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AlphaServer 2100: READ THIS FIRST

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NEW OPERATOR INTERFACES

On AlphaGeneration systems, which are based on the Alpha AXP architecture, control of the system hardware is provided by a console subsystem. The console subsystem contains firmware code (software code embedded in the hardware) that offers service functions. Some of these functions include initializing and testing the hardware, bootstrapping the system software, and providing a means for the system administrator or a management application to monitor and control the system.

Because the AlphaServer 2100 system is designed to support multiple operating systems, the server offers two separate operator interfaces: a command line interface called the SRM interface, and a menu interface called the ARC interface.

Refer to the *AlphaServer 2000/2100 Firmware Reference Guide* to learn how to use the SRM and ARC console interfaces.

SRM Command Line Interface

The SRM interface is a UNIX style, command line interface designed to facilitate interaction between the AlphaServer hardware and the DEC OSF/1 and OpenVMS operating systems. You enter console firmware commands at the SRM command line interface to configure and test the hardware and bootstrap the DEC OSF/1 or OpenVMS operating systems. Users of traditional Digital systems will be familiar with this command line interface.

ARC Menu Based Interface

The ARC interface is a graphical user interface designed to facilitate interaction between the AlphaServer hardware and the Microsoft Windows NT operating system. You configure your system hardware and boot Windows NT from the ARC menu interface. Users of window systems will be familiar with the menu-based style of interface.

When to Switch Interfaces

You can perform most console-related tasks from the interface designed to interact with your operating system. However, the console interfaces are designed so that you can easily switch between them. You will only need to switch between the interfaces in the following instances:

- If you are running DEC OSF/1 or OpenVMS and need to run the EISA Configuration Utility (ECU) or the RAID Configuration Utility (RCU), described below, you must switch to the ARC interface.

- If you are running Microsoft Windows NT and want to run the `test` command, you must switch to the SRM interface.

Refer to the *AlphaServer 2000/2100 Firmware Reference Guide* for instructions on switching between the interfaces.

CONFIGURATION UTILITIES

If you add, remove, or configure EISA or ISA options, you must run the EISA Configuration Utility. The ECU is provided on two diskettes with your server system—a diskette for DEC OSF/1 and OpenVMS and a diskette for Microsoft Windows NT. The Owner's Guide for the AlphaServer 2100 system explains how to run the EISA Configuration Utility.

If you purchased a StorageWorks RAID Array 200 Subsystem for your AlphaServer 2100 system, you must run the RAID Configuration Utility (RCU) to set up the disk drives and logical units. The RCU is provided on a diskette with the RAID subsystem kit. Refer to the *StorageWorks RAID Array 200 Subsystem Family Installation and Configuration Guide*, included in your RAID subsystem kit.

INIT COMMAND

Whenever you reset the following SRM environment variables, you must initialize the system to put the new setting into effect.

> **auto_action**
> **console**
> **language**
> **ocp_text**
> **os_type**
> **pk*0_fast**
> **pk*0_host_id**

To reset SRM environment variables, use the `set` command and initialize the system with the `init` command. For example, to change the device on which power-up output is displayed from a serial terminal to a graphics monitor, set the console environment variable to "graphics" and then enter the `init` command:

```
>>>  show console
console  serial
>>> set console graphics
>>> init
    .
    .
    .
>>> show console
console  graphics
```

The *AlphaServer 2000/2100 Firmware Reference Guide* explains the function of the environment variables.

HARD DISK PREPARATION FOR WINDOWS NT

If you purchased the Microsoft Windows NT 3.5 operating system with your AlphaServer 2100 system, your system will arrive properly configured for installing Windows NT. Before you install Windows NT, however, you must prepare the hard disk or disks.

If your first hard disk is already partitioned and formatted with either the FAT or NTFS files systems, you can begin installation of the Microsoft Windows NT software. It is recommended, however, that you partition and format the hard disk before installing Microsoft Windows NT even if your hard disk has already been partitioned and formatted. This reduces the likelihood of operational problems caused by mixing versions of the operating system or of disk-related problems.

Important

If the first hard disk in your computer currently contains any information you need, back up that information to another medium.

Partitioning and Formatting the First Hard Disk

Note

Omit this group of steps if you want to maintain your current disk and software setup.

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1. Insert the Microsoft Windows NT CD–ROM into your computer's CD–ROM drive.

2. Turn on your computer. After your computer performs startup diagnostics, the Boot menu is displayed.

3. Select `Run a program` and press Enter. A `Program to run` prompt is displayed.

4. Type the following line and press Enter. The ARC Installation Program screen is displayed.

   ```
   cd:\alpha\arcinst
   ```

5. Select `Configure Partitions` and press Enter. The available disk partitioning options are displayed.

6. Select `Delete Partition` and press Enter. If your computer has only one hard disk, press Enter. If your computer has more than one hard disk, select the disk to be prepared, and press Enter.

   Depending on the previous disk configuration, you might be notified that no partitions exist, or you may see a list of one or more partitions. Follow the on-screen prompts to delete all partitions on the disk.

7. Select `Create Partition` and press Enter. When the list of available disks is displayed, select the disk to be prepared and press Enter. You are prompted for the size of the partition.

8. Type `6` after the `Enter size` prompt, then press Enter. A 6-megabyte partition is created. This partition will be a FAT system partition.

9. Press Enter. The partition is formatted. Once the formatting is completed, press Enter.

10. Select `Create Partition` and press Enter. When the list of available disks is displayed, select the first disk again and press Enter. You are prompted for the size of the partition.

11. Type the larger of the two values at the `Enter size` prompt, then press Enter. The partition is created.

12. Press Enter. The partition is formatted. Once the formatting is completed, press Enter.

13. Select `Make Existing Partition into a System Partition` and press Enter.

    A message may be displayed asking whether to overwrite an already defined system partition. Type `Y`.

    If a `Boot selections already exist` message is displayed, exit the ARCINST program, go to the Setup menu, choose `Manage boot selections`, and delete all existing boot selections. Then start the ARCINST program again, and return to step 13.

14. When the list of available disks is displayed, select the same disk you just formatted and press Enter. The list of available partitions is displayed.

15. Select `Partition 1` and press Enter.

    Your computer is now prepared for installation of Microsoft Windows NT.

16. Select `Exit` and press Enter. Select `Exit` again and press Enter.

17. Select `Supplementary menu` and press Enter. When the Supplementary menu is displayed, select `Install Windows NT from CD--ROM` and press Enter.

At this point, Windows NT installation begins. Follow the on-screen prompts to complete the installation.

_____ **Important** _____

During Microsoft Windows NT installation, you are prompted for the location of Windows NT files. Install Windows NT into the larger of the two partitions you just created, and when prompted, format that partition with the NTFS file system.

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OPENVMS PATCH KIT

If you are running OpenVMS on your AlphaServer 2100 system, you must install a patch kit that is provided on a diskette (Volume Label AXPDRIV02). The patch kit addresses the following problems:

- The LK411 Rev B01 keyboard is not recognized by the device driver, and certain keys fail to function or function incorrectly.

- Some systems have halted with the message `Machine check in PALmode`. You cannot obtain a crash dump of this problem.

- The patch corrects a timing problem in the script code for the SCSI drivers and provides support for RZ28B drives on the 810 SCSI controller.

Contents of Patch Kit

- Kit Name: AXPDRIV02_061

- Kit Description: Applies to OpenVMS AXP V6.1

- Files patched or replaced:

  SYS$LOADABLE_IMAGES:SYS$CPU_ROUTINES_0902.EXE (new image)
  SYS$LOADABLE_IMAGES:SYS$GQADRIVER.EXE (new image)
  SYS$LOADABLE_IMAGES:SYS$PKEDRIVER.EXE (new image)
  SYS$LOADABLE_IMAGES:SYS$PKTDRIVER.EXE (new image)

Patch Kit Installation Procedure

Install the patch kit as follows:

1. Use the VMSINSTAL utility to log in to the SYSTEM account, and enter the following at the DCL ($) prompt:

    ```
    @SYS$UPDATE:VMSINSTAL AXPDRIV02_061 [saveset_location]
    ```

    The *saveset_location* may be a tape drive or a disk directory that contains the kit save set.

2. After you have installed the save set, obtain the release notes from SYS$HELP. The release notes are named AXPDRIV02_061.RELEASE_NOTES.

3. After the kit is successfully installed, reboot the system. Also reboot any other nodes in your cluster in order to use the new images.

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