Sun Fire™ V60x and Sun Fire V65x Server Release Notes

Solaris™ Compatible Version

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Sun Fire V60x and Sun Fire V65x Server Release Notes

These are the issues and advisories known to be outstanding for the Sun Fire™ V60x and Sun Fire V65x server.

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Installation

Please refer to the *Sun Fire V60x and Sun Fire V65x Server User Guide* and the *Sun Fire V60x and Sun Fire V65x Server Solaris Operating Environment Installation Guide* prior to installing a Sun Fire V60x or Sun Fire V65x server.

Documentation

The most up-to-date versions of these release notes and all other Sun Fire V60x and Sun Fire V65x server documentation can be found online at:

```
http://www.sun.com/products-n-solutions/hardware/docs/Servers
/Workgroup_Servers/Sun_Fire_V60x-V65x/index.html
```

Support

For technical support, call the phone numbers listed below, according to your location.

- United States 1-800-USA-4SUN (1-800-872-4786)
- UKTel: +44 870-600-3222
- FranceTel: +33 1 34 03 5080
- GermanyTel: +49 1805 20 2241
- ItalyTel: +39 02 92595228, Toll Free 800 605228
- SpainTel: +011 3491 767 6000

See the following link for US, Europe, South America, Africa, and APAC local country telephone numbers:

```
http://www.sun.com/service/contacting/solution.html
```

For general support, information and the latest patches for the Sun Fire V60x and V65x servers, see the following links:

```
http://www.sun.com/servers/entry/v60x
```

```
http://www.sun.com/servers/entry/v65x
```

Network Boot and Installation Support

- Preboot eXecution Environment (PXE) boot is the supported method for Solaris™ boot and installation over the network. Solaris "netinstall" is not supported, as there is no realmode Gigabit Ethernet driver.

Note – For those familiar with using JumpStart™ installation scripts with Solaris "netinstall" on other x86 platforms, Solaris JumpStart installation scripts can be invoked using PXE boot.

- When you boot the Device Configuration Assistant (DCA) from either a hard drive or floppy drive or CD, choose only DISK or CD entries from the Boot Solaris menu. Any NET options that display on the screen do not work. If you want to install from the network, use the PXE method.
- When using the BIOS information screen during PXE configuration, use the Esc key (instead of F12) to initiate PXE boot. This method will prompt you to select which Ethernet port should be used to complete PXE boot operation.
  - If the Esc key is used to initiate the PXE boot, it displays Ethernet ports in the following order: The physical top port, marked 2, which corresponds to e1000g1; then the physical bottom port, marked 1, which corresponds to e1000g0.
  - If the F12 key is used to initiate the PXE boot, the BIOS interface does not give the user an opportunity to choose the Ethernet port for the PXE boot operation.
- When using the Device Configuration Assistant (DCA) to configure Solaris, the Boot Solaris menu displays Ethernet ports in the following order:
  - The physical bottom port, marked 1, which corresponds to e1000g0.
  - The physical top port, marked 2, which corresponds to e1000g1.
- When selecting the Ethernet port in the DCA Boot Solaris menu during PXE installation, take care to select the same port that you chose in the Boot Selection menu of the BIOS when setting up the client for PXE install. If you choose an invalid Ethernet port, the DCA will fail with the following message: `Loading Driver e1000g.bef.`

  You will then need to reboot and choose an appropriate Ethernet port next time.

DHCP Configuration to Support PXE Boot

If you are using the Solaris DHCP server, you must configure a separate DHCP server for each subnet. Each DHCP server instance (per subnet) must be properly configured for the client population that it serves.

USB Support

If you need to use a keyboard for initial boot-up and configuration of the server, you must use a PS/2 keyboard. Do not connect a USB device to the server prior to configuring or installing the Solaris operating environment.

A PS/2 keyboard is also required when using the Diagnostic CD or Service Partition utilities.

After Solaris has been properly installed, you may use a USB keyboard and mouse. The Solaris 9 `uhci` driver is used for USB devices connected to the Sun Fire V60x and V65x servers. USB support is limited to keyboard and mouse devices.

Console Redirection

If you wish to redirect the console output to the serial port, you must perform configuration within both the server BIOS and the Solaris operating environment. Refer to the *Sun Fire V60x and Sun Fire V65x Server Solaris Operating Environment Installation Guide* for details.

SCSI Support

- The Adaptec adpu320 driver does not support any Adaptec Ultra/320 PCI add-on cards. Other add-on SCSI cards are supported if they are listed on the Sun hardware compatibility list (HCL). You can find the HCL at:

  `http://soldc.sun.com/support/drivers/hcl/`

- You may encounter issues when booting from internal SCSI drives when an external SCSI device or an external SCSI array has been added. To boot the system using internal drives, the SCSI BIOS settings may need to be modified for each channel using the following procedure.

Modifying the SCSI BIOS Settings

1. **To access the SCSI BIOS settings, press Ctrl+A (at POST, during the SCSI initialization phase).**

2. **Once in the SCSI BIOS, select External Channel A AIC-7902 A slot at 00:04:07:00.**

   Select the following options:

   - Configure/View SCSI Controller Settings
   - Advanced Configuration

3. **In the Advanced Configuration menu, go to SCSI Controller Int 13 Support.**

   Select one of the Disabled options.

   Note – If you select the *Disabled* option, you will disable the rear SCSI port. If you select the *Selecting Disabled: With Scan* option, the rear SCSI port will remain available.

   ---

4. **In the SCSI BIOS settings screen, select Internal Channel B AIC-7902 B at slot 00:04:07:01.**

   Select the following options:

   - Configure/View SCSI Controller Settings
   - Advanced Configuration

5. **In the Advanced Configuration menu, go to SCSI Controller Int 13 Support.**

   Select the Enabled option if it is not already selected.

6. **Save the settings before exiting the menu.**

General Boot and Installation Issues

- If both the Diagnostic Service Partition and Solaris operating environment are installed on your system and you press the F4 key while the BIOS POST is running, you will not be able to access the Service Partition. To access the Service Partition, let the system continue to boot up, and when the Solaris Primary Boot Subsystem menu displays, select DIAGNOSTIC partition.
- Occasionally, when using a Keyboard, Video and Mouse (KVM) switch, and sometimes even with the direct keyboard / video / mouse configurations, the `kdmconfig` screens may display when Solaris reboots. If this occurs, go through the `kdmconfig` configuration screens again to continue.
- During Solaris installation on the Sun Fire V60x server or the Sun Fire V65x server, the Device Configuration Assistant (DCA) reports a resource conflict with the Floppy Disk Controller. It is reported as both an ACPI and non-ACPI device in the Bus Enumeration screen. When you see this message, ignore the warning and press Enter to continue.
- The `kadb` kernel debugger does not work properly in GUI (CDE or GNOME) mode. Although the keyboard entry sequence F1-A does initiate a `kadb` session, the `kadb` prompt is not displayed. Therefore, the system appears to be hung but is actually waiting at an invisible `kadb` prompt.
  - If you initiate a `kadb` session and a `kadb` prompt does not display, press :+C (the : key, then the C key).
  - If you want to use a `kadb` session, access the session via text mode on a console or run a tip session through the serial line.

Network Interfaces

- Adding or removing network PCI cards will change the labelling order for the on-board network interfaces. Prior to adding an additional gigabit card, the on-board Ethernet ports will be assigned to e1000g0 and e1000g1.

  If, for example, you subsequently install an add-on Intel gigabit PCI card (single port), the new card's port will be assigned to e1000g0, while the on-board ports will be reassigned to e1000g1 and e1000g2.

- If you modify the e1000g configuration file (`/kernel/drv/e1000g.conf`) to force the speed and duplex settings to one of the following:
  - 10mbps half or full-duplex mode
  - 100mbps half or full-duplex mode

  and the systems are connected directly (without hub or switch), then you must use a cross-over cable to connect the systems.
- After modifying the e1000g configuration file (`/kernel/drv/e1000g.conf`), you must unload, then reload the driver module for the changes to take effect.

Adaptec HostRAID

On-board Adaptec HostRAID functionality is not supported by the Solaris operating environment. You may use another third party hardware RAID controller or the software RAID capabilities of Solaris Volume Manager.

IPv6 Neighbor Cache

A system with IPv6 configured on an e1000g interface may not respond to "Neighbor Solicitation" messages from any remote machine. Consequently, remote machines may not be able to communicate to this system using IPv6.

The following workaround will ensure that the system that is plumbed for IPv6 will be accessible remotely:

- **After setting the up IPv6 on an e1000g interface, bring the IPv6 interface down, then up.**

  # **`ifconfig e1000g0 inet6 down`**

  # **`ifconfig e1000g0 inet6 up`**

  Now you can communicate to this target system using IPv6 from remote systems.

  The above `ifconfig` commands, which bring the IPv6 interface down then up, may be added to the system's level 3 boot scripts to automate the workaround steps.

Note – Information on the latest patches for Sun Fire V60x and V65x software is available at: `http://www.sun.com/servers/entry/v60x` and `http://www.sun.com/servers/entry/v65x`