Sun Update Manager 1.0 Administration Guide

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Contents

Preface

The *Sun Update Manager 1.0 Administration Guide* explains the purpose and features of the Sun™ Update Manager client software, henceforth referred to as Update Manager.

This book also describes how to install, register, and use the Update Manager software. Update Manager provides a consolidated set of robust patch and update tools for managing updates on the Solaris™ 10 Operating System.

The Update Manager application is part of the Sun Update Connection, System Edition software product. The Sun Update Connection services and proxy are also part of this software product and are discussed in this book.

Note – The terms patch and update are used interchangeably in the Sun Update Manager application and in this book.

How This Book Is Organized

This guide contains five chapters and a glossary.

Chapter 1 describes how to get started using Update Manager in your update management environment. This chapter also provides an overview of Solaris updates, describes the main features in this release, and describes concepts to become familiar with before applying updates.

Chapter 2 describes how to install and uninstall the Sun Update Manager client software. It also explains how to install the Sun Update Connection Proxy software.

Chapter 3 describes how to register your system to take advantage of the functionality of the Sun Update Manager application.

Chapter 4 describes how to use the Sun Update Manager application to manage updates.

Chapter 5 describes how to configure and use a Sun Update Connection Proxy, also referred to as a local patch server, on your intranet.

Glossary is a list of terms that are used in this book and their definitions.

Related Books

- *Sun Update Connection 1.0 Administration Guide*

  Read this document for information about using the Sun Update Connection 1.0 web application to remotely manage updates on one or more of your Solaris 10 systems.

- *Solaris 10 Reference Manual*

  For information about the `smpatch` command, see the `smpatch`(1M) man page in this document.

Accessing Sun Documentation Online

The docs.sun.com^{SM} web site enables you to access Sun technical documentation online. You can browse the docs.sun.com archive or search for a specific book title or subject. The URL is `http://docs.sun.com`.

Ordering Sun Documentation

Sun Microsystems offers select product documentation in print form. For a list of documents and how to order them, see "Buy printed documentation" at `http://docs.sun.com`.

Typographic Conventions

The following table describes the typographic changes that are used in this book.

Typeface	Meaning	Examples
`AaBbCc123`	The names of commands, files, directories, and onscreen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% You have mail.`
`AaBbCc123`	What you type, when contrasted with onscreen computer output	`machine_name%` **`su`** `Password:`
AaBbCc123	Placeholder: replace with a real name or value	The command to remove a file is `rm` *filename*.
AaBbCc123	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the *User's Guide*. These are called *class* options. Do *not* save the file. (Emphasis sometimes appears in bold online.)

Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

Shell	Prompt
C shell prompt	`machine_name%`
C shell superuser prompt	`machine_name#`
Bourne shell and Korn shell prompt	`$`
Bourne shell and Korn shell superuser prompt	`#`

Contacting Sun Technical Support

If you have technical questions about this product that are not answered in this document, go to http://sunsolve.sun.com/.

If you have a Sun Service Plan, obtain support contact information at http://www.sun.com/service/contacting/solution.html.

Overview of Sun Update Manager

The Sun™ Update Manager software is one part of the Sun Update Connection, System Edition 1.0 software that enables you to locally manage updates on your system. Sun Update Manager is henceforth referred to as Update Manager.

This chapter covers the following topics:

Note – The terms patch and update are used interchangeably in the Sun Update Manager application and in this book.

Getting Started With Update Manager

Note – If you are familiar with Sun Update Manager and want to go ahead and install the client software, go to Chapter 2.

Sun Update Manager has two user interfaces that you can use to locally manage updates on your system. The user interfaces are the Sun Update Manager graphical user interface and the smpatch command-line interface.

This section covers the following topics:

Getting Started Process Overview

Before you can use Update Manager or the Sun Update Connection services to manage updates on your systems, you must determine the update management strategy you want to use.

1. Install and start the Sun Update Manager application on your Solaris™ 10 system.

2. Find the situation that best describes your update management environment.

   - Your client system is directly connected to the Internet.

     You are ready to begin the system registration process.

   - Your client system is connected to the Internet by means of a network proxy.

     You must first specify the host name and port of the network proxy during the system registration process. If required, also specify the user name and password associated with the network proxy.

   - You want to have several client systems obtain updates from a Sun Update Connection Proxy on your intranet.

     You must first configure a system to act as your Sun Update Connection Proxy. See "Configuring Your Sun Update Connection Proxy (Task Map)" on page 60. Then, configure your client system to obtain updates from the proxy during the registration process.

3. Register your Solaris system with Update Manager.

   During the registration process, you are prompted for a Sun Online Account. You might already have a Sun Online Account if you registered for an account with programs such as Java Developer Connection℠, Online Support Center (OSC), MySun, SunSolve℠, and SunStore.

   Determine the update management strategy you want to use based on your level of registration and subscription.

   - **Unregistered system.** Manually obtain and manage Solaris security updates locally on your system by using the smpatch add command and the smpatch remove command.

   - **Registered system with no subscription.** Use Update Manager to locally manage only Solaris security updates.

   - **Registered system with a subscription and managed with Sun Update Connection.** Use the Sun Update Connection services to remotely manage all Solaris updates. A subscription is part of the Sun Service Plan. You can still manage updates locally by using the Update Manager GUI or the smpatch command.

4. Manage updates on your Solaris 10 systems.

Comparison of Update Manager User Interfaces

The following table summarizes the Sun Update Manager 1.0 features and tasks that are supported by the GUI and the command-line interface (`smpatch`).

Feature/Task	Graphical User Interface	Command-Line Interface
Can apply updates to a system?	Yes	Yes
Can perform update management operations on a remote system?	Yes. You can run the GUI on a remote system and display it on your local system. Also, use the Sun Update Connection services to remotely manage your system.	Yes, in remote mode `smpatch` only. Local mode `smpatch` can only be run on the local system.
Can analyze a system for updates?	Yes	Yes
Can perform a scheduled update analysis of your system?	Yes	Yes. Use `cron` to run the `smpatch analyze` command.
Can download individual updates?	No, individual updates are downloaded only when they are applied.	Yes
Can resolve update dependencies?	Yes	Sometimes. If you run `smpatch add`, update dependencies are *not* resolved. However, if you run `smpatch update` or `smpatch analyze -i` *update-id*, update dependencies are resolved.
Can remove more than one update at a time?	Yes	No. `smpatch remove` can remove just one update at a time.
Can be run while the system is in single-user mode?	No	Yes. Limited operations of local mode `smpatch` only.
Can access updates from a Sun Update Connection Proxy?	Yes	Yes

Feature/Task	Graphical User Interface	Command-Line Interface
Can operate on update lists?	No	Yes
Can configure the update management environment for your system?	Yes	Yes
Supports RBAC?	No	Yes

Overview of Solaris Update Management

Update management involves *applying* Solaris updates, also referred to as *patches*, to a system. Update management might also involve removing unwanted or faulty updates. Removing updates is also called *backing out* updates.

This section covers the following topics:

- "Types of Updates" on page 4
- "Accessing Solaris Updates" on page 5
- "Tools for Managing Solaris Updates" on page 6

For information about applying patches to diskless client systems, see "Patching Diskless Client OS Services" in *System Administration Guide: Basic Administration*.

For information about recommended strategies and practices for using Solaris updates, go to http://docs.sun.com/doc/817-0574/.

Types of Updates

An *update* is a collection of files and directories that replaces or updates existing files and directories that are preventing proper execution of the existing software. An update might also introduce a new feature to the system. Such an update is called a *feature update*. The existing software is derived from a specified *package* format, which conforms to the application binary interface (ABI).

You can manage updates on your Solaris system by using the Update Manager application, the smpatch command, or the patchadd command.

> **Note –** Do not use the Update Manager GUI, the `smpatch` command, and the `patchadd` command simultaneously to manage updates on your system. While the Update Manager GUI is running, changes made by `smpatch` and `patchadd` might not be reflected correctly in Update Manager.

Signed and Unsigned Updates

A *signed update* is one that has a *digital signature* applied to it. An update that has its digital signature verified has not been modified since the signature was applied. The digital signature of a signed update is verified after the update is *downloaded* to your system.

Updates and patches for Solaris releases are available as signed updates and as unsigned updates. *Unsigned updates* do not have a digital signature.

Signed updates are stored in Java™ archive format (JAR) files and are available from the Sun update server. Unsigned updates are stored in directory format and are also available from the Sun update server as `.zip` files.

Accessing Solaris Updates

Sun customers can access updates and patches from the Sun update server whether or not they are in the SunSpectrum℠ program. These updates and patches are updated nightly.

You can obtain Solaris updates in the following ways:

- From the http://sunsolve.sun.com web site

  To access updates from the Sun Patch Portal, your system must be connected to the Internet and be capable of running a web browser, such as the Mozilla™ software.

- By using the Sun Update Manager tools that are described in this book
- By using the *Sun Update Connection services* that are described in the *Sun Update Connection 1.0 Administration Guide*

You can access individual updates or a set of updates from an update cluster, or refer to update reports. You can also use Sun Update Manager to *analyze* your system to determine the appropriate updates. Update Manager can also download and apply the updates to your system.

Each update is associated with a README file that has information about the update. You can view the README from the Update Manager GUI.

Solaris Update Numbering

Updates are identified by unique update IDs. An *update ID* is an alphanumeric string that is an update base code and the update revision number joined with a hyphen. For example, update 118822-02 is the update ID for the SunOS™ 5.10 kernel update.

Tools for Managing Solaris Updates

You can use the following tools to apply updates to Solaris systems:

- Sun Update Connection, System Edition tools:
  - Sun Update Manager graphical user interface (GUI)
  - Sun Update Connection web application
  - Sun Update Manager command-line interface (smpatch)
- patchadd command
- Solaris Management Console (smc) Patches tool (GUI, starting with Solaris 9)

If you need to apply a patch to a diskless client system, see "Patching Diskless Client OS Services" in *System Administration Guide: Basic Administration*.

The Update Manager application is part of the Sun Update Connection, System Edition software product. The Sun Update Connection services are also part of this software product.

The following table summarizes the availability of various Solaris update management tools.

Tool Availability	Sun Update Manager 1.0 and Sun Patch Manager 2.0	Sun Update Connection, System Edition 1.0	`patchadd`/`patchrm` Commands	Solaris 2.6 and Solaris 7 Patch Management Tools	PatchPro Interactive or PatchPro Expert
How do I get this tool?	**For Solaris 10 –** Apply the Update Manager feature update **For Solaris 8 or Solaris 9 –** Download the appropriate version of the Patch Manager tool from the Sun Download Center web site	Run tool from the Sun Update Connection web site	Included with the Solaris release	Download the tool from the Sun Download Center	Run tool from the PatchPro web site
Solaris release availability	**For Solaris 10 –** Sun Update Manager 1.0 **For Solaris 8 and Solaris 9 –** Sun Patch Manager 2.0	Solaris 10	Solaris 2.6, Solaris 7, Solaris 8, and Solaris 9 releases	Solaris 2.6 and Solaris 7 releases	Solaris 2.6, Solaris 7, Solaris 8, and Solaris 9 releases
Applies signed updates?	Yes, and automatically verifies the signed update when it is downloaded	Yes	**Starting with Solaris 9 12/03 –** Yes, and automatically verifies the signed update when it is downloaded	Yes, and automatically verifies the signed update when it is downloaded	No, these tools do not apply updates
Applies unsigned updates?	**For Sun Update Manager 1.0 –** No **For Sun Patch Manager 2.0 –** Yes, but the updates must be unzipped first	Yes	Yes	No	No

Tool Availability	Sun Update Manager 1.0 and Sun Patch Manager 2.0	Sun Update Connection, System Edition 1.0	`patchadd`/`patchrm` Commands	Solaris 2.6 and Solaris 7 Patch Management Tools	PatchPro Interactive or PatchPro Expert
GUI available?	**For Solaris 10 –** Yes, for systems running Update Manager **For Solaris 9 –** Yes, for systems running Patch Manager (`smc`) **For Solaris 8 –** No	Sun-based web application	No	No	Yes, these tools can only be run from the PatchPro web site
Analyzes system to determine the appropriate updates, and downloads signed or unsigned updates	Yes, signed updates only	Yes	No	Yes, signed updates only	Yes, unsigned updates only
Local and remote system update support	Local and remote **For Solaris 8 –** Local	Remote	Local	Local	No
RBAC support?	**For Update Manager –** No **For** `smpatch` **–** Yes	Not applicable	Yes	No	No

Managing Solaris Updates

While you apply updates, the `patchadd` command logs information in the `/var/sadm/patch/`*update-id*`/log` file.

The `patchadd` command cannot apply an update under the following conditions:

- The package is not fully installed on the system.
- The update package's architecture differs from the system's architecture.
- The update package's version does not match the installed package's version.
- An update with the same base code and a higher revision number has already been applied.
- An update that *obsoletes* this update has already been applied.
- The update is *incompatible* with an update that has already been applied to the system.
- The update being applied depends on another update that has not yet been applied.

Selecting the Best Method for Applying Updates

You can use several different methods to download or apply one or more updates to your system. Use the following table to determine which method is best for your needs.

Note – The version of the `smpatch` command described in this table was first available for Solaris 8 systems.

Command or Tool	Description	For More Information
Update Manager GUI	Use this tool when you want the convenience of a GUI to manage updates. Following are some features of this GUI: • Analyzing your system to determine the appropriate updates • Updating the system with one or more updates • Removing updates • Viewing the list of applied updates • Configuring your update management environment • Notifying you when new updates are available for your system	"Managing Solaris Updates by Using the Sun Update Manager GUI" on page 43
Sun Update Connection web application	Use this Sun-hosted web application to remotely manage updates on all of your Solaris 10 systems.	*Sun Update Connection 1.0 Administration Guide*
`smpatch update`	Use this command to analyze your system to determine the appropriate updates, and to automatically download and apply the updates. Note that this command will not apply an update that has the `interactive` property set. For Solaris 8 systems, only the local mode `smpatch` is available.	`smpatch`(1M) man page

Command or Tool	Description	For More Information
`smpatch analyze` and `smpatch update`	First, use `smpatch analyze` to analyze your system to determine the appropriate updates. Then, use `smpatch update` to download and apply one or more of the updates to your system. Note that this command will not apply an update that has the `interactive` property set. For Solaris 8 systems, only the local mode `smpatch` is available.	`smpatch`(1M) man page
`smpatch analyze`, `smpatch download`, and `smpatch add`	First, use `smpatch analyze` to analyze your system to determine the appropriate updates. Then, use `smpatch download` to download them. This command also downloads any prerequisite updates. Then, use `smpatch add` to apply one or more of the updates to your system while the system is in single-user or multiuser mode. For Solaris 8 systems, only the local mode `smpatch` is available.	`smpatch`(1M) man page
`patchadd`	**Starting with Solaris 2.6 release** – Apply unsigned updates to your system. **Starting with Solaris 9 12/03 release** – Use this command to apply either signed or unsigned updates to your system. To apply signed updates, you must first set up your package *keystore*.	`patchadd`(1M) man page

If you choose to use the `smpatch` command-line interface or the Update Manager graphical user interface to apply updates, see "Getting Started With Update Manager" on page 1 for additional information that might affect which method you select.

Sun Update Connection Features

This section describes the main features of Sun Update Connection, System Edition:

- "Sun Update Manager Graphical User Interface" on page 11
- "Sun Update Connection Services" on page 11
- "Sun Update Connection Proxy" on page 12
- "PatchPro Analysis Engine" on page 14

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To use the Update Manager tool, you must install at least the End User Solaris Software Group of Solaris 10 software.

Note – As of July 2005, not all Sun updates are available through the Sun Update Manager application. Such updates include those that do not conform to PatchPro standards and those that have third-party contract restrictions.

Information about Solaris patches and the Sun Patch Manager 2.0 software is in *System Administration Guide: Basic Administration* in the Solaris 10 System Administrator Collection on the docs.sun.com site.

Sun Update Manager Graphical User Interface

Update Manager offers a graphical user interface for updating systems with updates. You can use the GUI to analyze your system, apply updates you select, remove updates, and configure your update management environment.

Sun Update Connection Services

The Sun Update Connection services enable you to remotely monitor and manage all update activities for each of your registered systems. These services are available through a web application that runs at Sun.

Note – Systems that you manage with the Sun Update Connection services can still be managed locally by using Update Manager. The update data that appears in these tools might be out of sync due to latency.

The Sun Update Connection services provide a web application that is hosted on a Sun web site. You can use this tool to create jobs to run on systems as they check in to the service. A job either installs an update or uninstalls an update. You can also use the web application to view the update status of your systems and of your jobs.

The Sun Update Connection services have these features:

- **Automatic check-in of registered systems.** Each registered system *checks in*, or connects, to the Sun Update Connection web site to run queued jobs, which install and uninstall updates. You can specify the check-in interval for each system.

- **Job creation.** Create a job to download and install an update to one or more systems.
- **Job monitoring.** View the progress of all update jobs.
- **Job management.** Cancel pending jobs, archive completed jobs, and schedule system restarts to install updates that require a reboot.

For more information about the Sun Update Connection services, see the *Sun Update Connection 1.0 Administration Guide*.

Sun Update Connection Proxy

The *Sun Update Connection Proxy* was previously called *local patch server*.

This proxy supports client systems that use the Sun Update Connection, System Edition 1.0 software and the Sun Patch Manager 2.0 software. A Sun Update Connection client system is not compatible with the older local patch server feature associated with the Sun Patch Manager 2.0 product.

Note – The Sun Update Connection Proxy is an optional feature that you can obtain at no charge if you have a Sun Service Plan. For information about obtaining a Sun Service Plan, go to Solaris Operating System Software Support at http://www.sun.com/service/support/software/solaris/ and select the appropriate level of service.

Starting with the Solaris 8 Operating System, client systems can access updates and update data to perform *update analysis* and maintenance. This update data is provided by an update source. The update source can be an *update server*, such as the Sun update server or a Sun Update Connection Proxy (also referred to as a local patch server), or a local collection of updates.

By using a Sun Update Connection Proxy on your intranet, you can serve updates to your local systems and minimize the Internet traffic between your systems and the Sun update server. This type of proxy *caches* any updates that are downloaded from its update source.

For information about configuring this type of proxy on your intranet, see "Configuring Your Sun Update Connection Proxy by Using the Command-Line Interface" on page 62.

The Sun Update Connection Proxy obtains updates from its source of updates on a per-request basis. You do not need to stock your proxy with updates before you use it.

The system that you choose to act as the Sun Update Connection Proxy must be running at least Solaris 10 and have at least the Developer Solaris Software Group installed. This system must also have the Sun Update Manager 1.0 software installed.

Benefits of Using a Sun Update Connection Proxy

Using a Sun Update Connection Proxy addresses security concerns as well as system analysis and update download performance issues.

For instance, if your client systems are connected to a Sun Update Connection Proxy and managed locally, the client systems do not need to be connected to the Internet. These client systems also do not need to be registered by the Sun Update Manager software.

As another example, using this type of proxy can improve update-related performance issues. Instead of updates and metadata being downloaded from the Sun update server to each of your systems, the update is downloaded only once to your Sun Update Connection Proxy. After the update data is stored on this server, update data is transferred to your system for analysis over your intranet instead of over the Internet.

You can configure a chain of Sun Update Connection Proxies on your intranet. The last link in the chain of proxies can point to the Sun update server or to a local collection of updates. By using this chain of proxies, an update download request from your system to its primary Sun Update Connection Proxy can be forwarded to other proxies in the chain in an attempt to fulfill the request. If your system's primary Sun Update Connection Proxy cannot locate an update, it makes the same request of the next proxy in the chain to see if the update is stored there. If the update is found, it is downloaded to the system. If the update is not found, the request continues along the chain until the update is found or the last proxy in the chain is reached.

For example, your company has a Sun Update Connection Proxy that obtains updates directly from the Sun update server. Each office in your company has its own Sun Update Connection Proxy that obtains updates from the company proxy.

Each Sun Update Connection Proxy in the chain stores the updates found on another proxy in the chain based on the download request. So, an update that is not initially found on your proxy will be downloaded to your Sun Update Connection Proxy and stored before being downloaded to the client system. Each system in a chain of proxies might increase the amount of time it takes to download updates to your client system. So, the first time a client system requests a download, the update is downloaded to the proxy system over the Internet. Subsequent requests for that update are downloaded to the client system from the proxy system over your intranet.

PatchPro Analysis Engine

Update Manager incorporates *PatchPro* functionality. PatchPro performs update analyses on systems, then downloads and applies the resulting updates. This automation functionality was previously available for Solaris 2.6, Solaris 7, Solaris 8, and Solaris 9 as a separate PatchPro product, and in the Sun Patch Manager 2.0 product. PatchPro functionality is now part of the Sun Update Manager 1.0 software.

PatchPro uses signed updates, which improves the security of Solaris updates by ensuring that they have not been modified.

Note – The `pprosetup` and `pprosvc` commands are included with Sun Update Manager 1.0 for transition purposes. It is best *not* to use these commands and to use the `smpatch` command instead.

Local-Mode Command-Line Interface

Note – On Solaris 8 systems, you can only run `smpatch` in local mode.

Starting with Solaris 9, the `smpatch` command is available in two modes: local mode and remote mode. *Local mode* can only be run on the local system. This mode can be run while the system is in single-user or multiuser mode. *Remote mode* can be used to perform tasks on remote systems. Both local mode and remote mode can be used by users or roles that have the appropriate authorizations.

By default, `smpatch` runs in local mode. In local mode, the Solaris WBEM services are not used, and none of the authentication options or options that refer to remote systems are available. The `smpatch` command in local mode runs faster than in remote mode.

If you specify any of the remote or authentication options (except for `-L`), remote mode is used.

Single-User Mode Operations in Local Mode

You can use the `smpatch add` command in local mode to apply updates while the system is in single-user mode. Apply updates in this way when the updates are associated with the `singleuser` update property, or when you want to apply any updates to a quiet system.

Use only the `smpatch add`, `smpatch order`, and `smpatch remove` commands to manage updates when your system is running in single-user mode.

You can configure your update management environment while the system is running in single-user mode by using the `smpatch get`, `smpatch set`, and `smpatch unset` commands.

Do not use the `smpatch analyze`, `smpatch download`, and `smpatch update` commands while the system is running in single-user mode. These commands depend on network services that are not available while the system is in single-user mode.

Some updates cannot be automatically applied to your system if they do not meet the *policy for applying updates*. These updates might need to be applied manually in single-user mode.

Updates that require an immediate reboot or reconfiguration reboot after applying them are not applied immediately. Instead, these updates are automatically applied during a scheduled system shutdown.

Update List Operations

You can use the `smpatch` command to create an *ordered* list of updates. You can save the ordered list to a text file and use it to perform update operations.

You might use an *update list* to apply the same set of updates to systems that have the same hardware and software configurations. Or, you might create an update list file that contains all pertinent security updates and use that list to apply those security updates to one or more systems.

You can create a file that contains an ordered update list by using the `smpatch` command in any of these ways:

- **Perform an analysis of a system.** Use the `smpatch analyze` command to analyze a system to generate an ordered list of updates and write it to a file. You can edit this file to remove unneeded updates.
- **Supply a specific list of updates.** Use the `smpatch analyze` command to generate an ordered list of updates based on a set of updates that you specify for a particular system. The update list is *resolved* by augmenting the list with updates on which they depend.
- **Point to a collection of updates that are stored on a system.** Use the `smpatch order` command to produce an ordered list of updates based on a collection of updates that are stored on a system.

If you modify an update list and the updates are available on your system, use the `smpatch order` command to put the list in an order suitable for applying updates. Otherwise, use the `smpatch analyze` command, which also produces an ordered list of updates.

Caution – The `smpatch add` command attempts to apply all of the updates in the update list, regardless of the policy for applying updates and update dependencies.

You can use update lists as input to the `smpatch add`, `smpatch analyze`, `smpatch download`, `smpatch order`, and `smpatch update` commands.

Sun Update Manager Concepts

To use the Sun Update Manager software, you must be familiar with these concepts:

Information about Solaris patches and the Sun Patch Manager 2.0 software is in *System Administration Guide: Basic Administration* in the Solaris 10 System Administrator Collection on the docs.sun.com site.

Sun Update Manager Tool

Update Manager is a tool for managing updates on Solaris 10 systems. Update Manager extends the functionality that was previously available with the Sun Patch Manager 2.0 software. This new functionality is only available if you have a *Sun Online Account* and you *register* your system with Sun.

Note – You can always use the `smpatch add` command and the `smpatch remove` command to manage updates that you manually download from Sun. A system that you manage in this way need not be registered. However, your system must be registered if you use the `smpatch analyze`, `smpatch download`, or `smpatch update` command.

Sun Update Manager Registration

Only systems that have been registered with Update Manager can use its functionality and be managed remotely by the Sun Update Connection services.

For instructions on registering your system, see "How to Register Your System" on page 36. For information about obtaining a *subscription key*, see "How to Obtain a Sun Subscription Key" on page 41.

Note – If you locally manage a system that is a client of a Sun Update Connection Proxy on your intranet, you do not need to register the client system. You *must* register the system that acts as the proxy. If, however, your client system is also remotely managed by the Sun Update Connection services, the client system *must* be registered.

A customer with a Sun Service Plan, which includes software support, can do any of the following:

- Use the Sun Update Manager application to locally manage updates
- Use the Sun Update Connection services to remotely manage updates
- Access the Sun update server to manually manage updates
- Use the smpatch command to manage updates

For information about the available Solaris Service Plans, go to the http://www.sun.com/service/solaris10/ web site.

Registration Service Levels

To use Update Manager, you must register the system on which you installed the software. You can select from three levels of registration and entitlement, which are described in the following sections:

- Registered with no subscription
- Registered with a subscription
- Registered with a subscription and managed with Sun Update Connection

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Note – An unregistered system only has access to security updates. You can manage the updates on your unregistered system by using the smpatch add command and the smpatch remove command.

Registered With No Subscription

You have sent basic information about your system to Sun, but have not purchased an update management subscription. At this service level, you can use the Update Manager application to locally manage updates, which includes doing the following:

- Viewing lists of installed updates
- Managing security updates on your system
- Analyzing your system for appropriate updates
- Installing and uninstalling appropriate updates
- Resolving update dependencies
- Monitoring update download and installation status
- Being notified when new updates for your system become available

Note – If your update management environment includes a Sun Update Connection Proxy and your system is a client of that proxy, your client system does not need to be registered to use the Sun Update Manager software. However, the system that acts as the proxy *must* be registered.

Registered With a Subscription

You have sent system information to Sun and have purchased an update management subscription. This service level expands the functionality available at the previous (basic) service level. You can use the Update Manager application for these tasks:

- Managing all Solaris updates on your system
- Selecting updates for automated download and installation
- Receiving notification about all update dependencies
- Deciding to remotely manage your system with the Sun Update Connection services

Note – If your update management environment includes a Sun Update Connection Proxy and your system is a client of that proxy, your client system does not need to be registered to use the Sun Update Manager software. The system that acts as the proxy *must* be registered. If, however, you decide to use the Sun Update Connection services to remotely manage your client system, that system *must* be registered.

Registered With a Subscription and Managed With Sun Update Connection

You have sent system information, purchased a subscription, and want to use the Sun Update Connection services to remotely manage updates. This service level expands the functionality available at the previous (middle) service level. You can use the Sun Update Connection services for these tasks:

- Viewing information about all your managed systems
- Viewing reports that show all update management activity
- Using a Sun-hosted web application to remotely manage updates on your systems
- Controlling system check-in times to automate update management

Update Management Process

Update Manager enables you to perform the *update management process*, which includes the following tasks:

- Analyzing the system to obtain a list of appropriate updates
- Downloading the appropriate updates to your system
- Applying the appropriate updates to your system
- Configuring the update management environment for your system
- Tuning the update management environment for your system
- Removing updates from your system
- Using the Sun Update Connection services to remotely manage your systems

For information about recommended strategies and practices for using Solaris updates, go to http://docs.sun.com/doc/817-0574/.

After an update has been successfully applied, the downloaded update is removed from the *download directory*.

Updates are applied to your system depending on the specified policy and the update properties that are associated with the downloaded updates.

If an update does not meet the policy for applying updates, the update is not applied immediately. Instead, the update is applied during a scheduled system shutdown. The Update Manager application shows these updates as being Restart Required updates.

For any of the updates that have the `interactive` property set, follow the instructions in the update's README file to manually apply them. The Update Manager application shows these updates as being Download Only updates.

Analyzing Your System

Before you apply updates to your system, you must determine which updates are needed. You can use Update Manager to perform a update analysis of your system to obtain a list of appropriate updates.

Update Manager uses analysis modules and a list of available updates to perform the analysis of your Solaris system. For information about the source of updates, see "Specifying the Source of Updates" on page 22.

Based on the result of the analysis, the updates can be downloaded and applied to your system.

Sometimes an update cannot be applied to the system until another update is applied. The first update is said to depend on the second update. When Update Manager analyzes your system, it checks for update dependencies and automatically includes all updates in the resulting list.

Note – The list of updates that is generated by the analysis is based on all of the available updates from the Sun update server. No explicit information about your host system or its network configuration is transmitted to Sun. Only a request for the Sun update set is transmitted. The update set is scanned for updates that are appropriate for this host system, the results are displayed, and those updates are optionally downloaded.

Downloading Updates to Your System

Before you apply updates to your system, you must download the updates that you want from the Sun update server to that system.

You can download updates from the Sun update server based on an analysis of the system, or you can specify particular updates to download.

The Update Manager application ties the download operation and the installation operation together. So, when you request that an update be installed, the update is first downloaded to your system and then installed.

Some updates, which are marked as Download Only, cannot be installed by the Update Manager application. When you request that a Download Only update be installed, the update is downloaded to your system, but not installed. To install the update, you must follow the installation instructions in the update's README file.

Applying Updates to Your System

Update Manager can apply updates to your system.

If you use the smpatch add command to apply particular updates, it attempts to apply only those updates that you specified. The smpatch add command does not attempt to resolve *update dependencies*. If you want to apply an update that has a missing dependency, the update is not applied. You can use the smpatch analyze command or the smpatch update command to resolve update dependencies.

When you use the Sun Update Manager GUI to apply updates that you selected from the list of updates, each update is downloaded (if necessary) before it is applied.

If you attempt to install a list of updates, Update Manager first performs an analysis to determine whether dependent updates must also be installed.

Removing Updates From Your System

You might want to remove (or back out) an update that you previously applied to your system. Update Manager enables you to remove updates.

Caution – Do *not* remove the Sun Update Manager 1.0 feature update from a system, or Update Manager will not work properly.

When you remove an update, the Solaris update tools restore all of the files that have been modified by that update, unless any of the following are true:

- The update was applied by using the patchadd -d command, which instructs patchadd *not* to save copies of files being updated or replaced.
- The update was applied by using the patchadd command without the -d option, and the backout files that were generated have since been removed.
- The update has been obsoleted by a later update.
- The update is required by another update.

During the update removal process, the patchrm command logs the backout process in the /tmp/backoutlog.*process-id* file. This log file is automatically removed if the update is successfully removed.

You can use the Sun Update Manager GUI to remove one or more updates by selecting them from the list of applied updates. However, you can only remove *one* update at a time with the smpatch remove command.

Note – If you attempt to remove an update on which other updates depend, it is not removed. If you remove all of the updates that depend upon this update, you can remove the update.

When you attempt to remove an update on which other updates depend, Update Manager presents you with the list of updates that must be removed as well. To remove the update you originally selected, you must agree to remove these updates.

Using the Sun Update Connection Services to Manage Your Systems

You can request that your Solaris 10 systems be managed by the Sun Update Connection services either during or after the registration process. These services provide a web application for managing the updates on all of your systems.

For more information, see the *Sun Update Connection 1.0 Administration Guide*.

Even if your system is managed by the Sun Update Connection services, you can still use Update Manager to manage updates on your local system.

Specifying the Source of Updates

When you use Update Manager, your client systems and any Sun Update Connection Proxies must have access to Solaris updates and update data. Both client systems and proxies can obtain updates from these sources:

■ **Update server.** A server that provides access to Solaris updates and update data. An update server can be a Sun Update Connection Proxy on your intranet or the Sun update server, which is accessed over the Internet.

■ **Local collection of updates.** A collection of updates and update data that is stored in a directory available to the local system. Such a directory might be a local directory, a shared network directory, or a CD mounted on your local system.

The default source of updates for client systems and Sun Update Connection Proxies is the Sun update server. As a result, any client system or Sun Update Connection Proxy that obtains updates from the Sun update server must be connected, either directly or through a *network proxy*, to the Internet.

You can use a combination of Sun Update Connection Proxies and different update sources to configure these update management environments.

Clients access updates and update data from the following sources:

■ **Sun update server.** This configuration requires that the client systems are connected, directly or through a network proxy, to the Internet. Such a client system must be registered with Update Manager.

- **Sun Update Connection Proxy on your intranet (by way of the Sun update server).** This configuration requires that only the Sun Update Connection Proxy be connected, directly or through a network proxy, to the Internet. The system that acts as the proxy must be registered with Update Manager, but the proxy's client systems need not be registered.
- **Collection of updates on your local system.** This configuration does not require that the client systems be connected to the Internet. These client systems also need not be registered with Update Manager.
- **Sun Update Connection Proxy (by way of a collection of updates on your local system).** This configuration does not require that the client systems and Sun Update Connection Proxy be connected to the Internet. Neither the system that acts as the proxy nor the client systems must be registered with Update Manager.

For instructions on specifying the source of updates for your client system, see .

For instructions on specifying the source of updates for your proxy, see .

Customizing the Policy for Applying Updates

Update Manager applies these types of updates to your system:
- Standard updates that are applied immediately and require no system restart
- Updates that require a system restart
- Updates that must be manually applied

Standard updates are associated with the `standard` update property. Updates marked as Restart Required are associated with the `rebootafter`, `reconfigafter`, `rebootimmediate`, `reconfigimmediate`, and `singleuser` update properties. Updates marked as Download Only are associated with the `interactive` update property. Download Only updates are only downloaded to your system and must be applied manually according to the instructions in the update's README file.

If you use the `smpatch update` command to update your system, however, you can customize the policy for applying updates.

For more information about this policy, see the `smpatch`(1M) man page.

Setting Update Manager Configuration Properties

The `smpatch set` command uses the following parameters to configure your update management environment.

> **Note –** Except for `patchpro.patchset`, parameters can also be modified in the Sun Update Manager GUI by choosing Preferences from the File menu and specifying the appropriate values.

- `patchpro.patchset` – Name of the update set to use. The default name is `current`.

  Choose the update set from the View Collection menu.

- `patchpro.download.directory` – Path of the directory where downloaded updates are stored and from which updates are applied. The default location is `/var/sadm/spool`.

- `patchpro.backout.directory` – Path of the directory where update *backout data* is saved. When an update is removed, the data is retrieved from this directory as well. By default, backout data is saved in the package directories.

- `patchpro.patch.source` – URL that points to the collection of updates. The default URL is that of the Sun update server, `https://getupdates.sun.com/solaris/`.

- `patchpro.proxy.host` – Host name of your network proxy. By default, no network proxy is specified, and a direct connection to the Internet is assumed.

- `patchpro.proxy.port` – Port number used by your network proxy. By default, no network proxy is specified, and a direct connection to the Internet is assumed. The default port is `8080`.

- `patchpro.proxy.user` – User name used by your network proxy for authentication.

- `patchpro.proxy.passwd` – Password used by your network proxy for authentication.

- `patchpro.install.types` – Your policy for applying updates. The value is a list of zero or more colon-separated update properties that are permitted to be applied by an update operation (`smpatch update`).

  - By default, the `smpatch update` command applies updates that have the `standard`, `rebootafter`, and `reconfigafter` properties. See "Customizing the Policy for Applying Updates" on page 23.

  - The Sun Update Manager GUI always applies updates that have the `standard` property. This policy *cannot* be changed.

Installing the Sun Update Connection Software

This chapter describes how to install the Sun Update Connection software on Solaris 10 systems. The software you can install includes the Sun Update Manager client software and the optional Sun Update Connection Proxy software. This chapter also describes how to uninstall the Update Manager client software.

Installing the Update Manager client software is part of the getting started process. For an overview of the entire process, see "Getting Started Process Overview" on page 2.

This chapter covers the following topics:

Installing the Sun Update Connection Software (Task Map)

The Sun Update Connection software is supported on systems that run the Solaris 10 Operating System.

To use the Update Manager tool, you must install at least the End User Software Group of Solaris 10 software. Your system also must have 160 Mbytes of available disk space in /var.

If your system has the original Solaris 10 software installed, you must install the Sun Update Manager client software on your system. Subsequent releases of the Solaris 10 software include the Sun Update Manager client software.

The following table identifies how you can install the Sun Update Connection software on your system.

Task	Description	For Instructions
(Optional) Install the Sun Update Manager client software.	You can install the Update Manager client software in one of these ways: • Use the `smpatch update` command to install the Update Manager feature update. • Download the Sun Update Connection, System Edition software from the Sun Download Center, and run the installation script to install the Update Manager client software.	• "How to Install the Sun Update Manager Feature Update" on page 26 • "How to Install the Sun Update Manager Client Software" on page 27
(Optional) Install the Sun Update Connection Proxy software.	You can install the Sun Update Connection Proxy software in one of these ways: • Use the `smpatch update` command to install the proxy feature update. • Download the proxy software from the Sun Download Center, and run the installation script.	• "How to Install the Sun Update Connection Proxy Feature Update" on page 28 • "How to Install the Sun Update Connection Proxy Software" on page 29
(Optional) Upgrade from the Preview Release to the Sun Update Connection, System Edition 1.0 release.	From the Preview Release version of Update Manager, upgrade to Sun Update Connection, System Edition 1.0.	"How to Upgrade From the Preview Release to the Sun Update Connection, System Edition 1.0 Release" on page 30

▼ How to Install the Sun Update Manager Feature Update

Ensure that your system is running at least the End User Solaris Software Group of the Solaris 10 Operating System.

Caution – Your system must be connected to the Internet before you can install the Update Manager feature update because the software must be retrieved from Sun.

1. **Identify the appropriate version of the Update Manager feature update for your system.**

   Choose the feature update based on the platform type of your Solaris 10 system.

- SPARC: Latest revision of update 119107
- x86: Latest revision of update 119108

2. **Become superuser.**

3. **Use the** `smpatch update` **command to automatically download and apply the appropriate feature update to your system.**

   For example, the following command applies the Update Manager feature update to your SPARC based system:

   ```
   # smpatch update -i 119107-01
   ```

   Note that the `smpatch update` command installs the latest revision of the update you specify with the `-i` option.

   Now you must access the GUI to configure your update management environment and register your system. See "How to Access the Sun Update Manager Application (GUI)" on page 44.

▼ How to Install the Sun Update Manager Client Software

Ensure that your system is running at least the End User Solaris Software Group of the Solaris 10 Operating System.

⚠ **Caution –** Your system must be connected to the Internet before you can install the Update Manager client software because the software must be retrieved from Sun.

---

1. **Go to the Sun Download Center at** `http://www.sun.com/download`**.**

   a. **Click the Downloads A-Z tab.**

   b. **Click Sun Update Connection, System Edition 1.0.**

   c. **Click Download to start the download process.**

      Follow the download instructions.

   d. **Download the software to a local directory on your system.**

Note – The directory must not be mounted through NFS because of `patchadd` bug `6188748`.

Choose the software based on the platform type of your Solaris 10 system.

- SPARC: `updateConnection-sparc.zip`
- x86: `updateConnection-i386.zip`

2. **Become superuser.**

3. **Go to the directory where you downloaded the file.**

   For example, if you downloaded the file to `/tmp`, go to `/tmp`.

4. **Unzip the file you downloaded.**
   - For SPARC based systems, type:

   ```
   # unzip updateConnection-sparc.zip
   ```

   - For x86 based systems, type:

   ```
   # unzip updateConnection-i386.zip
   ```

5. **Install the Sun Update Connection, System Edition 1.0 feature update, which includes the Sun Update Manager client software.**

   ```
   # ./updateConnection/installUpdateConnection
   ```

   Now you must access the GUI to configure your update management environment and register your system. See "How to Access the Sun Update Manager Application (GUI)" on page 44.

▼ How to Install the Sun Update Connection Proxy Feature Update

Ensure that your system is running at least the End User Solaris Software Group of the Solaris 10 Operating System.

⚠ **Caution –** Your system must be connected to the Internet before you can install the proxy software because the software must be retrieved from Sun.

1. **Identify the appropriate version of the Sun Update Connection Proxy feature update for your system.**

   Choose the feature update based on the platform type of your Solaris 10 system:
   - SPARC: Latest revision of update 119788
   - x86: Latest revision of update 119789

2. **Become superuser.**

3. **Use the `smpatch` command to apply the appropriate feature update to your system.**

   The `smpatch update` command automatically downloads and applies the feature update to your system.

   For example, the following command applies the proxy feature update to your x86 based system:

   ```
   # smpatch update -i 119189-01
   ```

   Note that the `smpatch update` command installs the latest revision of the update you specify with the `-i` option.

   Now you must configure your proxy. See .

▼ How to Install the Sun Update Connection Proxy Software

Caution – Your system must be connected to the Internet before you can install the proxy software because the software must be retrieved from Sun.

Ensure that your system is running at least the End User Solaris Software Group of the Solaris 10 Operating System. This system must already have the Sun Update Manager software installed on it, and the system must be registered.

Note – The Sun Update Connection Proxy is an optional feature that you can obtain at no charge if you have a Sun Service Plan. For information about obtaining a Sun Service Plan, go to Solaris Operating System Software Support at `http://www.sun.com/service/support/software/solaris/` and select the appropriate level of service.

1. **Go to the Sun Download Center at** `http://www.sun.com/download`**.**

   a. **Click the Downloads A-Z tab.**

   b. **Click Sun Update Connection, System Edition 1.0.**

   c. **Click Download to start the download process.**

      Follow the download instructions.

    d. Download the software to a local directory on your system.

> **Note –** The directory must not be mounted through NFS because of `patchadd` bug 6188748.

    Choose the software based on the platform type of your Solaris 10 system.

- SPARC: `updateConnection-proxy-sparc.zip`
- x86: `updateConnection-proxy-i386.zip`

2. Open a terminal window.

3. Become superuser.

4. Go to the directory where you downloaded the zip file.

For example, if you downloaded the file to `/tmp`, go to `/tmp`.

5. Unzip the zip file.

- For SPARC based systems, type:

```
# unzip updateConnection-proxy-sparc.zip
```

- For x86 based systems, type:

```
# unzip updateConnection-proxy-i386.zip
```

6. Install the Sun Update Connection Proxy package.

```
# updateConnectionProxy/installUpdateConnectionProxy
```

Now you must configure your proxy. See "Configuring Your Sun Update Connection Proxy (Task Map)" on page 60.

▼ How to Upgrade From the Preview Release to the Sun Update Connection, System Edition 1.0 Release

If you installed the Preview Release of the Sun Update Connection, System Edition software, you must upgrade the Sun Update Connection software when the Preview Release promotional period ends. Perform this upgrade by installing the new Sun Update Connection, System Edition 1.0 feature update. If you are using the Preview

Release, this feature update will appear as an available update for your system through any of the System Edition user interfaces. See "How to Install the Sun Update Manager Feature Update" on page 26.

If you have also configured a Sun Update Connection Proxy, you must upgrade the software on the proxy system. You must install both the feature update for the Sun Update Connection and the feature update for the proxy software. The proxy feature update will appear in the list of available updates for your system only if you have a Sun Service Plan. See "How to Install the Sun Update Connection Proxy Feature Update" on page 28.

The feature update IDs for this software are as follows:

- 119107-01: Sun Update Connection, System Edition 1.0 (SPARC)
- 119108-01: Sun Update Connection, System Edition 1.0 (x86)
- 119788-01: Sun Update Connection Proxy (SPARC)
- 119789-01: Sun Update Connection Proxy (x86)

Uninstalling the Sun Update Manager Client Software (Task Map)

The following table identifies how you can uninstall the Sun Update Manager client software from your system.

Task	Description	For Instructions
(Optional) Uninstall the Sun Update Manager client software.	Use the `patchrm` command to uninstall the Update Manager client software.	"How to Uninstall the Sun Update Manager Client Software" on page 31
(Optional) Stop and disable the Sun Update Manager client agents.	Stop the client agents on your system before you uninstall the Update Manager client software from a system.	"How to Stop and Disable the Sun Update Manager Client Agent Software" on page 33

▼ How to Uninstall the Sun Update Manager Client Software

1. **Become superuser.**

2. **(Optional) If you installed the Sun Update Connection Proxy software, remove the** `prebackout` **lock file for the proxy software, and use** `patchrm` **to remove the update.**

   ■ For SPARC based systems, type:

   ```
   # rm /var/sadm/patch/119788-01/prebackout
   # patchrm 119788-01
   ```

   ■ For x86 based systems, type:

   ```
   # rm /var/sadm/patch/119789-01/prebackout
   # patchrm 119789-01
   ```

3. **Remove the** `prebackout` **lock file for the Sun Update Connection software.**

   ■ For SPARC based systems, type:

   ```
   # rm /var/sadm/patch/119107-01/prebackout
   ```

   ■ For x86 based systems, type:

   ```
   # rm /var/sadm/patch/119108-01/prebackout
   ```

4. **(Optional) If you use the** `patchrm -R` **command to uninstall the Update Manager feature update on a diskless client, you must first log in to the diskless client to stop and disable the Sun Update Manager client agents.**

   ```
   # /usr/lib/cc-cfw/framework/lib/cc-client-adm stop
   # /usr/lib/cc-cfw/framework/lib/cc-client-adm disable
   ```

5. **Use the** `patchrm` **command to remove the Sun Update Manager feature update.**

   ■ For SPARC based systems, type:

   ```
   # patchrm 119107-01
   # patchrm 119574-02
   ```

   ■ For x86 based systems, type:

   ```
   # patchrm 119108-01
   # patchrm 119575-02
   ```

▼ How to Stop and Disable the Sun Update Manager Client Agent Software

These agents are installed when you install the Sun Update Manager software. When you register your system with the Sun Update Manager Registration Wizard, the agents are enabled.

In most cases, the `pkgrm` command safely disables the agents before removing the `SUNWccinv` package. However, if you installed this package on a diskless client or a cluster of systems, you must manually disable the agents before you remove the `SUNWccinv` package.

1. **Become superuser.**

2. **Stop and disable the inventory agent.**

```
# /usr/lib/cc-cfw/framework/lib/cc-client-adm stop
# /usr/lib/cc-cfw/framework/lib/cc-client-adm disable
```

CHAPTER **3**

Registering Your System With Sun Update Manager

This chapter describes how to register your system with Sun Update Manager and to perform other tasks from the registration wizard.

Registering Your System With Sun Update Manager (Task Map)

You can use Update Manager to manage security updates for your Solaris 10 system by registering your system with Sun Update Manager. Registration is free and it involves sending only your basic system specifications to Sun. The registration process is initiated when you access the Update Manager GUI for the first time.

For more information about the different levels of registration, see "Sun Update Manager Registration" on page 17.

The following table identifies the tasks that you might perform when you use the Sun Update Manager registration wizard.

Task	Description	For Instructions
(Optional) Register your system with Sun Update Manager.	If your system obtains updates and update data from the Sun update server, or you want to manage your system remotely by using the Sun Update Connection services, you must register your system with Update Manager.	"How to Register Your System" on page 36
(Optional) Obtain a Sun subscription key.	If you want access to other than security updates, or you want to manage your system remotely by using the Sun Update Connection services, you must register your system with a Sun subscription key. This subscription key is available to software support customers.	"How to Obtain a Sun Subscription Key" on page 41
(Optional) After registration, specify the network proxy to use.	If your system is connected to the Internet through a network proxy, you must specify the network proxy that is used to access the Sun update server. By default, no network proxy is specified.	Step 5 in "How to Register Your System" on page 36
(Optional) After registration, specify a local source of updates for your system.	You might want your system to obtain updates from a local source, such as a Sun Update Connection Proxy or a collection of updates on a local system. You must specify a local source of updates if your system is not connected to the Internet. By default, your system obtains updates from Sun.	Step 4 in "How to Register Your System" on page 36

▼ How to Register Your System

Note – To register your system, it must be connected to the Internet. You might already have a Sun Online Account if you registered for an account with programs such as Java Developer Connection, OSC, MySun, SunSolve, and SunStore.

For more information about the different levels of registration, see "Sun Update Manager Registration" on page 17.

1. **Start the Sun Update Manager application.**

- For GNOME users, start the Update Manager application in one of these ways:
  - From the Notification area of the GNOME panel, click the Update Manager notification icon.

    This icon is a blue circle with a question mark. This icon indicates that the system has not been registered.

    This method does not work immediately after you install the software. You must log out of the GNOME desktop and log back in.
  - From the Sun Java Desktop System Launch menu, choose Applications.

    From the Applications menu, choose Utilities. Then, from the Utilities menu, choose Update Manager.
  - Run the `/usr/bin/updatemanager` command from your shell prompt.
- For CDE users, start the Update Manager application in one of these ways:
  - From the Application Manager window, double click the Sun Update Manager icon.
  - Run the `/usr/bin/updatemanager` command from your shell prompt.

The Authentication Required dialog box appears.

2. **Log in to the Update Manager GUI.**

   If you want to exit the Update Manager application during this step, click Cancel.

   a. **Specify the user name of a privileged user and click OK.**

      By default, the user is `root`.

      The Authentication Required dialog box appears.

   b. **Specify the password for the privileged user you specified and click OK.**

      The Sun Update Manager Registration Wizard appears.

3. **From the Welcome screen, specify how you want to use Update Manager to manage updates on your system.**

   Update Manager can automatically manage updates on your system or enable you to manually manage updates on your system.

   - To use the Update Manager GUI or `smpatch` CLI to manage updates on your system, click Register to Manage Updates.

     The Sun Online Account screen appears.

   - To download updates from the Sun update server and to use the `smpatch add` command and the `smpatch remove` command to manage updates, click Apply Updates Manually.

     Click Finish to exit the registration wizard.

Now you are ready to manually manage updates on your system. For information about using the `smpatch add` command and the `smpatch remove` command to manage updates, see the `smpatch`(1M) man page.

4. **(Optional) If your system does not connect to the Internet, specify a local source of updates.**

   To specify this local source for updates by using the Update Manager application, see "How to Specify a Source of Updates (GUI)" on page 48.

   a. **Click Configure the System to Retrieve Updates From a Local Source.**

      The Use a Local Source for Updates screen appears.

   b. **Click Retrieve Updates From a Local Source (Sun Update Connection Proxy).**

   c. **In the Patch Source URL field, type the URL to the local update source.**

      The Sun Update Connection Proxy URL has this form:

      `http://`*server-name*`:3816/solaris/`

   d. **Click Finish to set these update source values, and to return to the Sun Online Account screen.**

      Click Cancel to discard the registration information about the update source values that you set. Then, click Discard Registration to return to the Sun Online Account screen.

5. **(Optional) Specify the network proxy your system uses to connect to the Internet.**

   To specify this network proxy information by using the Update Manager application, see "How to Specify a Network Proxy (GUI)" on page 47.

   If your system is directly connected to the Internet, you do not need to specify network proxy information.

   a. **Click Configure Network Proxy Settings.**

      The Network Proxy Settings screen appears.

   b. **Click Enable Network Proxy.**

   c. **Type the host name for the proxy in the Proxy Host Name field.**

   d. **Type the port number for the proxy in the Proxy Port field.**

   e. **(Optional) If a user name and password are needed for proxy authentication, click Use Proxy Authentication, then do the following:**

      i. **Type the proxy user name in the Proxy User Name field.**

      ii. **Type the proxy user password in the Proxy Password field.**

f. **Click OK to set these network proxy values, and to dismiss the dialog box.**

Click Cancel to discard the network proxy values you set, and to dismiss the dialog box.

6. **Specify your Sun Online Account.**

   ■ If you already have a Sun Online Account, log in by supplying your Sun Online Account user name and password, click Next, and then go to Step 8.

      The Terms of Use and Software License screen appears.

   ■ If you have forgotten your user name or your password, click Forgot Your User Name or Password.

      After you have your Sun Online Account information, restart the registration process.

   ■ If you do not have a Sun Online Account, register for an account.

7. **(Optional) Click Create a Sun Online Account.**

   The Create Sun Online Account screen includes the Sun privacy policy and text fields in which to supply the information required to obtain a Sun Online Account.

   a. **Review the Sun Privacy Policy.**

   b. **Complete the account information on the registration form and click Next.**

      If you supplied an invalid entry, you are prompted to correct the error.

      The second Create Sun Online Account screen appears.

   c. **Complete the second registration form and click Next.**

      You must supply your company name, your country or territory, and the language you want to use for communications with Sun. The other values on this form are optional.

      The Terms of Use and Software License screen appears.

8. **(Optional) Decide whether you want access to all updates or only security updates.**

   ■ If you want access to all updates, supply your subscription key in the Key field.

      Your Sun subscription key might be your support contract number. If you do not have a subscription key, sign up for one of these software support plans:

      ■ For information about the Solaris 10 Service Plans, go to http://www.sun.com/service/solaris10/.

      ■ For information about general Solaris support plans, go to http://www.sun.com/service/support/software/solaris/.

   ■ If you want to access only security updates, click either Continue Without a Subscription Key or Enter One Later.

You can specify a subscription key at any time to gain access to all Solaris updates. See "How to Specify Your Subscription Key (GUI)" on page 49.

9. **Review the terms of use and the software license.**

   - If you agree, click I Have Read the Agreement and I Accept, and click Next.

     - If you supplied a subscription key, the Remote Software Updates Service screen appears. From this screen you can view demos of Sun Update Connection and Sun Update Manager.

     - If you did not supply a subscription key, the System Registration screen appears. Go to Step 11.

   - If you do not agree, click Cancel to exit the registration wizard.

     You cannot use the Sun Update Manager software unless you agree to the terms of use and the software license.

10. **Decide whether to manage updates on your systems remotely or locally.**

    - To manage updates remotely, click Activate Remote Update Management Using the Sun Update Connection.

      Even if you choose to manage updates remotely, you can still use Sun Update Manager to manage updates locally on your system.

      You can click What Gets Sent to see what information about your system is sent to Sun.

      For information about using the Sun Update Connection services to remotely manage updates on your systems, see the *Sun Update Connection 1.0 Administration Guide*.

    - To manage updates locally, click Activate Local Update Management.

      You can click What Gets Sent to see what information about your system is sent to Sun.

11. **Click Finish to complete the registration of your system, at which time information about your system is sent to Sun.**

    Click Cancel to discard the registration information that you supplied, and to dismiss the registration wizard.

    The Registration Confirmation screen, from which you can access the Sun Update Connection web application, appears.

12. **Click Close to dismiss the registration wizard.**

    The Checking dialog box shows the progress of the update analysis of your system.

    The list of updates that you can install on your system appears in the Available Updates screen of the Sun Update Manager application.

▼ How to Obtain a Sun Subscription Key

To gain access to all Solaris updates, you must have a Sun subscription key. Without a subscription key, you can only view security updates. You also need a subscription key to use the Sun Update Connection services.

A subscription is one of the features of the Software Support Service plan, the Solaris 10 Service Plan, or a SunSpectrum Support service agreement.

● **If you do not have a Sun subscription key, sign up for one of these software support plans:**

  ■ For information about the Solaris 10 Service Plans, go to
    `http://www.sun.com/service/solaris10/.`

  ■ For information about general Solaris support plans, go to
    `http://www.sun.com/service/support/software/solaris/.`

Managing Solaris Updates by Using the Sun Update Manager GUI

This chapter describes how to use the Sun Update Manager GUI to manage updates.

Note – You can also perform these tasks by using the `smpatch` command. See the `smpatch`(1M) man page.

This chapter covers the following topics:

Managing Solaris Updates by Using the Sun Update Manager GUI (Task Map)

The following table identifies the tasks that you might perform when you use the Sun Update Manager GUI.

Task	Description	For Instructions
Access the GUI.	If you want the convenience of a GUI to manage updates, use the Sun Update Manager 1.0 GUI.	"Accessing the Sun Update Manager GUI" on page 44
Configure the update management environment for your system.	By default, your system is assumed to be connected directly to the Internet and configured to obtain updates from the Sun update server. If this is not true for your system, change the configuration settings to match your environment.	"Configuring Your Update Management Environment by Using the GUI (Task Map)" on page 46
Manage updates on your system.	You can use the GUI to perform an analysis of your system, apply one or more updates, find update dependencies, and remove updates.	"Managing Updates by Using the GUI (Task Map)" on page 50
(Optional) Tune the update management environment for your system.	Change some optional configuration settings, such as the update directory locations.	"Tuning Your Update Management Environment by Using the GUI (Task Map)" on page 54

Accessing the Sun Update Manager GUI

Caution – The Update Manager application does *not* permit you to run simultaneous GUI and command-line update operations on your system because the system might become unstable. *Only* cancel an operation from the Update Manager progress dialog. Do not interrupt an `smpatch update` operation once it has started. You must wait for that operation to complete before starting another operation.

▼ How to Access the Sun Update Manager Application (GUI)

You can start the Sun Update Manager GUI from the GNOME desktop, the Sun Java Desktop System, the CDE Application Manager, or the command line.

The first time you start the application, the Sun Update Manager Registration Wizard appears. Use this wizard to register your Solaris 10 system to use Update Manager to manage updates.

1. **Start the Sun Update Manager application.**

   - For GNOME users, start the Update Manager application in one of these ways:

      - From the Notification area of the GNOME panel, click the Update Manager notification icon.

        This icon is a blue circle with a question mark. This icon indicates that the system has not been registered.

        This method does not work immediately after you install the software. You must log out of the GNOME desktop and log back in.

      - From the Sun Java Desktop System Launch menu, choose Applications.

        From the Applications menu, choose Utilities. Then, from the Utilities menu, choose Update Manager.

      - Run the `/usr/bin/updatemanager` command from your shell prompt.

   - For CDE users, start the Update Manager application in one of these ways:

      - From the Application Manager window, double click the Sun Update Manager icon.

      - Run the `/usr/bin/updatemanager` command from your shell prompt.

   The Authentication Required dialog box appears.

2. **Specify the user name of a privileged user, and click OK.**

   By default, the user is `root`.

   If you want to exit the Update Manager application, click Cancel.

   The Authentication Required dialog box appears.

3. **Specify the password for the privileged user you specified, and click OK.**

   Click Cancel to exit the Update Manager application.

   - If you are accessing the Update Manager GUI for the first time, the registration wizard appears so you can complete the registration process.

     See "How to Register Your System" on page 36.

   - If you have already completed the system registration process, you can configure, manage, or tune the update management environment by using the Update Manager GUI.

     See "Managing Solaris Updates by Using the Sun Update Manager GUI (Task Map)" on page 43.

Configuring Your Update Management Environment by Using the GUI (Task Map)

By default, the update management environment is configured to obtain updates directly from the Sun update server. Therefore, you must customize your environment if your system does one or more of the following:

- Connects to the Internet by means of a network proxy
- Requires a user name and password to provide authentication for the network proxy
- Obtains updates from an update source other than the Sun update server

The following table identifies the tasks that you might perform when you configure the update management environment for your system.

If you want to use the `smpatch` command to configure your update management environment, see the `smpatch`(1M) man page.

Task	Description	For Instructions
(Optional) Specify the network proxy to use.	If your system is connected to the Internet through a network proxy, you must specify the network proxy that is used to access the Sun update server. By default, no network proxy is specified.	"How to Specify a Network Proxy (GUI)" on page 47
(Optional) Specify the user and password needed to provide authentication for the network proxy.	If your network proxy requires authentication, you must specify the network proxy user that is needed for authentication. By default, no network proxy user is specified.	"How to Specify a Network Proxy (GUI)" on page 47

Task	Description	For Instructions
(Optional) Specify the source of updates for your system.	Your system can obtain updates from one of the following sources: • Sun update server (default) • Update server on your intranet • Collection of updates on your local system	"How to Specify a Source of Updates (GUI)" on page 48
(Optional) Specify your Sun subscription key.	When you add a subscription key to your system registration information, your system will gain access to all Solaris updates. Without a subscription, your system only has access to security updates.	"How to Specify Your Subscription Key (GUI)" on page 49
(Optional) Enable your system to be managed by the Sun Update Connection services.	If you want to remotely manage updates on your system, you can use the Sun Update Connection web application.	"How to Manage Your System by Using the Sun Update Connection Services (GUI)" on page 49

▼ How to Specify a Network Proxy (GUI)

This procedure describes how to update the network proxy from the Update Manager application. Use this procedure if your system requires a network proxy to connect to the Internet. If your system is already connected directly to the Internet, you do not need to specify a network proxy.

To specify this network proxy information from the registration wizard, see Step 5 of "How to Register Your System" on page 36.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Preferences from the File menu.**

   The Preferences dialog box appears.

3. **In the Network Proxy section, select Manual Proxy Configuration for Internet Connection.**

4. **Type the host name of the network proxy in the Proxy Host Name field.**

5. **Type the port number of the network proxy in the Proxy Port Number field.**

6. **(Optional) If a user name and password are needed for proxy authentication, click Use Proxy Authentication, and do the following:**

   a. **Type your network proxy user name in the Proxy User Name field.**

b. Type your network proxy password in the Proxy Password field.

7. **Click OK to set these values, and to dismiss the dialog box.**

   Click Cancel to discard the values you set, and to dismiss the dialog box.

▼ How to Specify a Source of Updates (GUI)

This procedure describes how to specify an alternate source of updates from the Update Manager application. By default, your system obtains updates from Sun.

To specify a local source of updates from the registration wizard, see Step 4 of "How to Register Your System" on page 36.

Note – If you change the source of updates for your system from a Sun Update Connection Proxy to the Sun update server, your system must be registered with Update Manager. If your system is not registered and you make this change, the registration wizard appears so you can complete the system registration process.

---

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Preferences from the File menu.**

   The Configuration screen of the Preferences dialog box appears.

3. **In the Update Source section, specify your source of updates.**

   ■ **Click From a Sun Source to obtain updates from Sun.**

      By default, you obtain updates from Sun.

   ■ **Click From a Local Source I Specify (Sun Update Connection Proxy or CD) to obtain updates from your specified update source.**

      You must type the URL to the update source in the text field.

      ■ For a Sun Update Connection Proxy on your intranet, type a URL of this form:

         `http://`*server-name*`:3816/solaris/`

      ■ For a directory, type a URL of this form:

         `file:/`*directory-name*

4. **Click OK to set this value, and to dismiss the dialog box.**

   Click Cancel to discard the value you set, and to dismiss the dialog box.

▼ How to Specify Your Subscription Key (GUI)

Perform this procedure after you have registered your system.

If you want access to all Solaris updates, not just security updates, add your Sun subscription key to your Update Manager registration information. If you do not have a Sun subscription key, see "How to Obtain a Sun Subscription Key" on page 41.

You can also specify your Sun subscription key during the registration process. See "How to Register Your System" on page 36.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Manage Subscription from the File menu.**

   The Add Subscription dialog box appears.

3. **Supply your Sun Online Account information.**

   a. **Type your user name in the User Name field.**

   b. **Type your password in the Password field.**

4. **Type your subscription key in the Key field.**

5. **Click Finish to store the changes, and to dismiss the dialog box.**

   Click Cancel to discard the changes, and to dismiss the registration wizard.

▼ How to Manage Your System by Using the Sun Update Connection Services (GUI)

This procedure describes how to enable your system to be managed from the Sun Update Connection web site.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Click Manage at Sun Update Connection.**

   The Enable Portal Management screen appears.

3. **(Optional) Click What Gets Sent to see what information about your system is sent to Sun.**

   The System Data dialog box appears.

   Click OK to dismiss the dialog box.

4. **Supply the user name and password for your Sun Online Account.**

   a. **Type your user name in the User Name field.**

   b. **Type your password in the Password field.**

   If you have forgotten the user name or password for your Sun Online Account, click Forgot Your User Name or Password.

5. **Specify your Sun subscription key in the Key field.**

   If you do not have a Sun subscription key and you want to use the Sun Update Connection web application, see "How to Obtain a Sun Subscription Key" on page 41.

6. **(Optional) Click What Keys Qualify to see which subscription keys you can use as your Sun subscription key.**

7. **Click Finish.**

   Click Cancel to discard the values you set, and to dismiss the dialog box.

Managing Updates by Using the GUI (Task Map)

You can use the Update Manager GUI to perform the following tasks:

- Analyze your system to determine the list of appropriate updates
- Update your system with updates automatically
- Remove an update from your system

Perform these tasks and more by using the command-line interface. See the smpatch(1M) man page.

The following table identifies the common update management tasks.

Task	Description	For Instructions
Analyze your system to determine the list of updates.	You want to analyze your system to obtain the list of appropriate updates. Based on the analysis, you can update your system with one or more updates in the list. Note that the GUI lists the appropriate updates. If you request another analysis, the list of updates is changed to reflect any new updates that are needed.	"How to Analyze Your System for Updates and View the List of Available Updates (GUI)" on page 51
Apply one or more updates in a single procedure.	You want to download and apply the updates that are appropriate for your system. The list of updates is determined by having Update Manager analyze your system.	"How to Apply Updates to Your System (GUI)" on page 52
Remove updates from your system.	You want to remove, or back out, updates that you applied to your system.	"How to View Installed Updates and Remove Updates From Your System (GUI)" on page 53

▼ How to Analyze Your System for Updates and View the List of Available Updates (GUI)

Use this procedure to manually initiate a system analysis to determine which updates are appropriate for your system.

By default, your system is analyzed once a day. If the automatic analysis feature is disabled, you can enable it. See "How to Enable a Daily Analysis of Updates (GUI)" on page 56.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **In the Available Updates screen, click Check for Updates.**

   The Analyze System dialog box shows the progress of the analysis. The list of appropriate updates then appears on the Available Updates screen.

▼ How to Apply Updates to Your System (GUI)

Use this procedure to apply one or more updates to your system.

If an update you install requires a system restart to activate it (Restart Required), the update is staged for installation during the next system shutdown. To apply an update that requires a restart, you must use one of the following commands to initiate the system shutdown:

- **Power down the system –** `init 0` or `shutdown -i 0`
- **Go to the firmware prompt –** `init 5` or `shutdown -i 5`
- **Restart the system –** `init 6` or `shutdown -i 6`

Note – Do *not* use the `reboot` command, the `halt` command, the `uadmin` command, or press the Reset or Power button to initiate a shutdown. Taking any of these actions bypasses the required shutdown processing, and prevents the updates from being installed on the system. Even if you bypass the required shutdown processing, the updates are still staged for installation during a system restart.

---

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Go to the Available Updates screen.**

   This screen shows the list of updates that are appropriate for your system.

3. **(Optional) Click Check for Updates to perform an update analysis of your system.**

   You might perform this analysis if the daily update analysis is disabled.

4. **Select one or more updates to install.**

   Only those updates that have a check box can be installed. Updates that have a dash next to the update ID are set to be installed during the next scheduled system shutdown.

   The name of the Install button changes based on the number of updates you select. For example, if you select one update, the button name is Install 1 Item Now. If you select two updates, the button name is Install 2 Items Now.

5. **Click Install Item Now.**

   The Installing dialog box shows the progress of the system analysis. This analysis is performed to determine whether the updates you selected depend on other updates being installed on the system. This dialog box also shows the progress of the update download and installation operations. You can cancel these operations by clicking Cancel.

   The Installation Complete dialog box shows the installation status for the updates you selected.

6. **(Optional) If you selected an update that depends on one or more other updates being installed, agree to install the update dependencies.**

   The Additional Updates Required dialog box shows the other updates that you must install.

   - Click Continue to install the updates.

     The updates are installed.

   - Click Cancel to cancel the installation.

     If you cancel the operation, the update is not installed.

7. **(Optional) If you selected an update that requires a system restart, decide whether to restart the system now or later.**

   The Installation Complete dialog box shows which updates were installed and whether the installation succeeded or failed. If updates that require a system restart (Restart Required) must be installed, the tool asks you whether you want to restart the system to install the updates.

   - To perform the system restart now, click Restart System Now, then click OK.

     Updates that do not require a system restart are installed immediately.

     The Restart System dialog box asks you to confirm whether to restart the system now.

     - Click Yes to restart the system.

       Update Manager restarts the system, and the updates that require a restart are installed.

     - Click No to dismiss the Restart System dialog box.

   - To perform the system restart later, click OK.

Note – Use only the `init` command or the `shutdown` command to restart your system, or the updates waiting for the restart will not be installed.

Updates that do not require a system restart are installed immediately, while updates that require a restart are queued for installation at the next system restart.

▼ How to View Installed Updates and Remove Updates From Your System (GUI)

Use this procedure to view the list of updates that are installed on your system and to remove one or more updates.

1. **Access the Sun Update Manager GUI.**

   See .

2. **In the Available Updates screen, click Installed Updates.**

   The Installed Updates screen shows the list of updates that are installed on your system.

3. **Select one or more updates to remove.**

   Only those updates that have a check box can be removed. Updates that have a dash next to the update ID *cannot* be removed.

   The name of the Uninstall button changes based on the number of updates that you select. For example, if you select one update, the button name is Uninstall 1 Selected Update. If you select two updates, the button name is Uninstall 2 Selected Updates.

4. **Click Uninstall Selected Update.**

   The Confirm Uninstallation dialog box shows the updates you want to remove. It also shows any update dependencies that must also be removed.

5. **Click Continue to uninstall the selected updates.**

   The Uninstalling dialog box shows the progress of the operation. You can cancel the uninstallation operation by clicking Cancel.

   When the updates are uninstalled, the Uninstallation Complete dialog box shows which updates were uninstalled and whether the uninstallation operation succeeded or failed. Click OK to dismiss the dialog box.

Tuning Your Update Management Environment by Using the GUI (Task Map)

The following table identifies the optional tasks that you might perform when you use the GUI to tune the update management environment for your system.

If you want to use the `smpatch` command to tune your update management environment, see the `smpatch`(1M) man page.

Task	Description	For Instructions
(Optional) Set different directory locations.	Specify a different location for the download directory or the backout directory if the default locations are not large enough.	"How to Change Update Directory Locations (GUI)" on page 55
(Optional) Schedule a regular update analysis to determine the list of appropriate updates.	Analyze your system on a regular basis to determine the list of appropriate updates. By default, an analysis is performed daily.	"How to Enable a Daily Analysis of Updates (GUI)" on page 56
(Optional) Reassign your system to another Sun Online Account.	Change the owner of your registered system to a different Sun Online Account.	"How to Reassign Your System to a Different Sun Online Account (GUI)" on page 56
(Optional) Display the Update Manager notification icons and menu on your GNOME desktop.	Use these icons to access the Sun Update Manager GUI and the Sun Update Connection services. You can also use these icons to obtain information about the updates, and their types, that are available for this system.	"How to Display the Notification Icons and Menu on Your GNOME Desktop (GUI)" on page 57

▼ How to Change Update Directory Locations (GUI)

This procedure describes how to specify alternative locations for the *download directory*, the *backout data directory*, or both. By default, the download directory is `/var/sadm/spool`.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Preferences from the File menu.**

   The Configuration screen of the Preferences dialog box appears.

3. **In the Directories section, specify alternative directory locations, as applicable.**

   - Type the alternative location for the download directory in the Download Directory field.

   - Type the alternative location for the backout data directory in the Backout Data Directory field.

4. **Click OK to set one or both of these values, and to dismiss the dialog box.**

   Click Cancel to discard the values you set, and to dismiss the dialog box.

▼ How to Enable a Daily Analysis of Updates (GUI)

By default, an automatic update analysis is performed one time each day. The analysis uses the source of updates you specified. Only the updates that you are permitted to access, based on the system registration and subscription key, are listed on the Available Updates screen after an analysis operation.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Preferences from the File menu.**

   The Configuration screen of the Preferences dialog box appears.

3. **Click Notification.**

   The Notification screen of the Preferences dialog box appears.

4. **In the Updates Analysis section, specify whether to perform an automatic update analysis on your system.**

   - To enable the automatic analysis operation, select Run Updates Analysis Daily (Recommended).
   - To disable the automatic analysis operation, select Do Not Run Updates Analysis.

5. **Click OK to set this value, and to dismiss the dialog box.**

   Click Cancel to discard the value you set, and to dismiss the dialog box.

▼ How to Reassign Your System to a Different Sun Online Account (GUI)

Perform this procedure after you have registered your system.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Manage Subscription from the File menu.**

   The Add Subscription dialog box appears.

3. **Supply the information for the other Sun Online Account.**

a. **Type the other user name in the User Name field.**

b. **Type the password in the Password field.**

4. **(Optional) Type your subscription key in the Key field.**

5. **Click Finish to store the changes, and to dismiss the dialog box.**

   Click Cancel to discard the changes, and to dismiss the registration wizard.

▼ How to Display the Notification Icons and Menu on Your GNOME Desktop (GUI)

These icons appear only on the GNOME desktop and enable you to access the Sun Update Manager GUI and the Sun Update Connection services. You can also use these icons to obtain information about the updates, and their types, that are available for this system.

Right click one of the following icons to show the menu choices that are linked to that notification icon. Left click the icon to start the Update Manager application.

- **Blue circle with a question mark.** Indicates that this system is not registered. From the icon menu, you can open the registration wizard and learn more about the Update Manager and Sun Update Connection tools.
- **Green circle with no mark.** Indicates that no new updates have been detected for this system. Note that you might see this state indicator if you disabled the daily update analysis. From the icon menu, you can start the Update Manager application and go to the Sun Update Connection web site.
- **Yellow circle with an exclamation mark.** Indicates the number of new non-security type updates that are available for this system. This icon *only* appears if your system is registered and you have a Sun Update Manager subscription. You must also have the daily system analysis enabled to get this notification. From the icon menu, you can start the Update Manager application and go to the Sun Update Connection web site.
- **Red circle with two exclamation marks.** Indicates the total number of new updates and the number of security type updates that are available for this system. You must have the daily system analysis enabled to get this notification. From the icon menu, you can start the Update Manager application and go to the Sun Update Connection web site.

1. **Access the Sun Update Manager GUI.**

   See "How to Access the Sun Update Manager Application (GUI)" on page 44.

2. **Choose Preferences from the File menu.**

   The Configuration screen of the Preferences dialog box appears.

3. **Click Notification.**

   The Notification screen of the Preferences dialog box appears.

4. **In the Notification Icon and Menu section, specify whether to display the notification icon and menu.**

   - To enable this feature, select Display Notification Icon and Menu.
   - To disable this feature, deselect Display Notification Icon and Menu.

5. **Click OK to set the value, and to dismiss the dialog box.**

   Click Cancel to discard the value you set, and to dismiss the dialog box.

Configuring a Sun Update Connection Proxy

This chapter describes how to configure a Sun Update Connection Proxy, also referred to as a local patch server, on a Solaris 10 system. This chapter includes the following task-related information:

- "Configuring Your Sun Update Connection Proxy (Task Map)" on page 60
- "Configuring Your Sun Update Connection Proxy" on page 61

The Sun Update Connection Proxy supports client systems that use the Sun Update Connection, System Edition 1.0 product and the Sun Patch Manager 2.0 product. A Sun Update Connection client system is not compatible with the older local patch server feature associated with the Sun Patch Manager 2.0 product.

Note – The Sun Update Connection Proxy is an optional feature that you can obtain at no charge if you have a Sun Service Plan. For information about obtaining a Sun Service Plan, go to Solaris Operating System Software Support at `http://www.sun.com/service/support/software/solaris/` and select the appropriate level of service.

For instructions on how to install the proxy, see "How to Install the Sun Update Connection Proxy Feature Update" on page 28 or "How to Install the Sun Update Connection Proxy Software" on page 29.

Configuring Your Sun Update Connection Proxy (Task Map)

The following table identifies the tasks that you can perform with the `patchsvr setup` command to configure an update server on your intranet. See the `patchsvr`(1M) man page.

Task	Description	For Instructions
Configure your Sun Update Connection Proxy for the first time.	Before you can use your system as a Sun Update Connection Proxy, you must do the following: • Verify that the proxy software is installed on the system. • (Optional) Change configuration settings, such as specifying a network proxy, for the system. • Enable the system to act as a Sun Update Connection Proxy. • Configure client systems to specify your Sun Update Connection Proxy as the source of updates.	"How to Initially Configure Your Sun Update Connection Proxy (Command Line)" on page 62
(Optional) Obtain information about the configuration of your Sun Update Connection Proxy.	This information can help you diagnose problems or view the configuration settings you specified.	"How to View Configuration Settings for Your Sun Update Connection Proxy (Command Line)" on page 66
(Optional) Change the configuration settings of your Sun Update Connection Proxy.	By default, your proxy directly connects to the Internet and obtains updates from the Sun update server. If your update management environment does not match the default, modify the configuration settings appropriately.	"How to Change Configuration Settings for Your Sun Update Connection Proxy (Command Line)" on page 67

Configuring Your Sun Update Connection Proxy

Client systems are configured to obtain updates from the Sun update server by default. You need a Sun Update Connection Proxy in the following situations:

■ Your client systems are not permitted to connect to the Internet.
■ You want to minimize the Internet traffic between your client systems and the Sun update server.

Note – The Sun Update Connection Proxy is an optional feature that you can obtain at no charge if you have a Sun Service Plan. For information about obtaining a Sun Service Plan, go to Solaris Operating System Software Support at http://www.sun.com/service/support/software/solaris/ and select the appropriate level of service.

For additional information, see "Sun Update Connection Proxy" on page 12.

Configuring Your Update Management Environment to Include a Sun Update Connection Proxy

Configuring your update management environment to include a Sun Update Connection Proxy and configuring your client systems to use the proxy involves completing these tasks:

1. Configure and start your Sun Update Connection Proxy.

   See "How to Initially Configure Your Sun Update Connection Proxy (Command Line)" on page 62.

2. Configure your client system or systems to obtain updates from your Sun Update Connection Proxy.

   See "How to Specify a Source of Updates (GUI)" on page 48.

After completing these tasks, you are ready to have your client systems obtain updates from your Sun Update Connection Proxy. See "Managing Solaris Updates by Using the Sun Update Manager GUI" on page 43.

Configuration Requirements

Your Sun Update Connection Proxy needs to obtain updates and update data from one of these sources:

- **Update server.** The update server can be the Sun update server or another Sun Update Connection Proxy in the chain of update servers. The Sun update server is the default source of updates.
- **Local collection of updates.** A collection of updates and update data that is stored in a directory available to the local system. Such a directory might be a local directory, a shared network directory, or a CD mounted on your local system.

After you set up the Sun Update Connection Proxy, you must configure each of your client systems to communicate with that proxy. Then you are ready to have your client systems obtain updates from that proxy.

Note – If you locally manage a system that is a client of a Sun Update Connection Proxy on your intranet, you do not need to register the client system. You *must* register the system that acts as the proxy. If, however, your client system is also remotely managed by the Sun Update Connection services, the client system *must* be registered.

Configuring Your Sun Update Connection Proxy by Using the Command-Line Interface

Use the `patchsvr` command to configure and enable your Sun Update Connection Proxy. See the `patchsvr`(1M) man page.

▼ How to Initially Configure Your Sun Update Connection Proxy (Command Line)

Before you can use a system as a Sun Update Connection Proxy, you must ensure that the proxy software is installed, configure and start the proxy, and configure clients to communicate with it.

Note – The Sun Update Connection Proxy supports client systems that use the Sun Update Connection, System Edition 1.0 product and the Sun Patch Manager 2.0 product. A Sun Update Connection client system is not compatible with the older local patch server feature associated with the Sun Patch Manager 2.0 product.

The system that you want to act as a Sun Update Connection Proxy on your intranet must meet these software requirements:

- Solaris 10 system with at least the Developer Solaris Software Group (`SUNWCdev`)
- Sun Update Manager 1.0 software

Note – If your Sun Update Connection Proxy uses a network proxy to connect to the Internet, you *must* specify information about the network proxy. See "How to Change Configuration Settings for Your Sun Update Connection Proxy (Command Line)" on page 67.

1. **As superuser, log in to the system that you plan to use as your Sun Update Connection Proxy.**

2. **Determine whether the `SUNWpsvru` and `SUNWpsvrr` packages are installed on the system.**

   ```
   # pkginfo | grep SUNWpsvr
   system      SUNWpsvrr      Patch Server Deployment (Root)
   system      SUNWpsvru      Patch Server Deployment (Usr)
   ```

3. **If the packages are not installed, you must install them before continuing this task.**

4. **Register this system with Update Manager.**

   See "Registering Your System With Sun Update Manager (Task Map)" on page 35.

5. **If needed, specify the network proxy that your Sun Update Connection Proxy uses to connect to the Internet.**

   # **patchsvr setup -x** *network-proxy-name*:*port*

   If you do not have the network proxy information, contact your network administrator.

6. **Specify the update source.**

   Your Sun Update Connection Proxy can point to a different source of updates. This update source can be used to fulfill update download requests that cannot be fulfilled by your proxy. By default, the source of updates for your Sun Update Connection Proxy is the Sun update server.

- To specify the next update server in the chain of Sun Update Connection Proxies, type:

  # **patchsvr setup -p http://**_server-name_**:3816/solaris/**

- To specify a collection of updates on the Sun Update Connection Proxy, type:

  # **patchsvr setup -p file:///**_directory-name_

  The local collection of updates can be in a directory, on a CD, or on a remote file system.

- To specify the Sun update server, which is the default, type:

  # **patchsvr setup -p https://getupdates.sun.com/solaris/**

7. **Start your Sun Update Connection Proxy.**

   # **patchsvr start**

8. **(Optional) Enable your Sun Update Connection Proxy so that it is started each time the system boots.**

   # **patchsvr enable**

Examples: Initially Configuring Your Sun Update Connection Proxy

Each of these examples verify that the Sun Update Connection Proxy software is installed on the system.

- The following example shows how to configure a Sun Update Connection Proxy to point to another proxy in a chain. You configure two proxies to serve systems in two buildings.

  You configure psvr1 to obtain updates from the Sun update server. Also, psvr1 communicates with the Internet by using a network proxy. Before you can make the Sun Update Connection Proxy ready for use, you must specify the host name, networkproxy1, and the port number, 2010, of the network proxy. After you configure psvr1, you must start it. You can also enable it for automatic restart when the system boots.

```
psvr1 # pkginfo | grep SUNWpsvr
system      SUNWpsvrr      Patch Server Deployment (Root)
system      SUNWpsvru      Patch Server Deployment (Usr)
psvr1 # patchsvr setup -x networkproxy1:2010
psvr1 # patchsvr setup -p https://getupdates.sun.com/solaris/
psvr1 # patchsvr start
Starting Local Patch Server
psvr1 # patchsvr enable
```

You configure `psvr2` to obtain updates from `psvr1` by specifying the URL to the server, which is `http://psvr1:3816/solaris/`. After you configure `psvr2`, you must start it. You can also enable it for automatic restart when the system boots.

```
psvr2 # pkginfo | grep SUNWpsvr
system      SUNWpsvrr      Patch Server Deployment (Root)
system      SUNWpsvru      Patch Server Deployment (Usr)
psvr2 # patchsvr setup -p http://psvr1:3816/solaris/
psvr2 # patchsvr start
Starting Local Patch Server
psvr2 # patchsvr enable
```

Now that both of the update servers are configured and started, configure client systems to use them. See "How to Specify a Source of Updates (GUI)" on page 48.

■ The following example shows how to configure a Sun Update Connection Proxy to obtain updates from a local collection of updates in the `/export/updates` directory. The URL that points to this directory is `file:///export/updates`. After configuring the proxy, you must start it. You can also enable it for automatic restart when the system boots.

```
# pkginfo | grep SUNWpsvr
system      SUNWpsvrr      Patch Server Deployment (Root)
system      SUNWpsvru      Patch Server Deployment (Usr)
# patchsvr setup -p file:///export/updates
# patchsvr start
Starting Local Patch Server
# patchsvr enable
```

Now that the update server is configured and started, configure client systems to use it. See "How to Specify a Source of Updates (GUI)" on page 48.

■ The following example shows how to configure a Sun Update Connection Proxy to obtain updates from a local collection of updates on a CD mounted from the first CD-ROM drive. The URL that points to this CD is `file:///cdrom/cdrom0`. After configuring the proxy, you must start it. You can also enable it for automatic restart when the system boots.

```
# pkginfo | grep SUNWpsvr
system      SUNWpsvrr      Patch Server Deployment (Root)
system      SUNWpsvru      Patch Server Deployment (Usr)
# patchsvr setup -p file:///cdrom/cdrom0
# patchsvr start
Starting Local Patch Server
# patchsvr enable
```

Now that the update server is configured and started, configure client systems to use it. See

■ The following example shows how to configure a Sun Update Connection Proxy to obtain updates from a collection of updates that is mounted on a remote system. The URL that points to this directory is /net/mars/export/updates. After configuring the proxy, you must start it. You can also enable it for automatic restart when the system boots.

```
# pkginfo | grep SUNWpsvr
system     SUNWpsvrr     Patch Server Deployment (Root)
system     SUNWpsvru     Patch Server Deployment (Usr)
# patchsvr setup -p file:///net/mars/export/updates
# patchsvr start
Starting Local Patch Server
# patchsvr enable
```

Now that the update server is configured and started, configure client systems to use it. See

▼ How to View Configuration Settings for Your Sun Update Connection Proxy (Command Line)

You can check the configuration settings of your Sun Update Connection Proxy to help diagnose problems or to understand your server's update-related settings.

The information includes the following:

■ **Location of the update collection.** Source of updates to be checked when the requested update is not available on the local server.

■ **Network proxy information.** Host name and port of a network proxy that is used to communicate with the Internet.

■ **Location of the update cache.** Directory where updates are cached.

1. **Log in to the Sun Update Connection Proxy as superuser.**

2. **List the configuration settings for your proxy.**

```
# patchsvr setup -l
Patch source URL: https://getupdates.sun.com/solaris/
Cache location: /var/sadm/spool/patchsvr
Web proxy host name: mars
Web proxy port number: 8080
```

▼ How to Change Configuration Settings for Your Sun Update Connection Proxy (Command Line)

If you want to change the configuration settings of your Sun Update Connection Proxy, you must first stop the proxy. After you change the settings by using the `patchsvr setup` command, you must restart the proxy.

For information about the configuration settings that you can change, see the `patchsvr(1M)` man page.

1. **As superuser, log in to the system that you plan to use as your Sun Update Connection Proxy.**

2. **Stop the proxy.**

   ` # `**`patchsvr stop`**

3. **Change one or more configuration settings, one per command line.**

   For example, specify a network proxy, *network-proxy-name*, and a port, *port*.

   ` # `**`patchsvr setup -x`** *network-proxy-name***`:`***port*

4. **Start the proxy.**

   ` # `**`patchsvr start`**

Example: Changing Configuration Settings for Your Sun Update Connection Proxy

This example shows how to change some configuration settings for your Sun Update Connection Proxy. The Sun Update Connection Proxy communicates with the Internet by using a network proxy. First, you stop the Sun Update Connection Proxy, then specify the host name, `networkproxy1`, and the port number, `2010`, of the network proxy.

Then, you specify the next Sun Update Connection Proxy in the chain. You configure two proxies to serve systems in two buildings. The `psvr1` server obtains updates from the Sun update server. The second server, `psvr2`, obtains updates from `psvr1`. You configure `psvr2` to obtain updates from `psvr1` by specifying the URL to the server, which is `http://psvr1:3816/solaris/`.

```
# patchsvr stop
Shutting down Local Patch Server
# patchsvr setup -x networkproxy1:2010
# patchsvr setup -p http://psvr1:3816/solaris/
# patchsvr start
Starting Local Patch Server
```

Glossary

The following terms are used throughout this book.

A

analyze   To check a system to determine the list of updates that are appropriate for this system.

Update Manager uses analysis modules and a list of available updates from the Sun update server to generate a list of updates for your Solaris system.

apply   To install an update on a system.

B

back out   To remove an update from a system.

backout data   Data that is created when an update is applied to enable the system to return to its previous state if the update is removed (*backed out*).

backout directory   Directory in which backout data is stored. By default, this is the `save` directory of each package that was installed by the update.

C

caching The ability of a server in a chain of update servers to store an update that has been downloaded to it from another server.

check in When a system connects to the Sun Update Connection web site to run queued jobs, which install and uninstall updates.

D

dependency See *update dependency.*

digital signature An electronic signature that can be used to ensure that a document, such as an update, has not been modified since the signature was applied.

download To copy one or more updates from a source of updates, such as a Sun Update Connection Proxy or the Sun update server, to the system where the updates are to be applied.

download directory Directory in which updates are stored when they are downloaded from the update source. This is also the directory from which updates are applied. The default location is `/var/sadm/spool`.

F

feature update An update that introduces a new feature to the system.

K

keystore A repository of certificates and keys that is queried when you attempt to apply a signed update.

L

local mode A mode available for the `smpatch` command, which can only be run on the local system. This mode can be used to apply updates while the system is either in single-user mode or in multiuser mode.

local patch server See *Sun Update Connection Proxy*.

N

network proxy A system that is used to connect your system to the Internet. Your system cannot connect directly to the Internet, but must use the network proxy to establish the connection. Also called *web proxy*.

O

order To sort a set of updates in an order suitable for applying updates.

P

package The form in which software products are delivered for installation on a system. The package contains a collection of files and directories in a defined format.

patch See *update*.

PatchPro A product developed by Sun Network Storage to provide automated update management technology, which is used by Sun Update Manager.

policy for applying updates A user-configurable policy that specifies the types of updates that can be applied during an update of your system.

R

register   To enroll your Solaris system to use the Sun Update Manager software.

remote mode   A mode available for the `smpatch` command, which can be run on a local system to update another system with updates. This mode can only be used while the system is in multiuser mode.

resolve   To determine the update dependencies required for a list of updates. Each update in the list is checked to determine whether any other updates must be added to the list. If any updates are required, they are added to the ordered update list.

S

signed update   An update that is signed with a valid digital signature. A signed update offers greater security than an unsigned update. The digital signature of the update can be verified before the update is applied to your system. A valid digital signature ensures that the signed update has not been modified since the signature was applied. Signed updates are stored in Java Archive (JAR) format files.

subscription key   A value that you use when registering your Solaris 10 system with Sun Update Manager. This key gives you access to non-security updates and to the Sun Update Connection services.

Sun Online Account   The account that you need to register your systems to use Sun Update Manager and to log in to the Sun Update Connection web site, where you can manage updates on your systems.

Sun Update Connection Proxy   A system on your intranet that provides access to update data. This proxy can be used instead of the Sun update server. This proxy caches updates that are downloaded from its update source. Also called *local patch server*.

Sun Update Connection Services   A web application hosted on a Sun web site that enables you to remotely manage updates on one or more of your Solaris systems.

U

unsigned update   An update that is not signed with a digital signature.

update   (n.) A change to software that you apply that corrects an existing problem or that introduces a feature.

(v.) To perform the steps necessary to apply updates to a system. The system is analyzed, and the updates are downloaded and then applied.

Also called *patch*.

update analysis   A method of checking a system to determine which updates are appropriate for the system.

update dependency   An instance where an update depends on the existence of another update on a system. An update that depends on one or more updates can only be applied to a system when those other updates have already been applied.

update ID   A unique alphanumeric string, with the update base code first, a hyphen, and a number that represents the update revision number.

update incompatibility   A rare situation where two updates cannot be on the same system. Each update in the relationship is incompatible with the other. If you want to apply an update that is incompatible with an update already on the system, you must first remove the update that is already on the system. Then, you can apply the new update.

update list   A file that contains a list of updates, one update ID per line. Such a list can be used to perform update operations. The list can be generated based on the analysis of a system or on user input.

Each line in an update list has two columns. The first column is the update ID, and the second column is a synopsis of that update.

update management process   A process that involves analyzing a system to determine the appropriate updates, downloading the updates to that system, and applying the updates. Another part of the update management process is the optional removal of updates.

update obsolescence   An instance where an update replaces another update, even if it has not already been applied to a system. An update that obsoletes one or more updates replaces those updates entirely and does not require that the obsolete updates be applied before the replacement update is applied.

update server   A source of Solaris updates that can be used by your systems to perform update analyses and from which to obtain the appropriate updates. The update server can be the Sun update server, or it can be a server on your intranet, called the *Sun Update Connection Proxy*.

W

web proxy   See *network proxy*.

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