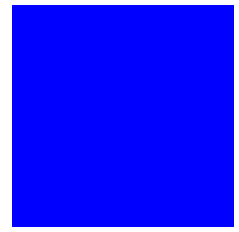


CIMS Lab, Inc.



CIMS Data Collector for UNIX

Release Notes

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Introduction

The following sections describe the changes and updates to CIMS Data Collector for UNIX V4 by 4.1.x revision level. The latest revision level is 4.1.3.

Table 1 lists the appropriate revision level for each UNIX/LINUX platform that CIMS Data Collector for UNIX supports.

Platform	CIMS Data Collector for UNIX Revision Level	CIMS Data Collector for UNIX Revision Date
AIX41	V4.1.2	01-May-2002
AIX43	V4.1.3	01-Mar-2003
AIX51	V4.1.3	01-Mar-2003
COM_Z	V4.1.3	01-Mar-2003
DEC	V4.1.3	01-Mar-2003
DG_INT	V4.1.0	20-Feb-1998
DG_MOT	V4.1.0	20-Feb-1998
HP_9	V4.1.2	01-Mar-2003
HP	V4.1.3	01-Mar-2003
IRIX	V4.1.3	01-Mar-2003
LINUX (Intel)	V4.1.3	01-Mar-2003
LINUX (OS/390)	V4.1.2	01-May-2002
NCR	V4.1.0	20-Feb-2000
PYREL	V4.1.0	20-Feb-1998
PYRMID	V4.1.0	20-Feb-1998
SCO	V4.1.0	20-Feb-1998
SEQ_4	V4.1.0	20-Feb-1998
SINIX	V4.1.0	20-Feb-1998
SOL_23	V4.1.0	20-Feb-1998
SOL_24	V4.1.3	01-Mar-2003
SOL_27	V4.1.3	01-Mar-2003
TRU64	V4.1.3	01-Mar-2003

Table 1 • Current Revision Levels for Each Supported UNIX Type

Revision Level 4.1.3

The following are the enhancements and changes for revision level 4.1.3.

Utility Versions in Revision Level V4.1.3

Table 2 lists the version number for the utilities in CIMS Data Collector for UNIX 4.1.3 (the latest revision level).

Utility	Version
A_authorize	V05.03
A_dbadb2	V01.02
A_dbao	V03.02
A_gui	V02.04
A_graph	V02.04
A_format	V03.06
A_merge	V02.05
A_rates	V03.02
A_report	V03.00
A_select	V05.07
A_setup	V05.03
G_license	V02.00

Table 2 • Current Utility Versions in Revision Level 4.1.3

Script Additions and Changes

- Changes to the following scripts in the `etc` directory:
 - `redo_nightly`
 - Added support for handling the `wtmp_last` file when the `TURN_WTMP` variable is set to `N`. The script will try to find the date/time from the previous day's `wtmp` file. If no file exists, `runacct` will use the 24 hours prior to argument date.
 - `arsap_nightly`
 - Added support for calling the `get_odb_storage` and `get_db2_storage` scripts to sample Oracle and DB2 instance storage use, respectively. These scripts are called when `ORACLE_STR_SAMPLE` or `DB2_STR_SAMPLE` is set to `Y` in the CIMS Data Collector for UNIX Configuration File, `$CIMS_HOME_data/A_config.par`.
- Changes to the following scripts in the `scripts/oracle` directory:
 - `link_A_dbao`
 - Added support for 9.0.1 on SOLARIS, AIX, and OSF Tru64.
 - Added support for 9.2.0 on OSF Tru64 and HP-UX.
 - Added code to create link in `$ORACLE_HOME/bin/A_dbso` if linking the CIMS Oracle Storage Sampler.
 - `arsap_check_odb`
 - Added support for `start` command line argument. With this argument, an attempt will be made to start the daemon if it is down. To use this script from `crontab`, refer to the comments at the beginning of the script.
 - `get_odb_storage`
 - New script for collecting Oracle storage data. To use this script, refer to the comments at the beginning of the script.
- Changes to the following scripts in the `scripts/db2` directory:
 - `link_A_dbadb2` and `arsap_start_dbadb2`
 - Added support for UDB 7.x on AIX platforms.
 - `get_db2_storage`
 - New script for collecting DB2 storage data. To use this script, refer to the comments at the beginning of the script.

- Change to the following script in the scripts/enterprise directory:
 - CS_nightly_consolidation
 - Added support for GEN_ORACLE_STORAGE and GEN_DB2_STORAGE variables in the A_config.par file to generate CIMS Oracle or DB2 storage input source files.

Utility Additions and Changes

- Changes to the A_select utility:
 - Changed the method for handling out of sequence events. If the A_select utility detects that the first record of an accounting files is out of sequence with the last record of the previous file, a FOUTOFSEQ WARNING level message is issued. A_select will now allow up to 20 FOUTOFSEQ messages before issuing an OUTFOFSEQ ERROR level message and stopping.
 - Added support for using a /ADD_IMAGES qualifier. If this qualifier is present in the SELECT command line, image names will be added to the Image Mapping File if the Proprietary_Software_Flag is ENABLED and the image name does not already exist in the Image Mapping File.
- New A_dbsdb_read utility:
 - This utility is now delivered with CIMS Data Collector for UNIX to read the CIMS DB storage file and output records in CIMS Resource Record format for input into CIMS Server or CIMS Desktop. This utility is used as follows:

```
A_dbsdb_read [<filename>] [enterprise|CS_enterprise]
```
- Change to the cims_fs_resource and CS_fs_resource utilities:
 - Added support for -user command line argument. This argument instructs the routine to produce records with username level detail. One record for each node/file system/user combination.

Configuration File Change

- New ORACLE_STR_SAMPLE=Y and DB2_STR_SAMPLE=Y variables in the CIMS Data Collector for UNIX Configuration File, A_config.par. These variables specify that CIMS Oracle or DB2 data is to be sent to the Consolidation Server.

Revision Level 4.1.2

The following are the enhancements and changes for revision level 4.1.2.

Script Additions and Changes

- Changes to the following script and file in the `etc` directory:
 - `arsap_install`
 - Modified script to create one default shift at installation: 1-prime. Previously, four default shifts were created: prime, non-prime, weekend, and holiday. CIMS Server requires that shifts start with a number.
 - `cron.entry`
 - Changed the example crontab entry for the `check_pacct` script to be called three times per hour (10, 30, 50). Also commented the example entry for the `check_nightly` script. The `check_nightly` script should be scheduled only on the Consolidation Server.
- Changes to the following script in the `scripts/oracle` directory:
 - `link_A_dbao`
 - Added support for Oracle 8.1.5 on OSF1 platforms.
 - Added support for 8.1.7 on AIX platforms.
 - Corrected link for OSF1 with Oracle 8.1.5.
 - Added support for Oracle 8.1.6 on SEQUENT, SOLARIS, and OSF1.
 - Added support for Oracle 8.0.6 on SOLARIS.
 - Added support for Oracle 8.1.7 on HP-UX and OSF1.
 - Added support for Oracle 9.0.1 on HP-UX.
 - Added 9.0.1 and 9.2.0 as valid Oracle versions for this script.
 - Added `ORACLE_LIB` and `ORACLE_RDBMS_LIB` variables to all for linking in 64-bit environments.
 - Changed `ORACLE_DEFAULT_VERSION` variable to 8.1.7.
- Change to the following scripts in the `scripts/db2` directory:
 - `A_db2_home` and `link_A_db2`
 - Added support for DB2 UDB V06.x on AIX.

- New scripts in the scripts/enterprise directory:
 - CS_gen_cims_sum
 - Generates CIMS Server Resource Files for CIMS Server.
 - nightly_consolidation
 - Generates input source files for CIMS Desktop.
 - CS_nightly_consolidation
 - Generates input source files for CIMS Server and CIMS for OS/390.
 - redo_nightly_consolidation
 - Re-creates input source files for CIMS Desktop for a specified day.
 - CS_redo_nightly_consolidation
 - Re-creates input source files for CIMS Server and CIMS for OS/390 for a specified day.

Utility Change

- Change to the A_setup utility:
 - Add support for the LOGOUT proration method.

Revision Level V4.1.1

The following are the enhancements and changes for revision level 4.1.1.

Script Changes

- Changes to the following scripts in the `scripts/oracle` directory:
 - `arsap_check_odb`, `arsap_start_odb`, and `arsap_stop_odb`
 - Modified to include SID in ps checks. This simplified the logic for determining the status of an ORACLE daemon.
 - `A_dbstatname.sys`
 - Changed `write_requests` to `db_block_gets`.
- Change to the following scripts in the `scripts/db2` directory:
 - `arsap_check_db2`, `arsap_start_db2`, and `arsap_stop_db2`
 - Modified to include SID in ps checks. Added condition to check lowercase `cs`, `pe`, and `v5` to eliminate case-sensitivity.
- Change to the following scripts in the `scripts/enterprise` directory:
 - `gen_cims_detail` and `gen_cims_sum`
 - Added support for using `shift` as a selection keyword.

Utility Changes

- Change to the `A_merge` utility:
 - This utility previously did not assign the group ID (GID) to storage jobtype statistics records if the `User_Accounting` flag was enabled and the `Project_Accounting` flag was disabled in the `A_setup.sys` file. The GID field was always 0 in this case.

When `Project_Accounting` is enabled, the GID (from the storage file) is used to assign a project to the storage jobtype statistics record. If a project exists in the authorization file with a matching `Project_GID`, that project is assigned to the storage jobtype statistics record. If no matching `Project_GID` is found, the group name associated with the GID is used as the project for the statistics record.

Changed so that the GID from the storage file is loaded into the GID field of the statistics record regardless of the state of the `Project_Accounting` flag. Note that the GID does not have to exist on the Consolidation Server (where the data is consolidated).

- Change to the `A_sampler` utility:
 - Added support for large files, (greater than 2 GB) on SOLARIS 2.7 and later, AIX 4.3 and later, HP-UX 10.20 and later, and Linux 2.2.x and later.
 - Do not include Block and Character special files on SOLARIS platforms for storage sampling. These files are block size 0 and add nothing to the sampling.
 - Do not sample file systems with `fs type autofs` on SOLARIS, OSF1, and HP-UX platforms. These are automounted file systems.
- Changes to the `A_select` utility:
 - Modified so that `memory_demand_algorithm` variable in the CIMS Data Collector for UNIX Parameter File, `$CIMS_HOME/data/A_setup.sys`, is applied to UGA and PGA memory statistic in Oracle jobtype records.
 - Corrected error in `setup_date.c`. This routines is called to organize the order in which `acc_files` will be processed by the `A_select` utility. The constant `ARSAP_KL_MAXSTRGRECLEN` was set to 128 in `A_defs.h`. The first record in each `acc_file` is read to determine the order the files will be processed. If the first record is out of range, that record is ignored and a `IGNDATE` warning error is issued. The next record is read until a valid date is read. Increased `ARSAP_KL_MAXSTRGRECLEN` to 256 to accommodate `acc_file` records greater the length 128.
 - Added `ptm` to list of terminal names to check for `win_time`. Also fixed conditional at start of the `check_win()` subroutine where it was skipping `wtmp` logout records in check for membership in console session. This problem only exists in records from SGI platforms.
 - If session is being tracked as part of a console session and a `VZ`, (logout), record is encountered for a terminal in the console session, do not call the `end_all_sessions()` subroutine. This was causing a problem in data from platforms like IRIX where `VA` and `VZ` records are seen for console windows.
 - If `VI`, (image), record is seen between `VA`, (`wtmp` login), and `VE`, (CIMS login), records in a console session, assign the project from the `VE` to the `VI` window session, just as is already done to console `VI` records that follow `VE` records.
- Change to the `G_license` utility:
 - Added support for a `verify` command. This command will display `LICENSE_ER_NORMAL` if the license on the local node is valid. If not valid, one of the following will be displayed; `GEJAC_ER_UNLICVER`, `GEJAC_ER_UNLICMAC`, `GEJAC_ER_NOLICINFO`, or `GEJAC_ER_SWHASEXP`.
- Change to the `A_gui` utility:
 - Corrected error when setting `VALIDATION_METHOD` from `DEFAULT_PROJECT` and `ADD_PROJECT` widgets. The underlying command string was being built with `/val` instead of `/validation_m`. This conflicted with `/validate`.

CIMS for Oracle Accounting Daemon Changes

- Changes to the CIMS for Oracle Accounting Daemon, A_dbao.
 - Modified the `fetch_info.c` subroutine to include machine identifier in the test for process uniqueness. Prior to this change, if two processes with the same PID occurred on successive rows, the metrics for the first row would be overwritten with the metrics from the second row and the second row would not be marked as updated.
 - Added support for `USE_SESSION_OSUSER` to read operating system username from `V$SESSION.OSUSER`. If the `USE_SESSION_OSUSER` environment variable is set in the environment of the CIMS for Oracle Accounting Daemon, the operating system username field will be read from the `V$SESSION.OSUSER` field. Otherwise, it will be read from `V$PROCESS.USERNAME` by default.

If an ORACLE user, using SQL Server on a client platform, defines `USERNAME` in the `oracle.ini` file, that value will be included in `V$SESSION.OSUSER`.

`USE_SESSION_OSUSER` variable can be set by uncommenting directives in the `scripts/oracle/arsap_start_odb` script.

- Because the `or_write_requests` variable is not included in ORACLE 8.1.5, changed default statistic from `write requests` to `db block gets`.

CIMS for DB2 Accounting Daemon Change

- Change to the CIMS for DB2 Accounting Daemon, A_dbadb2:
 - Corrected error in reading Monitor data in DB2 UDB V5. This error occurred when `STATEMENT` monitoring is turned on.

Revision Level V4.1.0

The following are the enhancements and changes for revision level 4.1.0.

Utility Changes

- Removal of the `A_validate` utility:
 - Merged the functions of the `A_validate` utility into the `A_authorize` utility. Therefore, `A_validate` is obsolete. `A_authorize` handles all commands previously available from `A_validate`.
- Change to the `A_report` utility:
 - Added support for the user and project grouping field selection keywords in audit reports.
- Change to the `A_merge` utility:
 - Updated the Database User Grouping option to direct `A_merge` to use database user names instead of operating system user name for grouping field assignments.
- Change to the `A_sampler` utility:
 - Added support for excluding `MNT_NFS3` on AIX 4.2 platform. This constant specifies NFS file system in `vmount` structure.
- Note on the `A_select` utility:
 - The terminal `lft` is treated as “console” in `wtmp` records. This is the terminal name that is used on AIX for console logins.

New Keywords

New select keywords `storage_group` (resource only) and `db2_user` in `.rdf` files.

CIMS Accounting Daemon Change

Absolute shift and daily accounting for database accounting is now available. The database daemons generate absolute shift and daily accounting records. These records are processed by the `A_select` utility into the statistics file. The absolute shift and daily database accounting options are managed through the `A_setup` utility.

