Sun[™] StorEdge[™] A1000 and D1000 Rackmount Installation Guide



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. 805-2626-12 April 2001, Revision A

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

Copyright 2001 Sun Microsystems, Inc., 901 San Antonio Road • Palo Alto, CA 94303 USA. 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.

Sun, Sun Microsystems, the Sun logo, Sun StorEdge, AnswerBook, docs.sun.com, 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. Adobe ® is a registered trademark of Adobe Systems, Incorporated.

The OPEN LOOK and SunTM 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 2001 Sun Microsystems, Inc., 901 San Antonio Road • Palo Alto, CA 94303 Etats-Unis. 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.

Sun, Sun Microsystems, le logo Sun, Sun StorEdge, AnswerBook, docs.sun.com, 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. Adobe est une marque enregistree de Adobe Systems, Incorporated.

L'interface d'utilisation graphique OPEN LOOK et Sun^{TM} 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 Sun DOK 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.





Preface

This document provides instructions for installing the rail mounting kit for Sun™ StorEdge™ A1000 and D1000 Disk Arrays into a system or expansion cabinet.

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:

- Solaris Handbook for Sun Peripherals
- AnswerBook[™] online documentation for the Solaris[™] software environment
- Other software documentation that you received with your system

Typographic Conventions

 TABLE P-1
 Typographic Conventions

Typeface	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your .login file. Use ls -a to list all files. % You have mail.
AaBbCc123	What you type, when contrasted with on-screen computer output	% su Password:
AaBbCc123	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 rm filename.

Shell Prompts

TABLE P-2 Shell Prompts

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

Related Documentation

TABLE P-3 Related Documentation

Title	Part Number
Sun StorEdge A1000 and D1000 Installation, Operations, and Service Manual	805-2624-10
Sun StorEdge A1000 and D1000 Tower Mount Installation	805-2627-10
Sun StorEdge D1000 Storage Guide	805-4013-10
Sun StorEdge D1000 to A1000 Upgrade	805-4749-10
Sun StorEdge A1000 and D1000 Product Note	805-4866-10
Rackmount Placement Matrix	805-4748-29

Documentation on the Web

Sun's documentation is available for viewing and printing at Sun's web site.

To view and print Solaris usage documents listed under "Using UNIX Commands" on page iii, go to:

http://docs.sun.com

To view and print the Network Storage documents listed under "Related Documentation," go to:

http://www.sun.com/products-n-solutions/hardware/docs/ Network_Storage_Solutions

Viewing and printing documents in Adobe Portable Document Format (PDF) requires Adobe® Acrobat Reader, which is downloadable for free from:

http://www.adobe.com/products/acrobat/readstep.html

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 of this document, 805-2626-12, in the subject line of your email.

Rackmount Installation

This document contains the following sections:

- Kit Contents—page 2
- Using the Rackmount Placement Matrix—page 2
- Installing the Mounting Tray on the Chassis—page 3
- Installing the Mounting Brackets—page 5
- Installing the Chassis in the Cabinet—page 7
- Reassembling the Cabinet—page 9

Kit Contents

The kit supplied with a tray contains:

- 1 mounting tray
- 2 mounting brackets
- 20 screws
 - 16 #10-32 x 1/2
 - 4 #10-14 x 7/16

Using the Rackmount Placement Matrix

Before beginning the installation, consult the *Rackmount Placement Matrix* for information you need about spacing the mounting brackets on the cabinet rack. Download the *Rackmount Placement Matrix* from:

http://www.sun.com/products-n-solutions/hardware/docs/ Network_Storage_Solutions/Cabinets_Enclosures_and_Other_Components/

In the table under "Cabinet Documentation," go to the row that lists the *Rackmount Placement Matrix*, and then click the link for the PDF file.

If you do not have Internet access, ask your Sun contact for a copy of the matrix.

Installing the Mounting Tray on the Chassis

Before installing a tabletop version of the disk array in a cabinet, you must first install a mounting tray on the bottom of the chassis as described here. If your disk array is already configured for cabinet installation, go directly to "Installing the Mounting Brackets" on page 5.



Caution – This procedure requires two people to lift and move the disk array. Use care to avoid injury. A disk array with a mounting tray attached may weigh up to 75 pounds (34 kg).

- 1. With the aid of an assistant, invert the chassis with the front facing you (FIGURE 1).
- 2. Remove the feet.

Discard the feet and screws. They are not reused.

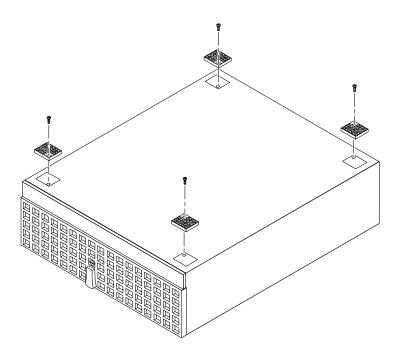


FIGURE 1 Removing the Feet

3. Place the mounting tray on the chassis (FIGURE 2).

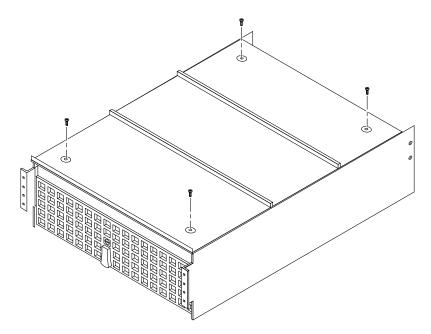


FIGURE 2 Installing the Mounting Tray on the Chassis

- 4. Loosely thread the #10-14 x 7/16-inch screws into all four holes.
- 5. When all screws are started, tighten them.
- 6. With the aid of an assistant, restore the chassis to the upright position with the front of the chassis facing you.
- 7. Go to "Installing the Mounting Brackets" on page 5.

Installing the Mounting Brackets

Follow the instructions on preparing for service that are in your system or expansion cabinet documentation. If necessary, be sure to:

- Extend the stabilizer legs
- Remove or open the front panel and/or door
- Remove or open the vented rear door

Note – The following procedure includes one figure for each of the two available mounting brackets. Use the keyhole combinations indicated in the figure that applies to the bracket you are mounting.

1. Loosely thread the two top screws into the rack as specified in the Rackmount Placement Matrix.

See "Using the Rackmount Placement Matrix" on page 2, if needed.

2. Take one of the mounting brackets and place two keyholes over the top screws.

FIGURE 3 shows which pair of keyholes to use when placing the universal mounting bracket in the Sun Fire Cabinet and which pair of keyholes to use in other cabinets.

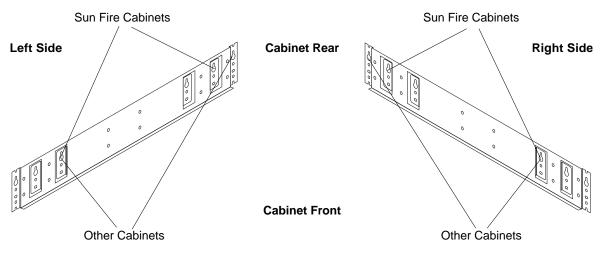


FIGURE 3 Universal Mounting Bracket

FIGURE 4 shows which pair of keyholes to use when placing the type of mounting bracket that is usable in any cabinet except a Sun Fire cabinet.

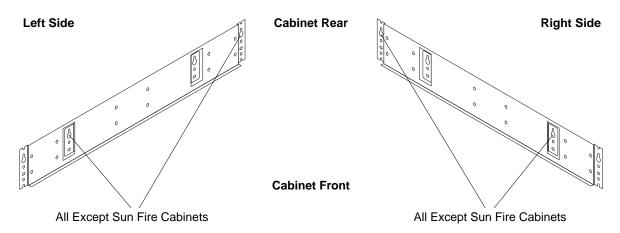


FIGURE 4 Mounting Bracket for All Cabinets Except Sun Fire Cabinets

- 3. Install the screws in the front and rear bottom holes.
- 4. Tighten all four screws.

Installing the Chassis in the Cabinet

Refer to the *Rackmount Placement Matrix* for the correct order in which to install the chassis.



Caution – The cabinet can become front-heavy while the chassis is being installed. Unless your cabinet is bolted to the floor, ensure that the stabilizer legs are extended before proceeding. Failure to extend the legs can result in the cabinet tipping forward and injuring personnel.



Caution – This installation requires two people to lift and move the disk array. Use care to avoid injury. A disk array with a baseplate attached may weigh up to 75 pounds (34 kg).

- 1. With the aid of an assistant, lift the chassis (one person on each side) and approach the expansion cabinet with the chassis back facing the cabinet.
- 2. Line up the mounting tray with the mounting brackets in the cabinet (FIGURE 5).

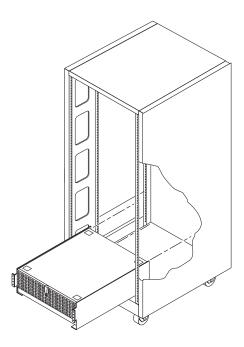


FIGURE 5 Aligning the Mounting Tray With the Mounting Brackets

- 3. Rest the chassis on the mounting brackets, then slide the chassis in.
- 4. Install the four securing screws in the front of the cabinet (FIGURE 6).

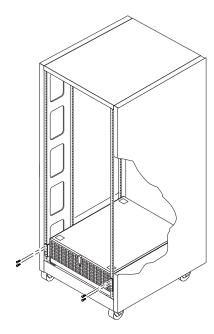


FIGURE 6 Installing the Front Securing Screws

5. Install the four securing screws at the rear of the mounting tray (FIGURE 7).

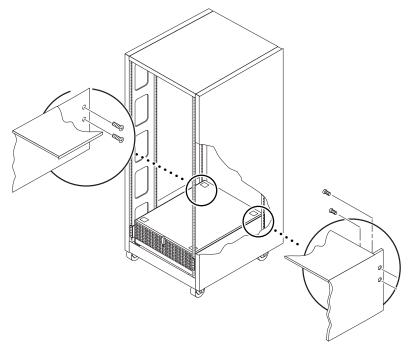


FIGURE 7 Installing the Rear Securing Screws

6. Connect the power cables and SCSI cables.

For maximum power redundancy, connect the power cables to different power sequencers. Refer to the instructions that came with your cabinet.

7. Connect a grounding strap between the host and the cabinet.

Refer to the instructions that came with your cabinet.

Reassembling the Cabinet

Follow the instructions in your system or expansion cabinet documentation. If necessary, be sure to:

- Replace or close the front panel and/or door
- Replace or close the vented rear door
- Push the stabilizer legs back into the cabinet