Clustered Platform Software 1.0 Recovery Disks Guide

Oracle9*i* With Real Application Clusters

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Preface

This guide contains an overview of the Clustered Database software 1.0 recovery disk and a procedure on how to recovery the management server.To use this guide, you must have prior experience installing the Solaris™ operating environment and must have Sun™ service training.

Using UNIX Commands

This document might 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*
- AnswerBook2™ online documentation for the Solaris operating environment
- Other software documentation that you received with your system

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. Replace command-line variables with real names or values.	Read Chapter 6 in the *User's Guide*. These are called *class* options. You *must* be superuser to do this. To delete a file, type `rm` *filename*.

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

Application	Title	Part Number
Release Notes	*Clustered Database Platform 280/3 With Oracle9i Database Real Application Clusters Release Notes*	816-4077
	Clustered Database Platform 280/3 With Oracle9i Database Real Application Clusters Late-Breaking News	816-4078
Installation	*Clustered Database Platform 280/3 With Oracle9i Database Real Application Clusters Installation Guide*	816-4075

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Clustered Database Software 1.0 Recovery Disks

The recovery disk enables you to replace the factory-installed Clustered Database software 1.0 software environment on the management server in the event of a system disk failure.

Contents of the Recovery Disks

The Clustered Database software 1.0 media kit contains a bootable CD and a recovery DVD that are used for restoring the system software.

Note – You must also use the recovery DVD from the hardware media kit.

The DVDs contain the following software that is installed on the management server:

- Solaris™ 8 10/01 operating environment
- Solaris DiskSuite™ 4.2.1 software with patches
- Sun Cluster™ 3.0 software with the appropriate patches
- Solaris JumpStart™ software environment
- Sun™ Management Center 3.0 update 4 with help desk
- Sun Component Manager software
- SunRay™ Server 1.3 software
- AnswerBook2™ 1.4.4 software
- Apache 1.3 server software
- Enterprise Services Explorer 3.5

Before You Use the Recovery Disks

Before you attempt to restore the management software environment, you must know your system configuration information and the state of your system backups. For information on about the configuration, refer to the site-planning guide or installation guide for the hardware.

At a minimum, the system configuration information must include the following:

- System name
- IP address
- Annex port name or number
- Time zone
- Name service
- Subnet information
- Ethernet addresses

Note – When you installed the management server for the first time, you should have created a back-up copy of the `/jumpstart/Files/JumpStart.conf` file. After you recover the management server, you must install the backup copy of the `/jumpstart/Files/JumpStart.conf` file to restore the system variables.

Using the Recovery Disks

This section includes procedures for recovering the management server. The recovery disks are intended only for recovering from a disaster. Do not use the recovery disks for installation and configuration of the management server or cluster nodes.

Caution – Initiate a recovery only at the direction of technical support. Because the recovery results in a generic, unconfigured system, you must restore all site-specific configuration files from backup data.

▼ To Use the Recovery Disks

The following procedure contains examples of the output from the recovery scripts. Certain values such as IP addresses and host names are examples only. Your system will have different values.

1. **Log in to your administration station as superuser.**
2. **Use the following command to access the management server console through the terminal concentrator:**

```
# telnet terminal_concentrator_name
```

3. **Press Return when you are prompted for the escape character.**
4. **Enter the Annex port name or number.**
5. **In the cluster console window, press Ctrl+] to stop the cluster nodes.**
6. **Use the following command to access the OpenBoot™ PROM prompt:**

```
telnet> send brk
```

7. **Insert the bootable installation CD into the DVD-ROM drive.**
8. **Boot the system from the CD:**

```
ok boot cdrom
```

You will see the following output.

```
Netra T1 200 (UltraSPARC-IIe 500 MHz), No Keyboard
OpenBoot 4.0, 512 MB memory installed, Serial #16746834.
Ethernet address 8:0:20:ff:89:52, Host ID: 80ff8952.

Initializing Memory

Executing last command: boot net
Boot device: /pci@1f,0/pci@1,1/network@c,1 File and args:

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whoami: no domain name
Configuring /dev/ and /devices
Using RPC Bootparams for network configuration information.
SunTone Clustered Database Platform Recovery Utility version 1.0
Searching the systems hard disks for a
location to place the SunTone Clustered Database Platform Recovery
Environment.
```

9. Select the boot disk.

```
You must select a disk to become your system's new boot disk.
Please select a disk for restoring the SunTone Clustered
Database Platform software:

1  c1t0d0s0

Enter selection [?,??,q]: 1

You have selected c1t0d0s0 as the disk on which to restore the
SunTone Clustered Database Platform software.
Please remember your selection.
```

10. **Press Y to format the boot disk, then Y to confirm your choice.**

You will see the following output.

```
Formatting c1t0d0s0 for restore...

fmthard: New volume table of contents now in place.

Disk c1t0d0s0 now is formatted to SunTone Clustered Database
Platform specifications.
The Recovery (Disk) Miniroot will now be installed on the swap
slice of your choice, and the system will be rebooted.
When the Recovery Miniroot prompts you for a disk on which to
install the SunTone Clustered Database Platform software, remember
to choose c1t0d0s0.

Looking for swap slice on which to install the SunTone Clustered
Database Platform Recovery Environment...
```

11. **Press Y to use the swap disk slice.**

```
The Recovery Utility will use the disk slice, c1t0d0s1, labeled as
swap.

WARNING: All information on this disk will be lost

Can the Recovery UTility use this slice [y,n,?] y
```

The management server will reboot at this point. At the end of the reboot, you will see the following output.

```
The Cluster Recovery (Disk) Miniroot is now running.
You will be prompted to select your new boot disk for recovery of
Management Server binaries.
```

12. **Press `1` to identify the CD-ROM drive.**

```
Please identify the CD-ROM drive:

1 c0t0d0s0

Enter selection [?,??,q]: 1

Current disk is c1t0d0s1
```

13. **Press `1` to choose the new boot disk.**

```
Please enter the name of the disk you selected as your new
boot disk:

1 c1t0d0s0

Enter selection [?,??,q]: 1
```

14. **Press `Y` to format and erase the boot disk, then press `Y` to confirm your choice.**

15. **Press `Y` to construct a new file system.**

```
newfs: /dev/rdsk/c1t0d0s0 last mounted as /a
newfs: construct a new file system /dev/rdsk/c1t0d0s0: (y/n)? y
```

You will see the following output. Some of the cylinder formatting output has been deleted for clarity.

```
Cylinder groups must have a multiple of 2 cylinders with the given
parameters
Rounded cgsize up to 230
/dev/rdsk/c1t0d0s0: 26966776 sectors in 5723 cylinders of 19
tracks, 248 sectors
```

16. **When prompted, insert Recovery DVD #1 in the CD-ROM drive, and press Return after it is mounted.**

```
Preparing to recover the Management Server.
Please place Recovery DVD #1 in the CD_ROM drive. Press <Return>
when mounted.
```

You will see the following output.

```
Restoring files from DVD 1...

No default media available
```

17. **When prompted for DVD #2, unmount DVD #1 and remove it.**

18. **Insert Recovery DVD #2 in the CD-ROM drive, and press Return after it is mounted.**

```
Please place Recovery DVD #2 in the CD-ROM drive. Press <Return>
when mounted.
```

You will see the following output.

```
Restoring files from DVD 2...

/usr/bin/gtar -xf /mnt/254-8014-05.cdb-image.tar
No default media available
Installing boot block...
Management Server restore complete.

Your restored boot disk is c1t0d0s0.

Your boot device pathname is
/devices/pci@1f,0/pci@1/scsi@8/sd@0,0:a.

INIT: New run level: 0
The system is coming down. Please wait.
System services are now being stopped.
umount: /dev busy
The system is down.
syncing file systems... done
Program terminated
```

At this point, the management server is halted.

Completing the Recovery

After the management server software image is restored, you must configure the system to match your environment. Refer to the *Clustered Database Platform 280/3 With Oracle9i Database Real Application Clusters Installation Guide* for information on how to configure the management server.