CIMS LAB, INC.

Enhancements/Updates to CIMS Chargeback MVS V11.6 (April 2003 – July 2003) (2003/07/18 Genlevel)

Programs:

CIMOREJ
- An abnormal termination (S0C7) would occur when processing CIMS record types 999 and 26.

CIMSACCT
- An update was made to correct a possible abnormal termination (S0C7) in CIMSEXTR when processing 792/793 records that have been generated by CIMSACCT when re-processing CIMS records (PROCESS CIMS MAINTENANCE).
- Job Priority was being calculated incorrectly.

CIMSCMS
- Shift processing was updated to correctly slice times for jobs that ran over multiple shifts.
- A new control card was added to assign all jobs to the prime shift (no slicing of times):
    ASSIGN ALL RECORDS PRIME
- A new control card was added to assign jobs that run over 24 hours to the prime shift (the default is to assign them to the non-prime shift).
    TRANSACTION OVER 24 HOURS ARE PRIME

CIMSDB2
- Negative CPU messages were being produced for DB2 records that did not contain negative CPU times. For "rollup records" the QWACEJST and QWACEST (Elapsed and TCB time fields) contain an accumulated time from all the child tasks in the rollup record, not an actual end time. CIMSDB2 was processing these times as an end time, causing the negative CPU message.
- Triplet validation was added to ensure the triplet information in the SMF product section is correct. If invalid information is present within the triplet section, it could cause a storage overlay within CIMSDB2 leading to abnormal termination (S0C4).

CIMSEXTR
- An abnormal termination (S0C1) would occur when processing INCLUDE statements for packed fields.

CIMSIMS2
- When using IMS Shared Queues, false messages (IMS Log 7 and 8 records) can appear in the IMS log. An update was made to CIMSIMS2 to identify these false messages and discard them.

CIMSTAPE

- New control cards were added for enhanced CA-TMS Virtual Tape (VTAPE) support.

  TMS VTAPE RATEID = nn

    Where nn = a numeric value 1–10 or 01–10. This specifies the rate code used for VTAPE storage. The rate code specifies the data field in which the rate value will be stored. For example, if nn = 03, then the rate code used by CIMSTAPE will be ZTPE@@03 and the number of megabytes used for storage will be placed in DATA FIELD03.

  VTAPE VOLSER RANGE llllll TO hhhhhh

    Where llllll is the low volser and hhhhhh is the high volser. This is used to identify the CA-TMS Virtual Tapes to CIMSTAPE.

  Notes:

  - The megabytes are returned with 2 decimal places (i.e., 9999999.99 MB). Therefore, you must specify 2 as the number of decimal places on the DATA FIELD statement for the rate ID.

    For example:
    If you specify TMS VTAPE RATEID =06
    Then you must specify DATA FIELD06,ZTPE,2,1

  - Up to 10 of the VTAPE VOLSER RANGE statements can be specified.

- A new control card was added for a different type of tape selection in the RMM processing.

  RMM SELECT MASTER TAPES

    This control card will bypass all of the current volser selection checking and only select RMM tapes that have an RVSTATUS equal to MASTER and an RVPENDRS equal to N.

Report Library (Reptlib):

AALEGEND
- An entry was added for CIMDB2E5.

CIMDB2EV
- This member was updated to contain the exception file layout for CIMSDB2 for release 11.6.

CIMDB2E5
- This is a new member that contains the exception file layout for CIMSDB2 for release 11.5.

RC791V00
- Changed the file name from CIMRC791-RECORD to RC791V00-RECORD.

RC792V00
- Changed the file name from CIMRC792-RECORD to RC792V00-RECORD.

RC793V00
- Changed the file name from CIMRC793-RECORD to RC793V00-RECORD.

SPWTR141
- This member was updated to reflect the "rollup" record processing for CPU times. Refer to the CIMSDB2 update in the Programs section for more information on the "rollup" record.

SWALIAS
- An entry was added for CIMDB2E5

Control Library (Datafile):

ACNVJCL2, ACNVJCL3, ACNVJCL4, CICSDT02, CICSDT03, CICSDT04, CICSDT10, CICSVSAM, CIMSDTC, CIMSRTLD, CLNTJCL1, SUBRATE2, SUBCLNT2
- VOL(??????) references in VSAM allocations were removed in the last genlevel (2003/04/09) update because IDCAMS can build VSAM files without the VOL(??????) reference if SMS controls are in place. But if SMS controls are not in place, then the job will end with a JCL error. Therefore the VOL(??????) were added back.

CIMSJOB2
- The CIMSEXCP file name was too long. The name was shortened.

DCTNR999
- Version default comment was changed to say the default is 00.

Enhancements/Updates to CIMS Chargeback MVS V11.6
(January 2003 – April 2003) (2003/04/09 Genlevel)

Programs:

CIMSACCT, CIMSCMF2, CIMSDB2, CIMSDISK, CIMSIMS2, CIMSTAPE, CIMSUNIV, CIMSUN02
- New control cards were added to turn off the wildcard matching in account code conversion or to change the default wildcard characters used in account code conversion:

  To turn off wildcard matching use: TURN OFF ACC WILDCARDS

  To change the ? wildcard character use: CHANGE ACC ? WILDCARD TO x

      Where x = the new wildcard character

  To change the * wildcard character use: CHANGE ACC * WILDCARD TO x

      Where x = the new wildcard character
- Shift determination was updated to handle seconds correctly.

CIMSACCT
- A new control card has been added to allow the user to specify the shift code to be used for the Non-Prime shift:

  NON-PRIME SHIFT CODE = n

      Where n = the shift code
- A new control card has been added that will cause CIMSACCT to parse the text units field of the Enhanced Sysout Section of the SMF type 6 record and format it into a fixed offset format in the CIMS Record Type 6. The default processing is to leave the text units field as it appears in the SMF 6 record.

  SMF6 ESS FIXED FORMAT
- The field CIMRC792-CPU-INIT was being calculated incorrectly. The field should be the sum of only the ISRB and ITCB CPU times.
- The conversion of the CIMS record types 79x from version 00 to version 01 was updated to prevent an abnormal termination (S0C7) when executing CIMSEXTR or during a re-process of the output through CIMSACCT.
- Conversion of the CIMS record type 791 version 00 was updated to prevent an abnormal termination (S0C7) when the RecordID does not start with CIMS.
- Processing was updated to correctly determine the length of CIMS 79x records that were produced by processing CIMS Server Resource Records.
- Properly set length of 792 so User Defined fields can be built from the SMF 30 information. The length was set to include only the 792 portion of the CIMRC792 record definition. Any fields referenced by User Defined entries beyond the base 792 resulted in DCTN004W messages.

CIMSBILL
- When exactly 52 accounting periods existed within the calendar file, the message MORE THAN 52 ACCOUNTING PERIODS, FIRST 52 USED was displayed. The message is no longer displayed.
- Processing was added to show rate codes in the RATE CODE NOT FOUND message that had rate totals of 0 (there were positive and negative entries for the rate code) and were not defined in the rate file
- The CIMSBILL module that was included in the 2003/03/05 build contains an update that can cause a storage overlay, which eventually causes an abnormal termination (S0C4).

CIMSDATA
- The Enhanced Sysout Section of the CIMS type 6 records was truncating the last byte.
- The CIMS record type 26 is now always written with a length of 457.

CIMSDB2
- The number of invalid CPU time messages is now limited to 100.
- Processing was updated to prevent an abnormal termination (S0C7) when the input is exception records only and the NO SORT option is specified.
- The 791 records were truncated to a length of 380 bytes. The length was changed to the full 460 bytes.

CIMSCMF2
- Supports the new format of the 791 records along with the new stop date/time in the common header.
- A new control card has been added to override the default return code of 16 when no input records are processed:
  > ON EMPTY INPUT FILE SET RC TO nnnn
  > > Where nnnn = a numeric value

CIMSDTLD
- Allows for blank lines in the CIMSCNTL member.

CIMSEXTR

- A new control card has been added to limit the number of DCTN004W warning messages:
  LIMIT DCTN004W MSG nnnn
    Where nnnn = a numeric value
- A new control card has been added to override the default return code of 16 when no input records are processed:
  ON EMPTY INPUT FILE SET RC TO nnnn
    Where nnnn = a numeric value
- A new control card has been added to control the validation of data:
  DATA VALIDATION X'nn' X'nn'
- For CIMS record type 999, the RecordID is set to S390R999.
- Support for BoxID processing was added where a BoxID definition may contain only one resource definition.
- The Extract report was changed to report only primary counters. Internal control counters have been removed but can still be included by using a 'TEST R' control statement.
- The conversion of the CIMS record types 79x from version 00 to version 01 was updated to prevent an abnormal termination (S0C7).
- An update was made to suppress the Start-Date identifier from appearing twice in the CSR record (CIMSOUT DD) for CIMS record type 999 records when the input contained both CIMS record type 791 and CIMS record type 999 records.
- Default Stop time values have been changed to be 23:59:59 instead of 24:00:00.
- A time validation check was added to ensure that the Start and Stop times are between 00:00:00 and 24:00:00. If a value is outside this range it will be changed to 23:59:59.

CIMSIMS1

- New processing was added to determine LTERM/LUNAME name for transactions.

CIMSIMS2

- New processing was added to support API-C (explicit APPC) IMS transactions.

CIMSUN01

- No output was being produced when processing IDMS 12.0 or 14.0 log records.

Report Library (Reptlib):

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AAIXJCL, AHPUXJCL, APCCLJCL, APCRTJCL, APCSMJCL, ARUNJCLH, ARUNJCL1, ASUNJCL, SAM01JCL
- Changed comments in JCL to prevent exceptions during CIMSINIT install processing.

AALEGEND
- Updated Comments.

ARUNJCL4
- Added DD statements CIMSDTVS and CIMSACT2 to the JSTEP010 step.

ATMONJCL, ATMO2JCL
- Added DD statements CIMSDTVS and CIMSACT2 to the JSTEP040 step.

CIMRC006
- Added fixed formatted ESS section.

CIMRC030
- Updated Comments.

CIMSZLM3
- Added support for TMON 2.2.

SMFRC116
- This is a new member that contains the record layout for the SMF 116 record.

SMFRC222
- This is a new member that contains the record layout for the Control-D SMF record.

SPWRP001, SPWRP005, SPWRP006, SPWRP007, SPWRP095, SPWRP900, SPWRP901, SPWRP907, SPWTR792
- CIMRC792-CPU-INIT has been changed to be the sum of ITCB+ISRB. It cannot be used as the total CPU value. The following reports were updated to calculate the total CPU value and changed to mixed case.

SPWRP940
- This is a new member that contains a report that processes MQSeries SMF 116 records and produces CIMS 791 records.

SPWRP941
- This is a new member that contains a report that processes Control-T 5.1 tape records and produces CIMS 791 records.

SPWRP942
- This is a new member that contains a report that processes Control-D records and produces CIMS 791 records.

SPWRP943

- This is a new member that contains a report that processes Control-T 6.0 tape records and produces CIMS 791 records.

SPWRPCN0

- This is a new member added to find header customizations during the VSAM Dictionary upgrade process.

SPWRPCN1

- Removed WARNING message for field NAME.
- Bypass entries reported in SPWRPCN0.

SPWTR735

- Updated file access count calculation.

SPWTR736

- Updated file access count calculation.

SPWTR737

- Updated file access count calculation.

SPWTR760

- CIMS now uses the CIMSRMM-RVMEDREC field to determine the type of media.

SPWTR815

- Changed compute for: CIMRC791-CIMSOFR-OFFSET-RSRC to 214
- Changed compute for CIMRC791-CIMSOFR-OFFSET-IDNT to 304
- Removed field CIMRC791-CIMSRCDN-RECORD-NUMBER
- Fixed lengths for fields CIMRC791-UNIVUSFD-USER-FIELD and CIMRC791-UNIVFLLR
- Changed B-SECS to BINARY
- Changed compute for CIMRC791-RDW to 464

SWALIAS

- Defined SMFRC116-RECORD as an alias for SMFRC116.

Control Library (Datafile):

ACCTINPC, ACCTINPT, ACCTINP3, ACCTINP4, ACCTINP5
- Updated Comments.

ACCTINPT, CMF2INPT, DATACIN1, DATACIN2, DB2INPT, DCTNCICS, DCTNDASD, DCTNDB2, DCTNHDR, DCTNIMS, DCTNRMM, DCTNR792, DCTNR793, DCTNR794, DCTNR999, DCTNTAPE, DCTNTLMS, DCTNTMS, DCTNTSO, DCTNUNIV, DCTNZARA, DISKCNTL, DISKINPT, IDMSCNT2, IDMSCNT4, IDMSCNT6, M204CNT2, RMMINPT, TAPEINPT, TL50INPT, TL54INPT, TMSINPT, UNIVINPT, ZADACNTL, ZARAINPT, ZDCBCNTL, ZDCCCNTL, ZFALCNTL, ZRJECNTL, ZROSCNTL, ZWYLCNTL
- Removed reference of 11.5.

ACNVJCL2, ACNVJCL3, ACNVJCL4, CICSDT02, CICSDT03, CICSDT04, CICSDT10, CICSMERG, CICSVSAM, CIMSADSM, CIMSDTC, CIMSDTD, CIMSRTLD, CLNTJCL1, SUBCLNT2, SUBRATE2
- Updated JCL, added FILE (VSAMC1) and deleted the VOL (???????) for IDCAMS processing.

ATMONJCL, ATMO2JCL
- Added DD statements CIMSDTVS and CIMSACT2 to the JSTEP040 step.

ATMONJCL, ATMO2JCL, CIMSADA1, CIMSCICS, CIMSDB2, CIMSDISK, CIMSEOM, CIMSFALC, CIMSJOB2, CIMSJB2A, CIMSJB2B, CIMSRJE, CIMSRMM, CIMSROSC, CIMSTAPE, CIMSTL50, CIMSTL54, CIMSTMS, CIMSUNIV, CIMSWYLB, CIMSZARA, IDMSJCL1, IDMSJCL2, IDMSJCL3, M204JCL1, SUBAS401, SUBAS402, SUBCICS2, SUBDATC1, SUBDATC2
- These members were updated to change the DCB information because Computer Associates' JCLCHECK does not recognize a DCB wrapped in ().

BUDJCL1, CIMSDTLD, CIMSDUTL, CIMSEXTR, CIMSJOB3
- Changed VERIFY DATASET to VERIFY FILE

CIMSCMPL
- Added the NODYNAM compile option and deleted the NONRESIDENT compile option.

CIMSDB2
- DB2RECS DCB error, RECFM=FB

CIMSDUTL
- Missing sequence number, RENUM

CIMSIMS
- Added a summarization step to the end of the job.

CIMSJOB1
- Removed un-needed VOL parameter.

CIMSJOB1, CIMSJOB2, CIMSGDG
- Shortened SUSPENSE file name.

CIMSJOB2, CIMSJOB4, CIMSLEVL, CIMSMERG, CIMSMULT, CIMSRSCA, CIMSRSCB, SMFMERGE, CIMSADSM, CIMSIMS, CIMSJOB1, CIMSJOB3, CIMSVTOC, CONVERTB

- These members were updated to prevent exception conditions when executing CIMSINIT during the install process. Comment lines in the JCLs contained DSN references that caused a line overflow during processing.

CIMSLOAD

- Changed reference from 11.5 to 11.6.

CIMRCT54, CIMRECTL

- These are new members that contain the CA-DYNAM/TLMS record layouts.

CIMSDUTL

- Added a new step to find header customizations.

DCTNCTLD

- This is a new member that contains the Control-D record definition.

DCTNCTLT

- This is a new member that contains the Control-T record definition.

DCTNMQSR

- This is a new member that contains the MQSeries record definition.

FILELIST

- Removed LINKJCL members from list.

SUBCICS

- Added DD statements CIMSDTVS and CIMSACT2 to the JSTEP020 step.