Managing Custom ESXi Extensions
ESXi 4.0

A custom VMware ESXi extension is a VMkernel module, driver, or Common Information Model (CIM) provider, usually from a third party, that you can install on an ESXi host to add hardware support or extend the platform. When you install, disable, or remove custom extensions, follow the best practices described in this technical note.

Install Custom ESXi Extensions

You can install custom extensions using VMware Update Manager or the VMware vSphere Command Line Interface (CLI) command, vihostupdate.

CAUTION Install only one extension at a time.

Before you install custom extensions, shut down or migrate running virtual machines off of the ESXi host.

To install custom ESXi extensions

1. Install one bulletin using the vihostupdate command as described in the vSphere CLI documentation.
2. If required, reboot your system after installing the extension.
3. If the installation was successful and the host performs as expected, install the next extension.
4. If the installation was unsuccessful and the host does not perform as expected, revert to the last known good image as described in “Roll Back to a Previous Installation” on page 2.

Removing Custom ESXi Extensions

To remove a custom ESXi extension, you must remove all installed third-party extensions at once. You cannot remove individual extensions. After removing all extensions and rebooting your system, you can reinstall extensions one at a time as described in “Install Custom ESXi Extensions” on page 1.

Remove Custom Extensions

Before you remove custom extensions, shut down or migrate running virtual machines off of the ESXi host.

To remove custom ESXi extensions

1. On the direct console user interface, select Remove Custom Extensions and press Enter.
   A confirmation screen appears.
2. Press F11 (OK) to confirm your selection.
3. Reboot the machine.
The **Remove Custom Extensions** option removes only third-party extensions. It does not remove any customizations you have made to the host's configuration.

**Disable Custom Extensions**

If a faulty extension prevents your host from booting, you can temporarily disable all extensions using the `nocustom` option.

**To disable custom ESXi extensions**

1. At the bootloader screen, type `Shift+0` to access the **Advanced Options** prompt.
2. At the **Advanced Options** prompt, type `nocustom` and press Enter.

The system boots and the direct console user interface appears. If you need to remove custom ESXi extensions, see “Remove Custom Extensions” on page 1.

**Reset Customized Settings**

You can restore your ESXi host to its factory state. Before you reset customized settings, shut down or migrate running virtual machines off of the ESXi host.

---

**CAUTION** Resetting customized settings removes all custom extensions and customizations that you have made to the host's configuration.

**To reset customized settings**

1. Boot the machine and access the direct console user interface.
2. On the direct console user interface, select **Reset Customized Settings**.
3. Confirm your selection.
4. Reboot the system.

**Roll Back to a Previous Installation**

When you install a third-party extension, it is installed in an alternate boot bank. After you install an extension and reboot the host, ESXi boots from the alternate boot bank. The newly installed extension is loaded, and the previous state of the host is preserved in the alternate boot bank.

If you encounter problems after installing an ESXi extension, you can revert to the host's previous state by rebooting from the alternate boot bank. When you revert to the previous state, you lose any extensions that you added or customizations made since the previous state.

Selective rollback is not supported. For example, if you installed three extensions at once before rebooting the host, all three extensions will be lost when you revert to the system’s previous state. Therefore, you should only install one extension at a time, as described in “Install Custom ESXi Extensions” on page 1.

Before you roll back your installation, shut down or migrate running virtual machines off of the ESXi host.

**To roll back the installation of custom ESXi extensions**

1. Boot the machine.
2. At the bootloader screen, type `Shift+R`.
   
   A warning dialog appears to confirm that you want to revert to the host's previous state.
3. Confirm your selection.

ESXi boots from the alternate boot bank, and the host reverts to its previous state.