

intel® Technical Advisory

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5200 NE Elam Young Parkway
Hillsboro, OR 97124

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Dynamic Disk Activation Causes Service Partition and Windows 2000 Operating System Inaccessible

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Products Affected

Product Type	Product Code
SKA4 Server Baseboard	BKO2HE
SRKA4 Server Platform	SKODVHI, SKODVBK, SKODVBS, ISP4400
SPKA4 Server Platform	SKOC2HI, SKOC2BS, SKOC2BSxx

Description

The Intel® Service Partition is a special hard disk partition that a user may optionally install on the Intel SKA4 server system. The Service Partition, when installed, is configured during initial server setup and contains utilities, diagnostics, and other software required to remotely manage a system with bundled Intel software.

The Microsoft* Windows* 2000 NTFS file system environment provides the user with the option to activate the NTFS file system as a "dynamic disk". However, when a hard drive containing the Service Partition is activated as a dynamic disk, the Service Partition and the operating system become inaccessible.

Root Cause

The Service Partition boot drive uses drive type '98h' (152 decimal under BIOS Configuration utility), which the Windows 2000 operating system does not recognize. Therefore, when a hard drive containing a Service Partition is activated as a dynamic disk, the partition is not displayed in the proper location and cannot be recognized by Windows 2000 management applications. Deleting and re-creating any partition on dynamic disks outside of Windows 2000 could lead to loss of data, problems during system start up, or an inability to boot the system.

Corrective Action / Resolution

Intel will release a new BIOS and Service Partition Administrator as part of the next ECO, which is schedule for the middle of September 2000 for SKA4 systems. This release will resolve the issue when managing a Service Partition on Dynamic disk environment.

For additional details regarding this issue, refer to the following articles on the Microsoft Knowledge Base before installing and converting the disk containing service partition to a Dynamic Disk:

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- Q175761 - Dynamic vs. Basic Storage in Windows 2000
(<http://support.microsoft.com/support/kb/articles/Q175/7/61.ASP>)
- Q222188 - Upgrading the System or Boot Drive to Dynamic (Rooting).
(<http://support.microsoft.com/support/kb/articles/Q222/1/88.ASP>)
- Q242168 - Problems Managing EISA Partition on Dynamic Disks
(<http://support.microsoft.com/support/kb/articles/Q242/1/68.ASP>)
- Q259075 - Cannot Upgrade Basic Disk Containing a Single EISA Partition to Dynamic Disk
(<http://support.microsoft.com/support/kb/articles/Q259/0/75.ASP>)

Note: Replace all references to EISA Partition in the articles with Service Partition.

Workarounds

Intel recommends that the user does not activate the dynamic disk option on a primary hard drive that has been configured with the Intel Service Partition. Instead, the user should install the Service Partition on a secondary hard drive that does not contain the Microsoft Windows 2000 Operating System.

If a system has already been configured with a Service Partition using the original production SKA4 CD, the Service Partition must be deleted USING THE ORIGINAL PRODUCTION CD. The Service Partition can then be recreated and reinstalled using the new Service Partition administrator that will be available as an ECO release for SKA4 in the middle of September 2000. However, even though the September release will resolve the issue with managing a service partition in a dynamic disk environment, the user will also need to follow the workaround outlined in Microsoft Knowledge Base Q259075 when using a dynamic disk partition in a Windows 2000 environment.

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

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