



ReleaseOrder ID:	SCGCQ01420136
Headline:	Point Release: SASFW_Intruder_Phase_15.0 - 15.00.
Release Version:	15.00.02.00
UCM Project:	SAS3.5FW_MASTER_DEV
Sub UCM Project:	SASFW_Intruder_Phase_15.0
UCM Stream:	SASFW_Intruder_Phase_15.0_Rel
Release Type:	Point
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Release Baseline:	SASFW_Intruder_Phase_15.0-2017-08-13-15.00.02.00_REL_1502692608@ ISAS_CTRL_FW
Release Date:	
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Defects Fixed (3):

ID: SCGCQ01393250

Headline: PL : SATA drives are not detected

Description Of Change: Do not postpone spin up processing upon spin up request even if Initial FIS is not received for SATA drives.

Issue Description: SATA drives connected to phy 0 are not detected.
This is because COMWAKE is not sent and OOB does not complete.

Spin up processing upon spin up request is postponed in firmware if identify frame/initial FIS is not received to avoid referring to invalid identify frame data to detect if drive is SPL2 or legacy SAS.

But in case of SATA drives, Initial FIS is received only after spin up request is acknowledged which sends COMWAKE.

So for SATA drives spin up processing should not be postponed.

Steps To Reproduce: Connect SATA drive to phy 0.

ID: SCGCQ01391044 (Port Of Defect SCGCQ01314465)

Headline: PL: Sending nonstop ATA Passthrough followed by unsupported SCSI commands rapidly to SATA device can cause a Call Stack Overflow

Description Of Change: Added a conditional after completion of the first IO to check if the device is a SATA device. If so, then we will not immediately start pending IOs, but instead will start at the next timer tick. This will allow the call stack to rewind and avoid the overflow condition.

Issue Description: An ATA Passthrough command sent to a SATA device followed by a SCSI command not supported by the SATA drive can result in a recursive function call leading to a Stack Overflow condition in the function call list. From a user's perspective, they will need to be monitoring the system log. In the system log, they will see the driver issue a task management to the device in question. The task management will timeout and the driver will issue an adapter reset.

Steps To Reproduce: Boot into operating system and open two terminal windows. In one terminal window start a script which sends SCSI Security Protocol In commands to a SATA device that doesnt support this SCSI Command. In a second window, start a script which issues sas3ircu query command to the adapter. Both scripts are running the scripts as fast and as often as possible.

ID: SCGCQ01401526 (Port Of Defect SCGCQ01393302)

Headline: PL : Drives do not spin up as PL firmware is not processing the spin up request

Description Of Change: Corrected the index used for iterating through the structure which checks for the identify frame data to process a spin up request.

Issue Description: Spin up request is not processed on drives connected to some phys.
While processing the spin up request, spin up process is postponed if identify frame/initial FIS is not received for a drive.
The index of loop which checks it iterates through phy 0 to max phy for each SAS core.
But the index of the structure which checks for the identify frame data should be iterated thorough 0 to max Phy on chip.
Due to this wrong phy is referred and the spin up request processing on some phys are missed.

Steps To Reproduce: 1. Have Os install- OEL 6.9 64 bit
2. after the installation some the drives were dropped
3. Now do a push pull of the drives and you see a firmware crash seen.