



SCS Engineering Release Notice

Phase16 GCA Release Version 16.00.00.00 - SAS2IRCU_Phase16.0 (SCGCQ00399477)

(SCGCQ00399477) - Phase16 GCA Release Version 16.00.00.00 - SAS2IRCU Phase16.0
(SCGCQ00397889) - Phase16 Beta Release Version 15.250.06.00 - SAS2IRCU Phase16.0
(SCGCQ00394961) - Phase16 Beta Release Version 15.250.05.00 - SAS2IRCU Phase16.0
(SCGCQ00385963) - Phase16 Beta Release Version 15.250.04.00 - SAS2IRCU Phase16.0
(SCGCQ00383498) - Phase16 Alpha Release Version 15.250.03.00 - SAS2IRCU Phase16.0
(SCGCQ00382084) - Phase16 Alpha Release Version 15.250.02.00 - SAS2IRCU Phase16.0
(SCGCQ00369509) - Phase16 Alpha Release Version 15.250.01.00 - SAS2IRCU Phase16.0



SCS Engineering Release Notice

Phase16 GCA Release Version 16.00.00.00 - SAS2IRCU_Phase16.0 (SCGCQ00399477)

Defects=0, Enhancements=0 (Version Change Only)



SCS Engineering Release Notice

Phase16 Beta Release Version 15.250.06.00 - SAS2IRCU_Phase16.0 (SCGCQ00397889)

Defects=0, Enhancements=0 (Version Change Only)



SCS Engineering Release Notice

Phase16 Beta Release Version 15.250.05.00 - SAS2IRCU_Phase16.0 (SCGCQ00394961)

Defects=0, Enhancements=0 (Version Change Only)



SCS Engineering Release Notice

Phase16 Beta Release Version 15.250.04.00 - SAS2IRCU_Phase16.0 (SCGCQ00385963)

Change Summary (Defects=1)

SCGCQ00384334 (DFCT) - Ph16 SAs2IRCU: The primary & Alt boot can be set for same drive in PPC and SPARC.



SCS Engineering Release Notice

Phase16 Beta Release Version 15.250.04.00 - SAS2IRCU_Phase16.0 (SCGCQ00385963)

Total Defects Resolved (1)

(SCGCQ00384334)		Defect 1/1
HEADLINE:	Ph16 SAs2IRCU: The primary & Alt boot can be set for same drive in PPC and SPARC.	
DESC OF CHANGE:	This is because of the endian issue while comparing the boot encl logical Id.	
TO REPRODUCE:	<p>Steps to reproduce:</p> <ol style="list-style-type: none">1. Assign a bare drive as primary boot using sas2ircu bootencl command.2. Assign the same bare drive as alternate boot device using sas2ircu altbootencl command.3. Issue sas2ircu output <p>Expected result: Only the information in enclosure information section must come with drive as alternate boot.</p> <p>Actual result: The drive is displayed as both primary and alternate boot.</p>	
ISSUE DESC:	Ph16 SAs2IRCU: The primary & Alt boot can be set for same drive in PPC and SPARC.	



SCS Engineering Release Notice

Phase16 Alpha Release Version 15.250.03.00 - SAS2IRCU_Phase16.0 (SCGCQ00383498)

Change Summary (Defects=3)

SCGCQ00381670 (DFCT) - SAS2IRCU_PH16: Locate command is not getting honored for the volume member of secondly created volume.

SCGCQ00383080 (DFCT) - SAS2IRCU: Primary / Alt Boot when set for two drives from same enclosure only one of the boot information is displayed

SCGCQ00383088 (DFCT) - In solaris SPARC the PI information for a RAID volume member is not displayed properly.

Total Defects Resolved (3)

(SCGCQ00381670)		Defect 1/3
HEADLINE:	SAS2IRCU_PH16: Locate command is not getting honored for the volume member of secondly created volume.	
DESC OF CHANGE:	we are using a global variable to count the number of physical disks, which is not getting updated properly. so the loop count we are getting is wrong and we are overriding the information about physical disks that are part of first raid volume.	
TO REPRODUCE:	Steps to Repro: 1)Create a raid volume x and wait till BGI complete. 2)Create a raid volume y and wait till BGI complete 3)Issue locate command to any volume member of volume x, volume member starts blinking. 4)Issue locate command to any volume member of volume y. Expected Result: Volume member must start blinking. Actual Result: Error message is observed as Drive specified is by 3:5 not available	
ISSUE DESC:	SAS2IRCU_PH16: Locate command is not getting honored for the volume member of secondly created volume.	
(SCGCQ00383080)		Defect 2/3
HEADLINE:	SAS2IRCU: Primary / Alt Boot when set for two drives from same enclosure only one of the boot information is displayed	
DESC OF CHANGE:	Added a check for slot number while checking if the same device is selected as primary and alternate.earlier it used to be only for Enclosure logical Id.	
TO REPRODUCE:	steps to reproduce: 1. Set a bare drive x as primary boot using sas2ircu. Perform a controller reset. 2. Issue sas2ircu display, the drive set as primary will be displayed properly under enclosure information 3. set another bare drive y as alternate boot using sas2ircu. Perform a controller reset. 4. Issue sas2ircu display Expected Result: Both the drives set as primary and alternate boot must be displayed under enclosure information Actual Result: Only the second drive y which was set as alternate boot is getting displayed	
ISSUE DESC:	SAS2IRCU: Primary / Alt Boot when set for two drives from same enclosure only one of the boot information is displayed	
(SCGCQ00383088)		Defect 3/3
HEADLINE:	In solaris SPARC the PI information for a RAID volume member is not displayed properly.	
DESC OF CHANGE:	its a problem with Endian for status command. Hence corrected the same. The reason for not showing PI information for drives which are part of RAID volume is beacuse of MPTLIB2 failure. Created a defect for MPTLIB2 and the ID is SCGCQ00383492.	
TO REPRODUCE:	1. Create a raid1 volume using 2 PI drives. 2. Issue Display command. 3. Issue status command. Expected Result: The PI information must be shown in volume information section,drive section and also in sas2ircu status command Actual Result: Under drive section and status command PI information is not getting displayed	
ISSUE DESC:	In solaris SPARC the PI information for a RAID volume member is not displayed properly.	



SCS Engineering Release Notice

Phase16 Alpha Release Version 15.250.02.00 - SAS2IRCU_Phase16.0 (SCGCQ00382084)

Change Summary (Defects=8)

SCGCQ00352215 (DFCT) - SAS2IRCU PH15:RAID 0 volume with PI drives after removing a volume member & issuing status command error message is displayed

SCGCQ00373866 (DFCT) - SAS2IRCU: "Step 4" and "Step 5" message seen on selecting a HS to set offline.

SCGCQ00373870 (DFCT) - SAS2IRCU: A volume can be set as "Preferred and well as Alternate" boot device.

SCGCQ00374506 (DFCT) - SAS2IRCU: SET OFFLINE command does not gets honoured during resync

SCGCQ00379110 (DFCT) - To fix the defects raised in the Code collaborator review #16914 for the ER SCGCQ00343269.

SCGCQ00380894 (DFCT) - SAS2IRCU:In SPARC after setting a bare drive either as Primary/Alt Boot, the sas2ircu does not display boot slot number

SCGCQ00380901 (DFCT) - In Solaris SPARC, info about PI Mixing and Enabled is not shown for a PI enabled controller in the display command.

SCGCQ00382820 (DFCT) -

Total Defects Resolved (8)**(SCGCQ00352215)** Defect 1/8

HEADLINE: SAS2IRCU PH15:RAID 0 volume with PI drives after removing a volume member & issuing status command error message is displayed

DESC OF CHANGE: As per Peter's suggestion additional check has been added for volume state. while displaying the information about the operations in progress, we have to check whether the volume is in failed state. If so we should not query the Raid status information.

TO REPRODUCE:

- 1.Create a 2 drive RAID 0 volume with PI drives
- 2.Issue a status command and verify the BGI for the volume starts.
- 3.During BGI remove one of the volume member.
- 4.Issue a sas2ircu status command following error message SAS2IRCU: bad indicator data received from controller! total blocks = 0. SAS2IRCU: Error executing command STATUS. will be displayed. But actually command gets executed and volume is shown up as failed.

ISSUE DESC: SAS2IRCU PH15:RAID 0 volume with PI drives after removing a volume member & issuing status command error message is displayed

(SCGCQ00373866) Defect 2/8

HEADLINE: SAS2IRCU: "Step 4" and "Step 5" message seen on selecting a HS to set offline.

DESC OF CHANGE: Removed the lines which displays "Step 4" and Step 5" on screen.

TO REPRODUCE:

1. Create a RAID1 volume and a HS.
2. execute "SETOFFLINE" command on HS.
3. Observe the output message displayed by IRCU.

ISSUE DESC: SAS2IRCU:

When a HS is selected to set to "OFFLINE", the IRCU displays "Step 4" and Step 5" on screen. These messages of no value to end user and need to be removed.

(SCGCQ00373870) Defect 3/8

HEADLINE: SAS2IRCU: A volume can be set as "Preferred and well as Alternate" boot device.

DESC OF CHANGE: Modified the code in such a way that when a boot preference (pref or alt) is selected, the previous settings (if set) are removed.

TO REPRODUCE:

1. Create a volume of any type.
2. Execute "ALTBOOTIR" and "BOOTIR" command on that volume.
3. Issue port reset (lsiutil 99)
4. Issue display command in IRCU and check the volume information.

ISSUE DESC: SAS2IRCU:

The IRCU allows to set a volume to be pref as well as alternate boot device. Other utility like BIOS CU will not allow this operation and when a boot preference (pref or alt) is selected, the previous settings (if set) are removed. Same is expected in IRCU.

(SCGCQ00374506) Defect 4/8

HEADLINE: SAS2IRCU: SET OFFLINE command does not gets honoured during resync

DESC OF CHANGE: Added the code to make the physical disk offline while rebuilding.

TO REPRODUCE:

- 1) Create a Raid1 volume and wait till BGI completes.
- 2) Issue setoffline command to either primary or secondary volume member.
- 3) The volume transitions to degraded state.
- 4) Issue setonline command to the same drive that was setoffline in step 2.
- 5) The drives comes back to online state and the resync operation starts on the volume
- 6) During the resync operation issue setoffline command to either primary or secondary volume member.

ISSUE DESC: When a volume is in resyncing state on issuing the SETOFFLINE command to either primary or secondary drive the command execution fails with the following error message "Volume is not in optimal state. Error executing command SETOFFLINE."

But the same command gets executed while the BGI is in progress.

Note: Using Lsiutil, we are able to make the secondary drive offline during the resync operation.

(SCGCQ00379110) Defect 5/8



SCS Engineering Release Notice

Phase16 Alpha Release Version 15.250.02.00 - SAS2IRCU_Phase16.0 (SCGCQ00382084)

HEADLINE: To fix the defects raised in the Code collaborator review #16914 for the ER SCGCQ00343269.
DESC OF CHANGE: Fixed all the defects which are raised in the review #16914 for the ER SCGCQ00343269.
TO REPRODUCE: execute the following commands:

ex : sas2ircu 0 setoffline 1:1
sas2ircu 0 setonline 1:1

ISSUE DESC: To fix the defects raised in the Code collaborator review #16914 for the ER SCGCQ00343269.

The ER SCGCQ00343269 was closed before review was completed.

And this defect was created to upload the files for review.

(SCGCQ00380894) Defect 6/8

HEADLINE: SAS2IRCU:iln SPARC after setting a bare drive either as Primary/Alt Boot, the sas2ircu does not display boot slot number
DESC OF CHANGE: its beacuse of the Endian issue. modified the code to take care of it.
TO REPRODUCE: Steps to Repro:

1.Boot to the Solaris 11 Sparc OS.
2.Set a bare drive as Boot device using Bootencd command.
3.Give a port reset to the controller.
4.Issue sas2ircu display command.

Expected Result:

Primary or Alternative Boot slot number should be displayed in the Enclosure Information.

Actual Result:

Primary or Alternative Boot slot number is not displayed in the Enclosure Information.

ISSUE DESC: SAS2IRCU:iln SPARC after setting a bare drive either as Primary/Alt Boot, the sas2ircu does not display boot slot number

(SCGCQ00380901) Defect 7/8

HEADLINE: In Solaris SPARC, info about PI Mixing and Enabled is not shown for a PI enabled controller in the display command.
DESC OF CHANGE: Added the code to convert the endianness depending on the system in which the utility is running.
TO REPRODUCE: Steps to Repro:

1. Boot to the Solaris Sparc OS and connect some PI drives in SAS2 controller.
2. Enable PI mixing in the OS using lsi utils.
3. Issue sas2ircu display command.
4. PI mixing and PI enable option is not shown in the controller information or in the drive information.

ISSUE DESC: After enabling the PI mixing in the SAS2 controller, When we give the Display command using Sas2ircu PI mixing and PI enabled options are not shown in the Controller Information or in the Drive information.

(SCGCQ00382820) Defect 8/8



SCS Engineering Release Notice

Phase16 Alpha Release Version 15.250.01.00 - SAS2IRCU_Phase16.0 (SCGCQ00369509)

Change Summary (Defects=2 Enhancements=2)

SCGCQ00360007 (DFCT) - Assignment operator instead of conditional operator has been used inside display command logic.

SCGCQ00361955 (DFCT) - fixing the memory leaks.

SCGCQ00343269 (ENHREQ) - Add the ability to pause and restart the resync of an IR volume

SCGCQ00348878 (ENHREQ) - SAS2IRCU ability to set boot devices



SCS Engineering Release Notice

Phase16 Alpha Release Version 15.250.01.00 - SAS2IRCU_Phase16.0 (SCGCQ00369509)

Total Defects Resolved (2)

(SCGCQ00360007)		Defect 1/2
HEADLINE:	Assignment operator instead of conditional operator has been used inside display command logic.	
DESC OF CHANGE:	Replaced the assignment operator with conditional operator.	
TO REPRODUCE:	Because of the usage of assignment operator this condition always be true and gives false information about boot device.	
ISSUE DESC:	In the 'if' code block where we check whether an encl:bay is boot device or not, assignment operator instead of conditional operator has been used.	

(SCGCQ00361955)		Defect 2/2
HEADLINE:	fixing the memory leaks.	
DESC OF CHANGE:	Memory that has been allocated was not getting freed up in failure cases. Added code to delete this memory before returning from application.	
TO REPRODUCE:	fixing the memory leaks.	
ISSUE DESC:	fixing the memory leaks.	



SCS Engineering Release Notice

Phase16 Alpha Release Version 15.250.01.00 - SAS2IRCU_Phase16.0 (SCGCQ00369509)

Total Enhancements Implemented (2)

(SCGCQ00343269)	Enhancement 1/2
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HEADLINE:	Add the ability to pause and restart the resync of an IR volume
NEW FUNCTIONALITY:	Added two new commands, SETOFFLINE and SETONLINE to pause and restart resyncing of the IR volume. sas2ircu <controller> SETOFFLINE <Encl:slot> ----- Will set the physical drive to Offline. sas2ircu <controller> SETONLINE <Encl:slot> ----- Will set the physical drive to online.

(SCGCQ00348878)	Enhancement 2/2
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HEADLINE:	SAS2IRCU ability to set boot devices
NEW FUNCTIONALITY:	Added new commands ALTBOOTIR and ALTBOOTENCL and added code to show this information as part of "display" command.