Intel® Entry Storage System SS4000-E

Software Release Version 1.1: Release Notes

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Storage Systems Technical Marketing

Document Revision History

Date	Revision Number	Modifications
3 Mar 2006	1.0	Initial Release
31 May 2006	1.1	Updated to reflect information pertinent to the latest 1.1 release.
19 June 2006	1.2	Removed section 2.5
15 Aug 2006	1.2-01	1. Added section 5 2. Section 1 was updated to include information regarding the Korean language version

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1.   Introduction

The following Release Notes provide information about current limitations in the most recent release of the Intel® SS4000-E Entry Storage System Management Software, the Client Backup and Recovery Software, the Storage System Console and the Recovery CD application. The release numbers are as follows:

	Release Version		Build		Package	
Component	English	Korean	English	Korean	English	Korean
Intel SS4000-E Entry Storage System Firmware	1.1	1.1K	214	224	BCFv11b214	BCFv11b224
Client Backup and Recovery	3.5	3.5	523	528	CBRv35b523	CBRv35b528
Storage System Console	1.0	1.0	116	118	SSCv10b116	SSCv10b118
Recovery CD Application	3.0	N/A	365	N/A	RCDv30b365	N/A

2.   New Features, Enhancements and Changes

2.1   Fan/thermal monitoring, CPU, other system status

The fan and thermal monitoring of the CPU and the disk drives has been improved. The web management interface has been modified to show system status which will show information such as the fan speed, the temperature of the three sensors in the system, one for the CPU temperature and two for the disk drives temperature. Other information is available in this window as well.

2.2   Improved thermal shutdown and fan/thermal alerting

The system will now send an email alert to notify an administrator if this condition has occurred and logs the event in the system log. The software now sends an email alert if the fan speed is not within the normal operating range as documented in the Intel SS4000-E Entry Storage System Technical Product Specification, revision 1.2.

2.3   PXE remote booting and PXE imaging

If the Client Backup and Recovery application is used to create a backup of a disk image, this image can be recovered by booting the client system using PXE (Pre-boot Execution Environment) and restoring the image. This capability is not supported in older systems. If your system does not support this capability, an error will be displayed.

2.4   HDD write-cache disabled

Hard Disk Drives (HDD) have a cache in the disk drive to temporarily store data prior to writing it to the disk platters. This can lead to data loss if a power loss is experienced while the write is occurring because there may have been data in the write cache of the HDD. This write-caching option has been turned off due to the potential for loss of data if a power loss is experienced. This causes no loss in performance.

2.5   Web UI forces secure communication

In the previous version of the web management user interface, the ability to login via a secure connection (https) was enabled but not the default. In this release accessing the storage system via the web management user interface is now done using a secure connection (https) to create a secure link.

2.6   Jumbo frames

Ethernet packets are typically 1500 bytes in size. Jumbo frames support enables the packet size to be much larger (on the order of 9000 bytes) for improved network performance and some reduction in the amount of CPU cycles required to process the TCP/IP requests. You can enable jumbo frame support via the web management user interface.

2.7   Recovery CD test mode to check for hardware support/compatibility

If you need to use the Recovery CD to recover an image that has been backed up to the Intel SS4000-E Entry Storage Server using the Client Backup and Recovery application, the recovery CD now incorporates a test mode to check the various components in the client system being restored. It will run this test to validate your system can be restored using the drivers on the Recovery CD. If your system contains components that are not supported a report will be displayed to assist customer support in resolving the issue. This report can be saved to the client system to send to customer support for assistance in issue resolution.

2.8   Expandable NAS partition, more flexible space allocation

In the previous version of the product, during the initialization process the software gave the administrator the opportunity to adjust the capacity for shared folders and for image backups. Once the partitioning had completed this could not be changed without reconfiguring the system which would destroy any data on the system. The web management user interface has added a new capability to expand these partitions after the initialization process has completed. If share folder storage needs to be increased and the backup partition has available capacity, the administrator can increase the shared space which will reduce the capacity of the backup space.

3.   Storage System and Client Operating Systems

3.1   Remotely booting from a backup on the storage system

If you need to remotely boot from a backup on the storage system, it is recommended that you select the IP address of the first Ethernet port in the event that your storage system has the DHCP server option enabled. If the DHCP server option is enabled on your storage system, you can remotely boot only from the first port. If this option is disabled and you're using a separate DHCP server in your network, you can remotely boot from either port.

3.2   Accessing shared folders using CIFS, NFS or FTP

If you are currently accessing shared folders via CIFS, NFS or FTP and attempt to expand the NAS volume at the same time, the NAS expansion will not complete. The following message will be displayed: "The storage system is currently busy. When the system is ready, you will be automatically redirected to the appropriate page." Therefore, it is recommended that you stop access to the NAS shared folder on any clients and then expand the NAS volume. Once the NAS volume has been expanded, you can proceed to access the NAS shared folder.

3.3   Using the web management interface during backup or restore

Performance issues could occur for backup and/or restore jobs if the Web management interface for the Intel SS4000-E Entry Storage System is accessed while backup and/or restore jobs are running.

3.4   Downgrading to previous version of software

If the Intel Entry Storage System SS4000-E is running firmware version 1.1, you cannot downgrade the system to run firmware version 1.0.

4.   Client Backup and Recovery

4.1   Previous version of software and current version of Client Backup and Recovery utility

The Intel Entry Storage System SS4000-E firmware v1.0 does not support Client Backup Recovery v1.1. Please refer to the latest Tested Hardware and OS List (THOL) for the latest versions of software and hardware located at:
http://support.intel.com/support/motherboards/server/ss4000-e/index.htm

4.2   Intelligent Management Agent installation

Client Backup and Recovery requires the Intelligent Management Agent (IMA) to be installed, and it is installed automatically during the installation of the Client Backup and Recovery utility. IMA requires that a C: partition exists on the machine where Client Backup and Recovery will be installed.

4.3   After installing Client Backup and Recovery version 1.1

After you upgrade to Client Backup and Recovery version 1.1 from version 1.0, you may not see the backups previously done under the earlier version by selecting "Protect A Disk". To correct this you must repair the connection, using **Repair Connection**, from disks/partitions that were protected using Client Backup and Recovery v1.0.

4.4   Partitions without drive letters

If you create a partition without assigning a drive letter to it, the name of the partition will not display correctly when viewing the available disk list. For example, if the third partition on a disk (Disk 0, Partition 3) has the volume label "Production" but does not have a drive letter associated with it, the Client Backup Recovery user interface will only display the partition's location on the disk (Disk 0, Partition 3).

5.   SPECIFICATION UPDATES

5.1   The Client Backup and Recovery (CBR) application only discovers the first NIC of the SS4000-E when searching for backup locations

Description: If the SS4000-E is connected to the network via NIC port #2 only, the CBR on the client PC attempting to be backed up will only find NIC port #1 and will not locate NIC port #2. Subsequently you will not be able to backup the client. NIC port #1 on the SS4000-E is erroneously shown instead of the correct NIC.

Workaround: To continue, manually enter the IP Address of NIC port #2 for the SS4000-E into the Client Backup and Recovery User Interface.

5.2   During a linear expansion of the disk configuration, the file system may become unrespsonsive

Description: If a linear expansion of the disk configuration is done during heavy I/O traffic to the SS4000-E, the file system may become unresponsive.

Workaround: To recover from this condition, you only need to reboot the SS4000-E.