Sun Secure File Transport User Guide

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054
U.S.A.

Part No: 820–1190
January 2009

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more U.S. patents or pending patent applications in the U.S. and in other countries.

U.S. Government Rights – Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

This distribution may include materials developed by third parties.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, the Solaris logo, the Java Coffee Cup logo, docs.sun.com, Java, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun^{TM} Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Products covered by and information contained in this publication are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical or biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

DOCUMENTATION IS PROVIDED “AS IS” AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Sun Microsystems, Inc. détient les droits de propriété intellectuelle relatifs à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et ce sans limitation, ces droits de propriété intellectuelle peuvent inclure un ou plusieurs brevets américains ou des applications de brevet en attente aux Etats-Unis et dans d'autres pays.

Cette distribution peut comprendre des composants développés par des tierces personnes.

Certaines composants de ce produit peuvent être dérivées du logiciel Berkeley BSD, licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays; elle est licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, le logo Solaris, le logo Java Coffee Cup, docs.sun.com, Java et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui, en outre, se conforment aux licences écrites de Sun.

Les produits qui font l'objet de cette publication et les informations qu'il contient sont régis par la legislation américaine en matière de contrôle des exportations et peuvent être soumis au droit d'autres pays dans le domaine des exportations et importations. Les utilisations finales, ou utilisateurs finaux, pour des armes nucléaires, des missiles, des armes chimiques ou biologiques ou pour le nucléaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou réexportations vers des pays sous embargo des Etats-Unis, ou vers des entités figurant sur les listes d'exclusion d'exportation américaines, y compris, mais de manière non exclusive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une façon directe ou indirecte, aux exportations des produits ou des services qui sont régis par la legislation américaine en matière de contrôle des exportations et la liste de ressortissants spécifiquement designés, sont rigoureusement interdites.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFACON.

090128@21808

Contents

Preface 5

1 Introduction 9
Sun SFT Software 9

2 Frequently Asked Question 11
About the Sun™ Secure File Transport 12
Downloading and Installing Sun SFT 13
Using Sun SFT 14
Security 18
Man Pages 19
Support and Contact Information 19

3 Sun SFT How-To 21
How-To Install Sun SFT 21
How-To Uninstall Sun SFT 22
How-To Upgrade Sun SFT 22
How-To Edit the Configuration File 22
How-To Launch Sun SFT 23
How-To Send a File with Priority 23
How-To Send Explorer Files to Sun 24

4 Command Line Options for Sun SFT 25
Command Line Options Table 25

Preface

The Sun™ Secure File Transport User's Guide contains frequently asked questions, installation, and upgrade procedures for the Sun™ Secure File Transport (Sun SFT) software.

Who Should Use This Book

This guide is intended for users of the Sun SFT software.

Related Books

The following paper contains additional information about Sun SFT:

- Sun Secure File Transport White Paper

Related Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

Note – Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (`http://www.sun.com/documentation/`)
- Support (`http://www.sun.com/support/`)
- Training (`http://www.sun.com/training/`)

Typographic Conventions

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

TABLE P–1 Typographic Conventions

Typeface	Meaning	Example
`AaBbCc123`	The names of commands, files, and 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, 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*. A *cache* is a copy that is stored locally. Do *not* save the file. **Note:** Some emphasized items appear bold online.

Shell Prompts in Command Examples

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

TABLE P–2 Shell Prompts

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

◆ ◆ ◆ CHAPTER 1

Introduction

Sun™ Secure File Transport (Sun SFT) is a Sun Services tool that supports data transfer between customer environments and Sun. It is used to periodically deliver Explorer data collector files for proactive reporting and for sending on-demand Explorer, core, log, or other files for support services diagnostics. Sun SFT is designed to support customer network environments where Explorer clients do not have Internet access and to provide a central point to manage Explorer telemetry.

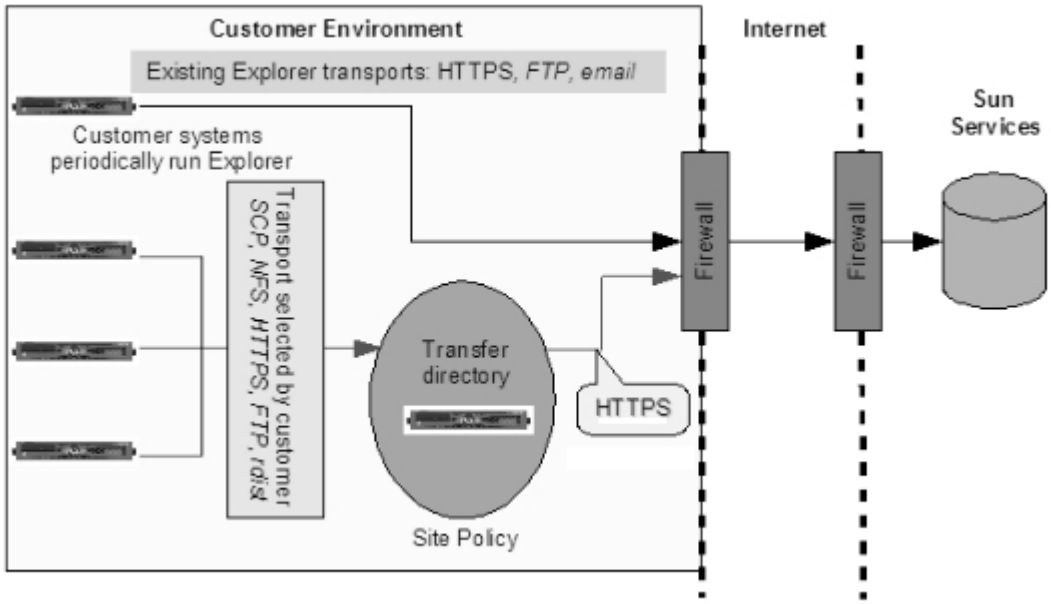
The Sun SFT software is a daemon process that runs in the background, periodically scanning a specified directory for new files and forwarding that data to the configured destination, Sun Microsystems, Inc. You launch the Sun SFT software through a command line interface. The software is a separate download that runs on versions 9 and 10 of the Solaris Operating System (OS) running Java 1.5.0 or higher. All transfers between your system and Sun use industry-standard Secure Sockets Layer (SSL) encryption, which ensures the security of the transfer of your data. The `/usr/bin/gzip` and `/usr/bin/tar` commands are required for transfer of Explorer files and should have been included with your Solaris OS . Sun SFT runs as a software bundle within Sun Automated Service Manager (SASM). you must be a superuser to launch the SASM process or use any of the Sun SFT or SASM command line options.

Sun SFT Software

The Sun SFT software is meant to be an aggregation and transfer point for telemetry data from other hosts. It detects and validates configured file types and then invokes a transfer process to send the data to the configured destination.

The Sun SFT software is distributed as a Solaris `SUNWsftransport` package that is installed under a standard location, `/opt/SUNWsftransport`. A Sun Online Account is required to install and run Sun SFT. Refer to the `sftransport(1m)` man page for information about command line options, and the `sftransport(4)` man page for a detailed description of the configuration file.

The following architecture diagram shows the configuration and communication routes of a typical Sun SFT network.



◆ ◆ ◆ CHAPTER 2

Frequently Asked Question

This document provides answers to questions about Sun SFT software.

- "About the Sun™ Secure File Transport " on page 12
  - What is the Sun™ Secure File Transport (Sun SFT)?
  - On what architecture or machines does Sun SFT run?
  - What Sun SFT command options are available?
  - How many Explorer clients can Sun SFT support?
- "Downloading and Installing Sun SFT" on page 13
  - How do I obtain Sun SFT?
  - Do I need a Sun Online Account for Sun SFT?
  - How do I install Sun SFT?
  - On what system should I install Sun SFT?
  - Are authenticated proxies or Windows NTLM proxies supported?
  - How large should the Sun SFT target transfer directory be?
  - How do I configure Sun SFT to run with a specific Java install?
- "Using Sun SFT" on page 14
  - What file types does Sun SFT 2.0 support?
  - How do I place the Explorer data (and other files) in the transfer directory for Sun SFT transfer?
  - What is HTTP Listener?
  - What is HTTPS Listener?
  - How do I use the HTTP Listener to receive files from Explorer 5.8 (and higher)?
  - How do I send core files or other case-data files to the HTTP Listener?
  - Does Sun SFT run in the background?

Can I archive files that are sent?
Can I be notified of transfer failures?
If transfer of a large file fails part-way through the transfer, what happens?
Where can I find log files?
- "Security" on page 18
  What are the firewall requirements for the Sun SFT software?
  How does Sun SFT encrypt the information that it sends to Sun?
- "Man Pages" on page 19
  Where are the Sun SFT man pages located?
- "Support and Contact Information" on page 19
  Where can I find more support about Sun™ Secure File Transport?
  Where can I submit my comments and suggestions about Sun Secure File Transport?
  Where do I go for support for the Sun™ Secure File Transport software?
  Where can I obtain status and outage information about Sun Secure File Transport service?

About the Sun™ Secure File Transport

Question: What is the Sun™ Secure File Transport (Sun SFT)?

Answer: Sun SFT is a configurable and automated method for sending data collected by Sun Explorer software, or other system telemetry data, to Sun Microsystems, Inc.

Question: On what architecture or machines does Sun SFT run?

Answer: Sun SFT runs on Solaris™ versions 9 and 10 on SPARC and Solaris 10 only on x86 architecture. Java 1.5.0 or higher is required on these systems.

Question: What Sun SFT command options are available?

Answer: Run `sftransport -h` to see a list of acceptable command options. For more information, see the `sftransport(1m)` man page.

Question: How many Explorer clients can Sun SFT support?

Answer: Sun SFT can support any number of Explorer clients. It might be appropriate to use multiple Sun SFT instances for manageability and to ensure that files are sent to Sun without unreasonable delay. A single Sun SFT instance can support up to 32 concurrent transfers . You need to define the concurrency appropriate to your specific needs and infrastructure. The number of concurrent transfers depends on the volume of Explorer files you need to send, the average size of the files, and your network bandwidth. If a single Sun SFT instance does not satisfy the file transfer volume, then additional Sun SFT instances should be installed on other hosts.

Downloading and Installing Sun SFT

Question: How do I obtain Sun SFT?

Answer: Information and download link for the software are included on the Services Tools Bundle page, located at:`http://www.sun.com/service/stb/index.jsp`.

Question: Do I need a Sun Online Account for Sun SFT?

Answer: Yes, a Sun Online Account is required to run Sun SFT. If you do not have a Sun Online Account or if you have forgotten your user name or password, go to `https://reg.sun.com/register`. Your username and password will be requested when running the `/opt/SUNWsasm/bin/sasm transport -r` command to register Sun Automated Service Manager for data transport.

Note – Your username is stored in a configuration file, but the given password is used only for a one time registration process and is not stored anywhere by Sun SFT or Sun Automated Service Manager.

Question: How do I install or upgrade Sun SFT?

Answer: Install it using the Solaris `pkgadd` command. Full details about the installation are included in Chapter 3, "Sun SFT How-To."

Question: On what system should I install Sun SFT?

Answer: Install Sun SFT on a system that has direct or proxied access to the Internet. Sun products running Explorer software need to be able to transfer files to the system where Sun SFT is installed.

Question: Are authenticated proxies or Windows NTLM proxies supported?

Answer: Sun SFT supports basic proxy authentication and Windows NTLM version 1.

When NTLM is in use, it might generate some extra log output. To mask this, in
`/etc/opt/SUNWsftransport/logging.properties`
change
`org.apache.commons.httpclient.level = WARNING`
to
`org.apache.commons.httpclient.level = SEVERE`
and restart the SASM process.

An alternate workaround (not tested, endorsed, or supported by Sun) is the open source "NTLM Authentication Proxy Server" project located at `http://ntlmaps.sourceforge.net/`.

Question: How large should the Sun SFT target transfer directory be?

Answer: It depends on the number of Explorer files that you choose to send and the average size of your Explorer data. Since Explorer output is the data that will be gathered together in the transfer directory and then sent by Sun SFT, plan the size of the transfer directory accordingly.

By default, Sun SFT saves only the files that failed to be sent; it removes files that were sent successfully unless configured to archive these files.

Question: How do I configure Sun SFT to run with a specific Java install?

Answer: At the top of the `/opt/SUNWsftransport/bin/sftransport` and `/opt/SUNWsasm/bin/sasm` files, modify the JAVA= line, for example: JAVA=/usr/jdk/jdk1.5.0_13/bin/java

Using Sun SFT

Question: What file types does Sun SFT 2.0 support?

Answer: Sun SFT 2.0 supports two data types:

- Sun™ Explorer data packages. These files should retain their filenames as created by Explorer (`explorer.{hostid}.*.tar.gz`). Sun SFT does some checks to validate the Explorer file before attempting to send it. Any validation failures are logged and the file is moved to the directory for failed transfers.
- Any files to assist in support case resolution such as core files, log files, configuration files, etc. These files must be named with the case number, optionally preceded by the word "case", and followed by additional file description and an extension. The preferred format is the first one listed below: `#-name.ext` (Case# hyphen name dot extension). However, several variations are acceptable.

  Sample filenames:

  12345678-core.gz
  case_12345678_messages.Z
  CASE-12345678-vmcore.bz2
  Case1234567.resolv.conf

If a file in the transfer directory does not match the filename pattern for any active slot, the file simply remains in the transfer directory and no information about that file is logged.

Note – Only validated files that are awaiting transfer are reported with the sftransport `--info` command.

Question: How do I place the Explorer data (and other files) in the transfer directory for Sun SFT transfer?

Answer: Sun SFT does not place restrictions on how you get the files to the transfer directory for Sun SFT to transfer. You can use any appropriate solution to transfer files from the systems running Explorer to the system where Sun SFT is installed. NFS, SCP, FTP, or any other solution may be used. In addition, Sun SFT includes an HTTP Listener that can be used to receive files directly from systems running Sun Explorer 5.8 (and higher) Data Collector.

Question: What is HTTP Listener?

Answer: HTTP Listener is a separate daemon process from the main transfer process that receives data. It can be setup and enabled during the Sun SFT installation procedure.

If you choose to enable the Listener, the Listener port can be verified or changed during the Sun SFT installation.

- Solaris 9 uses the Sun SFT `--start-listener` and `--stop-listener` command line options. Restart is managed via the `/etc/rc3.d/S73sftransport` and `/etc/rc2.d/K27sftransport` scripts.
- Solaris 10 uses `svcadm` to manage the separate `network/sftransport-listener` service. The `svcadm` manages the Listener restart on system reboot if Listener is enabled.

Note – Make sure that there will be no conflict using port 80 (the default port) on the Sun SFT host. If this port is already being used, then change the listener port to another acceptable value.

Question: What is HTTPS Listener?

Answer: HTTPS Listener provides the same basic functionality as the HTTP listener, but with added SSL encryption. To enable HTTPS, please follow the Sun SFT installation process to enable the HTTP Listener. In addition, you must complete the following steps to configure and setup the HTTPS Listener:

1. To generate the SSL certificate for the Sun SFT host, please follow the SSL Certificate directions located at:
   `http://docs.codehaus.org/display/JETTY/How+to+configure+SSL`
2. Modify the `/etc/opt/SUNWsftransport/listener.xml` `configuration` file to enable SSL.
   a. The `listener.xml` file has a section for SslSocketConnector that is commented out by default; un-comment this section and add the appropriate port and key/password configuration.
   b. Make sure that there will be no conflict with using port 443, the default port on the Sun SFT host.

      If port 443 is already being used, then change the Listener port to another acceptable value.

c. Comment out the `jetty.nio.SelectChannelConnector` <Item> element, so that `jetty.security.SslSocketConnector` is the only active connector.

Note – Please consult the Jetty documentation for additional information.

Question: How do I use the HTTP Listener to receive files from Explorer 5.8 (and higher)?

Answer: Use one of the following options to send data to the HTTP Listener from Explorer:

Note – The `server:port` variables in both options are the Sun SFT server and the port number for the Listener.

- Set the EXP_TRANSPORT value in `/etc/opt/SUNWexplo/default/explorer` configuration file to `http://server:port` and run Explorer with the `-P` command line option.

  Note – This is the recommended method of configuring Sun Explorer to use the Sun SFT Listener. This method ensures that the Sun SFT Listener setting remains constant during future Sun Explorer upgrades.

- Configure and run Explorer with the `-T http://server:port` command line option.

Question: How do I send core files or other case-data files to the HTTP Listener?

Answer: If the system has Explorer installed, use this command to transfer a file to the SFT transfer directory: `/opt/SUNWexplo/bin/curl.{sparc or i386} -T {file} "{Listener-URL}/?file={filename}"`

Example: `/opt/SUNWexplo/bin/curl.sparc -T /var/core.gz "http://my-sft-server:8080/?file=12345678-core.gz"`

Notes:

1. It is recommended to compress files to reduce the size of the data transfer, as shown in the core.gz example above.
2. The {file} parameter may include a path to the file location on the local system, but {filename} in the target URL must be a filename only (no path).
3. The {filename} in the target URL must use the correct filename format (including case number), but this does not have to match the filename on the local system, as shown in the example above.

Question: Does Sun SFT run in the background?

Answer: Sun SFT is a daemon process. A daemon process runs in the background, rather than under your direct control. The daemon process restarts automatically on system reboots and continues running until it receives a system-wide interrupt command.

Question: Can I archive files that are sent?

Answer: By default, files are deleted after successful transfer. To save files, configure the archivePath setting in the `/etc/opt/SUNWsftransport/sftransport.xml` file for each slot and restart SFT (for more information, see "How-To Edit the Configuration File" on page 22.

Question: Can I be notified of transfer failures?

Answer: Email notification of log messages can be configured in `/etc/opt/SUNWsftransport/logging.properties` file. Setup instructions are included in this file.

Question: If transfer of a large file fails part-way through the transfer, what happens?

Answer: There are two attributes in the `sftransport.xml` file that work together to control how a file is re-sent after a failed attempt:

- `transferTries` attribute

  This attribute defines the total number of attempts that will be made (including the first attempt). If a transfer fails somewhere in the middle of the transfer (for example, the connection is lost due to a network issue), then Sun SFT will continue the transfer from the point it left off on the next transfer attempt. When transferring large files, this attribute avoids starting over from the beginning. Of course, if the `transferTries` value is set at 1, there is no retry, and this feature will not be used.

- `secondsBetweenTries`attribute

  This attribute defines the wait time, in seconds, before a transfer is re-attempted after a failed attempt. The suggested value is at least 60 to give any network issues causing the original failure some time to clear up before attempting to resume the transfer. (To enable this feature, the `transferTries` value must be greater than one.)

For more information, see the `sftransport(4)` man page.

Question: Where can I find log files?

Answer: Log files are located in `/var/opt/SUNWsftransport`. Information about all transfer attempts and any errors that occur are recorded here. Log files are in XML format. They may be viewed with any text viewer, or see the`/opt/SUNWsftransport/logviewer/README.txt` file for information about a browser- based log viewer.

The `/opt/SUNWsftransport/logviewer/README.txt` outlines the following two options for browser-based log viewing:

- Use of the Sun SFT Listener process, which is included with Sun SFT, to view the logs.

Note – `logviewer` can be enabled during the Sun SFT installation process, and the logs can be browsed by appending `/logviewer/sftransport_log.cgi` to the Sun SFT Listener URL. For more information, see What is HTTP Listener?

- Use of another web server, such as Apache2, to view the logs.

  The Apache2 web server is bundled with the Solaris 10 operating system and it can be configured via `httpd.conf` file. For example, the following can be added to the `httpd.conf configuration` file to enable the log viewer.

```
AddHandler cgi-script .cgi
<Directory /var/apache2/htdocs/SFT>
   Options +ExecCGI
</Directory>
```

  For more information, see the Apache documentation at:
  `http://httpd.apache.org/docs/2.0/howto/cgi.html`

On Solaris 10, you can use `svcs -x sftransport-listener` command to show the listener log location.

Security

Question: What are the firewall requirements for the Sun SFT software?

Answer: Sun SFT communicates with Sun's servers using HTTPS; therefore, the system where Sun SFT is running requires outbound access to port 443.

If your firewall limits the hostnames that may be contacted, Sun SFT communicates only with transport.sun.com or transport.sun.co.uk. Check your `/etc/opt/SUNWsftransport/sftransport.xml` file to confirm which is in use for active slots. If your firewall limits communication by target IP address, you might perform a lookup for the addresses of these hostnames; however, keep in mind that Sun reserves the right to change the IP addresses of these hostnames.

Question: How does Sun SFT encrypt the information that it sends to Sun?

Answer: Sun SFT uses 128-bit SSL encryption.

Man Pages

Question: Where are the Sun SFT man pages located?

Answer: Sun SFT man pages are distributed with the Sun SFT Solaris package.

To access the man pages, you can use either of the following commands:

- `man -M sftransport_install_dir/man sftransport`
- `man -M sftransport_install_dir/man -s 4 sftransport`

Support and Contact Information

Question: Where can I find more support for the Sun™ Secure File Transport software?

Answer: Use SunSolve (`http://sunsolve.sun.com`) to find patches, application notes, and troubleshooting guides for Sun SFT and other Sun Services tools.

Question: Where can I submit my comments and suggestions about the Sun™ Secure File Transport?

Answer: You can use the following email alias to send your Sun SFT— related comments: sftransport-feedback@sun.com

Question: Where do I go for support for Sun Secure File Transport?

Answer: End users with maintenance contracts can go to the Customer Care Center: `http://www.sun.com/contact/support.jsp`

Question: Where can I obtain status and outage information about Sun Secure File Transport service?

Answer: You can obtain this type of Sun SFT information at: https://transport.sun.com/

◆ ◆ ◆ CHAPTER 3

Sun SFT How-To

This chapter explains how to perform the following procedures when installing, configuring, launching, and transitioning to the Sun SFT:

- "How-To Install Sun SFT" on page 21
- "How-To Uninstall Sun SFT" on page 22
- "How-To Upgrade Sun SFT" on page 22
- "How-To Edit the Configuration File" on page 22
- "How-To Launch Sun SFT" on page 23
- "How-To Send a File with Priority" on page 23
- "How-To Send Explorer Files to Sun" on page 24

How-To Install Sun SFT

Sun SFT is a Solaris package download that is available with or without the Sun Automated Service Manager package. Download the Sun SFT-only package if you already have SUNWsasm installed.

1. Install Service Tags

   If SUNWservicetags version 1.1.4 or higher is not already installed, download Services Tools Bundle from `http://www.sun.com/service/stb/index.jsp` and run its installer.

2. For SFT-with-SASM bundle, extract packages from downloaded file:
   `gunzip -c SUNWsftransport-*.tar.gz | tar xf -`

   For SFT-only, uncompress downloaded package file:
   `gunzip SUNWsftransport-.pkg.gz`

3. Install Sun Automated Service Manager: If SUNWsasm package is not already installed, run the following command: `pkgadd -d SUNWsasm-*.pkg SUNWsasm`

4. Register SASM for data transport: `/opt/SUNWsasm/bin/sasm transport -r`

5. Install the SFT Solaris package:
   `pkgadd -d SUNWsftransport-{version}.pkg SUNWsftransport`

The actual file name may vary because it is based on the version number of your download. The actual file name will be similar to the above name.

6. Provide the information requested during installation to configure the Sun SFT client.

Note – When reinstalling or upgrading Sun SFT, the configuration files are preserved.

How-To Uninstall Sun SFT

You can uninstall Sun SFT when you no longer want to use the software. Before you upgrade Sun SFT, you must uninstall the older version.

To uninstall Sun SFT use the pkgrm command: `pkgrm SUNWsftransport`

This command removes the Sun SFT software only, but leaves configuration files, log files and configured data directories in place. This is to retain all custom settings when upgrading Sun SFT. For a complete uninstall, follow the instructions printed during the pkgrm operation to remove the remaining files and directories. If not used for any other components, you can also uninstall Sun Automated Service Manager: `pkgrm SUNWsasm`

How-To Upgrade Sun SFT

Remove the old package with the `pkgrm` command as described in "How-To Uninstall Sun SFT" on page 22. Then install the new package with the `pkgadd` command as described in "How-To Install Sun SFT" on page 21.

How-To Edit the Configuration File

The `/etc/opt/SUNWsftransport/sftransport.xml` configuration file is installed when the Sun SFT package is installed. This file configures the main daemon parameters as well as all processing slot definitions. (A slot is a virtual holding place for files within a transfer directory.) You can edit this file directly to change the Sun SFT configuration. After making changes to the configuration file, you must restart the daemon for configuration changes to take effect.

Note – See the `sftransport(4)` man pages for specific details.

The following is an example of the `sftransport.xml` file:

```
<sftransport>
 <config version="2">
   <sleepSeconds>3600</sleepSeconds>
```

```
  <transferTries>3</transferTries>
  <secondsBetweenTries>120</secondsBetweenTries>
  <transferPath>/var/opt/SUNWsftransport/transfer</transferPath>
  <failedPath>/var/opt/SUNWsftransport/failed</failedPath>
  <diskThreshold>90</diskThreshold>
  <geo>AMER</geo>
</config>
<slots>
  <slot type="explorer" threads="5" archivePath="/mnt/explorer_archive">
    <url>/v1/queue/explorer</url>
  </slot>
  <slot type="casedata" threads="1" archivePath="">
    <url>/v1/queue/case-data<url>
  </slot>
</slots>
</sftransport>
```

How-To Launch Sun SFT

You launch Sun SFT by running `/opt/SUNWsftransport/bin/sftransport`. You can use the `--start` option to launch Sun SFT. This command ensures that Sun Automated Service Manager (SASM) is running, and activates the Sun SFT bundle. SASM remembers which bundles are active and restores them to that state each time SASM restarts. SASM starts at system boot via the `application/management/sasm` service on Solaris 10, and via the `/etc/init.d/sasm` script on Solaris 9.

How-To Send a File with Priority

When you select `transferPath` during the pkgadd, a subdirectory called *priority* is created in the `transferPath` directory. Files placed in this `priority` subdirectory are given preference over other files being transferred in the `transferPath` directory; however, since validation and file transfers occur in parallel, some non-priority items might finish transferring before a priority file. Sun Explorer files that are generated for a specific support case (using the `explorer -C` option to provide a case number) are treated as priority files whether placed in the priority subdirectory or the main transfer directory.

Note – If the `sftransport.xml` file is edited to change the transferPath to a new directory, a subdirectory called *priority* must exist in that new directory before you can startup the Sun SFT daemon.

How-To Send Explorer Files to Sun

Sun SFT has the ability to recognize two distinct types of Explorer files. It is important that you understand the distinction because there are differences in how Sun SFT processes each type, and how these files are processed at Sun.

- proactive files

  At Sun, proactive Explorer files are routed to Sun's Risk Analysis Engine

- reactive/on-demand files

  By default, Sun SFT gives priority to the reactive/on-demand files. At Sun, reactive Explorer files are routed to Sun Support Services personnel for analysis.

When working with Sun Support Services, you might be asked to send an Explorer file for extended diagnostics and troubleshooting. Once Sun SFT is installed and configured, it can be used to send high-priority Explorer files. When you run Explorer, include the `-C` option and the Sun Support Services Service Request number. For example:

```
explorer -C 12345678 -options
```

This causes Sun SFT to prioritize the delivery of this Explorer file ahead of other files that might be queued, and it will deliver the file to a Sun-internal location where it can be readily accessed by Sun Support Services. Complete Explorer documentation is available on `http://docs.sun.com`

◆ ◆ ◆ CHAPTER 4

Command Line Options for Sun SFT

Sun SFT supports the command line options shown in the following table:

Command Line Options Table

Option	Description
`-v or --version`	Print version
`-h or --help`	Print this usage message
`-p or --printconfig`	Print configuration settings
`-i or --info`	Print daemon status / current transfers
`-s or --start`	Start daemon
`-e or --shutdown`	Stop daemon, allow active transfers to finish (graceful shutdown)
`-a or --abort`	Stop daemon, abort active transfers
`-l or --start-listener`	Start HTTP Listener on Solaris 9 (On Solaris 10, use `svcadm`)
`-L or --stop-listener`	Stop HTTP Listener on Solaris 9 (On Solaris 10, use `svcadm`)
`svcadm`	This is an alternative option available with Solaris 10. You can use `svcadm` to enable/disable the svc:/application/management/sasm service. Use `svcadm` to manage the network/sftransport-listener service on Solaris 10. Note: this command can be used on Solaris 10 only; on Solaris 9 you must use one of the command options previously listed.