

# **FUJITSU Software PRIMECLUSTER GL 4.5A00**

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**

Oracle Solaris

J2S2-1670-01ENZ0(01)  
December 2017

# Preface

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## Purpose

This manual explains how to install PRIMECLUSTER GL.

## 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, and appendix. 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 Messages	Explains the messages displayed by installer.

## 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 Link Services is abbreviated as GLS.
- Global Disk Services is abbreviated as GDS.
- Oracle Solaris Legacy Containers is abbreviated as OSLC.
- Oracle Solaris might be described as Solaris, Solaris Operating System, or Solaris OS.

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## Revision History

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Changes	Section	Manual code
The note of the basic software patch have been modified.	2.1	J2S2-1670-01ENZ0(01) J2S2-1670-01ENZ2(01)

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# 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.

## 1.1 Oracle Solaris 10

No.	Package	Version	Function
1	FJSVhanet	2.10	Providing highly reliable transmission routes using a redundant network
2	FJSVmpnet	2.4.1	Providing highly reliable transmission routes using multiple NICs
3	FSUNnet	2.1.2	Online trace

## 1.2 Oracle Solaris 11

No.	Package	Version	Function
1	FJSVhanet	2.10	Providing highly reliable transmission routes using a redundant network
2	FJSVrvnet	1.2	Providing highly reliable transmission routes using a virtualized NIC

## 1.3 Oracle Solaris 8 Containers(OSLC)

No.	Package	Version	Function
1	FJSVhanet	2.6	Providing highly reliable transmission routes using a redundant network

## 1.4 Oracle Solaris 9 Containers(OSLC)

No.	Package	Version	Function
1	FJSVhanet	2.6	Providing highly reliable transmission routes using a redundant network

# 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	FJSVrvnet requires Oracle Solaris 11.1 or later.

### 2. Required software

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

No.	Software	Package	Version and/or level	Remark
1	-	FJSViomp	2.3	For Oracle Solaris 10. (*)
2	Oracle Solaris 8			Required to use Oracle Solaris 8 Containers (OSLC).
3	Oracle Solaris 9			Required to use Oracle Solaris 9 Containers (OSLC).

(\*) Proper operation of this software requires the FJSViomp package, which comes bundled with this software on the same DVD.

### 3. Exclusive software

None.

### 4. Required patches

To use this software, the following patch is required.

No.	Package Name	Patch ID	Remark
1	FJSVhanet 2.6	914111-03 or later	When using Redundant Line Control Function in OSLC, required to apply patch to Solaris 8/Solaris 9 container.

### 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

None.

3. Related 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.

- Solaris 10

No.	Directory	Disk space (in MB)	Remark
1	/	1.0	
2	/etc	12.0	
3	/usr	1.0	
4	/var	0	
5	/home	0	
6	/opt	3.0	

- Solaris 11

No.	Directory	Disk space (in MB)	Remark
1	/	0.1	
2	/etc	13.0	
3	/usr	2.0	
4	/var	0	
5	/home	0	
6	/opt	1.0	

- Solaris 8 Containers(OSLC) / Solaris 9 Containers(OSLC)

No.	Directory	Disk space (in MB)	Remark
1	/	0.5	
2	/usr	0.4	
3	/var	0.9	
4	/home	0	
5	/opt	8.8	

## 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.

- Solaris 10 or later

No.	Memory (in MB)	Operation
1	10.0	When it is a dual network using the Redundant Line Control Function (Fast switching mode).
2	10.0	When it is a dual network using the Redundant Line Control Function (NIC switching mode).
3	20.0	When it is a dual network using the Redundant Line Control Function (GS linkage mode).
4	30.0	When it is a dual network using the Redundant Line Control Function (Virtual NIC mode)

- Solaris 8 Containers(OSLC) / Solaris 9 Containers(OSLC)

No.	Memory (in MB)	Operation
1	9.4	When it is a dual network using the Redundant Line Control Function (Fast switching mode).
2	4.2	When it is a dual network using the Redundant Line Control Function (NIC switching mode).
3	5.4	When it is a dual network using the Redundant Line Control Function (GS linkage mode).
4	4.8	When it is a dual network using the Redundant Line Control Function (Virtual NIC mode)



# Chapter 3 Installation

This chapter explains the installation of this software.

## 3.1 Preparations

### 1. Time required

It takes approximately 5 minutes to install this software.

### 2. Checking the system environment

1. Check if a previous version of this software is installed. For the package name, see "[Chapter 1 Program components](#)".

```
# pkginfo -l package_name <Return>
```

2. If the name of the installed package is displayed by the above operation, the package is already installed. After saving the configuration files, remove the displayed package from the system. See "3. Saving the Configuration files" for how to save a configuration files, and refer to "[Chapter 4 Uninstallation](#)" for how to remove a package.
3. Before installing this software, check that enough disk space is available, for the disk size used by this software, see "[2.3 Static disk resources](#)". If there is insufficient space available, reconfigure the disk partition.
4. To install the FJSVmpnet package, it is necessary to install the FJSViomp packages first. If not installed, install the FJSViomp packages first, then install this software.

### 3. Saving the Configuration files

- If the Redundant Line Control Function is used

1. This software contains several configuration files. Before uninstalling this software, save the configuration files by executing the command listed below. For detailed information about the command, refer to the "PRIMECLUSTER Global Link Services Configuration and Administration Guide (Redundant Line Control Function)".

```
# /opt/FJSVhanet/usr/sbin/hanetbackup -d save_destination_directory <Return>
```

- If the Redundant Line Control Function for Virtual NIC Mode is used

1. Before uninstalling this software, save the configuration files by executing the command listed below.

```
# cp -p /etc/opt/FJSVrvnet/config/fjsrvrnet.xml save_destination_directory <Return>
```

- If the Multipath Function is used

1. This software contains the following configuration files.

```
/etc/opt/FJSVmpnet/conf/config  
/etc/opt/FJSVmpnet/conf/parameters  
/etc/opt/FJSVmpnet/conf/hosts  
/etc/opt/FJSVmpnet/conf/hosts6  
/etc/opt/FJSVmpnet/conf/hostname  
/etc/opt/FJSVmpnet/conf/hostname6
```

2. The above configuration files are automatically saved when the package is uninstalled, and they are automatically restored when the original software or an updated version is installed. To save configuration files for system replacement or other reasons, use the following procedure.

```
# cd /etc/opt/FJSVmpnet <Return>  
# tar cvf - conf | compress > mpnetfile.tar.Z <Return>
```



## Note

If you use Oracle Solaris 11, make sure that NWAM (Network Auto-Magic) is disabled. When NWAM is enabled, PRIMECLUSTER cannot work normally. For details of changing NWAM setting, see the Solaris documentation.

## 3.2 Installation

### 3.2.1 Installation to physical environment / global zone / domain / kernel zone



## Note

The PRIMECLUSTER version should be 4.3A40 or later for the global zone, the guest domain or the control domain on which the Kernel Zone works.

If it is earlier than 4.3A40, upgrade the PRIMECLUSTER version.

1. Insert DVD of this software into the DVD drive.
2. Login to the system and become a root user.

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

3. Mount the DVD.

```
# 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" directory exists and creates accordingly.

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

4. If you use Oracle Solaris 10, Check if the FJSViomp 2.3 version or later is installed.

```
# pkginfo -l FJSViomp.* <Return>
```

If the command indicates the FJSViomp version 2.2 or earlier, uninstall all the FJSViomp packages from the system.

```
# pkgrm FJSViomp <Return>
```

If the older FJSViomp versions are removed, or no FJSViomp versions are installed, install the FJSViomp package by executing the pkgadd(1M) command.

```
# pkgadd -d /cdrom/cdrom0/Tool/Pkgs FJSViomp <Return>
```

5. Execute the installation script.

```
# cd /cdrom/cdrom0/Tool <Return>
# ./cluster_install -e PCL-GLS <Return>

:
:

The installation was finished successfully.
#
```

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

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

### 3.2.2 Installation to Solaris 8 Containers/Solaris 9 Containers(OSLC)

1. Login to the global zone and become a root user.

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

2. Boot the non-global zone in single user mode from the global zone.

```
# zoneadm -z zone-a boot -s <Return>
```

zone-a is the name of the non-global zone into which this software is going to be installed. This name will change the system configuration. In the following examples, the name of the non-global zone will be "zone-a".

3. Login to the non-global zone.

```
# zlogin zone-a <Return>
```

4. Temporarily save the OS file in the following way.

```
# mv /usr/sbin/add_drv /usr/sbin/add_drv.save <Return>
```

5. Create a temporary file in the following way.

```
# touch /usr/sbin/add_drv <Return>
# chmod 555 /usr/sbin/add_drv <Return>
```

6. Installation of package.

At first, to access the medium of PRIMECLUSTER DVD from the non-global zone, mount the medium on the non-global zone or copy it to the non-global zone. Then, execute pkgadd command. In the following example, the directory in the non-global zone is </cdrom/cdrom0>.

When the type of non-global zone is a Solaris8 container

```
# pkgadd -d /cdrom/cdrom0/Solaris8/CD2/Solaris8/products/GLS/sparc FJSVhanet <Return>
```

When the type of non-global zone is a Solaris9 container

```
# pkgadd -d /cdrom/cdrom0/Solaris9/CD2/Solaris9/products/GLS/sparc FJSVhanet <Return>
```

7. Follow the interactive procedure shown below.

```
(The copyright message is displayed.)
This package' s default installation information is following:
    Program install directory: /opt
Do you want to change the install directory? n [y,n,?,q] y <Return> (If you do not want to change
the directory, type n. If n is entered, the change of directory message shown below is not
displayed.)

Please specify install directory: /opt2 <Return> (Specify a directory.)
This package' s installation information is following:
    Program install directory:
        Default directory:      /opt
        Specified directory:    /opt2

Correct ? y <Return>
(The following messages are occasionally displayed. Enter y <Return> here.)
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 <FJSVhanet> [y,n,?] y <Return>
:
:
(When 119254-31 is unapplication, the following messages might be displayed.
Enter y <Return> here. )
Do you want to install these as setuid/setgid files [y,n,?,q] y <Return>
:
:

```

Normal installation of the package is checked. If the following message is not displayed, the installation failed. Delete the failed package and reinstall it.

```

Installation of <FJSVhanet> was successful.

```

- Restore the OS file in the following way.

```

# mv /usr/sbin/add_drv.save /usr/sbin/add_drv <Return>

```

- Install patches.

When the type of non-global zone is a Solaris8 container

```

# cd /cdrom/cdrom0/Solaris8/patch <Return>
# patchadd 914111-03 <Return> (*1)

```

When the type of non-global zone is a Solaris9 container

```

# cd /cdrom/cdrom0/Solaris9/patch <Return>
# patchadd 914111-03 <Return> (*1)

```

(\*1) Patch 914111-03 or later should be applied.

- Logout from the non-global zone.

```

# exit <Return>

```

- Reboot the non-global zone from the global zone.

```

# zlogin zone-a shutdown -y -g0 -i6 <Return>

```

### 3.2.3 Installing non-global zone(Solaris 10 or later)

- Insert DVD of this software into the DVD drive.
- Login to the global zone and become a root user.

```

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

```

- Boot the non-global zone in single user mode from the global zone.

```

# zoneadm -z zone-a boot -s <Return>

```

"zone-a" is the name of the non-global zone into which this software is going to be installed. This name will change depending on the system configuration. In the following examples, the name of the non-global zone will be "zone-a".

- Mount the DVD on the global zone.

```

# 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" directory exists and creates accordingly.

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

5. Execute the installation script from the global zone.

```
# cd /cdrom/cdrom0/Tool <Return>
# ./cluster_install -e PCL-GLS -z zone-a <Return>

Checking <zone-a> for installing PRIMECLUSTER ...finished.
Preparing for installing PRIMECLUSTER into <zone-a> ...finished.
Installing PRIMECLUSTER into <zone-a> ...
:
:
The installation was finished successfully.
Executing post-install process on <zone-a> ...finished.
-----Installation result-----
zone-a:succeeded

Please restart zone-a.
The installation was finished successfully.
#
```

Check if "*zonename*:succeeded" is displayed in the "Installation result" field.

6. Reboot the non-global zone from the global zone.

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

## 3.3 Environment configurations

---

- If the Redundant Line Control Function is used

1. If you use Solaris 10 or later, Check SMF service of Global Link Services (hereinafter GLS) has been started using the following steps.

In Solaris 10, use the following step.

```
# svcs -a | grep fjsvhanet <Return>
online HH:MM:SS svc:/network/fjsvhanet:default
online HH:MM:SS svc:/network/fjsvhanet-poll:default
```

In Solaris 11 or later, use the following step.

```
# svcs -a | grep fjsvhanet <Return>
online HH:MM:SS svc:/network/fjsvhanet:default
online HH:MM:SS svc:/network/fjsvhanet-poll:default
# svcs -a | grep fjsvrvnet <Return>
online HH:MM:SS svc:/network/fjsvrvnet:default
```

1. If SMF service of GLS is "disbale", start SMF service by using the following steps.

In Solaris 10, use the following step.

```
# svcadm enable /network/fjsvhanet <Return>
# svcadm enable /network/fjsvhanet-poll <Return>
```

In Solaris 11 or later, use the following step.

```
# svcadm enable /network/fjsvhanet <Return>
# svcadm enable /network/fjsvhanet-poll <Return>
# svcadm enable /network/fjsvrvnet <Return>
```

2. If start an SMF service in the above, Check SMF service of GLS is "online".

In Solaris 10, use the following step.

```
# svcs -a | grep fjsvhanet <Return>
online HH:MM:SS svc:/network/fjsvhanet:default
online HH:MM:SS svc:/network/fjsvhanet-poll:default
```

In Solaris 11 or later, use the following step.

```
# svcs -a | grep fjsvhanet <Return>
online HH:MM:SS svc:/network/fjsvhanet:default
online HH:MM:SS svc:/network/fjsvhanet-poll:default
# svcs -a | grep fjsvrvnet <Return>
online HH:MM:SS svc:/network/fjsvrvnet:default
```

2. If the configuration files included with FJSVhanet package have been saved, execute the following command to restore them.

```
# cd save_destination_directory <Return>
# /opt/FJSVhanet/usr/sbin/hanetrestore -f name_of_saved_file <Return>
```

3. In the case of the following configuration, modification of the script (service.sh) is required. Refer to "Example of configuration with GS/SURE linkage mode" of "PRIMECLUSTER Global Link Services Manual (Redundant Line Control Function)" and modify the script.

- GS/SURE linkage mode is used, and
- Shared-IP zone is used, and
- Any shared-IP zone is configured to boot automatically, and
- The script (service.sh) of the service for Redundant Line Control function of User command execution function is used.

4. If the configuration files included with FJSVrvnet package have been saved, execute the following command to restore them.

```
# cd save_destination_directory <Return>
# cp -p name_of_saved_file /etc/opt/FJSVrvnet/config/fjsvrvnet.xml <Return>
```

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

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

- the Multipath Function is used

1. If the configuration files included with an earlier version has been saved, execute the following procedure to restore them.

```
# cd /etc/opt/FJSVmpnet <Return>
# uncompress mpnetfile.tar.Z <Return>
# tar xvf mpnetfile.tar <Return>
```

2. Setup the configuration files by following the procedure given in the "PRIMECLUSTER Global Link Services Configuration and Administration Guide (Multipath Function)".

# 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 from physical environment / global zone / domain / kernel zone

If the virtual NIC mode of GLS is used, it is necessary to delete the GLS configuration settings and then delete this software. For more information, refer to the "Deleting a virtual NIC" on "PRIMECLUSTER Global Link Services Configuration and Administration Guide Redundant Line Control Function for Virtual NIC Mode".

1. Insert DVD of this software into the DVD drive.
2. Login to the system and become a root user.

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

3. Mount the DVD.

```
# 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" directory exists and creates accordingly.

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

4. Execute the uninstallation script.

```
# cd /cdrom/cdrom0/Tool <Return>
# ./cluster_uninstall -e PCL-GLS <Return>
Are you sure to remove PRIMECLUSTER software packages from the global zone?(y,n) y <Return>

:
:

Uninstallation was successful.
#
```

Check if "Uninstallation was successful" is displayed.

5. Uninstall the FSUNnet package. Note that the FSUNnet package is used for the other products. If any of the following products has been installed, skip this step.
  - PRIMECLUSTER Clustering Base
  - Netcompo series software products

Execute the pkgrm(1M) command to remove it.

```
# pkgrm FSUNnet <Return>
```

6. In GLS Redundant Line Control Function, when using the user command execution function and script files remains, the directory under /etc/opt/FJSVhanet is not deleted. Delete this directory after saving or deleting script files.

```
# /usr/bin/rm -r /etc/opt/FJSVhanet <Return>
```



## Note

FJSViomp is a common package included in ETURNUS multi path driver. Please check whether it is being used by other products and then uninstall it.

## 4.3 Uninstallation from Solaris 8 Containers/Solaris 9 Containers(OSLC)

1. Login to the global zone and become a root user.

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

2. Boot the non-global zone in single user mode from the global zone.

```
# zoneadm -z zone-a boot -s <Return>
```

zone-a is the name of the non-global zone into which this software is going to be installed. This name will change the system configuration. In the following examples, the name of the non-global zone will be "zone-a".

3. Login to the non-global zone.

```
# zlogin zone-a <Return>
```

4. Execute the pkgrm(1M) command.

```
# pkgrm FJSVhanet <Return> (*1)
```

(\*1) When the "FJSVhanet" package is deleted, the following message might be output. If the message is displayed, it partially fails in the deletion of the package.

```
Removal of <FJSVhanet> partially failed.
```

If the above message is displayed, re-execute the pkgadd(1M) command. Confirm the package was completely deleted from the display of the following messages.

```
Removal of <FJSVhanet> was successful.
```

5. In GLS Redundant Line Control Function, when using the user command execution function and script files remains, the directory under /etc/opt/FJSVhanet is not deleted. Delete this directory after saving or deleting script files.

```
# /usr/bin/rm -r /etc/opt/FJSVhanet <Return>
```

## 4.4 Uninstallation from non-global zone(Solaris 10 or later)

1. Insert DVD of this software into the DVD drive.
2. Login to the global zone and become a root user.

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

3. Boot the non-global zone in single user mode from the global zone.

```
# zoneadm -z zone-a boot -s <Return>
```



"zone-a" is the name of the non-global zone which this software is going to be uninstalled. This name will change depending on the system configuration. In the following examples, the name of the non-global zone will be "zone-a".

4. Mount the DVD on the global zone.

```
# mkdir -p /cdrom/cdrom0 <Return> (*1)
# /usr/sbin/mount -F hsfs -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.

5. Execute the uninstallation script cluster\_uninstall.

```
# cd /cdrom/cdrom0/Tool <Return>
# ./cluster_uninstall -e PCL-GLS -z zone-a <Return>
Are you sure to remove PRIMECLUSTER software packages from <zone-a>?(y,n) y <Return>
Checking <zone-a> for uninstalling PRIMECLUSTER ...finished.
Preparing for uninstalling PRIMECLUSTER from <zone-a> ...finished.
Uninstalling PRIMECLUSTER from <zone-a> ...
:
:
Uninstallation was successful.
Executing post-uninstall process on <zone-a> ...finished.

-----Uninstallation result-----
zone-a:succeeded
#
```

Check if "zonename:succeeded" is displayed in "Uninstallation result" field.

6. In GLS Redundant Line Control Function, when using the user command execution function and script files remains, the directory under /etc/opt/FJSVhanet is not deleted. Login to the non-global zone and delete this directory after saving or deleting script files.

```
# zlogin zone-a <Return>
# /usr/bin/rm -r /etc/opt/FJSVhanet <Return>
```

7. Unmount the DVD, and eject DVD.

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

# Appendix A Messages

This chapter explains the messages displayed by installer.

## A.1 Error Messages

---

### **ERROR: <pathname>: no such file**

#### Description

The file <pathname> doesn't exist in the current working directory.

#### Workaround

Set the correct working directory then execute cluster\_install again.

---

### **ERROR: cluster\_install can only be run from global zone.**

#### Description

cluster\_install can only be run from global zone.

#### Workaround

Execute cluster\_install on global zone.

---

### **ERROR: Entry of sysnode already exists in /etc/hostname.XX.**

#### Description

Entry of *sysnode* already exists in /etc/hostname.XX. XX shows interface name.

#### Workaround

Remove the file /etc/hostname.XX then execute cluster\_install again.

---

### **ERROR: Failed to add device *device* to <zonename>.**

#### Description

The addition of the *device* to *zonename* failed.

#### Workaround

Remove the cause of the failure of the addition of the *device* to *zonename*, then execute cluster\_install again

---

### **ERROR: Failed to confirm the return value of cluster\_install on <zonename>.**

#### Description

Failed to confirm the return value of cluster\_install on <zonename>.

#### Workaround

Put down the message then contact your field engineers.

---

### **ERROR: Failed to copy XX to YY.**

#### Description

Failed to copy XX to YY.

#### Workaround

Remove the cause of the problem then execute cluster\_install again.

---

### **ERROR: Failed to create file /etc/PCL-release/XX.**

## Description

Creation of a file in /etc/PCL-release/XX failed. XX shows the abbreviation of the product name.

## Workaround

Remove the cause of the problem then execute cluster\_install again.

---

## **ERROR: Failed to create XX.**

## Description

Creation of XX failed. XX shows file name or directory name.

## Workaround

Remove the cause of the problem then execute cluster\_install again.

---

## **ERROR: Failed to entry 127.0.0.X to /etc/inet/hosts on <zonenumber>.**

## Description

Failed to entry 127.0.0.X to /etc/inet/hosts on <zonenumber>.

## Workaround

Put down the message then contact your field engineers.

---

## **ERROR: Failed to execute "command".**

## Description

Failed to execute "command".

## Workaround

Remove the cause of the problem then execute cluster\_install again.

---

## **ERROR: Failed to install FJQSS<Information Collection Tool>**

## Description

Installation of FJQSS failed.

## Workaround

Collect the following information then contact your Fujitsu system engineers.  
·/var/tmp/fjqssinstaller.log

---

## **ERROR: Failed to remove directory /etc/PCL-release**

## Description

Removal of a directory /etc/PCL-release failed.

## Workaround

Remove the cause of the problem then execute cluster\_uninstall again.

---

## **ERROR: Failed to remove file /etc/PCL-release/XX**

## Description

Removal of a file /etc/PCL-release/XX failed. XX shows the abbreviation of the product name.

## Workaround

Remove the cause of the problem then execute cluster\_uninstall again.

---

**ERROR: Failed to remove XX.****Description**

Removal of *XX* failed. *XX* shows file name or directory name.

**Workaround**

Remove the cause of the problem then execute cluster\_install again.

---

**ERROR: Failed to setup Cluster Foundation on <zonename>.****Description**

Failed to setup Cluster Foundation on <zonename>.

**Workaround**

Put down the message then contact your field engineers.

---

**ERROR: Installation was failed.****Description**

The product installation failed.

**Workaround**

Refer to the following log files to investigate the cause of the installation failure:

`/var/sadm/install/logs/cluster_install`

After that, remove all the packages referring to "[Chapter 4 Uninstallation](#)", and execute the "cluster\_install" command again.

---

**ERROR: network service is disabled.****Description**

Network service is disabled.

This message is output only in Oracle Solaris 11 or later operating environment.

**Workaround**

Enable network service then execute cluster\_install again.

---

**ERROR: NWAM(Network Auto-Magic) is enabled.****Description**

NWAM is enabled.

This message is output only in Oracle Solaris 11 operating environment.

**Workaround**

Disable NWAM then execute cluster\_install again.

---

**ERROR: option is not supported on non-global zone.****Description**

*option* is not supported on non-global zone.

**Workaround**

Correct the option then execute cluster\_install again.

---

**ERROR: Result of "/usr/bin/svcs -l svc:/network/physical:XX" does not include "enabled" field.****Description**

Result of "/usr/bin/svcs -l svc:/network/physical:XX" does not include "enabled" field. *XX* shows "default" or "nwam".

---

## Workaround

Put down the message then contact your field engineers.

---

### **ERROR: Run-level must be the single-user-state.**

#### Description

Run-level is not the single-user-state.

#### Workaround

Change the run level to the single-user state then execute `cluster_uninstall` again.

---

### **ERROR: *sysnode* already entried with following IP(s) to /etc/inet/hosts on <zonename>.**

#### Description

*sysnode* already entried with following IP(s) to /etc/inet/hosts on <zonename>.

#### Workaround

Remove the entry of *sysnode* then execute `cluster_install` again.

---

### **ERROR: system/xopen/xcu4 is not installed.**

#### Description

system/xopen/xcu4 is not installed.

This message is output only in Oracle Solaris 11 or later operating environment.

#### Workaround

Install system/xopen/xcu4 then execute `cluster_install` again.

Refer to OS manual.

---

### **ERROR: The PRIMECLUSTER software packages cannot be removed because GDS class(es) exist. Please remove the GDS class(es) and execute cluster\_uninstall again.**

#### Description

Global Disk Services (hereinafter GDS) class(es) exist.

#### Workaround

1. Check whether there are GDS classes using the `sdxinfo` command. If any, delete the classes. For the class deletion method, see the "PRIMECLUSTER Global Disk Services Configuration and Administration Guide".
2. Check the file in the `/etc/opt/FJSSVsdx/sysdb.d` directory using the `ls(1)` command. If there are other files than `class.db`, delete the files by executing the `rm(1)` command.
3. Check the file in the `/dev/sfdsk` directory using the `ls(1)` command. If there are other files or directories than `_adm`, `_diag`, `_sysadm`, and `_sysdiag`, delete the files and the directories.
4. Execute `cluster_uninstall` again.

---

### **ERROR: This installation is running now.**

#### Description

The "`cluster_install`" command is running for another process.

#### Workaround

Wait until the command is done, and execute it again.

---

### **ERROR: This software does not support the current Oracle Solaris OS version.**

## Description

The Oracle Solaris OS version of the machine isn't supported.

## Workaround

The "cluster\_install" command can only be used on machines with Oracle Solaris 10 or later.

---

## **ERROR: This software needs <sparc> architecture.**

## Description

The CPU type of the machine is not sparc.

## Workaround

The "cluster\_install" command can only be used on sparc machines.

---

## **ERROR: This software needs Oracle Solaris 10 or later.**

## Description

The OS version of the machine is earlier than Oracle Solaris 10.

## Workaround

The "cluster\_install" command can only be used on machines with Oracle Solaris 10 or higher.

---

## **ERROR: To use this installer you must be the root user.**

## Description

The user authority is not root.

## Workaround

Execute the "cluster\_install" command using a root user access privilege.

---

## **ERROR: zonename is not running.**

## Description

*zonename* is not running.

## Workaround

Start *zonename* then execute cluster\_install again.

---

## **ERROR: Zonpath *zonpath* is not available.**

## Description

Zonpath *zonpath* is not available.

## Workaround

Setup the zonpath correctly then execute cluster\_install again.

---

## **Please see the following log file.**

**[/var/sadm/install/logs/cluster\\_install](#)**

## Description

See the /var/sadm/install/logs/cluster\_install log file.

## Workaround

Remove the cause of the error referring to the log file then execute the command again.

---

**Please see the following log file.**  
**[/var/sadm/install/logs/cluster\\_uninstall](#)**

**Description**

See the /var/sadm/install/logs/cluster\_uninstall log file.

**Workaround**

Remove the cause of the error referring to the log file then execute cluster\_uninstall again.

---

**PRIMECLUSTER software packages were not installed in this system.**

**Description**

PRIMECLUSTER software packages were not installed in this system.

**Workaround**

None.

---

**Uninstallation was failed.**

**Description**

Uninstallation was failed.

**Workaround**

Remove the cause of the error referring to the log file or error message then execute cluster\_uninstall again.

---

**WARNING: Failed to remove device *device name* from <zonename>. It should be removed later.**

**Description**

Failed to remove *device name* from <zonename>.

**Workaround**

By using zonecfg(1M) command remove *device name* from <zonename> after uninstallation process.

---

**Warning: The package <FJSViomp> has not been installed.**

**Description**

The FJSViomp package has not been installed.

**Workaround**

After the installation with the "cluster\_install" command is complete, install the FJSViomp package using the pkgadd(1M) command.

---

**Warning: The package <FJSVsnap> has not been installed.**

**Description**

The FJSVsnap package has not been installed.

**Workaround**

After the installation with the "cluster\_install" command is complete, install the FJSVsnap package using the pkgadd(1M) command.