DFSMShsm documentation updates for OA63825

z/OS DFSMShsm Data Areas GC14-7504

z/OS DFSMShsm Data Areas GC14-7504 for V3R1 and higher has been updated for the below changes.

"Chapter 44. MCVT—Management Communication Vector Table" has a description of all MCVT fields. Updated the same with below fields.

a. Table 112. MCVT—Management Communication Vector Table

Offsets Decimal	(Hex)	Туре	Length	Name	Description
791	(317)	BITSTRING	1	MCVTFBVS	This byte contains the following backup volume selection flags:
		1		MCVTFBDA	When set to 1, volume backup processing can output to a tape or DASD backup volume.
		.1		MCVTFBDD	When set to 1, volume backup processing can output only to a DASD backup volume.
		1		MCVTFBDT	When set to 1, volume backup processing can output only to a tape backup volume.
		1		MCVTFBSA	When set to 1, spill processing can output to any type of spill backup volume.
		1		MCVTFBSD	When set to 1, spill processing can output only to a DASD spill backup volume.
		1		MCVTFBST	When set to 1, spill processing can output only to a tape spill backup volume.
		<mark>1.</mark>		MCVTQMSG	When 1 enables to display ARC1902I on the
					console when AUTOBACKUP is still running
					after quiesce/end time
		X			Reserved

1464	(500)				
1464	(5B8)	FIXED	4	MCVTDTQR	Amount of time (seconds) after the
					quiesce/end time need to display ARC1902I
					message on the console when AUTOBACKUP is
					still running. This field is only valid if
					MCVTQMSG is on.

b. Table 115. MCVT Data Area Cross-Reference Table

Name	Hex Offset	Hex value	Struct Level
MCVTQMSG	317		3
MCVTDTQR	5B8		2

"Chapter 5. BGCB—Backup Global Control Block " has a description of all BGCB fields and "Table has been updated to include BGCB_WTO_1902_ID at offset 112 (x'70')"

a. Table 9. BGCB—Backup Global Control Block

Offsets

Decimal	(Hex)	Туре	Length	Name	Description
112	(70)	FIXED	4	BGCB_WTO_1902_ID	DOM id of ARC1902I message for AUTOBACKUP function

b. Table 11. BGCB Data Area Cross-Reference Table

Name	Hex Offset	Hex value	Struct Level
BGCB_WTO_1902_ID	6C		3

z/OS DFSMShsm Storage Administration SC23-6871

z/OS DFSMShsm Storage Administration SC23-6871 for V3R1 and higher has been updated for the below changes.

" Chapter 65. SETSYS command: Establishing or changing the values of DFSMShsm control parameters Consolidated commands, storage group definitions, and management classes for the example system". Updated the same with the new SETSYS command with below details.

a. Under the section "*Syntax of the SETSYS command*" added a diagram for the new SETSYS ISSUEARC1902 command.

	YES		•
► ISSUEARC1902 ─	►NO	► DELAYTIME	→ nnn (secs)
			▶ 7200 (secs)

b. Under the section "Summary of DFSMShsm default values", in "Table 63. Summary of DFSMShsm Default Values" below "INTERVALMIGRATION", added the default values for the new SETSYS ISSUEARC1902 parameters

Table 63. Summary of DFSMShsm Default Values	
ISSUEARC1902	Issue of ARC1902I is disabled and the delaytime is
	set to default value of 7200 secs

c. Under the section "*Optional parameters of the SETSYS command*" added the details of the new SETSYS ISSUEARC1902 command.

ISSUEARC1902: Enable/disable the issuing of ARC1902I message to the console

Explanation:

ISSUEARC1902(YES|NO DELAYTIME(secs)) is an optional parameter that controls whether DFSMShsm will issue message ARC1902I when an autobackup function is still running after its specified quiesce/end time. If enabled, ARC1902I will be displayed on the operator console after the user specified amount of time, in

seconds, after the quiesce/end time of an autobackup function. The ARC1902I message will be removed from the operator console if the affected automatic function completes normally.

Subparameter	Explanation		
Y N	Enable/disable the DFSMShsm to issuing ARC1902I message to the console.		
DELAYTIME(secs)	Amount of time (seconds) after the quiesce/end time need to display ARC1902I message on the console when autobackup is still running.		

The Sub-parameters of the ISSUEARC1902 parameters follow this discussion.

SMS relationship: Parameter has the same meaning when applied to SMS-managed or non-SMS- managed DASD volumes or data sets.

SETSYS default: The following table describes the SETSYS ISSUEARC1902 default.

If	then	
If you specify ISSUEARC1902.	Issue of ARC1902I message is enabled with default delaytime 7200 secs	
If you specify DELAYTIME without a value.	SETSYS default is 7200 secs (equivalent to 2 hrs).	
If you specify DELAYTIME with a value greater than 50400 secs (equivalent to 14 hrs).	SETSYS default is 50400 secs (equivalent to 14 hrs).	

DFSMShsm default: The following table describes the SETSYS ISSUEARC1902 DFSMShsm default.

If	then	
If you specify ISSUEARC1902.	Issue of ARC1902I message is enabled with default delaytime 7200 secs	
If you specify DELAYTIME without a value.	DFSMShsm default is 7200 secs (equivalent to 2 hrs).	
If you specify DELAYTIME with a value greater than 50400 secs (equivalent to 14 hrs).	N/A	

z/OS MVS System Messages Volume 2 (ARC - ASA)

z/OS MVS System Messages Volume 2 (ARC – ASA) for V3R1 and higher has been updated for the below changes.

1. Under the section "Chapter 2. ARC messages" added a new message with below details.

ARC1902I AUTOBACKUP | STILL RUNNING | HH:MM AFTER ITS QUIESCE/END TIME IS REACHED/ SKIPPING NEXT AUTOBACKUP

Explanation:

The autobackup function still running hh:mm after the quiesce time/end time is reached or still running after the timer expired for the next start time for this autobackup function to run.

The quiesce time is the time after which no new volume operations are started for the function, but volumes already in progress are allowed to complete.

If the autobackup is still running when the timer expires for the start of next run, the autobackup is skipped and the ARC1902I message will remain on the operator console until the affected autobackup completes normally.

Note: This message is issued when enabled through the DFSMShsm SETSYS ISSUEARC1902 command. The purpose of the message is to help Storage Administrators to monitor the progress of their autobackup and, if needed, take an appropriate action. The timing of when the message is issued, if a quiesce time was specified, is controlled by the DELAYTIME sub keyword of the SETSYS ISSUEARC1902 command. The default for issuing the message is 120 minutes after the quiesce time if the autobackup is still running

System action

DFSMShsm processing continues.

Programmer response

Notify the storage administrator.

Storage Administrator response

The QUERY AUTOPROGRESS command can be issued periodically to see how much work remains to be done for an automatic function currently in progress. The command returns a list showing the number of volumes that have not been processed and the total volumes eligible to be processed. The QUERY ACTIVE command can be used to request the status of each DFSMShsm volume and data set subtask and what each active one is doing. The QUERY ACTIVE(TCBADDRESS) command can be used to obtain the Task Control Block addresses of active DFSMShsm data movement tasks.

If it is determined that one of the data movement tasks is hung, the function can then be held via the HOLD command and the CANCEL TCBADDRESS(tcbaddress) command can be used to cancel the stuck task, the RELEASE command can then be used to release the function. The ABEND code associated with the task cancellation is x'7D0'(decimal 2000).

The CANCEL TCBADDRESS command is intended for use when active tasks are hung. Cancelling a task actually moving towards completion may have unintended consequences, so use caution when cancelling tasks. HOLD before CANCEL is strongly recommended since in some circumstances an ABEND at the wrong moment of a processing window can itself produce a hang. It is also a good idea to re-do the QUERY ACTIVE(TCBADDRESS) just before issuing the CANCEL command to ensure the task is still running.

After data movement to tape has been cancelled, an OPEN ABEND613 may be received when DFSMShsm tries to use the same tape for output later. The tape will be marked full and HSM will select another tape and continue with the function.

In certain situations where a tape cannot be closed due to a hardware error, HSM may still hold that resource after the CANCEL.

Refer to DFSMShsm Storage Administration Reference for more details on the QUERY and CANCEL commands.

Source

DFSMShsm

2. Under the section "Chapter 2. ARC messages" updated below existing message with below details.

ARC0103I

Add new ISSUEARC1902 insert.

ISSUEARC1902

This parameter was specified with an invalid delaytime option.

Programmer response

If DELAYTIME was specified, ensure SETSYS ISSUEARC1902(Y DELAYTIME(nnnnn)) was specified.

3. Under the section "Chapter 2. ARC messages" updated below existing message with below details.

ARC0274I

Append new ISSUEARC1902 insert to the end of the message

ISSUEARC1902=({YES | NO}, DELAYTIME=nnnn)

If ISSUEARC1902=YES, issuing of ARC1902I message is enabled.

If ISSUEARC1902=NO, issuing of ARC1902I message is disabled,

IF DELAYITIME=nnnnn, it is the amount of time, in seconds, past the AUTOBACKUP quiesce time that will trigger issuing of the ARC1902I message if AUTOBACKUP is still running The value must be between 0-50400 secs (14hrs). The maximum value is 50400 secs (14 hrs).

If DELAYTIME = *****, issuing of ARC1902I message is disabled.