

How to migrate a Cognos ContentStore Database from DB2 v.11.1 to Oracle c12 (12.2.0.1)

(revision 1.0 April 2020)

This document describes the steps how to setup an Oracle c12 Database and how to connect/migrate an old Tivoli Common Reporting Cognos ContentStore using a DB2 database to a new Oracle database.

The Oracle c12 R2 release is not supported by Cognos v10.2.2 FP4 onwards, only tested in the described scenario. So the scenario is supported as-is.
Only Oracle 12.1.0.1.0 Standard Edition One and future fix packs are supported

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Prerequisites and Environment

In the current scenario we use:

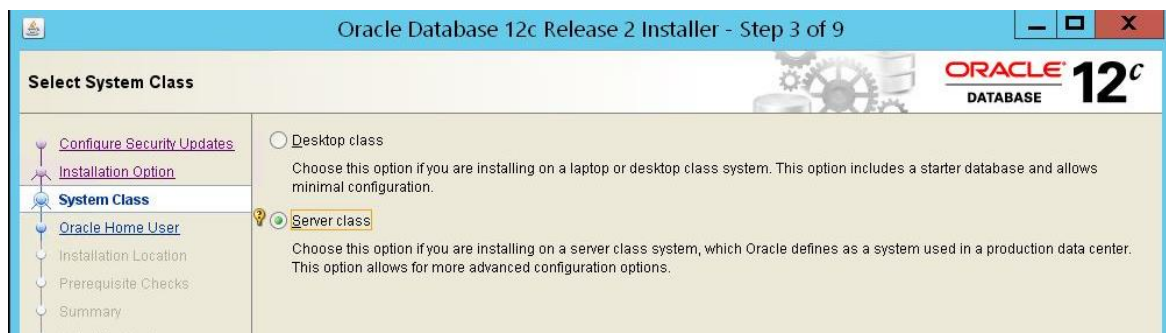
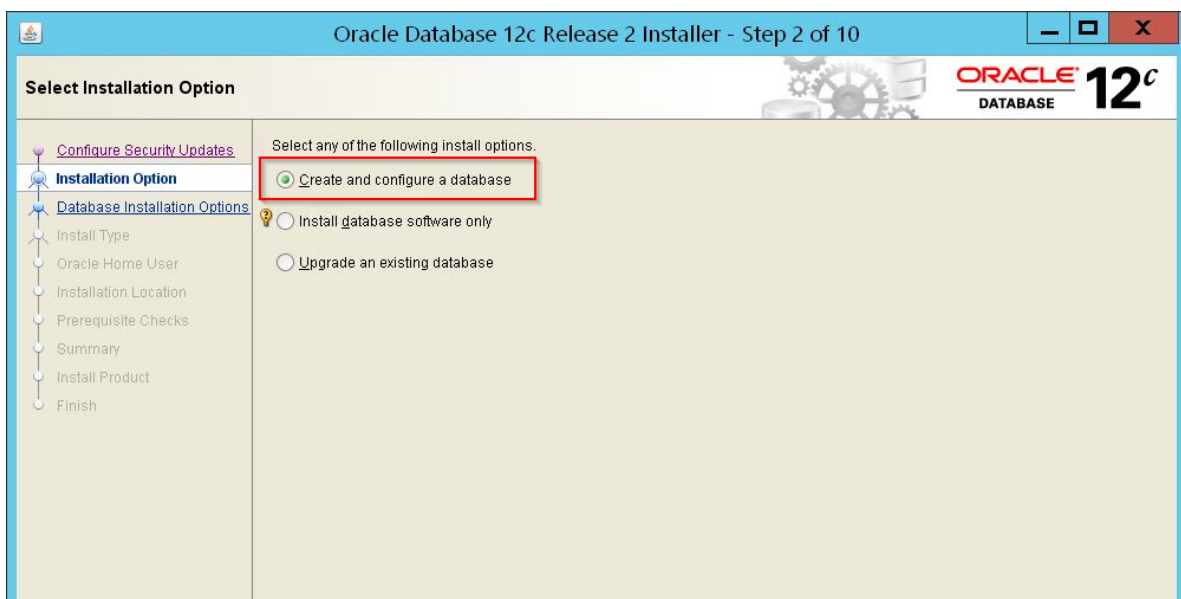
- a) a Windows 2012R2 system for the Oracle c12 (12.2.0.1) database
- b) Tivoli Common Reporting v3.1.3 using a remote Cognos ContentStore using DB2 v.10,1
Cognos v10.2.2 FP10

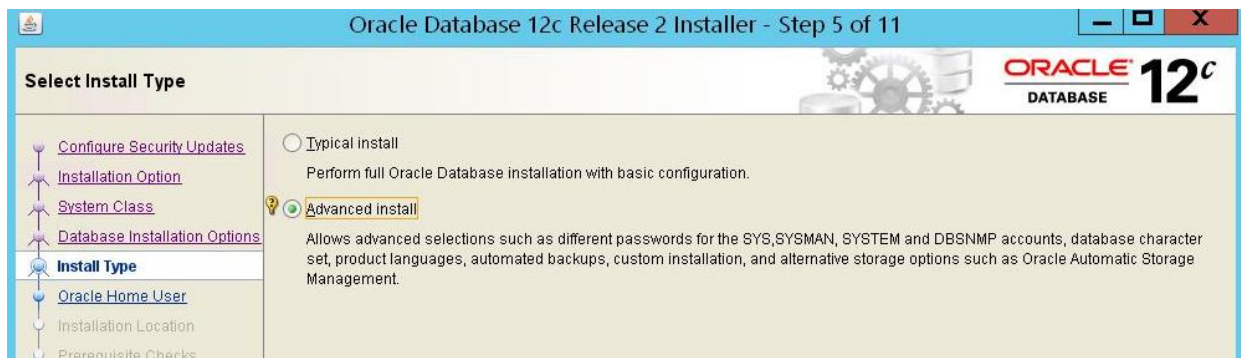
Installation of Oracle c120 (12.2.0.1)

The following screenshots, showing ONLY the important steps of the installation not all.

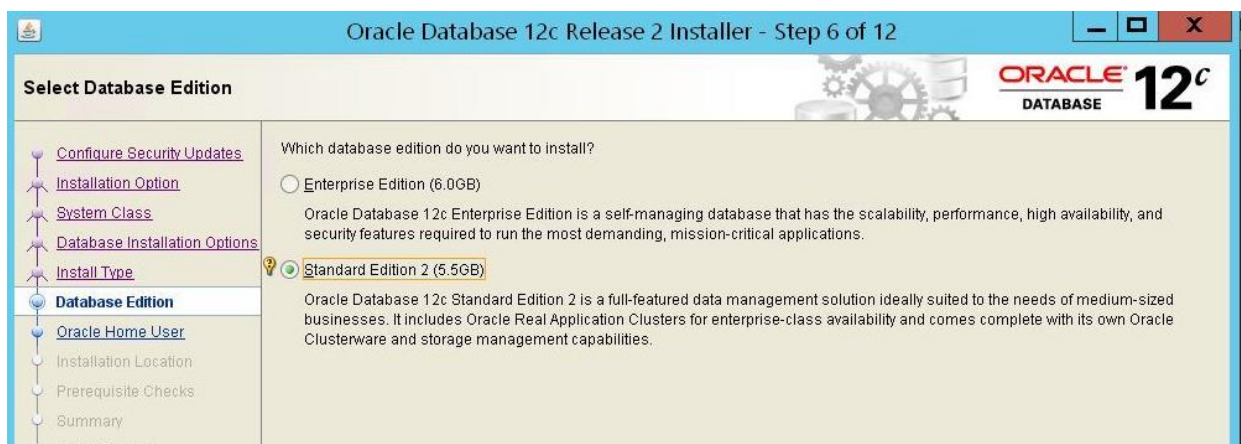
Create the database

Install an Oracle c12 database (in this case on a remote host), standard (no container bases) using the NLS_CHARACTERSET AL32UTF8.





In the next step you can use either Enterprise Edition or Standard Edition



Oracle Database 12c Release 2 Installer - Step 7 of 12

Specify Oracle Home User

For enhanced security, you may choose to run Windows Services from this Oracle home with a non-administrator account. Oracle recommends that you choose a Virtual Account or specify a standard Windows User Account for this purpose.

☒ Use Virtual Account

☐ Use Existing Windows User

User Name:

Password:

☐ Create New Windows User

User Name:

Password:

Confirm Password:

The newly created user is denied Windows login privileges.

☐ Use Windows Built-in Account

Configure Security Updates
Installation Option
System Class
Database Installation Options
Install Type
Database Edition
Oracle Home User
Installation Location
Prerequisite Checks
Summary
Install Product
Finish

Oracle Database 12c Release 2 Installer - Step 9 of 19

Select Configuration Type

Select the type of database that you want to create.

☐ General Purpose / Transaction Processing
A starter database designed for general purpose use, or for transaction-heavy applications.

☒ Data Warehousing
A starter database optimized for data warehousing applications.

Configure Security Updates
Installation Option
System Class
Database Installation Options
Install Type
Database Edition
Oracle Home User
Installation Location
Configuration Type
Database Identifiers
Configuration Options

Do **NOT** use “Create as a Container database”!

Oracle Database 12c Release 2 Installer - Step 10 of 19

Specify Database Identifiers

Provide the identifier information required to access the database uniquely. An Oracle database is uniquely identified by a Global database name, typically of the form “name.domain”. A database is referenced by atleast one Oracle instance which is uniquely identified from any other instance on this computer by an Oracle system identifier (SID).

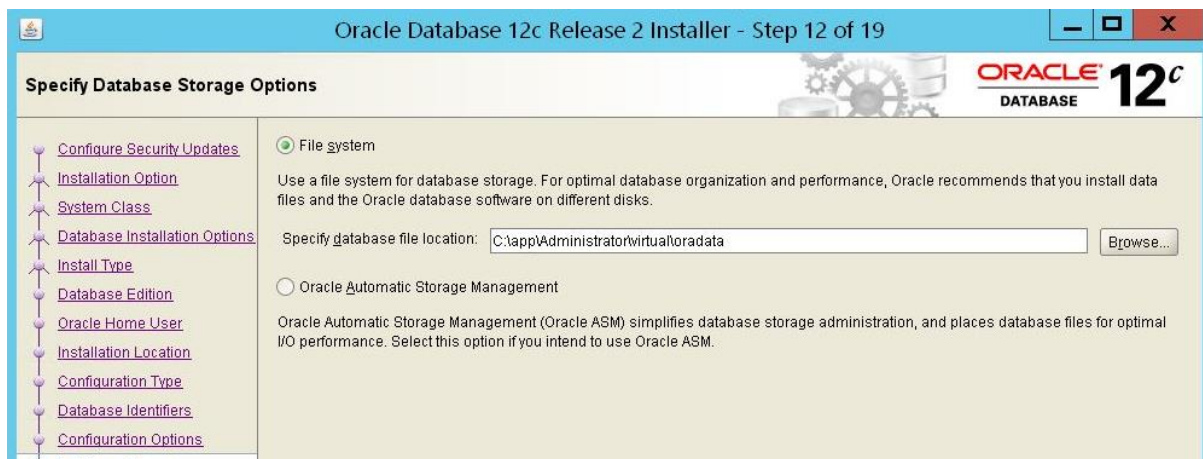
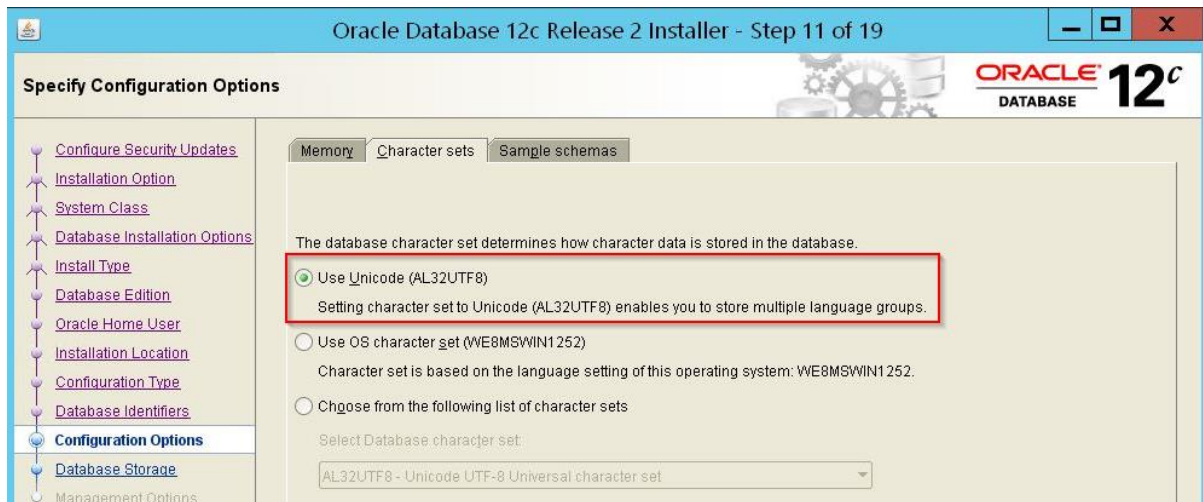
Global database name:

Oracle system identifier (SID):

☐ Create as Container database
Creates a database container for consolidating multiple databases into a single database and enables database virtualization.

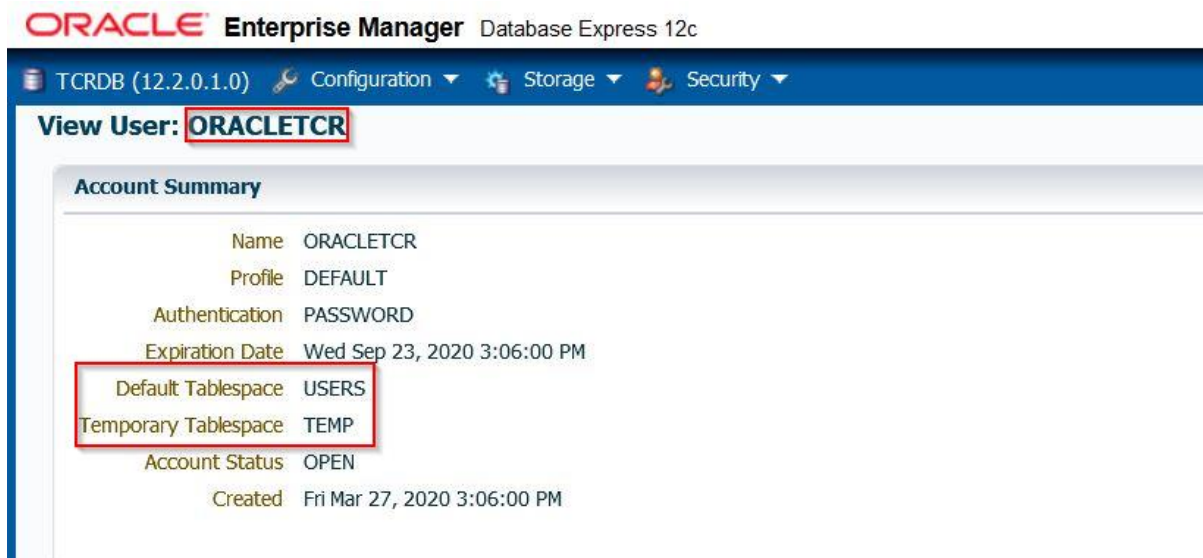
Pluggable database name:

Configure Security Updates
Installation Option
System Class
Database Installation Options
Install Type
Database Edition
Oracle Home User
Installation Location
Configuration Type
Database Identifiers



Create a new Oracle user

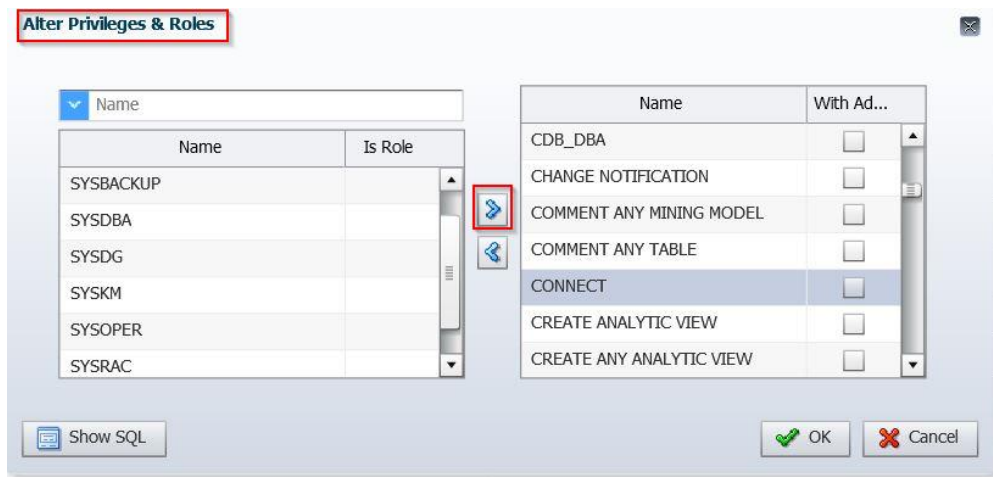
- create a new user in Oracle like **oracletcr**



b) grant the following Privileges & Roles to the new user:

- Connect to the database
- Create, alter, and drop triggers, views, procedures, and sequences
- Create and alter tables
- Insert, update, and delete data in the database tables

The screenshot shows only one example of the Privileges & Roles here.



Verify the new Oracle user login from the commandline

run a **sqlplus** to verify if this new user is able to login into the new database

```
C:\Windows\system32>sqlplus
SQL*Plus: Release 12.2.0.1.0 Production on Tue Apr 14 16:37:12 2020
Copyright (c) 1982, 2016, Oracle. All rights reserved.
Enter user-name: oracletcr
Enter password:
Last Successful login time: Fri Mar 27 2020 17:22:01 +02:00
Connected to:
Oracle Database 12c Standard Edition Release 12.2.0.1.0 - 64bit Production
SQL>
```

Run a select statement to verify as well:

select table_name from user_tables order by table_name;



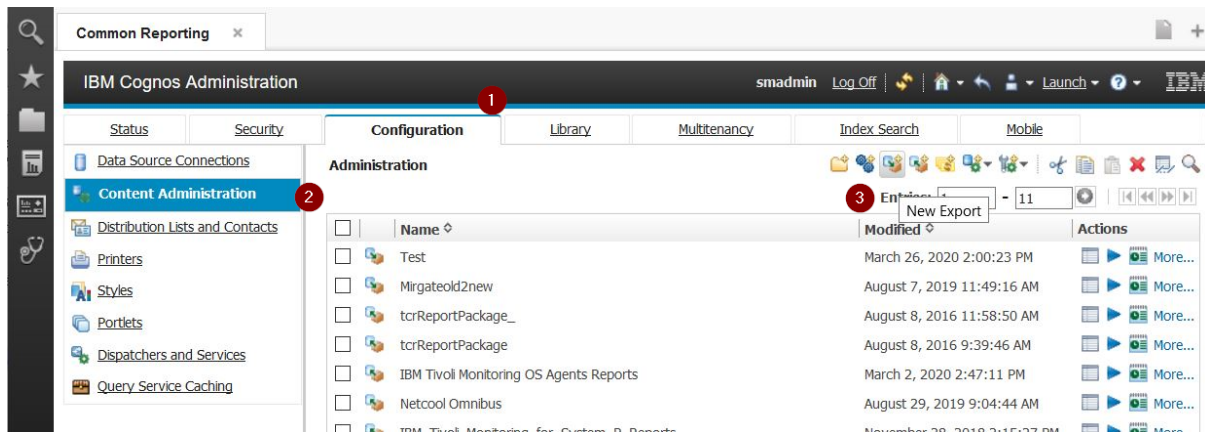
At this point there is nothing else to do for the new TCR ContentStore. While the first start of Cognos (TCR) the new empty Cognos ContentStore tables will be created.

Export the old ContentStore

Login into the DASH, go to “Launch” -> “Cognos Administration” and export the current ContentStore under “Configuration” -> “Content Administration” -> “New Export”.

The export of the ContentStore will be saved on the DASH/TCR system under

/opt/IBM/JazzSM/reporting/cognos/deployment



Changing the ContentStore

- 1) shutdown the TCR and Cognos

./opt/IBM/JazzSM/profile/bin/stopServer.sh server1

- 2) make a backup of the Cognos Configuration

cp /opt/IBM/JazzSM/reporting/cognos/configuration/cogstartup.xml cogstartup.xml.save

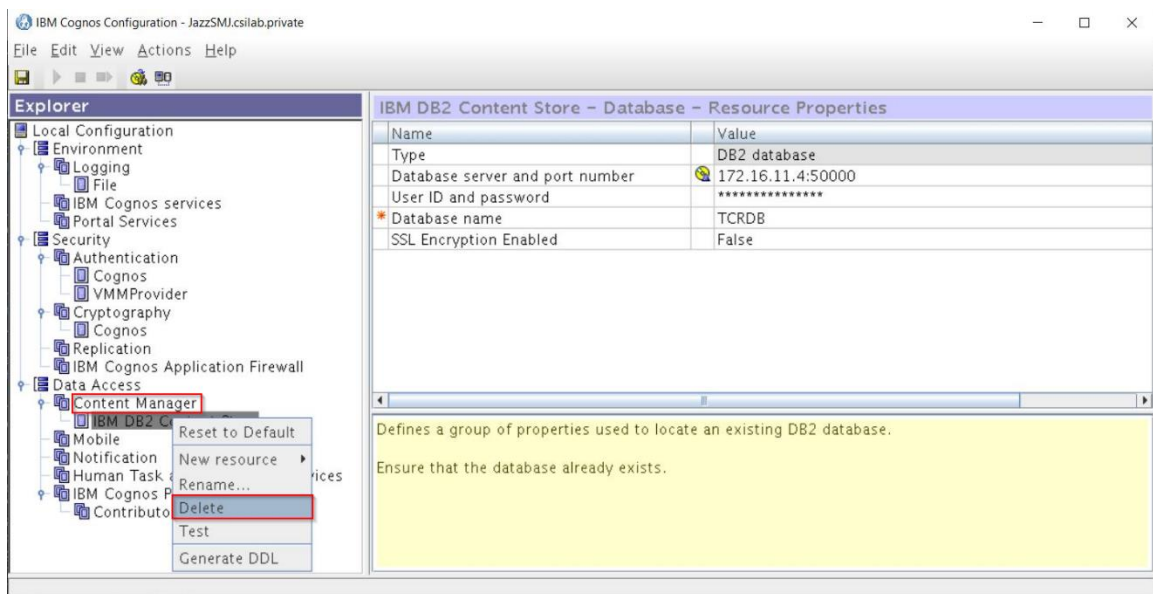


The advantage of this, when you make a mistake while your configuration or you want back to you old DB2 ContentStore, you can copy back the saved configuration.

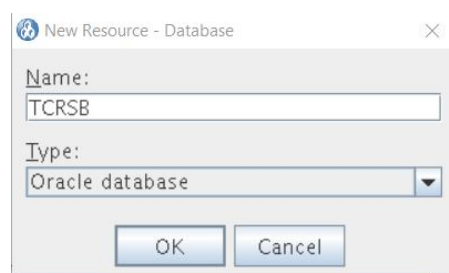
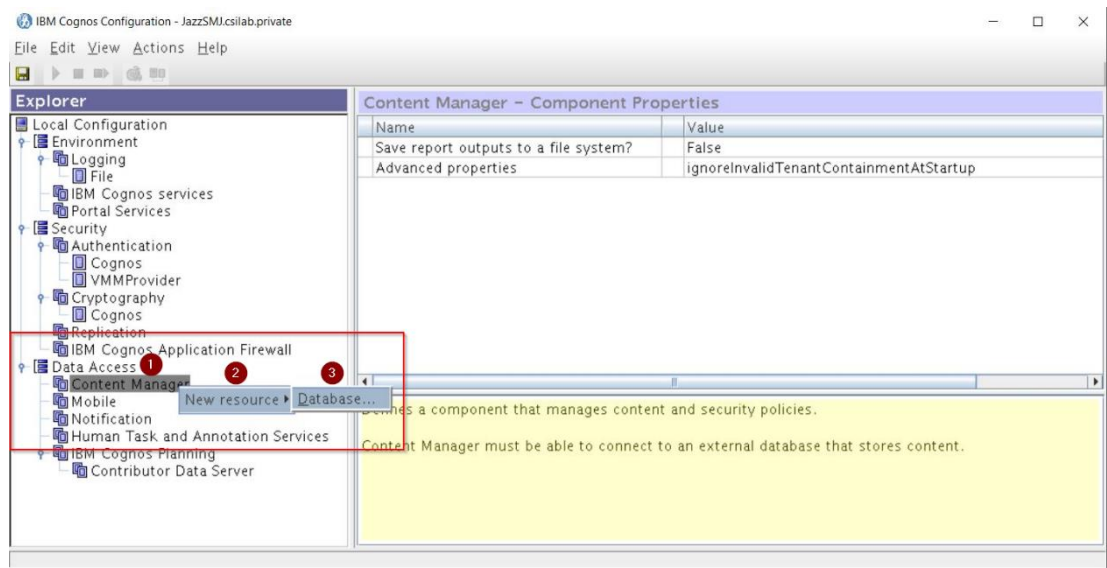
- 3) opened the Cognos configuration:

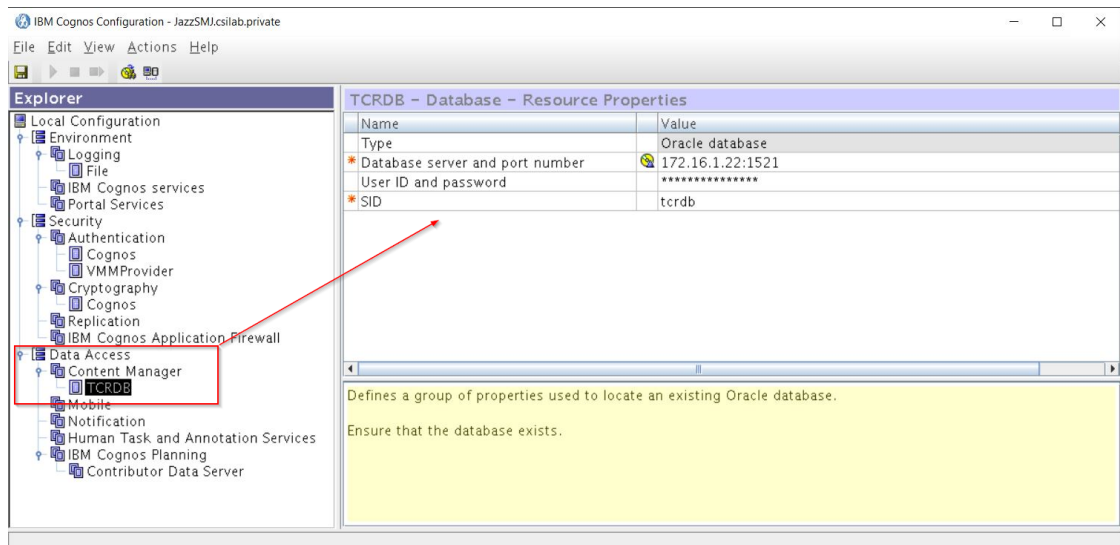
./opt/IBM/JazzSM/reporting/cognos/bin64/tcr_cogconfig.sh

4) Delete the old DB2 ContentStore settings

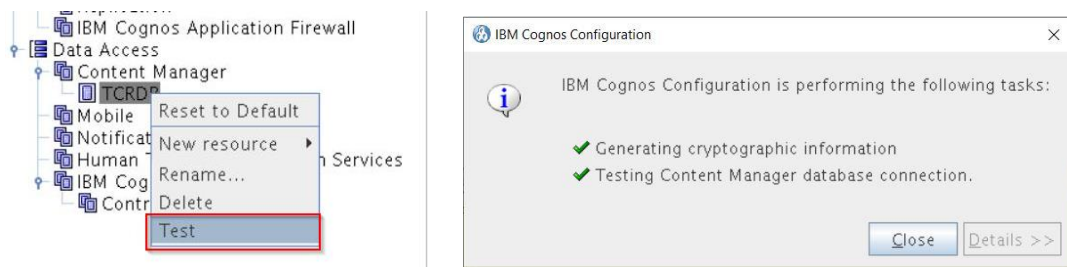


5) add the New Resource -> Database -> Oracle and fill in the IP-address (or hostname), username/password and SID. The username must be the same as created in Oracle!





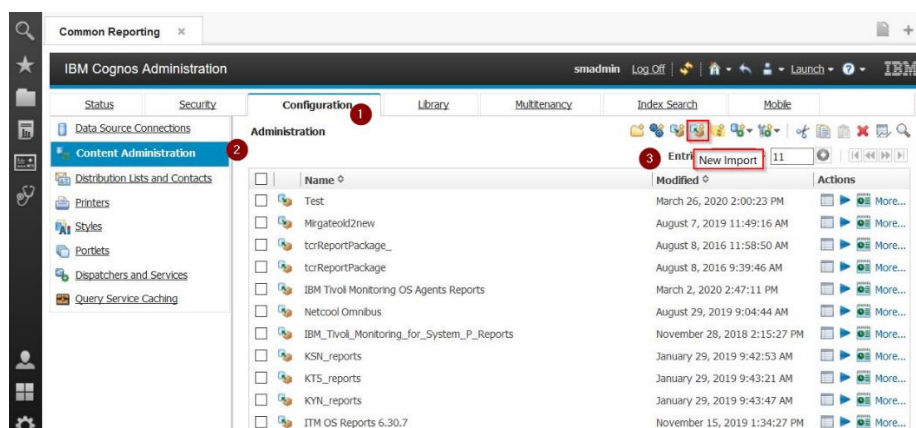
- 6) run the Test in the Cognos Configuration to verify if the user is able to connect to the Oracle Database, and SAVE the configuration

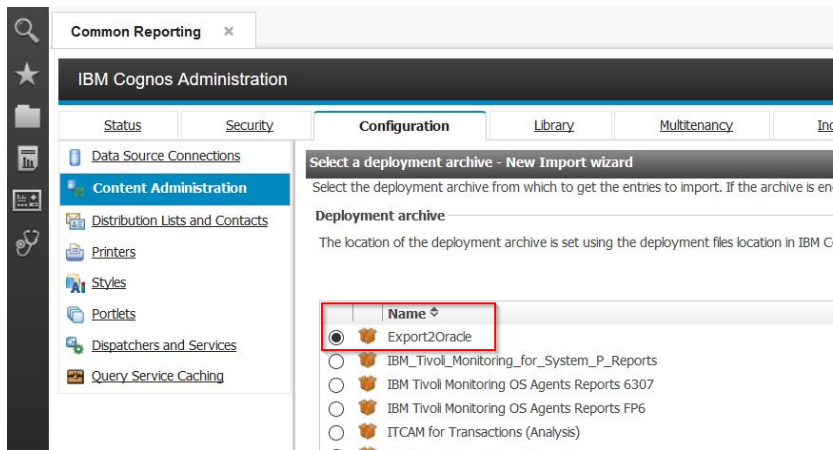


- 7) restarted the TCR/DASH

./opt/IBM/JazzSM/profile/bin/startServer.sh server1

- 8) Login into the DASH, do to "Launch" -> "Cognos Administration" and export the current ContentStore under "Configuration" -> "Content Administration" -> "New Import " using export from the DB2 CS.





9) now you should see all your DataSource Configurations, and old Reports, same like using the DB2 ContentStore

10) ran a report as a test to verify if the reports are still working

Now you finished the migration of your Tivoli Common Reporting ContentStore from a DB2 ContentStore to an Oracle ContentStore.

When you have further questions please contact the IBM support!