Silicon Graphics 320™ and Silicon Graphics 540™

Software Installation Guide Errata

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Silicon Graphics 320 and Silicon Graphics 540 Software Installation Guide Errata

This document describes changes to the Silicon Graphics 320 and Silicon Graphics 540 system software and installation procedures that occurred after the *Silicon Graphics 320 and Silicon Graphics 540 Visual Workstation Software Installation Guide* went to print. Use this document in conjunction with the *Silicon Graphics 320 and Silicon Graphics 540 Visual Workstation Software Installation Guide* when installing Windows NT and Silicon Graphics system software.

Setting Up Windows NT for the First Time

Between steps 5 and 6, the installation process runs for several minutes without displaying a progress bar or other indication that the installation is continuing normally. This is not a cause for concern. Do not press any keys while this operation is in progress. Wait until Setup completes this phase of the installation.

Using the Silicon Graphics CDs

Ignore references to a CD containing Internet Explorer. Internet Explorer is not delivered on a separate CD.

Internet Explorer is preinstalled on your visual workstation. In the event that you reinstall the visual workstation system software, Internet Explorer is reinstalled automatically along with the system software and required applications and drivers.

Reinstalling Windows NT

The procedure described in the *Software Installation Guide* has been changed. Please substitute the procedure outlined below.

The procedure consists of two phases:

- The first phase uses a text-based interface, which gathers hardware information about your visual workstation and copies system files to it. At the end of this phase, the Setup utility prompts you to restart your visual workstation and then automatically continues to the next phase.

- The second phase uses the Setup Wizard's graphical user interface to gather site-specific information and customize Windows NT for your network environment.

Silicon Graphics strongly recommends that you accept the default values supplied throughout the Setup program, and that you create an emergency repair disk after completing the reinstallation and restarting the visual workstation.

Follow these steps to upgrade or reinstall Windows NT:

1. Start your visual workstation.

2. Press the **Esc** key within a few seconds after the first startup messages appear on the monitor (a progress bar tells you how much time has elapsed). The system firmware displays the main screen, as shown below.

3. Click the *Install System Software* button. The Setup utility starts automatically.

4. When prompted to do so, insert *Recovery CD 1* into the CD-ROM drive and click the *Continue* button.

5. A dialog box asks you to specify the disk partition in which to install the system loader files. Use the arrow keys on the Disk list box to select a disk and the arrow keys on the Partition list box to select a partition.

   The disk partition you specify here need not already exist. However, if it does not already exist, you must create it during step 14 of the procedure.

   See "Partitioning the System Disk" on page 8 for more information about visual workstation disk partitions.

6. Click the *Accept* button to continue. This starts the Windows NT Setup program.

7. The Mass Storage Device screen lists the mass storage device drivers to be installed during the Setup procedure. Typically, only the CD-ROM drive is listed. This is normal. IDE drives are automatically detected.

    Press the **Enter** key to continue. The installation program loads some files it needs for the installation. This may take several minutes.

8. In the Welcome to NT Setup screen, you must decide whether to repair the existing Windows NT installation or to reinstall Windows NT.

    •   If you wish to repair Windows NT using the information on your emergency repair disk, press the **R** key. Follow the instructions given by the Setup program, and restart your visual workstation when prompted to do so.

    •   If you wish to reinstall Windows NT, press the **Enter** key. Continue with steps 9 through 20 of this procedure.

9. The Mass Storage Device screen lists any mass storage devices that the firmware detects. Press the **Enter** key to continue.

10. In the License Agreement screen, read the end-user license agreement (press the **Page Down** key to scroll to the bottom of the screen). To agree to the license agreement, press the **F8** key.

11. If Setup detects an existing copy of Windows NT, you are asked if you wish to upgrade the existing copy or install a fresh copy:

    •   If you are reinstalling Windows NT after adding processors to your visual workstation, press the **Enter** key to upgrade the existing copy. Follow the instructions given by the Setup program, and restart the visual workstation when prompted to do so.

    •   If you wish to reinstall a fresh copy of Windows NT, press **N**. Continue with the rest of this procedure.

12. The Hardware Components screen lists the visual workstation hardware components. Press the **Enter** key to continue.

13. The Verifying Partitions screen lists the existing partitions on the system disk. Press the **Enter** key to continue.

14. The Reformat Partitions screen offers you the option to reformat the partitions on the system disk.

    - If you are reinstalling the system software after adding a processor to your visual workstation, leave the existing partitions as they are. Press the **Enter** key to continue.

    - If you wish to reformat the system disk, use this screen to reformat the partitions according to the recommended partitioning scheme described in "Partitioning the System Disk" on page 8.

    Please be aware of the following considerations when creating partitions:

    - The disk partitions are numbered in the order that they were created (that is, Partition 1 is the first partition created on a disk and Partition 2 is the second partition created on the same disk).

    - If it does not already exist, you must create the partition that you specified as the System Loader partition in step 5. This partition must be at least 20 MB in size, and must be formatted with the FAT filesystem.

    - The partitions are formatted as you create them. The maximum size permitted by the Setup program is 4095 MB.

    - Partitions you specified as NTFS filesystems are displayed by the Setup program as FAT partitions after formatting. This is not a cause for concern. The Setup program converts these partitions to NTFS later in the installation process.

15. After you have created all the partitions you need, use the Up and Down arrows to select the disk partition in which you want the Operating System files to be installed, then press the **Enter** key.

16. The System Folder screen lists the directory in which to install Windows NT. The default is *WINNT*. Press the **Enter** key to continue.

17. The Examine Hard Disk for Corruption screen asks if you wish to perform a check of the system disk. Press the **Enter** key to perform a disk check. This process takes up to several minutes, depending on the size of the system disk.

18. Setup copies files from the CD to the system disk. Do not press any keys while the copy operation is in progress. Wait until Setup completes this phase of the installation.

19. Press the **Enter** key to restart the visual workstation. After the visual workstation restarts, the Setup Wizard starts automatically and begins prompting you for information.

    This portion of the procedure is similar to the initial setup procedure (see "Setting Up Windows NT for the First Time" in the *Software Installation Guide*).

    Follow the instructions given by the Setup Wizard. Except for fields in which you are required to enter user-specific or site-specific information or options, accept the default values provided by the Setup Wizard.

20. The Setup Wizard customizes the system software and copies files. When the installation is complete, remove any diskettes or CDs from their drives, and click the *Restart* button to restart the visual workstation.

Reinstalling Drivers and Auxiliary Applications

The procedure described in the *Software Installation Guide* has been changed. Please substitute the procedure outlined below.

This procedure reinstalls drivers and applications that are required for proper operation of your visual workstation, as well as online documentation.

1. Make sure you are logged in to the Administrator account on your visual workstation.

2. Insert *Recovery CD 2* in the CD-ROM drive. The Setup utility on the CD starts up automatically.

3. Follow the instructions on the screen. At the end of the initial installation sequence, Setup prompts you to restart the visual workstation. Leave *Recovery CD 2* in the CD-ROM drive and restart the visual workstation.

4. In the login dialog box, log in as Administrator.

5. Select Run from the Start menu. In the Run dialog box, enter `E:\yamaha\disk1\setup.exe` (assuming E: is the drive letter of your CD-ROM drive).

6. Accept all defaults during the installation of the Yamaha Synthesizer.

7. At the end of the installation sequence, Setup prompts you to restart the visual workstation. Remove *Recovery CD 2* from the CD-ROM drive and click the *Restart Now* button. Restarting ensures that the system initializes the Yamaha Synthesizer.

Partitioning the System Disk

The information in the *Software Installation Guide* is incomplete. Please substitute the information below.

The system disk is partitioned at the factory into two partitions. The visual workstation requires two partitions to boot Windows NT. The system firmware must load an executable (*arcldr.exe*) from a FAT partition in order to load the rest of the operating system from another partition. Changing partitions or moving system files without reconfiguring the system firmware can prevent the visual workstation from booting successfully.

Silicon Graphics strongly recommends that you accept the default partitions during the Windows NT Setup procedure.

If you wish to partition the drive differently at a later time, you may do so, with some restrictions:

- You must create at least two partitions.

- The second partition must be at least 20 MB in size, and must be formatted using the FAT filesystem.

- This partition is where the boot files reside. The system firmware is able to find and execute boot files in a FAT partition, but not in an NTFS partition.

- The remaining partition(s) may be any size appropriate to your needs, and may use either FAT or NTFS filesystems.

Note: If you reformat using the Setup program, the maximum partition size is 4095 MB. If you reformat using the Disk Administrator, this restriction does not apply.

The system disk may be partitioned a bit differently at the factory. However, these are the most basic requirements. The table below lists partition requirements for systems that boot from an IDE drive and systems that boot from a SCSI drive.

	IDE Boot Drive	SCSI Boot Drive
Operating system partition	IDE 0, Disk 0, Partition 1	SCSI 2, Disk 0, Partition 1
Filesystem	NTFS	NTFS
Size	4095 MB maximum	4095 MB maximum
System loader partition	IDE 0, Disk 0, Partition 2	SCSI 2, Disk 0, Partition 2
Filesystem	FAT	FAT
Size	20 MB minimum	20 MB minimum
Directory Location for Windows NT	\WINNT	\WINNT

Caution: By default, Windows NT operating system files are located in the first partition on the boot disk and system loader files are located in the second partition on the boot disk. System Loader files include *hal.dll, arcldr.exe*, and *arcsetup.exe*. If you move these files to different partitions, you must configure the system firmware appropriately or the visual workstation cannot boot successfully. See "Startup Settings" in the *Software Installation Guide* for more information.

Configuring Graphics Memory

The Software Installation Guide does not describe the procedure for configuring graphics memory. This procedure is provided below.

Some applications, such as graphics-intensive games or heavily textured screen-savers, may require that more memory be allocated to the graphics hardware than is configured at the factory. Some symptoms indicating that an application needs more graphics memory include graphics that display in monochrome instead of color, and 3D graphics that display as wireframes instead of solids.

Follow these steps to increase the amount of system memory allocated to the graphics hardware:

1. Choose Start > Settings > Control Panel.

2. In the Control Panel window, double-click the Display icon.

3. Click the Silicon Graphics Settings tab.

4. In the Graphics Settings and Memory Reservation Profile panel, select the preset memory configuration from the list box that matches your graphics application's needs. The System Memory panel at the bottom of the window displays the memory allocation for that configuration.

5. Click the *OK* button to accept the new memory allocation and close the Properties window, and click the *OK* button in the Display Properties window.

6. If prompted to do so, restart your visual workstation.

Try your application with the new graphics memory allocation. If the application still needs more graphics memory, create a customized graphics memory profile using these steps:

1. Choose Start > Settings > Control Panel.

2. In the Control Panel window, double-click the Display icon.

3. Click the Silicon Graphics Settings tab.

4. In the Graphics Settings and Memory Reservation Profile panel, select the preset memory configuration in the list box that most closely meets your needs.

5. Click the *Copy* button to create a duplicate of the selected memory configuration. In the Copy Profile dialog box, enter the name of the new memory configuration and click the *OK* button.

6. Click the *Properties* button to open the Properties window.

7. Use the Graphics Memory Allocation panel to allocate additional memory for graphics hardware.

   You can do this in either of two ways:

   • Use the Up and Down arrows to select one of the preset values in the list box.

   • Highlight the existing value displayed in the list box, and type a new value in its place.

   Notice that the amounts of memory listed in the System Memory panel change as you adjust the Graphics Memory Allocation value. The value labeled Maximum Available to Graphics Hardware is the upper limit that you can specify. This value represents the total amount of available memory minus 64 MB (Windows NT reserves 64 MB for use by the system software).

8. Click the *OK* button to accept the new memory allocation and close the Properties window, and click the *OK* button in the Display Properties window.

9. If prompted to do so, restart your visual workstation to initialize the system using the new graphics memory allocation.

Try your application again, and fine-tune the graphics memory allocation if necessary.

Configuring System Firmware Options

The Software Installation Guide refers to a *Stop for Maintenance* button. That button has been removed. Use the **Esc** key to access the system firmware.

Startup Settings

The Startup Settings screen shown in the *Software Installation Guide* applies to workstations that boot from an IDE drive. If your visual workstation boots from a SCSI drive, the values in some of the fields are different. Refer to the table below for a list of values appropriate to your visual workstation.

Field	IDE Boot Drive	SCSI Boot Drive
OSLoader	\os\winnt40\arcldr.exe	\os\winnt40\arcldr.exe
OSLoad Filename	\WINNT	\WINNT
OSLoad Partition	IDE 0 Disk 0Partition 1	SCSI 2 Disk 0 Partition 1
System Partition	IDE 0 Disk 0 Partition 2	SCSI 2 Disk 0 Partition 2
OSLoad Options	*For normal operation, this field should be blank.*	

System Settings

The Software Installation Guide describes the *Revert to Factory Default Settings* button. This button is now labeled *Restore Settings*, and is currently unimplemented.