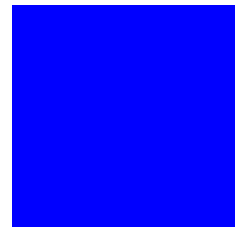


CIMS Lab, Inc.



CIMS Data Collector for UNIX®

Release Notes

Version 5.0.1

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CIMS Data Collector for UNIX

5.0.1 Release Notes

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Upgrading to CIMS Data Collector for UNIX 5.0.1

Important! • This section provides upgrade instructions for upgrading from CIMS Data Collector for UNIX® 4.1.3 or earlier to version 5.0.1. Because the names of some scripts, files, utilities, and variables have changed in CIMS Data Collector for UNIX 5.0.1, it is important that you follow the upgrade instructions closely.

Verify That CIMS V5 Is the Correct Version for Your UNIX/Linux Platform

Table 1 lists the appropriate CIMS Data Collector for UNIX version for each UNIX/Linux® platform. This document is applicable only to CIMS Data Collector for UNIX 5.01. If you are using a platform that is supported by CIMS Data Collector for UNIX version 4.1.3 or earlier, refer to the release notes for that version.

Platform	CIMS Data Collector for UNIX Version	Release Date
AIX®41	V4.1.2	01-May-2002
AIX43	V4.1.3	01-Mar-2003
AIX51	V5.0.1	15-Nov-2005
COM_Z	V5.0.1	15-Nov-2005
COM_GZ	V5.0.1	15-Nov-2005
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	V5.0.1	15-Nov-2005
HP_IA	V5.0.1	15-Nov-2005
IRIX	V4.1.3	01-Mar-2003
LINUX (Intel®)	V5.0.1	15-Nov-2005
LINUX (OS/390)	V5.0.1	15-Nov-2005
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

Table 1 • Current CIMS Version for Each Supported UNIX Type

Platform	CIMS Data Collector for UNIX Version	Release Date
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	V5.0.1	15-Nov-2005
SOL_27	V5.0.1	15-Nov-2005
TRU64	V5.0.1	15-Nov-2005

Table 1 • Current CIMS Version for Each Supported UNIX Type (Continued)

Back Up Your CIMS Directories and Custom Scripts

Before you perform an upgrade, back up the CIMS Data Collector for UNIX directories so you can recover to the original state if necessary. In addition, back up any CIMS scripts that you have modified. Note that the names of some scripts may have changed as described in the following section.

Change Crontab Entries and Custom Scripts as Needed

The following CIMS Data Collector for UNIX scripts have been renamed in version 5.0.1, which might require changes to crontab entries. Also, if you have customized these scripts or have custom scripts which call any of these scripts, you will need to make the appropriate changes to your scripts.

The renamed scripts are presented by the directory in which they reside.

\$CIMS_HOME/etc

Previous Name	New Name
arsap_nightly	cimsu_nightly
arsap_date	cimsu_date
arsap_date.awk	cimsu_date.awk
arsap_env	cimsu_env
arsap_platform	cimsu_platform

\$CIMS_HOME/etc/lib

Previous Name	New Name
arsap_cv.pm	cimsu_cv.pm
arsapdosglob.pm	cimsudosglob.pm
arsap_oos.pm	cimsu_oos.pm
arsap_proc.pm	cimsu_proc.pm
arsap_rec.pm	cimsu_rec.pm

\$CIMS_HOME/scripts/admin

Previous Name	New Name
arsap_check_env	cimsu_check_env
arsap_connect	cimsu_connect

\$CIMS_HOME/scripts/oracle

Previous Name	New Name
arsap_check_odb	cimsu_check_odb
arsap_start_odb	cimsu_start_odb
arsap_stop_odb	cimsu_stop_odb
arsap_view.sql	cimsu_view.sql

\$CIMS_HOME/scripts/db2

Previous Name	New Name
arsap_check_db2	cimsu_check_db2
arsap_start_db2	cimsu_start_db2
arsap_stop_db2	cimsu_stop_db2

Prepare to Run the Installation Script (cimsu_install)

Before you run the `cimsu_install` script, do the following in the order presented.

1. Turn Off CIMS Database Accounting Daemons

If you are using the Oracle or DB2® Accounting daemons, you must stop the daemons prior to upgrading to version 5.0.1.

If you are calling either the `arsap_check_odb` or `arsap_check_db2` database monitoring script from crontab, disable this crontab job and then stop all daemons as follows:

```
> $CIMS_HOME/scripts/oracle/arsap_stop_odb all
```

Or

```
> $CIMS_HOME/scripts/db2/arsap_stop_db2 all
```

In each `ORACLE_HOME` on your system, remove the CIMS symbolic links from the `$ORACLE_HOME/bin` directory. Check in `/etc/oratab`, (`/var/opt/oracle/oratab` on Solaris), to determine the location of each `ORACLE_HOME` on your system.

For each `ORACLE_HOME`, do the following:

```
> rm $ORACLE_HOME/bin/A_dbao
```

```
> rm $ORACLE_HOME/bin/A_dbso
```

2. Suspend Any Scheduled CIMS Jobs

CIMS jobs that are scheduled in cron or another batch scheduler should be suspended until after the upgrade is complete. Check both `root` and the `cims` user crontab entries for scheduled CIMS jobs and comment these jobs until after the upgrade.

3. Turn Off UNIX Accounting

Use the CIMS `turnacct` script to stop UNIX accounting during the upgrade. As `root`, do the following:

```
> $CIMS_HOME/etc/turnacct off
```

4. Define CIMSU_SERVER in the Configuration Parameter File

In the Configuration Parameter file (`$CIMS_HOME/data/A_config.par`), there is a definition for the `ARSAP_SERVER` variable. Define a new variable in the file called `CIMSU_SERVER` and assign it the same value as `ARSAP_SERVER`.

The installation script will use this variable during the upgrade.

```
ARSAP_SERVER=itest12
```

```
CIMSU_SERVER=itest12
```

Run the `cimsu_install` Script

CIMS Data Collector for UNIX includes an installation script, `cimsu_install`. To run this script, refer to the *CIMS Data Collector for UNIX Installation and User Guide*.

The `cimsu_install` script prompts you for the information required for installation. This includes information from your CIMS Data Collector for UNIX license PAK. *You must enter the requested information exactly as it is shown in the license PAK.* CIMS Data Collector for UNIX is authorized to run only on licensed computers. If you do not have the license PAK, contact CIMS Lab.

For an example of the `cimsu_install` run, refer to Appendix F in the *CIMS Data Collector for UNIX Installation and User Guide*.

The `cimsu_install` script prompts you for the installation location for CIMS Data Collector for UNIX. You may install it in the same location as the your current installation or to a new location.

Upgrading to a New Location

Type `n` when the `cimsu_install` script issues this prompt:

```
Are you installing an upgrade to CIMS/UNIX [n] ?
```

Your V4 data files with `.sys` extensions, as well as existing log and history files can be copied to the V5 data directories after you run `cimsu_install` to save you time setting up V5. In the following example, `cims` is the CIMS user and its group is `cims`.

```
> cp $V4_CIMS_HOME/data/*.sys $CIMS_HOME/data
> chown cims:cims $CIMS_HOME/data/*.sys

> cp $V4_CIMS_HOME/history/* $CIMS_HOME/history
> chown cims:cims $CIMS_HOME/history/*

> cp $V4_CIMS_HOME/log/* $CIMS_HOME/log
> chown cims:cims $CIMS_HOME/log/*
```


Upgrading to the Same Location

Following the upgrade, you should remove the following CIMS UNIX V4 scripts and binary executables.

- V4 scripts that have been renamed in V5:

```
> cd $CIMS_HOME/etc
> rm arsap*

> cd $CIMS_HOME/etc/lib
> rm arsap*

> cd $CIMS_HOME/scripts/admin
> rm arsap*

> cd $CIMS_HOME/scripts/oracle
> rm arsap*

> cd $CIMS_HOME/scripts/db2
> rm arsap*
```

- Database Accounting daemons linked with V4:

```
> cd $CIMS_HOME/bin
> rm A_dbao.V*
> rm A_dbso.V*
> rm A_dbadb2.V*
> rm A_dbsdb2.V*
```

After Upgrading

1. Check the A_config.par File

Check that the variable definitions in the `A_config.par` file are initialized to suit the needs of your environment. All variable names containing `ARSAP`, have been changed to `CIMSU`. For example, the variable `ARSAP_UPATH` in the V4 `A_config.par` file is now `CIMSU_UPATH`.

If you upgraded to the same location, your V4 `A_config.par` file has been renamed `A_config.V040` and is located in `$CIMS_HOME/data`. Use this file to verify the settings in the new `A_config.par` file.

If you installed to a new `CIMS_HOME` location, you can compare the values from the `A_config.par` file in the old location to those values in the `A_config.par` file in the new location.

2. Check crontab Entries for CIMS Jobs

Make sure that all CIMS jobs called from crontab are correct. Verify directory paths and script names in entries in the crontab files for both `root` and the CIMS user. Once you are satisfied the entries are correct, re-enable the jobs that were suspended prior to the upgrade.

3. Restart Unix Accounting

Restart Unix Accounting by running the following command as `root`:

```
> $CIMS_HOME/etc/turnacct on
```

4. Restart CIMS Database Accounting Daemons

If you are using Oracle or DB2 Accounting, you will need to re-link the accounting daemons. See the instructions for Oracle and DB2 preparation in Chapter 1 of the *CIMS Data Collector for UNIX Installation and User Guide*.

Once you have relinked the daemons, you can use the new V5 database accounting scripts. To start, monitor, and stop the accounting daemons.

```
$CIMS_HOME/scripts/oracle/cimsu_check_odb
```

```
$CIMS_HOME/scripts/oracle/cimsu_start_odb
```

```
$CIMS_HOME/scripts/oracle/cimsu_stop_odb
```

```
$CIMS_HOME/scripts/db2/cimsu_check_db2
```

```
$CIMS_HOME/scripts/db2/cimsu_start_db2
```

```
$CIMS_HOME/scripts/db2/cimsu_stop_db2
```

The database monitoring script `cimsu_check_odb` or `cimsu_check_db2` can be called from crontab. See the comments at the beginning of these scripts for sample crontab entries.

Changes and Updates

The following sections describe changes and updates for CIMS Data Collector for UNIX 5.0.1.

Configuration Parameter File (A_config.par) Changes

Table 2 lists variables that have been added to the Configuration Parameter file (A_config.par). For more information about these variables, refer to Chapters 2 and 3 of the *CIMS Data Collector for UNIX Installation and User Guide*.

Variable	Description
USE_SESSION_OSUSER	This variable was previously defined in the <code>cimsu_start_odb</code> script. When this variable is set to Y (the default and recommended), the CIMS Oracle Accounting daemon will retrieve the OS user name from the V\$SESSION table.
CS_METHOD, CS_PLATFORM, CS_USER, CS_KEY, CS_UPATH	The <code>CS_send</code> script uses these variables to deliver CIMS Server Resource (CSR) files to CIMS Server.
TNS_ADMIN, ORA_SEND_STARTMSG, ORA_STARTMSG_RCPT	These variables are used when the CIMS Oracle Accounting daemon is started.
CHK_NIGHTLY_MSG_RCPT	This variable is used to define the recipient of messages generated by the <code>check_nightly</code> script.
GEN_UNIXFS, GEN_ORACLE, GEN_ORACLE_STORAGE, GEN_DB2, GEN_DB2_STORAGE	These variables were previously defined in the <code>CS_nightly_consolidation</code> script. The variables define which CSR files will be generated by the <code>CS_nightly_consolidation</code> script.
GEN_UNIXPROC	If this variable is set to Y, Process/Package records are included in the UnixOS CSR file.
GEN_PROCONLY	If this variable is set to Y, no interactive or background types are included in the UnixOS CSR file.
CS_COLL_PATH	This variable is used by the <code>CS_log_send</code> script. For more information about this new script, refer to "Transferring Log Files to CIMS Server" in Chapter 3 in <i>CIMS Data Collector for UNIX Installation and User Guide</i> .

Table 2 • Variables Added to the A_config.par File

Utility Changes

Table 3 lists the changes to CIMS utilities.

Utility	Description of Change
A_dbao	<ul style="list-style-type: none"> ■ Added support for using Oracle 8i Oracle Call Interfaces (OCIs). ■ Added /*+ rule */ to the SELECT query. This improves performance, particularly under Oracle 10g. ■ Now uses value of BGPROCESS number in all cases to identify unique session in Oracle.
A_dbso	<ul style="list-style-type: none"> ■ Added support for using Oracle 8i OCIs. ■ Added support for Oracle datafile resources collection as part of nightly storage collection.
A_dbsdb_read	<ul style="list-style-type: none"> ■ Added support for aggregating records on the tablespace name. This results in fewer CSR records in the Oracle storage CSR file. ■ Added support for Oracle datafile resource reporting. CSR records containing Oracle datafile usage are included in the Oracle storage CSR file. ■ A_dbsdb_read is called as part of Oracle storage collection if ORA_STR_SAMPLE is set to Y in the A_config.par file.
dbrtl library	<ul style="list-style-type: none"> ■ Updated the routines in this library to use Oracle 8i OCI calls.
A_format	<ul style="list-style-type: none"> ■ Added support for new /AGGREGATE qualifier. This qualifier instructs A_format to treat all process records as background jobs. This means that all process records are rolled up based on username and processname. <p>This qualifier has meaning only when used with the /ROLL qualifier.</p> <ul style="list-style-type: none"> ■ Added support for formatting the wtmps file on HP-UX 11i v2 Itanium-based platform. The wtmps file has replaced the wtmp file on this platform.

Table 3 • Utility Changes

Utility	Description of Change
A_setup	<ul style="list-style-type: none"> ■ A Memory Demand Algorithm value of 0 has been added. This value will indicate that the UNIX memory usage metric is reported in megabytes (MB). The Memory Demand Algorithm will be set to 0 for initial CIMS Data Collector for UNIX installations. <p>For more information about the Memory Demand Algorithm, refer to “Memory Demand Algorithm” in Chapter 4 of the <i>CIMS Data Collector for UNIX Installation and User Guide</i>.</p>
A_select	<ul style="list-style-type: none"> ■ The FOUTOFSEQ_WARNING_COUNT has been increased to 300. If an out-of-sequence condition occurs, A_select will first output an FOUTOFSEQ warning level message and then continue processing up to 300 records. <p>If the out-of-sequence condition corrects, a warning level message is output showing the number of records that were out-of-sequence.</p> <p>If the condition does not correct, A_select outputs a severe level error and discontinues processing.</p> <p>For more information about out-of-sequence processing, refer to “Out-of-Sequence Record Management” in Chapter 4 of the <i>CIMS Data Collector for UNIX Installation and User Guide</i>.</p> <ul style="list-style-type: none"> ■ Added support for new Memory Demand Algorithm value 0 (see A_setup utility changes). ■ Corrected processing of Intermediate Oracle and DB2 Accounting records when the proration_method parameter is set to LOGOUT. Intermediate Oracle and DB2 accounting records are generated when either DB_Absolute_Daily or DB_Absolute_Shift are enabled. <p>For more information about the proration_method parameter, refer to “Process Resource Usage Proration” in Chapter 4 of the <i>CIMS Data Collector for UNIX Installation and User Guide</i>.</p>
CS_fs_resource	<ul style="list-style-type: none"> ■ Added rate codes that express blocks allocated and used in gigabytes (GB).

Table 3 • Utility Changes (Continued)

Utility Versions

Table 4 lists the version number for the utilities in CIMS Data Collector for UNIX 5.0.1.

Utility	Version
A_authorize	V05.03
A_dbadb2	V01.02
A_dbao	V04.02
A_dbso	V02.07
A_format	V03.08
A_gui	V02.04
A_graph	V02.04
A_merge	V02.05
A_rates	V03.02
A_report	V03.00
A_select	V06.02
A_setup	V05.04
G_license	V02.00

Table 4 • Current Utility Versions in Revision Level 5.0.1

Script Changes

\$CIMS_HOME/etc

Table 5 lists changes to scripts in the \$CIMS_HOME/etc directory.

Script	Description of Change
get_acct	<ul style="list-style-type: none"> Added support for using SFTP as a transfer method.
compress_acc_month, uncompress_acc_month	<ul style="list-style-type: none"> These are new scripts that archive and retrieve nightly accounting and storage files. For more information about these scripts, refer to “Compressing Nightly Accounting and Storage Files” in Chapter 4 of the <i>CIMS Data Collector for UNIX Installation and User Guide</i>.

Table 5 • \$CIMS_HOME/etc Script Changes

\$CIMS_HOME/scripts/admin

Table 6 lists changes to scripts in the \$CIMS_HOME/scripts/admin directory

Script	Description of Change
create_A_config.par	<ul style="list-style-type: none"> Moved the variable definition <code>USER_SESSION_OSUSER</code> to the Configuration Parameter file. This variable had previously been defined in the <code>cimsu_start_odb</code> script. Added the following variable definitions: <ul style="list-style-type: none"> <code>GEN_UNIXFS</code>, <code>GEN_ORACLE</code>, <code>GEN_ORACLE_STORAGE</code>, <code>GEN_DB2</code>, <code>GEN_DB2_STORAGE</code>, <code>GEN_UNIXPROC</code>, <code>GENPROCONLY</code> <code>CS_METHOD</code>, <code>CS_PLATFORM</code>, <code>CS_USER</code>, <code>CS_KEY</code>, <code>CS_UPATH</code> <code>TNS_ADMIN</code>, <code>ORA_SEND-STARTMSG</code>, <code>ORA_STARTMSG_RCPT</code> <code>CHK_NIGHTLY_MSG_RECPT</code> <code>CS_COLL_PATH</code> Set the default value for <code>SELECT_QUALS</code> variable to <code>/ADD_IMAGE</code>. Set the default value for <code>USE_SESSION_OSUSER</code> variable to <code>Y</code>.

Table 6 • \$CIMS_HOME/scripts/admin Script Changes

\$CIMS_HOME/scripts/enterprise

Table 7 lists changes to scripts in the \$CIMS_HOME/scripts/enterprise directory.

Script	Description of Change
CS_send	<ul style="list-style-type: none"> ■ Added support for using SCP and SFTP file transfer.
CS_nightly_consolidation, redo_CS_nightly_consolidation	<ul style="list-style-type: none"> ■ These scripts now read the following variables from the A_config.par file: <ul style="list-style-type: none"> • GEN_UNIXFS • GEN_ORACLE • GEN_ORACLE_STORAGE • GEN_DB2 • GEN_DB2_STORAGE

Table 7 • \$CIMS_HOME/scripts/enterprise Script Changes

\$CIMS_HOME/scripts/oracle

Table 8 lists changes to scripts in the \$CIMS_HOME/scripts/oracle directory.

Script	Description of Change
cimsu_start_odb, cimsu_stop_odb, cimsu_check_odb	<ul style="list-style-type: none"> ■ Changed PS_FLAGS for HP-UX to -efx. The x option to the ps command is supported in HP-UX 11.11. For HP-UX 11.00, the PHCO_26274 patch must be installed to support the x option. ■ Moved the variable definition USE_SESSION_OSUSER from the cimsu_start_odb script to the A_config.par file. ■ The cimsu_start_odb script searches the A_config.par file for the TNS_ADMIN variable. If the variable has been defined, the script exports the variable prior to starting the accounting daemon. The TNS_ADMIN variable should be set if tnsnames.ora file is not in \$ORACLE_HOME/network/admin directory.
cimsu_check_odb	<ul style="list-style-type: none"> ■ If the variable ORA_SEND_STARTMSG is set to Y in the A_config.par file, a message is sent to the recipient defined by the ORA_STARTMSG_RCPT variable when an attempt is made to start the Oracle Accounting daemon.

Table 8 • \$CIMS_HOME/scripts/oracle Script Changes

Script	Description of Change
get_odb_storage	<ul style="list-style-type: none"> ■ By default, this script calls the A_dbsdb_read utility with the aggregate argument. ■ Changed Oracle account name to cims.
cimsu_view.sql	<ul style="list-style-type: none"> ■ Added support for Oracle datafile resource collection using the A_dbso utility. ■ Changed Oracle account name to cims. ■ Added SELECT on V\$DATAFILE to cimsu_view role.
link_A_dbao	<ul style="list-style-type: none"> ■ Added support for linking with Oracle 9i and 10g on Linux platforms. ■ Added support for linking with Oracle 10g on AIX, HP-UX, OSF1, and Solaris platforms.

Table 8 • \$CIMS_HOME/scripts/oracle Script Changes (Continued)

\$CIMS_HOME/scripts/db2

Table 9 lists changes to scripts in the \$CIMS_HOME/scripts/db2 directory.

Script	Description of Change
link_A_dbadb2, cimsu_start_db2, cimsu_stop_db2, cimsu_check_db2, get_db2_storage, A_db2_home	<ul style="list-style-type: none"> ■ Added support for DB2 8.1 on AIX platforms.
cimsu_check_db2	<ul style="list-style-type: none"> ■ Added support for starting the DB2 Accounting daemon if it is not already running using the start argument.
A_db2_home, link_A_dbadb2	<ul style="list-style-type: none"> ■ Added support for linking DB2 8.1 on Solaris platforms.

Table 9 • \$CIMS_HOME/scripts/db2 Script Changes

