Allocate or deallocate TM type and subtype in a MM packet store
File: H_FCP_DHS_3036.xls
Author: cmevi-hp

Procedure Summary

Objectives

This procedure describes the steps needed to modify the storage selection definition for a specified Packet Store.

The storage selection definition used by CDMS to send packets for storage in a given Packet Store consists of the identification of the Application Identifier, Type and Subtype of the relevant packets.

Summary of Constraints

Each packet store has a selection criteria set up from Ground via TCs.

For the standard packet stores the selection criteria are mutually exclusive per memory board (i.e. one packet can be stored in at most one standard packet store on each memory board).

The default packet stores record packets that do not match the selection criteria of any standard packet store (i.e. the selection criteria is always the complement of the union of all other selection criteria of the standard packet store).

SEL may have a selection criteria that overlaps with other packet stores (i.e. one packet may be recorded in the SEL as well as in a standard packet store).

TC(15,3) "Add Packet Definitions to Storage Selection Definition" and TC (15,4) "Remove Packet Definitions from Storage Selection Definition" are rejected for the CEL and dafault packet stores.

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

HFD3036A
HFD3036B

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Referenced Displays

ANDs **GRDs** **SLDs**

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
30/10/07		1	Created	cmevi-hp	
10/06/08	1	2	TC flag and seq property changed	S. Manganelli	
28/11/08	2	3	Procedure updated according to latest version received from industry on 29/09/2008	cmevi-hp	

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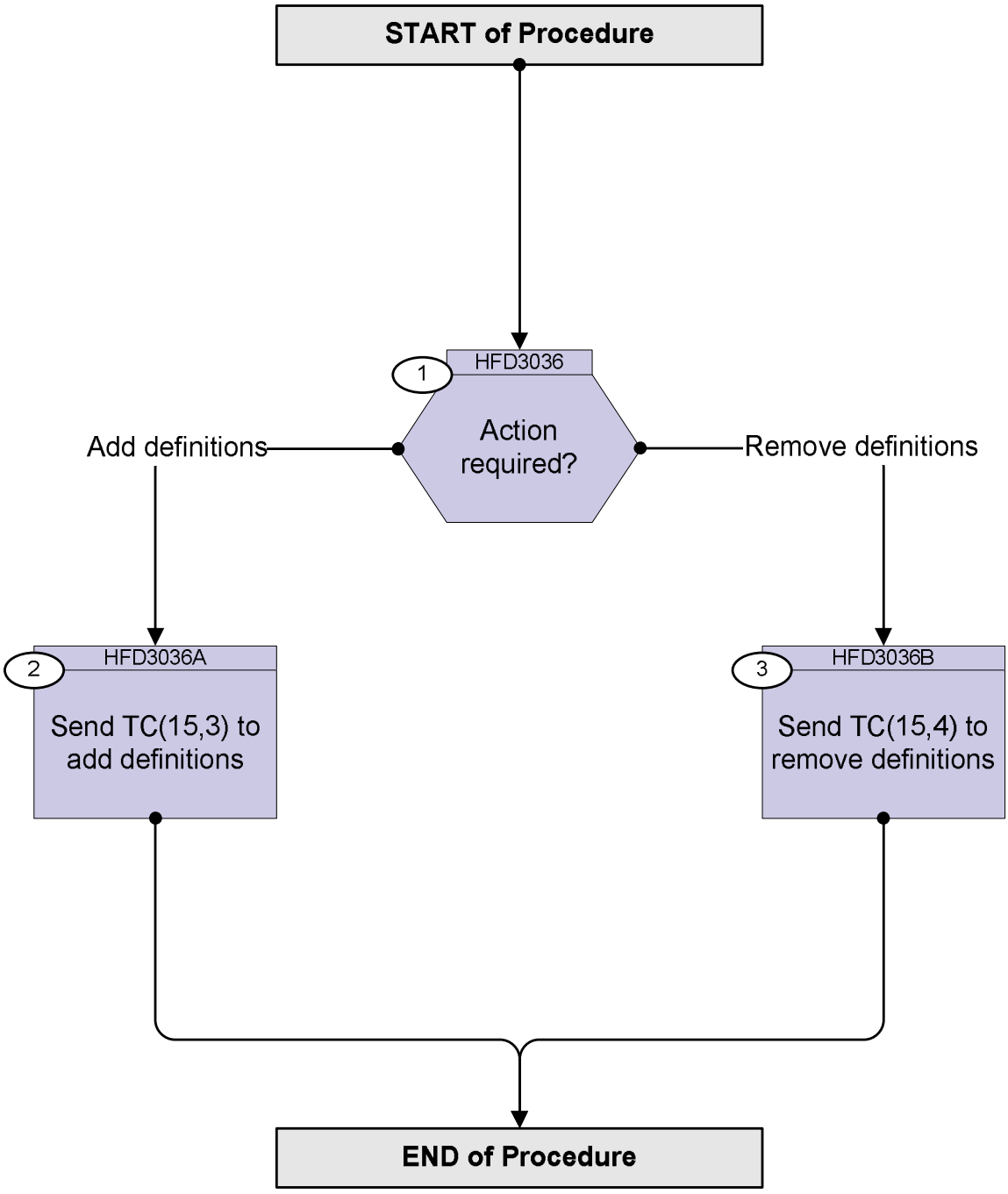
Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Beginning of Procedure		
		TC Seq. Name :HFD3036 (Dummy sequence) *TimeTag Type:* *Sub Schedule ID:*		
1		*Action required?*		Next Step: Add definitions 2 Remove definitions 3
		TC Seq. Name :HFD3036A (Add definitions) *TimeTag Type: B* *Sub Schedule ID:*		
2		*Send TC(15,3) to add definitions*		Next Step: END
		WARNING: This TC overrides any previous selection		
		In the TC(15,3) it is necessary to set the following parameters: **- Store-ID: the identifier of the Packet Store in which TM packets are stored;** **- N1: number of TM packet APIDs in the Packet Store Storage Selection Definition that follows;** **- APID: the identifier of the unit/application for which TM packets are stored;** **- Type: a telemetry source packet Type;** **- N2: number of Subtype definitions that follow;** **- Sub-Type: a telemetry packet Subtype of the specified Type.**		
		The current contents of the Packet Store is not affected by the request and, if storage is enabled, packets start or stop to be appended to the Packet Store immediately after the command is executed.		
		Note : Differrent TCs are used depending on (SUM(N1) + SUM(N2)) being even or odd. **Futhermore, a dedicated TC has been instantiated when all TM packets are to be stored.**		
		WARNING: the following TCs are intended to be just examples.		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
2.1		*All types of TM packets from all Application Processes, which are generated on board, are to be stored in the specified Packet Store*		
		N1=0		
		Execute Telecommand **AddPktDefStorageSel_A** *Command Parameter(s) :* **Store_Id DH003160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Add All Packet Definitions to Storage Selection This Telecommand will not be included in the export	**DC156160** **Store ID**	
2.2		*The specified Type of Telemetry packet from the Application Process, covering all Subtypes, is added (if not yet present) to the list of stored packets of the specified Packet Store*		
		N1 > 0 and N2 = 0 The following is an example of SUM(N1) + SUM(N2) being odd. We use however the _E command because our MCS inserts automatically the padding octect where missing.		
		Execute Telecommand **AddPktDefStorageSel_E** *Command Parameter(s) :* **Store_Id DH003160** **N1 DH004160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Add Pkt Def. to Storage Selection Def. - SUM(N1+N2) even. This Telecommand will not be included in the export	**DC154160** **Store ID** **1 <dec>** (Def) **Application ID** **5 <dec>** **0 <dec>**	
2.3		*The specified Type and related Subtypes of Telemetry packets from the Application Process are added to the list of stored packets of the specified Packet Store*		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		N1 > 0 and N2 > 0 The following is an example of SUM(N1) + SUM(N2) being even.		
		Execute Telecommand **AddPktDefStorageSel_E** *Command Parameter(s) :* **Store_Id DH003160** **N1 DH004160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** **Sub-Type DH067160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Add Pkt Def. to Storage Selection Def. - SUM(N1+N2) even. This Telecommand will not be included in the export	**DC154160** **Store ID** **1 <dec>** (Def) **Application ID** **5 <dec>** **1 <dec>** (Def) **1 <dec>**	
2.4		*It is possible to specify for one Type all SubTypes (ie N2=0) and for another Type specific subtypes (N2>0) in a same TC.*		
		N1 > 1 The following is an example of SUM(N1) + SUM(N2) being even.		
		Execute Telecommand **AddPktDefStorageSel_E** *Command Parameter(s) :* **Store_Id DH003160** **N1 DH004160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** **Sub-Type DH067160** **Sub-Type DH067160** TC *Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Add Pkt Def. to Storage Selection Def. - SUM(N1+N2) even. This Telecommand will not be included in the export	**DC154160** **Store ID** **2 <dec>** **Application ID** **5 <dec>** **0 <dec>** **Application ID** **3 <dec>** **2 <dec>** **25 <dec>** **26 <dec>**	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		TC Seq. Name :HFD3036B (Remove definitions) *TimeTag Type: B* *Sub Schedule ID:*		
3		*Send TC(15,4) to remove definitions*		Next Step: END
		In the TC(15,4) it is necessary to set the following parameters: **- Store-ID: the identifier of the Packet Store in which TM packets are stored;** **- N1: number of TM packet APIDs in the Packet Store Storage Selection Definition that follows;** **- APID: the identifier of the unit/application for which TM packets are stored;** **- Type: a telemetry source packet Type;** **- N2: number of Subtype definitions that follow;** **- Sub-Type: a telemetry packet Subtype of the specified Type.**		
		The current contents of the Packet Store is not affected by the request and, if storage is enabled, packets start or stop to be appended to the Packet Store immediately after the command is executed.		
		Note : Differrent TCs are used depending on (SUM(N1) + SUM(N2)) being even or odd. **Futhermore, a dedicated TC has been instantiated when for a specified Packet store the entire storing list is to cleared.**		
		WARNING: the following TCs are intended to be just examples.		
3.1		*Clear the entire storing list for the specified Packet Store*		
		N1=0		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **RemPktDefStorageSel_A** *Command Parameter(s) :* **Store_Id DH003160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Remove Packet Definitions - Clear all This Telecommand will not be included in the export	**DC159160** **15 <dec>**	
3.2		*The specified Type of Telemetry packet from the Application Process, covering all Subtypes, is removed (if present) from the list of stored packets of the specified Packet Store*		
		N1 > 0 and N2 = 0 The following is an example of SUM(N1) + SUM(N2) being odd. We use however the _E command because our MCS inserts automatically the padding octect where missing.		
		Execute Telecommand **RemPktDefStorageSel_E** *Command Parameter(s) :* **Store_Id DH003160** **N1 DH004160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Remove Pkt Def. from Storage Selection Def. - SUM(N1+N2) even. This Telecommand will not be included in the export	**DC157160** **Store ID** **1 <dec>** (Def) **Application ID** **5 <dec>** **0 <dec>**	
3.3		*The specified Type and related Subtypes of Telemetry packets from the Application Process are removed from the list of stored packets of the specified Packet Store*		
		N1 > 0 and N2 > 0 The following is an example of SUM(N1) + SUM(N2) being even.		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **RemPktDefStorageSel_E** *Command Parameter(s) :* **Store_Id DH003160** **N1 DH004160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** **Sub-Type DH067160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Remove Pkt Def. from Storage Selection Def. - SUM(N1+N2) even. This Telecommand will not be included in the export	**DC157160** **Store ID** **1 <dec>** (Def) **Application ID** **5 <dec>** **1 <dec>** (Def) **1 <dec>**	
3.4		*It is possible to specify for one Type all SubTypes (ie N2=0) and for another Type specific subtypes (N2>0) in a same TC.*		
		N1 > 1 The following is an example of SUM(N1) + SUM(N2) being odd.		
		Execute Telecommand **RemPktDefStorageSel_O** *Command Parameter(s) :* **Store_Id DH003160** **N1 DH004160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** **App_Process_Id DH065160** **Type DH066160** **N2 DH005160** **Sub-Type DH067160** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Remove Pkt Def. from Storage Selection Def. - SUM(N1+N2) odd. This Telecommand will not be included in the export	**DC158160** **Store ID** **2 <dec>** **Application ID** **3 <dec>** **0 <dec>** **Application ID** **5 <dec>** **1 <dec>** (Def) **1 <dec>**	

End of Procedure