



Release Bulletin: For M-Card OS 1.5.2 On PKM 802/03

This bulletin provides release information for M-Card OS 1.5.2 3001 SW stack.

Release Details

This section lists component version numbers and other details for this release.

Release Type:	Official Release
Release Version:	M-Card 1.5.2 3001
OS Version:	1.5.2 3001

These are the features introduced in M-Card OS 1.5.2:

- Group operations for CDL 2.0 and CCCM override are supported.
- Diag page changes (Pod Handler Diagnostics (Sync), Secure Micro Software Version, fields added to DAVIC Page and inband hardware status, etc.)
- New Generic Feature Parameters (Reset PINS, Turn On Channel and download Group ID)
- Support for Host Addressable Properties [ECN 1082-5].
- Support for Host Reset Vector Apdu.
- Support for Connect/Disconnect Apdu.
- Use CaSyatemID client instead of WKMA for SA network info.
- MCard should allow ccm override that comes from CDL file.
- Socket Flow and Direct ADSEG Support.
- VCT_ID support.
- Force tune EAS support for UDCP Host
- IP address support [ECN 1120]
- Support the Named Entitlement section in its EUT handling
- ECO 1408 Addition of Vendor ID to Generic Diagnostics

Related Publication

See the following publication for additional information related to this release:

Release Notes for OHT 1.6.9 0103 and CANH 1.1.7.1.

Known Issues

None

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
122294	Multiple reboots observed during staging boxes	SPONT HDT REBOOT	Multiple reboots observed in the M-Card after a HRV reset is given.	1.5.2.3001

M-Card

Fixed Issues

116935	Fix channel change failure on 6th stream that has Pgm Index=5	BLACK SCREEN	In Vecima Host, black screens on any channel change to encrypted programs after the first tuned program.	1.5.2.2801
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This section lists cumulative fixed defects for this release.

Fixes in OS 1.5.2 3001

M-Card

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
122294	Multiple reboots observed during staging boxes	SPONT HDT REBOOT	Multiple reboots observed in the M-Card after a HRV reset is given.	1.5.2.3001

M-Card

116935	Fix channel change failure on 6th stream that has Pgm Index=5	BLACK SCREEN	In Vecima Host, black screens on any channel change to encrypted programs after the first tuned program.	1.5.2.2801
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M-Card

Fixes in OS 1.5.2 2901

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
120821	Ippv Entt is lost at times when Ippv Purchase coincides with Entt. Cache update	BLACK SCREEN	This issue could explain the periods where we have black screens in multiples of minutes for the a recently purchased, already tuned-in IPPV event program. There will be black screens for the period between the time instance of the Purchase and the time instance of the next entitlement cache update.	1.5.2.2901

M-Card

97198	Indicate 'waiting for open_homing' state in M-CARD diag page	FEATURE	When waiting for open_homing, there is no indication that the card has triggered on a download. It would be nice to indicate this state in the M-CARD download diag page.	1.5.2.2901
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M-Card

Fixes in OS 1.5.2 2801

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
108975	Macroblocking during normal play with encrypted channels	VIDEO QUALITY	This macroblocking can be presented many ways: (1) localized to one area, (2) A line across the screen, or	1.5.2.2801

M-Card

Fixes in OS 1.5.2 2701

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
116431	Implementation of hub specific EAS suppression.	FEATURE	With this feature the EAS suppression can be controlled with respect to hub	1.5.2.2601

M-Card

Fixes in OS 1.5.2 2601

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
113926	OOB mode staging: Clear NVM override when a reset passthru is received	FEATURE	As part of staging, the resetClientNvm BASS transaction is used to reset the Host parameters.	1.5.2.2601

M-Card

Fixes in OS 1.5.2 2501

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
113747	"After scripts CC diag screen shows blank pages and not able to view ENC channels".	INCORRECT BEHAVIOR	When packages are added and removed in very close succession (ie b/w 30s and 1 min) for several hours this issue will occur.	1.5.2.2501
113926	OOB mode staging: Clear NVM override when a reset passthru is received	FEATURE	As part of staging, the resetClientNvm BASS transaction is used to reset the Host parameters.	1.5.2.2501

M-Card

Fixes in OS 1.5.2 2401

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
112795	Mcard should modify EAS table in order to support EAS suppression	FEATURE	Mcards are required to modify EAS packets by adding EAS suppression source IDs in order to suppress the EAS message.	1.5.2.2401
	M-Card			
112796	Mcard should not send channel number of 0 for duplicated source	INCORRECT BEHAVIOR	Host will fail on cross-checking of SI tables, and may not go SI-ready.	1.5.2.2401
	M-Card			
112797	Mcard should use raw DCM to calculate total section count in raw VCMs	BLACK SCREEN	When DNCS does not send out complete set of VCMs during SI update, mcard will send out incomplete channel map to host due to the wrong calculation of total VCM section count.	1.5.2.2401
111474	Delete IP_U flow when the DAVIC connection is lost	INCORRECT BEHAVIOR	When the DAVIC 2-way connection is lost, there is a possibility that the Card may get a different IP address after the next sign-on.	1.5.2.2401
	M-Card			
112898	OOB state operation changes for staging DSG and transitioning to DSG	FEATURE	Used for staging new boxes for DSG and for transitioning the QPSK boxes to DSG.	1.5.2.2401
	M-Card			
112239	Define the pre-dsg failure type better.	ENHANCEMENT	The pre-DSG failure needs to include more details to better assist the operator in troubleshooting where the actual failure is occurring, instead of listing only a "timeout failure".	1.5.2.2401
	M-Card			
112238	The cmd2000 response from the pre-dsg test should tell you where to find the log	ENHANCEMENT	Pre-DSG test cmd2000 should tell the operator where to find the logs for the results.	1.5.2.2401
	M-Card			
112236	"Commencing Pre-Dsg" test message not always displayed.	INCORRECT BEHAVIOR	When running the pre-dsg test the message "Commencing Pre-Dsg Test" is not always displayed via cmd2000.	1.5.2.2401
	M-Card			

Fixes in OS 1.5.2 2301

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
110680	Host DSG resource presence should be checked before trying to switch to DSG	INCORRECT BEHAVIOR	Card might go to continuous reboot resulting in no video.	1.5.2.2301
M-Card				
111392	M-Card should send HRV to the Host if an OOB mode switch requires reboot	INCORRECT BEHAVIOR	User may not view any programs if the mode switch does not happen correctly.	1.5.2.2301
M-Card				

Fixes in OS 1.5.2 2201

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
109915	ADSG Indirect Socket mode support with DCM field of UNConfig	FEATURE	Support of ADSG Indirect Socket mode while still using the DNCS SR 4.2.	1.5.2.2201
M-Card				
109914	M-Card Network Logging Support for ADSG transition in field	FEATURE	Enhance diagnostic capabilities for operator support.	1.5.2.2201
M-Card				

Fixes in OS 1.5.2 2101

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
107507/AT2316	Card should reset when there an OOB mode change when Card is 2-way	FEATURE	ODN can not handle OOB mode changes when the Card is in 2-way operational. It is decided to reset the Card for such mode transitions.	1.5.2.2101
M-Card				
107508	Card takes lot of time for determining the OOB mode of operation first time	PERFORMANCE	When the NVM override flag is not set, Card waits for gdl.tblo before deciding on the mode of operation. Currently the gdl.tblo is read after reading all other BFS files resulting in a lot of delay. Card can read the gdl.tblo ahead of all the other files	1.5.2.2101
M-Card				
107611	In ADSG Socket Mode CARD does not get Host IP during a recombine	INCORRECT BEHAVIOR	CARD does not take the new HOST IP during a recombine.	1.5.2.2101
M-Card				

Fixes in OS 1.5.2 2001

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
104121	During recombine testing DOCSIS set top 8kg6 CARD no ip without reboot.	INCORRECT BEHAVIOR	CARD does not obtain an IP address when moved to a different CMTS downstream/upstream/IP domain.	1.5.2.2001
M-Card				
106389-01	The Cable CARD Replies Wrongly for ROOT_OID Request from Host	INCORRECT BEHAVIOR	The root oid response sent from the card is not encoded in ASCII format as expected by host, the host will not be able to know the root oid of card and hence the cable card diagnostic information cannot be obtained through the SNMP. The root oid encoding f	1.5.2.2001
M-Card				

Fixes in OS 1.5.2 1901

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
104296	When app_id = 1, 2 or 5 is used, Card constructs the dsg filters incorrectly	BLACK SCEEN	The application will not load.	1.5.2.1901
	M-Card			
104465	Enhance Copy Protection MMI screen to show CP-CA and key refresh info.	ENHANCEMENT	Added 2 new fields to the Copy Protection Information diag screen on the CableCARD. The first field is to display the value of the global variable "gCP_CaDisable" which CP uses to enable/disable CA decryption. The second field is to indicate when the Card	1.5.2.1901
	M-Card			
104973	M-Card stops communicating to the host	INCORRECT BEHAVIOR	MCard stops communicating to the host when: Repeated channel changes where the ca_pmt() has other CA descriptors other than the ones with Powerkey's CA System ID; Staying long in the PPV OSD screen. M-Card stops decrypting the content and the M-Card diagn	1.5.2.1901
	M-Card			

Fixes in OS 1.5.2 1801

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
104056	M-card has to get the vendor id properly from the host having	INCORRECT BEHAVIOR	The host upgrade capability using Common Download is affected.	1.5.2.1801
	M-Card			

Fixes in OS 1.5.2 1701

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
101276	Support ECR 1408: Addition of Vendor ID to Generic	CUSTOMER ENHANCEMENT	There are currently systems in the field which support only CDL1.0 for certain vendor_ids. A mechanism is required for the Card to find out the system CDL support for a particular vendor_id prior to opening the System Control resource. This will be acco	1.5.2.1701
M-Card				
98960	noCP on reboot	INCORRECT BEHAVIOR	After upgrading M-Card with new firmware or after a reboot host displays "noCP" on the front panel. Host could not complete the boot up process and is struck at this point.	1.5.2.1701
M-Card				
102029 RM 2504	M-Card should not display information of the path of "podchan.tblo" in Direct mode	CUSTOMER ENHANCEMENT	User could be confused by the mcard loaded podchan.tblo information since host does not need it in Direct AD SG mode.	1.5.2.1701
M-Card				
97198	Indicate waiting for open_homing' state in M-CARD diag page	FEATURE	When waiting for open_homing, indication that the card has triggered on a download in M-CARD download diag page.	1.5.2.1701
M-Card				
95274	Hyperlink at bottom of MAC Address Report diagnostic screen overlaps the text	GRAPHICS QUALITY	The Hyperlink and the Text at the bottom of the cable card diagnostic screens should not overlap	1.5.2.1701
M-Card				
91971	CP Fail message is not sent to headend in DSG mode	INCORRECT BEHAVIOR	In DSG mode we are not sending CP Fail message if it fails in mutual authentication as the condition checked for 2-way availability.	1.5.2.1701
M-Card				
82582	MCard autobind retry does not check for changes in CPDefinition for Display MMI	INCORRECT BEHAVIOR	A DNCS Admin currently can not turn off/on autobind for CableCARDS operating in the field by way of the Configure MMI Screen Data UI, Display MMI for Bi-Directional Device setting in the CableCARD UI.	1.5.2.1701
M-Card				

Fixes in OS 1.5.2 1601

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
92236	Card doesn't support Broadcast tunnels in Indirect AD SG mode	Third Party Apps	apps will not be loaded	1.5.2.1601
M-Card				
92830	Preview video not shown following a purchased PPV	LOSS SCV/VIDEO	Video will appear frozen after a purchased PPV, even if free preview for next event is active.	1.5.2.1601
M-Card				
98654	Application Information page for CANH	FEATURE	This does not have any impact on the user as this is a diagnostic page change	1.5.2.1601
M-Card				
98656	Card MIB resource Support as per CCIF I17	FEATURE	Card diag filed could be accessed through snmp	1.5.2.1601
M-Card				
98657	SNMP Framework code -- support for basic snmp operations as per CCIF I17	FEATURE	Card diags would be avialbe in snmp as per CCIF 117	1.5.2.1601
M-Card				
98658	General MIB support	FEATURE	Cable card general diagnostics would be available trough SNMP	1.5.2.1601
M-Card				
98661	DSG MIB support	FEATURE	Dsg related diagnostic info would be available through snmp	1.5.2.1601
M-Card				
98659	Powerkey MIB implementatin	FEATURE	Powerkey Realted Diagnostic info would be avaiable thru SNMP	1.5.2.1601
M-Card				
97115-01	Integrating CISCO name change in the user viewable pages	FEATURE	The CableCARD should use "CISCO" name in the pages generated for various applications.	1.5.2.1601
M-Card				
98524	Card should parse the option bytes from the new_flow_cnf to get the subnet mask	INCORRECT BEHAVIOR	Diagnostic field for subnet mask would show correct value instead of "0.0.0.0"	1.5.2.1601
M-Card				
98478	OOB mode change without resetting Card and send correct mode details to Host	PERFORMANCE	Host application behavior boot-up time will improve if an OOB mode switch is medeed soon after the need to boot-up.	1.5.2.1601
M-Card				
85837	Resend a UNCR on DAVIC reconnect	INCORRECT BEHAVIOR	user may loose 2-way connectivity if these corner cases happen	1.5.2.1601
M-Card				

Fixes in OS 1.5.2 1503

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
99271	Lug_id should be ignored in DSG Direct mode.	CUSTOMER ENHANCEMENT	If mcard is assigned with Enhanced Channel Map using lug_id rules in AD SG Direct mode, host won't get correct channel map.	1.5.2.1503
M-Card				

Fixes in OS 1.5.2 1501

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
97847	MCard should parse entire gdl.tblo file in case of multiple EID assignments	INCORRECT BEHAVIOR	Currently the MCard will stop parsing the gdl.tblo as soon as it has found a matching EID for both a cccm and a group_ID assignment. If there are multiple matching EIDs for both cccm and group_ID, the MCard will not read the assignments in the file past t	1.5.2.1501
M-Card				

97604	CDL 2.0 parameters for Diagnostics purpose	ENHANCEMENT	It's recommended to include CDL2.0 related fields in the diag pages. sessions	1.5.2.1501
M-Card				

Fixes in OS 1.5.2 1401

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
91549	OOB State Operation and HID-CID related fixes	INCORRECT BEHAVIOR	After successfully booting up in the DSG mode, if the Host sends DCD not found then stay in the DSG mode instead of jumping to QPSK mode.	1.5.2.1401
M-Card				
85569	Video Freezes on MOD playback	INCORRECT BEHAVIOR	Site has reported on and off that they have seen frozen video on MOD sessions	1.5.2.1401
M-Card				
96209-02	Memory leak in CP thread due to cp_valid_req() APDU not being freed.	INCORRECT BEHAVIOR	CETV does not display any SA MCard diagnostic information on any of the menus selected after leaving it on overnight. TV needs to be rebooted in	1.5.2.1401
M-Card				
92986-01	Card Ser.No and MAC should be part of app_info_cnf() APDU as per CCIF spec I16	INCORRECT BEHAVIOR	This field needs to be supported as part of latest CableLab Spec CCIF -I16	1.5.2.1401
M-Card				
96890	IP address field in the new_flow_cnf apu is not coded as per Ext Chan T1V6	INCORRECT BEHAVIOR	IP address field is coded as per ipv4 (32 bit) format instead of ipv6 (128 bits, upper 98 bits 0 and remaining bits with actual value) when extended channel resource	1.5.2.1401
M-Card				
96893	Manual reset mechanism of last known OOB mode	FEATURE	During certain scenarios, it might be required to reset any AD SG to QPSK OOB mode using manual approach. This has to work seemingly across various	1.5.2.1401
M-Card				
94595	M-Card should handle Unexpected Profile_Changed APDU	VIDEO QUALITY	Cannot see the video.	1.5.2.1401
M-Card				

Fixes in OS 1.5.2 1301

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
95782	M-Card does not forward CDL CVT to host when the CVT version is changed	INCORRECT BEHAVIOR	This affects the host software upgrade.	1.5.2.1201
M-Card				
95879	M-Card does not forward all the matching CVT records in the cvt_v2xxxxx.tblo	INCORRECT BEHAVIOR	This is required for host software upgrade	1.5.2.1201
M-Card				

Fixes in OS 1.5.2 1201

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
92608	Reset PIN feature doesn't work in Mcard	Third Party Apps	User can not reset his PIN	1.5.2.1101
M-Card				
92654	Overlay Pgm CA_PMT from Host with orphan Overlay Pid entry has to be considered.	LIMITED FUNCTIONALITY	Either Improper Audio or Video availability on Hosts.	1.5.2.1101
M-Card				
93942	MCard sends wrong vct_id for a Davic-Only Host when h/e is set in Direct AD SG	BLACK SCREEN	No video as there is no channel map	1.5.2.1201
M-Card				
93494	MCards do not open tunnels destined for it unless a classifier is put in the DCD	CUSTOMER ENHANCEMENT	user may not get SI, EPG, 2-way	1.5.2.1201
M-Card				
93613	M-Card becomes non-responsive after some of its queues get clogged	LOSS SVC/VIDEO	Initially starts with Lack of A/V on encrypted channels and later goes out-of-communication on the available communication channels with both the HE and the Host and eventually ends up in Brick Mode or Non-responsiveness of the software.	1.5.2.1201
M-Card				
93125	M-Card in S-mode does not read group download file.	INCORRECT BEHAVIOR	M-Card will not read gdl.tblo file when operating in S-mode. This will cause it to fail to switch from DAVIC to DOCSIS mode when the mode is switched after the card has been started in DAVIC mode.	1.5.2.1201
M-Card				

Fixes in OS 1.5.2 1001

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
86477-01	MCARD boxes not handling copy protection correctly - NGP and non-NGP	Third Party Apps	Macrovision copy protection isn't recognized	1.5.2.1001
M-Card				
91299	HID-CID Changes: Not getting IP and not updating NVM override correctly	INCORRECT BEHAVIOR	user can not get 2-way operations.	1.5.2.0902
M-Card				
90986	New approach (HID:CID) to Solve Hub Straddling	FEATURE	Pick client rules based on the hub specific WKMA.	1.5.2.0901
M-Card				

Fixes in OS 1.5.2 0801

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
86477-01	MCARD boxes not handling copy protection correctly - NGP and	Third Party Apps	Macrovision copy protection isn't recognized	1.5.2.0801
M-Card				
88586	MCard should use IP addr in UNCI instead of PPV Poll Passthru for FPM response	ENHANCEMENT	TFPM Poll response may not reach the DNCS leading to lack of billing and/or PPV Purchase failures once the PPV Purchase limit gets hit.	1.5.2.0801
M-Card				

Fixes in OS 1.5.2 0702

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
87884-02 M-Card	Loss of authorization barker with non SA host	Third Party Apps	CA_Update with 0x71 is incorrectly send by the M-Card resulting in non authorization barker during channel	1.5.2.0702
85774 M-Card	M-Card does not send CA_Update when purchasing event after tuning to PPV	INCORRECT BEHAVIOR	This deficiency leads to an unfavourable delay in the play-out of the video which is ideally expected to happen immediately after the successful PPV Purchase rather	1.5.2.0701
87403 M-Card	vbapp support for bist,flashinfo and nvm crc	FEATURE	No impact for the customer. This is a new feature to support debugging in factory.	1.5.2.0701

Fixes in OS 1.5.2 0601

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
87088 M-Card	Non translated SI should not be passed to one-way hosts	Third Party	The channel map cached by 3rd party hosts will be lost due to non-translated SI sent during the next boot up.	1.5.2.0601

Fixes in OS 1.5.2 0501

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
86105 M-Card	M-Card may calculate CRC over a partially translated VCM	PERFORMANCE	The host may get confused with SI for a 20 sec cycle.	1.5.2.0501

Fixes in OS 1.5.2 0404

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>	
85049 M-Card	M-Card does not send Entt Change notification to CanH during some instances	INCORRECT BEHAVIOR	Incorrect behaviour leading to host misunderstanding the authorizations	1.5.2.0403	AT 5072
84648 M-Card	MCARD should use DII block size fields to determine last_section_number	INCORRECT BEHAVIOR	No Impact	1.5.2.0403	
84930 M-Card	Mcard changes to handle new CDL2.0 CDVT file formats, and Cccm.	INTERNAL ENHANCEMENT	Changes are needed to hadle CDVT common download CVT files created by the S&T TSB for common download 2.0. Mcard will not process the new files without this CR.	1.5.2.0403	
84753 M-Card	Additional CDL override changes	FEATURE	no user impact	1.5.2.0403	
83757 M-Card	SA Cntrl v3 Support for Slow boot implementation in AD SG mode	FEATURE	no user impact	1.5.2.0402	
84130 M-Card	M-Card should support the 'Named Entitlement' EUT feature	FEATURE	The Host can ,using this named entitlement feature, request for Authorization status of certain service capabilities by referring to them by their defined package name strings rather than by the existing Entitlement Id values.	1.5.2.0402	
84255 M-Card	ECN 1120 Support (IP address suport and Clarification of Lost Flows)	FEATURE	The M-Card should operate correctly if the IP address is reassigned. Also it should handle the lost_flow_ind() as explained in the ECN.	1.5.2.0402	
83235 M-Card	M-Card must handle unexpected result from Secure Micro during PPV event purchase	PERFORMANCE	The M-Card becomes non-responsive a few seconds after the PPV Purchase attempt.	1.5.2.0401	
82031 M-Card	Start from DSG mode if QPSK tuner is absent in the Host	FEATURE	This change is required for the hosts that doesn't contain qpsk tuner and only supports DSG. In this case, it's expected that the host will deny the oob rx tune request, so that the M-Card can jump immediately to the DSG mode.	1.5.2.0401	
83061-03 M-Card	Integrating OS20 Kernel Changes recommended in ST toolset 2.2.1	INCORRECT BEHAVIOR	During a corner case, same task can run twice when the task state is incorrectly set, resulting in that task getting dropped from the run queue. This will cause a ripple effect and halt the system, if the dropped task acquired a mutex or semaphore but not	1.5.2.0401	
82920 M-Card	MCard should modify the SCTE65 VCT_ID to 0x00 in Indirect and QPSK mode	FEATURE	no user impact	1.5.2.0401	
85373 M-Card	MCard should modify the SCTE65 VCT_ID to 0x00 in Indirect and QPSK mode	INCORRECT BEHAVIOR	the channel map is misaligned.	1.5.2.0404	

Fixes in OS 1.5.2 0303

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
79428-02 M-Card	M-Card crash on early CA_PMT in TiVo HD after re-insertion or download.	LOSS SVC/VIDEO	Only affects M-Cards used in TiVo HD model host. When condition occurs, user will have to power cycle TiVo HD to restore SVC/VIDEO.	1.5.2.0301
80356-02 M-Card	Validating memory handle for heap operations	INCORRECT BEHAVIOR	User may have to reboot STB. Sometimes no premium programs will be available.	1.5.2.0301
80779-02 M-Card	Host strucks at XAIT as Card doesn't receive SI packets.	UNKNOWN	No SI is received	1.5.2.0301
81007-02 M-Card	TiVo not able to show video after M-CARD reinsertion	BLACK SCREEN	TiVo has to be tuned out of digital program or restarted.	1.5.2.0301
70648-02 M-Card	MCard has IP address, but it cannot be pinged from the DNCS.	INCORRECT BEHAVIOR	Customer will not be able to purchase xOD and will only be able to purchase PPV events until their limits are reached if the box is not communicating with the DNCS.	1.5.2.0301
80970-02 M-Card	Card Re signs on for no apparent reason.	INCORRECT BEHAVIOR	no user impact	1.5.2.0301
79181-02 M-Card	CRC validation has to be added to the NVM Cache	PERFORMANCE	This would make the M-Card Hardware more robust such a way that unintentional modifications would not happen to the Non Volatile memory	1.5.2.0301
80568-02 M-Card	Add fields to Diagnostics pages to show the NVM Corruption Recovery Count	FEATURE	More fields are added to the diagnostics pages to detect corrected as well as uncorrected cases.	1.5.2.0301
80869-02 M-Card	DumpMem command is required in poddiag cmd2k	UNKNOWN	no user impact	1.5.2.0301
80780-02 M-Card	Add more diag fields in MCard Davic page to identify field issues/behavior	UNKNOWN	no user impact	1.5.2.0301
81522 M-Card	Removal of Connect/Disconnect feature. Removal of Leased Host private resource.	FEATURE	None. The feature will be implemented using the POD Handler.	1.5.2.0301
80620-02 M-Card	Remove coupling between reading of pod channel definition file with XAIT table	PERFORMANCE	Will improve OCAP host boottime	1.5.2.0302
82019 M-Card		PERFORMANCE	In the scenario involving certain third party and/or retail hosts - the performance of the M-Card will start degrading after running fine for a few days continuously and this starts affecting the stability of the M-Card s/w execution.	1.5.2.0302
82085 M-Card	Remove all calls to time() function	DEVELOPMENT ONLY	The time() function is used in a few places just for debugging purposes.	1.5.2.0303

Fixes in OS 1.5.2 0201

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
77827 M-Card	LUG_ID also needs to be considered as VCT_ID if rule matches in group_defs.txt	INCORRECT BEHAVIOR	When the action for the rule in enhanced channel map is defined as LUG_ID M-card ignores the action as per the requirement defined then. As a result the card will not send the proper VCT ID and the host may not get channel map as the current system archit	1.5.2.0201
77124 M-Card	ECR 1082-5 : Host Addressable Properties needs to be implemented	FEATURE	This new feature is required to support OCAP hosts loading Application based on card's reply. For this a new resource is added by CableLabs that allows the CableCARD to forward the data requested by host based on which it decides loading an application	1.5.2.0201
77566 M-Card	M-Card should display the Secure Micro S/w version in its diag pages	FEATURE	No User Impact seen.	1.5.2.0201
77501 M-Card	Add new diag page to display the count of dropped POD Handler SAS Su=yinc message	FEATURE	No User Impact seen.	1.5.2.0201
77501 M-Card	M-Card would drain its memory if HOST pulls OBOC data in a slower rate.	LOSS SVC/VIDEO	The M-Card would become non-responsive. As a result the user would lose encrypted content	1.5.2.0201
77518 M-Card	Corrupted SPDU causes M-Card to close SAS session	INCORRECT BEHAVIOR	Host puts up not authorised barker. All POD handler communication stops.	1.5.2.0201
77502 M-Card	M-Card doesn't forward passthru messages to the host	OCAP	RA might not receive the profile update catalog passthru message	1.5.2.0201

Fixes in OS 1.5.2 0101

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
76089 M-Card	Support for Host Reset Vector Apdu	FEATURE	This will help the ocap hosts to reset in a Generic Manner.	1.5.2.0101
75807 M-Card	Couple of DHCP sub-options are not updated as per the new CCIF spec.	UNKNOWN	no user impact	1.5.2.0101
76090 M-Card	Field Diagnostics Support	INTERNAL ENHANCEMENT	Support to enhance the field diagnostics support in the CableCARD Side.	1.5.2.0101
73104 M-Card	MCard diag HTML needs to be consistent for improved readability	INTERNAL ENHANCEMENT	This is an enhancement request, which will result in the MCard diag pages being more readable and consistent with the	1.5.2.0101
76095 M-Card	New Generic Feature Parameter Support - Reset PINs	FEATURE	The M-Card shall support Reset PINs Feature Parameter	1.5.2.0101
76097 M-Card	Support for Connect/Disconnect Apdu	FEATURE	An approach to deactivate the box based upon the brick package in a generic manner.	1.5.2.0101
76094 M-Card	New Generic Feature Parameter Support - Turn On Channel	FEATURE	The M-Card shall support Turn On Channel Generic Feature Parameter	1.5.2.0101

Fixes in OS 1.5.1 0103

<u>CR #</u>	<u>CR Title</u>	<u>User Impact</u>	<u>Description</u>	<u>Fixed In</u>
76098 M-Card	Use CaSystemID client instead of WKMA for SA network info	FEATURE	no user impact	1.5.1.0103
76109 M-Card	Group Download Capability for Common Download	FEATURE	A New approach to assign download	1.5.1.0103
76054 M-Card	MCard should allow cccm override that comes from CDL file.	FEATURE	no user impact	1.5.1.0103
73870 M-Card	Support for VCT_ID generic feature and DSG_Directory with correct VCT_ID	FEATURE	no user impact	1.5.1.0103
74181 M-Card	Socket Proxy, Direct AD SG support in Mcard	FEATURE	In Direct AD SG mode, user may receive the SI faster.	1.5.1.0103

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