intel Technical Advisory

5200 NE Elam Young Parkway Hillsboro, OR 97124

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November 10, 2004

Intel® RAID Controller SRCU42X with Firmware 413E and older has Random Deletion Enabled

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Products Affected

Intel® RAID Controller SRCU42X, product code SRCU42X

Description

<u>Customers should not attempt to use RAID Web Console versions 2.6 or older to manage their RAID</u> <u>configuration if a Random Deletion operation has been performed in Bios Console that has left unused space</u> <u>on the physical drives; doing so could result in unpredictable operation and a possible loss of the RAID</u> <u>configuration and a resulting data loss.</u> Random Deletion is a feature provided by the RAID firmware that allows logical drives to be deleted in any order. The default setting for this feature is programmed at the factory; this setting should be set by default to disable Random Deletion capability. SRCU42X controllers built with firmware versions 413E and older had this default setting set to enable Random Deletion. The firmware version can be viewed during POST when the RAID controller product code is displayed, or the firmware version can be viewed in the BIOS Console Utility by pressing <ctrl+g> when prompted during POST. The first BIOS console screen displays the firmware version.

The RAID management utility, Bios Console, which is incorporated into the firmware of the RAID controller supports Random Deletion and will allow out of order deletions to be performed if the default Random Deletion setting is enabled. However, the RAID Web Console RAID management utility, versions 2.6 or older, does not support Random Deletion and will not correctly display the raid configuration when that configuration contains unused space created by an out of order logical drive deletion. Attempting to modify the configuration or create logical drives using Raid Web Console version 2.6 or older when the configuration is not properly displayed due to a Random Deletion operation previously performed will likely result in a loss of the RAID configuration as well as a resulting data loss.

Root Cause

This issue resulted from an incorrect default setting programmed into the affected RAID controllers at the factory.

Corrective Action / Resolution

Intel has modified the RAID controller programming at the factory to correct this issue, RAID controllers containing 413Y or newer are programmed at the factory with Random Deletion Disabled. In addition, Intel will provide an updated version of RAID Web Console that supports Random Deletion and that will properly display the RAID configuration when that configuration includes unused space created by an out of order logical drive deletion. Intel expects this updated version of RAID Web Console to be available about February 15, 2005. The updated version of RAID Web Console to be available about February 15, 2005. The updated version of RAID Web Console will be available for download at http://support.intel.com/support/motherboards/server/ and will also be incorporated into future versions of the resource CD shipped with the product.

Customers who have performed an out of order logical drive deletion can continue to manage the RAID configuration using the BIOS Console utility. In addition, BIOS console can be used to create a logical drive in unused space created by an out of order deletion. Once all the unused space has been allocated to a logical drive, RAID Web Console version 2.6 or older can then be used to manage the RAID configuration.

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Workarounds

Use BIOS Console to manage the RAID configuration if an out of order deletion has been performed. Use BIOS Console to create a logical drive in unused space created by an out of order logical Drive deletion.

Please contact your Intel Sales Representative if you require more specific information about this issue.

Enterprise Platforms & Services Division Intel Corporation