Intel® Storage System SSR316MJ2

Release Notes Version 6.0

Storage System Console Version 6.0.25.0012
Storage System Software Version 6.0.25.0018
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Thank you for your interest in Storage System SSR316MJ2.

These Release Notes provide

- information about current limitations in this release

- possible workarounds to these limitations

Storage System Software

Module

Incorrect Error Message When Powering Off Drive (621)

Scenario

New drives are added to the system and powered on. The powering on fails.

The drives are then powered off. You may see the following error message:

"Power off failed because the ide bus cannot be deactivated."

Solution

Ignore this error message. It is incorrect. The drives were never actually powered on, so they can be removed safely from the system.

Storage

Removing Drive From Storage Server Without First Powering Down Drive Causes RAID To Become Degraded (711)

See the section, Managing Disks, in the Software User Manual or the online help, for instructions about removing and replacing drives.

Scenario

If you remove a drive without first powering it down in the Storage Server Console, RAID becomes degraded and the SSM becomes inaccessible.

Workaround

1. Re-insert the drive.

2. Reboot the module.

3. Select the inactive drive(s) in the list and click Add Disk to RAID. The SSM starts rebuilding RAID again.

Replacing A Drive With A Drive Of A Different Size May Cause Unexpected Behavior (493)

Only replace drives with drives of the same capacity, same model number, and from the same vendor.

When Adding Drives To System, The Storage Server Remains Down (782)

When adding drives to the SSM, if, after adding the drives to RAID, the Storage Server does not come back up and remains in the down state, check to ensure that there is enough memory in the SSM to support the drive configuration.

Recommendation

Plan to have 128 MB of memory per disk.

Number of disks	Recommended memory
4	512
8	1 GB
16	2 GB

SSM Comes Up With RAID Degraded After Rebooting SSM While RAID Is Rebuilding (1211)

If an SSM is rebooted when RAID is rebuilding, it will revert to a RAID degraded state.

Workaround

1. Log in to the SSM. The SSM Configuration window opens.

2. Select the Storage category and click the Disk Setup tab.

3. Select the inactive drive(s) in the list and click Add Disk to RAID. The SSM starts rebuilding RAID again.

Network

When SSM Is Configured For DHCP And Is Disconnected From DHCP, SSM Loses IP Address Upon Reboot (666)

Recommendation

Always assign a static IP address to an SSM.

Information About NIC Bonding Should Include 4 Port Bonds (701)

The software supports 2 and 4 port bonds. Therefore, the software user manual section on Deleting A NIC Bond, the final sentence in both the first and second paragraphs should read "All other interfaces are disabled and the IP addresses are set to 0.0.0.0."

SNMP

SNMP Snapshot ACL Table Does Not Display All Entries (750)

Scenario

Using SNMP monitoring, when reviewing the Snapshot ACL table, the table may not report all snapshots existing on the system.

Workaround

Use the Storage System Console to verify what authentication groups are associated with snapshots.

1. Click the snapshot for which you want to verify the authentication group association.

2. Click the Authentication Groups tab. The authentication groups are listed.

SNMP Variable Indicates Manual Snapshot Was Created By Script (665)

Snapshots can be created three ways; manually, using snapshot schedules and using scripts. If you use an SNMP client for monitoring, the variable "volumeSnapshotCreator" sometimes displays a wrong value.

Management Groups

SSM Loses Its License Key When It Is Removed From A Management Group (1218)

License keys are assigned to an SSM through a management group. Therefore, when the SSM is removed from a management group, it loses its license key.

Solution

When the SSM is re-added to a management group, you can reassign the license key.

Virtual Manager

On Starting A Virtual Manager When The Quorum Is Lost, All Volumes Become Unavailable (1290)

In a management group configured with a virtual manager, an SSM that is running a manager becomes unavailable. If a virtual manager is started on an SSM in that management group that is not running a manager, then volumes may become inaccessible until the unavailable SSM with its manager is restored into the management group.

Workaround

Always start the virtual manager on an SSM that is running a manager.

Volumes

Moving Volume To Cluster With Down SSM (330)

The system allows you to move volumes from one cluster to another. However, if you move a volume to a cluster with an SSM that is not online, the migration does not start until the SSM comes online. Until that time the volume remains in the original cluster and is still available in that cluster.

For more information about moving volumes, see the section Editing a Volume in the Software User Manual or in the online help.

Remote Copy

Temporarily Reducing the Remote Copy Bandwidth to Zero Stalls Remote Copy (632)

If you reduce the bandwidth for a remote management group to zero and then increase it, there is a very long delay before remote copy resumes.

Workaround

Use the Storage System Console to reboot, one at a time, each SSM that is running a manager in the remote management group.

Recommendation

Never set the remote copy bandwidth to zero.

Feature Registration

Feature License Key Expiration Causes Unspecified Results (819)

Scenario

While using the 30-day evaluation period to test a licensed feature, the 30-day evaluation period expires. As described in the warnings provided, when the license expires the volumes associated with the licensed feature becomes unavailable. When a volume becomes unavailable, the effect on a given application is unspecified and characteristic of that application. However, there is a potential for the application to crash and data corruption to occur.

Recommendation

Purchase a license key or disable the evaluation before the 30-day trial period expires.

Fibre Channel

Configuring Fibre Channel For Failover (464)

1. During failover, do not rescan disks in the Windows Disk Management console.

2. Supported configurations for failover are for a maximum of 2 Fibre Channel ports on the server. There is a 30 second delay for failover to complete.

3. Add/change the following to the server registry settings. **Warning**: Please back up your registry before making any changes.

-   Select HKEY_LOCAL_MACHINE and navigate to the QLogic driver as follows:

```
HKEY_LOCAL_MACHINE
    SYSTEM
        CurrentControlSet
            Services
                Ql2300
                    Parameters
                        Device
```

-   Change DriverParameters to: UseSameNN=0;buschange=0;fixupInquiry=1

Fibre Channel Failover Is Not User Configurable (360)

Default timeout is 30 seconds before failover can occur to another adapter.

Fibre Channel Failover Caused By SSMs Losing IP Connection Requires User To Manually Reset The Fibre Channel Preferred Path When IP Connection Is Restored (593)

Scenario

IP connection between the SSMs within the management group is lost, but the systems do not lose power. Fibre Channel failover is triggered on the host system. Since the SSMs do not lose power, failback to the preferred Fibre Channel connection does not occur when the IP connection between the SSMs is restored.

Workaround

Manually reset the host to the preferred Fibre Channel I/O path.

When A Fibre Channel Port Reaches "Enabled" Status In The Passive Report Its Status Will No Longer Update (354)

In the Edit Configuration - Reporting category, the Passive Report lists Status under Fibre Channel Items. This status updates as the state of the Device/Port changes.

Device/Port Status'

initialized	HBA Port is initialized, ready for microcode download
waiting for Firmware	attempting to download Host Bus Adapter microcode
active	HBA microcode downloaded and executing
enabled	HBA Port I/O is enabled
not ready	HBA Port not available for use

However, in this release, the status stops updating when the port becomes enabled. Subsequent status changes are not reported in the Passive Report.

Example

The port reaches the enabled state and then looses connectivity. The status in the Passive Report remains "enabled."

Configuring Fibre Channel Volumes For Failover To Avoid LUN Number Conflicts (761)

It is possible to create Fibre Channel volumes with the same LUN numbers and assign them to different authentication groups with different World Wide Port Names (WWPN) that refer to Fibre Channel ports on the same host HBA. This configuration can cause LUN number conflicts if the Fibre Channel host is configured for failover.

The scenario below describes such a configuration.

1. Create two Authentication Groups for Fibre Channel access.

- Auth_group_0 with the WWPN of 210000E08B112C1A for port 0.

- Auth_group_1 with the WWPN of 210100E08B312C1A for port 1.

2. Create a 10 GB Fibre Channel volume (volume_10), associate Auth_group_0 to the volume, and assign LUN 1.

3. Create another 10 GB Fibre Channel volume (volume_20), associate Auth_group_1 to the volume, and assign LUN 1.

The problem with this scenario occurs if port failover is enabled, which is the default setting for QLDirect, (the QLogic tool to manage failover). QLDirect detects the two volumes. Since the volumes have the same WWNN (world wide node name), have different WWPNs, and have identical LUN numbers, QLDirect treats the volumes as the same volume.

Workaround:

If your configuration requires that failover be enabled:

1. Create one authentication group that includes both ports' WWPNs.

2. Then associate this authentication group to the volumes and assign separate LUN numbers.

Recommendation:

Use unique LUN numbers for the same host.

Removing Fibre Channel LUN 0 Temporarily Removes All LUNs From The Windows 2003 Host (1276)

Scenario

A volume is configured as LUN 0. Later, that LUN designation is broken, for example, by

- deleting the volume,

- disassociating the volume from the authorization group,

- changing the LUN with the authorization group association, or

- disabling permissions with the LUN group association.

If the user then performs a "Rescan Disk" operation from the Disk Management panel of the Computer Management window, then Windows users may see a temporary interruption of service to all other volumes.

Workarounds

- Only use LUN 0 for the storage controller. Do not create any volumes with LUN 0.

  or

- Before deleting LUN 0, disable all volumes with LUN numbers greater than 0.

If these two options are not possible and you must perform a Rescan Disk operation, do the following:

1. disable all applications on that initiator that are accessing all volumes.

2. Perform the Rescan Disk operation.

3. Wait a few minutes. Perform the Rescan Disk operation again to reactivate the remaining volumes.

iSCSI

When Mounting Existing iSCSI Volumes On Different Servers, Volumes May Be Assigned Duplicate Drive Letters Or No Drive Letters (469, 541)

Scenario

An iSCSI volume that was mounted on a server and assigned a drive letter is logged off from Server 1. It is then mounted on Server 2. Sometimes it picks up a drive letter that is already in use on Server 2. Sometimes it is not assigned a drive letter. The volume then becomes inaccessible.

Workaround

- Open the Windows Disk Management console and assign a new drive letter to the volume. The volume should then appear in the directory structure.

Storage System Console Stops Responding When iSCSI Access In A Cluster Is Changed From Virtual IP To iSNS (523)

Scenario

An iSCSI volume is created in a cluster that has a Virtual IP address. The iSCSI volume is mounted and a client is accessing the volume. If you edit the cluster to change from a Virtual IP address to an iSNS server, the Console stops responding.

Workaround

- Close the Storage System Console and open it again.

- Verify that the iSNS server is still configured. You may have to add it again.

EBSD Snapshots of iSCSI Volumes Can Only Be Mounted On One System At A Time (520)

If you create a snapshot of an iSCSI volume, and change the snapshot type to EBSD, that snapshot can only be mounted on one system at a time.

After An Upgrade, The Microsoft iSCSI Initiator Fails To Connect To Volumes On SSMs Configured With A Virtual IP Address (1108)

Before you upgrade an SSM that has a Virtual IP address

1. In the Initiator Properties window, log off the active sessions to the available targets that are volumes on that SSM.

2. Complete the upgrade of the SSM.

3. Return to the Initiator Properties window and manually log on to the available targets (volumes).