

Sun Enterprise™ 10000 Capacity on Demand 1.0 Installation Guide and Release Notes



THE NETWORK IS THE COMPUTER™

Sun Microsystems, Inc.
901 San Antonio Road
Palo Alto, CA 94303-4900 USA
650 960-1300 Fax 650 969-9131

Part No.: 806-2283-10
Revision A, October 1999

Send comments about this document to: docfeedback@sun.com

Copyright 1999 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, California 94303-4900 U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

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. For Netscape Communicator™, the following notice applies: (c) Copyright 1995 Netscape Communications Corporation. All rights reserved.

Sun, Sun Microsystems, the Sun logo, AnswerBook2, docs.sun.com, Sun Enterprise, and Solaris are trademarks, registered trademarks, or service marks 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™ 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.

RESTRICTED RIGHTS: Use, duplication, or disclosure by the U.S. Government is subject to restrictions of FAR 52.227-14(g)(2)(6/87) and FAR 52.227-19(6/87), or DFAR 252.227-7015(b)(6/95) and DFAR 227.7202-3(a).

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 1999 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, Californie 94303-4900 U.S.A. Tous droits réservés.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd. La notice suivante est applicable à Netscape Communicator™ : (c) Copyright 1995 Netscape Communications Corporation. All rights reserved.

Sun, Sun Microsystems, le logo Sun, AnswerBook2, docs.sun.com, Sun Enterprise, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, 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.

CETTE PUBLICATION EST FOURNIE "EN L'ETAT" ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APTITUDE DE LA PUBLICATION A REpondre A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.



Sun Enterprise 10000 SSP Attributions:

This software is copyrighted by the Regents of the University of California, Sun Microsystems, Inc., and other parties. The following terms apply to all files associated with the software unless explicitly disclaimed in individual files.

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

IN NO EVENT SHALL THE AUTHORS OR DISTRIBUTORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE, ITS DOCUMENTATION, OR ANY DERIVATIVES THEREOF, EVEN IF THE AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. THIS SOFTWARE IS PROVIDED ON AN "AS IS" BASIS, AND THE AUTHORS AND DISTRIBUTORS HAVE NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

RESTRICTED RIGHTS: Use, duplication or disclosure by the government is subject to the restrictions as set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software Clause as DFARS 252.227-7013 and FAR 52.227-19.

This is scotty, a simple tcl interpreter with some special commands to get information about TCP/IP networks. Copyright (c) 1993, 1994, 1995, J. Schoenwaelder, TU Braunschweig, Germany, Institute for Operating Systems and Computer Networks. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that this copyright notice appears in all copies. The University of Braunschweig makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Contents

Preface	vii
Before You Read This Book	vii
Using UNIX Commands	viii
Typographic Conventions	viii
Shell Prompts	ix
Related Documentation	ix
Accessing Sun Documentation Online	x
Sun Welcomes Your Comments	x
1. Release Notes	1
General Issues	1
Printing the Capacity on Demand 1.0 Documentation	1
Viewing man pages with AnswerBook2 Server	1
Viewing man Pages with <code>man(1M)</code>	2
Known Bugs	2
unique <code>smancommon.ent</code> file not supp on Sol 2.6 and 7 (4264517)	2
Patches	2
SSP 3.1.1	2
2. Installing Capacity on Demand 1.0	3

Installing Capacity on Demand 1.0 on a Spare SSP 3

- ▼ To Install Capacity on Demand 1.0 on a Spare SSP 3

Re-installing Capacity on Demand 1.0 5

- ▼ To Re-install Capacity on Demand 1.0 on the Main SSP 5

Preface

This document contains the release notes for Sun Enterprise 10000 Capacity on Demand 1.0. It also describes how to how to install the Capacity on Demand software on a spare System Service Processor (SSP) and how to re-install it on the main SSP.

Before You Read This Book

This manual is intended for the Sun Enterprise 10000 system administrator who is familiar with SSP administration. Refer to the *Sun Enterprise 10000 SSP 3.1.1 User Guide* and *Sun Enterprise 10000 SSP 3.1.1 Reference Manual*. SSP 3.1.1 is the first release of SSP software that supports Capacity on Demand 1.0. The Sun Enterprise 10000 system administrator must also have a working knowledge of UNIX® systems, particularly those based on the Solaris™ operating environment. If you do not have such knowledge, you must first read the Solaris User and System Administrator AnswerBook2™ collections provided with this system, and consider UNIX system administration training.

Using UNIX Commands

This document does not contain information on basic UNIX commands and procedures such as shutting down the system, booting the system, and configuring devices.

See one or more of the following for this information:

- AnswerBook online documentation for the Solaris software environment, particularly those dealing with Solaris system administration
- Other software documentation that you received with your system

Typographic Conventions

TABLE P-1 Typographic Conventions

Typeface or Symbol	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output.	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. % You have mail.
AaBbCc123	What you type, when contrasted with on-screen computer output.	% su Password:
<i>AaBbCc123</i>	Book titles, new words or terms, words to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . These are called <i>class</i> options. You <i>must</i> be superuser to do this.
	Command-line variable; replace with a real name or value	To delete a file, type <code>rm filename</code>

Shell Prompts

TABLE P-2 Shell Prompts

Shell	Prompt
C shell	<i>machine_name%</i>
C shell superuser	<i>machine_name#</i>
Bourne shell and Korn shell	<i>\$</i>
Bourne shell and Korn shell superuser	<i>#</i>

Related Documentation

TABLE P-3 Related Documentation

Application	Title	Part Number
Administrator Guide	<i>Sun Enterprise 10000 Capacity on Demand 1.0 Administrator Guide</i>	806-2190-10
Reference (man pages)	<i>Sun Enterprise 10000 Capacity on Demand 1.0 Reference Manual</i>	806-2191-10
Other	<i>Sun Enterprise 10000 SSP 3.1.1 User Guide</i>	805-7519-10
	<i>Sun Enterprise 10000 SSP 3.1.1 Reference Manual</i>	805-7520-10
	<i>Sun Enterprise 10000 Dynamic Reconfiguration User's Guide</i>	805-7985-10
	<i>Sun Enterprise 10000 Dynamic Reconfiguration Reference Manual</i>	805-7986-10
	<i>Sun Enterprise Server Alternate Pathing User's Guide</i>	805-5985-10
	<i>Sun Enterprise Server Alternate Pathing Reference Manual</i>	805-5986-10

Accessing Sun Documentation Online

The `docs.sun.com`SM web site enables you to access Sun technical documentation on the Web. You can browse the `docs.sun.com` archive or search for a specific book title or subject at:

`http://docs.sun.com`

Sun Welcomes Your Comments

We are interested in improving our documentation and welcome your comments and suggestions. You can email your comments to us at:

`docfeedback@sun.com`

Please include the part number (806-2283-10) of your document in the subject line of your email.

Release Notes

General Issues

Printing the Capacity on Demand 1.0 Documentation

To print the *Sun Enterprise 10000 Capacity on Demand 1.0 Administrator Guide* or the *Sun Enterprise 10000 Capacity on Demand 1.0 Reference Manual*, print the appropriate PostScript™ file from the `/cdrom/cdrom0/Docs` directory on the CD-ROM or the `Docs` directory in the directory in which you downloaded the files from the Web.

Viewing man pages with AnswerBook2 Server

When viewing the man page collection with the AnswerBook2 server, click on a man page from the list shown below the alphabet. Clicking on the letters of the alphabet shown at the top of the page does not always display the section in which you are interested.

Viewing man Pages with man(1M)

To view man pages using man(1M):

1. Make sure that the environment variable `MANPATH` includes the directory for the SSP man pages (`/opt/SUNWssp/man`).
2. Run `catman -w`.

Known Bugs

unique `smancommon.ent` file not supp on Sol 2.6 and 7 (4264517)

Description: Solaris 2.6 and Solaris 7 do not support unbundled versions of the `smancommon.ent` file, or use of a common file with a different name, which prevents the `man(1M)` command from functioning properly. Capacity on Demand 1.0 man pages displayed using `man(1M)` will not display some of the headings, such as "OPTIONS" and "SEE ALSO". The information indicated by the heading is present; only the heading is missing.

Workaround: None.

Patches

SSP 3.1.1

For SSP 3.1.1, you must install patch 108135-01, which fixes bug number 4258031 (`codd` does not stop when SSP made into spare). This patch can be found in the `Patches` directory (in the directory in which you downloaded the software from the Web).

Installing Capacity on Demand 1.0

The Capacity on Demand 1.0 software and the license key(s) that you ordered with the system were installed on your Sun Enterprise 10000 system by Sun personnel.

If you are using a spare SSP, you must install the Capacity on Demand 1.0 software on it (see the procedure below). If you need to re-install the Capacity on Demand 1.0 software, due to a disk failure or other problem, see “To Re-install Capacity on Demand 1.0 on the Main SSP” on page 5.

Installing Capacity on Demand 1.0 on a Spare SSP

If you are using a spare SSP, it must be running the same version of the SSP software and the same version of the Solaris operating environment that you are running on the main SSP.

If you are using SSP 3.1.1 software on the main and spare SSP, you must install patch 108135-01.

▼ To Install Capacity on Demand 1.0 on a Spare SSP

- 1. Back up the SSP environment on the main SSP by using `ssp_backup(1M)`.**

You will use this backup file to copy the main SSP environment, including Capacity on Demand configuration information, to the spare SSP later in this procedure.
- 2. Download the Capacity on Demand 1.0 software from the Web.**
 - a. Point your Web browser to this URL:** <http://www.sun.com/servers/sw>.

- b. Click the **Enterprise 10000 Capacity On Demand (COD) Software link**.
- c. Click the **Click here to download link**.

The file that will be downloaded is named `sun_cod_1_0.tar.Z`.

3. On the SSP, log in as superuser.
4. If the SSP processes are running (these processes are normally run on the main SSP, not the spare), stop them:

```
ssp# /etc/init.d/ssp stop
```

5. Change directory to the location where you downloaded the Capacity on Demand software.

```
ssp# cd download_directory
```

6. Extract the downloaded file by typing:

```
ssp# uncompress sun_cod_1_0.tar.Z | tar xvf
```

7. Install the Capacity on Demand packages by typing:

```
ssp# pkgadd -d Product SUNWcod SUNWcodmn SUNWcodbk
```

8. On the spare SSP, restore the backup file from Step 1 by using `ssp_restore(1M)`.

If you did not back up the main SSP in Step 1, you must copy the following files from the main SSP to the spare SSP:

- License file (`/var/opt/SUNWssp/.ssp_private/SUNWcod.lic`)
- `cod_resource` file (`/var/opt/SUNWssp/.ssp_private/cod_resource`)
- Secure log file and the copies of the log file that are saved monthly (`/var/opt/SUNWssp/adm/cod.log` and `/var/opt/SUNWssp/adm/cod.log.*`)
- `blacklist(4)` file (`/var/opt/SUNWssp/etc/platform_name/blacklist`)

Re-installing Capacity on Demand 1.0

The Capacity on Demand 1.0 software was installed on your Sun Enterprise 10000 system by Sun personnel. If you have a disk failure, or other problem, on the main SSP and do not have a backup file, you will need to re-install the Solaris operating environment, the SSP software, and the Capacity on Demand 1.0 software, as described in the following procedure.

▼ To Re-install Capacity on Demand 1.0 on the Main SSP

1. Install the Solaris operating environment.

Refer to one of the following manuals:

- For Solaris 2.6, see the *Solaris 2.6 System Administrator Collection Vol 1—Solaris Advanced Installation Guide*.
- For Solaris 7, see the *Solaris 7 Installation Collection—Solaris Advanced Installation Guide*.

2. Re-install the SSP software as described in the *Sun Enterprise 10000 SSP 3.1.1 Installation Guide and Release Notes* or *Sun Enterprise 10000 SSP 3.2 Installation Guide and Release Notes*.

If you install the SSP 3.1.1 software, you must also install patch 108135-01.

If the SSP processes are running, stop them:

```
ssp# /etc/init.d/ssp stop
```

3. Download the Capacity on Demand 1.0 software from the Web.

- a. Point your Web browser to this URL: <http://www.sun.com/servers/sw>.
- b. Click the Enterprise 10000 Capacity On Demand (COD) Software link.
- c. Click the Click here to download link.

The file that will be downloaded is named `sun_cod_1_0.tar.Z`.

4. On the SSP, log in as superuser.

5. Change directory to the location where you downloaded the Capacity on Demand software.

```
ssp# cd download_directory
```

6. Extract the downloaded file by typing:

```
ssp# uncompress sun_cod_1_0.tar.Z | tar xvf
```

7. Install the Capacity on Demand packages by typing:

```
ssp# pkgadd -d Product SUNWcod SUNWcodmn SUNWcodbk
```

8. If you have a backup file of the SSP environment that you created with `ssp_backup(1M)`, type:

```
ssp# ./ssp_restore backup_directory/ssp_backup.cpio
```

Where *backup_directory* is the directory in which the `ssp_backup.cpio` file created by `ssp_backup(1M)` resides.

9. If you did not restore the SSP environment in Step 8, you must edit the Capacity on Demand license file, `cod_resource(4)` file, and create the `blacklist(4)` file.
 - If your license key files are stored on a system other than the SSP, copy them to the SSP.
 - If you do not have license key files or the email attachment containing the license keys, you can create the license key file using any text editor; you must type in the license keys from the license certificates. Refer to the *Sun Enterprise 10000 Capacity on Demand Administrator Guide*.
 - If you do not have your license certificates, contact your sales representative.
 - a. Log in to the SSP as user `ssp`.
 - b. Change directory to the directory in which your license key files reside.

c. Type:

```
ssp% codlit filenames  
codlit: 2 license key(s) installed from file, filename
```

where *filenames* is a list of one or more filenames (separated by spaces) of license key files. If you specify more than one filename on the command line, `codlit(1M)` prints a line for each file that indicates how many license keys were installed from that file.

Note – It is suggested that you save copies of your license files on a system other than the SSP.

d. Add the processors for which you do not have licenses to the `blacklist(4)` file.

You can modify the `blacklist(4)` file with a text editor. See the *Sun Enterprise 10000 Capacity on Demand 1.0 Administrator Guide*.

e. Using a text editor, edit the `cod_resource(4)` file, as needed.

Enter values for the `LicenseNotifyList` and `SunAddr` resources. See the `cod_resource(4)` man page or the *Sun Enterprise 10000 Capacity on Demand 1.0 Administrator Guide*.

10. Back up the SSP environment using `ssp_backup(1M)`.

Note – If you are using a spare SSP, the spare SSP must run the same version of the SSP software and the Solaris operating environment that you are running on the main SSP.

11. Log in as superuser and start the SSP processes:

```
ssp# /etc/init.d/ssp start
```

12. Check the Capacity on Demand log:

```
ssp% cat $SSPLOGGER/cod.log
```

Look for a Capacity on Demand startup message similar to the following:

```
Thu Aug 19 14:01:41 1999 1014:SSP codd started 935096501.880  
808edcd5 a69f04 1719 ZP4pcDBQhoe8rkAldMpXTw
```

and the Capacity on Demand heartbeat message that follows the startup message and indicates the number of processors in use and the number of licensed processors.