

# **FUJITSU Software**

# **PRIMECLUSTER GD Snapshot**

# **4.6A00**

A decorative horizontal band with a red-to-dark-red gradient, featuring abstract, glowing white and red lines that swirl and intersect, creating a sense of motion and energy.

## **Installation Guide**

Oracle Solaris

J2S0-0472-01ENZ0(00)  
October 2021

# Preface

---

## Purpose

This manual explains how to install PRIMECLUSTER GD Snapshot.

## Target Readers

This manual is written for people who will install this product.

It is strongly recommended that you read the Software Release Guide from the product media before using this manual.

When setting up systems, it is assumed that readers have the basic knowledge required to configure the servers, storage and network devices to be installed.

## Organization

This manual consists of four chapters. The contents of these chapters, the appendices are listed below.

Title	Description
Chapter 1 Program components	Explains the packages of which this product is composed.
Chapter 2 Operation environment	Explains the operational environment of this product.
Chapter 3 Installation	Explains how to install this product.
Chapter 4 Uninstallation	Explains how to uninstall this product.

## Notational Conventions

The notation in this manual conforms to the following conventions.

- References and character strings or values requiring emphasis are indicated using double quotes ( " ).
- Text to be entered by the user is indicated using bold text.
- Variables are indicated using italic text.

The following abbreviations are used in this manual:

- Global Disk Services is abbreviated as GDS.

## Export Administration Regulation Declaration

Exportation/release of this document may require necessary procedures in accordance with the regulations of your resident country and/or US export control laws.

## Trademark Information

- EMC, PowerPath and Symmetrix are registered trademarks of EMC Corporation.
- TimeFinder is a trademarks of EMC Corporation.
- Other trademarks and registered trademarks appearing in this manual are the trademarks or registered trademarks of their owners.

Information in this manual is subject to change without notice.

## Date of publication and edition

October 2021 First Edition

## Copyright notice

# Revision History

---

First Edition

# Contents

---

Chapter 1 Program components.....	1
Chapter 2 Operation environment.....	2
2.1 Software environment.....	2
2.2 Hardware environment.....	3
2.3 Static disk resources.....	3
2.3.1 Required disk space.....	3
2.3.2 Required work area.....	3
2.4 Dynamic disk resources.....	4
2.4.1 Required disk space.....	4
2.5 Required memory.....	4
Chapter 3 Installation.....	5
3.1 Preparations.....	5
3.2 Installation.....	5
3.3 Environment configurations.....	7
Chapter 4 Uninstallation.....	8
4.1 Preparations.....	8
4.2 Uninstallation.....	8

# Chapter 1 Program components

A system consists of programs, and each program is referred to as a package.  
This software consists of the following packages.

No.	Component	Package	Version	Function
1	Global Disk Services Snapshot	FJSVsdxss	4.6.0	GDS Snapshot option
		FJSVsdxsl	4.6.0	
		FJSVgdapi	2.21	

# Chapter 2 Operation environment

This chapter explains the operation environment of this software.

## 2.1 Software environment

### 1. Required basic software

To use this software, install either of the following basic softwares.

No.	Basic Software	Remark
1	Oracle Solaris 10 (8/11 or later)	
2	Oracle Solaris 11	

### 2. Required software

To use this software, the following software product is required.

No.	Software	Package	Version and/or level	Remark
1	PRIMECLUSTER GD, PRIMECLUSTER Enterprise Edition, PRIMECLUSTER HA Server		4.6A00	
2	EMC TimeFinder	(*1)	6.0	Required to use copy function in an EMC Symmetrix cabinet. (Oracle Solaris 10)
3	EMC SRDF	(*1)	6.0	Required to use copy function between different EMC Symmetrix cabinets. (Oracle Solaris 10)
4	EMC Solutions Enabler	(*1)	6.0	Required to use EMC TimeFinder or EMC SRDF. (Oracle Solaris 10)

(\*1) For the package name, contact EMC engineers.

### 3. Exclusive software

None.

### 4. Required patches

None.

### Note

Please check the support status from PRIMECLUSTER product information before applying the basic software patch(es).

## 2.2 Hardware environment

---

The following hardware requirements must be satisfied to operate this software.

1. Memory

128MB or more of memory is required.

2. Required hardware

No.	Device name	Device type	Remark
1	Fujitsu Storage ETERNUS DX series		Required to use the Advanced Copy function
2	EMC Symmetrix storage system		Required to use EMC TimeFinder or SRDF

## 2.3 Static disk resources

---

This section explains static disk space requirements for this software.

### 2.3.1 Required disk space

---

The following table lists the disk space requirements for installing this software. If necessary, expand the size of the relevant file systems.

- Solaris 10

No.	Directory	Disk space (in MB)	Remark
1	/	0	
2	/etc	0.8	
3	/usr	0.2	
4	/var	0.1	
5	/home	0	
6	/opt	9.0	

- Solaris 11

No.	Directory	Disk space (in MB)	Remark
1	/	0.3	
2	/etc	0.9	
3	/usr	0.3	
4	/var	0.7	
5	/home	0	
6	/opt	9.0	

### 2.3.2 Required work area

---

None.

## 2.4 Dynamic disk resources

---

This section explains dynamic disk space requirements for this software.

### 2.4.1 Required disk space

---

When this software is operated in the following environment, the additional disk space shown below is required for each directory as well as the disk space required for installing this software as described in "[2.3 Static disk resources](#)". If free space is insufficient, expand the size of the relevant file system.

No.	Directory	Disk space (in MB)	Operation
1	/var	50.0	When a proxy volume is related with the mirror volume of the local class.

## 2.5 Required memory

---

The following table shows the memory required when this software is operated in the following environment.

No.	Memory (in MB)	Operation
1	12.5	When a proxy volume is related with the mirror volume of the local class.



# Chapter 3 Installation

This chapter explains the installation of this software.



## Information

If the No.1 package described in "2. Required software" of "2.1 Software environment" has not been installed, GDS Snapshot cannot be installed.

## 3.1 Preparations

### 1. Time required

It takes approximately 3 minutes to install this software.

### 2. Checking the system environment

Make sure that the disk has enough free space to install this software. For the disk size that this software uses, see "2.3 Static disk resources". If free space is insufficient, re-configure the disk partitions.

### 3. Saving the Configuration files

None.

## 3.2 Installation

### 1. Insert CD of this software into the CD drive.

### 2. Login to the system and become a root user.

```
% su <Return>
Password:password <Return>
#
```

### 3. The system is changed to the OpenBoot environment.

```
# /usr/sbin/shutdown -y -g0 -i0 <Return>
```

### 4. Start the system in single user mode.

```
{0} ok boot -s <Return>
```

### 5. Mount necessary file systems.

```
# /usr/sbin/zfs mount -a <Return>
```

When installing in the UFS file system directory, please execute the following command.

```
# /usr/sbin/mountall -l <Return>
```

### 6. Mount the CD.

```
# mkdir -p /cdrom/cdrom0 <Return> (*1)
# /usr/sbin/mount -F hfs -o ro /dev/dsk/c0t4d0s2 /cdrom/cdrom0 <Return> (*2)
```

(\*1) Checks if "/cdrom/cdrom0" exists and creates accordingly.

(\*2) Since the underlined device name is different according to the machine environment, please confirm it.

### 7. Execute the pkgadd(1M) command. Install described in "Chapter 1 Program components".

```
# pkgadd -d /cdrom/cdrom0/Solaris/GDS_Snapshot FJSVsdxls1 FJSVsdxss FJSVgdapi <Return>
```

Follow the interactive process as instructed.

```
Processing package instance <FJSVsdxsl> from </cdrom/cdrom0/Solaris/GDS_Snapshot>

SDX Snapshot License(sparc) 4.6.0
:
Do you want to continue with the installation of <FJSVsdxsl> [y,n,?] y <Return>
:
Installation of <FJSVsdxsl> was successful.

Processing package instance <FJSVsdxss> from </cdrom/cdrom0/Solaris/GDS_Snapshot>

SDX Snapshot(sparc) 4.6.0
:
Do you want to continue with the installation of <FJSVsdxss> [y,n,?] y <Return>
:
Installation of <FJSVsdxss> was successful.

Processing package instance <FJSVgdapi> from </cdrom/cdrom0/Solaris/GDS_Snapshot>

GR-API for GDS on Solaris(sparc) 2.21
:
*** Information ***
This package has two types of API libraries for accessing GR.
One is for 32-bit module, and other is for 64-bit module.

Installation directory structure:
    [32-bit] : <BASEDIR>/FJSVgdapi/<32 bit directory>
    [64-bit] : <BASEDIR>/FJSVgdapi/<64 bit directory>

Default installation directory:
    [32-bit] : /opt/FJSVgdapi/32
    [64-bit] : /opt/FJSVgdapi/64
*** **

Please input install base directory (default /opt) [?,q] <Return>

Please input directory for 32-bit module (default 32) [?,q] <Return>

Please input directory for 64-bit module (default 64) [?,q] <Return>

This package installation information:
    [32-bit] : /opt/FJSVgdapi/32
    [64-bit] : /opt/FJSVgdapi/64

Are you sure? (default : y) [y,n,?,q] <Return>
:
Do you want to continue with the installation of <FJSVgdapi> [y,n,?] y <Return>
:
```

Follow the interactive process as instructed if the package is overridden.

```
The following files are already installed on the system and are being
used by another package:
:
Do you want to install these conflicting files[y,n,?,q] y <Return>

This package contains scripts which will be executed with super-user
permission during the process of installing this package.

Do you want to continue with the installation of <FJSVsdxss> [y,n,?] y <Return>
:
Installation directory structure:
```

```
[32-bit] : <BASEDIR>/FJSVgdapi/<32 bit directory>
[64-bit] : <BASEDIR>/FJSVgdapi/<64 bit directory>

Default installation directory:
[32-bit] : /opt/FJSVgdapi/32
[64-bit] : /opt/FJSVgdapi/64
*** **
```

Please input install base directory (default /opt) [?,q] <Return>

Please input directory for 32-bit module (default 32) [?,q] <Return>

Please input directory for 64-bit module (default 64) [?,q] <Return>

This package installation information:

```
[32-bit] : /opt/FJSVgdapi/32
[64-bit] : /opt/FJSVgdapi/64
```

Are you sure? (default : y) [y,n,?,q] **y** <Return>

:

Do you want to install these conflicting files [y,n,?,q] **y** <Return>

This package contains scripts which will be executed with super-user permission during the process of installing this package.

Do you want to continue with the installation of <FJSVgdapi> [y,n,?] **y** <Return>

:

8. Unmount the CD, and eject CD.

```
# cd / <Return>
# /usr/sbin/umount /cdrom/cdrom0 <Return>
```

9. Execute the shutdown(1M) command to reboot the system.

```
# /usr/sbin/shutdown -y -g0 -i6 <Return>
```

### 3.3 Environment configurations

Configure the system environment according to the "PRIMECLUSTER Global Disk Services Configuration and Administration Guide".

# Chapter 4 Uninstallation

This chapter explains the uninstallation of this software.

## 4.1 Preparations

Before uninstalling, if you are applying patch for PRIMECLUSTER by UpdateSite format, remove them by UpdateAdvisor (middleware). For details, see help information on UpdateAdvisor(middleware) and the update information file of the patch.

## 4.2 Uninstallation

1. Login to the system and become a root user.

```
% su <Return>
Password: password <Return>
#
```

2. If there is a proxy volume, disable proxy using the sdxproxy Break command, or the GDS Management View menu: [Operation]: [Proxy Operation]:[Break].
3. Execute the pkgrm(IM) command. Remove described in "Program Components".

```
# pkgrm FJSVgdapi FJSVsdxss FJSVsdxs1 <Return>
```