

Recreating a missing VMFS datastore partition in VMware vSphere

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Symptoms

•A datastore has become inaccessible. •A VMFS partition table is missing.

Cause

The partition table is required only during a rescan. This means that the datastore may become inaccessible on a host during a rescan if the VMFS partition was deleted after the last rescan. The partition table is physically located on the LUN, so all vSphere hosts that have access to this LUN can see the change has taken place. However, only the hosts that do a rescan will be affected. This article provides information on: • Determining whether this is the same problem. • Resolving the problem.

Purpose

This issue occurs because the VMFS partition can be deleted by deleting the datastore from the vSphere Client. This is prevented by the software, if the datastore is in use. It can also happen if a physical server has access to the LUN on the SAN and does an install, for example.

Resolution

Since this question is related to the VMware mostly, we prefer to provide the link to the original

article: http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2046610

Additional Information

In VMware Sphere 5.x and later, newly-created VMFS datastores use GPT partition tables instead of MBR partition tables. The benefit of using GPT partition tables is thatmore than one copy of the partition table is kept on the LUN. If a physical Windows host has access to the LUN on the SAN, it, by default, automatically assigns a drive letter to the LUN, which destroys an MBR partition table. This type of problem does not occur with GPT, since vSphere uses the backup partition table.

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