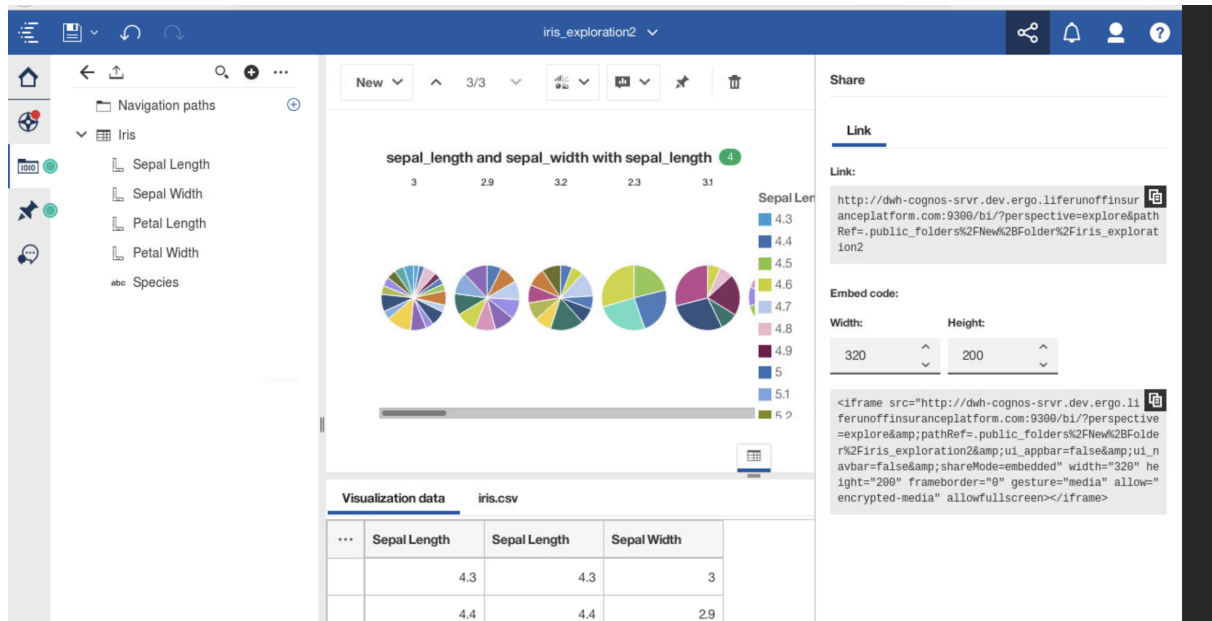


Cognos 11.1.x Usage, Installation, Connection to Hadoop Guide

Cognos server is installed on machine 10.xx.xx.xx. You can access the GUI at hostname

Cognos Usage Guide

Hit <http://host:9300> from the dwh-server to open cognos analytics. Below you can find the exploration of sample iris.csv data



once port 9300 on host is opened by network admin, you can also share the above generated report with below link

http://.....:9300/bi/?perspective=explore&pathRef=.public_folders%2FNew%2BFolder%2Firis_exploration2

To explore cognos functionalities, follow below videos

https://www.youtube.com/playlist?list=PLfq0ST5X3p-Sd57_PJg_rjAOlyAVGnoL9

Cognos Installation Guide

Files location

1. SSH to 10.85.52.13 after connecting to ITERGO OpenVPN
2. move to /tmp/install.
3. Find below 3 files.
 1. ca_server_linuxi38664_11.1.1.zip - IBM Cognos Analytics Server 11.1.1 Linux x86 Multilingual
 2. ca_installer_linuxi38664_2.0.bin - IBM Cognos Analytics Installer 2.0 Linux x86 Multilingual
 3. ca_client_MP_11.1.1.zip - IBM Cognos Analytics Client 11.1.1 Multiplatform Multilingual

Note: You can find these files in ibm box as well. But check licenses before you install them anywhere else other than DWH servers.

Permissions

1. Move the files from /tmp/install to your Desktop
2. Give rwx permissions to directory where bin file exists and to directory where you want to install cognos
3. `chmod 777 /opt & chmod 777 location-where-installer-files are`

Installation Guide

1. Run the `ca_installer_linuxi38664_2.0.bin` file with kdamarla account. Root / any other user doesnot have permissions to use the GUI mode for installation.
2. Cognos can be installed only from GUI. Cant be installed through command line. For 11.1.x, choose the server or client zip file during installation

Configuring Cognos (or) start/stop server

1. Before configuration start, set the class path

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/ibm/cognos/analytics/cgi-bin
```

```
export JAVA_HOME=/opt/ibm/cognos/analytics/jre
```

```
export PATH=$JAVA_HOME/bin:$PATH
```

```
export DISPLAY=:3
```

2. Run the config file with sudo permissions **cogconfig.sh**
3. Configuration setup
Edit the content manager>content store with below details

Cognos Connection to Hadoop databases

1. Connecting to Hive from Cognos Analytics
A) To connect to cloudera hive from cognos, first copy the correponsding cognos 11.1 and CDH6.2 supported drivers to the cognos `install_loc/drivers` folder

```
sudo find / -name xyz
```

B) Connecting to hive from cognos analytics. Note the jdbc url
jdbc:hive2://10.85.52.14:10000/lf and Classname - org.apache.hive.jdbc.HiveDriver

2. Connecting to Impala from Cognos Analytics

Impala db connection with cloudera impala drivers

Connection - jdbc:impala://10.85.52.14:21050/lf

Connection with no auth - jdbc:impala://10.85.52.14:21050;AuthMech=0;

Classname- com.cloudera.impala.jdbc41.Driver for jre 8 . Currently we have jdbc41 drivers in cognos ofr jre 8 (or) use com.cloudera.impala.jdbc4.Driver for jre below 7

Impala db connection with hive drivers

Hive driver class namr - org.apache.hive.jdbc.HiveDriver

Connecting with hive2 to impala port - jdbc:hive2://10.85.52.14:21050;auth=noSasl

Connecting with hive 2 to impala port with noAuth - jdbc:hive2://10.85.52.14:21050/
AuthMech=0;

Drivers

<https://www.ibm.com/developerworks/community/forums/html/topic?id=416fbc7a-c0e8-42b6-9314-b9c5f05666ae>

Troubleshoot guide

1. check the log files stored in /tmp folder.
2. [ERROR] CAM-CRP-1064 Unable to process the PKCS #7 data because of an internal error. Unable to read the contents of the keystore
'/opt/ibm/cognos/analytics/configuration/csk/jCSKKeystore'. Reason:
java.io.IOException: Invalid secret key format. The parameter named 'External JMX credential' located in 'Environment' is currently invalid.
Sol: Regenerate keys for cognos 11 -
<https://www-01.ibm.com/support/docview.wss?uid=swg21995088>
Rgenerate keys for older cognos versions -
https://www.ibm.com/support/knowledgecenter/en/SSMR4U_10.2.2/com.ibm.swg.ba.cognos.express_migration.10.2.2.doc/t_express_inst_mig_trouble_regen_crypto.html
3. Java.lang.NoClassDefFoundError: javax/net/ServerSocketFactory:

https://www.ibm.com/support/knowledgecenter/SSEP7J_11.1.0/com.ibm.swg.ba.cognos.tg_bitshoot.doc/t_crypto_error_trbls.html#crypto_error_trbls
Sol: Find bcprov*.jar (bcprovpkix-1.59.jar) within install_loc/bin (this creates crypto keys)
4. com.ibm.db2.jcc.am.SqlException: [jcc][10389][12245][3.72.30] Failure in loading native library db2jcc2, java.lang.UnsatisfiedLinkError: no db2jcc2 in java.library.path: ERRORCODE=-4472, SQLSTATE=null
Sol: Enter the database name and username / password details correctly. Check if u got all the req jar files from db2 to /install-location/drivers
5. If server is not starting at 9300 port
Sol: make sure no other service is running at port 9300 or rename the ibm cognos service in config file or check the services allowed at firewall

6. While restarting cognos, Install_loc/logs/cbs_run_websphere*.log -PingChildProcess ping loop: process "wlp" is not active, so restarting it.

Sol: This error happens when we don't run the cogconfig file with sudo permissions

<https://www-01.ibm.com/support/docview.wss?uid=swg22011841>

7. Others

<https://www-01.ibm.com/support/docview.wss?uid=swg22012164>

<https://www-01.ibm.com/support/docview.wss?uid=swg21343297>

Removing install_loc/configuration/ cogstartup.lock file for new start -

https://www.ibm.com/support/knowledgecenter/en/SSMR4U_10.2.2/com.ibm.swg.ba.cognos.express_migration.10.2.2.doc/c_express_inst_mig_trouble_cog_config_locked.html