Notes on DVD Drive and Discs in SPARC Enterprise

This document describes the necessary information and precautions to use DVD drive in SPARC Enterprise.

CD-ROMs and CD-R/RWs are referred to as "CD", DVD-ROMs and DVD-R/RWs are referred to as "DVD" and CDs and DVDs are collectively referred to as "Discs" in this document.

Discs

■ Supported Disc Standards

When writing/rewriting data using this DVD drive, use discs that comply with the following standards:

| Discs | | Standards | |
|------------|--------|--|--|
| CD-R/CD-RW | | Orange Book Part II | |
| DVD-R | | DVD Specification for Recordable Disc Ver. 2.0 | |
| DVD-RW | 1 – 2X | DVD-RW Version 1.1/2X-SPEED DVD-RW Revision 1.0 | |
| | 2 – 4X | DVD-RW Version 1.2/4X/2X-SPEED DVD-RW Revision 2.0 | |

■ Precautions for Handling Discs

- Do not put stickers or write anything with pencil or ball-point pen on both sides of the disk.
- Do not touch or scratch the recording surface.
- Do not bend or press down hard on the disc.
- To clean discs, wipe the shiny surface with a soft, damp cloth, working from the center to the edge. Then wipe with a dry cloth.
- Do not spill liquids on discs.
- Do not use or store in locations of extremely high or low temperature.
- Do not use or store in humid or dusty locations.
- There are copy-protected DVD discs used for copyright protection. Be sure to check the type of discs before using.
- Data corruption or disk drive failure might occur when other types of discs are used.

■ Drive

■ Maximum Read/Write/Rewrite Speed

With the standard DVD drive installed in SPARC Enterprise servers, discs can be read, written, or rewritten at the following speeds. The other discs (not listed below) are not supported.

SPARC Enterprise T2000: slimline DVD-ROM/CD-RW

| Disc | Maximum Read Speed | Maximum Write/Rewrite Speed |
|---------|--------------------|-----------------------------|
| DVD-ROM | 8x | - |
| CD-ROM | 24x | - |
| CD-R/RW | 24x | 24x |

SPARC Enterprise T5120/T5220/T5140/T5240/T5440: CD-RW, DVD+/-RW

| Disc | Maximum Read Speed | Maximum Write/Rewrite Speed |
|---------|--------------------|-----------------------------|
| DVD-ROM | 8x | - |
| DVD-R | 8x | 8x |
| DVD-RW | 8x | 6x |
| DVD+R | 8x | 8x |
| DVD+RW | 8x | 8x |
| CD-ROM | 24x | - |
| CD-R | 24x | 24x |
| CD-RW | 24x | 10x |

SPARC Enterprise M3000/M4000/M5000: CD-RW/DVD-RW

| <u> </u> | | | |
|----------|--------------------|-----------------------------|--|
| Disc | Maximum Read Speed | Maximum Write/Rewrite Speed | |
| DVD-ROM | 8x | - | |
| DVD-R | 8x | 8x | |
| DVD-RW | 8x | 6x | |
| CD-ROM | 24x | - | |
| CD-R | 24x | 24x | |
| CD-RW | 24x | 10x | |

$SPARC\ Enterprise\ M8000/M9000: CD-RW/DVD-RW-Hot-swap\ supported$

| Disc | Maximum Read Speed | Maximum Write/Rewrite Speed |
|---------|--------------------|-----------------------------|
| DVD-ROM | 8x | - |
| DVD-R | 8x | 8x |

| DVD-RW | 6x | 6x |
|--------|-----|-----|
| CD-ROM | 24x | - |
| CD-R | 24x | 24x |
| CD-RW | 24x | 16x |

Precautions for DVD Drive

- Audio CDs cannot be played.
- DVD-Video discs (movies) cannot be played.
- <u>Data transfer speed may be slower depending on the type of media used.</u>
- Only circular discs can be loaded in the DVD drive. Inserting an unusually sized or shaped disc may damage the drive and such damage is NOT covered by the warranty.
- Do not insert discs that do not comply with the above-mentioned "Precautions for Handling Discs". Moreover, never use damaged, broken, or deformed discs. They may damage the drive and such damage is NOT covered by the warranty.
- In the publicly established DVD standard, the stipulated media thickness range is from 1.14mm to 1.5mm.
 - When any media that fails to meet the thickness requirement is used (such as those CDs with extremely thin recording surface), it may damage the device. Damages caused by using non-standard DVD media are NOT covered by the
 - warranty.

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- The lens might become contaminated when a commercially-available CD-ROM cleaning kit is used. Do not use a CD-ROM cleaning kit.

■ Write/Rewrite Mode

■ Applications for Write/Rewrite Mode

It is recommended to be used for <u>temporary offline data transfer</u>. It is NOT recommended to use the CD/DVD write/rewrite mode for the following:

- To make backups of important data
- To make backups of system volume

When faster write/rewrite time or higher quality is required, the use of a tape device is recommended.

■ Disc-related Utilities (Solaris[™] OS Commands)

- 1) Read commands
 - Only HSFS file system can be read. The use of commands for RAW devices is not supported.
- 2) Write/Rewrite commands
 - "cdrw" and "mkisofs" commands can be used.
 - DVD-R and DVD-RW will be written only in DAO (single-session) mode.
 - "session", "fast", and "all" commands can be used to erase data on CD-RW media.
 - Data might not be completely erased with the "session" or "fast" command; if that is the case, use the "all" command.
 - Only the "all" command can be used to erase data on the DVD-RW media.
 - Pseudo-writing mode is not available.

NOTICE:

<u>Upon completion of a write/rewrite operation, be sure to compare the data with the original to confirm that the operation completed successfully.</u>

■ Precautions for Write/Rewrite

- While the disc is being accessed, do not expose the device to any impacts or vibrations.
- While data is being written, do not turn off and reboot the device, or press the CD/DVD Eject button.
- When the device detects any scratches on the disc, write operation might stop.
- While data is being written, do not start other software applications. If any software application is already open, be sure to close it before starting the write operation.
- Note that the write/rewrite speed might become slower or the operation might not complete successfully if other types of recording discs are used.
- Depending on the type of drive used, the disc created with this DVD drive may not be playable or readable. Also, depending on the recording status, it may not be playable or readable even on supported DVD drives.
- To delete data written on CD-RW or DVD-RW, all data on the disc must be erased.

■ Warnings

Although the DVD drive is constructed to safely block the laser beam, the following precautions should be taken into account.

- Do not look directly into the laser light source of the DVD drive.

 If the laser beam escapes due to accidental damage to the cover, avoid looking at it directly. It may result in irradiation of the eyes, causing impaired vision.
- Do not attempt to disassemble, repair, or modify the DVD drive yourself. It could result in the laser beam escaping from the drive, irradiating the eyes, causing impaired vision.