Information Update for the Solaris™ 10 Operating System

Creating Virtual Drives on a System With a Dell™ SAS 6/iR Controller

On a system with a Dell SAS 6/iR controller, a firmware conflict may prevent you from configuring virtual drives using the lsiutil and raidct1 commands in the Solaris operating system. The system may issue an `Operation failed` error message and place the physical drives in an offline state.

Workaround:

Configure virtual drives using the SAS configuration utility. To access the SAS configuration utility, press `<Ctrl-C>` when prompted during the BIOS boot sequence.

Dell PERC 6 Support

If the device driver for Dell PERC 6 controller is not included with the Solaris operating system, navigate to your system driver download page on support.dell.com and follow the instructions for downloading and installing the drivers.

Installing the EMC® PowerPath® Driver on a System With a PERC 6/i or CERC6 Controller

A system running Solaris 10 update 5 with a PERC 6/i or CERC6 as a boot controller may fail to boot after installation of the EMC PowerPath driver. The fix for this issue will be included in future releases or updates of the Solaris operating system. Following is the workaround for this issue.

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Workaround:

Edit the **/kernel/drv/mega_sas.conf** file and replace all occurrences of `class="scsi"` with `parent="mega_sas"`, as in the following example.

```
name="sd" class="scsi" target=0 lun=0;
```

is changed to

```
name="sd" parent="mega_sas" target=0 lun=0;
```

System Timeouts on Multiprocessor Systems With an Onboard SATA Controller

System timeouts may occur during system boot on a PowerEdge™ multiprocessor system if the root device is on a drive with a legacy ATA driver. These timeouts result in a system hang with console error messages similar to the following that may scroll for several screens:

```
scsi: [ID 107833 kern.warning] WARNING:
      /pci@0,0/pciide@1f,2/ide@0 (ata0): timeout: reset
      bus, target=0 lun=0

scsi: [ID 107833 kern.warning] WARNING:
      /pci@0,0/pciide@1f,2/ide@0 (ata0): timeout: early
      timeout, target=0 lun=0

gda: [ID 107833 kern.warning] WARNING:
      /pci@0,0/pciide@1f,2/ide@0/cmdk@0,0 (Disk0):

Error for command 'read sector' Error Level:
      Informational

gda: [ID 107833 kern.notice] Sense Key: aborted command

gda: [ID 107833 kern.notice] Vendor 'Gen-ATA '

error code: 0x3

gda: [ID 107833 kern.warning] WARNING:
      /pci@0,0/pciide@1f,2/ide@0/cmdk@0,0 (Disk0):
      Error for command 'read sector' Error Level:
      Informational
```

Workaround 1:

Install the Solaris operating system on a disk connected to a SAS 6 or CERC6 controller.

Workaournd 2:

During system installation, select the option not to auto reboot after installation is complete. When the installation completes, type the following in a UNIX shell to disable the microcode update:

```
# mv /a/platform/i86pc/ucode
/a/platform/i86pc/ucode.disabled
```

If the system has already rebooted after installation, type the following in a UNIX shell:

```
# mv /platform/i86pc/ucode
/platform/i86pc/ucode.disabled
```

If you were unable to perform the workaround during the installation and are not able to boot the system due to system hanging, you can temporarily disable multiprocessing that will restore system operation so that you can disable microcode update from a UNIX shell.

To disable multiprocessing perform the following steps from the Grand Unified Boot loader (GRUB) menu:

1. Type `e` to edit your selected Solaris entry.
2. Navigate to the line that begins with kernel.
3. Type `e` to switch to the GRUB edit mode.
4. Append `-kd` to the line.
5. Press <Enter> to accept the change.
6. Type `b` to boot the selected Solaris entry.
7. At the kbmd prompt, type the following command and press <Enter>:

   ```
   use_mp/W 0 :c
   ```

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