Bootable Diagnostics CD for the Sun FireTM V20z and Sun Fire V40z Servers

Introduction

Note – To use the bootable diagnostics CD, the server must be running **NSV 2.2.0.6** or higher.

This guide walks you through the Bootable Diagnostics CD for your Sun Fire $^{\rm TM}$ V20z or Sun Fire V40z server.

The Bootable Diagnostics CD allows you to:

- run tests on both the Service Processor and the platform;
- run tests on the platform only;
- (after booting the CD) run the tests remotely, using SSH to log on to the CD; and
- save test results to a USB storage device or to a floppy diskette.



Caution – While running diagnostics from the bootable Diagnostics CD, do not interact with the Service Processor (SP) or the platform through the command-line interface or IPMI.

The sensor commands cannot be used reliably while the diagnostics are running. Issuing sensor commands, while diagnostics are loaded, may result in "false" or erroneous critical events being logged in the events log. The values returned by the sensors are not reliable in this case.

Related Documentation

For troubleshooting tips and a description of the diagnostics tests, refer to the *Sun Fire V20z and Sun Fire V40z Servers*—*Troubleshooting Techniques and Diagnostics Guide* (817-7184).

For a complete list of the diagnostics commands that you can run from the command line, refer to the *Sun Fire V20z and Sun Fire V40z Servers—Server Management Guide* (817-5249).

User Documentation

For the most up-to-date user documentation, for both the Sun Fire V20z and Sun Fire V40z servers, please visit the following Web site:

http://www.sun.com/products-n-solutions/hardware/docs/ Servers/Workgroup_Servers/Sun_Fire_V20z/index.html

This site contains the user manuals, the Release Notes and the individual guides for each of the customer-replaceable units (CRUs).

To verify whether a document on the site is more recent than the document that you have, refer to the final two digits (the dash-roll) of the Part Number for that document.

Installing the CD-Based Diagnostics Tests

To install the CD-based diagnostics tests

- 1. Insert the Sun Fire V20z and Sun Fire V40z Servers—Bootable Diagnostics CD into the drive.
- 2. (*If necessary*) In the Boot Order list within the BIOS Settings, ensure that the option "Boot from CD-ROM" is at the top of the list.
- 3. Boot (or reboot) the server.

When the CD has booted, the platform IP address displays. You can use this IP address if you want to SSH remotely. (See "Remote Access to CD-Based Diagnostics Tests" on page 5.)

Once the CD boot process is complete, the CD diagnostics menu displays on your screen. You can use the menu options to run tests and capture system information, or you can use the command-line interface (CLI).

Note – To launch these tests from the CLI, type: **diags start**

Using the Menu Options

The menu options simplify the process of running a full set of diagnostics tests and capturing system information on a USB storage device or floppy diskette.

- 1. **View Documentation.** Use this option to open the documentation. This online documentation explains:
 - all the menu options
 - helpful tips
 - known issues
 - commands you can run from the command line
 - instructions for using SSH from a remote machine
 - other important information
- 2. **Run from Prompted Interface and create run_commands.sh.** Use this option to run tests and save system information in a log file.

This option opens a series of three prompts. When you proceed through the prompts, a script is created and stored in the same location as the saved log file. You can use this script to run operations on multiple machines.

3. Go to Command-Line Interface. Use this option to access the command-line interface.

Note – For a complete list of the diagnostics commands that you can run from the command line, refer to the *Sun Fire V20z and Sun Fire V40z Servers*—*Server Management Guide* (817-5249).

- 4. Reboot System. Use this option to reboot the server or platform.
- 5. **Run** /floppy/run_commands.sh.Use this option to run a script that you saved to a floppy diskette. (See option 2.)
- 6. **Run** /usbstorage/run_commands.sh. Use this option to run a script that you saved to a USB storage device. (See option 2.)

Note – For detailed information, select **1**. View Documentation.

Remote Access to CD-Based Diagnostics Tests

To use remote scripting via SSH network access:

1. SSH to the platform IP address as the user *setup*.

You are prompted for a user name and password to create a new account.

2. Enter a user name and password.

You can use any user name except the following:

diagUser

setup

root

3. When your new user name and password are validated, you are logged off.

You can now use your new user account to SSH to the platform.

Once you are logged in, you can use the standard diagnostics commands. For a complete list of the diagnostics commands, refer to the *Sun Fire V20z and Sun Fire V40z Servers—Server Management Guide* (817-5249).

Saving Test Results

If you are working from the command-line interface and want to save the results of the diagnostic test(s), you can mount a USB storage device or a floppy diskette.

• To mount a USB storage device, run the following command:

```
mount /usbstorage
```

To mount a floppy diskette, run the following command:

```
mount /floppy
```

• To remove the device, run the following command:

```
umount /<usbstorage | floppy>
```