


Release Note, EPICenter Management Suite

Software Version 6.0

Service Pack 2

Extreme Networks, Inc.
3585 Monroe Street
Santa Clara, California 95051
(888) 257-3000
(408) 579-2800
<http://www.extremenetworks.com>

Published: November 2007
Part Number: 120343-00 Rev 03



Alpine, Alpine 3804, Alpine 3802, Altitude, BlackDiamond, BlackDiamond 6808, BlackDiamond 6816, EPICenter, Ethernet Everywhere, Extreme Ethernet Everywhere, Extreme Networks, Extreme Turbodrives, Extreme Velocity, ExtremeWare, ExtremeWorks, ExtremeXOS, GlobalPx Content Director, the Go Purple Extreme Solution Partners Logo, SentiAnt, ServiceWatch, Summit, Summit24, Summit48, Summit1i, Summit4, Summit5i, Summit7i, Summit 48i, SummitRPS, SummitGbX, Triumph, vMAN, the Extreme Networks logo, the Alpine logo, the BlackDiamond logo, the Summit logos, the Extreme Turbodrives logo, and the Color Purple, among others, are trademarks or registered trademarks of Extreme Networks, Inc. or its subsidiaries in the United States and other countries. Other names and marks may be the property of their respective owners.

© 2007 Extreme Networks, Inc. All Rights Reserved.

Specifications are subject to change without notice.

Merit is a registered trademark of Merit Network, Inc. Solaris and Java are trademarks of Sun Microsystems, Inc. in the U.S. and other countries. Avaya is a trademark of Avaya, Inc.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org>).

This product contains copyright material licensed from AdventNet, Inc. (<http://www.adventnet.com>). All rights to such copyright material rest with AdventNet.

Use of Open Source Libraries. The Software uses or links to the third party "open source" library(ies). Please read the "Notice" files included with the Software for identification of these libraries and applicable license agreements.



Contents

Chapter 1: Overview	5
New Features/Changes in EPICenter 6.0 Service Pack 2	5
Features/Changes in EPICenter 6.0 Service Pack 1	7
Features in the EPICenter 6.0 Refresh Release	8
Features in the EPICenter 6.0 Initial Release	8
What's Different from Previous EPICenter Versions	10
Important Information about Using EPICenter	11
The EPICenter RADIUS Server	11
The EPICenter TFTP Server	11
Telnet Polling and EPICenter	12
EPICenter Server Requirements	12
Microsoft Windows XP/2003 Server	12
Sun Microsystems Solaris 8 or 9	13
Redhat Linux Enterprise Version 4	13
EPICenter Asset Discoverer Requirements	14
EPICenter Client Requirements	14
Microsoft Windows	14
Sun Solaris	14
Redhat Linux	15
The Browser-based Client	15
ExtremeWare/ExtremeXOS Support Requirements	16
Switch Access Requirements	16
EPICenter 6.0 Device Support	17
Extreme Networks Device Support	18
Avaya Device Support	19
Other Third-Party Device Support	19
SSH Support	20
EPICenter Software Licensing	20
EPICenter Upgrade Licensing	21
Software Installation or Upgrade Overview	21
Obtaining a License	22
Updating an Existing EPICenter 6.0 Installation to Service Pack 2	22
Upgrading from EPICenter 5.0 or 5.1 to EPICenter 6.0 Service Pack 2	22
Upgrading an Evaluation License	23
EPICenter Software Documentation	23
Chapter 2: Clarifications, Known Behaviors, and Resolved Issues	25
Troubleshooting	25
Issues Resolved in this Release (Service Pack 2)	25
Issues Resolved in the Service Pack 1 Release	26
Issues Resolved in the EPICenter 6.0 Refresh Release	27
Issues Resolved in the Initial 6.0 Release	28
New Clarifications and Known Problems	28

Clarifications and Known Problems in Previous Releases.....	29
Upgrading from a Previous EPICenter Release.....	29
Installing or Uninstalling.....	30
Distributed Server Mode	31
General—Client	31
General—Server	32
Administration	32
Alarm Manager	33
Configuration Manager.....	34
ESRP Manager.....	35
External Device Manager (ExtremeWare Vista).....	35
Firmware Manager.....	35
Grouping Manager.....	37
Inventory Manager.....	37
IP/MAC Address Finder.....	38
Policy Manager	39
Real-Time Statistics	39
Reports	40
SSH/SCP/SFTP	40
Telnet and Telnet Macros.....	40
Topology Views	42
VLAN Manager.....	43
Asset Discoverer.....	43
Avaya-EPICenter Integration.....	44
Profiles Applet (Universal Port Manager).....	45
Chapter 3: Creating and Deploying ExtremeXOS Scripts with EPICenter	47
Using the ExtremeXOS Script Editor	47
Filtering the List of ExtremeXOS Scripts.....	48
Viewing ExtremeXOS Scripts	49
Creating a New ExtremeXOS Script.....	51
Editing an Existing ExtremeXOS Script.....	56
Using Deployment Module Templates.....	56
Viewing the Differences Between Two ExtremeXOS Scripts.....	57
Deleting an ExtremeXOS Script.....	58
Deploying ExtremeXOS Scripts	58
Viewing Information about Deployed Scripts	62

This release note contains a summary of the requirements and new features for the EPICenter™ Management Suite, version 6.0 Service Pack 2.

Section 2, “Clarifications, Known Behaviors, and Resolved Issues” lists problems from previous releases that have been fixed by this release, as well as descriptions of known problems and non-intuitive behaviors that occur in this release.

Please refer to the *EPICenter Reference Guide* or the *EPICenter Concepts and Solutions Guide* for detailed descriptions of the features in the EPICenter 6.0 release.

Contact customer support at (408) 579-2800 or support@extremenetworks.com if you need additional help.

This section covers the following topics:

- [New Features/Changes in EPICenter 6.0 Service Pack 2 on page 5](#)
- [Features/Changes in EPICenter 6.0 Service Pack 1 on page 7](#)
- [Features in the EPICenter 6.0 Initial Release on page 8](#)
- [EPICenter Server Requirements on page 12](#)
- [EPICenter Asset Discoverer Requirements on page 14](#)
- [EPICenter Client Requirements on page 14](#)
- [ExtremeWare/ExtremeXOS Support Requirements on page 16](#)
- [EPICenter 6.0 Device Support on page 17](#)
- [Software Installation or Upgrade Overview on page 21](#)
- [Obtaining a License on page 22](#)
- [Upgrading from EPICenter 5.0 or 5.1 to EPICenter 6.0 Service Pack 2 on page 22](#)
- [Upgrading an Evaluation License on page 23](#)
- [EPICenter Software Documentation on page 23](#)

New Features/Changes in EPICenter 6.0 Service Pack 2

- Support for ExtremeXOS version 12.0 SR1 is introduced in Service Pack 2.
- You can now use EPICenter to create and edit ExtremeXOS scripts, then deploy them to managed devices. The EPICenter Configuration Manager applet provides an interface for editing, managing, and deploying ExtremeXOS scripts.
See “[Creating and Deploying ExtremeXOS Scripts with EPICenter](#)” on page 47 for information about how to use this feature.
- The maximum number of Interactive Telnet sessions that can be run concurrently has been increased. EPICenter now allows a maximum of 10 Interactive Telnet sessions to be open at the same time; previous releases allowed a maximum of 5 concurrent Interactive Telnet sessions. This is useful if you need to manually establish a connection and enter commands on a large number of switches at once. By default, EPICenter allows a maximum of 5 concurrent Interactive Telnet sessions. To

change this value, go to the Admin applet, select the Server Properties tab, select **Scalability** from the drop-down menu field at the top of the properties panel, then modify the value in the Number of Interactive Telnet Sessions field.

In addition, if you use the Telnet Macro feature to execute commands across a large number of switches concurrently, you can reduce the amount of time required to complete the operation by adjusting the following settings in EPICenter:

- Increase the values for the Thread Pool Size and the Thread Default Alloc Size. (In the Admin applet, click on the Server Properties tab and select Scalability Properties from the drop-down list.) For example, if you are running a macro on 50 switches, you should set the Thread Pool Size to a number greater than 50, and you should set the Thread Default Alloc Size to its maximum value of 50.
- Enable the “Save Configuration Changes in the background after executing macro” option in the Telnet Macro Play view.
- EPICenter supports automatic login for Summit WM controllers. When you add a Summit WM controller to the EPICenter database, you can specify the username and password for logging into the controller. When you launch the Summit WM controller from EPICenter, these credentials are automatically applied on the device; you are not prompted to enter the username and password.

Note that the wireless reports available in EPICenter apply to ExtremeWare wireless devices, not to the Summit WM. To obtain wireless reports for a Summit WM device, use the Summit WM management application.

- Support for the Telnet Macro feature on Allied Telesyn (ATI) switches is included in Service Pack 2. A new ATL property, `CLI.MACRO_COMMAND_TERMINATOR`, can be used to configure the line terminator for ATI devices.

Available command terminators are CR and LF.

- CR represents `\n`.
- LF represents `\r`.

You can modify this ATL property to `CR`, `LF`, or `CRLF`, based on the requirements for the line terminator on your ATI device.

- Support for two Summit WM-related traps is included in EPICenter, using the third-party alarm integration framework: `summitWMLogAlarm` and `altitudeTunnelAlarm`.
- Support for the following Extreme devices is introduced in Service Pack 2:
 - Summit 150 series switches (Summit 150-24t, Summit 150-24p, Summit 150-48t)
 - Summit X250e-24x switch
- Support for the following hardware is introduced in Service Pack 2:
 - MSM-6R Management Switch Module
 - 10G-2HR Module
 - 10/100/1000 mini-GBIC interface
 - ER-XFP interface
 - 100BaseFX (without PHY) interface
 - 100BaseBX (without PHY) interface
 - 100BaseLX (without PHY) interface

Features/Changes in EPICenter 6.0 Service Pack 1

The following section describes the features implemented in the Service Pack 1 release of the EPICenter 6.0 software.

- *Universal Port Manager* (the *Profiles* applet), which allows you to manage edge port security policies and port configurations for ExtremeXOS-based switches using the ExtremeXOS Universal Port feature.

The Universal Port feature in ExtremeXOS can automatically apply an appropriate port configuration to a switch edge port based on who, where, when, and what is being connected to the network. It is configured through the use of *Universal Port profiles*, which are sets of commands that change the configuration of a port. The Universal Port Manager in EPICenter allows you to create, edit, test, and deploy Universal Port profiles.

The Universal Port Manager is available as part of the Advanced Upgrade option. Its features are described in the EPICenter online Help available from the EPICenter Client, or in the *EPICenter Reference Guide*, "Using the Universal Port Manager".

- Support for ExtremeXOS 12.0. ExtremeXOS 12.0 is required to use the new Universal Port Manager (Profiles applet).
- Multi-homing support: If you are installing EPICenter on a multi-homed server, you can specify which of the server's IP addresses the EPICenter server uses. EPICenter clients use this IP address to connect to the EPICenter server, and the EPICenter server uses this IP address for communication with its managed devices. On the managed devices, this IP address is registered as an SNMP trap receiver.
- ExtremeXOS stacking is supported on Summit X450 and X250 series switches.
- On the Hardware Selection page of the Upgrade Wizard, a new device category "E" has been added, which indicates ExtremeXOS stacking devices.
- The Configuration Manager now displays the message "Retrieving..." as EPICenter gathers configuration information. (PD3-120761671)
- In the Alarm Manager, the ability to control the formatting and content of e-mail notification messages has been enhanced. The device name is now included in the e-mail subject along with its IP address. (PD3-115906341)
- Polling-related information for devices managed by EPICenter can now be displayed. (PD3-115906671)
- You can now optionally specify that a Telnet macro perform save configuration operations in the background after the macro commands are executed. When this option is enabled, after a macro is executed on the selected devices, the save configuration operations are performed in the background on all of the devices. (PD3-113151385)
- ScreenPlay, a flash-based, on-switch management tool, is available as the Device Manager for Extreme devices running ExtremeXOS version 12.0. If the device is running ExtremeXOS 12.0, right-click on the device to bring up the Device Manager (ScreenPlay) for that device.
- New scripts to back up and validate the EPICenter database have been introduced. These scripts can be used as alternatives to the `dbbackup` and `dbvalid` commands listed in the "EPICenter Backup" appendix of the *EPICenter Reference Guide*.
- Support for the following Extreme devices is introduced in Service Pack 1:
 - Summit WM 200/2000 controllers
 - Summit WM 100/1000 controllers
 - Summit X250e series switches (Summit X250e-24t, Summit X250e-24p, Summit X250e-48t, Summit X250e-48p)

- Summit X450a-24x-DC and Summit X450a-48tDC switches
- BlackDiamond 12802 switch
- ExtremeXOS stacking device support for Summit X450 and Summit X250e series switches (in any combination)
- Support for the following hardware is introduced in Service Pack 1:
 - 10G4Ca module for the BlackDiamond 8800 switch
 - WAN PHY OAM (XENPAK)
 - SFP 100FX GBIC interface
 - LX100 GBIC interface

Features in the EPICenter 6.0 Refresh Release

The following section describes features that were implemented in the refresh release of the EPICenter 6.0 software.

- The installation procedure detects if EPICenter 5.0 or 5.1 is installed. If an EPICenter 5.0 or 5.1 installation is found, and the EPICenter components are installed as services (in Windows) or daemons (Solaris/Linux), then the EPICenter services/daemons are automatically disabled prior to the installation of EPICenter 6.0. If EPICenter 6.0 is subsequently uninstalled, then the EPICenter services/daemons from the previous version are automatically re-enabled. (PD3-102928857, PD3-118252811)
- On Solaris/Linux systems, a version of the EPICenter server component that facilitates running EPICenter on multi-homed servers is installed. EPICenter support for multi-homed servers is included in EPICenter 6.0 Service Pack 1.
- When specifying the ports to be used for communication between the EPICenter Server and the database, if you enter a port number that EPICenter uses for internal functions, you are prompted to select a different port. (PD3-102754500)
- When using a browser to access the EPICenter Server, if the Java plug-in is configured with a Java Applet Runtime setting of less than 256 MB, then a message is displayed recommending that you increase the Java Applet Runtime setting to 256 MB.

Features in the EPICenter 6.0 Initial Release

The following section describes features that were implemented in the initial release of the EPICenter 6.0 software.

- Support for the EPICenter Server and Client under Redhat Linux Enterprise version 4.0 as well as Windows XP/2003 Server and Sun Microsystems' Solaris 8 and 9.
- Support for the Mozilla FireFox 1.5 browser.
- Support for ExtremeWare version 7.7 and ExtremeXOS version 11.6. These are needed to enable full functionality in the new EAPS Monitor.
- Support for the Summit X450a-24x, Summit X450a-24x-DC, and the Summit X450e-48p.
- Support for new modules for the BlackDiamond 8800 series: MSM48 and 10G4Xa.
- Support for Avaya Integrated Management Software version 3.1.
- A new optional feature, the EAPS Monitor, lets you view the status of your EAPS configurations through a graphical topology map and associated status displays. The EAPS Monitor also provides a validation tool you can use to verify your EAPS domain configurations. The EAPS Monitor is

available as part of the Advanced Upgrade option. Its features are described in the EPICenter online Help available from the EPICenter Client, or in the *EPICenter Reference Guide*, Chapter 16, “EAPS Protocol Monitoring and Validation.”

Devices must be running ExtremeWare 7.7 or ExtremeXOS 11.3 (or later) to be detected as EAPS devices. For devices running ExtremeXOS, 11.6 is required for full functionality—prior to 11.6, only the `EAPSStateChange` trap is supported, and it has limited variables compared to 11.6.

- There are several enhancements in the Inventory Manager.
 - The Inventory Manager now supports a text field that can be used to enter and save additional information about a device, slot, or port. For a device, you can enter this information when you add a device or modify the device information. You can include a description when you add devices after a discovery, and can add a description to the default device configuration settings. You can also add or edit a text description for a device, slot, or port within the device view when you have selected the device, slot or port in the Inventory Manager Component Tree.
 - EPICenter now supports port names (port display names). Port names can be entered and edited in the Inventory Manager Device View when a port is selected. Port names can appear along with the port number in the Inventory Manager Component Tree, in link labels on a Topology Map, in Reports, and several other places. You can control whether port names are displayed or not through the Admin applet, Server Properties.
 - Alarm Propagation is now supported at the Device Group level in the Inventory Manager and in other EPICenter applets that use a similar Component Tree. An alarm icon representing the highest unacknowledged alarm from any device within a group is now shown next to the Device Group label in the tree.

Further, you can control whether a device’s alarm status will contribute to the status at the Device Group level—in other words, you can configure it so that the Device Group alarm status reflects the alarm status of only a sub-set of devices of interest, while alarms from other devices within the group are ignored.
 - The Discovery feature has been modified to simplify specifying an IP address range in Classless InterDomain Routing (CIDR) format. The separate Subnet Mask field has been removed and a field is provided for a complete address specification (IP address plus subnet mask) in CIDR format.
 - The Discovery feature was enhanced to allow configuration of an SNMP timeout value. The timeout determines how long EPICenter will wait for an SNMP request to complete when attempting to contact a device within the current discovery scope.
- The Configuration Manager has been enhanced as follows:
 - For devices running ExtremeXOS, policy files are now uploaded along with the configuration file when you do a configuration upload or archive. The policy files and the config file are saved together in a zip file (.zip format). When a saved configuration is downloaded to an ExtremeXOS device, the policy file(s) are downloaded first, followed by the configuration file.

When viewing the list of uploaded configuration files for an ExtremeXOS device, you can expand the zip file to display its component files (configuration file and any policy files). This enables you to select a component file to View or compare to another file with the Diff function.
 - For devices running ExtremeWare, you can now select the image location (Current, Primary, or Secondary) where a downloaded configuration should be placed (this functionality already exists for ExtremeXOS devices).
 - When uploading or archiving configurations, you can now change the format of the filename used to save the configuration, within certain limitations. Changing the name in the Configuration Manager changes it for that set of configuration uploads: you can set the format in the Admin applet (under Server Properties) to change what appears as the default.

- EPICenter's SNMP trap processing has been enhanced to allow use of trap varbinds as parameters when running a program or a Telnet Macro as an alarm action. The variables are referenced based on their position in the varbinds set (e.g. `$trap(0)` references the first trap in a varbinds list).
- The Telnet Macro capability has been enhanced to allow the insertion of trap varbinds as variables in a Telnet Macro. The macro can then be invoked as the action taken upon an alarm event. In addition, two functions are provided that will convert the port numbers and VLAN IDs returned in varbinds into formats that can be used in CLI commands within a macro.
- In the Firmware Manager, if you have specified a device reboot after a firmware download, the reboot will load the image from the partition where the downloaded image was placed.
- For ExtremeXOS devices, add-on images such as SSH can be downloaded into either the active or backup partition, while the base image can be downloaded only into the backup partition.
- A new menu command, **Upload Device Info**, has been added to facilitate the troubleshooting of your Extreme Networks devices. The Upload Device Info command appears under the new **Technical Support** menu item available from the device right-click menu, or from the **Tools** menu. The Upload Device Info command uploads the output produced by selected variations of the "show tech" or "show tech-support" commands, and saves it in a zip file, optionally along with the last uploaded configuration file from the device. The file can be emailed to Extreme Networks' Technical Support group.
- A new integration framework has been developed to enable enhanced support for 3rd-party devices. This new framework enables support for new devices to be integrated into EPICenter outside of the regular software release/Service Pack cycle. The framework enables support for alarms, Telnet access and Telnet macros, and the ability to launch external applications that run on or support the third-party devices. A new menu item, **External App**, appears on the device right-click menu in the Inventory Manager
- The EPICenter infrastructure has been substantially revised to allow greater scalability and reliability, and to facilitate the addition of major new features such as the EAPS Monitor. Significant revisions include:
 - The addition of a second database file (with a second corresponding log file) to support the new product features.
 - Elimination of the need to co-locate an external SSH client in order to support SSH communication to managed devices. (This was implemented originally in EPICenter 5.1 Service Pack 1.)
 - The use of signed applets with the browser-based client for increased security and more complete functionality.

What's Different from Previous EPICenter Versions

For users of previous versions of EPICenter, there are some significant changes in the way certain features work in EPICenter 6.0:

- The installation wizard has been completely re-written to simplify the installation process. Installation under Solaris and Linux is also done through the InstallShield wizard rather than through scripts.
- The installation of EPICenter license keys is now performed through a License Manager with a graphical interface. The new License Manager runs independently of the installation process, and independently of the server: the License Manager can be used whether the server is running or not, and the server does not need to be restarted to have new keys take effect.

License keys are no longer installed as part of the software installation process.

- If you install the EPICenter Server components as regular applications rather than as services (in Windows) or as daemons (in Linux/Solaris), you must now start and stop the EPICenter database and EPICenter Server in two separate operations. In Windows, there are commands on the EPICenter Start menu for starting and stopping each component. In Linux or Solaris, similar commands may appear in Application Manager menus, or the components can be started from the command line. See the *EPICenter Installation and Upgrade Guide* for more details.
- The minimum memory requirements for systems running the EPICenter server and standalone client have increased. See “[EPICenter Server Requirements](#)” on page 12 and “[EPICenter Client Requirements](#)” on page 14 for more information.
- For optimal applet performance when using the EPICenter browser-based client under Windows, you should change the amount of memory available to Java applets. See the instructions under “[The Browser-based Client](#)” on page 15 for information on setting the available memory. If an EPICenter applet does not have sufficient memory, it may start up or run very slowly, or generate an “Out of Memory” error.
- EPICenter now uses signed applets with the browser-based client. This provides enhanced security and allows more complete functionality equivalent to that available with the installed client application.
Also, the JRE 1.5.0_08 plug-in is required for the browser-based client. If it is not installed the client will prompt you to download and install it.
- In the Alarm Manager, the option to execute a script as an alarm action has been removed.
- The STP and VoIP applets are no longer enabled as standard features. In order to use either of these features, you must enable them through the Admin applet. (Use the Features selection under Server Properties to accomplish this). You must also have the Advanced Upgrade option license installed to use the VoIP applet.

Important Information about Using EPICenter

The following describes some important caveats about how EPICenter should be used within your network.

The EPICenter RADIUS Server

EPICenter’s built-in RADIUS server should not be used to provide authentication services for your network devices in a production environment. It should be used only for demonstration or testing purposes. The built-in server is not sufficiently robust to be used in a production environment. For RADIUS authentication, EPICenter can be configured to function as a client of an external RADIUS authentication server.

The EPICenter TFTP Server

EPICenter’s built-in TFTP server is intended only for uploading and downloading switch configuration files and software image files under EPICenter’s control. It is not intended for use as a general purpose TFTP server.

Telnet Polling and EPICenter

Although EPICenter primarily uses SNMP to retrieve switch status and configuration information, it uses Telnet polling to collect certain types of information that are not available using SNMP. This includes information about netlogins, device FDB data (if FDB polling is enabled) and other selected status. EPICenter's use of Telnet polling can affect your switches in several ways:

- Each time EPICenter logs in and out of the switch, entries are created in the switch log.
- In some cases EPICenter needs to disable CLI paging in order to parse the results of certain commands. This creates an entry into the switch log file each time this occurs.
- Over time, these entries can fill the switch log file, and can make it more difficult to recognize log entries due to errors or other significant conditions. If these entries in the log file become problematic, there are several possible steps you can take to alleviate the problem, including periodically clearing the switch log, disabling EPICenter's Telnet polling, reducing EPICenter's polling frequency, or using the ExtremeWare or ExtremeXOS Event Management System log filtering capability to suppress the log entries generated by EPICenter login and logout events. For details on implementing any of these tactics, see Appendix A, "Troubleshooting," in the *EPICenter Concepts and Solutions Guide*.

EPICenter Server Requirements

The EPICenter 6.0 server is supported on Windows XP with SP1 or later, Windows 2003 Server, Solaris 2.8 and 2.9, and Redhat Linux Enterprise version 4.0.

Specific details as to versions supported, as well as hardware and software requirements, are described in the following subsections.

Microsoft Windows XP/2003 Server

The system requirements for the EPICenter server (and client) under Microsoft Windows are as follows:

- Microsoft Windows XP Professional with SP1 or later, or Windows 2003 Server running on an Intel Pentium-compatible CPU.
- 512 MB RAM minimum, 2 GB recommended.
If the Gold upgrade license is installed to allow more than 250 devices, 1 GB is required. Up to 2 GB may be needed for very large numbers of devices (1000 or more).
- 2 GB disk space available, NTFS filesystem recommended.
- Swap space equal to double the amount of memory. For example, if you have 512 MB of RAM, you should have 1 GB of swap space.
- 1 GHz or greater Pentium-compatible processor (2 GHz recommended).

The EPICenter server software requires the 1.5.0_8 Java runtime package, which is included in the server installation. No separate installation is needed.



NOTE

Additional disk space may be needed to hold alarm logs and other runtime data. The amount of space depends on the number of devices and the number of traps and syslog messages generated by the managed devices.

Sun Microsystems Solaris 8 or 9

The EPICenter server software, version 6.0, is supported under Sun Solaris Operating Environment, specifically SPARC Solaris 2.8 or Solaris 2.9, 32-bit version. The 64-bit and x86 versions are not supported. The system requirements for the server and client are as follows:

- 512 MB RAM minimum, 2 GB recommended.
If the Gold upgrade license is installed to allow more than 250 devices, 1 GB is required. Up to 2 GB may be needed for very large numbers of devices (1000 or more).
- 400 Mhz or better processor.
- 2 GB disk space available, NTFS filesystem recommended.
- Swap space equal to double the amount of memory. For example, if you have 512 MB of RAM, you should have 1 GB of swap space.

The EPICenter server software requires the 1.5.0_8 Java runtime package, which is included in the server installation. No separate installation is needed.

Currently, OS patch downloads are available for Solaris 2.8 and Solaris 2.9. Please make sure you have these installed before you run the EPICenter server in a Solaris environment. To obtain the latest patches for the version of Solaris you are running, visit:

<http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/JavaSE>



NOTE

Additional disk space may be needed to hold alarm logs and other runtime data. The amount of space depends on the number of devices and the number of traps and syslog messages generated by the managed devices.

Redhat Linux Enterprise Version 4

The EPICenter server software, version 6.0, is supported under Redhat Linux Enterprise version 4.0. Only the 32-bit version is supported, and only on X-86 based platforms. The system requirements are as follows:

- 512 MB RAM minimum, 2 GB recommended.
If the Gold upgrade license is installed to allow more than 250 devices, 1 GB is required. Up to 2 GB may be needed for very large numbers of devices (1000 or more).
- 1 GHz or greater Pentium-compatible processor (2 GHz recommended).
- 2 GB disk space available, NTFS filesystem recommended.
- Swap space equal to double the amount of memory. For example, if you have 512 MB of RAM, you should have 1 GB of swap space.

The EPICenter server software requires the 1.5.0_8 Java runtime package, which is included in the server installation. No separate installation is needed.



NOTE

Additional disk space may be needed to hold alarm logs and other runtime data. The amount of space depends on the number of devices and the number of traps and syslog messages generated by the managed devices.

EPICenter Asset Discoverer Requirements

The system requirements for Asset Discoverer are as follows:

- Windows XP Professional with SP1 or later, or Windows 2003 Server running on an Intel Pentium-compatible CPU.
- 256 MB RAM minimum.
- 500 MB disk space available.
- 1 GHz or greater Pentium-compatible processor (2 GHz recommended).

EPICenter Client Requirements

EPICenter is a client-server application that supports two types of clients: an installed client application, and a browser-based client that can be run using the Microsoft Internet Explorer or Mozilla Firefox browsers.

The EPICenter client application is installed automatically along with the EPICenter server. You can also install the client separately on other systems and connect remotely to the EPICenter server. The information that follows specifies the requirements for the installed client application.

An EPICenter client requires a monitor that supports 1024 x 768 resolution, and at least 16-bit color. Your system display settings must be set for at least 65536 colors.

The client can use large amounts of memory. 256 MB of RAM is the minimum for best performance. 512 MB is required if you plan to run the client on the same system as the EPICenter server.

Microsoft Windows

The system requirements for the EPICenter client under Microsoft Windows are as follows:

- Windows XP Professional with SP1 or later, or Windows 2003 Server running on an Intel Pentium-compatible CPU.
- A monitor that supports at least 1024 x 768 resolution, and 16-bit color. Your system display settings must be set for at least 65536 colors.
- 256 MB RAM minimum (1 GB recommended).
- A browser (Mozilla Firefox 1.5 or Microsoft Internet Explorer 6.0) is required to display reports and view the EPICenter on-line Help.

Sun Solaris

The system requirements for the EPICenter client under Solaris 8 or Solaris 9 are as follows:

- A monitor that supports at least 1024 x 768 resolution, and 16-bit color. Your system display settings must be set for at least 65536 colors.
- 512 MB RAM minimum.
- A browser (Mozilla Firefox 1.5) is required to display reports and view the EPICenter on-line Help.

Redhat Linux

The system requirements for the EPICenter client under Redhat Linux Enterprise version 4.0 are as follows:

- A monitor that supports at least 1024 x 768 resolution, and 16-bit color. Your system display settings must be set for at least 65536 colors.
- 256 MB RAM minimum (1 GB recommended).
- A browser (Mozilla Firefox 1.5) is required to display reports and view the EPICenter on-line Help.

The Browser-based Client

The EPICenter client can be launched in a browser window. EPICenter uses signed applets: you will be prompted to accept the security certificate from Extreme Networks the first time you try to launch the applet.



NOTE

The Java Plug-In version 1.5.0_8 is required for the EPICenter browser-based client. If this version of the plug-in is not already installed, you will be prompted to download it the first time you try to launch the EPICenter client.

Table 1 lists the browsers that are supported by the EPICenter 6.0 release. A browser is also required to display EPICenter reports and the EPICenter on-line Help.

Table 1: EPICenter 6.0 supported browsers

Platform	Browser Configuration Description
Windows XP, Windows 2003 server	Internet Explorer™ 6.0, Mozilla Firefox 1.5
Sun Solaris 8 and 9	Mozilla Firefox 1.5
Redhat Linux Enterprise version 4.0	Mozilla Firefox 1.5



NOTE

For the Mozilla Firefox browser, you must install the Java Plug-In version 1.5.0, then link the plug-in to the Firefox browser. See the EPICenter Installation and Upgrade Guide for instructions.

Modifying the Amount of Memory Available for Java Applets

By default, Java applets can consume only up to 64MB of memory. This may not be enough to allow EPICenter applets to function effectively. Applets without sufficient memory may start up and run very slowly, or may generate an Out of Memory error. You can increase the amount of memory available to applets through the Java Plug-in control Panel. The following instructions apply to JRE 1.5.0.

To increase the memory available to Java applets, do the following:

- 1 From the Control Panel (Start > Settings> Control Panel) double-click the Java icon.
- 2 When the Java Plug-In Control panel appears, click the Advanced tab.
- 3 In the field labeled Java Runtime parameters, type the following line exactly as shown:
-Xmx256M

- Click **Apply**. Restart the browser to have these settings take effect.

ExtremeWare/ExtremeXOS Support Requirements

Table 2 describes the minimum ExtremeWare or ExtremeXOS software image versions for each switch platform supported in EPICenter release 6.0. Make sure that you have these software images or later versions running on your Extreme switches before running EPICenter.

Table 2: ExtremeWare/ExtremeXOS versions supported by EPICenter 6.0

Extreme Switch Platform	ExtremeWare Versions Supported
Summit 150	ExtremeXOS 12.0 SR1 or later
Summit 200	7.1e or later (Note: S200s stacking not supported in 7.1e. Please upgrade to 7.4 for stacking support). 7.3e or later required for 802.1x and SNMPv3 support 7.4 or later required for S200s stacking support.
Summit 300-24	7.3e or later
Summit 300-48	6.2a or later 7.3e or later required for 802.1x and SNMPv3 support
Summit 400-24	7.4 or later
Summit 400-48	7.2e or later 7.3e or later required for 802.1x and SNMPv3 support 7.4 or later required for S400s stacking support.
All "i" Series switches, Alpine, MSM64i	6.2 or later 7.1 or later required for 802.1x and SNMPv3 support
Summit X250e	ExtremeXOS 12.0 or later ExtremeXOS 12.0 SR1 or later for X250e-24x
Summit X450	ExtremeXOS 11.2 or later ExtremeXOS 11.5 or later for X450e, X450a
BlackDiamond 6800	6.2 or later
BlackDiamond 8800	ExtremeXOS 11.1 or later ExtremeXOS 12.0 or later for 10G4Ca Module
BlackDiamond 10808	ExtremeXOS 11.0 or later
BlackDiamond 12802	ExtremeXOS 12.0 or later
BlackDiamond 12804	ExtremeXOS 11.4 or later

If you have a support contract, you can download the latest versions of ExtremeWare or ExtremeXOS from: <http://www.extremenetworks.com/go/esupport.htm>.

Switch Access Requirements

EPICenter and Asset Discoverer use both SNMP and Telnet to discover and communicate with the devices on your network. They support both SNMP v1/v2 or SNMP v3.

- SNMP must be enabled on the switch for EPICenter or Asset Discoverer to discover the device, and for EPICenter to manage the switch.

- If you use access profiles to control SNMP, Telnet and SSH access to your switches, you must ensure that the EPICenter or Asset Discoverer host's IP address is permitted in those access profiles.

EPICenter 6.0 Device Support

With a base license, EPICenter 6.0 supports up to 250 managed devices. The Gold upgrade provides support for up to 2000 devices, and also supports Distributed Server Mode to enable support of very large networks. The following sections list the devices supported by EPICenter 6.0.

Extreme Networks Device Support

EPICenter 6.0 supports the following Extreme Networks devices:

Table 3: Extreme Networks devices supported by EPICenter 6.0

Switches/Modules			
Summit switches:			
Summit1i /1/SX	Summit24e3**	Summit 300-24	SummitPx1*
Summit5/1X/LX/SX	Summit48i/48Si	Summit 300-48	Summit WM 100/1000
Summit7/1X/SX	Summit 200-24	Summit 400-24t	
Summit24e2T/2X*	Summit 200-24fx	Summit 400-24p	
Summit WM 200/2000	Summit 200-48	Summit 400-48	
Summit 150 series:			
Summit 150-24t (New)	Summit 150-48t (New)	Summit 150-24p (New)	
Summit X250e series:			
Summit X250e-24t	Summit X250e-24p	Summit X250e-48t	Summit X250e-48p
Summit X250e-24x (New)			
Summit X450 series:			
Summit X450-24t	Summit X450a-24t	Summit X450a-24t-DC	Summit X450a-24x
Summit X450-24x	Summit X450a-48t	Summit X450e-24p	Summit X450a-24x-DC
Summit X450e-48p	Summit X450a-48tDC		
Alpine 3800 series/modules:			
FM24Fi / SFi / Ti	GM4Xi /Si/Ti	WM-4E1i /4T1i	GM16x3
FM32Ti	SMMi	WM-1T3	GM16T3
FM8Vi	WDMi	10GLR	FM32Pi
BlackDiamond 6800 series/modules:			
F32F/Fi /T	G4X	P12cMi /Si	G16x3
F48Ti	G6X	P3cMi /Si	G24T3
F96Ti	G8Ti /Xi	WDMi	10Gx3
G12Si	MSM/MSM64i	10GLR	G16x3
BlackDiamond 8800 series/modules:			
MSM-G8X	G48T	G48Te	G48Ta
G24X	G48P	G48Pe	G48Xa
10G4X	MSM48	10G4Xa	10G4Ca
BlackDiamond 10808 series/modules:			
G60T	10G6X	G20X	10G2X
G60X	10G2H	10G2HR (New)	
BlackDiamond 12800C/12800R series/modules:			
MSM-5	GM-20XT	MSM-5R	XM-2XR
GM-20T	XM-2X	GM-20XTR	MSM-6R (New)

* EPICenter 6.0 provides only limited support for the Summit24e2, SummitPx1, Summit WM 100/1000, and Summit WM 200/2000. These devices are supported with the same limitations as non-Extreme devices.

** The Summit24e3 is supported in most EPICenter 6.0 applets, with the exception of the RT Stats applet, VoIP Manager, and the optional Policy Manager. The RMON-based alarms are also not supported.

Devices that are released after the initial EPICenter software release may be supported through software patches. Check the Extreme Networks customer support web site at <http://www.extremenetworks.com/support/patches.asp> for information on patches to support new devices.

Avaya Device Support

EPICenter 6.0 supports the Avaya Integrated Management software version 3.1 and the following Avaya devices:

Table 4: Avaya devices supported by EPICenter 6.0

Device	Device	Device
S8300 Media Server	Cajun C360-PWR	4602 IP Phone
S8500B Media Server	Cajun P333T-PWR	4610 IP Phone
S87XX Media Server	Cajun P332G-ML	4620 IP Phone
G250 Media Gateway	Cajun P332GT-ML	4621 IP Phone
G250-BRI Media Gateway		4622 IP Phone
G700 Media Gateway		4624 IP Phone
G350 Media Gateway		4630 IP Phone

Other Third-Party Device Support

Under normal circumstances, EPICenter 6.0 provides limited support for non-Extreme devices that run MIB-II compatible agents. These devices are supported in the Inventory and Alarm applets (for standard SNMP traps). There is also limited support for third-party devices in the Telnet and Topology Manager applets.

In EPICenter 6.0, a new framework enables the integration of additional devices independently of EPICenter software releases. Over time, this will allow support for selected third-party devices to be added, as well as simplifying the support of new Extreme Networks devices that may be released between EPICenter software releases. Devices integrated through this framework will enjoy full support in the Inventory Manager, the Alarm Manager, and the Telnet applet (including Telnet macro support).

Third-party devices are *not* supported in the VLAN Manager, Configuration Manager, Firmware Manager, IP/MAC Address Finder, Real Time Statistics applet, ESRP Manager, or the optional EAPS Monitor and Policy Manager.



NOTE

Third-party device limitations also apply to the Extreme Summit24e2, the SummitPx1, and the Summit WM 100/1000 and Summit WM 200/2000 devices.

The Telnet applet supports interactive Telnet access to selected third-party devices, but does not provide automatic login to those devices. It supports Telnet macros on Avaya devices. It does not support SSH to any third party devices. [Table 5](#) provides a feature-by-feature summary of EPICenter's basic support for non-Extreme devices.

Table 5: Third-Party Device Support by Feature

EPICenter Feature	Third-Party Device Support
Inventory	MIB-2 compatible devices: status only, SNMP v1 only. Integrated support for devices included through the Integration Framework.
Alarms	MIB-2 compatible devices: standard traps. Integrated alarm support for devices included through the Integration Framework.
Configuration Manager	No
Firmware Manager	No
Grouping Manager	No
IP/MAC Address Finder	No
Telnet Applet	Interactive Telnet supported for selected third-party devices. Telnet macros for Avaya devices. No SSH support. Telnet macro support for devices included through the Integration Framework.
Real-Time Statistics	No
Topology	Yes, limited to display on map.
VLAN Manager	No
ESRP Monitor	No
STP Monitor	No
Reports	Limited support for MIB-2 compatible devices
Policy Manager	No
VoIP Manager	No

SSH Support

EPICenter supports the use of SSH for communication with Extreme Networks devices if the following conditions are met:

- The SSH Enabling Module must be installed on the EPICenter server host. Due to export restrictions, you must obtain this module from Extreme Networks. It is not included with the EPICenter software distribution.
- Your switches must be running versions of ExtremeWare or ExtremeXOS that support SSH, and SSH must be enabled on those devices. Due to export restrictions, a special license is required for the SSH versions of the switch software. To request SSH-enabled versions of the software, contact Extreme Networks Technical Support.

More information about obtaining and installing these modules can be found in the *EPICenter Management Suite Installation and Upgrade Guide* for the version 6.0 software. SSH is not supported for third-party devices.

EPICenter Software Licensing

The EPICenter Server requires a license key to be installed before you can use its features.

- A Base license allows you to log into the EPICenter Server through either an installed EPICenter Client application or using a browser-based client, and manage up to 250 devices.
A permanent license has no time limit.

- An evaluation license allows you to run all features of the product (including those enabled through the Advanced or Gold Upgrades) for 30 days.

You can install the software (Server and Clients) without a license key, but you will not be able to connect to the Server from an EPICenter Client until an evaluation license or Base license is installed.

The Asset Discoverer does not require a license.



NOTE

A Base license is required to run EPICenter. Installing an Upgrade license (Advanced or Gold) without a Base license does not provide access to the EPICenter Server.

If you have purchased the product, you should have received an activation key, found on the License Agreement that accompanies your software package. This key starts with “AC,” and can be used to obtain a permanent license key. You do not need an activation key to obtain an evaluation license key.

EPICenter Upgrade Licensing

Extreme Networks provides two upgrades to EPICenter:

- EPICenter Gold Upgrade
- EPICenter Advanced Upgrade

The *EPICenter Reference Guide* and this release note cover all features in EPICenter, the EPICenter Gold Upgrade, and the EPICenter Advanced Upgrade.

EPICenter Gold Upgrade

The EPICenter Gold Upgrade license enables scaling up to 2000 nodes (the basic license supports 250 nodes) and supports using EPICenter in a distributed server implementation. The Distributed Server capability lets you coordinate multiple EPICenter Servers.

The EPICenter Gold Upgrade is a license key-only upgrade—it does not come with a CD or a separate User Guide or Release Note. Applying the Gold Upgrade license over a licensed Base EPICenter installation enables the additional features.

EPICenter Advanced Upgrade

The EPICenter Advanced Upgrade enables the Universal Port Manager, EAPS Monitor and the EPICenter Policy Manager, which allows configuration of security policies and QoS/ACL policies. The EPICenter Advanced Upgrade is a license key-only upgrade—it does not come with a CD or a separate User Guide or Release Note. Applying the Advanced Upgrade license over a licensed Base EPICenter installation enables the additional features.

Software Installation or Upgrade Overview

The *EPICenter Management Suite Installation and Upgrade Guide* contains complete instructions for installing the EPICenter Management Suite (the EPICenter server and client and the EPICenter

standalone client) under Windows, Linux, and Solaris. It also covers the installation of EPICenter Asset Discoverer as a standalone utility under Windows, as well as how to upgrade your EPICenter installation to the Service Pack 2 release.

The *EPICenter Management Suite Installation and Upgrade Guide* can be found in PDF format on the EPICenter product CD, on the Extreme Networks EPICenter download web site, or on the Extreme Networks documentation page.

For specific instructions for upgrading EPICenter to the Service Pack 2 release, see the “Upgrading the EPICenter Software” chapter in the *EPICenter Management Suite Installation and Upgrade Guide*.

Obtaining a License

EPICenter requires a valid base or evaluation license to be installed before you can log into the EPICenter Server through an EPICenter client. Optional upgrades such as the Advanced Upgrade or Gold Upgrade also require their own license keys. To obtain a license key, use your browser to connect to the license page at <http://www.extremenetworks.com/go/epickey.htm>.

To obtain an evaluation license, select the option to obtain an evaluation license key. You will be asked to enter your name, company information, and other similar information, and an e-mail address to which your license key should be sent. Your license key will be sent to you by return e-mail.

To obtain a permanent license, select the option to obtain a permanent license key. Fill in the requested information, and enter your activation key. The activation key is a 14-character key that starts with “AC” and is found on the License Agreement included with your software package.

Your permanent license key will be sent to you by return e-mail. See the *EPICenter Management Suite Installation and Upgrade Guide* for instructions on running the License Manager to install your license(s).

Updating an Existing EPICenter 6.0 Installation to Service Pack 2

To upgrade your EPICenter 6.0 installation to the Service Pack 2 release, follow the instructions in the “Upgrading the EPICenter Software” chapter of the *EPICenter Management Suite Installation and Upgrade Guide*. Do not perform a new installation of EPICenter; performing a new installation of EPICenter does not preserve the database from the previous EPICenter 6.0 installation.



NOTE

If you are running a Beta version of the EPICenter 6.0 software, you must uninstall the Beta software and do a new installation of the final release software. You cannot upgrade from a Beta build to the final build of the same EPICenter version.

Upgrading from EPICenter 5.0 or 5.1 to EPICenter 6.0 Service Pack 2

If you have version 5.0 or 5.1 of the EPICenter software installed, upgrading to the EPICenter 6.0 Service Pack 2 release consists of downloading and installing the latest version of the EPICenter 6.0 software, then installing the Service Pack. If you have the EPICenter 6.0 product CD, you can install EPICenter from the CD, download and install the Refresh patch, and then install the Service Pack.

See the “Upgrading the EPICenter Software” chapter of the *EPICenter Management Suite Installation and Upgrade Guide* for instructions.

During installation of the EPICenter 6.0 software, you are given the option to migrate your 5.0 or 5.1 database information to EPICenter 6.0. (This does not affect the original database; you will still be able to use it with your earlier version of EPICenter.) Migration of a database from earlier versions of EPICenter (prior to 4.1) or ExtremeWare Enterprise Manager is not supported.

Upgrading an Evaluation License

To update an evaluation license to a permanent license, or to install a license after you have completed the software installation, use the EPICenter License Manager.

- In Windows, the License Manager is available from the **Start** menu (go to **Programs > Extreme Networks > EPICenter 6.0 > License Manager**)
- In Linux or Solaris, run **instlic.bin** from the EPICenter installation directory (`/opt/ExtremeNetworks/EPICenter6.0`).

You must have write permission for the EPICenter installation directory.

In Linux, the License Manager is also available in the **Startup** menu. Select **Others > License Manager**

In Solaris, the License Manager is also available in Administrative Tools. Select **Administrative Tools > Extreme Networks > EPICenter > License Manager**

See the *EPICenter Management Suite Installation and Upgrade Guide* for instructions.

EPICenter Software Documentation

The EPICenter software documentation set includes installation instructions, context-sensitive Online Help, two User Guides, and this release note.

The *EPICenter Management Suite Installation and Upgrade Guide* contains documentation on how to install the EPICenter software, or upgrade from a previous version. This is available in PDF format on the EPICenter product CD, in the **extreme.war\helptext\docs** subdirectory of the EPICenter installation, and on Extreme Networks’ documentation web site. It is also shipped in hardcopy with the EPICenter version 6.0 software package.

The *EPICenter Concepts and Solutions Guide* provides discussions and examples of how to use EPICenter to manage your Extreme Networks installation. It is available in Acrobat PDF format, accessed from the **Programs > Extreme Networks > EPICenter 6.0** submenu on the Windows **Start** menu. It can also be found in the **extreme.war\helptext\docs** subdirectory of the EPICenter installation.

The *EPICenter Reference Guide* contains basic documentation on how to use the features of the EPICenter software, including the features of the optional Policy Manager and Gold upgrades. Its content forms the basis of the context-sensitive online Help. The Reference Guide is available in Acrobat PDF format, accessed from a link on the “About” page of the EPICenter user interface or from the **Programs > Extreme Networks > EPICenter 6.0** submenu on the Windows **Start** menu. It can also be found in the **extreme.war\helptext\docs** subdirectory of the EPICenter installation.

In addition, the manuals and Release Notes can be found on Extreme Networks’ web site at <http://www.extremenetworks.com>.

2

Clarifications, Known Behaviors, and Resolved Issues

This section describes known problems with the EPICenter 6.0 Service Pack 2 release, including recommendations for workarounds when available. It also lists problems that existed in previous versions of EPICenter that have been fixed in this release.

Numbers in parentheses are for internal tracking. For the latest release notes, patches, and bug list, see: <http://www.extremenetworks.com/go/esupport.htm>.

Troubleshooting

The *EPICenter Concepts and Solutions Guide*, Appendix A provides useful troubleshooting information and suggestions for commonly-encountered questions about the functioning of the EPICenter software.

If you are having problems with the EPICenter server or client, there are several ways you can capture information that will be helpful to Extreme Networks's Technical Support staff.

The Package EPICenter Info command

On the EPICenter server, you can use the **Package EPICenter Info** tool to create a zip format file of all the EPICenter logs, syslog files, property files and other information, which can be sent to your Extreme Networks Technical Support representative for analysis. You can run this tool whether or not the EPICenter server is running.

The Package EPICenter Info command is found under the main EPICenter installation directory. See Appendix E of the *EPICenter Concepts and Solutions Guide* for details on using this command.

Client Information from the About window

From an EPICenter client you can display a great deal of status information about the client status from the About information pop-up: from the EPICenter **Help** menu, click **About EPICenter**, then click the **Client Information** button. Information is displayed in a text window; you can cut and paste the information into a file and send it to your Extreme Networks Technical Support representative for analysis.

Issues Resolved in this Release (Service Pack 2)

- 1 Inventory Manager:** EPICenter reports that a device has rebooted 497 days after its last reboot, even if the device did not actually reboot at that time. (PD2-31845215)
- 2 IP/MAC Address Finder:** A log message indicating that the IP/MAC finder did not poll certain switch ports was incorrectly classified as an error message, rather than as an informational message. (PD3-77224841)

- 3 **EAPS Monitor:** If you save the results of an EAPS verification report to a file, EPICenter prompts you to specify a filename that ends with an .html extension, rather than adding the .html extension to the filename automatically. (PD3-120111568)
- 4 **Configuration Manager:** When a change was made to a device's configuration in EPICenter, the configuration was saved on the device, even though the "Automatically save config on device" option was not enabled. (PD3-121753667)
- 5 **Inventory Manager:** If you attempt to poll or sync a device using incorrect SNMP credentials, such as a wrong username or password, it does not generate an "SNMP unreachable" alarm. This is not considered a problem. (PD3-129104116)
- 6 **Inventory Manager:** After a switch was added to the EPICenter Inventory database, if that switch subsequently became unreachable, it did not generate an "SNMP unreachable" alarm. (PD3-134078943)
- 7 **Configuration Manager:** If EPICenter is scheduled to upload a configuration to a device at a specified time, and the EPICenter server is not running at that time, then when the EPICenter server is restarted, EPICenter shows the next scheduled upload time as the one that was skipped because the EPICenter server was not running. (PD3-140320301)
- 8 **Telnet Macro:** When using the Telnet Macro feature with Allied Telesyn switches, EPICenter periodically does not send a carriage return character at the end of a command. (PD3-140358287)
- 9 **Alarm Manager:** On Solaris Systems, the command that processes alarm actions (postemsg.exe) does not consider a value specified within double quotes that includes spaces as a single string. (PD3-151955232)
- 10 **EPICenter Clients:** If you have two EPICenter clients running at the same time, and you make a change on one of the clients (disable an EPICenter feature, for example), then the change takes place only on the client where you made the change, not the other client. (PD3-131743171)
- 11 **Administration:** Normally, if there are changes to the configuration, they are automatically saved if the "Automatically save configuration on device" option on the Server Properties Configuration page is enabled. However, for network configuration actions done with the Universal Port Manager (Profiles applet), enabling this option did not automatically save them. Instead, they were automatically saved to the devices only if the "Save Changed Configuration Only" option was enabled. (PD3-137195141)
- 12 **Topology Views:** It took a long time (2-6 minutes) to refresh a topology view consisting of a large number of devices, links, and ports. (PD3-177887261)

Issues Resolved in the Service Pack 1 Release

- 1 **Configuration Manager:** When the EPICenter database was migrated from version 5.0 or 5.1 to version 6.0, configuration files that were uploaded according to a global archive schedule used an incorrect naming format for the archived files. (PD3-122990221)
- 2 **Alarm Manager:** If you defined an alarm that included the \$alarmId variable in the Message field, the alarm ID appeared as 0 when the alarm was viewed in the Alarm Log Browser. (PD3-120701601)
- 3 **Alarm Manager:** If you selected \$alarmMessage for the message variable, no alarm was displayed in the Alarm window. (PD3-120701676)
- 4 **Alarm Manager:** If you selected \$alarmActions for the message variable, the value was displayed as "Null". (PD3-120701720)
- 5 **Inventory Manager:** When setting up an SNMP trap receiver, if the Read or Write Community strings were incorrectly specified, the error was incorrectly reported with the message "Max # of

trap-receivers is reached...” This occurred especially when SmartTrap handlers were registered during the Sync process. (PD3-120085070)

- 6 **Inventory Manager:** It took a long time to display the front panel of a device in the Device Detail Display. In this release, the amount of time it takes to display the front panel has been significantly reduced. (PD3-115906529)
- 7 **Telnet Macro:** Using the interactive Telnet feature to make changes to a large number of devices (for example, to create some VLANs and save the configuration on a collection of switches) took a long time to complete because the save configuration operations had to be completed for each device before you could execute the macro on another device.
Starting in this release, you can now optionally specify that a macro perform the save configuration operations in the background after the commands are executed. When this option is enabled, after a macro is executed on the selected devices, the save configuration operations are performed in the background on all of the devices. (PD3-113151385)
- 8 **Configuration Manager:** Because it required EPICenter to complete the configuration download process, it took a substantial amount of time to dismiss the Current Progress dialog box. (PD3-112636908)
- 9 **Configuration Manager:** The process of downloading configuration information to a device took a substantial amount of time. This occurred because the configuration download process required EPICenter to download the device's configuration, reboot the device, and perform a Sync with the device once it came back online. In this release, the amount of time this process requires has been reduced. (PD3-112636778)
- 10 **Configuration Manager:** Switching to the Configuration Manager applet took a substantial amount of time. This was especially apparent when no device or device group was selected prior to switching to the Configuration Manager. (PD3-112263863)
- 11 **Inventory Manager:** When polling or performing a Sync with a Black Diamond 8810 switch, EPICenter was unable to read LLDP data, and a “NumberFormat” exception occurred. As a result, LLDP links were not shown, and blades were not shown properly in the Inventory Manager.
- 12 **Inventory Manager:** Using an EPICenter browser client executing in a Firefox browser, when the Summit WM application was launched from the External App item on the right-click pop-up menu, the application replaced the EPICenter client in the Firefox browser, rather than running in a new browser window. (PD3-104821641)
- 13 **Inventory Manager:** EPICenter did not display port information correctly for the G48xa card in a BlackDiamond 8810 running XOS 11.6.2.9. The port numbers did not line up correctly: EPICenter displayed as Port 2 what was actually Port 25. (PD3-134886285)
- 14 **EPICenter Client:** Attempting to invoke EPICenter applications such as AlarmMgr.exe or FindAddr.exe from the command prompt resulted in the message “Fatal Error - Can't connect to the server. Please contact your administrator to see if the server is up and running.” (PD3-133295791)
- 15 **EAPS Monitor:** Using the Synchronize command resulted in a blank map display. A Java exception was written to the log file. (PD3-121933891)

Issues Resolved in the EPICenter 6.0 Refresh Release

- 1 **Avaya-EPICenter Integration:** If the Avaya Integrated Management (AIM) software was installed anywhere other than C:\Program Files\Avaya, the integration elements (menu items, etc.) did not appear in EPICenter. In this release, integration between EPICenter and the AIM software now

works correctly when the AIM software resides in a non-default installation directory. (PD3-106244851)

- 2 Installation:** In the Installation Wizard on Solaris systems, if you elected to migrate the database to the new installation, then clicked the **Next** button to continue, the **Back** button on the subsequent dialog box was not functional, and you could not go back to the previous screen. (PD3-99875621)
- 3 Installation:** In the Installation Wizard on Solaris systems, the License Agreement dialog box displayed some invalid characters. (PD3-103500251)
- 4 Installation:** When EPICenter 6.0 was installed on the same machine where EPICenter 5.0 or 5.1 was installed, it did not disable the services of the older EPICenter version. (PD3-102928857, PD3-118252811)
- 5 Installation:** When specifying the ports to be used for communication between the EPICenter Server and the database, if you enter a port number that EPICenter uses for internal functions, you are prompted to select a different port. (PD3-102754500)

Issues Resolved in the Initial 6.0 Release

- 1 Installation:** The Solaris Java plug-in (`sunjre-solaris-installer.sh`) downloaded via the 'Get Java Plugin' link, is corrupted. The correct plug-in (`jre-1_5_0_08-solaris-sparc.sh`) can be downloaded from:
<https://sdlc3e.sun.com/ECom/EComActionServlet;jsessionid=DA18E2078568426C6579599E77DD6BD3>
(PD3-96274861)
- 2 Alarm Manager:** Alarm status that has been propagated to the Device Group level remains in place even after all alarms and all devices are deleted from the EPICenter database. (PD3-91893147)
- 3 Real Time Statistics:** For ExtremeXOS devices, the RT Stats applet no longer returns the error that RMON is disabled on the device when RMON is actually enabled. (PD3-85816061)

New Clarifications and Known Problems

This section describes known problems and clarifications reported since the previous EPICenter release (EPICenter 6.0 Service Pack 1).

- 1 Inventory Manager:** When a 10/100/1000 Copper SFP is inserted into a switch, the output of the show ports CLI command indicates that the port is configured as BASE-T, but the Inventory Manager screen does not indicate that the SFP has been inserted. (PD3-168869922)
- 2 Configuration Manager:** A scheduled configuration upload failed with an SSH error message: "Could not establish connection via ssh due to error : null reference is not allowed". (PD3-157373545)
- 3 Inventory Manager:** It is not possible to modify the default poll interval when adding a new device to inventory. (PD3-179459420)
- 4 Multi-homing support:** If the EPICenter server is a multi-homed device, with one IP address on a public network and the other IP address on a private management network, if you set the EPICENTER_SERVER_ADDRESS environment variable to the IP address on the management network, clients could not connect to the EPICenter server from the public network. (PD3-181587181)
- 5 Client Connectivity:** When the connection to the EPICenter server uses Network Address Translation (NAT), the EPICenter client is not able to connect to the EPICenter server. (PD3-180489411)

- 6 **Alarm Manager:** When attempting to define an alarm log filter, the EPICenter client was disconnected. This occurred as a result of invalid data in the Alarm Event table in the EPICenter database. (PD3-177778441)
- 7 **Alarm Manager:** EPICenter generated alarm messages that incorrectly indicated that a device in inventory had rebooted. This occurred when the device was manually synchronized with the EPICenter database following a reboot. After the reboot, if the device could not be synchronized due to an SNMP timeout, then additional alarm messages were generated, incorrectly indicating that the device had rebooted. (PD3-170752017)
- 8 **MAC FDB polling:** Synchronizing the FDB failed with an exception when the FDB output had a port name in the following format: (2:6(2:6 Name-2)) (PD3-173094712)
- 9 **Inventory Manager:** If you attempted to manually synchronize a device that has a large number of VLANs (more than 800), it resulted in an SNMP timeout. As a workaround, increase the default SNMP timeout value. (PD3-173510081)
- 10 **Inventory Manager:** EPICenter reported the up time for a device as a negative number of days, hours, and minutes. (PD3-73114319)
- 11 **ESRP Monitor:** In an ESRP configuration with three switches, if you define a VLAN with protocol type “any” on one of the switches, and protocol type “ip” on another switch, when you add the switches to EPICenter, the ESRP monitor displays the VLAN twice. (PD3-110746209)
- 12 **Inventory Manager:** For the BlackDiamond 12802 switch, the graphical display of the front panel incorrectly shows the MSM slot at the bottom of the switch; the MSM slot should be displayed in the middle. (PD3-171307061)
- 13 **Inventory Manager:** If you add an ExtremeWare/EXOS switch to EPICenter, it causes an SNMP trap receiver to be registered on the switch (added as SNMPv1 or SNMPv3). If you also add the same SNMP trap receiver on the switch for the same port/community/source using the CLI on the switch, a single event causes multiple alarms to be sent to the EPICenter server (one for each trap receiver), rather than the two identical trap receivers being treated as a single entity. (PD3-151924041)
- 14 **Topology Views:** The EPICenter client may hang while browsing a topology view consisting of a large number of devices, links, and ports. This can occur when RMON statistics are enabled for the map. As a workaround, open another client, and disable the display of RMON statistics. To do this, right-click on the map background to display the pop-up menu, then select **Map Properties...** Uncheck the box next to Rmon Statistics, and click **OK**. (PD3-179374094)

Clarifications and Known Problems in Previous Releases

Following are the clarifications and known problems discovered in previous releases of EPICenter that may still appear in this release of EPICenter 6.0.

Upgrading from a Previous EPICenter Release

It is not possible to “upgrade” from a Beta release version

If you have a Beta version of the EPICenter release 6.0 installed, you must uninstall the Beta release and do a new install of the final release. The upgrade feature of the installation process does not work for upgrading between beta and final versions of a single software release. (PD3-3422139)

Installing or Uninstalling

Cannot re-install EPICenter after an unsuccessful uninstall

If problems occur during the uninstall process, or if an uninstall is done incorrectly (for example, by just deleting all the EPICenter files) the installation program may refuse to let you re-install because it still detects the previous installation. To solve this problem the InstallShield Vital Product Data (VPD) registry may need to be cleaned up. This registry is a directory that resides at `\Program Files\Common Files\InstallShield\Universal` (in Windows) or in `~/InstallShield` in Linux or Solaris. You need to remove the directory `extremenetworks\epicenter` under this VPD registry. Note that other applications may use the InstallShield VPD to store their uninstallation data, so use caution when cleaning the VPD registry. Call your Extreme Networks technical support representative if you need further help.

Not able to start/stop database when invoked from Startup menu (Solaris/Linux)

If your Linux or Solaris desktop provides a startup menu, and you have installed EPICenter components as applications, not as services, the start and stop EPICenter database and server commands will appear under the Other menu item. However, you cannot use these to start or stop the database, you must instead start it from the command line, as described in the *EPICenter Installation and Upgrade Guide*. (PD3-93524552)

If installation fails, message says to use Uninstall, but Uninstaller is not present

If the installation process fails before the uninstaller has been installed, you must use the Windows Add/Remove programs mechanism to remove the rest of the EPICenter installation. You will not be able to perform the installation again until you have uninstalled the partial installation. See the *EPICenter Management Suite Installation and Upgrade Note* for details on uninstalling EPICenter. However, if the Uninstaller is not in the Add/Remove programs list, you will have to manually remove this entry from the registry. (PD3-25661176)

Windows EPICenter installation executable does not run

Under some circumstances, it is not possible to run the Windows EPICenter installation executable. When you attempt to start the executable, the installer dialog box appears briefly, but then disappears.

As a workaround, do the following:

- 1 Using Windows Explorer or the command prompt, manually create the installation directory for EPICenter; for example, `C:\Program Files\Extreme Networks\EPICenter 6.0`.
- 2 Run the EPICenter installation executable. When you are prompted for the installation directory, browse to the directory you created (even if it is the default directory displayed by the installation executable).

This issue may also appear when version 8.2 of McAfee VirusScan is installed on the Windows system. Subsequently disabling McAfee VirusScan and running the installation executable does not resolve the issue. Upgrade to the latest version of McAfee VirusScan.

Distributed Server Mode

Cannot launch distributed server, incorrect password sent

Distributed Server mode (Gold Upgrade): when you attempt to launch a remote distributed server, the incorrect password is sent, so the auto login fails. (PD3-9751617, PD3-47441450, PD3-63873601)

General—Client

Old log files do not get removed, accumulate indefinitely

When the EPICenter client is started, a new log file is created for the client session, but the old log files from previous sessions are not removed, and they will accumulate indefinitely. Periodically you should delete some of the older files. (PD3-100117025)

Auto-save is on by default when the EPICenter server starts up

When the EPICenter server starts up it syncs all devices, and the auto-save feature is enabled by default. To avoid having auto-save function on your devices, you can disable it through the server properties in the Admin applet. If you do not want auto-save to take effect at all, you should disable it before you add your devices to the EPICenter inventory database. You can do this through the server properties in the Administrator applet. (PD2-204103816)

Stack Overflow error with Remote Desktop connection

If you attempt to use the Windows XP Remote Desktop feature to access an EPICenter client running on another machine, you may encounter a Stack Overflow error. To avoid this error, start a new EPICenter client after connecting to the remote machine.

Cannot use a browser-based client with JRE 1.6

If you want to use the EPICenter browser-based client, you *cannot* use JRE version 1.6. If you have JRE 1.6 installed, you must uninstall it and install a supported JRE version in order to use Firefox to connect to the EPICenter server. The latest JRE version supported by EPICenter is JRE 1.5.0_08. If the JRE 1.5.0_08 plug-in is not installed when you attempt to connect to the EPICenter server, you are prompted to download and install it. (PD3-141892105)

Message about EPICenter's digital signature appears twice

When using a browser to connect to the EPICenter server, a dialog box indicating that the EPICenter application's digital signature could not be verified may appear twice. (PD3-139718617)

General—Server

Traps may be dropped if the trap rate becomes excessive

In order to be able to reliably handle trap storms from a single or multiple devices, EPICenter limits its trap processing to 20 traps every 28 seconds from an individual device, and a total of 275 traps every 55 seconds system-wide. Any traps that occur beyond these limits are discarded, but will be noted in the `log.txt` file. If a sufficiently long burst of traps occurs, some of them may be dropped.

Exceeding the first limit (>20 traps in 28 seconds for a single device) is rare. However, if you are managing a large number of devices, it is possible to exceed the total (275) limit. (PD3-103525231)

MAC FDB polling error occurs if port has a port string configured

The EPICenter FDB Poller cannot retrieve FDB data for a port that has been configured with a port string. The poller will report an invalid port error. To enable the FDB poller to retrieve data on the port, you must remove the port string. (PD3-38906968, PD3-36743184)

TFTP port remains in use after EPICenter TFTP server disabled

After disabling the EPICenter TFTP server, the TFTP port remains in use. Restart the system to clear it. (PD3-24495867)

CLI access to offline switches blocked except for Telnet, Macros and Vista

For switches that are designated as offline in EPICenter, CLI access (Telnet, SSH, SCP) is blocked unless you are using Interactive Telnet, running a Telnet Macro, or using ExtremeWare Vista through the `Device > Device Manager` command. (PD2-109826462)

Administration

SNMP timeout prevents some devices from being added to inventory

A device that is slow to respond to SNMP requests (e.g. Summit 300-24 or -48, BlackDiamond 6816) or devices with very large numbers of ports (> 500) or very large numbers of VLANs (> 1000) may fail to be added successfully to the EPICenter Inventory database due to SNMP timing out before the add operation completes. In this case, you can increase the SNMP time out value to a larger number through the Server Properties setting in the Administration applet. Devices with these characteristics that get added successfully may still time out frequently and be shown as unreachable much of the time. Increasing the timeout value can also help this problem. (PD3-11401638).

The Inventory Manager is not completely disabled via the Features server property

The Inventory Manager does not get disabled completely through the Features server properties. Its button continues to appear in the Navigation Toolbar. However, it becomes read-only. Likewise, the VoIP and Policy features, if they are present, are not completely disabled. (PD3-8615291)

In Solaris, clicking menus in the New User dialog box does not display choices

On Solaris standalone clients, in the New User dialog box, clicking the Role or the ExtremeWare RADIUS Access drop-down menu does not display the list of choices. As a workaround, click on the drop-down menu and make your selection using the up or down arrow keys. (PD3-139667282)

Alarm Manager

No way to stop a sound alert until the entire audio file has been played

There is not a way to stop the play of a sound alert file until the entire file has played. If you replace the default sound alert file, you should ensure that it will end within a reasonable time. (PD3-47591872)

Port Utilization Alarm Threshold is not available for ExtremeXOS devices

The Port Utilization option has been disabled for ExtremeXOS devices in the Alarm Manager's Threshold Configuration function. (PD3-106699331)

Multiple alarms can occur for a single EPICenter event

A single EPICenter event, such as a device reboot, power supply failure, or fan failure, can cause multiple alarm events in the Alarm Manager. (PD3-39722605)

Polling timeouts can cause false SNMP unreachable alarms

If timeouts occur during EPICenter's status polling or detail polling operations, an SNMP unreachable alarm may be triggered, even though the device is reachable. This can cause numbers of false alarms.

To work around this, you can modify the SNMP unreachable alarm to use a repetitive occurrence specification as follows:

- 1 In the Alarm Manager, go the **Alarm Definition** tab, and select the SNMP Unreachable alarm
- 2 Click **Modify** to display the Modify Alarm Definition window with the Basic tab displayed.
- 3 At the bottom of this window, check the box next to "If event happens" and then enter the number of times the event must happen, and the timeframe within which these events must occur.

For example, you could set this so that the SNMP Unreachable event must occur 3 times within 30 minutes before the SNMP Unreachable alarm will be triggered.

- 4 Click **OK** to save these changes. These will take effect immediately if the alarm is enabled.

Alternatively, you could disable the alarm using the Modify alarm process. (PD3-30468254)

Configuration Manager

Configuration baselining not supported on ExtremeXOS devices

Configuration baselining is not supported on any ExtremeXOS platforms due to the XML format used in their configuration files. The create baseline and remove baseline commands appear on the right-click pop-up menu for an ExtremeXOS device, and the create baseline command can be run, but it will not actually create a baseline file. (PD3-100549655)

Downloading a config file to device fails if using SSH

Downloading a configuration file to a device running ExtremeWare fails if EPICenter attempts to use SSH to the device. To successfully download a configuration through EPICenter, you must temporarily disable SSH for the device, using the Modify Device operation in the Inventory Manager. (PD3-102888481)

Changing the Diff or Config file viewer settings does not work properly

Changing the settings for the configuration file viewer or the Diff viewer from a remote client does not work properly when the remote client is connected to a Linux server. For the configuration viewer it will attempt to use the viewer configured on the server; for a Diff it uses `sdiff` which is available locally. (PD3-91990375)

Configuration File displayed in raw XML for ExtremeXOS devices

When viewing a configuration file from a device running ExtremeXOS, the contents of the file is displayed in raw XML format. EPICenter should show the contents in the same format as used by the CLI "show config" command. (PD3-64376621)

Changing the Diff viewer or Config file viewer settings affects all clients

Changing the settings for the configuration file viewer or the Diff viewer (using the Setup Viewer function) changes these settings for all EPICenter clients, not just the client requesting the change. (PD3-12891849)

No automatic differences notification if device and global archive schedules differ

If the device archive schedule differs from the global archive schedule, the automatic differences report will not be created. (If no global schedule is set, it works correctly). (PD3-15256696)

ESRP Manager

Traps can be lost from devices running ESRP

If a switch is running ESRP, it is possible that traps sent to EPICenter use the ESRP address as a source address. In this case, EPICenter will not know from which of two switches the trap originated, since ESRP groups share an IP address. (PD2-92709969)

External Device Manager (ExtremeWare Vista)

Rebooting switch from within the external Device Manager may cause browser time-out

In the browser-based client, you can initiate a switch reboot from the external Device Manager (accessed from the Device Manager command on the Device sub-menu on the Tools or pop-up menu. However, because the switch is rebooting, it does not respond to the browser's forms submission, and the browser will time out and report an error (Error: 504) instead of refreshing the configuration page. Once the switch has successfully finished rebooting, you can select it again in the Component Tree and the page will refresh correctly. (13736)

Firmware Manager

Firmware upgrades on ExtremeXOS devices fail with SSH

Firmware upgrades to devices running ExtremeXOS will fail if SSH is enabled for device communication. To successfully download new firmware through EPICenter, you must temporarily disable SSH for the device, using the Modify Device operation in the Inventory Manager. (PD3-60672086, PD3-93288181)

Switch may fail to reboot after image upgrade

Sometimes after an image upgrade, a switch may fail to reboot, with an "Invalid reboot time" message in the Messages from Server window. If this happens, you need to Telnet to the switch to reboot it. (PD3-28666448)

Attempting image upgrade while save is in progress causes an error

You will most often see this problem when you are using pscp or sftp. The error message is:

```
ScpSession: pscp: unable to open configuration.cfg: permission denied
```

When you have this problem, redo the task after the save is done. (PD2-137802543)

Multi-step upgrades can be incorrect when upgrading primary or secondary images

The calculations for multi-step upgrades are based on the current image. If that is the same as the one you have chosen, the upgrade will be correct. If they are different, the calculation will be incorrect. For example, if the current image is the same as the primary image and you upgrade the primary image, the calculations are correct. On the other hand, if the current image is different from the secondary image and you try to upgrade the secondary image, the calculations are incorrect. (PD2-121186116)

ExtremeXOS image upgrade requires VR-Mgmt or VR-Default as management VLAN

For switches running ExtremeWare XOS 11.1.0, EPICenter only supports an image upgrade when the switch's management VLAN is VR-Mgmt or VR-Default. (PD3-15443398, PD3-16322222)

Status for SSH versions of ExtremeWare may be shown incorrectly

In the Firmware Manager's Upgrade Wizard, the status of some SSH versions of ExtremeWare may be shown incorrectly.

If a non-SSH version of a specific image (release/build) is already shown as General Availability, the SSH version of that image will be shown as Obsolete when it should be shown as General Availability. (PD3-26300275)

If the SSH version ends with `_ssh.xtr` in its file name instead of the extension `.sxttr`, then its status will be incorrectly shown as Unknown. (PD3-19001715).

"Obsolete" column for device image is empty

In the Firmware Manager, the Obsolete column for device images in the right-hand side table for a device group is always empty. (PD3-19001279)

Download to BD8810 or BD10808 may fail due to timeout

Downloading an image or bootrom to a Black Diamond 8810 or 10808 sometimes fails due to timeout. If this is a repeated problem you can change the Upload/Download Timeout Period property in the Admin applet under Server Properties, in the Devices Properties set. The default timeout is 60 seconds. 120 seconds (2 minutes) is recommended. (PD3-19758770)

Stacking devices may not be displayed in the Hardware Selection page

In the Upgrade Wizard, if you select an ExtremeWare or ExtremeXOS stacking image in the Image Selection page, then select "Extreme Stacking" or "Extreme EXOS Stacking" under Device Types on the Supported Hardware Selection page, devices of the selected type are not displayed in the Hardware Selection page.

ExtremeXOS devices cannot upgrade the image on the current partition

Firmware Manager: On ExtremeXOS devices, it is not possible to upgrade the image on the current partition. However, you can download ExtremeXOS modules (SSH, EAPS, and so on) to any partition. (PD3-145988922)

Grouping Manager

Netlogin client that moves to a new VLAN is shown twice

When a netlogin client moves from one VLAN to another upon successful authentication, the Grouping Manager shows the user with two host relationships—one with the temporary IP address (prior to authentication) and one with the IP address assigned by DHCP upon authentication. EPICenter shows two ACLs on the switch. Doing a manual Sync on the device will fix this. (PD3-24698442)

Inventory Manager

Modify Device changed fields are not updated after Apply

When a change is made in the Modify Device dialog, after clicking **Apply** the change is not reflected in the fields in the Modify Device window. You must close and re-open the Modify Device dialog to see the changes. (PD3-89128855)

Additional Information field accepts more than 255 characters

Even though there is a 255-character limit on text in the Additional Information field, you can type more than that into the field. However, the characters beyond 255 will not be saved. (PD3-82612460)

The Upload Device Info command does not work with SSH

The Upload Device Info command, used for uploading device status information, does not work if SSH is enabled for the device in EPICenter, due to a timeout. To successfully upload the device information, you must temporarily disable SSH for the device, using the Modify Device operation in the Inventory Manager. (PD3-91755264)

The ExtremeXOS config file saved by the Upload Device Info command has errors

If you use the Upload Device Info command for a device running ExtremeXOS, and select the option to include the last uploaded configuration file, the Configuration file saved within the **TAC_Info** zip file will produce CRC errors when you attempt to unzip it. (PD3-106577660)

Changing a device password via Modify Device does not work

In Modify Device, changing the device password (and selecting the “Device and Database” option) does not change the password, even though EPICenter indicates the operation was successful. (PD3-64421421)

Configured type for removed slot in ExtremeXOS not shown correctly

For switches running ExtremeWare XOS 11.1.0, when a slot is removed but has a configured slot type, EPICenter will not show the configured slot type in the Inventory applet due to an agent bug which does not correctly update the configured slot type. (PD3-18078976)

Adding SNMP v3 devices fails

In some cases SNMP v3 devices may fail to be added to the database, and a “Time Synchronization failure could have occurred” error appears in the log. Restarting the EPICenter server will correct the problem. (PD3-24472462)

EPICenter 6.0 does not support SNMPv3 on third party devices

Third party devices that support SNMPv3 will be discovered as SNMPv1 and added as such. EPICenter 6.0 won't prevent users from adding a third party device as an SNMPv3 device through the Inventory Manager, but there is no guarantee that the device will behave as expected. (PD2-117703746)

Port information unavailable in Device Details view for ExtremeXOS stacking devices

In the Device Details view for a stacking device running ExtremeXOS, information about the management port and stacking ports is not available on the Device Back Panel tab (PD3-128361639)

Stacking Port Link information displayed incorrectly on two-switch ExtremeXOS stacking devices

Information in the Stacking Port Link tab is displayed incorrectly on an ExtremeXOS stacking device that contains only two switches. The Stacking Port Link information is displayed correctly if the stacking device contains more than two switches. (PD3-142240641)

Status of combo ports on G20XTR module displayed incorrectly

For the BlackDiamond 10K G20XTR module, both combo ports (fiber and copper) are shown as active in the Inventory Manager device view if either port is actually active on the device. (PD3-106688211)

IP/MAC Address Finder

EPICenter does not use VRs when pinging, resulting in errors on some ExtremeXOS devices

In the IP/MAC Address Finder, EPICenter pings without using any VR, thus using VR-default only. If some ExtremeXOS switches are in VR-mgmt, this results in a packet transmit error. (PD3-90286092)

With multiple connections between two switches, incorrect port, MAC Addresses, and IP addresses are reported

If there are multiple connections between two switches such that there are multiple FDB entries with the same MAC address, IP/MAC Address Finder will report only the first matched MAC address or IP address and port. This occurs because the `ipNetToMedia` table does not contain information about VLANs that would enable distinguishing between the entries. (PD2-242747853, PD2-77302783)

Policy Manager

Switches running ExtremeXOS not supported by Policy Manager

EPICenter Policy Manager does not support switches running any version of ExtremeWare XOS.

Switch MIB Table is empty after adding IP policies using Policy Manager

For devices running ExtremeWare 7.4.1, when adding multiple IP policy rules through EPICenter's Policy Manager, frequently the MIB table will become empty or partially cleared (only some of the rules will remain), even though no error message has occurred, and the policy rules are still in place on the switch. This is due to a known problem in ExtremeWare 7.4.1. When this happens it is no longer possible to create policies on the switch through EPICenter. (PD3-36028540)

Previously configured IP policies might fail to configure after ExtremeWare upgrade

When you are upgrading ExtremeWare, the owner of the access-list is removed. For instance, if there is a previously configured IP policy with precedence 10000 and you create an IP policy with the same precedence, the configuration will fail. You must manually remove the old ACL or change the precedence starting point in the Admin applet in order to configure a new ACL. (PD2-96428496)

Policy Manager does not check for maximum number of rules configurable on a device

The Policy Manager server does not check for the maximum number of rules that can be configured on a device before it configures rules on the switch. If the policies specified in the Policy Manager generate too many rules, errors will occur in the EPICenter log file and the switch log file, but the Policy Manager will not display any warnings or errors. (15349)

Configuration not shown correctly for source port policy with “blackhole” profile

Configuring a source port with the “blackhole” QoS profile disables the port. However, due to a problem with the ExtremeWare agent, the MIB is not updated, and the status of the port will continue to be shown as enabled when viewed through ExtremeView. In addition, changes made to the port's QoS profile through the ExtremeWare CLI will not be reflected in EPICenter because the MIB value is not updated correctly. (15411)

Real-Time Statistics

Hierarchical port groups are not displayed correctly in the RT Statistics applet

The Real-Time Statistics applet does not support hierarchical groups. Selecting a subgroup of a port group is not recognized; selecting the top-level port group initially displays all ports in the group and its subgroups at the same level, then changes the display to show only the ports in the top level group. (PD3-40487688)

Reports

User Defined Reports link does not appear the first time Reports are invoked

When you display the Reports feature for the first time after installing EPICenter 6.0, the User Defined Reports link does not appear. Once you refresh the browser, the link appears and works properly from then on. (PD3-106204511).

Network Login reports do not work if you are not using EPICenter as a syslog server

The current Network Login reports get data from the syslog table. If you do not set EPICenter as a syslog server, Network Login reports will not work. (PD2-97604980)

Unused ports report might not give correct information for newly added devices

The unused ports report defaults to showing unused ports in the past seven days. If the default setting is used, the report will not show unused ports for newly added devices since the system has not been running long enough to generate a report. To work around this, set the default Inactive Days setting to a shorter time. (PD2-119378049)

MAC address for netlogin traps not readable in Event and Syslog reports

The MAC address for netlogin traps is not readable in the Event and Syslog reports. (PD3-15209264)

SSH/SCP/SFTP

Using SFTP on Solaris might not work

Due to an ExtremeWare limitation, uploading configuration file using SFTP on Solaris might not always work. You might see an error stating `Couldn't read from remote file "/configuration.cfg": End of file`. You can retry the upload to see if you can successfully upload the configuration file. If this problem happens often, it is recommended that you use TFTP instead of SFTP to perform the configuration upload. (PD2-125288111)

Telnet and Telnet Macros

CLI commands that provide refreshing output cannot be used in a macro

Commands that continuously refresh their output cannot be used in a Telnet macro. These types of commands will fail with a timeout error. (PD3-88791235, PD3-91859421)

The built-in Telnet LLDP macro will fail on an ExtremeWare device

The LLDP macro that appears in the Macros sub-menu of the right-click pop-up menu for devices in the Component Tree will fail when run on a device running ExtremeWare. This macro also should not be run on ExtremeWare devices from within the Telnet applet (Macro Player). (PD3-91859421)

Cannot edit ExtremeXOS Policy files in the Telnet applet

The EPICenter Telnet applet does not support the editing of ExtremeXOS policy files. (PD3-55109713)

Telnet Macro fails when “\$” character is used

When a string in a Telnet macro includes the “\$” character, the characters following the \$ are interpreted as if they are a user-defined variable, and the macro fails saying it cannot find the variable. This occurs even if the string is enclosed within quotes: `conf snmp add community readonly "foo$b"`. The workaround is to escape the \$ character as well as enclosing the string: `conf snmp add community readonly "foo\b"`. (PD3-46428441)

Telnet Macro “Play” gets stuck when Stop is pressed

In the Macro Player, when playing a Telnet macro on several devices, if you press the Stop button the macro player never completes, and the Close button is never enabled. (PD3-46483576, PD3-65409069)

No error given when attempt to SSH from Telnet applet to a 3rd-party device

SSH is not supported from the Telnet applet to non-Extreme Networks devices. When you attempt to SSH to such a device, the attempt does not succeed, and the Interactive Telnet/SSH area becomes greyed out, but no error or warning is given. (PD3-27902861)

Tab/Up Arrow keys do not work correctly with ExtremeXOS Commands

Using EPICenter’s Telnet with switches running ExtremeXOS (BD10K/BD 8800/Summit X450) the Tab and Up Arrow keys both produce a second CLI prompt followed by the command line. In the case of the Tab key, if you include a space after the command, the Tab key works correctly. If you do not include a space after your command, pressing Tab produces a second prompt followed by your command line with a space; pressing Tab again produces the correct result (the list of next command options). (PD3-19726468)

Cannot login to device if password includes special characters

If a device password includes special characters such as {, }, [,], or comma, EPICenter will not be able to log into the device via interactive Telnet or with Telnet macros. (PD3-14112251)

Cannot switch between results from multiple devices in Viewer

Sometimes, when you select multiple devices (rows) in the Macro Play tab and open the Viewer (click View) to view the last set of macro results, the next and previous arrows may be missing from the window. This means you cannot switch between the results from the selected devices. To work around

this, either redo the multiple selection and re-open the view window, or select each device individually and display its results. Note that the next and previous arrows do *not* appear if only one device row is selected. (PD3-6713931)

Topology Views

Switching maps can take a long time to complete

Switching between maps can be very slow. In some cases, the client display may disappear, but it will be redisplayed when the operation completes. (PD3-35616035)

Cannot add loadsharing ports on switches running ExtremeXOS

The ExtremeXOS MIB does not support the loadsharing group, so EPICenter does not support loadsharing on devices running ExtremeXOS. Therefore, attempts to add a loadsharing port to a VLAN through the Topology applet (via the Connect Edge Port to VLAN) will fail. (PD3-30155557)

Ports connected through a 3rd-party device may be shown as directly connected

If you have ports on two different Extreme Networks devices that are connected through a third party device that does not support EDP, such as a hub or router, the Topology applet will show the two Extreme Networks devices as being directly connected to each other, even when the third party is included in the EPICenter inventory database. (PD3-27295562, PD3-29769566)

Topology might show an incorrect down link status

When EPICenter has management connectivity with a link that is down, the link will turn yellow (half up/half down) because EPICenter does not receive a link down trap from the other device. The other device will still be marked as up (green) in Topology, Inventory Manager, and the rest of EPICenter until the next poll cycle. (PD2-109826469)

Incorrect Topology Links

The Topology view may show incorrect links between devices. (PD3-20704977)

In some circumstances, if the topology seems to be incorrect, performing a “Sync Links” from the **Edit** menu will remedy the situation.

Printing in landscape mode cuts off the device names

When printing in landscape mode, the device names get cut off. This does not happen when printing in portrait mode. (PD3-6850018)

Error trying to create a link to an existing VLAN

Since EPICenter does not retrieve VLAN information during detailed device polls, and traps may be lost, VLAN information in EPICenter may become out of sync with the switches. When this happens, if

you try to create a link to an existing VLAN, EPICenter will try to create the VLAN. This will cause an error since the VLAN already exists on the device. (PD3-16311591)

Display may not refresh immediately

If you cut a device, or new links come up, the display may not refresh immediately. However, if you switch to another applet, then come back to the Topology applet, the display has the latest changes. (PD3-130099999)

VLAN Manager

Loadsharing not supported on switches running ExtremeXOS

The ExtremeXOS MIB does not support the loadsharing group, so EPICenter currently does not support loadsharing for devices running ExtremeXOS. (PD3-30155557, PD3-18078839)

Asset Discoverer

Not able to launch Asset Discoverer

Occasionally Asset Discoverer cannot be launched from the start menu or from the command line. In these cases it is necessary to double click on the `assetdiscoverer.bat` file found in the `<EPICenter_Install_Dir>\discoverer` directory to launch the program. (PD3-106448806)

Stack members not reported by Asset Discoverer

Asset Discoverer does not report the stack members in a stacking device, only the stack master. (PD3-45526497)

Asset Discoverer does not report BootROM version for PSU/MSM

On a BlackDiamond 8806, Asset Discoverer does not report the BootROM version for components such as the MSM or the Power Supply Units. (PD3-45526594)

Asset Inventory Report does not report Alpine SMMI serial number

The Asset Inventory Report does not report the Alpine SMMI serial number. (PD3-24772354)

“Server Busy” message box does not disappear after a rediscovery

After finishing the initial discovery process, upon doing a rediscovery a “Server Busy” message box appears and will remain displayed indefinitely, until you close the message box using the “X” close button. (PD3-26374825)

Avaya-EPICenter Integration



NOTE

These items apply only to customers with the Avaya Integrated Management server version 3.1 co-resident with the EPICenter server.

EPICenter complains about missing device when launched from AIM

When EPICenter is launched from the Avaya Integrated Management software, it complains that “Device 127.0.0.1” is not in Inventory. You can ignore this message. (PD3-102012039)

Attempting to launch EPICenter from the browser-based AIM Console fails

If you launch the AIM console in a browser window, and then attempt to launch, the EPICenter browser window never opens. This does not happen consistently, and is most likely to happen when the browser client is running on the same system as the EPICenter and AIM servers. (PD3-102011941)

EPICenter cannot be started from the Avaya Integrated Management Console

With AIM 3.1 updates 3 or earlier, the EPICenter runclient batch file is missing from the Avaya installation, so the EPICenter client cannot be started. To fix this you must copy the runclient.bat file (found in the EPICenter installation directory, <EPICenter_Install_Dir>\runclient.bat) to the following Avaya directory: <Avaya_Install_Dir>\Network Management\CVS\vendors\extreme. This applies to AIM version 3.1 updates 3 or earlier and may be fixed in the next Avaya update. (PD3-104838671)

Must restart the EPICenter server after changing the Trap Forwarding to AIM setting

When you change the state of the trap forwarding setting (**Trap Forwarding to AIM enabled**) in the EPICenter Admin applet (under Avaya Integration server properties) the new setting does not take effect until you restart the EPICenter server. This is true for enabling or disabling trap forwarding. (PD3-63926806)

Must restart the EPICenter server after changing Avaya trap port

If you change the Avaya trap port configuration through the Avaya Integration server Properties in the Admin applet, you must restart the EPICenter server for it to take effect. (PD3-6717965)

The Reports feature does not launch properly after launching the Avaya Console

After launching the Avaya Integrated Management Console, the next time you try to launch the Reports feature it does not launch correctly. To work around this, you can click the Reports button from the client a second time. Setting the browser home page to about:blank will prevent this from happening. (PD3-10228783)

Profiles Applet (Universal Port Manager)

EPICenter does not enforce the maximum number of profiles

The Universal Port feature allows a maximum of 128 profiles on an Extreme device. However, in the current release, EPICenter does not enforce this maximum number. EPICenter allows you to deploy more than 128 profiles to a switch, but the configuration fails. (PD3-133538459)

Profiles are executed at the client's local time, which may not match the switch's local time

If the EPICenter client where a profile is created resides in a different time zone from the switch where the profile is executed, the execution time configured on the client will differ from the time the profile is actually executed on the switch.

When you create a timer event, it is executed based on the local time zone of the client machine, which may not correspond to the local time zone of the switch where it is to be executed. For example, if the client machine is set to the PDT time zone, and the switch is set to use the default GMT time zone, then an event created to be executed at 10:00 p.m. PDT, will be scheduled to be executed at 5:00 a.m. GMT, which may not be your intention.

When setting the execution time for an event, first determine the time that you want the event to be executed on the switch, then adjust the execution time on the client accordingly. For example, if you want an event to be executed at 10:00 p.m. GMT, schedule it on the client for the local equivalent of 10:00 p.m. GMT. On a client in the PDT time zone, the equivalent of 10:00 p.m. GMT is 3:00 p.m. PDT.

Profiles bound to USER-REQUEST events are executed at the time of deployment

If you bind a profile to a USER-REQUEST event, the profile is executed at the time of deployment, even if the profile is disabled in EPICenter.

If a network profile is bound to a user request event and the profile is disabled, if you want to run the profile again, you should enable the profile from the Network Profiles view and then click the **Run** button to run the script.

3 Creating and Deploying ExtremeXOS Scripts with EPICenter

EPICenter 6.0 Service Pack 2 features the ability to create and edit ExtremeXOS scripts, then deploy them to managed devices. ExtremeXOS scripts are files containing CLI commands and scripting structures to be executed on Extreme devices. Any ExtremeXOS CLI command can be used in an ExtremeXOS script. ExtremeXOS scripts are supported on devices running ExtremeXOS 11.4 or later.

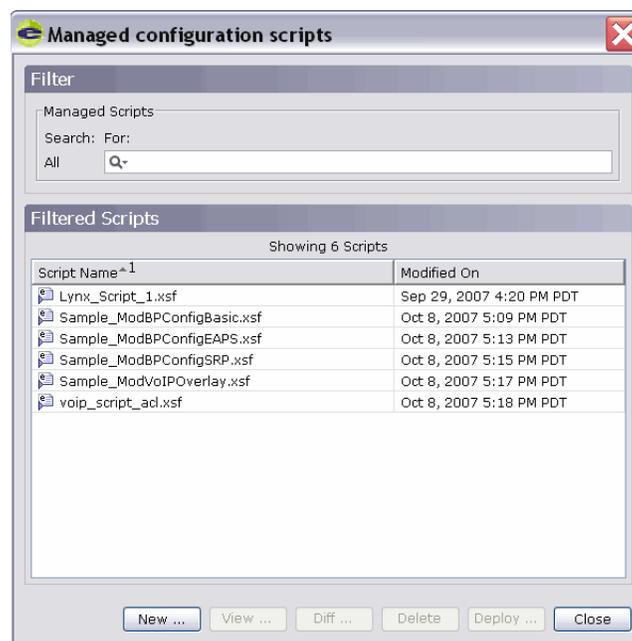
In an ExtremeXOS script, values for some parameters in the CLI commands are automatically substituted by the system, while other CLI command parameters can be defined within the script itself. ExtremeXOS scripting also provides control structures such as IF/THEN/ELSE and data manipulation functions. See the “CLI Scripting” chapter in the *ExtremeXOS Concepts Guide* for more information on ExtremeXOS script functionality and syntax.

The EPICenter Configuration Manager applet provides an interface for editing, managing, and deploying ExtremeXOS scripts. Using EPICenter, you can create an ExtremeXOS script, either from scratch or using a pre-configured script template, then deploy the script to selected devices. You can also view information about scripts that have been executed on Extreme devices.

Using the ExtremeXOS Script Editor

To get to the ExtremeXOS script editor, start the Configuration Manager applet by clicking the **Config** button in the EPICenter Navigation Toolbar, then select **Managed Scripts** from the **Scripts** menu. The Managed configuration scripts window appears, as shown in [Figure 1](#).

Figure 1: Managed configuration scripts window



This window displays a table of the existing ExtremeXOS scripts on the EPICenter server, with columns listing the filename and modification date of each script.

From the Managed configuration scripts window, you can do the following:

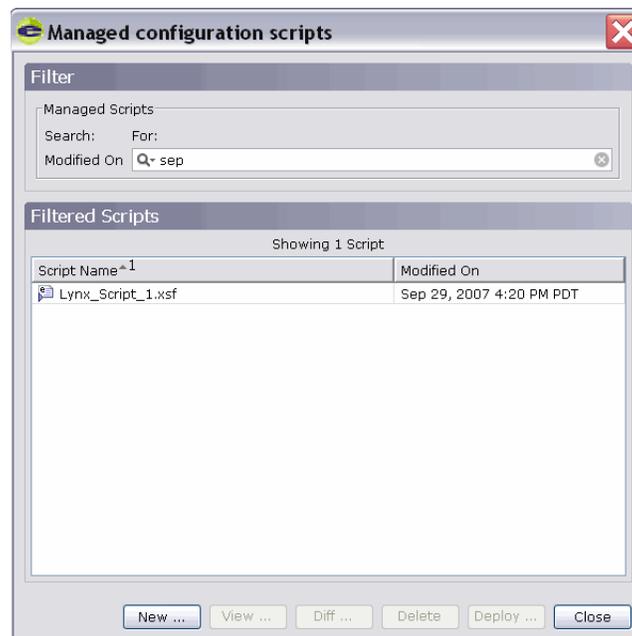
- Filter the list of ExtremeXOS scripts displayed in the window
- View an existing ExtremeXOS script
- Create and edit a new ExtremeXOS script
- Edit an existing ExtremeXOS script
- Display the differences between two ExtremeXOS scripts
- Delete an ExtremeXOS script
- Deploy (download and execute) a script to selected devices

Filtering the List of ExtremeXOS Scripts

You can filter the list of ExtremeXOS scripts displayed in the Managed configuration scripts window to show only those scripts that match certain search criteria, such as a given filename or modification date.

For example, to display just the scripts that were last modified in the month of September, click on  (the filter icon) and select **Modified On** from the drop-down list. Then in the **For:** field, enter *sep*. When you do this, only scripts that have “*sep*” in the Modified On column are displayed in the Filtered Scripts table. For example:

Figure 2: Filtered list of ExtremeXOS scripts



Using the filter definitions in the  (filter icon) drop-down list, you can search for the text in any or all of the columns in the Filtered Scripts table. You can optionally make the search case-sensitive, and you can specify whether the search text must start at the beginning of the column or if it can appear anywhere within the column.

Viewing ExtremeXOS Scripts

To view an ExtremeXOS script, select its row in the Filtered Scripts table and click the **View...** button (or double-click on the script name). The script is opened in the Script Editor window, as shown in [Figure 3](#). The Script Editor window has three tabs, **Purpose**, **Overview**, and **Script View**.

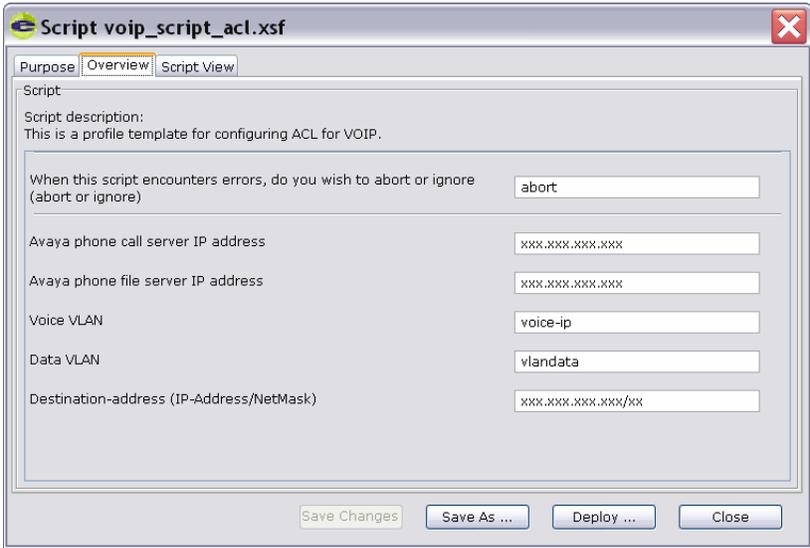
The **Purpose** tab contains descriptive information about the script.

Figure 3: ExtremeXOS Script Editor window (Purpose tab)



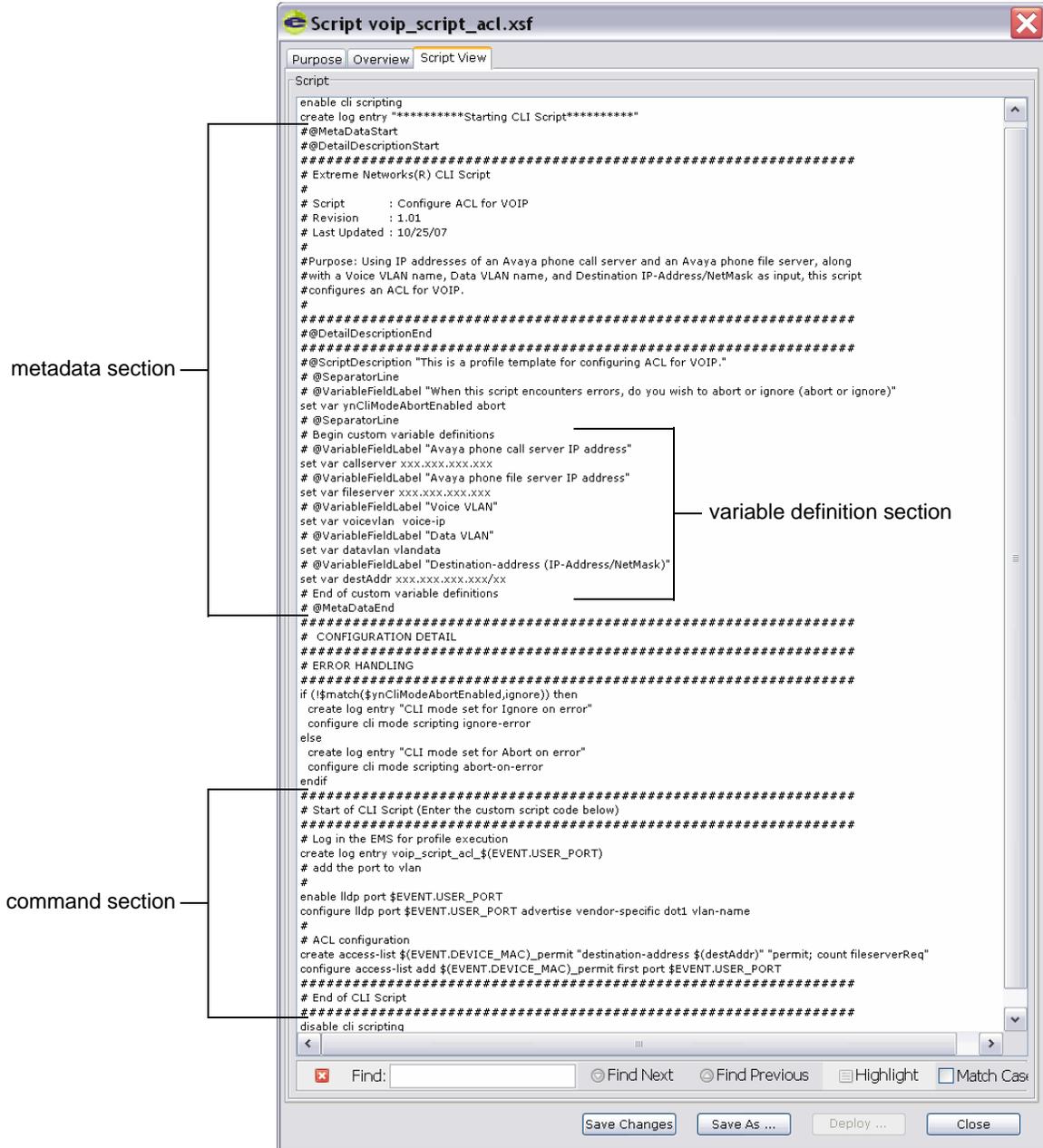
The **Overview** tab contains fields to enter script variables, if any are defined.

Figure 4: ExtremeXOS Script Editor window (Overview tab)



The **Script View** tab displays the script in a text editor window, where you can modify it directly.

Figure 5: ExtremeXOS Script Editor window (Script View tab)



ExtremeXOS scripts created in EPICenter contain two sections that you can edit: a *metadata* section and a *command* section. The metadata section (starting with the `#@MetaDataSetart` line and ending with the `#@MetaDataSetend` line) appears at the beginning of the script, and the command section follows it.

In the metadata section, you can specify a brief and detailed description of the script and define script variables. The detailed description information appears in the Purpose tab for the script, and the variable definitions appear as input fields in the Overview tab. You can enter values for the variables in the appropriate fields in the Overview tab. The brief description appears at the top of the Overview tab.

In the command section, you enter the ExtremeXOS CLI commands and scripting structures to be executed on the device where the script is deployed. See the “CLI Scripting” chapter in the *ExtremeXOS Concepts Guide* for information on how to develop ExtremeXOS scripts.

Creating a New ExtremeXOS Script

To create a new ExtremeXOS script, click the **New...** button in the Managed configuration scripts window. A Script Editor window appears, displaying a script with default content.

Figure 6: ExtremeXOS Script Editor window



By default, an ExtremeXOS script created in EPICenter contains the following items:

- A metadata section where you can enter a description of the script and define variables.
- Commands to enable and disable CLI scripting on a device.
- Commands to create a log entry when the script starts and when it finishes running.

- An error handling section consisting of ExtremeXOS scripting commands that allow you to specify what happens if the script encounters an error when it is executed. You can specify that script stop running (abort) when an error is encountered (the default), or you can specify that the script continue running and ignore errors.
- Blank space in the metadata and command sections where you can enter ExtremeXOS script code.

In the metadata section, you can edit the #@ScriptDescription line and the area between the #@DetailDescriptionStart and #@DetailDescriptionEnd lines to supply a description for the script. This description will appear in the Purpose tab. (Note the # character that begins each line in the script description area.) For example:

Figure 7: Specifying a description for an ExtremeXOS script

```

Script
Purpose Overview Script View
Script
#@MetaDataStart
#@DetailDescriptionStart
#####
# Extreme Networks(R) CLI Script
#
# Script : VLAN Create Script
# Revision : 1.01
# Last Updated : 10/25/07
# Purpose: This script creates a specified number of VLANs on a switch, with IP addresses ranging
# from 10.1.1.1/16 to 10.100.1.1/16
#
#####
#@DetailDescriptionEnd

create log entry "*****Starting CLI Script*****"
enable cli scripting
#####
#@ScriptDescription "Create some VLANs"
#@VariableFieldLabel "When this script encounters errors, do you wish to abort or ignore (abort or ignore)"
set var ynCliModeAbortEnabled abort
#@SeparatorLine
# Begin custom variable definitions

# End of custom variable definitions
#@MetaDataEnd
#####
# CONFIGURATION DETAIL
# ERROR HANDLING
#####
if (!$match($ynCliModeAbortEnabled,ignore)) then
create log entry "CLI mode set for ignore on error"
configure cli mode scripting ignore-error
else
create log entry "CLI mode set for abort on error"
configure cli mode scripting abort-on-error
endif
#####
# Start of CLI Script (Enter the custom script code below)
#####

#####
# End of CLI Script
#####
disable cli scripting
create log entry "*****Finshed running CLI Script*****"
    
```

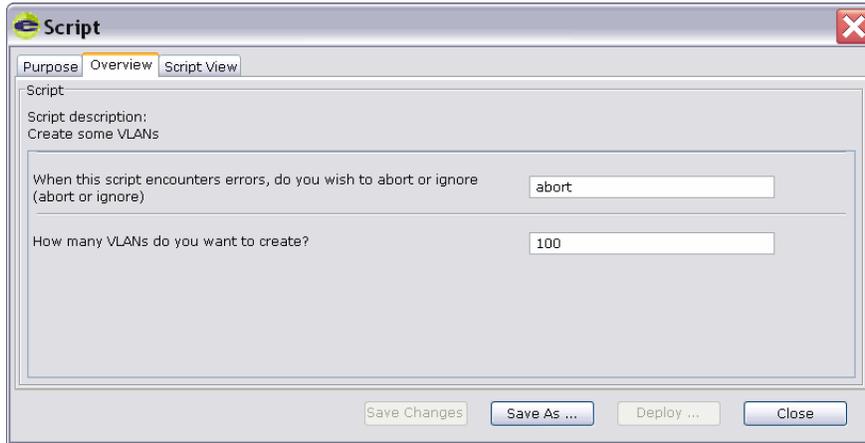
You can place variable definition statements in the metadata section, so that variables can be defined by entering values in the Overview tab window. For example:

Figure 8: Defining variables in the metadata section of an ExtremeXOS script



When you do this, the variable definition field appears on the Overview tab, as shown in [Figure 9](#).

Figure 9: Overview tab with a variable definition field



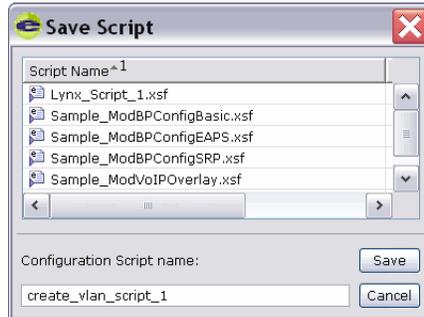
In the command section, you can place ExtremeXOS scripting commands. The following example shows the commands for a script that creates a specified number of VLANs on a switch, with IP addresses ranging from 10.1.1.1/16 to 10.100.1.1/16.

Figure 10: Sample ExtremeXOS script in the Script View tab



To save the script, click the **Save As...** button. EPICenter prompts you for the name of the script. The extension `.xsf` is automatically appended to the name you specify.

Figure 11: Save Script As dialog



Editing an Existing ExtremeXOS Script

After you save the script, it is added to the Filtered Scripts table. You can open the script, edit it, and save it with a new name.

To open the script, select it in the Filtered Scripts table and click the **View...** button (or double-click on the script name). The script is opened in the Script Editor window. To edit the script, you can either change the values for variables in the Overview tab, or you can edit the text in the Script View tab directly.

Figure 12: Editing an ExtremeXOS script from the Overview tab



When you have finished editing the script, you can save the changes to the current version of the script by clicking the **Save Changes** button, or you can save a copy of the script with a new name by clicking the **Save As...** button. When you save the script with a new name, both versions appear in the Filtered Scripts table.

Using Deployment Module Templates

A number of pre-configured sample ExtremeXOS scripts (known as *deployment module templates*), are available from Extreme Networks. Deployment module templates provide sample best-practice configurations for features such as VoIP, SRP, and EAPS. You can modify the deployment module templates to suit your needs.

EPICenter 6.0 Service Pack 2 includes four sample deployment module templates. If you are using the default EPICenter TFTP server, these deployment module templates automatically appear in the Filtered Scripts table when the Service Pack is installed.

If you are not using the default EPICenter TFTP server, then after installing Service Pack 2, you must manually copy the `.xsf` files from the `<EPICenter_install_dir>\user.war\tftp\scripts` directory to a `<tftp-server-root>\scripts` directory on the EPICenter server.

If you download a deployment module template from Extreme Networks, it is supplied in the form of a zip archive containing a `readme.txt` file, which describes the deployment module template, and an `.xsf` file, which contains the script code.

To add a downloaded deployment module template to your EPICenter installation, do one of the following:

- Open the `.xsf` file in a text editor, copy its contents into an EPICenter Script Editor window, then click **Save As...** to save the script.
- Copy the `.xsf` file to the following directory on the EPICenter server:

```
<tftp-server-root>\scripts
```

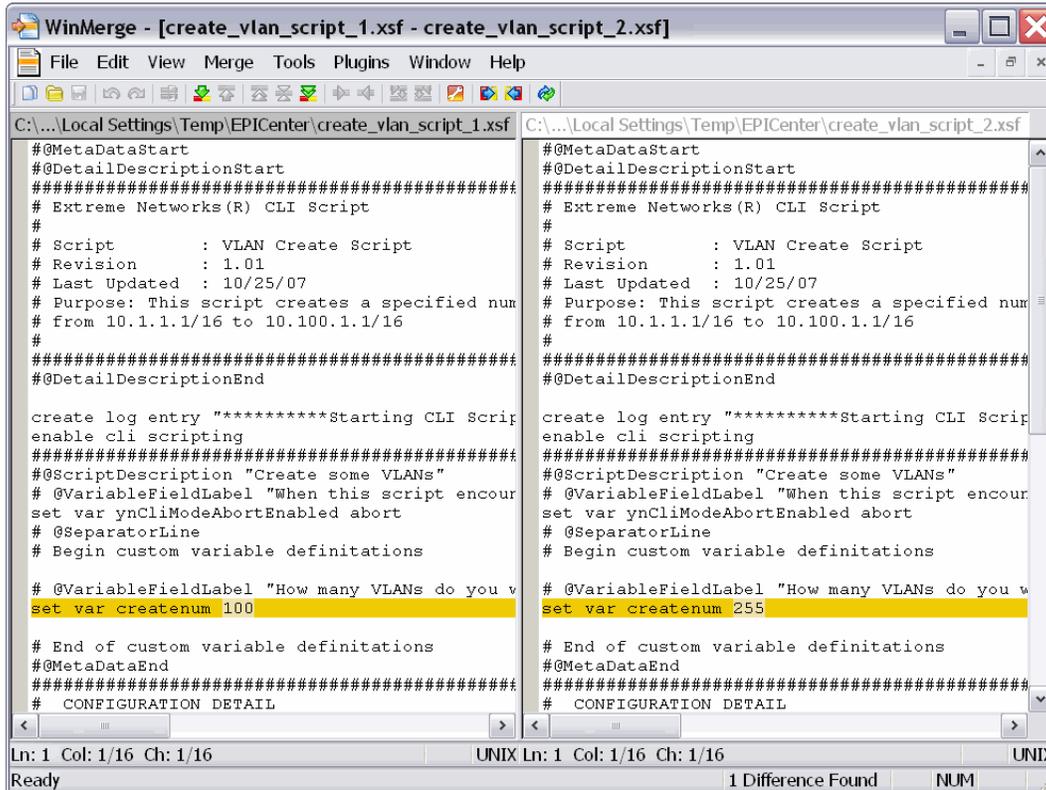
The EPICenter `<tftp-server-root>` is by default `<EPICenter_install_dir>\user.war\tftp` where `<EPICenter_install_dir>` is the directory where the EPICenter server is installed.

Viewing the Differences Between Two ExtremeXOS Scripts

You can view the differences between two ExtremeXOS scripts. To do this, select the scripts you want to compare in the Filtered Scripts table, then click the **Diff...** button. The differences between the scripts are shown in the configured Diff viewer for EPICenter.

EPICenter invokes the Diff viewer in a separate window, with the two files you selected displayed. [Figure 13](#) shows an example of a differences comparison using WinMerge in Windows XP.

Figure 13: Viewing differences between two ExtremeXOS scripts



Viewing differences between scripts requires that you specify an external Diff viewer in EPICenter. To do this, go to the Config applet and select **Options > Setup Viewers** from the Config menu. For Windows, WinMerge, an open source viewer, is assumed as the default. For Linux or Solaris, sdiff (in /usr/bin/sdiff) is assumed as the default.

See “Configuring a Viewer” in the *EPICenter Reference Guide* for information on how to set up a Diff viewer on your system and make it available to EPICenter.

Deleting an ExtremeXOS Script

To delete an ExtremeXOS script, select the script (or scripts) you want to delete in the Filtered Scripts table, and click the **Delete** button. EPICenter prompts you for confirmation before deleting the selected script(s).

Deploying ExtremeXOS Scripts

You can deploy ExtremeXOS scripts to devices managed by EPICenter. *Deploy*, in this context, means:

- *Select* the devices where you want to execute the script
- Optionally *customize* the script parameter settings, or set script parameters for each individual device
- *Download* the script to the device(s)

- *Execute* the script commands on the device(s)

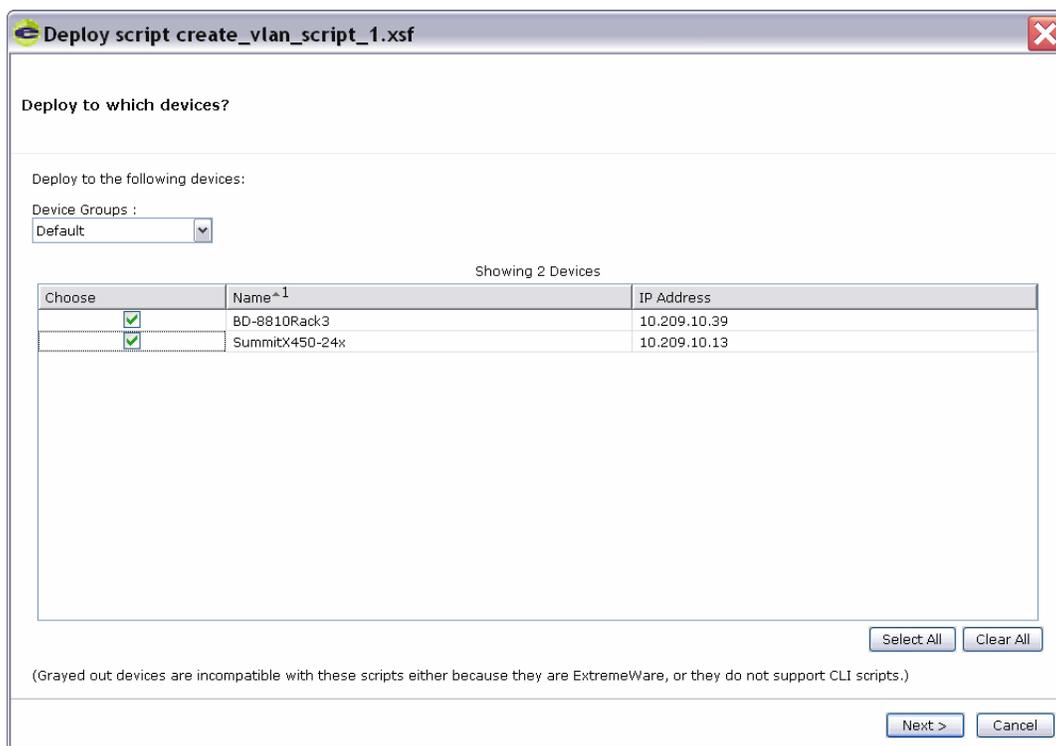
The devices to which you deploy the scripts must be running a software image that supports ExtremeXOS CLI scripting. ExtremeXOS CLI scripting is supported on devices running ExtremeXOS version 11.4 or higher. If you want to use secure communication (SSH and SFTP) to deploy scripts, ExtremeXOS version 12.0 SR1 is required. ExtremeXOS CLI scripting is not supported on ExtremeWare devices.

To deploy a script, do one of the following:

- Select the script in the Filtered Scripts table and click the **Deploy** button.
- View the script in the Script Editor window and click the **Deploy** button.

Clicking the **Deploy** button starts the Deploy Script wizard. You are prompted to select the devices to which you want to deploy the script.

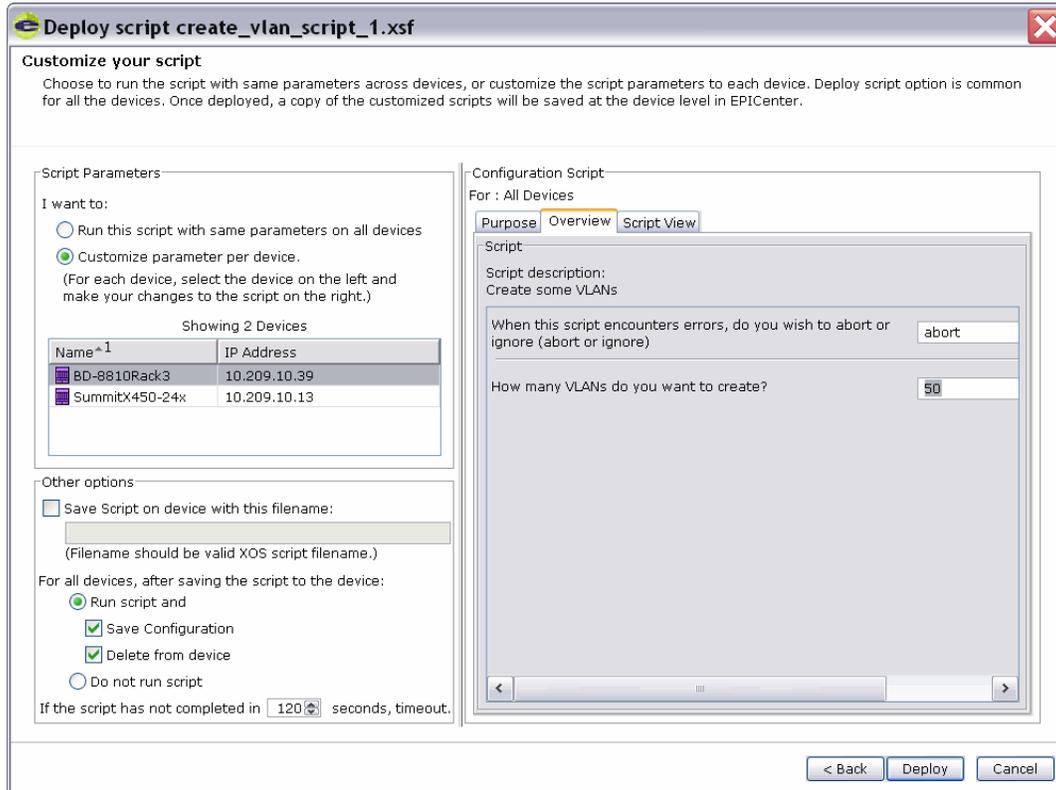
Figure 14: Selecting devices in the Deploy Script wizard



On this screen, you can select one or more managed devices. If the managed device is running a software image that does not support ExtremeXOS CLI scripting, then the device is grayed-out in the list and cannot be selected.

After selecting the devices where you want to deploy the script, click the **Next** button to continue. The script customization screen is displayed.

Figure 15: Script customization screen in the Deploy Script wizard



The script customization screen shows the contents of the script in the Profile, Overview, and Script View tabs. On this screen, you can optionally make changes to the script parameters before the script is deployed. You can modify the parameter settings in the Overview tab only; you cannot modify the text in the Profile or Script View tabs.

You can specify that the script be applied identically on all of the selected devices (the default), or you can adjust the script so it uses different parameter settings on each individual device. For example, you can configure the script to create 255 VLANs on all of the selected devices, or you can configure the script to create 50 VLANs on one device, 100 VLANs on another device, and so on.

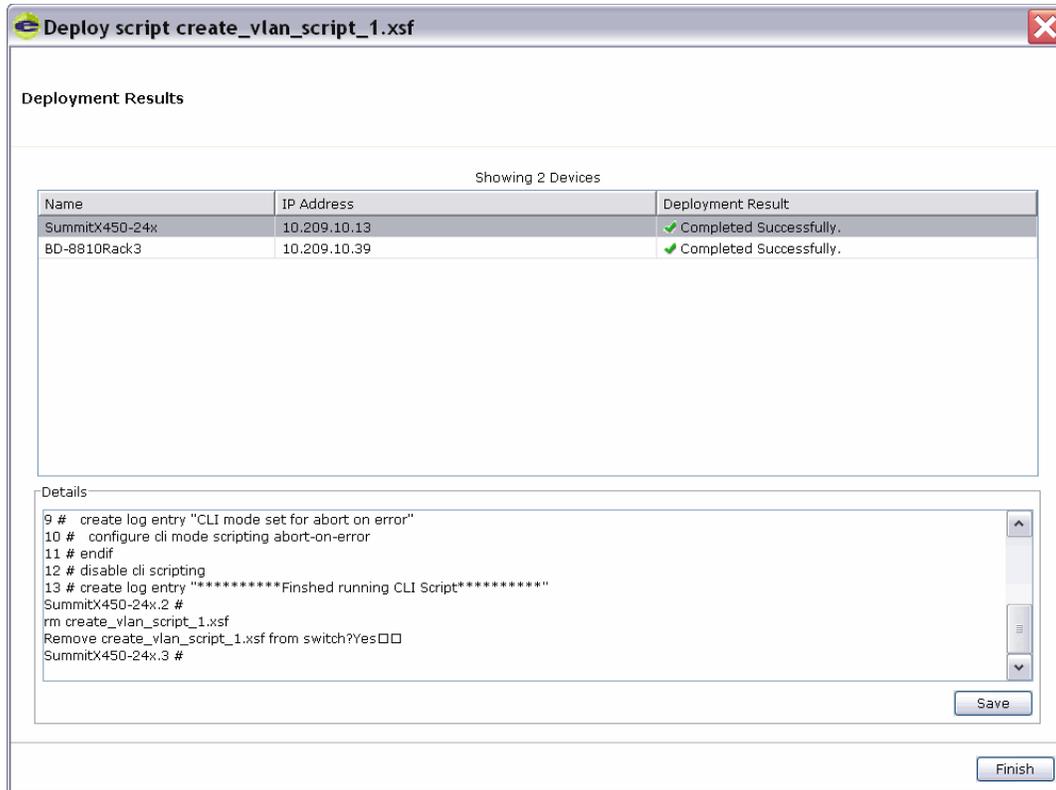
To adjust the parameter settings for each device, select the button next to “Customize parameter per device.” You can then select a device from the list and modify script parameter settings in the Script Overview tab. When the script is deployed, the script parameter settings will apply only to that device.

You can optionally specify the following:

- A filename under which the script is saved on the device where it is deployed.
- Whether the script is executed after it is downloaded to the selected devices. By default, the script is executed after it is downloaded to a device.
- If the script is executed after it is downloaded, you can also select whether to save the configuration and/or delete the script from the device after execution. The previous configuration file is saved as `snapshot.cfg`.
- The number of seconds allotted for execution of the script on the device. If the script has not completed after this number of seconds, it is halted.

When you have finished making changes on the script customization screen, click the **Deploy** button to deploy the script to the selected devices. The deployment results screen shows the progress of the script as it is deployed on each device, and reports the result of the deployment process.

Figure 16: Deployment results screen in the Deploy Script wizard



A log of the script deployment results for the device is stored on the EPICenter server in the following location:

```
<tftp-server-root>\scripts\<<device-ip-address>\<script-name>.log
```

The `<tftp-server-root>` is by default `<EPICenter_install_dir>\user.war\tftp` where `<EPICenter_install_dir>` is the directory where the EPICenter server is installed. If the script could not be downloaded to the device, no script deployment results log is generated.

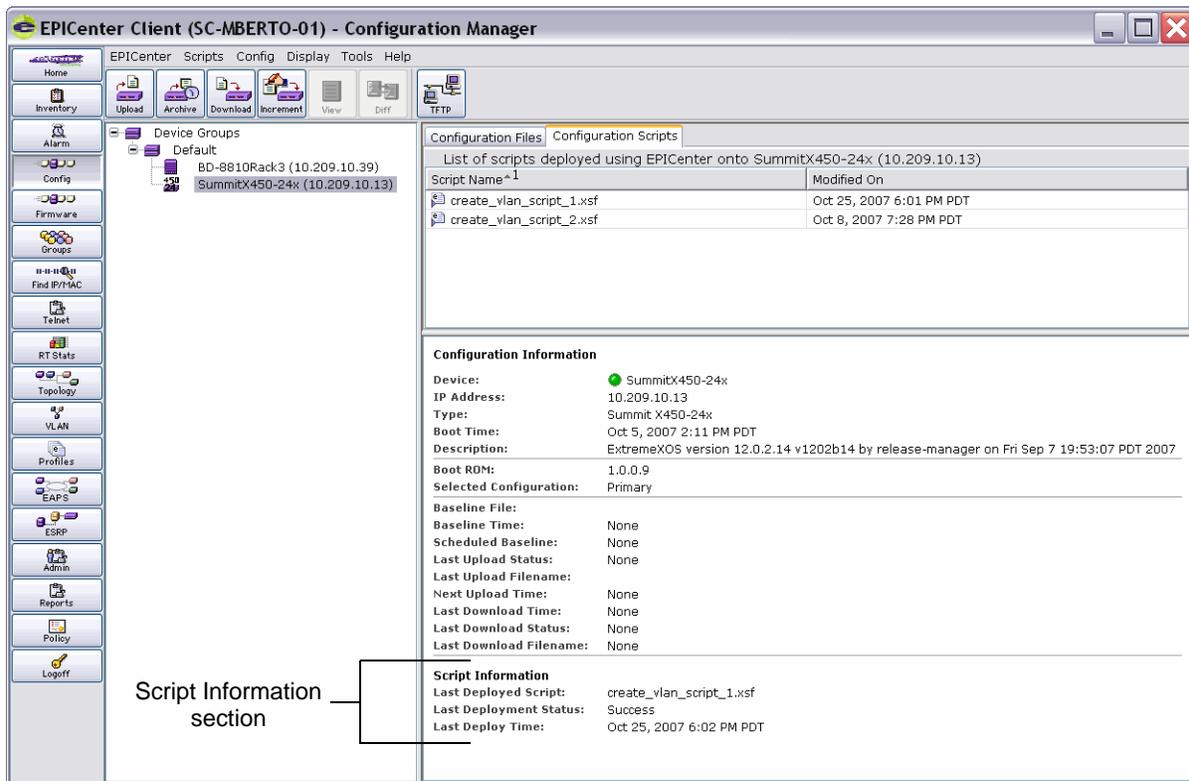
To view details about the deployment results on a device, select the device name in the table. Information about the script deployment on the selected device appears in the Details box. The last 2,000 lines of the deployment results are displayed in the Details box. You can save the text in the Details box to file by clicking the **Save** button and specifying a filename.

After the script deployment is completed, click **Finish** to exit the Deploy Script wizard.

Viewing Information about Deployed Scripts

After you deploy a script to a device, information about the script is displayed in the device status window. The device status window includes a Configuration Scripts tab and a Script Information section.

Figure 17: Device status window for a device where a script has been deployed



The Configuration Scripts tab lists all of the ExtremeXOS scripts that have been deployed on this device using EPICenter, and when the scripts were last modified. If you modified a script's parameters for the device before deploying the script, the device-specific version of the script is listed here.

- To view the contents of the script, select the script from the list and click the **View** button (or select **View** from the **Scripts** menu). The script is opened in a read-only window.
- To view the differences between two ExtremeXOS scripts deployed on the device, select the two scripts in the list and click the **Diff** button (or select **Diff** from the **Scripts** menu). The differences between the scripts are shown in the configured Diff viewer for EPICenter.

The Script Information section shows information about the last script that was deployed to the device. It shows the name of the script, the result of the deployment (success or failure), and the date and time of the deployment.

The scripts that have been deployed on the device are stored on the EPICenter server in the following directory:

```
<tftp-server-root>\scripts\<<device-ip-address>
```

The `<tftp-server-root>` is by default `<EPICenter_install_dir>\user.war\tftp` where `<EPICenter_install_dir>` is the directory where the EPICenter server is installed. Note that if you specified an alternate name for the script using the “Save script on device with this filename” option on the script customization screen, the script is stored on the EPICenter server under its original name, not the name that you specified.

