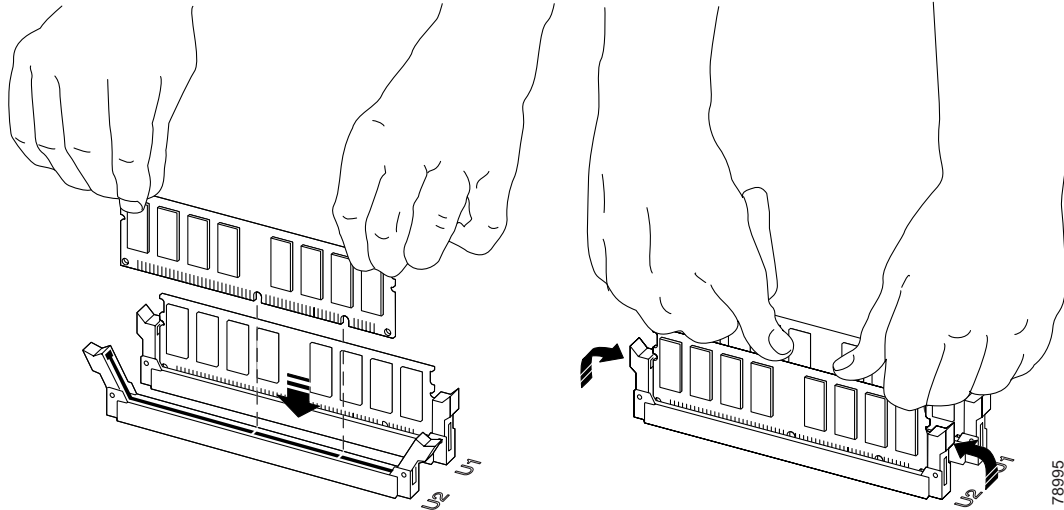


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- Step 4** Open the two white latches on ends of the slot: push them away from the slot.

- Step 5** Remove the new 128-MB memory module from its ESD envelope.

- Step 6** Orient and install memory module. The module has notches in the connector edge that fit over pins in the socket, and it will fit only one way. The corners must also fit in the open latches. Push straight down, firmly. The connector is tight; you may need to wiggle the module end-to-end to seat it. *Do not bend or twist the module.*



- Step 7** Secure the latches on both ends of module: push them up against the module.
- Step 8** Remove wrist strap connector from chassis.
- Step 9** Replace chassis cover with its four screws. Slide the cover toward the front of the chassis then insert the screws.

## Testing and Configuring the Upgrade Module

After you have installed the new memory module, follow these steps.

- Step 1** Connect network cables and the console cable.
- Step 2** Connect power cord to the power supply module, and plug the power cord into a power outlet that provides a reliable Earth ground.
- Step 3** Turn power on: press | on the power switch. The VPN 3000 Concentrator automatically detects the new module during reboot. Confirm that the front-panel System LED is ON (green).
- Step 4** Confirm that the front-panel LEDs for Expansion Module insertion Status and Run Status are ON (green) for both SEP modules installed.
- Step 5** Confirm that the back-panel Power and Status LEDs are ON (green) on both SEP modules.
- Step 6** Using the VPN Concentrator Manager, check the Monitor | System Status screen. Be sure the RAM Size is 256 MB.

# Troubleshooting

Problem	Possible Cause	Solution
Memory module not detected.	<ul style="list-style-type: none"> <li>Module is not seated properly.</li> <li>Module is defective.</li> </ul>	<ul style="list-style-type: none"> <li>Shut down and power off the VPN 3000. Remove chassis cover. Attach ESD kit. Remove the memory module by pushing the latches away from the module. Reinstall it. Be sure it is inserted all the way in the socket and the latches are tight up against the module.</li> <li>Contact Cisco support.</li> </ul>

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