

ReleaseOrder ID: DCSG00777085
Headline: GCA Release: IT_UEFI_Drv_Ph18 - 18.00.00.00 (Signed) UEFI BSD
Release Version: 18.00.00.00
UCM Project: IT_UEFI_Drv
Sub UCM Project: IT_UEFI_Drv_Ph18
UCM Stream: IT_UEFI_Drv_Ph18_Rel
Release Type: GCA
State: Released
Release Baseline: IT_UEFI_Drv_Ph18-2021-01-19-18.00.00.00_REL_1611048141@\\SAS35
Release Date: 2021-01-19 09:21:59.000000
Date Generated: Mar 19, 2021

Release History

- [DCSG00777085 - GCA Release: IT_UEFI_Drv_Ph18 - 18.00.00.00 \(Signed\) UEFI BSD](#)
- [DCSG00556747 - Beta Release: IT_UEFI_Drv_Ph18 - 18.255.03.00 UEFI BSD](#)
- [DCSG00432904 - Alpha Release: IT_UEFI_Drv_Ph18 - 18.255.02.00 UEFI BSD](#)
- [DCSG00384057 - Pre-Alpha Release: IT_UEFI_Drv_Ph18 - 18.255.01.00 UEFI BSD](#)

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Release Version: 18.00.00.00
UCM Project: IT_UEFI_Drv
Sub UCM Project: IT_UEFI_Drv_Ph18
UCM Stream: IT_UEFI_Drv_Ph18_Rel
Release Type: GCA
State: Released
Release Baseline: IT_UEFI_Drv_Ph18-2021-01-19-18.00.00.00_REL_1611048141@\\SAS35
Release Date: 2021-01-19 09:21:59.000000
Date Generated: Mar 19, 2021

ReleaseOrder ID: DCSG00556747 [Open In CQWeb](#)
Headline: Beta Release: IT_UEFI_Drv_Ph18 - 18.255.03.00 UEFI BSD
Release Version: 18.255.03.00
UCM Project: IT_UEFI_Drv
Sub UCM Project: IT_UEFI_Drv_Ph18
UCM Stream: IT_UEFI_Drv_Ph18_Rel
Release Type: Beta
State: Released
Release Baseline: IT_UEFI_Drv_Ph18-2020-12-28-18.255.03.00_REL_1609227215@\\SAS35
Release Date: 2020-12-29 07:33:19.000000
Date Generated: Mar 19, 2021

Defects Fixed (2):

ID: DCSG00500387 (Port Of Defect DCSG00393279)
Headline: HII triggers RSOD in a specific enclosure with a faulty slot.
Description Of Change: During HII Refresh Operation, there are couple of pointers turning NULL and accessing them caused RSOD. The pointer corruption or turning them NULL is due to handling an specific error path. A drive at specific slot is present at initial time of device discovery (SAS Dev page 0 scanning) but gone missing (due the slot issue in enclosure) later when sending Report Lun command. Due to failure of Report Lun command, the error handler code did not allocate LUN related memory. However, later this memory was accessed during LUN Data processing as the drive was reported as present earlier. This caused NULL Pointer access, Causing the RSOD (Break Point). There are 3 changes added to addresses this issue.
1. When Report LUN command fails, do not add such device in to the list. Dropping of such drive is necessary as all SCSI commands will be sent to LUNs later.
2. One of the discovery function is made to continue on for other drives if one device fails Report LUN command. The return status is checked for only memory failure as this is the only real reason HII should not continue on for other devices. For other failures (command specific) HII is made to scan other devices.
3. On a specific case where Report LUN passed but LUN Inventory collection failed, there was a double memory de-allocation which lead to RSOD (Break point).
Issue Description: HII triggers RSOD in a specific enclosure with a faulty slot. The trigger could be after few iteration of Refresh Topology. There are two types of RSODs observed. One is Page Fault another is Break Point.
Steps To Reproduce: HII triggers RSOD in a specific enclosure with a faulty slot. The trigger could be after few iteration of Refresh Topology. There are two types of RSODs observed. One is Page Fault another is Break Point.

ID: DCSG00555571 (Port Of Defect DCSG00555363)
Headline: UEFI HII does not clear preferred legacy OpROM boot device.
Description Of Change: Once legacy OpROM boot device is selected in HII, legacy OpROM will mark this device as current boot device and put this on top of POST display chain. When this device is removed from preferred boot device, HII must remove it from both preferred and current boot device. HII was removing it only from preferred leaving current as it is. Fix is to make HII remove from both preferred and current device selection when device is removed from boot device.
Issue Description: UEFI HII does not clear preferred legacy OpROM boot device. Once preferred boot device is selected the device remains as preferred boot device even after de selecting from legacy OpROM boot device.
Steps To Reproduce: UEFI HII does not clear preferred legacy OpROM boot device. Once preferred boot device is selected the device remains as preferred boot device even after de selecting from legacy OpROM boot device.

Enhancements Implemented (2):

ID: DCSG00519319 (Port Of EnhancementRequest DCSG00427830)
Headline: Enhances to FMP functions (IOC Init wait time increase, return status, progress indicator).
Description Of Change: - Upon successful package download (both upgrade and downgrade), the BSD will issue a diag reset to the controller before exiting with SUCCESS status.
- Change the return status from SUCCESS to ABORT if we hit any issues (including verification, recover man pages reset, etc...) and assign appropriate Abort message.
- We will keep Abort message pointer to NULL indicating there is no Abort message if we return SUCCESS.

ID: DCSG00552188 (Port Of EnhancementRequest DCSG00552146)
Headline: Customized HII help string for root menu.
Description Of Change: Customized HII help string for root menu. The help string shows tri mode only when NVMe is enabled.

ReleaseOrder ID: DCSG00432904 [Open In CQWeb](#)
Headline: Alpha Release: IT_UEFI_Drv_Ph18 - 18.255.02.00 UEFI BSD
Release Version: 18.255.02.00
UCM Project: IT_UEFI_Drv
Sub UCM Project: IT_UEFI_Drv_Ph18
UCM Stream: IT_UEFI_Drv_Ph18_Rel
Release Type: Alpha
State: Released
Release Baseline: IT_UEFI_Drv_Ph18-2020-11-25-18.255.02.00_REL_1606295855@\\SAS35
Release Date: 2020-11-25 09:17:14.000000
Date Generated: Mar 19, 2021

Defects Fixed (5):

ID: DCSG00431527 (Port Of Defect DCSG00414370)
Headline: HII is hung when SATA devices are connected to HBA and Refresh Topology is executed more than once.
Description Of Change: For SATA devices HII sends ATA to identify command to get ATA device information. When the data is received, HII swaps the bytes to correct the bytes order. While swapping the bytes HII overruns the allocated memory to store the product name and revision names and swapped unallocated memory bytes. This results in unpredictable behavior and one such behavior is HII hang. Restricting the bytes swap within allocated memory fixes the issue.
Issue Description: HII is hung when SATA devices are connected to HBA and Refresh Topology is executed more than once.
Steps To Reproduce: HII is hung when SATA devices are connected to HBA and Refresh Topology is executed more than once.

ID: DCSG00415260 (Port Of Defect DCSG00415110)
Headline: HII shows one less character for FW revision of a SATA device
Description Of Change: The HII function that converts ASCII string to unicode added string terminator at the last position. The last position being last character, the last character was lost.
Issue Description: HII shows one less character for FW revision of a SATA device. Out of 8 characters only 7 are seen. As per ATA specification, there are 8 characters.
Steps To Reproduce: HII shows one less character for FW revision of a SATA device. Out of 8 characters only 7 are seen. As per ATA specification, there are 8 characters.

ID: DCSG00421995 (Port Of Defect DCSG00417486)
Headline: EXT SCSI PT commands fails with Invalid Handle after refresh topology is run.
Description Of Change: When Refresh Topology is executed from HII, the HII discards all the existing HII inventory and recreates new one based on latest FW data. After discarding the devices, HII did not reset the handle count back to 1. Thus, the new handle numbers started from previous latest numbers. But the BSD had the old device handles. This makes BSD to have a complete mismatch device handles after Refresh Topology. Fix is to reset the device handles number back to 1 after devices were discarded.
Issue Description: After Refresh Topology is issues, the BSD cannot execute SCSI commands to any of the devices. Same devices were able to serve correctly before refresh topology is executed.
Steps To Reproduce: Run extended SCSI PT command.
Issue Refresh Topology
Run extended SCSI PT command again.
This time EXT SCSI PT command fails with Invalid Handle.

ID: DCSG00425482 (Port Of Defect DCSG00425361)
Headline: IMAGE_ATTRIBUTE_RESET_REQUIRED to GetImageInfo function is missing.
Description Of Change: Added flag IMAGE_ATTRIBUTE_RESET_REQUIRED to GetImageInfo function of FMP.
Issue Description: Added flag IMAGE_ATTRIBUTE_RESET_REQUIRED to GetImageInfo function of FMP.
Steps To Reproduce: IMAGE_ATTRIBUTE_RESET_REQUIRED to GetImageInfo function is missing.

ID: DCSG00427740 (Port Of Defect DCSG00426056)
Headline: The LUN capacity in HII is wrong for other than zero LUNS. Other LUNS show the same LUN capacity as LUN 0.
Description Of Change: During Device discovery, HII fired read capacity/read capacity 16 commands to each LUNS that were detected. However, in the SCSI Path, the LUN number passed in from HII was ignored and LUN zero was used always. This resulted in a capacity value of LUN 0 assigned to other LUNS. The fix is to seed the LUN number passed in from HII in SCSI processing functions.
Issue Description: The LUN capacity in HII is wrong for other than zero LUNS. Other LUNS show the same LUN capacity as LUN 0.
Steps To Reproduce: The LUN capacity in HII is wrong for other than zero LUNS. Other LUNS show the same LUN capacity as LUN 0.

Enhancements Implemented (2):

ID: DCSG00391363
Headline: Update IOC Page 1 for PCI Bus# and Segment #
Description Of Change: BSD checks for PCI Bus# between IOC page 1 and currently assigned by the system. If the BUS # is not the same, UEFI updates the IOC Page 1 with new values.

ID: DCSG00397951
Headline: Set up for GCP based build environment.
Description Of Change: Build script changes for a new build environment. There are no functional changes.

ReleaseOrder ID: **DCSG00384057** [Open In CQWeb](#)
Headline: **Pre-Alpha Release: IT_UEFI_Drv_Ph18 - 18.255.01.00 UEFI BSD**
Release Version: **18.255.01.00**
UCM Project: **IT_UEFI_Drv**
Sub UCM Project: **IT_UEFI_Drv_Ph18**
UCM Stream: **IT_UEFI_Drv_Ph18_Rel**
Release Type: **Pre-Alpha**
State: **Released**
Release Baseline: **IT_UEFI_Drv_Ph18-2020-10-09-18.255.01.00_REL_1602240836@ISAS35**
Release Date: **2020-10-09 10:53:28.000000**
Date Generated: **Mar 19, 2021**

Enhancements Implemented (5):

ID: DCSG00380630 (Port Of EnhancementRequest DCSG00335903)
Headline: HII should get the Product ID and Revision name from VPD 89h page instead.
Description Of Change: The supported VPC page (0x00) is fired first to check if VPC page 0x89 (SATA Identify) is supported. If supported then page 0x89 is fired to get the SATA device information. Then the reply data is parsed to get the Product and Revision names for HII to show in device properties screen.

ID: DCSG00380631 (Port Of EnhancementRequest DCSG00354220)
Headline: Extend MCTP / I2C OOB Management Toggle Protocol to Accommodate PLDM
Description Of Change: The BSD is enhanced to check for correctness of OOB communication mode with respect to PLDM. If OOB mode is I2C PLDM is disabled. If OOB mode is PCIe then PLDM is enabled or disabled based on default FW settings. BSD can issue a diagnostic reset to HBA if settings were changed.
AIP (Adapter Information Protocol) is enhanced to provide additional details of where PLDM settings are read and also PLDM is enabled or disabled based on new OOB method requested.

ID: DCSG00380634 (Port Of EnhancementRequest DCSG00354650)
Headline: The HII root menu and PCI Slot number is updated.
Description Of Change: The HII root menu and PCI Slot number in the controller properties screen is updated as per request. For specific PNP values, the PCI slot number does apply. Thus for such cards, the PCI Slot number is not obtained always shown as "Integrated" in controller properties screen.

ID: DCSG00380633 (Port Of EnhancementRequest DCSG00360570)
Headline: Update FW validation checks to account for SDID
Description Of Change: Update FW validation checks to account for SDID. With this new update, if the FMP is created with any of the 4 Part PnP values, then all of them must match the card while downloading the package.

ID: DCSG00381329 (Port Of EnhancementRequest DCSG00381123)
Headline: Update the release date format from MMDDYYYY to MM/DD/YYYY
Description Of Change: Update the release date format from MMDDYYYY to MM/DD/YYYY. The FW gives the date in ACSII string with date and month in 2 decimals and year in 4 decimals. So a / character is added after date and month.