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CGS 7.3.7 SW Release Notes

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This document issue provides the description of the CGS SW release 7.3.7.

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Ausgabe Issue	**Datum** Date	**Betroffener Abschnitt/Paragraph/Seite** Affected Section/Paragraph/Page	**Änderungsgrund/Kurze Änderungsbeschreibung** Reason for Change/Brief Description of Change
1/-	29.01.2010	All	Version for 7.2.0
2/-	07.05.2010	All	Version for 7.2.1
3/-	30.09.2010	All	Version for 7.2.2
4/-	23.05.2011	All	Version for 7.3.0
5/-	15.03.2012	All	Version for 7.2.3
6/-	05.10.2012	All	Version for 7.3.1
7/-	23.11.2012	All	Version for 7.2.4
8/-	16.04.2013	All	Version for 7.3.2
9/-	17.05.2013	All	Version for 7.3.3
10/-	26.07.2013	All	Version for 7.3.4
11/-	06.09.2013	All	Version for 7.3.5
12/-	06.09.2013	All	Version for 7.2.5
13/-	28.02.2014	All	Version for 7.3.6
14/-	28.05.2014	All	Version for 8.0.0
15/-	30.06.2014	All	Version for 7.3.7

Table of Contents

1. Introduction

1.1 Identification and Scope

This document is the CGS 7.3.7 SW Release Notes. The release is identified by document CGS SRO (ESO-IT-SRO-0204).

CI Name:	CGS SW
CI Number:	1130992
CI Variant:	7.3.7

1.2 Purpose

The purpose of this software release is a delivery of a validated version of CGS for official use.

1.3 Document Layout

This document has the following layout:

Chapter 1 provides the document identification and identifies under which CI this document is prepared. Chapter 1 also provides an overview of the purpose of the document and the overall document structure.

Chapter 2 provides the list of documents which are applicable or are referenced.

Chapter 3 provides an overall description of the release. Thus in this chapter all SW products being integrated are listed including the temporary fixes necessary to run the SW. This chapter also provides the identification of CCU versions being used for the SW product integration (if any).

Chapter 4 provides an overview of the release status. This includes a statement on the current test status and the identification of SPRs being fixed with this release.

Chapter 5 provides the installation instruction for the CGS SW.

Chapter 6 provides a list of abbreviations being used

2. Applicable and Reference Documents

CGS Documents:

	name	issue	date
Technical Note			
ESO-IT-RN-0110	CGS SW Release Notes (Linux)	15	30.06.2014
CGS-RIBRE-TN-0002	The CGS Authorization Concept	2/B	04.09.2006
SW Release Order			
ESO-IT-SRO-0204	CGS Software Release Order (Linux)	15	30.06.2014
User Manuals			
CGS-RIBRE-SUM-0001	CGS User Manual	16/-	30.06.2014
CGS-RIBRE-SUM-0002	CGS Installation Manual (Linux)	12/-	30.06.2014
CGS-RIBRE-SUM-0003	MDA Reference Manual	1/G	05.04.2012
CGS-RIBRE-SUM-0005	DADIMA Reference Manual	1	09.11.2001
CGS-RIBRE-SUM-0006	DADIMA Administration Manual	1	09.11.2001
CGS-RIBRE-MA-0001	UCL Debugger User Manual	1	01.09.2004
CGS-RIBRE-MA-0003	call - A tool to add a graphical user interface to command line based programs	1/-	01.03.2006
CGS-RIBRE-MA-0004	"mdb - MDB Access Tool"	1/A	01.02.2009
CGS-RIBRE-MA-0005	"generate - Text Generation Tool"	1/-	01.03.2006
CGS-RIBRE-MA-0006	CDU Merge Users Manual	1	14.03.2006
CGS-RIBRE-MA-0007	Start Center - A generic user interface for multi-process systems	1/C	04.09.2007
CGS-RIBRE-MA-0008	An XML Based Configuration Concept	1/-	01.10.2006
CGS-RIBRE-MA-0010	Logger - A client/server based logging system	5/-	25.06.2014
COL-RIBRE-MA-0018-00	MDA Administration Manual	4/B	31.03.2000
COL-RIBRE-MA-0030-00	MDA Introduction Manual	3/B	04.04.1997
COL-RIBRE-MA-0037-00	DADIMA Introduction Manual	3	04.04.1997
COL-RIBRE-MA-0046	SID Range Tool Users and Operations Manual	1	15.09.1997
Reference Manuals			
CGS-RIBRE-STD-0001	User Control Language (UCL) Reference Manual	5/-	29.01.2010
CGS-RIBRE-STD-0002	High Level Command Language (HLCL) Reference Manual	5/-	29.01.2010
CGS-RIBRE-STD-0003	Virtual Stack Machine and I-Code Reference Manual	5/-	29.01.2010
COL-RIBRE-STD-0008	Reference Manual for Crew Procedure Language and Software, Commanding	1/F	31.10.2001
Requirements Specifications			
CGS-RIBRE-SPE-0001	Columbus Ground System (CGS) Requirement Specification	2/D	23.03.2004
CGS-RIBRE-SPE-0002	CGS Test Case Specification and Test Procedure	7/-	30.06.2008
Design Documentation			
COL-RIBRE-ADD-0006	Columbus Ground System (CGS) Software Architectural Design Document	4/B	30.10.1997
Interface Definitions			
CGS-RIBRE-ICD-0001	System to CGS ICD	1/-	31.01.2002
CGS-RIBRE-ICD-0002	MDB Standard Entities and Application Program Interface	1/-	
ESO-IT-LI-0070	List of IRNs fromCGS-RIBRE-ICD-0001	1	01.07.2008
ESO-IT-LI-0071	List of IRNs from CGS-RIBRE-ICD-0002	1	01.07.2008

USS Documents:

	name	issue	date
SW Release Note			
ESO-IT-RN-0095	USS 2.23.1 Release Note	7/-	20.06.2014
SW Release Order			
ESO-IT-SRO-0143	USS SW 2.23.1	9/-	20.06.2014

3. Release Overview

3.1 CCU Version Identification

This CGS SW Release provides no mission database content.

3.2 Integrated Products

In following table integrated components are identified, delivered with this release of the CGS SW.

- USS 2.23.1 (see 4.3)

3.3 Release Media & their Contents

The System is delivered as ISO image as described in SW Release Order (ESO-IT-SRO-0204).

This delivery contains the CGS system as well as online documentation.

3.4 Identification of the Generation and Test Environment

The CGS SW Generation environment is based on commercial baseline described in chapter 4.3 Commercial Baseline.

The CGS Test environment is based on commercial baseline described in chapter 4.3 Commercial Baseline.

4. SW Release Status

4.1 Release Status

The release status is: **VALIDATED**

The SPRs fixed in this release have been regression tested as documented in the CGS SPRdb. It has been assessed that the code changes have no impact on the qualification status of other SW modules of CGS as released in former versions.

4.2 Test Status

This CGS SW was tested using the baseline as defined in Chapter 4.3. The test status is VALIDATED.

Only the SPRs fixed in this release have been regression tested as documented in the CGS SPRdb.

4.3 Commercial Baseline

- ✓ Suse Linux Enterprise Server 10 / ServicePack2 / 32 bit
  - Recommended patch: glibc-2.4-31.63.7.i686.rpm, glibc-devel-2.4-31.63.7.i686.rpm
- ✓ Oracle 11.2.0.3.0 standard one edition
- ✓ gnat 6.4.1 used to build CGS API (*)
- ✓ CIS CORBA Server built with PrismTech OrbAda OrbAda 3.0_V110722 (CORBA 2.5, GIOP 1.2)
- ✓ CIS CORBA Server built with Ada Core PolyORB 2.10.0w-20130529 (rev. 210323) (CORBA 3.0, GIOP 1.2)
- ✓ USS version 2.23.1 (build-20140616-0922 @ 106680) (*)
- ✓ Java 1.6.0_14 (*)

This CGS SW release shall be executed on Intel PC with SUSE Linux Enterprise Server 10 (SLES10 - 32 bit) based environments.
(*) marked components are available on CGS delivery

4.4 Recommended Hardware Baseline

- ✓ It is recommended to use NVIDIA graphic card and the corresponding NVIDIA driver for usage of USS.

4.5 Recommended KDE settings

✓ It is recommended to set for each user the focus stealing prevention to "None" (KDE/Personal Settings/Desktop/Window Behaviour/Advanced/Focus stealing prevention level). This means: Prevention is turned off and new windows always become activated. (SPR-102860)

4.6 Compatibility Statement

The compatibility of current CGS 7.3.7 and selected CGS components to previous CGS versions are shown below (✓- compatible)

CGS Version \ Component	7.2.1	7.2.2	7.3.0	7.3.1	7.3.2	…	7.3.6	remark:
CGS software					✓		✓	
MDB	✓	✓	✓	✓	✓		✓	upward compatible
SAS (CGS API)				✓	✓		✓	new CGS API in 7.3.1
CSS model			✓	✓	✓		✓	rebuild requested in 7.3.0
I-Code	✓	✓	✓	✓	✓		✓	
UCL System Libraries	✓	✓	✓	✓	✓		✓	
Command History					✓		✓	new installation requested in 7.3.2

Remark: It is still possible to import MDB content (CCU, CDU) from CGS 7.3.6 or CGS 7.3.7 in CGS 7.3.5.

4.7 New or Updated Components

All software components are updated.

4.8 New features in CGS 7.3.7

What's new in CGS 7.3.7 (different from CGS 7.3.6)?

This version is a bug fix version only. No major changes are implemented! Some changes are described in detail in the next sections.

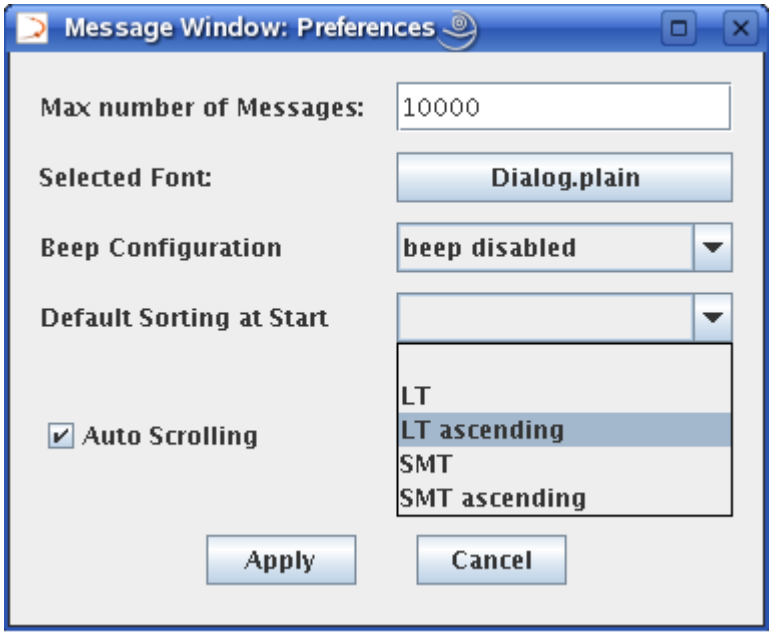
Remark: The major changes between CGS 7.2.2 and CGS 7.3.6 are described in CGS 7.3.6 release notes (ESO-IT-RN-0110,13/-,28.02.2014).

4.8.1 CGS installation – save USS configuration (SPR-103041)

During CGS installation former USS versions was deleted completely. Now the configuration directories (e.g. uss-<version>/etc) from the former USS versions are saved, but not restored automatically.

4.8.2 CGS message window – default ordering (SPR-103038)

In the CGS message window the user can change the default ordering of messages. The default is newest message on top (= LT ascending = as before).

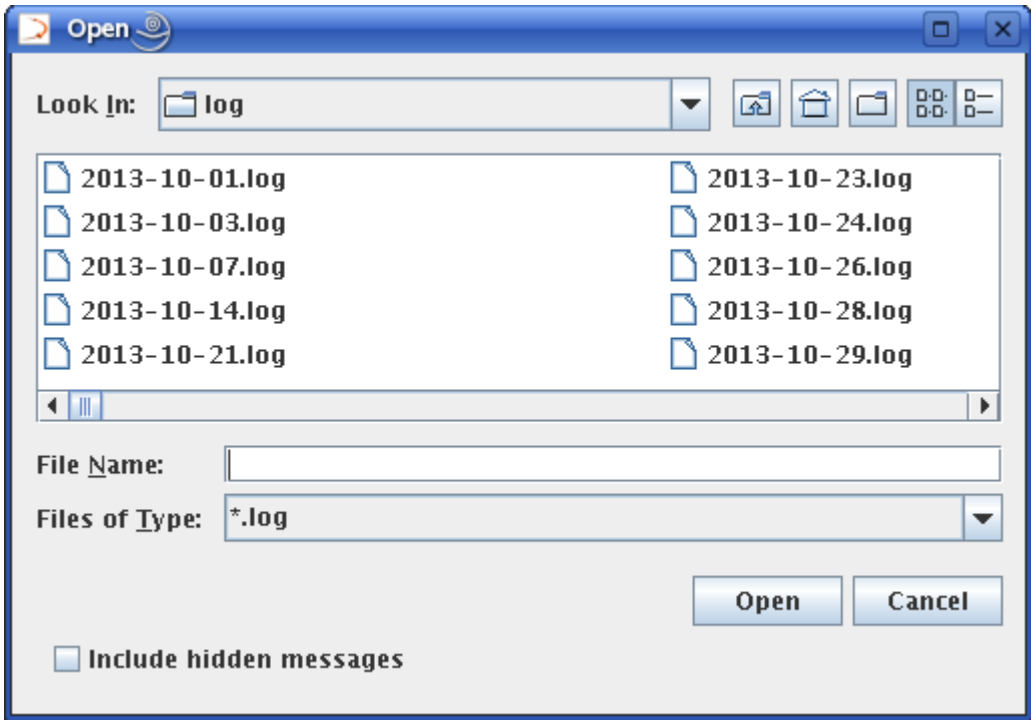


4.8.3 CGS message window – hidden messages during OPEN (SPR-103008)

In the CGS message window the File->Open dialog was improved to decide, whether hidden messages shall be loaded or not. Hidden messages are messages stored in the message log files, but not shown during the online session.

If the check box “include hidden messages” is disabled, the offline result shall be the same as online shown in message window. The hidden messages are not loaded in message window and not shown.

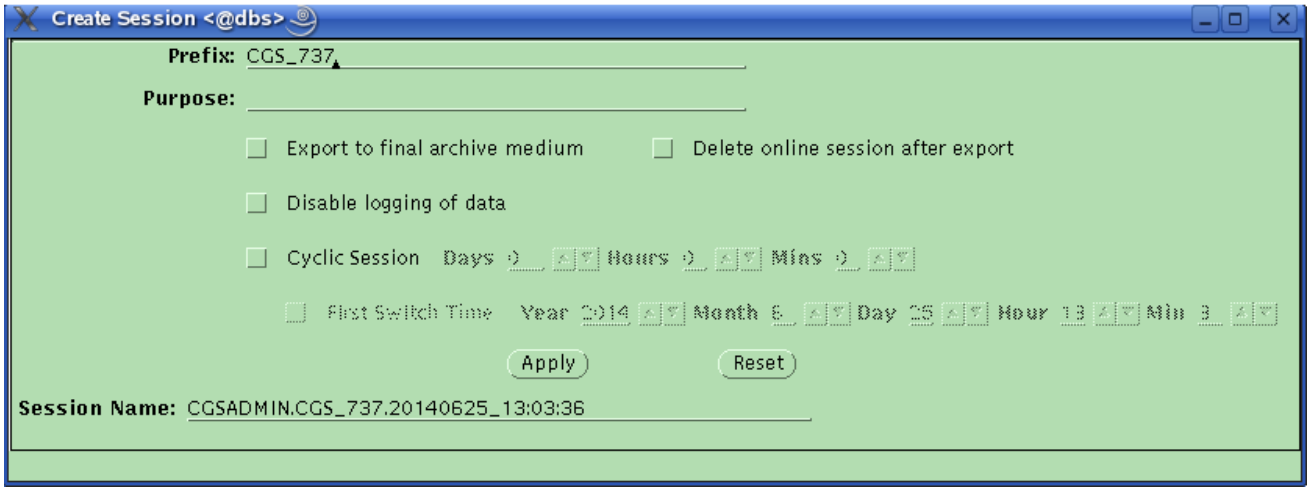
If the check box is enabled, all messages from file are displayed, but the count of messages is much more. This leads sometimes to a message window resource problem. To overcome this, the CGS configuration parameter Resource.Java.MaxHeapSpace.Message_Window has to be increased by the user and then restart message window.



4.8.4 TSCV – allow deletion of exported sessions (SPR-103052)

In TSCV Create Session dialog the user can specify

- the export of an execution session after closing the session (Export to final archive medium)
- the deletion of the online session after export (Delete online session after export)



Both functionalities are available in TSCV batch mode too.

```
TSCV Batch Mode Usage:

tscv -mn <mission_name>
     -ec <element_configuration>
     -sv <system_tree_version>
     -sn <system_tree_node_name>
     -cn <CCU_name>
     -cv <CCU_version>
```

```
-tc <test_configuration>
[-ts <test_session_name> [-fa | -fa_del] [-switch]]
[-q]
[-ap <pathname / nickname>]
[-shutdown]

-fa       : final archive - data directly saved on final archive medium
-fa_del   : final archive and delete - delete session after export (fa)
-switch   : switches session name from active session
-q        : quit - TSCV does not wait for Master AP termination
-ap       : defines master ap (works also for option '-shutdown')
-shutdown : shutdown - shutdown the configuration
-h        : single option - shows help message
```

4.8.5 HLCL Commanding Window Copy/Paste (SPR-103053)

To allow the short cuts Ctrl-C and Ctrl-V for copy and paste in the HLCL command window a new configuration parameter was introduced:

ONLINE_TEST_CONTROL.COMMAND_FACILITY.InterruptWithCtrl

With following description:

```
Interrupt HLCL commands with Ctrl-C key in addition to Escape key.
If enabled Ctrl-C can't be used to copy selected text. Use corresponding menu
entries instead.
```

4.8.6 CGS – new configuration parameter (SPR-103058)

In the CGS configuration the user can specify a new parameter:

TES.KERNEL.SW_CMDER.MIN_SWOP_PACKET_LENGTH

with following description:

```
(A) Allow or inhibit the checking of the packet length in SWOP packets to be
send.

    If this value is greater than 0 Byte, the SWOP packet length will be checked
    against this value and set to minimum if necessary:
      (SW_CMDER.MIN_SWOP_PACKET_LENGTH > 0 AND SWOP_Packet_Length <
SW_CMDER.MIN_SWOP_PACKET_LENGTH).
    SWOP packet length means here in detail the CCSDS packets length written
    in the length field of primary header after parameter substitution.

    Remark: Force even packet length for CCSDS packets (Columbus packet
standard).
            For SWOPs the length is set always according Columbus standard.

    Range:                              0 .. 4089 [Byte]
    Recommended value:                  0 [Byte]

Set the default, the system behaves as before. If the value is changed, give user
a message about the changes:

title: "Packet length of all SWOP commands is changed to 101"
text:  "The packet length is set at least to the defined minimum and corrected
according to Columbus packet standard to 101."
```

4.8.7 CGS – changed default value for configuration parameter (SPR-103082)

In CGS configuration the default value for parameter:

NWSW.IGNORE_ALIVE_MSG_CHECK

from False to True. The default behaviour now triggers no action in case of a detected alive message timeouts.

4.9 SW Problem Status

4.9.1 SPR Status and Impact Analysis

For this release 41 SPR's are solved.

ID▲	TITLE	EXTERNAL REFERENCE
SPR-102797	CGS 7.3.2 User Manual Reference Documents not Up-to date	
SPR-102875	Change CGS User Manual: replace string „cgs_configuration.xml“ by „configuration.xml“.	
SPR-102894	CGS User Manual not up-to-date	COL-RIBRE-SPR-25429
SPR-103005	CGS User Manual: Definition of Dynamic Strings	
SPR-103008	CGS message handler:Unexpected error raised	COL-RIBRE-SPR-25641
SPR-103009	I_MDB: Subwindow Resizing Problem (for end item type EVENT_MESSAGES on KDE)	COL-RIBRE-SPR-25639
SPR-103010	TSCV : switch entry not active	COL-RIBRE-SPR-25642
SPR-103025	TSCV: Final archiving fails, if target directory missing.	COL-RIBRE-SPR-25653
SPR-103026	HLCL Command Window: no proper work of history key	
SPR-103033	Configuration Editor: CIS, HLCL LoginSequence improvement	
SPR-103034	USS executor: HLCL init script error message improvement	USS-4077 (PFORGE) COL-RIBRE-SPR-25863
SPR-103035	CSS Kernel cannot connect to Event Handler	
SPR-103038	Message Window: Ordering of new messages	
SPR-103039	Again Frozen CDU status has changed to NONE	COL-RIBRE-SPR-25676
SPR-103041	CGS Installation Procedere improvement	
SPR-103046	I_MDB doesn't stop, if cgs_logger_server isn't running	
SPR-103051	Unreadable passages in the CGS user manual	COL-RIBRE-SPR-25707
SPR-103052	Automatic Final Archive does not delete test session in TRDB	COL-RIBRE-SPR-25704
SPR-103053	HLCL Commanding Window Copy/Paste inconsistency/malfunction	

SPR-103055	TEV does not show events stored in TRDB by the Log Converter SAS	
SPR-103056	HCI Explorer search: don't find all nicknames	
SPR-103058	Make the CGS config parameter "TES.KERNEL.GDU.MIN_CCSDS_PACKET_LEN" applicable for SWOP_Commands	COL-RIBRE-SPR-25729
SPR-103059	Refactor HCI to use same GTK MDB tree model for all applications to unify features	
SPR-103062	Message "Could not store archive file"' still occurring with CGS 7.3.5	COL-RIBRE-SPR-25737
SPR-103064	deliver new CGS user manual	
SPR-103065	Explorer find reports unexpected problem when pressing return if pattern not found	
SPR-103066	The parameter description "Version" occurs twice in Export Info file for CDUs	COL-RIBRE-SPR-25759
SPR-103067	UCL Browser reports unexpected problem when trying to load UCL item just deleted with I_MDB	
SPR-103069	TRDB and batch_tev not synchronous	
SPR-103070	SAS Status Window shows misleading SAS status	COL-RIBRE-SPR-25760
SPR-103071	Close test session results in a SASs disconnection	COL-RIBRE-SPR-25754
SPR-103074	Lot of EVL related error messages when closing a test session	COL-RIBRE-SPR-25750
SPR-103076	e-mail notification support	
SPR-103082	Change the default value of the CGS conf parameter Nwsw.Ignore_Alive_Msg_Check from False to True	COL-RIBRE-SPR-25787
SPR-103086	Install CGS (MDB) User raises ERROR	COL-RIBRE-SPR-25795
SPR-103087	CGS boot scripts attempt to start disabled DBS processes	COL-RIBRE-SPR-25800
SPR-103091	Message Window does not reconnect if SYSTEM_TOPOLOGY_TABLE defines 'localhost:DBS_01'	COL-RIBRE-SPR-25806
SPR-103109	Using TEV for error analysis not possible, because import of final archive session not successful.	COL-RIBRE-SPR-25815
SPR-103119	MDB DIFF Report does not provide expected results	COL-RIBRE-SPR-25837
SPR-103126	CGS-ERR-0083: out of scope on many derived values	COL-RIBRE-SPR-25847
SPR-103128	Missing tn directories stop TES from starting - unneccesary on stand-alone testnodes	COL-RIBRE-SPR-25839

4.10 Temporary fixed Problems

4.10.1 Further Open Problems

- SPR-100868 - SAS linked with the CGS API and using posix.process_primitives.exit_process are hanging. Use the system call _exit (not exit !) instead of posix.process_primitives.exit_process.

4.10.2 Known Restrictions

- It is not possible to prepare a telecommand (SWOP, FLAP, PUS_TC, and TC) via CIS, if this telecommand is defined with garded parameters in the parameter lists.
- SPR-101245 - CIS clients to implement sufficient large timeouts that can deal with a 10 seconds delay of 'Login' or 'subscribe<service>' requests.
- Not all interfaces for the new CGS IDL 2.0 are implemented in CGS:
  Note: unsupported '`oneway void`' calls are stubs, just generating a debug message
  '`<Procedure_Name> -- to be implemented --`' with debug output enabled.

  - o - not (yet) supported by CGS:
    - Calibration description as telemetry property:
      - o not yet supported by CGS: no calibration updates are sent by CIS
    - Telemetry report deliveries:
      - o Telemetry data reports not yet supported:
      - o `Telemetry.getTelemetryReport` raises `ServiceNotAvailable`.
      - o `Telemetry.cancelTelemetryReport` is empty.
      - o `TelemetryClient.telemetryReportDelivery` is never called by CIS.

5. Installation Procedures

This software shall be used on Intel PC with SUSE Linux Enterpriser Server 10 (SLES10).

5.1 Complete Installation

For a complete installation follow the instructions of CGS installation manual CGS-RIBRE-SUM-0002.

Remark: The actual CGS installation manual is on ISO image below /<mountpoint>/doc/manual.

5.2 Upgrade Installation

For an upgrade installation follow the next instructions.

For an upgrade based on CGS 7.2.2 / 7.3.0 / 7.3.1 follow the instructions given in section 5.2.2.

For an upgrade based on CGS 7.3.2 … 7.3.6 follow the instructions given in section 5.2.3.

The following syntax

cgsadmin> **ls -al**

means the shell command *ls -al* executed as user cgsadmin,

oracle> **cd**

means the shell command *cd* executed as user oracle.

5.2.1 Needed passwords

```
1. <cgsadmin>          (UNIX user)
2. root                (UNIX user)
3. <oracle>            (UNIX user)
4. <MDB_ADM>           (oracle user)
```

5.2.2 Installation steps (based on CGS 7.2.2 / 7.3.0 / 7.3.1 – but not for 7.3.2 … 7.3.6)

1. login as user <cgsadmin> on DB server host

2. cgs shutdown via cgs start_center

3. stop command history / central distributor (on command history server)
   cgsadmin> **$CGS_HOME/gsaf/dbs/bin/common/stop_cmd_history**
   cgsadmin> **$CGS_HOME/gsaf/dbs/bin/common/stop_central_distributor**

4. quit cgs start_center

5. terminate the cgs_daemon
   cgsadmin> **killall -9 cgs_daemon**

6.  Oracle data export

   - MDB data export
   - MDB user export
   - Command History export (optional)
   - TRDB export (optional)

   - Steps
     cgsadmin> **setenv CGS_SAVE <YourCGS_SAVE>**
       (e.g.: setenv CGS_SAVE $HOME/CGS_SAVE)
     cgsadmin> **mkdir $CGS_SAVE**
     cgsadmin> **$CGS_HOME/gsaf/cgsi/util/common/saveCGSconf**

7.  Oracle database de-installation

   - MDB de-installation
   - Command History de-installation (optional)
   - TRDB de-installation

   - Steps
     remove TRDB data files
     cgsadmin> **rm -rf $VICOS_CEN_DBS_HOME/***

     Login as user **oracle** on database server
     get the Oracle SIDs for MDB, TRDB and Command History
     oracle> **more /etc/oratab**

     delete the databases
     oracle> **$ORACLE_HOME/bin/dbca -silent -deleteDatabase -sourceDB <ORACLE_SID for MDB>**
     oracle> **$ORACLE_HOME/bin/dbca -silent -deleteDatabase -sourceDB <ORACLE_SID for TRDB>**

oracle> **$ORACLE_HOME/bin/dbca -silent -deleteDatabase -sourceDB <ORACLE_SID for Command History>**

8. Oracle upgrade

- de-install Oracle 11gR1 Enterprise edition
  as user **oracle** on database server:
  oracle> **$ORACLE_HOME/oui/bin/runInstaller -deinstall -silent -force ORACLE_HOME=$ORACLE_HOME "REMOVE_HOMES={$ORACLE_HOME}"**

- install Oracle 11gR2 Standard One edition
  install glibc-2.4-31.63 and glibc-devel-2.4-31.63 or higher version if not already done (see SPR-102552)

  get the actual glibc version
  cgsadmin> **rpm -qa | grep glibc**
  install glibc-2.4-31.63 and glibc-devel-2.4-31.63 or higher version as **root** user

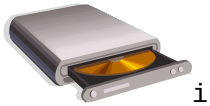
  as user **oracle** on database server:
  oracle> **unset ORACLE_HOME**
  oracle> **unset TNS_ADMIN**
  oracle> **/mount_point_Oracle/database/runInstaller**

Step	Installation Step	Action
1	Configure Security Updates Deselect ***I wish to receive security updates via My Oracle Support*** Window *My Oracle Support .. Not Specified* pops up Select ***Yes***	***Next***
2	Download Software Updates Select ***Skip Software updates***	***Next***
3	Installation Option Select ***Install database software only***	***Next***
4	Grid Installation Option Usually leave the default***Single instance database installation*** or choose ***Oracle Real Application Clusters database installation***	***Next***
5	Product Languages Leave the default ***English***	***Next***
6	Database Edition Select the desired database edition: Single instance database: choose ***Standard Edition One*** Oracle RAC database: choose ***Standard Edition***	***Next***
7	Installation Location Leave the defaults	***Next***
8	Operation System Groups Leave the defaults	***Next***
9	Prerequisite Checks In case of warnings: Select ***Fix & Check Again*** Execute the script as root and press ***OK***	
10	Summary	***Install***

11	Install Product Execute the script ***root.sh*** as root	***OK***
12	Finish	***Close***

Change default environment variables in */etc/profile.d/oracle.sh* as ***root*** *user*:
root> **vi /etc/profile.d/oracle.sh**
ORACLE_HOME=$CGS_BASE/product/11.2.0/dbhome_1

ORACLE_SID=<name of your global database>

9.  insert CGS DVD CGS_7.3.7

10. mount DVD

11. install all products from DVD
cgsadmin> **/<mountpoint>/installer.sh**

Select Exit (after installation)

12. unmount DVD

13.  installation of needed databases

- MDB Data Dictionary
cgsadmin> **cd $GSAF_HOME/mda/config/mdb/install**
cgsadmin> **zcat <YourDadiDeliveryLocation>/<YourDadiDeliveryFile>.tar.Z | tar –xvf –**

- install databases
cgsadmin> **$CGS_HOME/gsaf/config/bin/configurator.tcl &**

Installation Step	Optional	Action
Change ORACLE_HOME for MDB	No	Select tab Oracle/MDB ORACLE_HOME: replace ***11.1/db_1*** by ***11.2.0/dbhome_1***
Change ORACLE_HOME for TRDB	Yes Not needed in case of work without TRDB Not needed if use the same database for MDB and TRDB	Select tab TRDB ORACLE_HOME: replace ***11.1/db_1*** by ***11.2.0/dbhome_1***
Change ORACLE_HOME for CMDH	Yes Not needed in case of work without Command History Not needed if use the same database for MDB and TRDB	Select tab CMDH ORACLE_HOME: replace ***11.1/db_1*** by ***11.2.0/dbhome_1***
Save Configuration	No	File -> Save

Create Dot-files	No	Create -> Dotfiles
Create MDB Instance	No	Install -> Oracle MDB Instance
Create TRDB Instance	Yes Not needed in case of work without TRDB Not needed if use the same database for MDB and TRDB	Install -> Oracle TRB Instance
Create CMDH Instance	Yes Not needed in case of work without Command History Not needed if use the same database for MDB and CMDH	Install -> Oracle CMDH Instance

- Install and initialize the MDB

  From still running configurator:

Installation Step	Action
Install MDB	Install -> Mission Database Enter the right DADI export directory Enter the desired MDB instance range
Initialize MDB	Install -> Initialze Mession Database
Exit Configuratur	File -> Exit

-  **set new environment because of change of ORACLE_HOME and LD_LIBRARY_PATH**

  ***cgsadmin>* exit (this shell)**

- install exported MDB users

  Open **new** shell as cgsadmin user
  cgsadmin> **setenv CGS_SAVE <YourCGS_SAVE>**

  start the configurator again
  cgsadmin> **$CGS_HOME/gsaf/config/bin/configurator.tcl &**

Installation Step	Action
Install exported MDB Users	Upgrade -> Install Exported MDB Users

- install 7.3.7 TRDB (optional - not needed in case of work without TRDB)
  cgsadmin> **$CGS_HOME/gsaf/dbs/util/common/add_trdb_user**

  From still running configurator:

Installation Step	Action
Install TRDB	Install -> Test Result Database Please enter (1 / 2 / ALL / EXIT) : ***ALL***

- installation of 7.3.7 command history
  (optional - not needed in case of work without command history)

cgsadmin> **GSAF_HOME/dbs/util/common/command_history/add_cmd_history_user**

From still running configurator:

Installation Step	Action
Install Command History	Install -> Command History

- Quit configurator

  From still running configurator:

Installation Step	Action
Exit Configuratur	File -> Exit

14. Oracle import data

- import MDB data
  cgsadmin> **$MDA_HOME/config/mdb/upgrade/import**

```
Do you wish to start the import [y] ? <Return>
Enter OWNER NAME of the Oracle MDB account [<MDB instance name>_ADM]     : <Return>
Enter OWNER PASSWORD of the Oracle MDB account [<MDB instance name>_ADM] : <Return>

Enter BASENAME of the datafiles
(INCLUDING THE PATH BUT WITHOUT TRAILING '.<number>')
$CGS_SAVE/export_MDB.<MDB instance name>_ADM.<YY_MM_DD>

The logging-file stores all display outputs during the script execution
in the users HOME (/cgs_inst/users/cgsadmin) directory
Default logging filename: import_to_CGS_DEVELOPMENT_ADM.13_02_19.log
Enter logging-file name [import_to_CGS_DEVELOPMENT_ADM.13_02_19.log] : <Return>
```

- import TRDB data (optional)
  cgsadmin> **$GSAF_HOME/dbs/util/common/upgrade_tool -import $CGS_SAVE/trdb.content**

- import command history data (optional)
  cgsadmin> **$GSAF_HOME/dbs/util/common/command_history/import_partitions -f $CGS_SAVE/CH_<from_date_to_date>.exp**

15. update the Oracle JDBC driver

    cgsadmin> **$CGS_HOME/patches/update_ojdbc.sh**

16. update CGS directory structure and delete unwanted files

    cgsadmin> **$CGS_HOME/patches/patch_cgs.sh**

17. merge USS configuration files from former version into the new one

18. recreate your SCOE data (generate SCOE files)

    CGS requests to recreate SCOE data due to USS extensions.

19. rebuild your CSS models

    CGS requests to rebuild all CSS models due to CSS extensions.

20. rebuild your special application software (SAS)

    CGS requests to rebuild SAS.

21.  reboot server and if the server is ready, reboot all clients

5.2.3 Installation steps (based on CGS 7.3.2 … CGS 7.3.6)

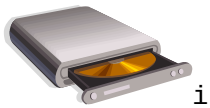
1. login as user <cgsadmin> on DB server host

2. cgs shutdown via cgs start_center

3. stop command history / central distributor (on command history server)
   cgsadmin> **$CGS_HOME/gsaf/dbs/bin/common/stop_cmd_history**
   cgsadmin> **$CGS_HOME/gsaf/dbs/bin/common/stop_central_distributor**

4. quit cgs start_center

5. terminate the cgs_daemon
   cgsadmin> **killall -9 cgs_daemon**



6. insert CGS DVD CGS_7.3.7

7. mount DVD

8. install all products from DVD
   cgsadmin> **/<mountpoint>/installer.sh**

   Select Exit (after installation)

9. unmount DVD

10. update the MDB

    cgsadmin> **$CGS_HOME/patches/patch_mdb.sh**

11. update the Oracle JDBC driver

    cgsadmin> **$CGS_HOME/patches/update_ojdbc.sh**

12. update CGS directory structure and delete unwanted files

    cgsadmin> **$CGS_HOME/patches/patch_cgs.sh**

13. merge USS configuration files from former version into the new one

14. **optional –** convert old I-MDB CCU filter (SPR-102961)

    Download correct_ccu_filter.sh from CGS-RIBRE-SMD-102961-B.

    cgsadmin> **chmod +x correct_ccu_filter.sh**
    cgsadmin> **./correct_ccu_filter.sh**
    for each user> **./correct_ccu_filter.sh**

15.  reboot server and if the server is ready, reboot all clients

6. Acronyms

AD	Applicable Document
ADD	Architectural Design Document
AP	Automated Procedure
ASCII	Americal Standard Code for Information Interchange
ATP	Authorization to Proceed
ATV	Autonomous Transfer Vehicle
CCB	Configuration Control Board
CCU	Configuration Control Unit
CCSDS	Consultative Commitee for Space Data System
CGS	Core Ground System
CDU	Configuration Data Unit
CLS	CGS Language System
COTS	Commercial Off-The-Shelve
CPL	Crew Procedure Language
CPU	Central Processing Unit
D&D	Design and Development
DMS	Data Management System
DOF	Degree of Freedom
EGSE	Electrical Ground Support Equipment
EM	Engineering Model
EQM	Engineering Qualification Model
ESA	European Space Agency
ETM	Electrical Test Model
FDIR	Fault Detection, Isolation and Recovery
FM	Flight Model
GMT	Greenwich Mean Time
GNC	Guidance Navigation Control
GPS	Global Positioning System
HCI	Human-Computer Interface
HL	High Level
HLCL	High Level Command Language
HW	Hardware
ICD	Interface Control Document
IF	InterFace
ISS	International Space Station
LL	Low Level
MDB	Mission Database
MET	Mission Elapsed Time
MMS	Matra Marconi Space
N/A	Not Applicable
PDB	Project Data Base
PROM	Programmable Read Only Memory
RAM	Random Access Memory
RD	Reference Document
RFW	Request for Waiver
ROM	Read Only Memory
RV	RendezVous
S/C	SpaceCraft
SCCB	Software Configuration Control Board
SOC	Statement of Compliance
SPR	Software Problem Report
SRD	Software Requirements Document
SUM	Software User Manual
SW	SoftWare
SWRU	Software Replaceable Unit
TBC	To Be Confirmed
TBD	To Be Defined
TC	TeleCommand
TM	TeleMetry
TRR	Test Readiness Review
UCL	User Control Language
URD	User Requirements Document
UTC	Universal Time Coordinated
VCD	Verification Control Document
VTP	Validation Test Plan