Intel[®] Server Continuity Suite v1.3 Release Notes

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A. PRODUCT OVERVIEW

Intel[®] Server Continuity Suite (Intel[®] SCS) version 1.3 is a server management solution for small and medium enterprises that helps achieve business continuity. Intel[®] SCS provides distinct features in a simplified manner, and form a part of an IT administrators' daily needs to manage their servers with the following major modules:

- Hardware Management
- Storage (RAID) Management
- Continuous Data Protection

Refer <u>Intel[®] Server Continuity Suite User Guide</u> for details

B.PACKAGE CONTENTS

The Intel[®] SCS zip package includes the following software and documentation.

- Intel[®] SCS version 1.3
- Intel[®] Recovery Wizard version 1.3
- Intel[®] RAID Web Console 2 v12.01.03.0100
- Intel[®] Server Continuity Suite User Guide
- Intel[®] Server Continuity Suite Installation Guide
- Release Notes

For the latest documentation go to: <u>http://www.intel.com/p/en_US/support/highlights/server/scsuite/</u>

C.SOFTWARE REQUIREMENTS

During the Intel[®] SCS installation, the installer detects if the below required software is installed. All required software detected as not installed will be automatically installed during the Intel[®] SCS installation.

- Oracle* Java* Runtime Engine version 7.0.7
- Microsoft Visual C++ 2005 Redistributable* version 8.0.59193
- JRuby for Windows* version 1.6.7.2
- PostgreSQL* versions 9.0.7 and 9.1.3

D. INSTALLATION/UPGRADE INSTRUCTIONS

Preparing for the Intel[®] SCS installation or upgrade:

- 1. Download the Intel[®] SCS v1.3 package from:
 - http://www.intel.com/p/en_US/support/highlights/server/scsuite/
- 2. Unzip the package to a folder

Installing $Intel^{\ensuremath{\mathbb{R}}}$ SCS or upgrading to the latest $Intel_{\ensuremath{\mathbb{R}}}$ SCS release:

- 1. Run the file "default.hta" from the folder in step 2 above to launch the main installer interface
- 2. Refer to the *Intel[®] Server Continuity Suite Installation Guide* for detailed instructions



E. RESCUE MEDIA

The Intel[®] SCS v1.3 zip package does not include the Rescue CD. Rescue CD mode is intended to be used to recover the OS boot volume.

Creating the Intel[®] SCS Rescue CD:

- 1. Download the Intel[®] SCS v1.3 Rescue CD zip file from: http://www.intel.com/p/en_US/support/highlights/server/scsuite/
- 2. Extract the zip file into a temporary directory
- 3. Using a CD Burning application, burn the ISO image into a blank CD

F. GENERAL INFORMATION

Supported Operating Systems:

- Microsoft^{*} Windows Server^{*} 2008 SP2
- Microsoft^{*} Windows Server^{*} 2008 R2 SP1

Supported Operating System Languages:

- English (US)
- German (DÉU)
- Russian (RUS)
- Italian (ITA)
- French (FRÁ)
- Spanish (ESP)

Supported Browsers:

- Mozilla* Firefox* 4.0 or higher
- Microsoft* Internet Explorer* 8.0 or higher⁽³⁾
- Google Chrome* 15.0.874.106 m

Intel[®] Server Continuity Server Suite is best viewed with screen resolution set at 1280 X 1024 or higher.

When launching the Intel[®] SCS console from a browser, if you get a message that there is a problem with the website's security certificate, click the appropriate button in the message to launch the Intel[®] SCS Console. See **Known Issues** for more information.

Microsoft* Internet Explorer*: The visual experience of Intel[®] SCS in Microsoft Internet Explorer 9 may be better than the visual experience of Intel[®] SCS in Microsoft Internet Explorer 8.

Important: You must enable JavaScript* in your browser for all functionalities in Intel[®] SCS to work.

Supported Intel[®] Server Systems and Intel[®] Server Boards:

The Intel[®] SCS v1.3 release supports systems built with the following Intel[®] Server Boards. For a complete list of all supported Intel[®] Server Boards refer to the



Supported Intel[®] Server Systems and Intel[®] RAID Controllers list at: http://www.intel.com/support/motherboards/server/scsuite/sb/CS-032978.htm

- Intel[®] Server Board 1200BTL¹
- Intel[®] Server Board 1200BTLR
- Intel[®] Server Board S5520HC
- Intel[®] Server Board S5520HCR
- Intel[®] Server Board S5520HCV
- Intel[®] Server Board S5500HCV
- Intel[®] Server Board S5500HCVR
- Intel[®] Server Board S5520HCT
- Intel[®] Server Board S5500HCT
- Intel[®] Server Board S5500BC
- Intel[®] Server Board S5500BCR
- Intel[®] Server Board S2600CP
- Intel[®] Server Board S2600GL
- Intel[®] Server Board S2600GZ
- Intel[®] Server Board S2600IP
- Intel[®] Server Board W2600CR
- Intel[®] Server Board S2600CO
- Intel[®] Server Board S2400EP
- Intel[®] Server Board S2400BB
- Intel[®] Server Board S2400SC
- Intel[®] Server Board S2400SC2
- Intel[®] Server Board S2400GP
- Intel[®] Server Board S1400FP
- Intel[®] Server Board S1400SP

Notes:

1. Intel[®] SCS v1.3 is not supported on Intel[®] Server Board S1200BTS

Supported Intel[®] Raid Controllers:

The Intel[®] SCS v1.3 release supports the following Intel[®] RAID Controllers, Intel[®] Integrated Server RAID Module, Integrated RAID I/O Expansion Module and Intel[®] Embedded Server RAID Technology. For a complete list of all supported Intel[®] RAID Controllers and adapters refer to the Supported Intel[®] Server Systems and Intel[®] RAID Controllers list at:

http://www.intel.com/support/motherboards/server/scsuite/sb/CS-032978.htm

- Intel[®] RAID Controller RS2BL040
- Intel[®] RAID Controller RS2BL080
- Intel[®] RAID Controller RS2MB044
- Intel[®] RAID Controller RS2SG244
- Intel[®] RAID Controller RS2WC040
- Intel[®] RAID Controller RS2WC080
- Intel[®] RAID Controller RS2WG160
- Intel[®] RAID Controller SASMF8I
- Intel[®] RAID Controller SASUC8I
- Intel[®] RAID Controller SASWT4I
- Intel[®] RAID Controller SRCSASBB8I



- Intel[®] RAID Controller SRCSASJV
- Intel[®] RAID Controller SRCSASLS4I
- Intel[®] RAID Controller SRCSASPH16I
- Intel[®] RAID Controller SRCSASRB
- Intel[®] RAID Controller SRCSATAWB
- Intel[®] Integrated Server RAID Module AXX4SASMOD
- Intel[®] Integrated Server RAID Module AXXRMS2AF040
- Intel[®] Integrated Server RAID Module AXXRMS2AF080
- Integrated RAID I/O Expansion Module AXXROMBSASMR
- Intel[®] Embedded Server RAID Technology II(ESRT-2)
- Intel[®] RAID Controller RS25AB080
- Intel[®] RAID Controller RS25SB008
- Intel[®] RAID Controller RS25DB080
- Intel[®] RAID Controller RS25GB008
- Intel[®] RAID Controller RS25NB008

Supported LSI RAID Controllers

The Intel[®] SCS v1.3 release supports the following LSI^{*} RAID Controllers:

- LSI^{*} MegaRAID SAS 9240-4i
- LSI^{*} MegaRAID SAS 9240-8i
- LSI^{*} MegaRAID SAS 9260-4i
- LSI^{*} MegaRAID SAS 9260-8i
- LSI^{*} MegaRAID SAS 9260-16i
- LSI^{*} MegaRAID SAS 9265-8i
- LSI^{*} MegaRAID SAS 9280-4i4e
- LSI^{*} MegaRAID SAS 9266-4i
- LSI^{*} MegaRAID SAS 9266-8i
- LSI^{*} MegaRAID SAS 9280-16i4e

Storage:

Fast initialization is done by default after a RAID array is created. The Virtual Drive initialize menu option is designed for foreground (full) array initialization.

If an operating system is installed on a virtual drive or initialization is in progress, the "Delete" and "Initialize" menu options are not available for the selected virtual drive.

RAID 0, consistency check is not supported

Adding a Virtual Disk to an existing RAID Array will fail intermittently if the specified Virtual Disk size is larger than the continuous block of space available in the RAID Array.

Data Protection:

- The backup repository can be a local hard drive, RAID volume or ISCSI storage array. Only NTFS File system volumes are supported for Data Protection
- An ISCSI disk configured as the Data Protection Repository volume should be used for a single server only, create one authenticated LUN on one disk volume.



Important: The following is not supported with Data Protection:

- CIFS (Windows* file server share folder) is not supported.
- Dynamic Disks are not supported for either source volumes or backup repositories.
- GPT partitions are not supported

Important: Do not scan the backup repository volume using Anti-virus software.

Important: Do not run de-fragmentation on protected volumes.

Shrink volume operation is not supported when a Volume is protected.

Intel[®] SCS data protection supports application consistency only for those applications which have Microsoft* VSS writer included in the application.

While Recovering or Cloning a volume, data protection for the volume that is being recovered or cloned will be paused. Protection will resume once the Recover Volume or Clone Volume operation is complete. Do not manually resume protection for the volume.

Important: Rescue mode is intended to be used to recover the OS boot volume. To recover multiple volumes, including the OS Boot volume, first use the Rescue CD mode to recover the OS Boot volume. Do NOT select the repository as the target volume during the Rescue OS boot volume recovery. Then launch the Intel[®] Recovery Wizard and recover the remaining volumes.

Important: For iSCSI target to work while performing a Rescue operation, during OS volume recovery, a DHCP server is required. Static IP addresses are not supported

Intel[®] SCS and Intel[®] Recovery Wizard refer to an Application Consistent Restore Point (ACRP) as a consistency point, a restore point and a bookmark.

Install/Uninstall

Important: Verify System time is correct prior to installing Intel® SCS. Once the Intel® SCS installation is complete, do not alter system time as it might result in unexpected behavior.

Important: Intel[®] SCS v1.3 supports PostgreSQL* versions 9.0.7 and 9.1.3, any other versions are not supported. If an unsupported version of PostgreSQL* is installed, follow the steps below to uninstall PostgreSQL prior to starting the Intel[®] SCS installation. To preserve data from a previous PostgreSQL installation, when prompted enter the original PostgreSQL password during the Intel[®] SCS installation.

Steps to uninstall PostgreSQL prior to installing Intel[®] SCS:

- 1. Uninstall PostgreSQL* using Add & Remove Programs from the Control Panel
- 2. Remove the Postgre service account using User Accounts from the Control Panel
- 3. Enter original PostgreSQL password when prompted during Intel[®] SCS install

Important: Intel[®] SCS will not function properly with multiple versions of PostgreSQL installed.

PostgreSQL* Service account and Database (DB) admin account passwords cannot contain the characters ", ', <, >, (, or).



Intel[®] SCS installer detects and verifies all prerequisites are present prior to installation. If prerequisites are missing or if unsupported versions are detected, a message is displayed. Refer to the Intel[®] Server Continuity Suite Installation Guide for details.

Intel[®] SCS uninstall does not uninstall PostgreSQL. To cleanly uninstall PostgreSQL after uninstalling Intel[®] SCS follow the steps below.

- 1. Uninstall PostgreSQL^{*} using Add & Remove Programs from the Control Panel
- 2. Remove the Postgre service account using User Accounts from the Control Panel
- 3. Remove the registry entries using Windows^{*} Registry Editor located at: HKEY_LOCAL_MACHINE\Software\PostgreSQL
- 4. Delete all PostgreSQL related folders from C:\Program Files

G. DEFECTS FIXED IN THIS RELEASE

H. NEW FEATURES/FUNCTIONS IMPLEMENTED IN THIS RELEASE

- Intel[®] SCS v1.3 provides support for LSI* RAID Controllers. The list of LSI RAID Controllers can be found in the section "Supported LSI* RAID Controllers".
- Support added for the Intel[®] Server Board S2400EP, Intel[®] Server Board S2400BB, Intel[®] Server Board S2400SC, Intel[®] Server Board S2400SC2, Intel[®] Server Board S2400GP, Intel[®] Server Board S1400FP, Intel[®] Server Board S1400SP

I. FEATURES/FUNCTIONS NOT IMPLEMENTED

J. KNOWN ISSUES

- Microsoft* Internet Explorer* 9: In Microsoft* Internet Explorer* 9.0 the error message "Select a Volume" or "Select a Repository" may be displayed on the Data Protection Set Up wizard screens. This only occurs on systems where there are only two virtual drives detected, the OS boot drive and the Repository drive. To continue Data Protection set up go to the Internet Explorer Tools menu and select Internet Options. Next click on the Security tab and select the Local Intranet zone. Click the Sites button and verify the "Automatically detect intranet network" option is unchecked and that the following three options are checked:
 - Include all local (intranet) sites not listed in other zones
 - Include all sites that bypass the proxy server
 - Include all network paths (UNCs)
- **Installer:** Intel[®] SCS installer may indicate the Intel[®] Server Board S1200BTL did not meet the "1GB or more of available physical memory" of the system prerequisite conditions, even if the user has populated 1GB physical memory on the server. This is caused by the server boards system BIOS which may use memory space, so the



available system memory is less than 1GB. It is recommended to install Intel[®] SCS a server system using the Intel[®] Server Board S1200BTL with 2GB or more physical memory.

- **Installer:** The Intel[®] SCS installer may pause if you click the Documents or Support buttons during the Intel[®] SCS install. To continue the installation, you must close the Documents/Support pages.
- **Installer:** Intel[®] SCS database service account admin password does not support special characters as the first character in a password.
- **Installer:** After providing the password for Intel[®] SCS database service account configuration, you must click the "Install" button to continue; if you press the "Enter" key on the keyboard to continue, some unexpected scripts may be launched.
- **Installer:** Intel[®] SCS does not support the "Repair" option under Control Panel > Add/Remove Programs.
- **Update Installer:** Updating to Intel[®] SCS v1.3 from v1.2 on a system running Microsoft^{*} Windows Server^{*} 2008 x64, an unsigned driver (invirvol.sys) is installed.
- **Self-Signed Certificate:** This product supports secure transport using SSL/TLS. This product supports secure transport using SSL/TLS. SSL/TLS uses a self-signed certificate because of which the browsers will throw an "Untrusted Connection" warning. The following is a screen shot of this warning on Microsoft Windows*.

	This Connection is Untrusted
	You have asked Firefox to connect securely to localhost:7000 , but we can't confirm that your connection is secure.
	Normally, when you try to connect securely, sites will present trusted identification to prove that you are going to the right place. However, this site's identity can't be verified.
	What Should I Do?
	If you usually connect to this site without problems, this error could mean that someone is trying to impersonate the site, and you shouldn't continue.
	Get me out of here!
	Technical Details
	I Understand the Risks
	If you understand what's going on, you can tell Firefox to start trusting this site's identification. Even if you trust the site, this error could mean that someone is tampering with your connection.
	Don't add an exception unless you know there's a good reason why this site doesn't use trusted identification.
	Add Exception

The certificate used in Intel[®] Server Continuity suite is a self-signed one to reduce the cost of deployment. All modern browsers will detect self-signed certificate and give a warning that the "certificate is invalid" since the authority that signed the certificate is not a publicly acknowledged authority. However, Users can override the warning and accept the certificate. You should do this only if you are sure that the certificate is originated from the application itself (by making sure you first launch the application from a trusted network and add the certificate to the trusted list). Once a certificate is accepted, the warning goes away as long as you launch the application from the same client.

• **Intel[®] SCS Console:** Launching Intel[®] SCS after a server boot event, the user may experience a blank page on the web browser, this is cause by related services just starting up. Perform another connection request after a minute to successfully launch Intel[®] SCS.



- Intel[®] SCS Console: An error message such as "middleware connection error", "Internal application error" and other application error may occur when Intel[®] SCS is launched, to resolve the error messages, go to Microsoft Windows* Service Manager and restart the "Appcore" service and launch Intel[®] SCS again. If the error message is still displayed, copy the production.log file from folder <SCS INSTALL_DIR>\console\logs and send to Intel technical support.
- **BMC Actions:** Error message "Response from middleware indicates error" is displayed when attempting to create a BMC user account using an existing user account name. The wrong error message is displayed, however it does prevent the creation of a duplicate BMC user account.

System Actions

• The informational error message "uninitialized constant Mail::Field::ContentTypeField" under System Actions is displayed when the server with Intel[®] SCS installed loses network connectivity. To resolve this error, re-connect the server to the network.

Hardware Management

- **Events tab:** In rare insistences the timestamp may be incorrect for single events in the hardware event log.
- **Events tab:** Hardware events are displayed in the order in which occurred, in rare instances events may be listed without a timestamp. This occurs if the firmware timer was not initialized prior to the hardware event occurrence.
- **Board Image:** In rare instances, the Board image (VPE) may indicate an incorrect DIMM position for Mem P1 Thrm Margin Trip with select boards.
- **Sensor Tab:** Intel[®] Server Board S1400FP: When the P1 MTT sensor exits a critical state the Intel[®] SCS hardware sensor tab may continue to display the sensor as critical (red) after crossing threshold from critical back to warning. Sensor may continue to be displayed as critical (red) until sensor health is updated by the BMC.
- **Board Image:** An incorrect heat sink may be displayed on the hardware management screen if the server uses non Intel chassis.

Storage

- **Storage events:** A delay in displaying storage events in the Intel[®] SCS console may occur with system configurations that include the products below. Refer to the RAID log in the RAID Web Console 2.
 - Intel[®] RAID Controller SASMF8I
 - Intel[®] RAID Controller SRCSASPH16I
 - Intel[®] Integrated Server RAID Module AXXRMS2AF080
 - Intel[®] Integrated Server RAID Module AXXRMS2AF04
 - Intel[®] Integrated Server RAID Module AXX4SASMOD
- The Intel[®] Integrated Server RAID Module AXX4SASMOD supports one Virtual Drive (VD) in a single RAID array. The Add Virtual Drive action for an existing RAID Array with this RAID module will fail.
- Intel[®] Integrated Server RAID Module AXX4SASMOD does not support SAS and SATA hard drives in the same RAID array. If a RAID Array is configured using this RAID module and both SAS and SATA hard drives, Intel[®] SCS will attempt to create the RAID



Array. The RAID Array will be left in an unhealthy state and will not be usable.

- **Storage events:** Storage events are displayed in the order in which they occurred, in rare instances events:
 - May be listed without a timestamp. This occurs if the firmware timer was not initialized prior to the Storage event occurrence.
 - May not be displayed in Intel[®] SCS, but are displayed in the RAID log in the RAID Web Console 2. To resume storage event display in the Intel[®] SCS restart the server.
- For specific time zones, i.e. New Zealand Daylight Time (NZDT), during daylight savings time the timestamp for events and actions may be +/- one hour from the actual system time. All events and actions are logged immediately as they occur, however the timestamp may not match the system time in these time zones.

Data Protection

- Physical hard drives with large sector sizes (greater than 512 bytes) are not supported by Data Protection.
- In general, in the event of a sudden power loss, data in memory buffers in the operating system and hard drives will not get written to disk, and this can result in data loss and corruption of the data stored in the file system. In rare cases, if a sudden power loss were to occur at the instant when the backup repository metadata was being updated by the Intel[®] Server Continuity Suite, the backup repository configuration could become inconsistent and the data inaccessible. For maximum reliability, a UPS should be used to detect an unexpected power outage and the system should be properly shutdown. If this occurs, a critical event is logged under Data Protection stating "The repository configuration is inaccessible. Please refer the FAQ section in user manual for details."
- In rare cases, while performing a Rescue operation, the rescue may not complete. Reboot the server and retry the rescue operation.
- If any of the protected volumes are missing or deleted while data protection is running, there will be an event stating that the protected volume is missing in the events tab. The Data Protection health does not change and the volume will still be displayed as protected on the Data Protection screen. Restore the volume to continue protection. If volume cannot be restored Data Protection will need to be deleted and reconfigured.
- Running additional backup software on the server may impact the Continuous Data Protection operation. The issue occurs when more than one backup application is attempting to create a consistency point at the same time. Only one consistency point can be created at a given time. If additional backup software is running on the server with Intel[®] SCS installed and Data Protection configured a consistency point may be missed. When this occurs, the below warning event is logged under Data Protection: Consistency job Failed with "Vacp failed to issue the consistency. Failed with Error Code:10007...



Intel[®] Recovery Wizard/Rescue Mode:

- If uninstalling the Intel[®] Recovery Wizard manually the Intel[®] Recovery Wizard is listed as the "Intel[®] Server Continuity Suite - Data Protection1.3" under Uninstall a Program in the Windows Control Panel.
- Once a recovery has started using either the Recovery Wizard or the Rescue media, if the operation is canceled/aborted before the volume recovery has successfully completed, the target volume is left in an incomplete state. To return the volume to a healthy state, restart the recovery operation and wait until the operation successfully completes. Aborting a recovery does not return the target volume back to the state prior to the start of the recovery operation.
- If time based recovery operation is not successful select a different time or a consistency point (bookmark) option for recovering the files or volumes.