# Data Integration Platform Cloud
## Hands On Lab

Architecture Overview

This Hands-on lab demonstrates the power and simplicity of the Data Integration Platform. For this Hands-on lab data will be sourced from an OLTP system made up of a 3NF schema, data will be extracted and synchronized in real time to an operational reporting schema, this data will then be mini batched to an analytical data warehouse. The goal of this lab to demonstrate how DIPC removes the complexity in creating a real-time operation reporting schema as well as a near real-time analytical data warehouse, enabling even novice users to perform the creation, initial load and real time synchronization of the operational reporting schema in just a couple of clicks. Historically these types of data integration tasks required expert ETL and DBA resources as well as a detailed understanding of the source schema. Built from the ground up on proven technologies, DIPC provides enterprise data integration and data governance features for today's enterprise.
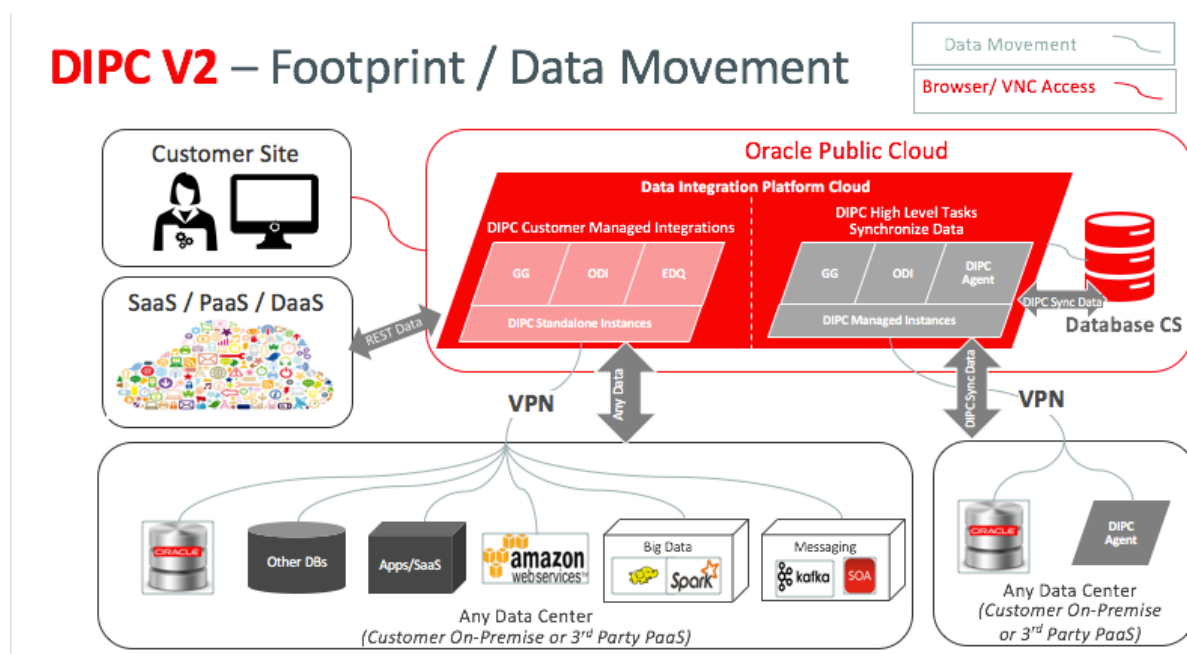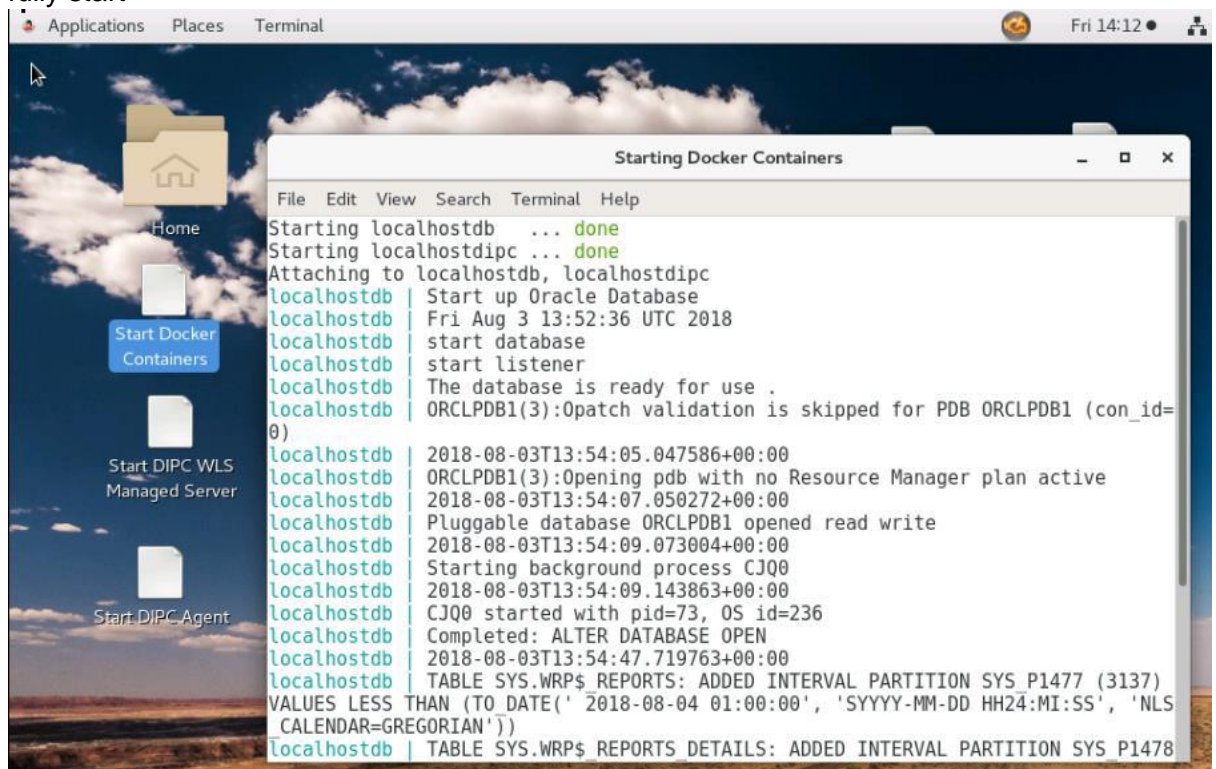
Lab Steps:

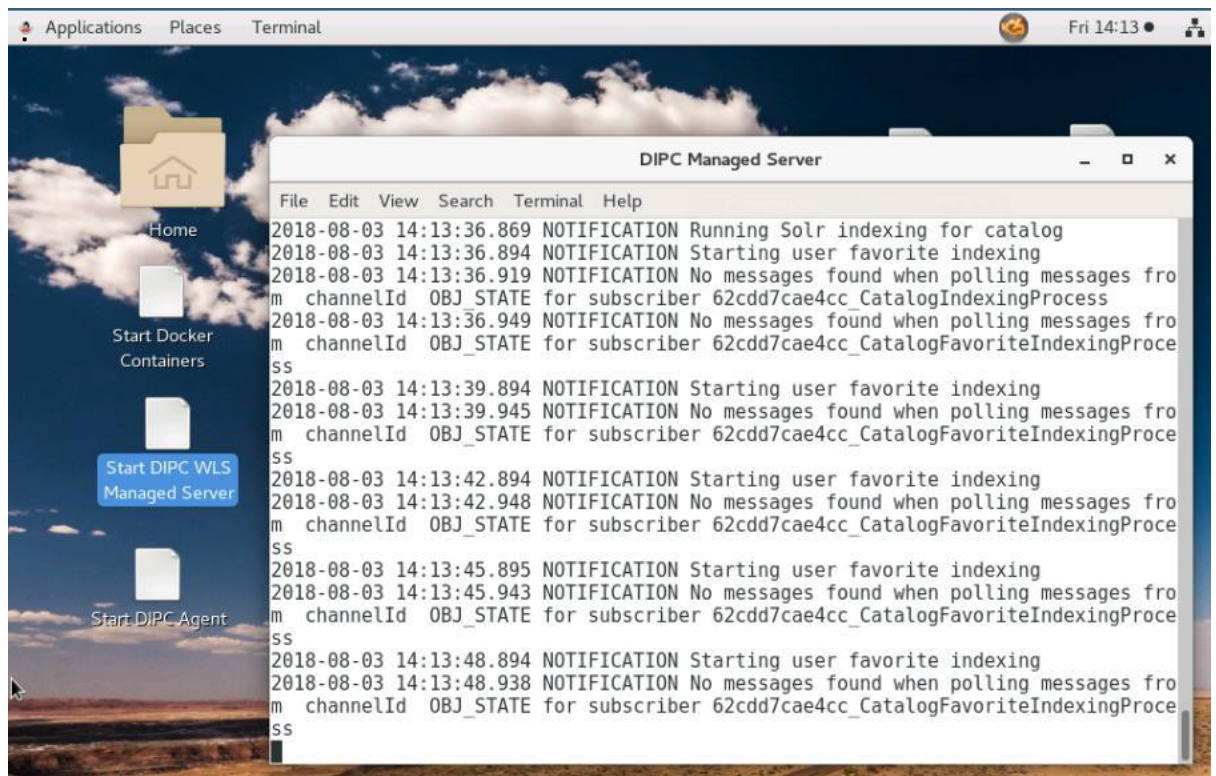1. Login to the VM as DIPC user – Password is "welcome1"
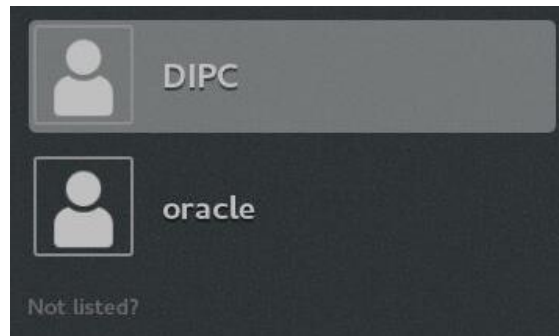
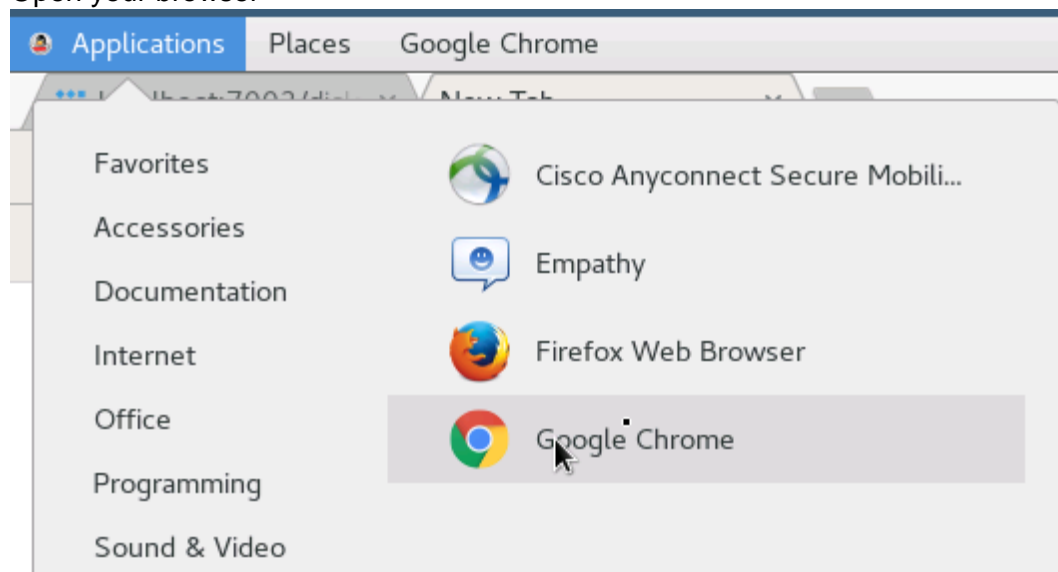2. On the Desktop, double-click on Start Docker Containers and wait for both of them to fully start
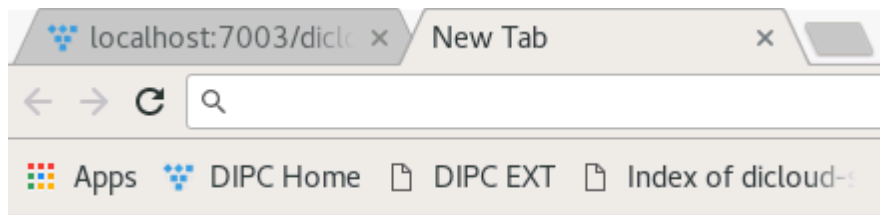
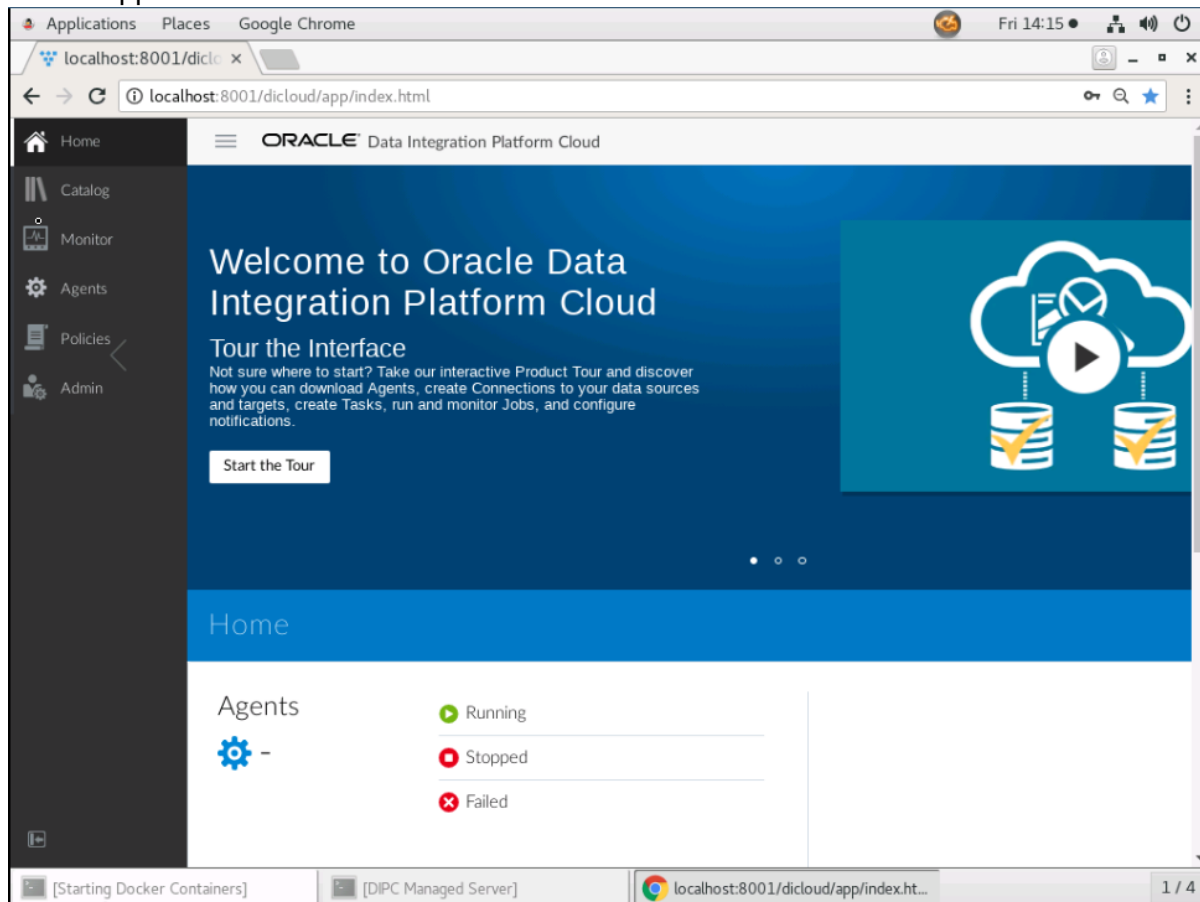3. Then double click on Start DIPC WLS Managed Server to start WebLogic

4. Log into Data Integration Platform Cloud
   a. Open your browser

   b. Click on DIPC Home bookmark or go to your <Ravello Instance hostname>:8001/dicloud/login.html

   c. Login with weblogic/welcome1. After a few seconds, the following page
       should appear –

5. Setup/ Download Agent/ GG Setup
   DIPC On-Premise Agents allow synchronizing data from outside of Oracle Public
   Cloud.

   a. For this download we will use Chrome running in the VM not the one running
      on your laptop/desktop
   b. Go to Applications > Internet and click Google Chrome
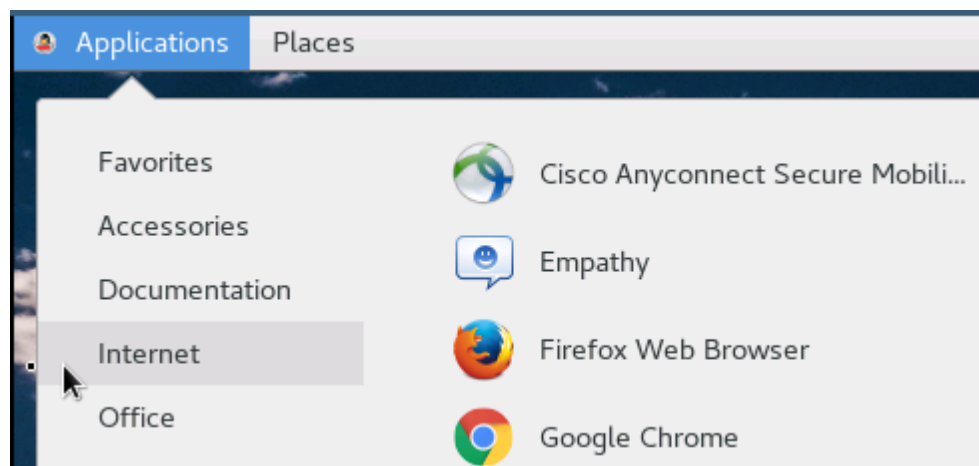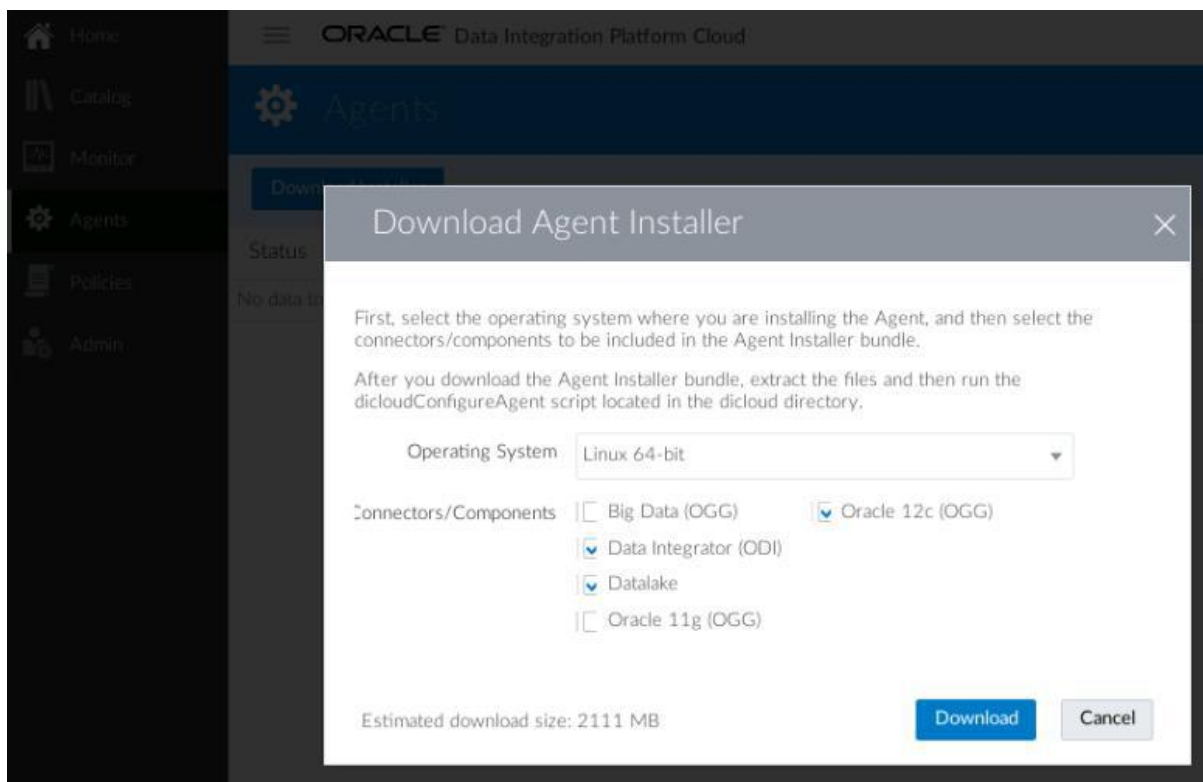
c. In Chrome, click on DIPC Home bookmark or go to localhost:8001/dicloud/login.html
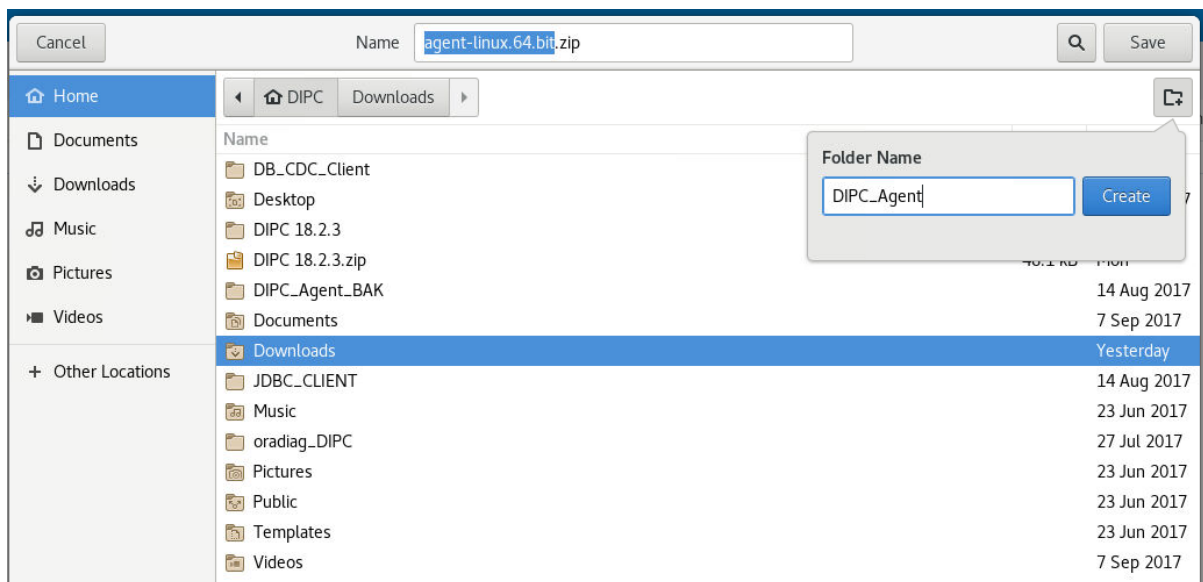d. Login with weblogic/welcome1
e. Click Agents
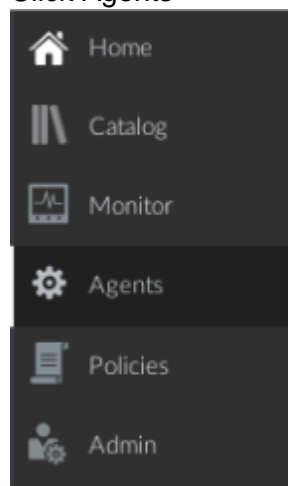
f. Click Download Installer then select Linux 64-bit and check Data Integrator (ODI), Datalake and Oracle 12c (OGG)

g. Click Downoad in the Download Agent Installer window
h. Add the DIPC_Agent directory and click on Create

i. Then click on Save
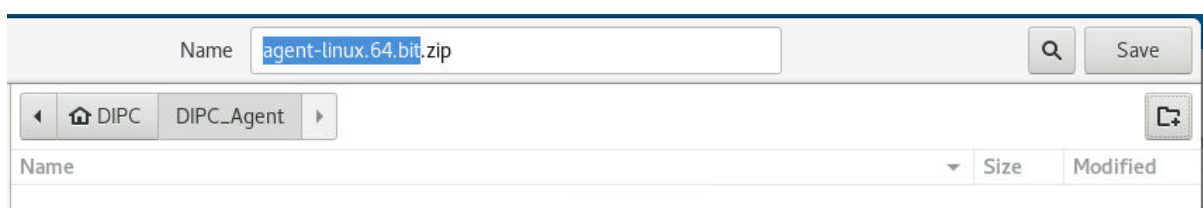
      j.   Wait a few minutes for the download to be done
      k.   Extract agent-linux.64.bit.zip to ~/DIPC_Agent
         i. Click on downloaded file within Chrome
         ii. Extract with Unzip UI

         iii. Click Extract again (blue button)

         iv. Close all Unzip UI windows

l. Open a new terminal window

m. Enter: sudo su - to switch to root user. Enter welcome1 as the sudo password

```
[DIPC@DIPC ~]$ sudo su -
[sudo] password for DIPC:
Last login: Fri Jul 27 15:13:48 UTC 2018 on pts/0
[root@DIPC ~]#
```
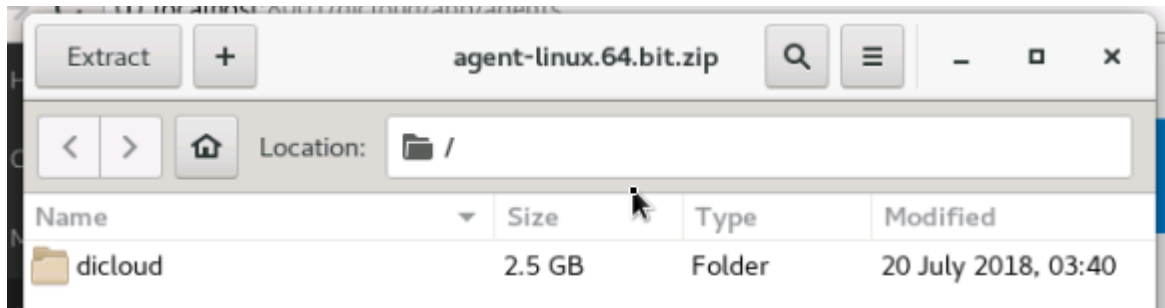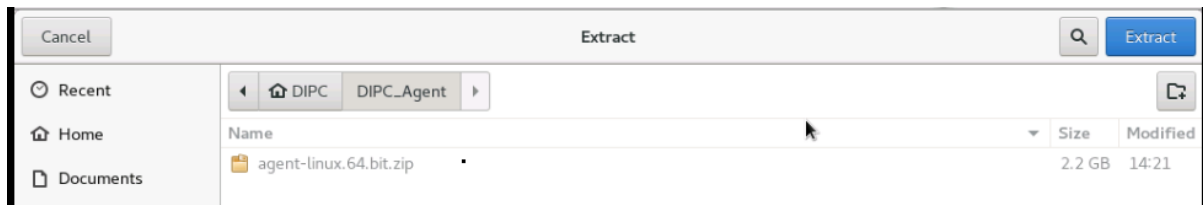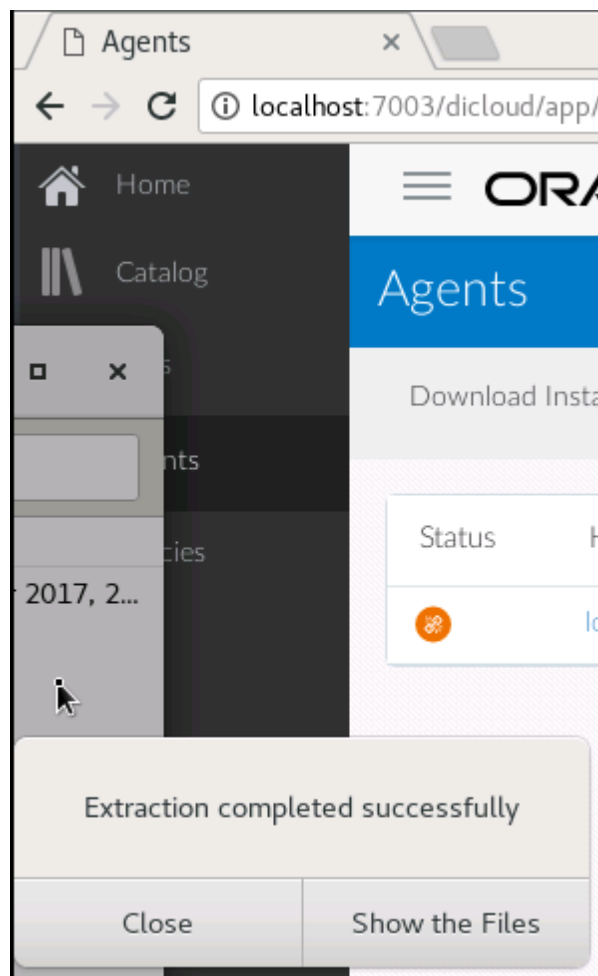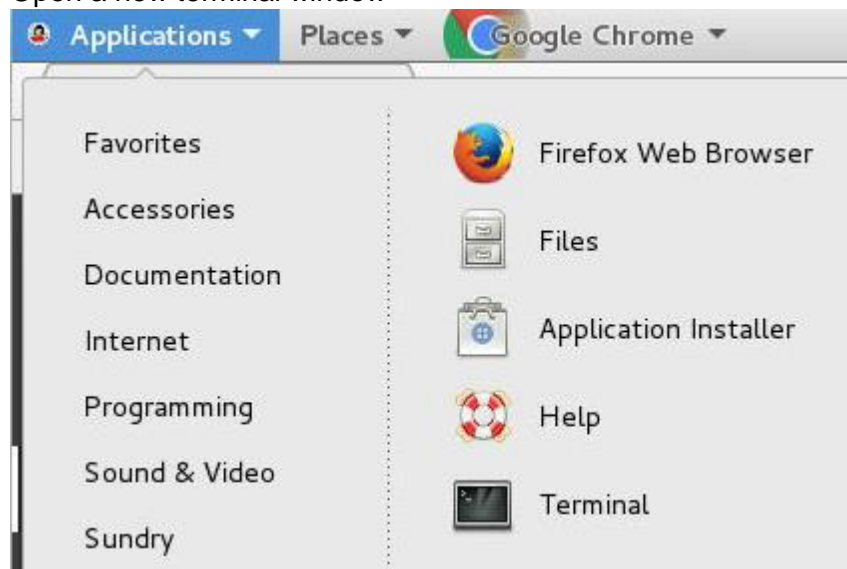
n. cd /home/DIPC/DIPC_Agent/dicloud
o. Run: export JAVA_HOME=/usr/java/jdk1.8.0_131/
p. Execute ./dicloudConfigureAgent.sh -dipchost=localhost -dipcport=8001 -
   user=weblogic -authType=BASIC -odiRemote

```
[root@DIPC ~]# cd /home/DIPC/DIPC_Agent/dicloud/
[root@DIPC dicloud]# pwd
/home/DIPC/DIPC_Agent/dicloud
[root@DIPC dicloud]# ls
agent  dicloudConfigureAgent.sh  dicloudUpgradeAgent.sh  gghome  oci
[root@DIPC dicloud]# ./dicloudConfigureAgent.sh -dipchost=localhost -dipcport=80
01 -user=weblogic -authType=BASIC -odiRemote
2018-08-03 14:33:57.394 INFO    [oracle.dicloud.agent.core.GGCCAgentInstallation
] (oracle.dicloud.agent.core.GGCCAgentInstallation handleCreateInstance) Creatin
g agent instance home at :/home/DIPC/DIPC_Agent/dicloud/agent/dipcagent001
2018-08-03 14:33:57.458 INFO    [oracle.dicloud.agent.core.GGCCAgentInstallation
] (oracle.dicloud.agent.core.GGCCAgentInstallation handleCreateInstance) Agent i
nstance home created successfully at :/home/DIPC/DIPC_Agent/dicloud/agent/dipcag
ent001
2018-08-03 14:34:00.314 INFO    [oracle.jps.common] (oracle.security.jps.JpsStar
tup start) Jps initializing.
2018-08-03 14:34:00.942 INFO    [oracle.jps.common] (oracle.security.jps.JpsStar
tup start) Jps started.
Enter password:
```

q. Script will prompt for password twice – welcome1 Wait for the script to finish
   configuring the Agent, it will take ~7-10 minutes

```
root@DIPC:/home/DIPC/DIPC_Agent/dicloud                    _  □  ×

File  Edit  View  Search  Terminal  Help
  Connected as :OPR1_ODI_REPO
Agent OracleDIAgent1configuration does not exist in the repository. Hence creati
ng...
Agent Configuration Completed Successfully
  Closing down all connections.

Updating ODI auth details for supervisor.

USING jdbc.drivers PROPERTY

  Loading JDBC Driver  :com.mysql.jdbc.Driver
  Connecting to :jdbc:mysql://DIPC.localdomain:3307/OPR1_ODI_REPO
  Connected as :OPR1_ODI_REPO
Updating the authentication details
Updating the authentication details...done
  Closing down all connections.

-- configureOdiAgent.sh: done... [08/03/18 02:48:46 PM]

Cleaningup libraries
Creating /tmp/dipcagent/
/tmp/dipcagent/ already exists.
Standalone ODI agent is configured successfully.
[root@DIPC dicloud]# █
```

    r.   cd /home/DIPC/DIPC_Agent/dicloud/agent/dipcagent001/bin

    s.   Execute ./startAgentInstance.sh

```
[root@DIPC dicloud]# cd /home/DIPC/DIPC_Agent/dicloud/agent/dipcagent001/bin/
[root@DIPC bin]# ./startAgentInstance.sh
AGENT_HOME : /home/DIPC/DIPC_Agent/dicloud/agent/dipcagent001/bin/../../oracle
2018-08-03 14:50:09.978:INFO::main: Logging initialized @1727ms
2018-08-03 14:50:10.280:INFO:oejs.Server:main: jetty-9.3.12.v20160915
2018-08-03 14:50:10.374:INFO:oejsh.ContextHandler:main: Started o.e.j.s.ServletC
ontextHandler@f5ac9e4{/dicloud,null,AVAILABLE}
2018-08-03 14:50:10.399:INFO:oejs.AbstractConnector:main: Started ServerConnecto
r@7c729a55{HTTP/1.1,[http/1.1]}{localhost:7005}
2018-08-03 14:50:10.400:INFO:oejs.Server:main: Started @2153ms
```

       Wait for the Agent to be fully started

```
2018-08-03 14:50:19.260 NOTIFICATION Configuring GoldenGate Manager ..
2018-08-03 14:50:19.333 NOTIFICATION GoldenGate is using the LD_LIBRARY_PATH = /
home/DIPC/DIPC_Agent/dicloud/oci
2018-08-03 14:50:28.010 NOTIFICATION Done. GoldenGate Manager is configured now.
```

    t.   In Browser (any): Within app, on your desktop go to Agents page in DIPC

    u.   The new agent should appear as follows (it will be Stopped at first then Running)

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