

Packet store creation and VC 2, 3 allocation
 File: H_FCP_DHS_3038.xls
 Author: S. Manganelli



Procedure Summary

Objectives

This procedure describes the steps needed to allocate (create) a specified Packet Store.

Summary of Constraints

The shall be at least two seconds of delay between the deletion of a packet store and the creation of a new packet store using the same Packet Store ID.

TC(8,4,3,1) "Allocate Packet Store" is rejected for the CEL (Critical Event Log).

Note that TC(8,4,3,1) will fail when there is an ongoing TC(8,4,2,3) (Check Mass Memory), TC(8,4,2,4) (Map Mass Memory), TC(8,4,2,5) (Turn Bank on/off) or TC(8,4,2,6) (Initialise Mass Memory) using the same MM board.

Spacecraft Configuration

Start of Procedure

- CDMU in default configuration, that is:
- PM A or B ON (nominally A)
 - TM Encoder/OBT A or B active (nominally A)
 - RM A and B enabled
 - MM A and B ON

End of Procedure

- CDMU in default configuration, that is:
- PM A or B ON (nominally A)
 - TM Encoder/OBT A or B active (nominally A)
 - RM A and B enabled
 - MM A and B ON

Reference File(s)

Input Command Sequences

Output Command Sequences

HFD3038A
 HFD3038B

Referenced Displays

ANDs GRDs SLDs
 ZAD22999 (None)

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
31/10/07		1	Created	cmevi-hp	
10/12/07		2	Procedure splitted in 2 sequences.	cmevi-hp	

Status : Version 6 - Unchanged
 Last Checkin: 13/01/09

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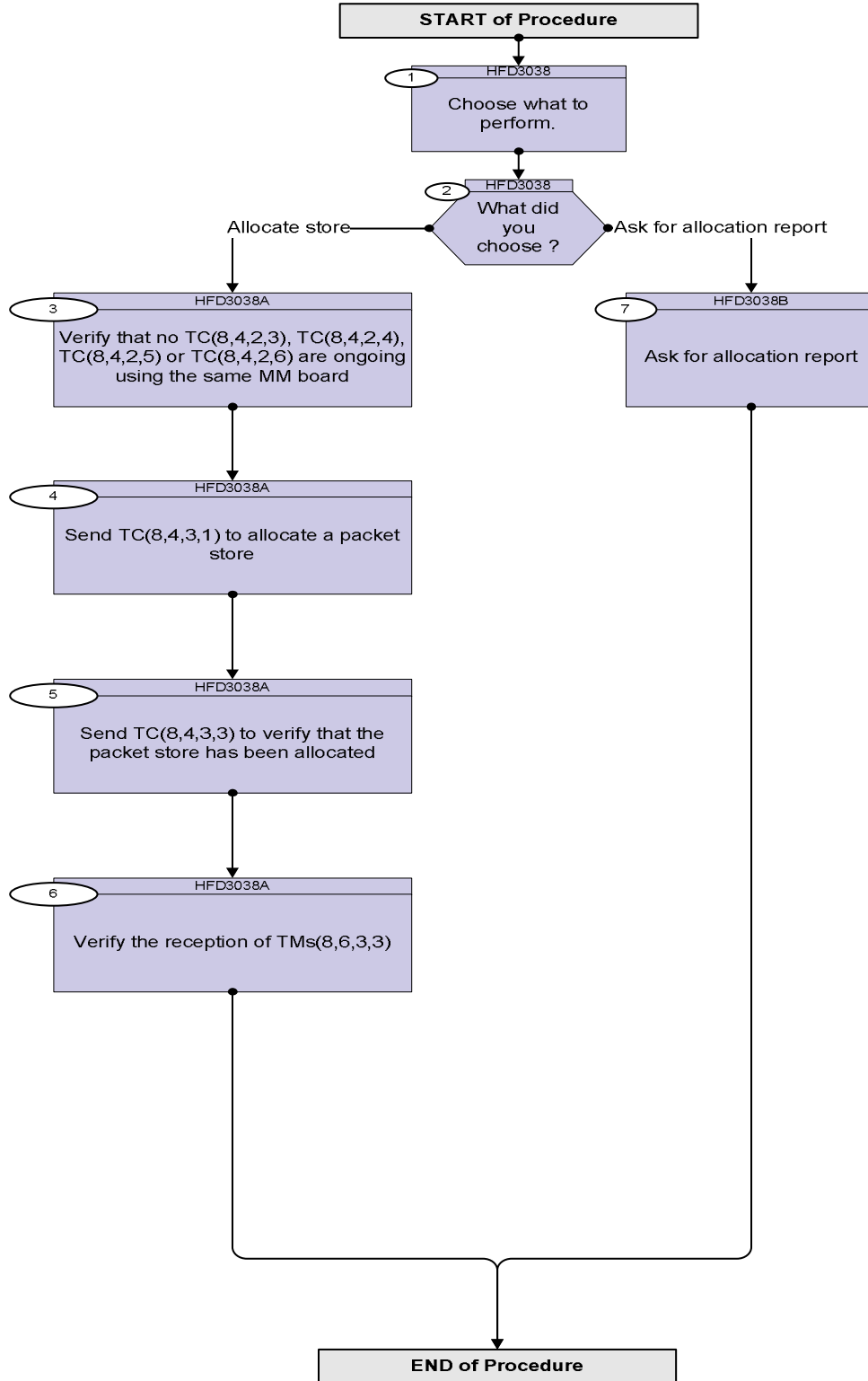


10/12/07		3	DB checked.	cmevi-hp	
24/01/08	1	4	Batch update of TC flags	S. Manganelli	
09/12/08		5	DB check after OBSW 3_6_2	S. Manganelli	
13/01/09	2	6	Updated following OBSW 3_8	S. Manganelli	

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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
<p><i>TC Seq. Name :HFD3038 (Dummy sequence)</i></p> <p><i>TimeTag Type: N</i> <i>Sub Schedule ID:</i></p> <p style="text-align: center;">□</p>				
1		Choose what to perform.		Next Step: 2
2		What did you choose ?		Next Step: Allocate store 3 Ask for allocation report 7
<p><i>TC Seq. Name :HFD3038A (Allocate store)</i></p> <p><i>TimeTag Type: N</i> <i>Sub Schedule ID:</i> <i>Formal Parameter List :</i> TYP TYPE= <dec> VC VCDUMP= <dec> ID STOREID= <dec> SAD STARTADD= <hex> LEN LENGTH= <dec></p>				
3		Verify that no TC(8,4,2,3), TC(8,4,2,4), TC(8,4,2,5) or TC(8,4,2,6) are ongoing using the same MM board		Next Step: 4
		Verify Telemetry TC_8-4-2-3_x DEE0J161 = FALSE		AND=ZAD22999
		Verify Telemetry TC_8-4-2-4_x DEE0K161 = FALSE		AND=ZAD22999
		Verify Telemetry TC_8-4-2-5_x DEE0L161 = FALSE		AND=ZAD22999
		Verify Telemetry TC_8-4-2-6_x DEE0M161 = FALSE		AND=ZAD22999
4		Send TC(8,4,3,1) to allocate a packet store		Next Step: 5
		This TC will create a Packet Store in MM.		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch															
		<p>In the TC it is necessary to set the following parameters:</p> <ul style="list-style-type: none"> - Packet Store Type: linear or cyclic A linear packet store becomes disabled when full. In a cyclic packet store, old data will be overwritten if the store becomes full. - Virtual Channel: VC2 or VC3 - Packet Store ID: the packet store id associated 																	
		<ul style="list-style-type: none"> - Start address: Internal address - Length: number of bytes to allocate for the Packet Store. 32768 bytes of this allocated area is reserved by the BSW to store internal information. 																	
		<p>Execute Telecommand</p> <p style="text-align: center;">AllocatePktStore</p> <p>Command Parameter(s) :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">TYP</td> <td style="width: 30%;">DH033160</td> <td style="width: 30%;">TYPE</td> </tr> <tr> <td>VC</td> <td>DH034160</td> <td>VCDUMP</td> </tr> <tr> <td>ID</td> <td>DH035160</td> <td>STOREID</td> </tr> <tr> <td>SAD</td> <td>DH032160</td> <td>STARTADD</td> </tr> <tr> <td>LEN</td> <td>DH012160</td> <td>LENGTH</td> </tr> </table> <p>TC Control Flags :</p> <p style="text-align: right;">GBM IL DSE --Y -- ---</p> <p>Subsch. ID : 10 Det. descr. : Allocate Packet Store</p>	TYP	DH033160	TYPE	VC	DH034160	VCDUMP	ID	DH035160	STOREID	SAD	DH032160	STARTADD	LEN	DH012160	LENGTH	DC807160	
TYP	DH033160	TYPE																	
VC	DH034160	VCDUMP																	
ID	DH035160	STOREID																	
SAD	DH032160	STARTADD																	
LEN	DH012160	LENGTH																	
5		<p>Send TC(8,4,3,3) to verify that the packet store has been allocated</p> <p>The allocation is reported in up to four TM (8,6,3,3).</p>		Next Step: 6															
		<p>Execute Telecommand</p> <p style="text-align: center;">ReportPktStrAlloc</p> <p>TC Control Flags :</p> <p style="text-align: right;">GBM IL DSE --Y -- ---</p> <p>Subsch. ID : 10 Det. descr. : Report Packet Store Allocation</p>	DC809160																
6		<p>Verify the reception of TMs(8,6,3,3)</p>		Next Step: END															
		<p>Verify Packet Reception</p> <p style="text-align: center;">Packet Store Allocation Report</p> <p>Packet Details:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">APID:</td> <td style="width: 50%;">16</td> </tr> <tr> <td>Type:</td> <td>8</td> </tr> <tr> <td>Subtype:</td> <td>6</td> </tr> <tr> <td>PI1:</td> <td>771</td> </tr> <tr> <td>PI2:</td> <td>22</td> </tr> </table>	APID:	16	Type:	8	Subtype:	6	PI1:	771	PI2:	22	PktStoreAllc						
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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry FUN DE016160		(None)
		Verify Telemetry ACT DE017160		(None)
		Verify Telemetry SID DE018160		(None)
		Verify Telemetry N DE023160		(None)
The following parameters are repeated N times				
		Verify Telemetry PKS_ID DE024160		(None)
		Verify Telemetry SAD DE019160		(None)
		Verify Telemetry LEN DE025160		(None)
<p>TC Seq. Name :HFD3038B (Ask for current allocation)</p> <p>TimeTag Type: Sub Schedule ID: <input type="checkbox"/></p>				
7		Ask for allocation report		Next Step: END
		Execute Telecommand ReportPktStrAlloc TC Control Flags : GBM IL DSE --Y -- -- Subsch. ID : 10 Det. descr. : Report Packet Store Allocation	DC809160	
End of Procedure				