

# **FUJITSU Software**

## **PRIMECLUSTER GDS Snapshot 4.3A30**

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 technology.

# Installation Guide

Linux

J2UL-1393-03ENZ0(01)  
April 2014

# Preface

---

## Purpose

This manual explains how to install PRIMECLUSTER GDS 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 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, and appendices. 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.
Appendix A Troubleshooting	Explains how to address problems that occur.

## 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 abbreviation is used in this manual:

- Global Disk Services is abbreviated as GDS.
- PRIMEQUEST 2000/1000 Series is abbreviated as PRIMEQUEST.

## Export Controls

Exportation/release of this document may require necessary procedures in accordance with the regulations of the Foreign Exchange and Foreign Trade Control Law of Japan and/or US export control laws.

## Trademark Information

- PRIMECLUSTER is a registered trademark of Fujitsu Ltd.
- UNIX is a registered trademark of The Open Group in the United States and other countries.
- Linux is a registered trademark of Linus Torvalds.
- Oracle and Java are registered trademarks of Oracle and/or its affiliates.
- Microsoft is a registered trademark of Microsoft Corporation in the United States and other countries.
- Adobe and Adobe Reader are trademarks or registered trademarks of Adobe System Incorporated in the United States and/or other countries.

- IBM products are registered trademarks of IBM in the United States; all others are trademarks or common law marks of IBM in the United States.
- Red Hat is a registered trademark of Red Hat, Inc. in the U.S. and other countries.
- Microsoft and Internet Explorer are Registered Trademarks of Microsoft 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

Date of publication and edition	Manual code
February 2014, First edition	J2UL-1393-03ENZ0(00)/J2UL-1393-03ENZ2(00)
April 2014 1.1 edition	J2UL-1393-03ENZ0(01)/J2UL-1393-03ENZ2(01)

Copyright notice

All Rights Reserved, Copyright (C) FUJITSU LIMITED 2014

Editing record

Changes	Section	Manual code
Abbreviations have been modified.	Preface	J2UL-1393-03ENZ0(01)
"Export Controls" have been modified.	Preface	J2UL-1393-03ENZ2(01)

# Contents

---

Chapter 1 Program components.....	1
1.1 Red Hat Enterprise Linux 5 (for x86) for PRIMERGY/PRIMEQUEST.....	1
1.2 Red Hat Enterprise Linux 5 (for Intel64) for PRIMERGY/PRIMEQUEST.....	1
1.3 Red Hat Enterprise Linux 5 (for Intel64) xen kernel for PRIMEQUEST.....	1
1.4 Red Hat Enterprise Linux 6 (for x86) for PRIMERGY/PRIMEQUEST.....	2
1.5 Red Hat Enterprise Linux 6 (for Intel64) for PRIMERGY/PRIMEQUEST.....	2
Chapter 2 Operation Environment.....	3
2.1 Software environment.....	3
2.2 Hardware environment.....	5
2.3 Static disk resources.....	5
2.3.1 Required disk space.....	5
2.3.2 Required work area.....	5
2.4 Dynamic disk resources.....	6
2.5 Required memory.....	6
Chapter 3 Installation.....	7
3.1 Preparations.....	7
3.2 Installation.....	7
3.3 Environment configuration.....	8
Chapter 4 Uninstallation.....	9
4.1 Preparation.....	9
4.2 Uninstallation.....	9
Appendix A Troubleshooting.....	10
A.1 When segmentation violation causes an installation failure.....	10

# Chapter 1 Program components

A system consists of programs, and each program is referred to as a package. This chapter explains about the packages of which this software is composed.

## PRIMERGY

- Red Hat Enterprise Linux 5 (for x86)
- Red Hat Enterprise Linux 5 (for Intel64)
- Red Hat Enterprise Linux 6 (for x86)
- Red Hat Enterprise Linux 6 (for Intel64)

## PRIMEQUEST

- Red Hat Enterprise Linux 5 (for x86)
- Red Hat Enterprise Linux 5 (for Intel64)
- Red Hat Enterprise Linux 5 (for Intel64) xen kernel
- Red Hat Enterprise Linux 6 (for x86)
- Red Hat Enterprise Linux 6 (for Intel64)

## 1.1 Red Hat Enterprise Linux 5 (for x86) for PRIMERGY/ PRIMEQUEST

No.	Component	Package	Version	Function
1	Global Disk Services(GDS) Snapshot	FJSVsdx-ss	4.2.3	GDS Snapshot option
		FJSVsdx-bss	4.3.3	
		FJSVgdapi	1.18	

## 1.2 Red Hat Enterprise Linux 5 (for Intel64) for PRIMERGY/ PRIMEQUEST

No.	Component	Package	Version	Function
1	Global Disk Services(GDS) Snapshot	FJSVsdx-ss	4.2.3	GDS Snapshot option
		FJSVsdx-bss	4.3.3	
		FJSVgdapi	1.18	

## 1.3 Red Hat Enterprise Linux 5 (for Intel64) xen kernel for PRIMEQUEST

No.	Component	Package	Version	Function
1	Global Disk Services(GDS) Snapshot	FJSVsdx-ss	4.2.3	GDS Snapshot option
		FJSVsdx-bss	4.3.3	
		FJSVgdapi	1.18	

## 1.4 Red Hat Enterprise Linux 6 (for x86) for PRIMERGY/ PRIMEQUEST

---

No.	Component	Package	Version	Function
1	Global Disk Services(GDS) Snapshot	FJSVsdx-ss	4.3.1	GDS Snapshot option
		FJSVsdx-bss	4.3.3	
		FJSVgdapi	1.18	

## 1.5 Red Hat Enterprise Linux 6 (for Intel64) for PRIMERGY/ PRIMEQUEST

---

No.	Component	Package	Version	Function
1	Global Disk Services(GDS) Snapshot	FJSVsdx-ss	4.3.1	GDS Snapshot option
		FJSVsdx-bss	4.3.3	
		FJSVgdapi	1.18	

# Chapter 2 Operation Environment

This chapter explains the operation environment of this software.

## 2.1 Software environment

### 1. Basic software prerequisites

This software is option software of PRIMECLUSTER 4.3A30.

A basic software necessary for operating this software is the same as a basic software necessary for operating PRIMECLUSTER 4.3A30 for Linux(TM).

### 2. Required software

To operate this software, the following software products are required:

#### 1. Red Hat Enterprise Linux 5 (for x86) for PRIMERGY

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.2.3	
		FJSVsdx-drv	4.2.3	
		kmod-FJSVsdx-drvcore-PAE	4.3.3	

#### 2. Red Hat Enterprise Linux 5 (for Intel64) for PRIMERGY

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.2.3	
		FJSVsdx-drv	4.2.3	
		kmod-FJSVsdx-drvcore	4.3.3	

#### 3. Red Hat Enterprise Linux 6 (for x86) for PRIMERGY

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.3.1	
		FJSVsdx-drv	4.3.3	
		kmod-FJSVsdx-drvcore	4.3.3	

#### 4. Red Hat Enterprise Linux 6 (for Intel64) for PRIMERGY

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.3.1	
		FJSVsdx-drv	4.3.3	
		kmod-FJSVsdx-drvcore	4.3.3	

5. Red Hat Enterprise Linux 5 (for x86) for PRIMEQUEST

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server or PRIMECLUSTER GDS	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.2.3	
		FJSVsdx-drv	4.2.3	
		kmod-FJSVsdx-drvcore-PAE	4.3.3	

6. Red Hat Enterprise Linux 5 (for Intel64) for PRIMEQUEST

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server or PRIMECLUSTER GDS	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.2.3	
		FJSVsdx-drv	4.2.3	
		kmod-FJSVsdx-drvcore	4.3.3	

7. Red Hat Enterprise Linux 5 (for Intel64) xen kernel for PRIMEQUEST

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server or PRIMECLUSTER GDS	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.2.3	
		FJSVsdx-drv	4.2.3	
		kmod-FJSVsdx-drvcore-xen	4.3.3	

8. Red Hat Enterprise Linux 6 (for x86) for PRIMEQUEST

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server or	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.3.1	
		FJSVsdx-drv	4.3.3	



No.	Software	Package	Version and/or level	Remarks
	PRIMECLUSTER GDS	kmod-FJSVsdx-drvcore	4.3.3	

#### 9. Red Hat Enterprise Linux 6 (for Intel64) for PRIMEQUEST

No.	Software	Package	Version and/or level	Remarks
1	PRIMECLUSTER Enterprise Edition or PRIMECLUSTER HA Server or PRIMECLUSTER GDS	FJSVsdx-bas	4.3.3	
		FJSVsdx-cmd	4.3.1	
		FJSVsdx-drv	4.3.3	
		kmod-FJSVsdx-drvcore	4.3.3	

#### 3. Exclusive software

None.

#### 4. Required patches

None.

## 2.2 Hardware environment

---

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

#### 1. Memory

1024MB or more of memory is required.

#### 2. Required hardware

None.

## 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.

No.	Directory	Disk space (in MB)	Remarks
1	/	0	
2	/usr	0.1	
3	/var	0.1	
4	/etc	0	
5	/etc/opt	0.6	
6	/opt	0.7	

### 2.3.2 Required work area

---

None.

## 2.4 Dynamic disk resources

---

None.

## 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	41.0	sdxproxy operated, and proxy volume is configured.

# Chapter 3 Installation

This chapter explains the installation of this software.

If the basic packages for PRIMECLUSTER GDS, FJSVsdx-bas, FJSVsdx-cmd, and FJSVsdx-drv, are not installed, the product cannot be installed. All packages are included in No.1 of "2) Required software" of "2.1 Software environment".

## 3.1 Preparations

### 1. Prerequisites

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.

### 2. Saving the configuration file

None.

### 3. Time required

It takes approximately 5 minutes to install this software.

### 4. Patch download

Before installing this software, download the latest PRIMECLUSTER patch by UpdateSite format and update information file from Updatesite.

## 3.2 Installation

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

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

### 2. Insert CD in the CD-ROM drive.

```
# mount /media/cdrom <Return>
```

<CDROM\_DIR> will be used as the mount point.

### 3. Install the packages by executing the rpm(8) command.



Notes in the case of upgrading from the old version to this version:

- If the rpm has already installed and the version is same or newer than the rpm in the CD-ROM, don't install it.
- If the rpm has already installed and the version is older than the rpm in the CD-ROM, execute the rpm(8) command with "-Uhv" options, not with "-ihv" options.

Red Hat Enterprise Linux 5 (for x86)

```
# cd <CDROM_DIR>/Linux/products/GDS_Snapshot_RH_EL5/i386 <Return>
# rpm -ihv FJSVsdx-ss-4.2.3-X.rhel5_i386.rpm <Return>
# rpm -ihv FJSVsdx-bss-4.3.3-X.rhel5_i386.rpm <Return>
# rpm -ihv FJSVgdapi-1.18-X.i386.rpm <Return>
```

Red Hat Enterprise Linux 5 (for Intel64)

Red Hat Enterprise Linux 5 (for Intel64) xen kernel

```
# cd <CDROM_DIR>/Linux/products/GDS_Snapshot_RH_EL5_x86_64/i386 <Return>
# rpm -ihv FJSVsdx-ss-4.2.3-X.rhel5_x86_64.rpm <Return>
# rpm -ihv FJSVsdx-bss-4.3.3-X.rhel5_x86_64.rpm <Return>
# rpm -ihv FJSVgdapi-1.18-X.x86_64.rpm <Return>
```

Red Hat Enterprise Linux 6 (for x86)

```
# cd <CDROM_DIR>/Linux/products/GDS_Snapshot_RH_EL6/i386 <Return>
# rpm -ihv FJSVsdx-ss-4.3.1-X.rhel6_i686.rpm <Return>
# rpm -ihv FJSVsdx-bss-4.3.3-X.rhel6_i686.rpm <Return>
# rpm -ihv FJSVgdapi-1.18-X.i386.rpm <Return>
```

Red Hat Enterprise Linux 6 (for Intel64)

```
# cd <CDROM_DIR>/Linux/products/GDS_Snapshot_RH_EL6_x86_64/i386 <Return>
# rpm -ihv FJSVsdx-ss-4.3.1-X.rhel6_x86_64.rpm <Return>
# rpm -ihv FJSVsdx-bss-4.3.3-X.rhel6_x86_64.rpm <Return>
# rpm -ihv FJSVgdapi-1.18-X.x86_64.rpm <Return>
```



The number entered for 'X' corresponds to that of the package.

4. Eject CD.

```
# cd / <Return>
# umount /media/cdrom <Return>
# eject <Return>
```

5. Please apply the patch for PRIMECLUSTER.

Please refer to the update information file of each patch for installation instructions and points of concern, etc.

## 3.3 Environment configuration

---

Refer to "PRIMECLUSTER Global Disk Services Configuration and Administration Guide."

# Chapter 4 Uninstallation

This chapter explains the uninstallation of this software.

## 4.1 Preparation

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

If you are using a proxy volume, unconfigure the proxy volume by executing the `sdxproxy Break` command.

1. Login to the system as a root user.

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

2. Remove the package using the `rpm(8)` command.

```
# rpm -e FJSVgdapi <Return>
# rpm -e FJSVsdx-bss <Return>
# rpm -e FJSVsdx-ss <Return>
```

# Appendix A Troubleshooting

This chapter explains how to address problems that occur.

## A.1 When segmentation violation causes an installation failure

If segmentation violation is due to the rpm(8) command, take the following corrective steps. If the problem still remains unresolved, contact Fujitsu customer support engineers.

1. Reboot the system by executing the shutdown(8) command.

```
# shutdown -r now <Return>
```

2. Delete PRIMECLUSTER GDS Snapshot from the system according to "[4.2 Uninstallation](#)".
3. Execute the following command.

```
# rpm --rebuilddb <Return>
```

4. Install PRIMECLUSTER GDS Snapshot again.