



CONVERSION NOTEBOOK

HCC/MVS 3.0

HOST

COMMUNICATION

CONTROL

7th edition

7th Edition

This Manual has been written with utmost care. Textual or formal errors still cannot be excluded!

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Extensions and changes to this Manual are based on PTF with status ZY00108, in as much as software changes were made at the same time.

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CONVERSION NOTEBOOK for HCC/MVS 3.0

1 CONVERSION NOTEBOOK for HCC/MVS 3.0

LITERATURE

Manual	Order number	Reference
General Information Manual	600226-A	G
Installation/Customization Guide	600227-A	G
System Reference Guide	600233-A	G
Operators Guide	600231-A	G
Command Reference	600223-A	G
Conversion Notebook	600224-A	G
Installation/Customization Reference	600228-A	G
Messages and Codes	600230-A	G
ISPF User Guide	600229-A	G
Release Guide	600232-A	G

- G This Manual is part of the standard HCC documentation. Further copies of the manuals can be obtained from the publisher.



CONVERSION NOTEBOOK for HCC/MVS 3.0

2 VERSION 3 SUMMARY TABLES

This Section contains a summary of new, changed and deleted information for HCC/MVS Version 3.0

2.1 DOCUMENTATION ORGANIZATION FOR HCC/MVS VERSION 3.0

HCC/MVS Version 3.0	HCC/MVS Version 2.4.0
General Information Manual	General Information Manual
Installation/Customization Guide Installation/Customization Reference	Installation/Customization Guide
System Reference Guide	System Reference Guide
Command Reference Operator Guide	Operator Guide
Messages and Codes	Messages and Codes
Operator Quick Reference	Operator Quick Reference
ISPF-User Guide	ISPF-User Guide
Not available	Presentation Manual
Release Guide	Release Guide
Conversion Notebook	Not available

Fig. 1 Documentation organization for HCC/MVS Version 3.0 as compared to HCC/MVS Version 2.4.0

2.2 HACCPARM HCC/MVS PARAMETER CHANGES

Parameter	Release	Changes
AUTOFREEVOL	3.0	Usage changed - this statement only controls the automatic FREEVOL process for cartridges.
DSNGR	3.0	Statement changed - the Scratch Warning level has been extended from 3 to 5 positions.
EXTSEC	3.0	Statement deleted - replaced by SECURITY.
FPMADDEF	3.0	Usage changed - this parameter is only valid for coordinates with TYPE=CAR and Scratch pools for cartridges.
JOBGR	3.0	Statement changed - the Scratch Warning level has been extended from 3 to 5 positions.
KEEPWT	3.0	Usage changed - this parameter only controls the Keep-Wait-Time for TAPE devices - the OAD of a jukebox is serviced without Keep-Wait-Time.
LDEV	3.0	Usage changed - the option Fxx (foreign mount) is only valid for the medium TAPE - the option Rxx (rack) with the parameter DYN (dynamic area) is only valid for the medium TAPE - the option Txx (tower) with the parameter DYN (dynamic area) is only valid for the medium TAPE - the option Txx (tower) with the parameter HWS (HCC Work Stor.) is only valid for the medium TAPE. Function extended - the option Exx (eject area) is valid for the medium optical disk. - the option Ixx (insert area) is valid for the medium optical disk. - the option Rxx (rack) is valid for the medium optical disk. - the option Txx (tower) is valid for the medium optical disk. New parameter - the parameter LIB=C/O serves to identify the medium, the parameter is ignored for the option Wxx (waste box)

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Parameter	Release	Changes
MSG=CBR4405D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=CBR4406D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=CBR4423D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=CBR4424D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=CBR4432D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=CBR4438D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=CBR4439D	3.0	New statement - automatic acknowledgment to a pending reply from OAM
MSG=IEC512I	3.0	New statement - automatic acknowledgment to an ejection command for a Volser

Parameter	Release	Changes
PDSNEXCx	3.0	Function extended - up to 15 Exchange log files can be defined New parameter - the parameter STATUS controls whether the communication should be activated during the HCC start or after the start with a command
PRTY MO=nn	3.0	Usage changed - this value is used as the basis value for the LJB, UJB and FLIP statements
ODSCR	3.0	New statement - the parameter TYPE= defines how FREESPACE extracts information on optical disks - the parameter DSN= defines the input file for optical disks
SECURITY	3.0	New statement - internal and external access authorization
STORGRP	3.0	New statement - the parameter Name= defines the name of the storage group - the parameter VOL= defines the volser masks for optical disks
TDSNARCH	3.0	Parameter deleted
TDSNEXCx	3.0	Parameter deleted
TDSNMLGx	3.0	Parameter deleted
TDSNSTMS	3.0	Parameter deleted
TDSNULOG	3.0	Parameter deleted
TMSEXIT	3.0	Usage changed - the module names for the default exits have been changed and, therefore, the module names should not start with HLQ, HAC or ZHC because these are reserved for the HCC modules.
TSOSEC	3.0	Parameter deleted - replaced by SECURITY.

Parameter	Release	Changes
UNIT	3.0	<p>Function extended</p> <ul style="list-style-type: none"> - functional extension to support optical disks <p>Usage changed</p> <ul style="list-style-type: none"> - the parameter ALTCUU is only valid for TAPE devices - the parameter FPMALOC is only valid for TAPE devices <p>New parameter</p> <ul style="list-style-type: none"> - the parameter TYPE=CARLOADIOS serves to identify the drives - the parameter CAP= defines the capacity of a jukebox (only valid with TYPE=IOS)
VOLGR	3.0	<p>Changed Parameter</p> <ul style="list-style-type: none"> - the Scratch Warning level has been extended from 3 to 5 positions.

Fig. 2 HACCPARM parameter changes for HCC/MVS Version 3.0



The "Installation and Customization Reference for HCC/MVS 3.0" manual contains a complete description of the individual parameters.

2.3 START PROCEDURE PARAMETER CHANGES

Parameter	Release	Changes
ACNTL=	3.0	Parameter deleted
CID=	3.0	Parameter deleted
FEXn=Y N	3.0	Parameter deleted
FEX=(n,..n,n-n)	3.0	<p>New parameter</p> <ul style="list-style-type: none"> - this parameter controls the formatting of all (max. 15) Exchange log files. <p>New options</p> <ul style="list-style-type: none"> - input of a range from 1-Z possible; for example FEX=(3-A) - selective input possible; for example FEX=(1,4,5,F) - mixed input possible; for example FEX=(1-4,5,7,9-B) - dummy input suppresses formatting; FEX=()
SIM=	3.0	Parameter deleted
TEST=	3.0	Parameter deleted

Fig. 3 Proclib parameter changes for HCC/MVS Version 3.0



The "Installation and Customization Reference for HCC/MVS 3.0" manual contains a complete description of the individual parameters.

2.4 HCC SAMPLIB MEMBER CHANGES

Member	Release	Changes
ABSSAMP	3.0	Member changed - member extended to include a note on the correct allocation of the HACCPARM file
ABSTEST	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD
ABSTESTN	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD
ARCRECOV	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23160 to ZHC16000
ASPALLOC	3.0	Member changed - JCL extended with additional step to allocate a sequential file for the "Scratch processing" of optical disks
DLNK26LP	3.0	Member changed - program name changed from HAC026DU to ZHC026DU
HACASR	3.0	Member renamed - HACASR renamed to ZHCASR
HCC	3.0	Member deleted
HACCISSI	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23203 to ZHC20300
HACCSTC1	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - HCC start procedure example extended with the new parameter FEX=(...) - parameters FEXn=, ACNTL=, CID=, SIM=, TEST= deleted

Member	Release	Changes
HACCSTC2	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - HCC start procedure example extended with the new parameter FEX=(...) - parameters FEXn=, ACNTL=, CID=, SIM=, TEST= deleted
HACCSTC3	3.0	Member deleted
HACEX1	3.0	Member renamed - HACEX1 renamed to ZHCEX1
HACLDV	3.0	Member renamed - HACLDV renamed to ZHCLDV
HACLGD	3.0	Member renamed - HACLGD renamed to ZHCLGD
HACMOX	3.0	Member renamed - HACMOX renamed to ZHCMOX
HACPAPPC	3.0	Member changed - HACCPARM example extended to include new and changed parameters, especially for optical disk support
HACPARM1	3.0	Member changed - HACCPARM example extended to include new and changed parameters (without OD usage)
HACSMF	3.0	Member renamed - HACSMF renamed to ZHCSMF
JICHRFR	3.0	Member changed - file name for HCC-SAMP changed to new HCC version
JICHRRC D	3.0	Member changed - file name for HCC-SAMP changed to new HCC version
LCK	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23080 to ZHC08000

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Member	Release	Changes
LKSVC26	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC026DU to ZHC026DU
LNKCTTEX	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23N25 to ZHCN2500
LNK26LPA	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC026DU to ZHC026DU
MIGARC24	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23351 to ZHC35100
ODSC	3.0	New member - describes the possibilities for FREESPACE to extract information on optical disks
ODSCJOB	3.0	New member - JCL example on creating a sequential file as input to HCC/MVS
ODSCREXX	3.0	New member - REXX procedure example on selecting optical disks with FREESPACE
SMFLIST	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23150 to ZHC15000
TLI	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23080 to ZHC08000
UM000001	3.0	Member changed - FMID changed from ZHC2401 to ZHC3000 - program name changed from HAC23013 to ZHC01300

Member	Release	Changes
UM000002	3.0	Member changed - FMID changed from ZHC2401 to ZHC3000 - program name changed from HAC23202 to ZHC20200
X00026DU	3.0	Member changed - program name changed from HAC026DU to ZHC026DU - constant PGMID changed from "HAC026DU/2.4.000" to "ZHC026DU/3.0.000"
X01CA101	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CA102	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CA103	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CA104	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CNTT1	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01EPIC1	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01SEQF1	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01SEQF2	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01TLMS1	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01TLMS2	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1
X01ZARA1	3.0	Member changed - new mapping macro ZHCEX1 used instead of HACEX1

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Member	Release	Changes
X02MO001	3.0	Member changed - new mapping macro ZHCMOX used instead of HACMOX
X03VI001	3.0	Member changed - new mapping macro ZHCASR used instead of HACASR
X04EJ001	3.0	Member changed - new mapping macro ZHCASR used instead of HACASR
ZAPPRM1	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23013 to ZHC01300
ZAPPRM2	3.0	Member changed - DS-Name changed to new HCC version ZHC300.LOAD - program name changed from HAC23202 to ZHC20200
ZHCASR	3.0	Member renamed - ZHCASR is the new name for the HACASR member - extended to support optical disks
ZHCEX1	3.0	Member renamed - ZHCEX1 is the new name for the HACEX1 member
ZHCLDV	3.0	Member renamed - ZHCLDV is the new name for the HACLDV member
ZHCLGD	3.0	Member renamed - ZHCLGD is the new name for the HACLGD member
ZHCMOX	3.0	Member renamed - ZHCMOX is the new name for the HACMOX member
ZHCRMF	3.0	Member renamed - ZHCRMF is the new name for the HACRMF member
ZHCSMF	3.0	Member renamed - ZHCSMF is the new name for the HACSMF member

Fig. 4 Samplib member changes for HCC/MVS Version 3.0



The "Installation and Customization Reference for HCC/MVS 3.0" manual contains a complete description of the individual parameters.

2.5 HCC COMMAND CHANGES

Command	Release	Changes
ACC	3.0	Function extended - functional extension for optical disk support New parameter - the parameter SKIP=NO/YES supports skipping every second coordinate (optical disk support)
ACV	3.0	Function extended - functional extension for optical disk support
ADD	3.0	Command deleted
ALLOC	3.0	Usage changed - this command is only valid for TAPE devices
CANCEL	3.0	New command - with the option LABEL, this command deletes inactive entries in an optical disk label table
CL cuu	3.0	Usage changed - this command is only valid for TAPE devices
CX	3.0	Functions deleted - the Token Ring support for the options - CMD - GETMAJOR - MSG - SETMAJOR - SETMINOR has been deleted
CX	3.0	Functions deleted - the options - D - ECHO - GETLINE - SHUTDOWN - SWLINE have been deleted
DC	3.0	New parameter - the new parameter SKIP=NO/YES supports skipping every second coordinate; serves as support for optical disks. Output changed - the display has been extended for optical disks.

Command	Release	Changes
DEL	3.0	Command deleted
DISPLAY	3.0	<p>New option</p> <ul style="list-style-type: none"> - the option COM displays the status of the communication connections - the option JB displays the status of the jukeboxes - the option LABEL displays the status of the label processes for optical disks - the option STORGRP displays the definitions of the storage groups <p>New parameters</p> <ul style="list-style-type: none"> - the parameters PATH=,STATUS=, HID= of the COM option serve to limit the communication connections on display - the parameters NAME=, DET= of the JB option serve to limit the display - the parameters NAME=, DET=, NUM= of the STORGRP option serve to limit the display <p>Output changed</p> <ul style="list-style-type: none"> - the option CSA has been extended to support optical disks.
DLC	3.0	<p>Function extended</p> <ul style="list-style-type: none"> - functional extension for optical disk support <p>New parameter</p> <ul style="list-style-type: none"> - the new parameter SKIP=NO/YES supports skipping every second coordinate (optical disk support).
DLV	3.0	<p>Function extended</p> <ul style="list-style-type: none"> - functional extension for optical disk support
DRT	3.0	<p>Usage changed</p> <ul style="list-style-type: none"> - no further support for robot test functions - this command is only valid for cartridges
DSC	3.0	<p>New parameter</p> <ul style="list-style-type: none"> - the parameter TYPE=CAR/OPT serves to differentiate between optical disks and cartridges

Command	Release	Changes
DU	3.0	<p>Usage changed</p> <ul style="list-style-type: none"> - the MVS address of a tape device or the name of an OAD can be optionally specified <p>New parameter</p> <ul style="list-style-type: none"> - the parameter DET=Y/N serves to request detailed information for a specified unit <p>Output changed</p> <ul style="list-style-type: none"> - the output for the parameter DET=Y has been extended to include the status flags of the UNIT LOG file
DV	3.0	<p>Usage changed</p> <ul style="list-style-type: none"> - either the volser of a cartridge or the A or B side of an optical disk can be specified <p>Output changed</p> <ul style="list-style-type: none"> - the output for this command has been extended to support optical disks
EJ	3.0	<p>Function extended</p> <ul style="list-style-type: none"> - functional extension for optical disk support <p>Usage changed</p> <ul style="list-style-type: none"> - the first valid unit is selected when no ejection unit is specified as a parameter - when the parameter Exx is specified, a check is made whether the medium for the specified volser is valid for the ejection unit
FLIP	3.0	<p>New command</p> <ul style="list-style-type: none"> - manual optical disk rotation on a specified OAD
FMA	3.0	<p>Usage changed</p> <ul style="list-style-type: none"> - this command is only valid for the medium TAPE
FMD	3.0	<p>Usage changed</p> <ul style="list-style-type: none"> - this command is only valid for the medium TAPE
FREE	3.0	<p>Usage changed</p> <ul style="list-style-type: none"> - this command is only valid for TAPE devices
FREEVOL	3.0	<p>New parameter</p> <ul style="list-style-type: none"> - the parameter TYPE=CAR/OPT serves to identify optical disks and cartridges <p>New output</p> <ul style="list-style-type: none"> - the output for the parameter TYPE=OPT is new
HELP	3.0	<p>Output changed</p> <ul style="list-style-type: none"> - display of all new/changed HCC operator commands

Command	Release	Changes
INC	3.0	Usage changed - functional extension for optical disk support New parameter - the new parameter SKIP=NO/YES supports bypassing every second coordinate (optical disk support).
INV	3.0	Usage changed - functional extension for optical disk support
K	3.0	Usage changed - the MVS address of a tape device or the name of an OAD can be optionally specified
LCK	3.0	Usage changed - this command is only valid for TAPE devices
LJB	3.0	New command - manual load of an optical disk in the IOS of a jukebox
M	3.0	Usage changed - the MVS address of a tape device or the name of an OAD can be optionally specified
MOVEH	3.0	Usage changed - functional extension for optical disk support
MOVET	3.0	Usage changed - this command is only valid for TAPE devices
MRO	3.0	Command delete
PCL	3.0	Usage changed - this command is only valid for TAPE devices
PLCK	3.0	Usage changed - this command is only valid for TAPE devices
PRT	3.0	Command deleted
PTLI	3.0	Usage changed - this command is only valid for TAPE devices
SCL	3.0	Usage changed - this command is only valid for TAPE devices
SET	3.0	Usage changed - the parameter MO=xx of the PRTY option sets the basic values for the LJB, UJB, FLIP commands
SETUP	3.0	Usage changed - the MVS address of a tape device or the name of an OAD can be optionally specified

Command	Release	Changes
SETUP AR	3.0	Usage changed - the MVS address of a tape device or the name of an OAD can be optionally specified
SLCK	3.0	Usage changed - this command is only valid for TAPE devices
SRT	3.0	Command deleted
START LABEL	3.0	New command - this command initiates a label process for optical disks on an IBM 3995-13x
STLI	3.0	Usage changed - this command is only valid for TAPE devices
TLI	3.0	Usage changed - this command is only valid for cartridges
UJB	3.0	New command - manual unload of an optical disk from the IOS of a jukebox

Command	Release	Changes
ULC	3.0	Function extended - functional extension for optical disk support New parameter - the new parameter SKIP=NO/YES supports skipping every second coordinate (optical disk support).
ULV	3.0	Function extended - functional extension for optical disk support
UNLOAD	3.0	Usage changed - this command is only valid for TAPE devices
UPC	3.0	Function extended - functional extension for optical disk support
UPV	3.0	Function extended - functional extension for optical disk support New parameter - the parameter NAME= serves, combined with the status OJ (optical disk in jukebox), to output the jukebox library name
VARY	3.0	Function extended - the ACT/INACT option can be used to control the communication establishment using the Exchange log file New parameter - the parameter PATH=APPC\DASD serves to identify the communication method
VI	3.0	Function extended - functional extension for optical disk support
VI TC	3.0	Usage changed - this command is only valid for cartridges

Fig. 5 HCC command changes for HCC/MVS Version 3.0



The "Installation and Customization Reference for HCC/MVS 3.0" manual contains a complete description of the individual parameters.

2.6 SMF RECORD SUBTYPE CHANGES

Subtype	Release	Changes
59F (Full Update Archive)	3.0	Subtypes changed Unit record - AML units from 01-FF are supported Jukebox record (new) - new record for optical disk support Volser record - extended for optical disk support
U13 (Handle Mount Message)	3.0	New subtype - record is written when a Mount message is accepted as a request
U14 (Handle Keep Message)	3.0	New subtype - record is written when a Keep message is accepted as a request
491 (Handle OAD Mount Message)	3.0	New subtype - record is written when a Mount message for an OAD is accepted as a request
492 (Handle OAD Keep Message)	3.0	New subtype - record is written when a Keep message for an OAD is accepted as a request
493 (Handle OAD Flip Message)	3.0	New subtype - record is written when a Flip message for an OAD is accepted as a request
494 (Handle Load Jukebox Message)	3.0	New subtype - record is written when a Load jukebox message on an IO/S is accepted as a request
495 (Handle Unload Jukebox Message)	3.0	New subtype - record is written when an Unload jukebox message on an IO/S is accepted as a request

Subtype	Release Changes	
013 (Process HACCPARM Statement)	3.0	New subtype - record is written for each HACCPARM statement processed
101 (HCC Start-Parameter)	3.0	New subtype - record is written for each Start parameter.

Fig. 6 SMF record subtype changes for HCC/MVS Version 3.0



The "System Reference Guide for HCC/MVS 3.0" contains a complete description of the individual subtypes.

2.7 EXIT CHANGES

Exit	Release	Changes
ZHC026DU	3.0	Changed - program name changed from HAC026DU to ZHC026DU - constant PGMID changed from "HAC026DU/2.4.000" to "ZHC026DU/3.0.000"
X01CA101	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CA102	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CA103	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CA104	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01CNTT1	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01EPIC1	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01SEQF1	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01SEQF2	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01TLMS1	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01TLMS2	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X01ZARA1	3.0	Changed - new mapping macro ZHCEX1 used instead of HACEX1
X02MO001	3.0	Changed - new mapping macro ZHCMOX used instead of HACMOX

Exit	Release	Changes
X03VI001	3.0	Changed - new mapping macro ZHCASR used instead of HACASR
X04EJ001	3.0	Changed - new mapping macro ZHCASR used instead of HACASR

Fig. 7 Exit changes for HCC/MVS Version 3.0



The "Installation / Customization Guide for HCC/MVS 3.0" contains a complete description of the individual exits.

2.8 CONTROL BLOCK AND CONTROL BLOCK FIELD CHANGES

Control block or Control block field	Release	Changes	Migration action
HACASR	3.0	Deleted - replaced by ZHCASR	
HACEX1	3.0	Deleted - replaced by ZHCEX1	
HACLDV	3.0	Deleted - replaced by ZHCLDV	
HACLGD	3.0	Deleted - replaced by ZHCLGD	
HACMOX	3.0	Deleted - replaced by ZHCMOX	
HACSMF	3.0	Deleted - replaced by ZHCSMF	
ZHCASR	3.0	New - extended for new function - replaces HACASR	Recompile user interface programs
ZHCEX1	3.0	New - replaces HACEX1	Recompile user interface programs
ZHCLDV	3.0	New - extended for new function - replaces HACLDV	Recompile user interface programs
ZHCLGD	3.0	New - replaces HACLGD	
ZHCMOX	3.0	New - replaces HACMOX	
ZHCSMF	3.0	New - extended for new function - replaces HACSMF	Recompile user interface programs

Fig. 8 Control block changes for HCC/MVS Version 3.0



The "System Reference Guide for HCC/MVS 3.0" contains a description of the control blocks.

2.9 HCC MESSAGE CHANGES

Message number	Release	Language		MSG type	
		English	German	Info	Action
HAC000I	3.0	X	X	X	-
HAC016I	3.0	X	X	X	-
HAC017I	3.0	X	X	X	-
HAC117I	3.0	X	X	X	-
HAC118I	3.0	X	X	X	-
HAC119I	3.0	-	X	X	-
HAC144I	3.0	X	X	X	-
HAC156I	3.0	X	-	X	-
HAC166I	3.0	-	X	X	-
HAC246I	3.0	X	X	X	-
HAC247I	3.0	X	X	X	-
HAC249I	3.0	X	X	X	-
HAC250I	3.0	X	X	X	-
HAC304A	3.0	X	X	-	X
HAC419I	3.0	X	X	X	-

Fig. 9 Message changes for HCC/MVS Version 3.0



The "Messages and Codes for HCC/MVS 3.0" manual contains a description of the messages.

2.10 NEW HCC MESSAGES

Message number	Release	Language		MSG type	
		English	German	Info	Action
HAC200I	3.0	X	X	X	-
HAC202A	3.0	X	X	-	X
HAC230I	3.0	X	X	X	-
HAC234I	3.0	X	X	X	-
HAC284I	3.0	X	X	X	-
HAC433I	3.0	X	X	X	-
HAC451I	3.0	X	X	X	-
HAC497I	3.0	X	X	X	-
HAC500I - 516I	3.0	X	X	X	-
HAC517A	3.0	X	X	-	X
HAC518I - 524I	3.0	X	X	X	-
HAC527I - 544I	3.0	X	X	X	-
HAC558I	3.0	X	X	X	-
HAC585I - 587I	3.0	X	X	X	-
HAC590I	3.0	X	X	X	-

Fig. 10 New messages for HCC/MVS Version 3.0



The "Messages and Codes for HCC/MVS 3.0" manual contains a description of the messages.

2.11 DELETED HCC MESSAGES

Message number	Release	Language		MSG type	
		English	German	Info	Action
-----	3.0	-	-	-	-

Fig. 11 Messages deleted for HCC/MVS Version 3.0



The "Messages and Codes for HCC/MVS 3.0" manual contains a description of the messages.

2.12 HCC ARCHIVE ADMINISTRATION MENU CHANGES (HAA)

Menu	Release	Changes
HAA 01/1	3.0	<p>Menu changed</p> <ul style="list-style-type: none"> - Menu name HCC ARCHIVE ADMINISTRATION (HAA 3.0/M00) <p>Options changed</p> <ul style="list-style-type: none"> 1 - CARTRIDGE LIBRARY Entry menu for all cartridge administration tasks 2 - OPTICAL LIBRARY Entry menu for all optical disk administration tasks 3 - Unused, option 9 in the future <p>New options</p> <ul style="list-style-type: none"> 6 - DISPLAY ALL DEVICES 9 - GENERATE ARCHIVE FROM HACCPARM <p>Option deleted</p> <ul style="list-style-type: none"> 10 - General information
HAA 03/1	3.0	<p>Menu deleted</p> <ul style="list-style-type: none"> - Menu name GENERATE COORDINATE RECORDS
HAA 03/2	3.0	<p>Menu changed</p> <ul style="list-style-type: none"> - Menu name DISPLAY ARCHIVE ALL LIBRARY DEVICES - Follow-up menu for HAA 01/1 when option 6 or HAA 03/0 option 5 selected - Display all devices generated for + cartridges + optical disks
HAA 02/1	3.0	<p>Menu changed</p> <ul style="list-style-type: none"> - Menu name CARTRIDGE LIBRARY - Follow-up menu for HAA 01/1 when option 1 selected - Menu description changed

Menu	Release	Changes
HAA 03/0	3.0	New menu <ul style="list-style-type: none"> - Menu name OPTICAL LIBRARY MAIN MENU - Follow-up menu for HAA 01/1 when option 2 selected - Following options can be selected <ul style="list-style-type: none"> 1 - DEFINE AND ASSIGN VOLSER 2 - DISPLAY/MODIFY/DELETE VOLSER 3 - unused 4 - DISPLAY JUKEBOXES 5 - DISPLAY OPTICAL DEVICES
HAA 31/0	3.0	New menu <ul style="list-style-type: none"> - Menu name OPTICAL LIBRARY DEFINE AND ASSIGN VOLSERS - Follow-up menu to HAA 03/0 when option 1 selected - Serves to define optical disks <ul style="list-style-type: none"> + volser A side and B side + status + coordinate A side + jukebox name
HAA 32/0	3.0	New menu <ul style="list-style-type: none"> - Menu name OPTICAL LIBRARY DISPLAY/ MODIFY/DELETE VOLSERS - Follow-up menu to HAA 03/0 when option 2 selected - Following options can be selected <ul style="list-style-type: none"> S - detailed optical disk display U - update optical disk D - delete optical disk X - exit

Menu	Release	Changes
HAA 32/2	3.0	New menu <ul style="list-style-type: none"> - Menu name OPTICAL LIBRARY DISPLAY volser - Follow-up menu to HAA 32/0 when option S selected - Display of <ul style="list-style-type: none"> + A-VOLSER + B-VOLSER + HOMECOOR + LIBNAME + SYSTEM # + ROBOT # + STATUS + STATISTICS + FLAG SETTINGS
HAA 03/4	3.0	New menu <ul style="list-style-type: none"> - Menu name OPTICAL LIBRARY DISPLAY JUKEBOX(ES) - Follow-up menu to HAA 03/0 0 when option 4 selected - Display of <ul style="list-style-type: none"> + DEV # + LIBNAME + SYSTEM + ROBOT + CAPACITY + USED

Fig. 12 Menu changes of the HCC Archive Administration (HAA) for HCC/MVS V. 3.0



The "ISPF-User Guide for HCC/MVS 3.0" contains a complete description of the individual menus.

3 RELEASE SUMMARY

This Section contains a technical description of all new functions in HCC/MVS Version 3.

3.1 HCC/MVS VERSION 3.0

This Section provides a short overview of the new functions in HCC/MVS Version 3.0.

3.1.1 OAM support for IBM 3995 jukeboxes

The IBM jukebox 3995, models 132/112 and 133/113, are supported by HCC/MVS Version 3.0 when these are connected using OAM.

The internal drives are supported by the Input/Output Station. The requests are converted to *Load* jukebox and (LJB) *Unload* jukebox (UJB) commands.

The external drive (Operator Accessible Drive) is serviced with the **MOUNT**, **FLIP** and **KEEP** commands.

The input/output station and operator accessible drive servicing can differentiate between the A and B sides of an optical disk.

Optical disks have an external label (barcode), with the volsers of the A and B sides, for identification by the robot system.

The optical disks must be initialized with these volsers to make automatic processing possible, this can be done automatically on the operator accessible drive.

A further HCC/MVS Version 3.0 function is that storage groups can be assigned to optical disks. This information is then used, amongst other tasks, for initialization and processing of an "out of space" situation.

Command calls can provide HCC "FREESPACE information for optical disks. "Out of space" situations for optical libraries can be processed in this manner.



OAM only manages optical disks within the libraries, optical disks with FREESPACE external to the libraries are not requested by OAM, not even when these were assigned to the storage group during initialization.

3.1.2 Communication between primary and secondary HACC systems

3.1.2.1 Number of secondary HCC systems

Up to 35 secondary HCC systems can be connected to a primary HCC system as of HCC/MVS Version 3.

This extension makes the support for Exchange log files for test purposes (TDSNEXCx) obsolete.

3.1.2.2 Activating a communication path

As of HCC/MVS Version 3, defining a communication path between a primary and a secondary HCC system (PDSNEXCx) does not trigger an immediate attempt to establish communication. Instead, a new parameter (STATUS=ACT|INACT) is used to decide whether communication should be established or not.

The new option (PATH=DASD) for the HCC Operator command VARY ACT|INACT supports controlling the status of the communication path at any time.

3.1.3 SMF recording

The Start options and all processed HACCPARM statements are written as User-SMF records during a HCC start, providing writing User-SMF records has been activated.

3.1.4 Automatic ejection after a label error

An eject command can be generated automatically for the cartridge currently in the unit after message IEC512I LBL ERR unit

When this message appears on an MVS system on which a secondary HCC is active, the message is passed to the primary HCC for processing.

This new function can be activated with the HACCPARM statement MSG=IEC512I,AUTOEJECT.

RELEASE SUMMARY

3.1.5 Functions no longer supported

3.1.5.1 Simulation mode

HCC/MVS Version 3.0 no longer supports simulation mode.

3.1.5.2 Test mode

HCC/MVS Version 3.0 no longer supports test mode.

3.1.5.3 Robot test function

HCC/MVS Version 3.0 no longer supports the robot test function.



RELEASE SUMMARY

4 MIGRATION TASKS

4.1 Migration tasks

This Section describes the tasks necessary to convert the installation exits, parameter files, HCC files and start procedures.

This Section does not describe the work necessary to support IBM 3995 jukeboxes.

4.1.1 Migration steps from HCC/MVS 2.4.0 to HCC/MVS 3.0

It is recommended, after the successful SMP/E installation of HCC/MVS 3.0, to first perform the single migration steps before defining/activating changes relative to specific HCC/MVS 3.0 functions. This ensures that the "fallback" can be performed quickly and easily at any time.

4.1.2 Adapting installation exits

Tape Management System User Exit - TMSEXIT

- When a TMS-USER-Exit is in use, this must be
 - compiled with the HCC/MVS 3.0. macros in the SAMPLIB and
 - linked to the HCC Load library
- Please note the restrictions for module names
- Further information on TMSEXIT can be found in the HCC Installation/Customization Reference manual for HCC/MVS 3.0.

Volume Eject User Exit - EJEXIT

- When a Volume Eject User Exit is in use, this must be
 - compiled with the HCC/MVS 3.0. macros in the SAMPLIB and
 - linked to the HCC Load library
- The SAMPLIB contains an example under the member name X04EJ001
- Please note the restrictions for module names
- Further information on EJEXIT can be found in the HCC Installation/Customization Reference manual for HCC/MVS 3.0.

Volume Mount User Exit - MOEXIT

- When a Volume Mount User Exit is in use, this must be
 - compiled with the HCC/MVS 3.0. macros in the SAMPLIB and
 - linked to the HCC Load library
- The SAMPLIB contains an example under the member name X02MO001
- Please note the restrictions for module names
- Further information on MOEXIT can be found in the HCC Installation/Customization Reference manual for HCC/MVS 3.0.

Volume Insert User Exit - VIEXIT

- When a Volume Insert User Exit is in use, this must be
 - compiled with the HCC/MVS 3.0. macros in the SAMPLIB and
 - linked to the HCC Load library
- The SAMPLIB contains an example under the member name X03VI001
- Please note the restrictions for module names
- Further information on MOEXIT can be found in the HCC Installation/Customization Reference manual for HCC/MVS 3.0.

MIGRATION TASKS

Catalog Installation Exit - HAC026DU/ZHC026DU

- The Catalog Installation Exit has not changed between the release HCC/MVS 2.4.0 with PTF status ZY00038 and HCC/MVS 3.0 basis (PTF status ZY00055); just the name was changed from HAC026DU to ZHC026DU
- It is recommended to use the new exit for maintenance reasons (**IPL necessary**)
- Further information can be found in the System Reference Guide and Installation/Customization Guide for HCC/MVS 3.0

4.1.3 Adapting the parameter files

Adapting the HACCPARM files

- Backup existing HACCPARM files
- Delete the following obsolete parameters
 - TDSNARCH
 - TDSNEXCx
 - TDSNMLGx
 - TDSNTMS
 - TDSNULOG
- Modify parameters where the syntax has changed
 - DSNGR (5 digit Scratch-Warning-Level)
 - JOBGR (5 digit Scratch-Warning-Level)
 - VOLGR (5 digit Scratch-Warning-Level)
- Modify the Exit parameters when the exit name has changed (for example, due to name restrictions)
 - EJEXIT
 - MOEXIT
 - TMSEXIT
 - VIEXIT
- Optionally extend parameters (for more clarity) with new default values
 - MSG=CBR .. ,NOAUTOREPLY
 - UNIT= ,TYPE=CAR
 - LDEV= ,LIB=C



These parameters must be deleted in the case of a "fallback" .

- The Installation/Customization Reference manual for HCC/MVS 3.0 contains further information on the individual parameters.

The following migration step **must only** be performed when all the HCC systems involved are **inactive**. All further steps are easier to perform when the HCC is not active.

This why it is recommended to stop all HCCs involved in the migration on all MVS systems.

MIGRATION TASKS

4.1.4 Adapting HACC files

Converting the Archive files

- TSO ALLOC for the HACCPARM file in which the Archive file to be converted is defined under the PDSNARCH parameter
- Call HAA (HCC Archive Administration) from HCC/MVS 3.0
 - The current Archive file (2.4.0) is opened
 - The following message appears in the bottom line:
WARNING: INVALID COORDINATES IN VOLSER-ENTRIES: xxxxx
 - A backup of the Archive file (with HAA or ARCSAVE) is recommended
HAA 01/1 - Option 4 - SAVE/RESTORE/COPY/EXPORT/IMPORT
HAA 04/1 - Option 1 - SAVE ARCHIVE INTO SEQ. Note FILE SAVEDSN for eventual fallback
 - Perform HAA 01/1 - Option 9 - GENERATE ARCHIVE FROM HAAPARM
 - Return to main menu HAA 01/1; the warning on the bottom line must not appear again
 - Terminate HAA
- Refer to the ISPF User Guide for HCC/MVS 3.0 for further information on HAA

UNIT LOG file

- The UNIT LOG file layout is compatible between HCC/MVS 2.4.0 and HCC/MVS 3.0
- Migration work is not required

Exchange log files

- The Exchange log files layout is compatible between HCC/MVS 2.4.0 and HCC/MVS 3.0
- Migration work is not required for existing Exchange log files

Message log files

- The Message log files layout is compatible between HCC/MVS 2.4.0 and HCC/MVS 3.0
- Migration work is not required

4.1.5 Adapting the HACC Start procedures

- Backup existing procedures (recommended)
- Change program name from HAC23001 to ZHC00100
- Replace the FEXn=Y/N parameter with the new parameter FEX=(..)
- Delete the following parameters no longer supported (comments)
 - ACNTL=
 - CID=
 - SIM=
 - TEST=
- Modify the Steplib as necessary
- The HCC Operators Guide for HCC/MVS 3.0 contains further information on the start parameters

4.1.6 Adapting the HACCISSE Start procedures

- Backup existing procedures (recommended)
- When the Catalog Installation exit is active, the program name in the Start procedures HACCISSE must be changed from HAC23203 to ZHC20300
- Modify the Steplib as necessary

4.1.7 ABBASEND

- Ensure that no ABBASEND from a previous HCC release is in use (for example, by renaming or deleting the programs HAC23103, ABS and ABBASEND in the relative HCC Load library)

4.1.8 HCC Starts

- Start HCCs on all systems involved
- Check that any new procedures are started
- Start options
 - SSI=Y mandatory
 - HOT=N mandatory
 - FMTU=Y mandatory
 - FEX=(....) recommended
- Perform acceptance tests

4.1.9 Cleanup

- Delete product HCC/MVS 2.4.0
- Perform cleanups

MIGRATION TASKS

4.1.10 Fallback

Should it become necessary, HCC/MVS 2.4.0 can be reactivated without any problems.

- Stop all HCCs on all systems involved
- Restore the saved HACCPARM files
- or
- Reset changes in the HACCPARM files
 - remove specific parameters for HCC/MVS 3.0 (or mark as comments)
 - modify the parameters where the syntax has changed (DSNGR, JOBGR, VOLGR)
- Perform HAA option 3 - generate coordinates from HCC/MVS 2.4.0 for all Archive files involved. HCC can still be started even when this step cannot be performed (not enough time).

The following messages do however appear during the start:

 - HAC321A LDEV DIFFERENCES ... and
 - HAC323A HACPARM1 LDEV=ddd,COORDINATE=cccccccfor each LDEV statement
- Reload start procedures for HCC/MVS 2.4.0 or adapt the existing procedures (parameter FEXn, Steplib, PGM name)
- Start all HCCs on all systems involved; ensure that the old procedures are started.
- Start options:
 - SSI=Y mandatory
 - HOT=N mandatory
 - FMTU=Y mandatory
 - FEXn=Y recommended
- Ensure that the programs HAC23103, ABS and ABBASEND from the *old* HCC Load library are active again for ABBASEND.



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