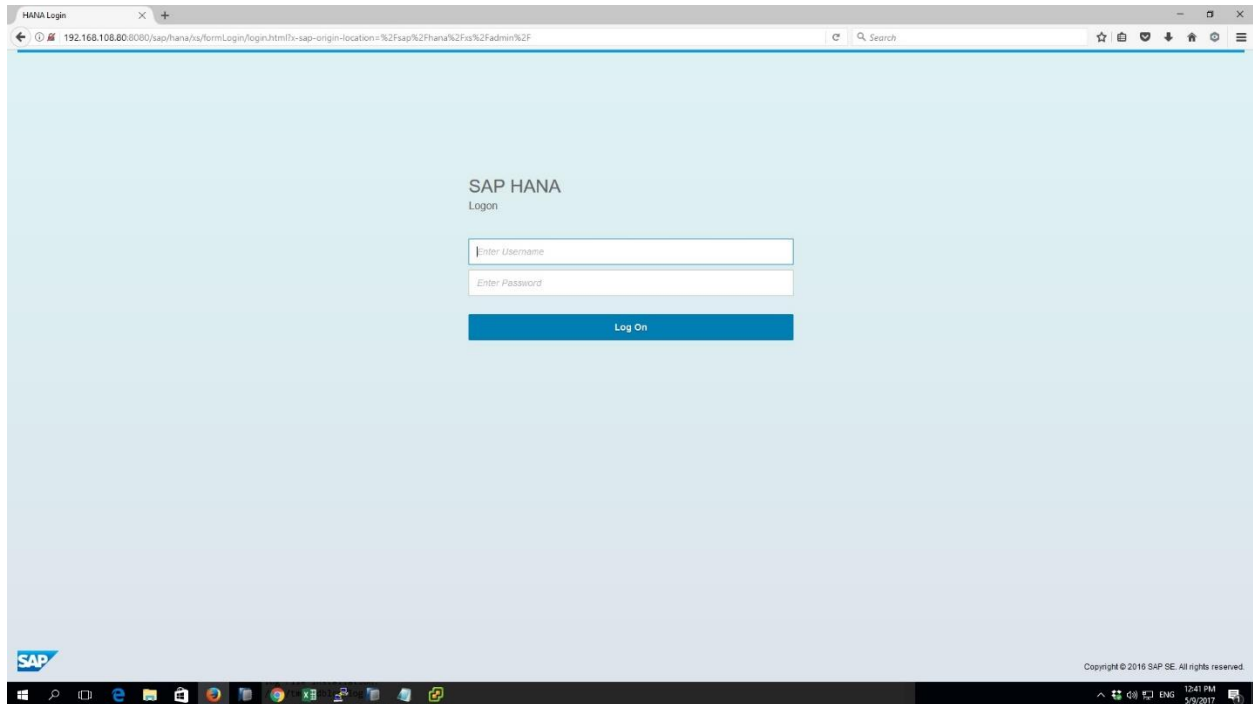


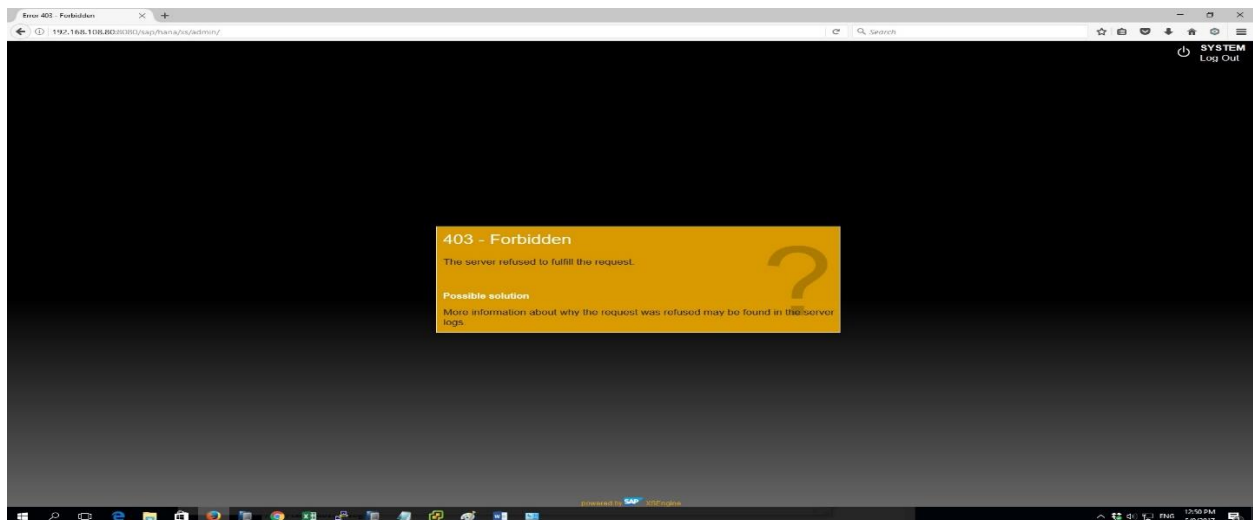
XS & Cockpit

XS LINK:

<http://192.168.108.80:8080/sap/hana/xs/admin/>

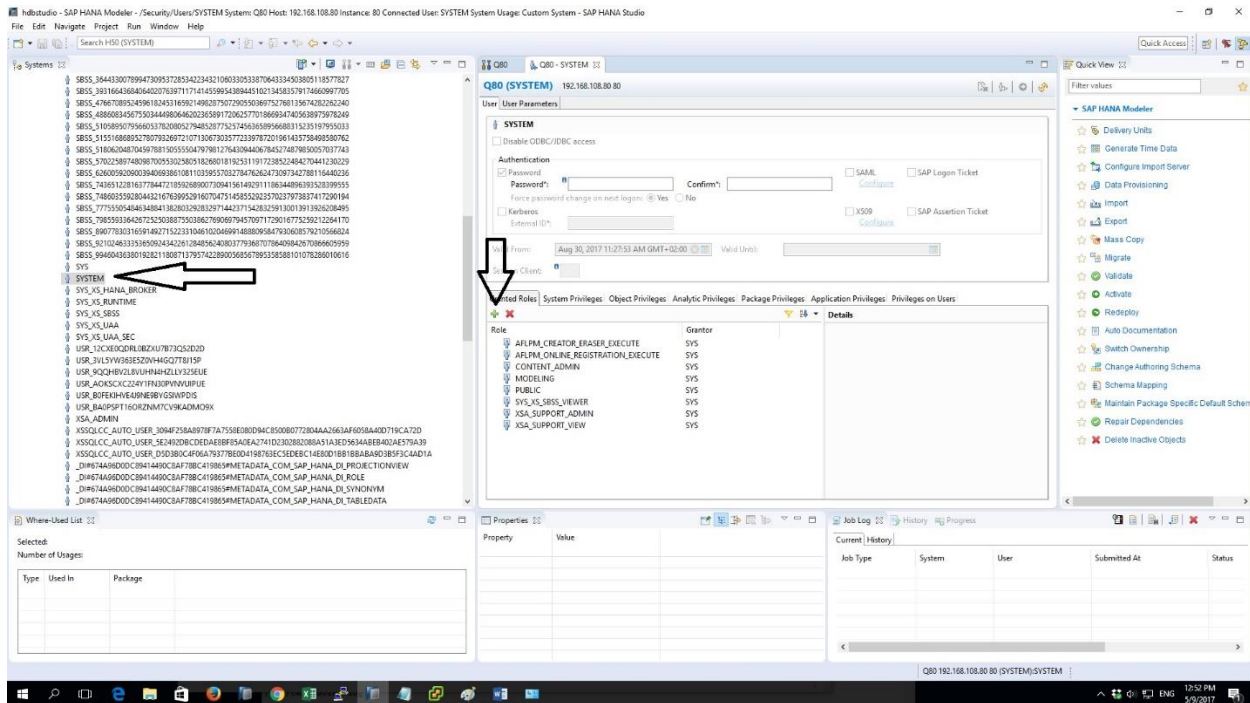


Log in : system

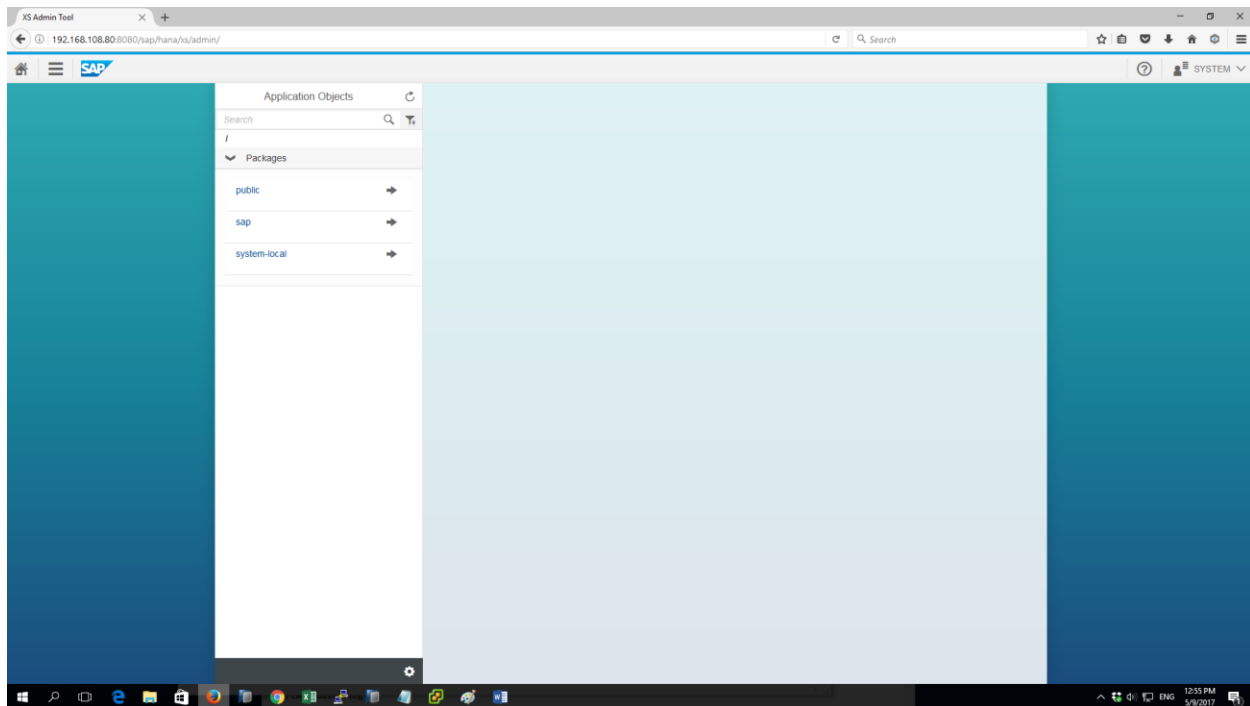


Log at hana studio :

Security → user → system → and add role xs



Open a gene link xs:

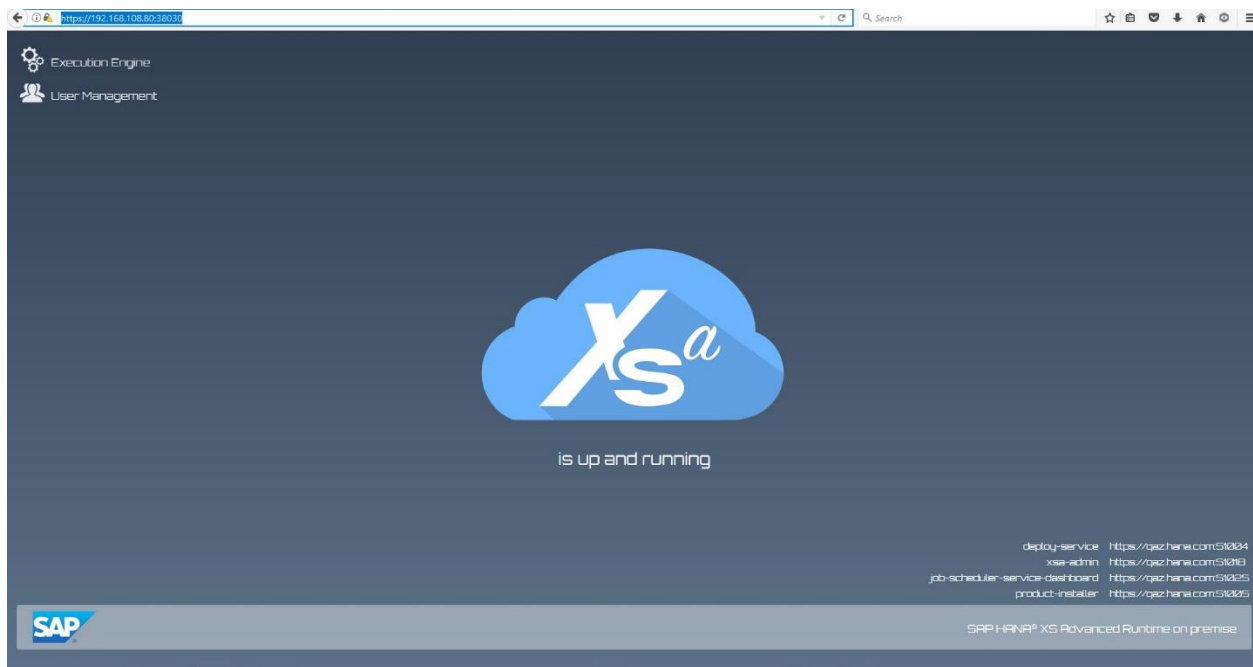


Verify using XSA Runtime client tool

- Login to server using PuTTY (or SSH) as <sysid>adm (eg: q80adm).
- Login as XSA_ADMIN

- #xs-admin-login
- Check XSA CLI version
- #xs version
- Check if apps are installed and running
- #xs apps (or xs a)

you can open link: <https://<ip host>:38030/>
<https://192.168.108.80:38030/>



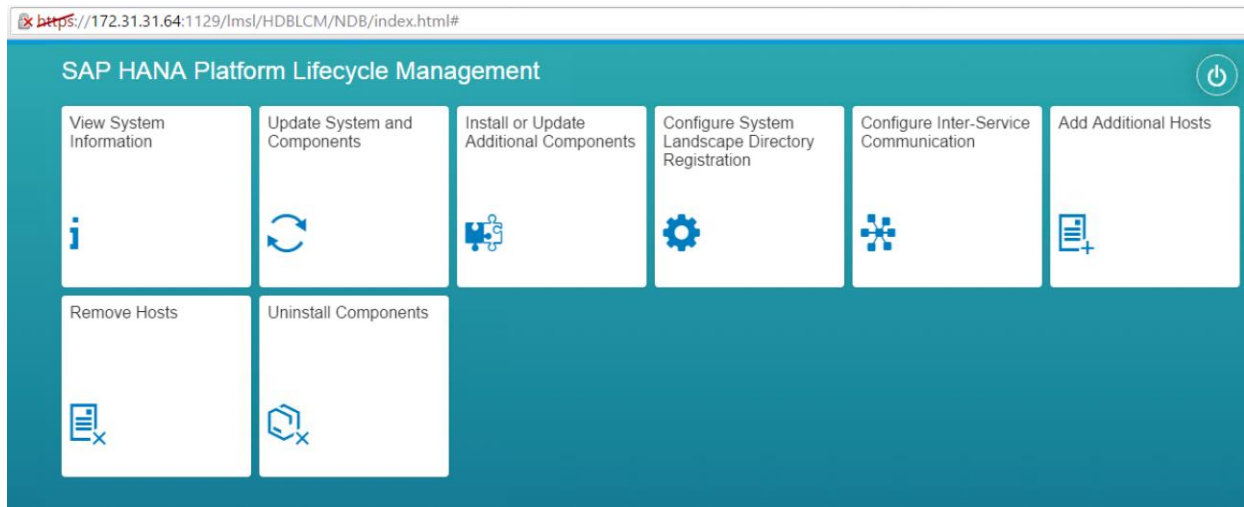
Post Installation Checks

- xsexecagent
- xsuaaserver
- xscontroller
- Access into your SAP HANA Platform Lifecycle Management to verify your System Information (see attached screenshots below)

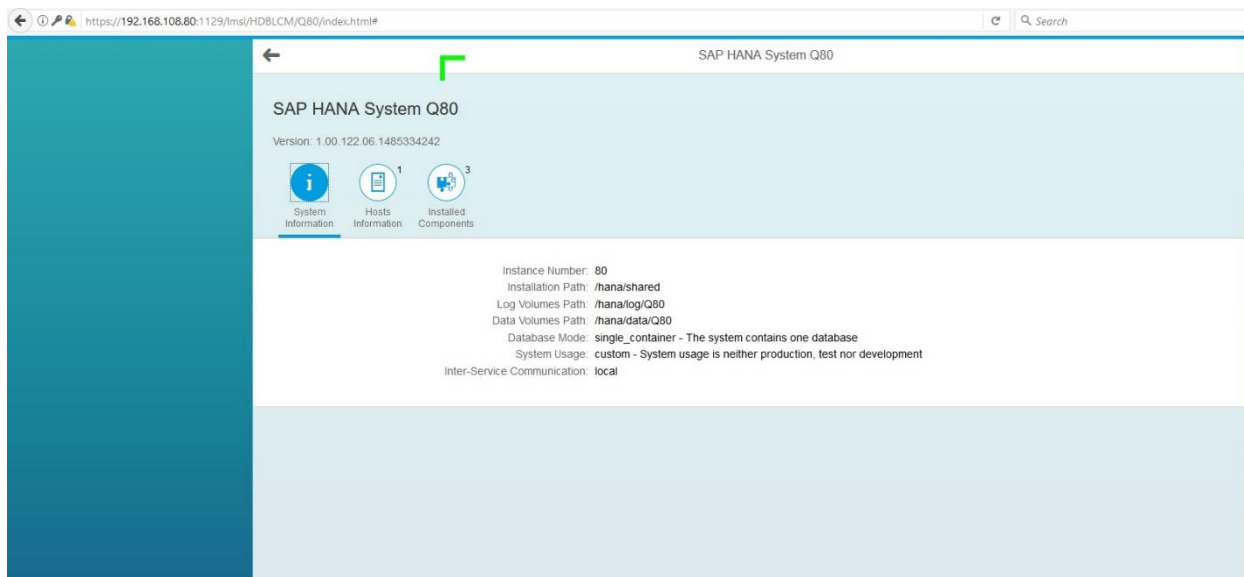
— Access into <https://<ipaddress>:1129/lmsl/HDBLCM/<SID>/index.html>

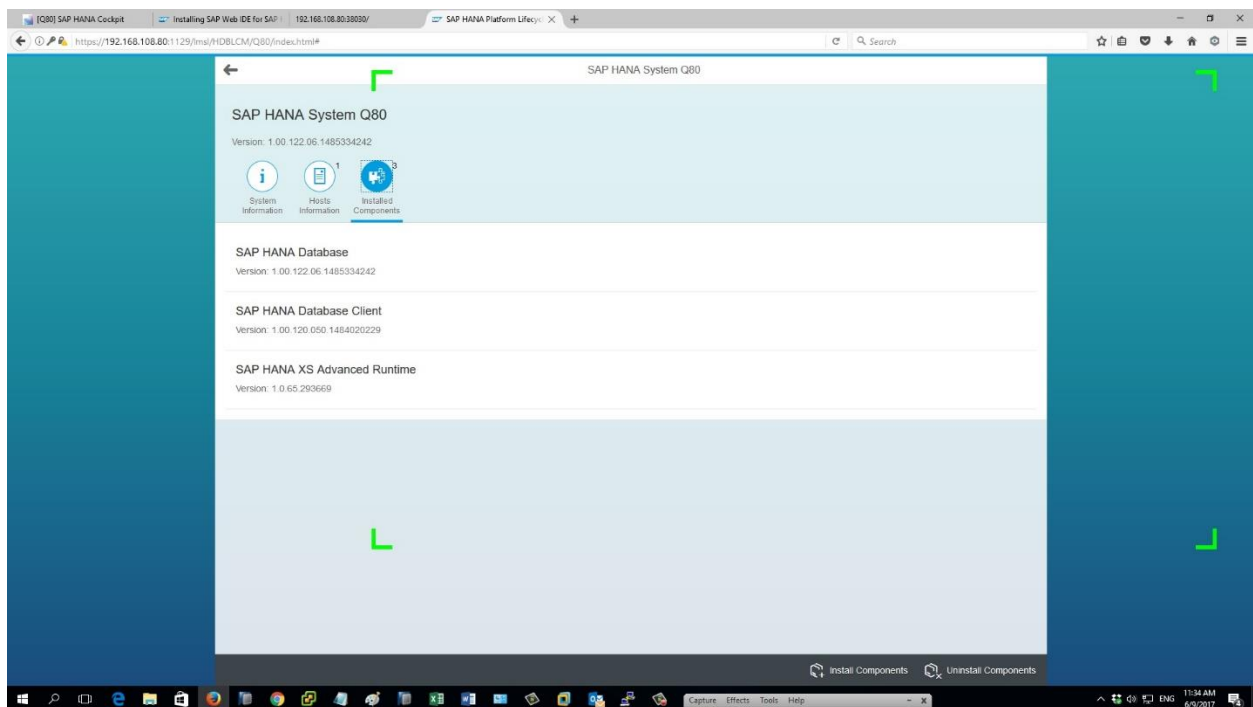
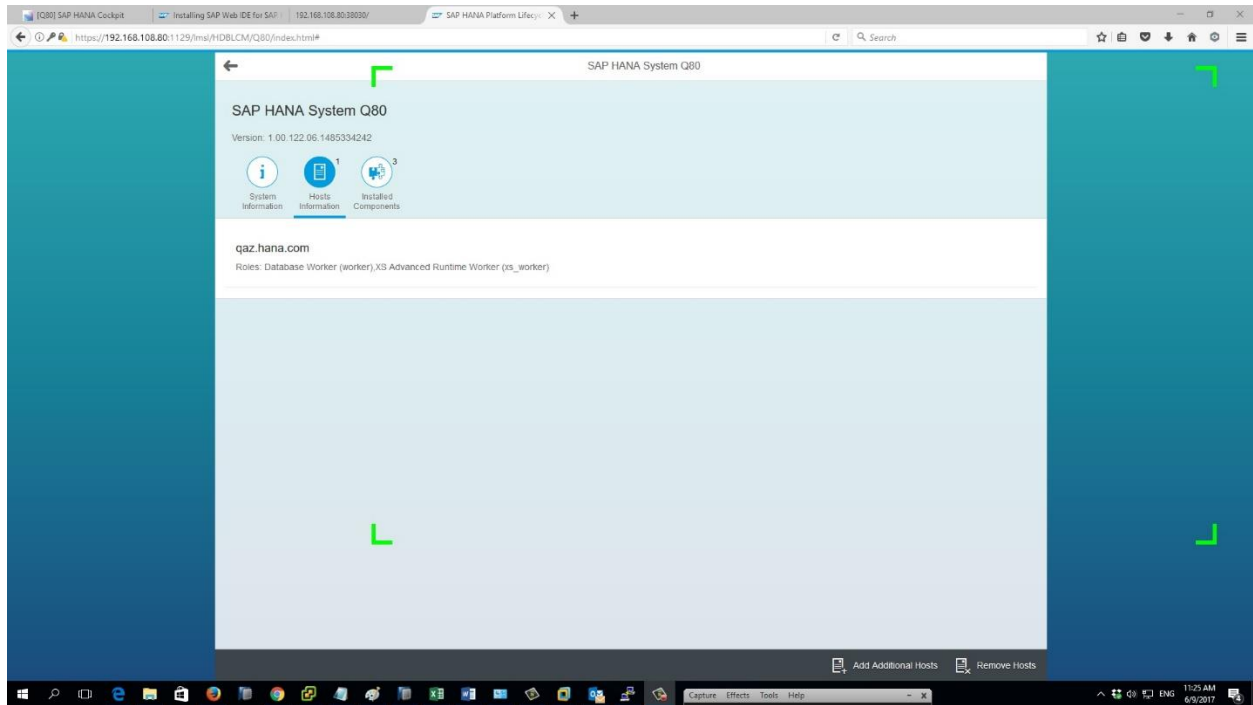
<https://192.168.108.80:1129/lmsl/HDBLCM/80/index.html>

login by user :<SID>adm



- “View System Information”
- “Hosts Information”
- Verify XS Advanced Runtime Worker (xs_worker) is included
- “Installed Components”
- Verify “SAP HANA XS Advanced Runtime” is installed with the right version (34)

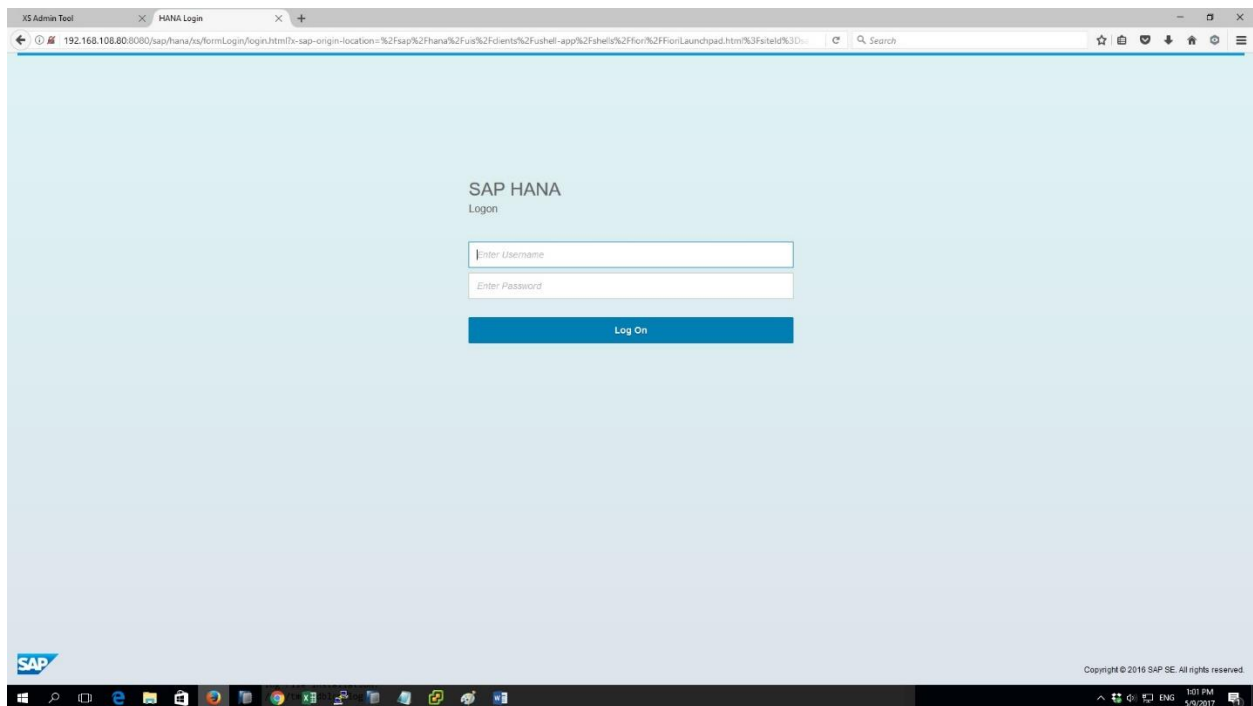




Cockpit:

Cockpit LINK:

<http://192.168.108.80:8080/sap/hana/admin/cockpit>



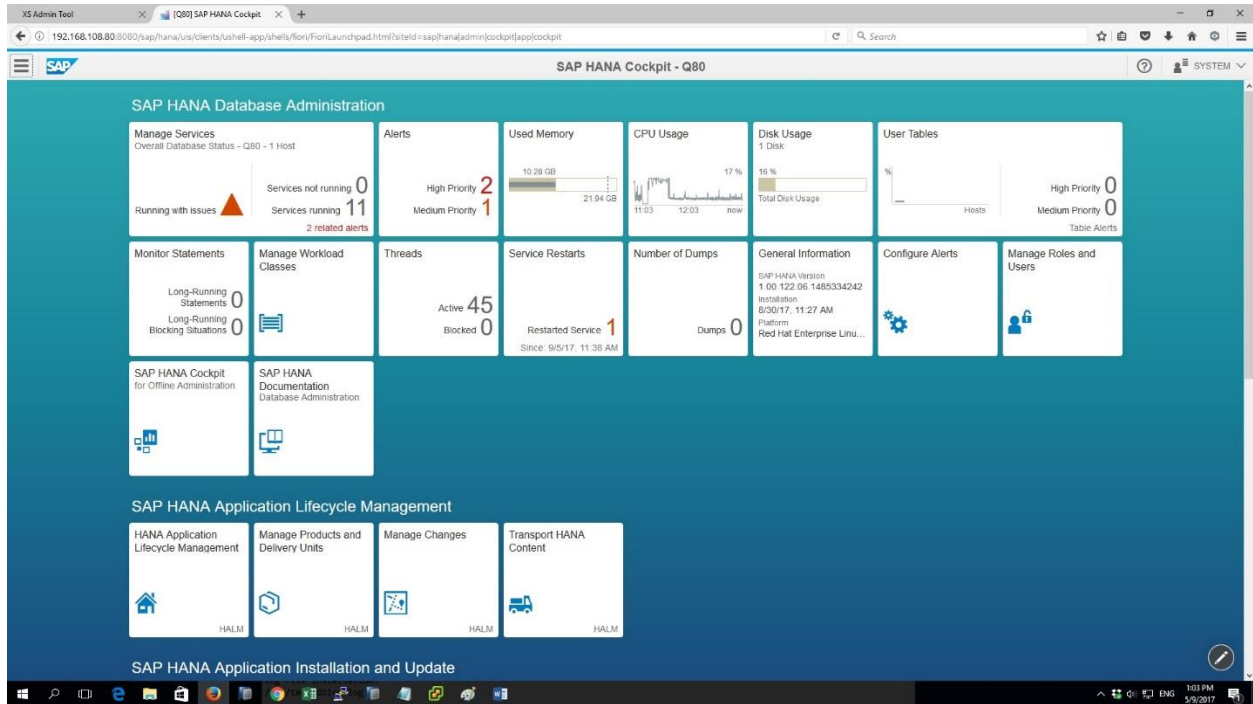
At hana studio add role at user system to cockpits:

Role cockpit:

sap.hana.admin.roles::Monitoring

sap.hana.admin.roles::Administrator

And login agent :

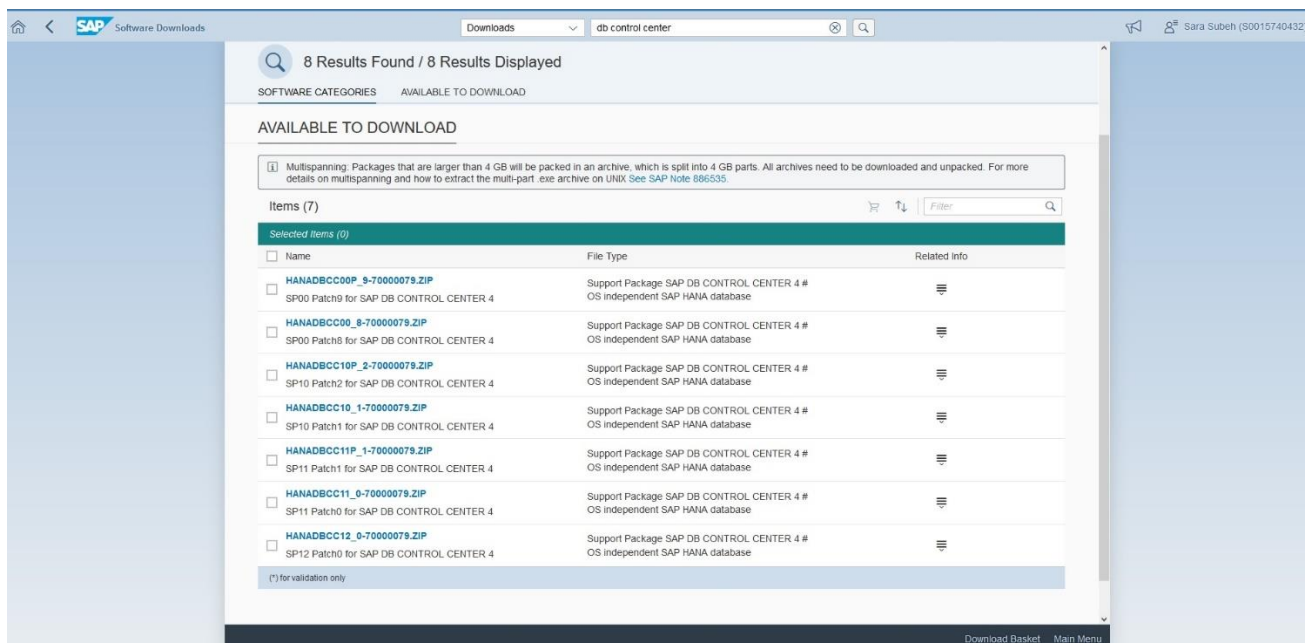


DBCC

Setting up SAP DB Control Center:

At the beginning of each step, I'll first show on **(which system, A or B)** this step is carried out.

Step 1: Download SAP HANA DBCC delivery unit from [Software Downloads | SAP Support Portal](#)



Step 2: **(A)** Import SAP HANA DBCC delivery unit. After you import the DU successfully, you should be able to see the package sap.hana.dbcc

hdbstudio - SAP HANA Modeler - System: Q80 Host: 192.168.108.80 Instance: 80 Connected User: SYSTEM System Usage: Custom System - SAP HANA Studio

File Edit Navigate Project Run Window Help

New Alt+Shift+N >
Open File...
Open Projects from File System...
Close Ctrl+W
Close All Ctrl+Shift+W
Save Ctrl+S
Save As...
Save All Ctrl+Shift+S
Revert
Move...
Rename... F2
Refresh F5
Convert Line Delimiters To >
Print... Ctrl+P
Switch Workspace >
Restart
Import...
Export...
Properties Alt+Enter
Exit

Quick Access

Quick View

Filter values

SAP HANA Modeler

- Delivery Units
- Generate Time Data
- Configure Import Server
- Data Provisioning
- Import
- Export
- Mass Copy
- Migrate
- Validate
- Activate
- Redeploy
- Auto Documentation
- Switch Ownership
- Change Authoring Scher
- Schema Mapping
- Maintain Package Specif
- Repair Dependencies
- Delete Inactive Objects

Last Update: Sep 7, 2017 9:56:50 AM Interval: 60 Seconds

Performance Volumes Configuration System Information Diagnosis Files

Item Replication Host: <All> Service: <All>

Service	Detail	Start Time	Process ID	CPU	Memo
mpilesrver		Sep 6, 2017 9:22:27 AM	11319		
emon		Sep 6, 2017 9:22:13 AM	11180		
erver		Sep 6, 2017 9:23:37 AM	11696		
dexserver	master	Sep 6, 2017 9:22:36 AM	11366		
meserver	master	Sep 6, 2017 9:22:18 AM	11203		
eprocessor		Sep 6, 2017 9:22:29 AM	11321		
ostartsv					
dbdispatcher		Sep 6, 2017 9:23:32 AM	11698		
ontroller		Sep 6, 2017 9:30:35 AM	12562		
engine		Sep 6, 2017 9:22:36 AM	11368		
exccagent		Sep 6, 2017 9:26:56 AM	12566		
aaaserver		Sep 6, 2017 9:29:28 AM	12572		

Properties

Selected: Properties are not available.

Number of Usages:

Type	Used In

0 items selected

Job Log History Progress

Current History

Job Type	System	User	Submitted /

hdbstudio - SAP HANA Modeler - System: Q80 Host: 192.168.108.80 Instance: 80 Connected User: SYSTEM System Usage: Custom System - SAP HANA Studio

File Edit Navigate Project Run Window Help

Search H50 (SYSTEM)

Quick Access

Q80 (SYSTEM) 192...80

Overview Landscape

Services Hosts Redis

Active Host

qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor
qaz.hana.cor

Import

Select

Choose import wizard.

Select an import wizard:

type filter text

- > General
- > Install
- > Plug-in Development
- > Run/Debug
- > SAP HANA
- > SAP HANA Content
 - Data from Local File
 - Delivery Unit
 - Developer Mode
 - Mass Import of Metadata
 - SAP NetWeaver BW Models
 - Selective Import of Metadata
- > Team
- > XML

< Back Next > Finish Cancel

Filter values

SAP HANA Modeler

- Delivery Units
- Generate Time Data
- Configure Import Server
- Data Provisioning
- Import
- Export
- Mass Copy
- Migrate
- Validate
- Activate
- Redeploy
- Auto Documentation
- Switch Ownership
- Change Authoring Schen
- Schema Mapping
- Maintain Package Specif
- Repair Dependencies
- Delete Inactive Objects

Properties

Selected:

Number of Usages:

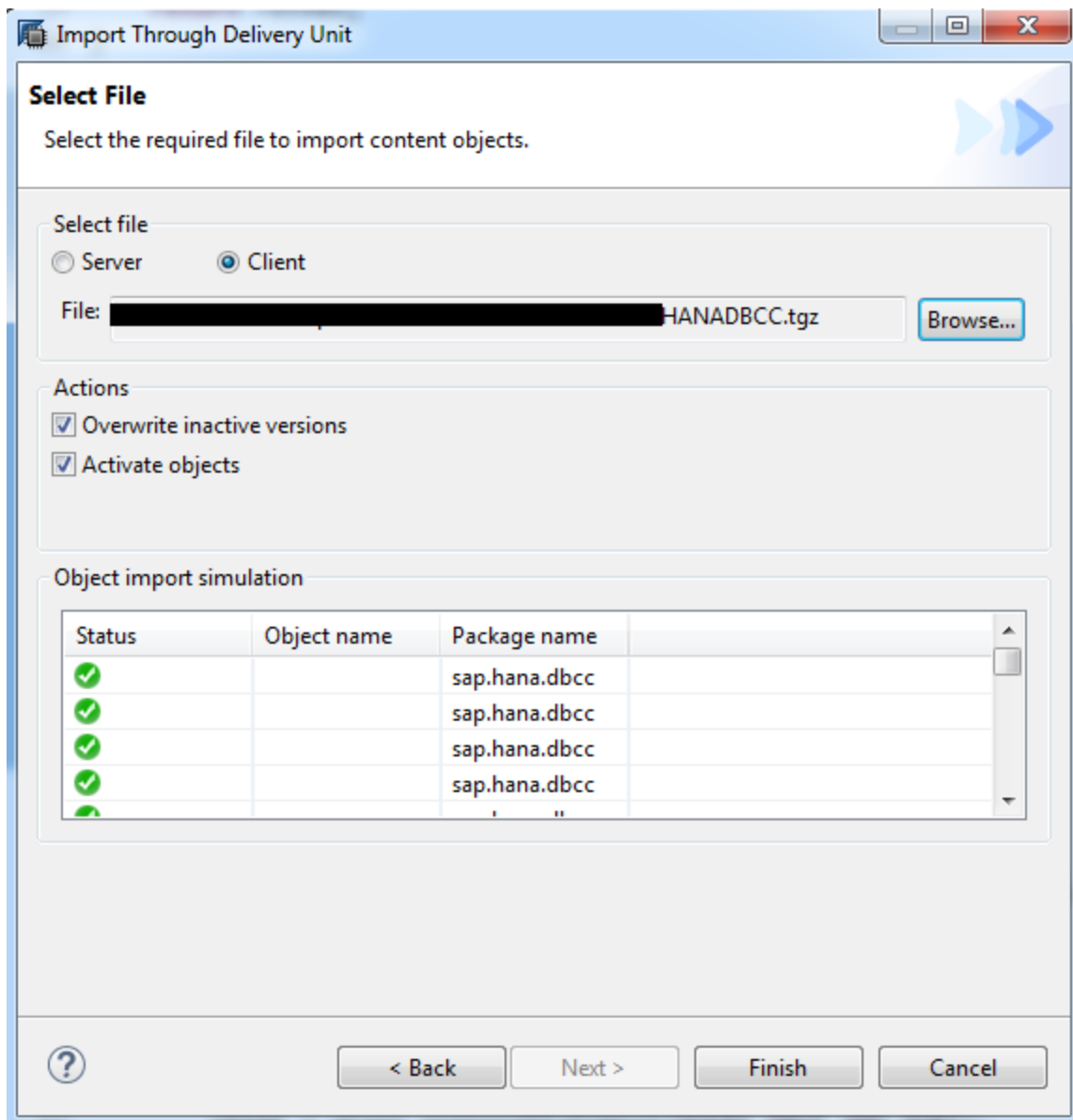
Time Used In

Properties are not available.

Job Log History Progress

Current History

Job Type	System	User	Submitted A



Step 3: (A) Configure xsengine.ini

- section scheduler: enabled=true Since SAP DB Control Center uses XS job scheduling to monitor the statuses of various databases, you need to enable the scheduler first.
- section httpserver: sessiontimeout=3600 It's optional. You set this parameter in order to increase the time of session timeout.

xsengine.ini		
▶ [] application_container		
▶ [] communication		
▶ [] geocoding		
▶ [] httpserver		◆
listenport	3\$(SAPSYSTEM)08	
maxsessions	50000	
maxthreads	200	
sessiontimeout		● 3600
▶ [] persistence		
▶ [] pythontrace		
▶ [] row engine		
▶ [] scheduler		◆
enabled		● true

Step 4: (A) Grant the following roles to the SYSTEM user

- sap.hana.dbcc.roles::DBCCAdmin (extends role sap.hana.dbcc.roles::DBCCUser)
- sap.hana.uis.db::SITE_DESIGNER
- sap.hana.xs.admin.roles::HTTPDestAdministrator
- sap.hana.xs.admin.roles::JobAdministrator
- sap.hana.xs.admin.roles::RuntimeConfAdministrator
- sap.hana.xs.admin.roles::SQLCCAdministrator
- sap.hana.xs.admin.roles::TrustStoreAdministrator

SYSTEM

Authentication

☒ Password
 Password*: Confirm*:

☐ Kerberos
 External ID*:

Valid From: Dec 30, 2014 2:41:44 PM GMT+08:00 Valid Until:

Session Client:

Granted Roles | System Privileges | Object Privileges | Analytic Privileges | Package Privilege

Role	Grantor
AFLPM_CREATOR_ERASER_EXECUTE	SYS
CONTENT_ADMIN	SYS
MODELING	SYS
PUBLIC	SYS
sap.hana.dbcc.roles::DBCCAdmin	_SYS_REPO
sap.hana.uis.db::SITE_DESIGNER	_SYS_REPO
sap.hana.xs.admin.roles::HTTPDestAdministrator	_SYS_REPO
sap.hana.xs.admin.roles::JobAdministrator	_SYS_REPO
sap.hana.xs.admin.roles::RuntimeConfAdministrator	_SYS_REPO
sap.hana.xs.admin.roles::SQLCCAdministrator	_SYS_REPO
sap.hana.xs.admin.roles::TrustStoreAdministrator	_SYS_REPO

Step 5: (A) Create the user DCC_ADM and grant the following roles. DCC_ADM is the administrator of SAP DB Control Center.

- sap.hana.admin.roles::Monitoring
- sap.hana.dbcc.roles::DBCCAdmin

DCC_ADM

Authentication

☒ Password
 Password*: Confirm*:

☐ Kerberos
 External ID*:

Valid From: Dec 30, 2014 3:29:01 PM GMT+08:00 Valid Until:

Session Client:

Granted Roles | System Privileges | Object Privileges | Analytic Privileges | Package Privileges | Appli

+ -

Role	Grantor
PUBLIC	SYS
sap.hana.admin.roles::Monitoring	_SYS_REPO
sap.hana.dbcc.roles::DBCCAdmin	_SYS_REPO

Step 6: (A) Create the user DCC_COLLECTOR and grant the following roles. DCC_COLLECTOR is in charge of collecting statuses of various databases.

- sap.hana.admin.roles::Monitoring
- sap.hana.dbcc.roles::DBCCAdmin

DCC_COLLECTOR

Authentication

☒ Password
 Password*: Confirm*:

☐ Kerberos
 External ID*:

Valid From: Dec 30, 2014 3:33:22 PM GMT+08:00 Valid Until:

Session Client:

Granted Roles | System Privileges | Object Privileges | Analytic Privileges | Package Privileges | .

+ -

Role	Grantor
PUBLIC	SYS
sap.hana.admin.roles::Monitoring	_SYS_REPO
sap.hana.dbcc.roles::DBCCAdmin	_SYS_REPO

Step 7: (A) Create the user DCC_USR and grant the following roles. DCC_USR is the user of SAP DB Control Center.

- sap.hana.admin.roles::Monitoring
- sap.hana.dbcc.roles::DBCCUser

DCC_USR

Authentication

☒ Password
Password*: Confirm*:

☐ Kerberos
External ID*:

Valid From: Valid Until:

Session Client:

Granted Roles | System Privileges | Object Privileges | Analytic Privileges | Package Privileges

+ -

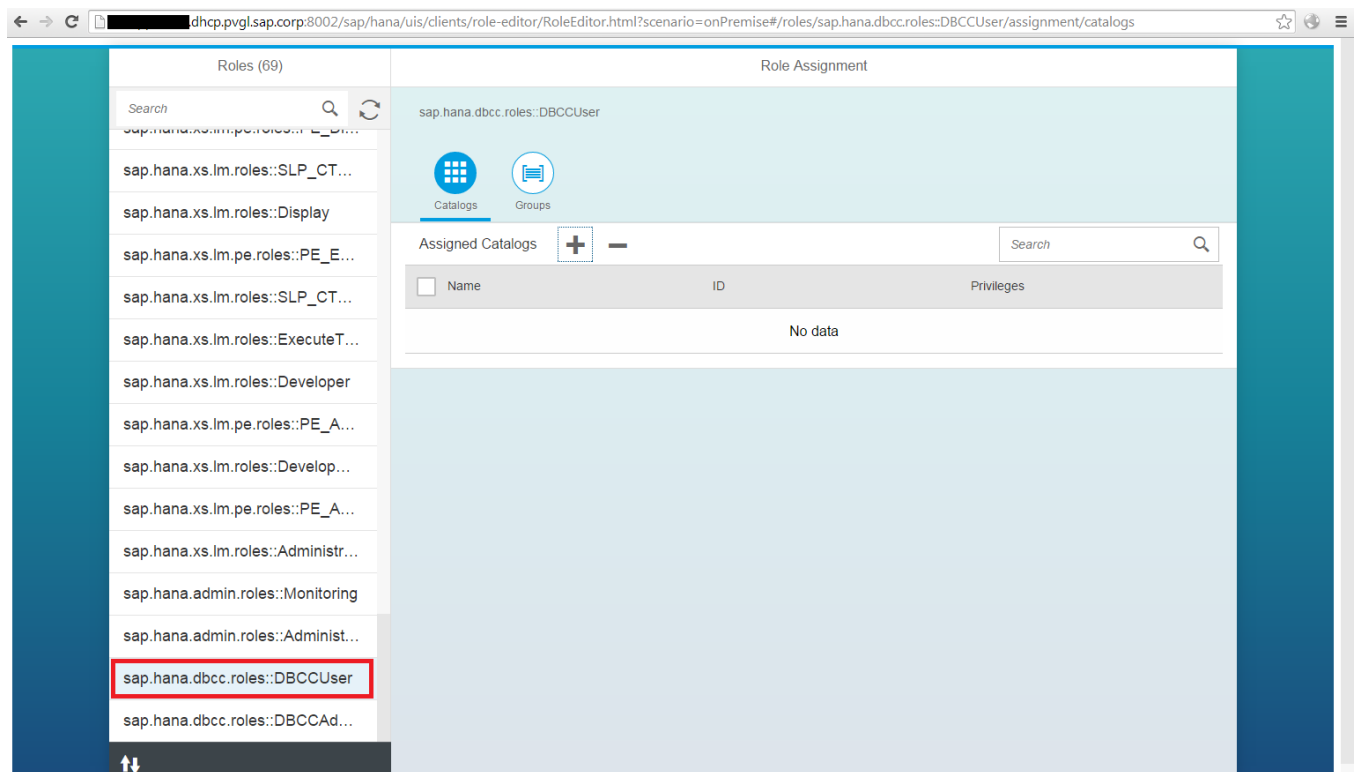
Role	Grantor
PUBLIC	SYS
sap.hana.admin.roles::Monitoring	_SYS_REPO
sap.hana.dbcc.roles::DBCCUser	_SYS_REPO

Step 8: (A) Grant application privileges to the role sap.hana.dbcc.roles::DBCCUser

1. Visit <http://<hostname>:80##/sap/hana/uis/clients/role-editor/RoleEditor.html?scenario=onPremise>

<http://192.168.108.80:8080/sap/hana/uis/clients/role-editor/RoleEditor.html?scenario=onPremise>

2. Logon with the SYSTEM user
3. Select the role sap.hana.dbcc.roles::DBCCUser



4. In the “Catalogs” tab, assign the catalog “SAP DB CC”

Assign Catalogs

Search

Items selected: 1

☐

SAP HANA Administration and Monitoring

☒

SAP DB CC

☐

Manage Profile

☐

SAML Configurations

☐

SMTP Configuration

☐

Trust Manager

☐

XS Admin Artifact Administration

☐

XS Job Dashboard

☐

User Self Service

☐

Web Dispatcher Administration

OK

Cancel

5. In the “Groups” tab, assign the group “SAP DB Control Center”

Assign Groups

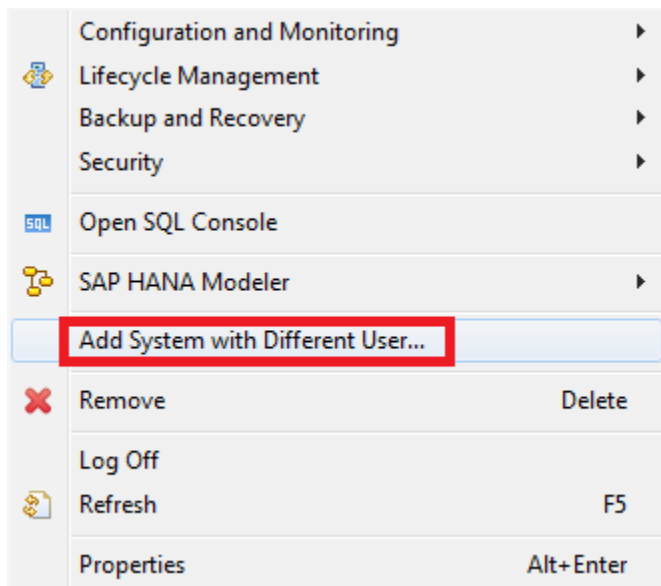
🔍

Items selected: 1

☒ SAP DB Control Center

☐ SAP HANA Administration and Monitoring

Step 9: **(A)** In SAP HANA Studio, use “Add system with different user” to logon system A with new created users DCC_ADM, DCC_COLLECTOR and DCC_USR in order to change their passwords. You’ll be asked to change your password. It’s easy to understand and it’s the same in our daily life. Since SYSTEM (the administrator) created these users, SYSTEM knew their passwords. They need to change their passwords.



Step 10: **(B)** Create the technical user SAPDBCC in the monitored database and grant the following roles.

- sap.hana.admin.roles::Monitoring (This role is necessary for the cockpit)

On every SAP HANA system you will monitor with SAP DB Control Center, create an SAPDBCC user account, grant it monitoring privileges, and add the SAPDBCC account to the SQL connection configuration (SQLCC) in SAP HANA XS.

SAPDBCC

Authentication

☒ Password
 Password*: Confirm*:

☐ Kerberos
 External ID*:

Valid From: Dec 30, 2014 3:56:34 PM GMT+08:00 Valid Until:

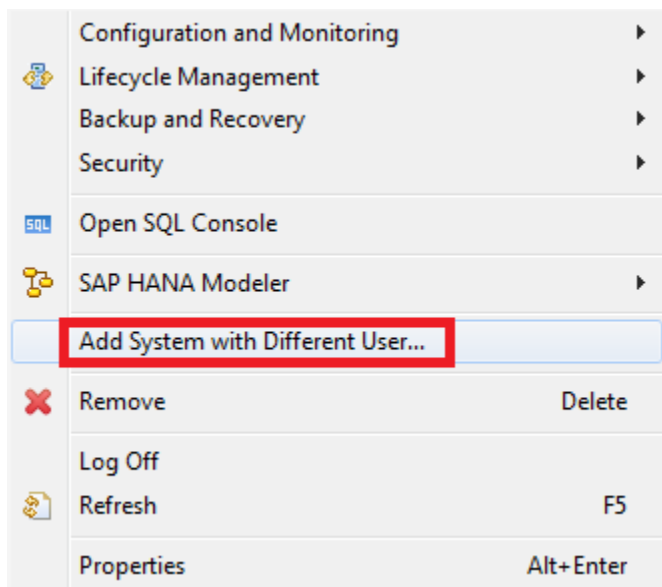
Session Client:

Granted Roles | System Privileges | Object Privileges | Analytic Privileges | Package Privileges | Application

+ -

Role	Grantor
PUBLIC	SYS
sap.hana.admin.roles::Monitoring	_SYS_REPO

Step 11: **(B)** In SAP HANA Studio, use “Add system with different user” to logon system B with new created user SAPDBCC in order to change the password.

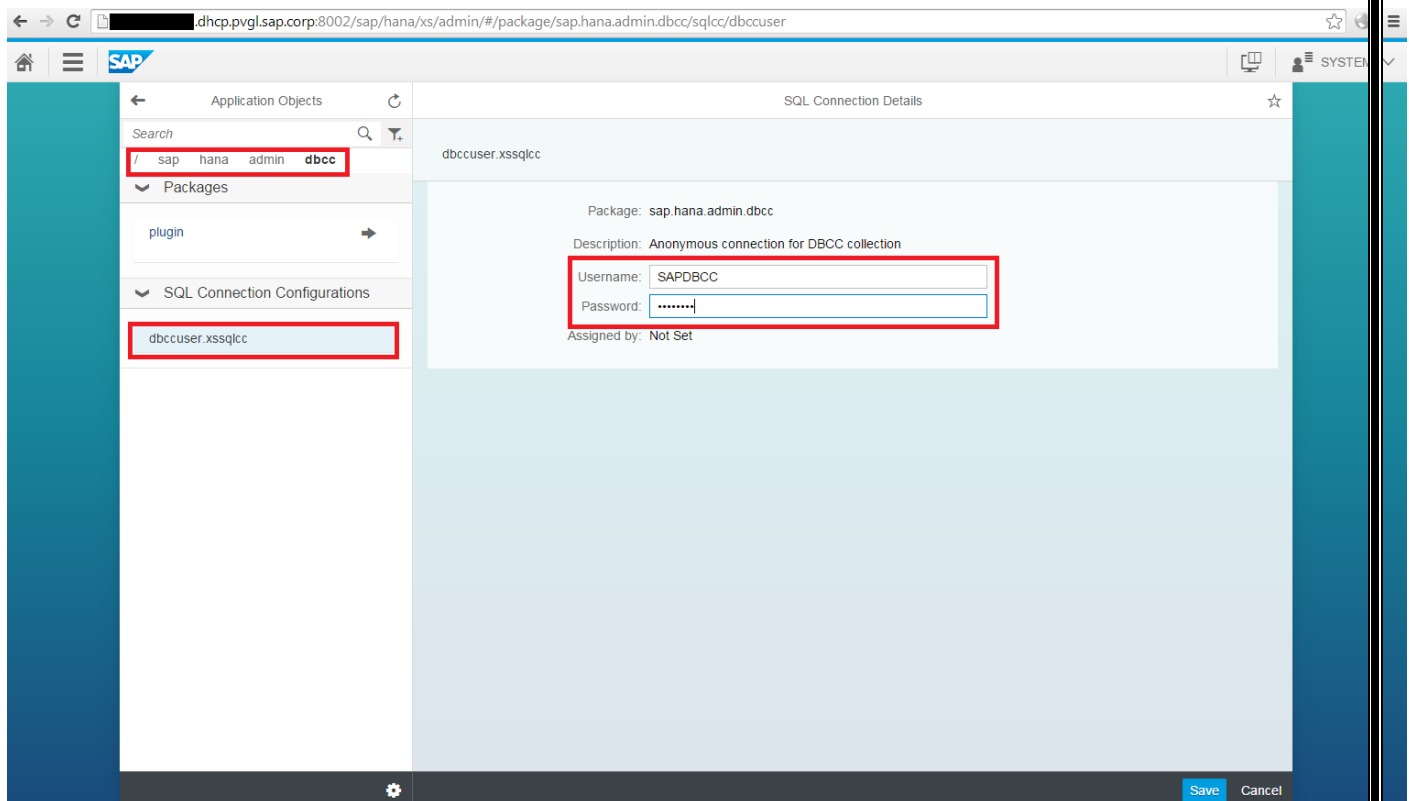
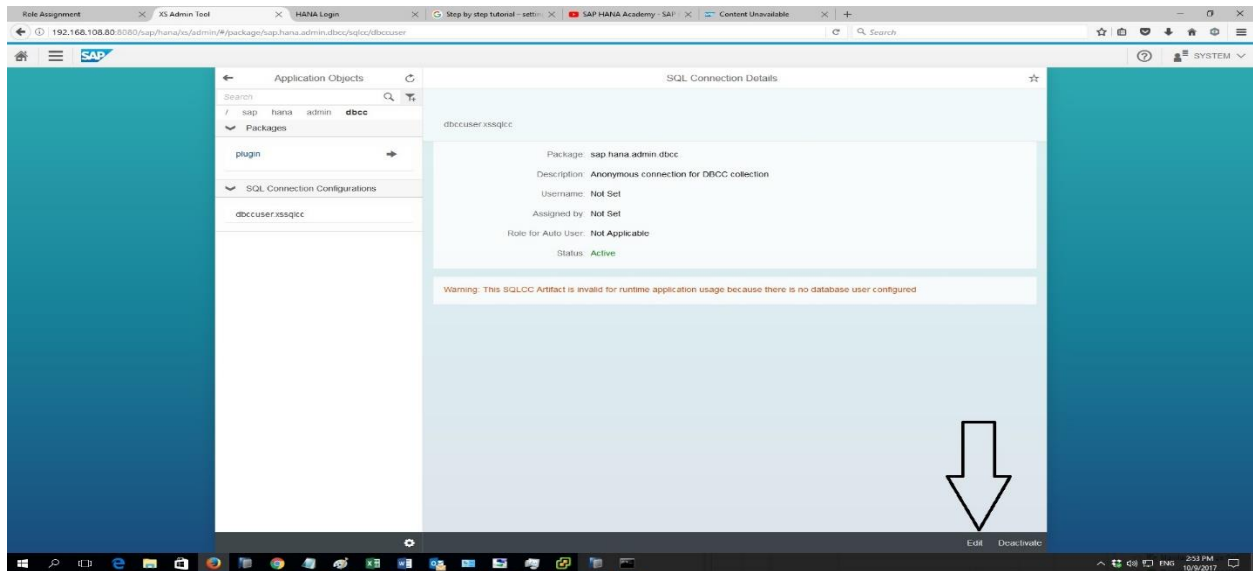


Step 12: **(B)** Configure dbccuser.xssqlcc (SQL connection configuration, can be used for anonymous connection)

1. Visit <http://<hostname>:80##/sap/hana/xs/admin/>

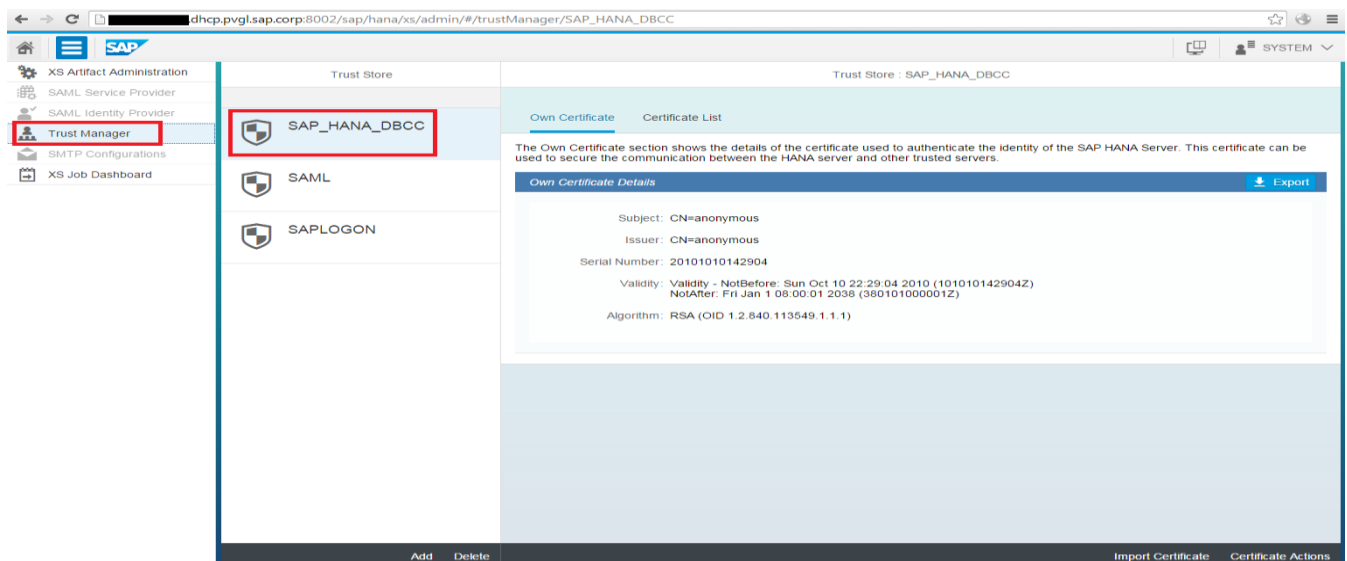
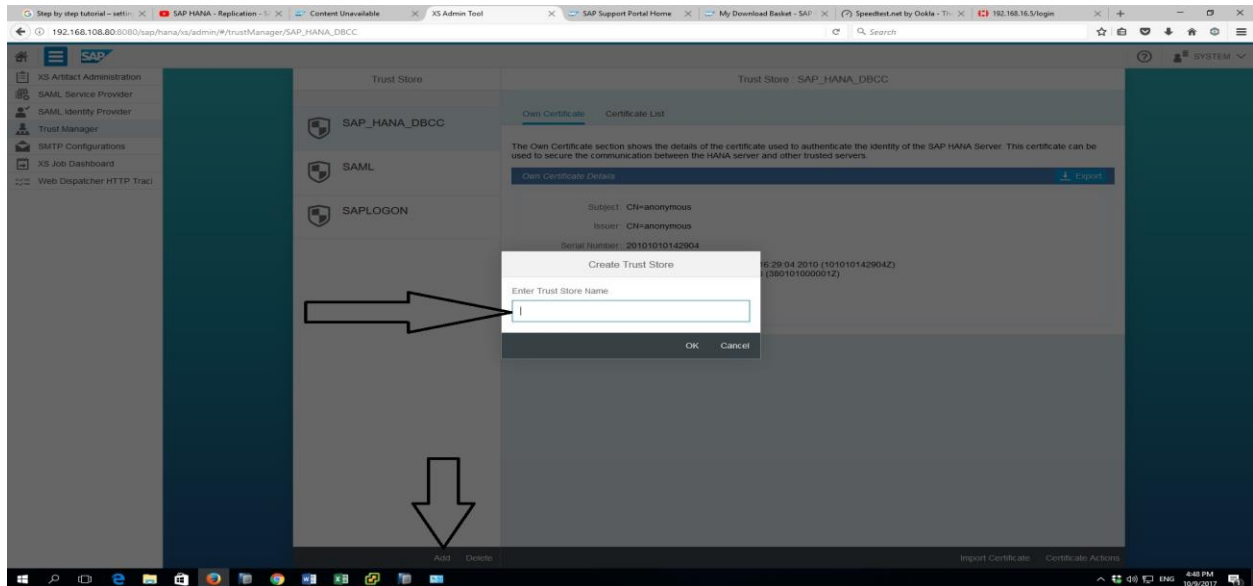
2. Logon with the SYSTEM user (SYSTEM needs to have the role sap.hana.xs.admin.roles::SQLCCAdministrator)

3. Go to package sap.hana.admin.dbcc -> Select dbccuser.xssqlcc -> Input the username (SAPDBCC) and password -> Save



Step 13: (A) Add trust store

1. Visit <http://<hostname>:<port>/sap/hana/xs/admin/>
2. Logon with the SYSTEM user
3. Select “Trust Manager”
4. Add the trust store SAP_HANA_DBCC



Step 14: (A) Configure ScheduleCollections.xsjob, collect the APCA (Availability, Performance, Capacity, Alerts) data periodically. XSCron * * * * * 0 means the job run every minute and, in addition, at the 0th second in the specified minute.

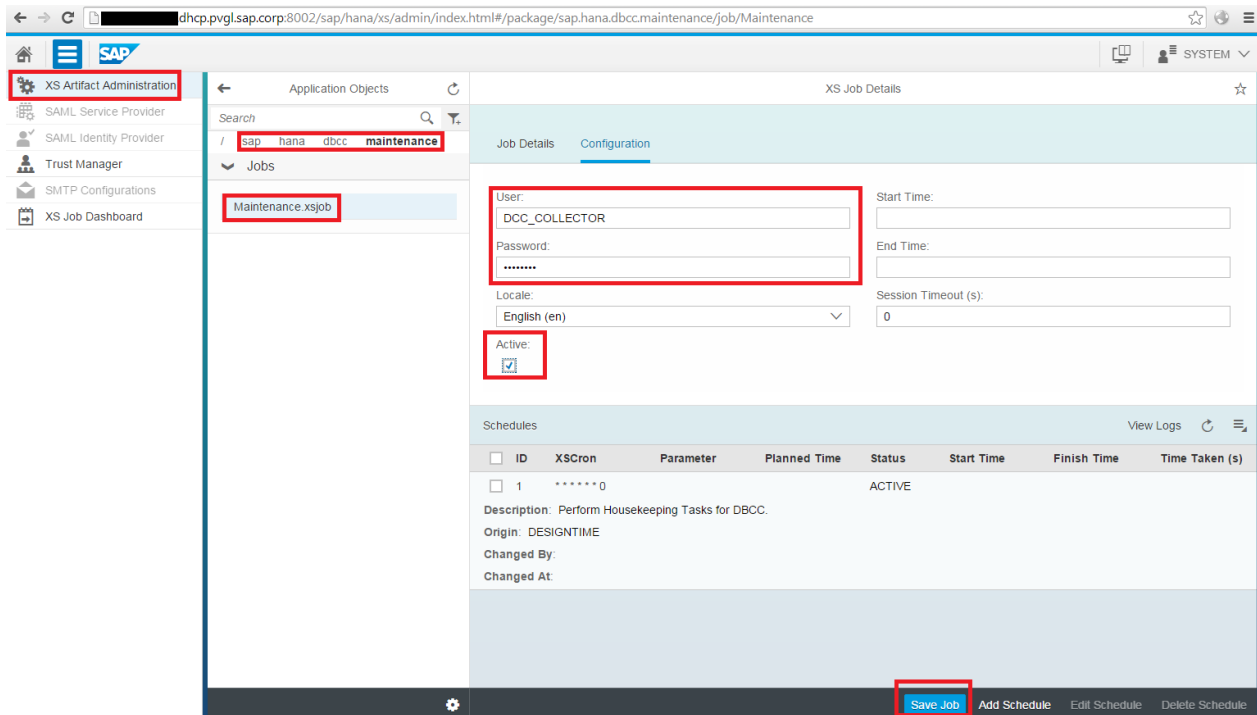
Select “XS Artifact Administration” -> Go to package sap.hana.dbcc.collections -> Select ScheduleCollections.xsjob -> Input username (DCC_COLLECTOR) and password -> Select “Active” -> Save Job

The screenshot shows the SAP XS Artifact Administration web interface. The left sidebar has a menu with 'XS Artifact Administration' highlighted. The main area is titled 'XS Job Details' and shows the configuration for the 'ScheduleCollections.xsjob'. The 'Configuration' tab is active, displaying fields for 'User' (DCC_COLLECTOR), 'Password' (masked with asterisks), 'Locale' (English (en)), 'Start Time', 'End Time', and 'Session Timeout (s)' (0). The 'Active' checkbox is checked. Below these fields is a 'Schedules' table with one entry: ID 2, XSCron *****0, Status ACTIVE. The description is 'Collects APCA from remote systems if it is time to do so.' The origin is DESIGNTIME. At the bottom right, there is a 'Save Job' button.

ID	XSCron	Parameter	Planned Time	Status	Start Time	Finish Time	Time Taken (s)
2	*****0			ACTIVE			

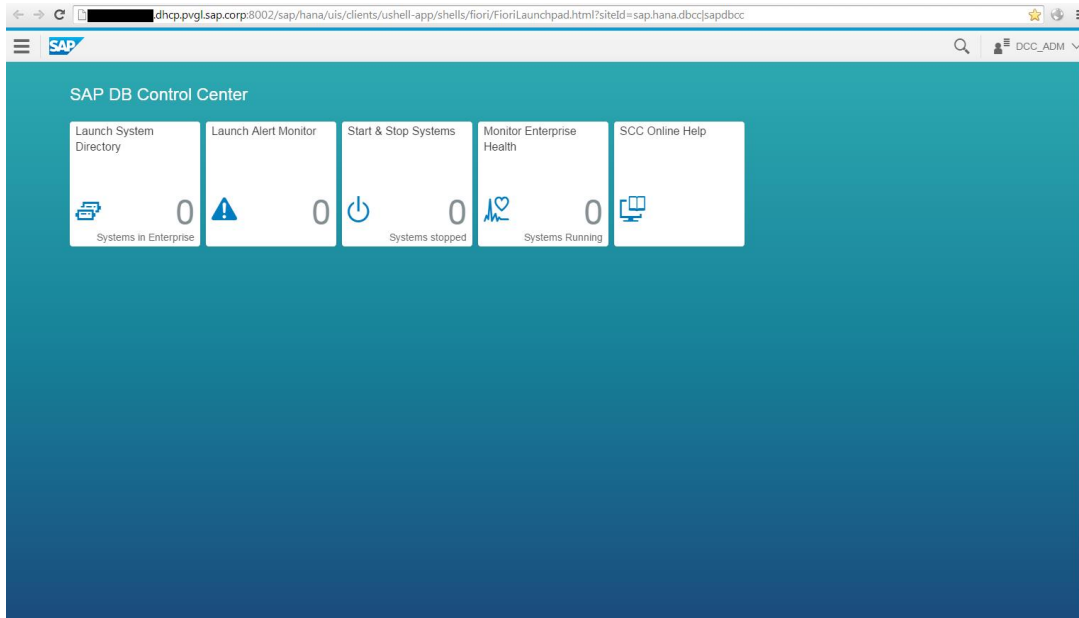
Step 15: (A) Configure Maintenance.xsjob, perform maintenance on the message queue periodically. XSCron * * * * * 0 means the job run every minute and, in addition, at the 0th second in the specified minute.

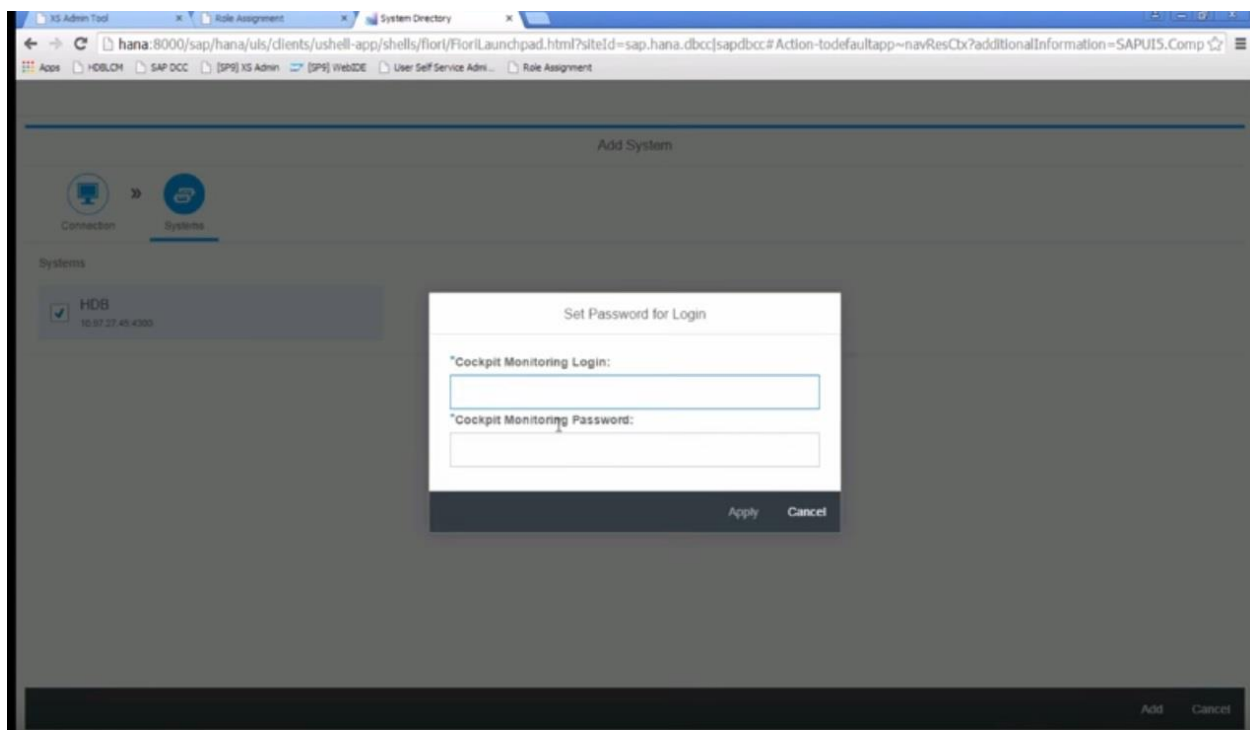
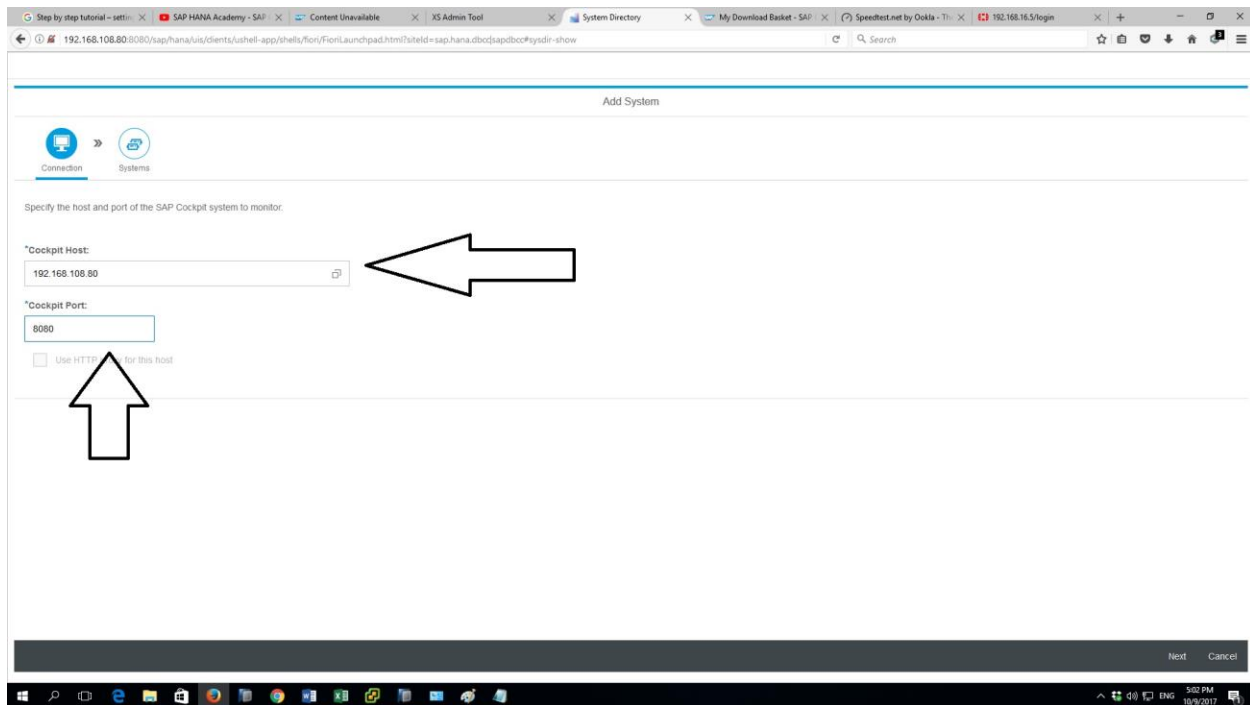
Select “XS Artifact Administration” -> Go to package sap.hana.dbcc.maintenance -> Select Maintenance.xsjob -> Input username (DCC_COLLECTOR) and password -> Select “Active” -> Save Job



Step 16: (A) Access SAP DB Control Center

1. Visit <http://<hostname>:80##/sap/hana/dbcc>
2. Logon with DCC_ADM





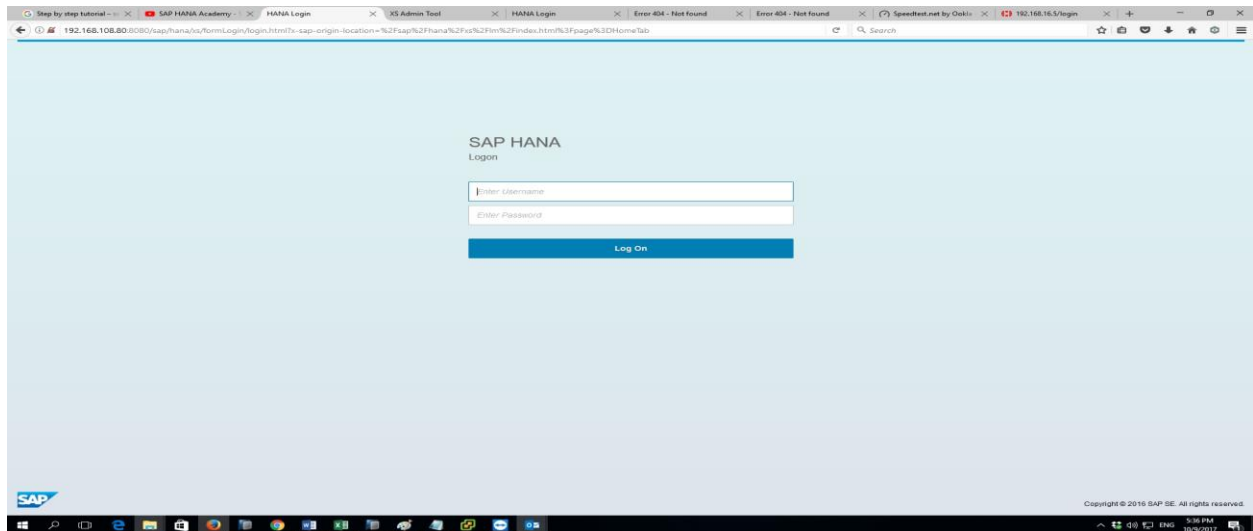
Login by : SAPDBCC----->ADMINadmin80

That's it. Till now we've set up our SAP DB Control Center. In the next document [Step by step tutorial – setting up SAP DB Control Center in SAP HANA SPS 09 \(part 2\)](#), let's have a look how to use SAP DB Control Center to start/stop/monitor databases.

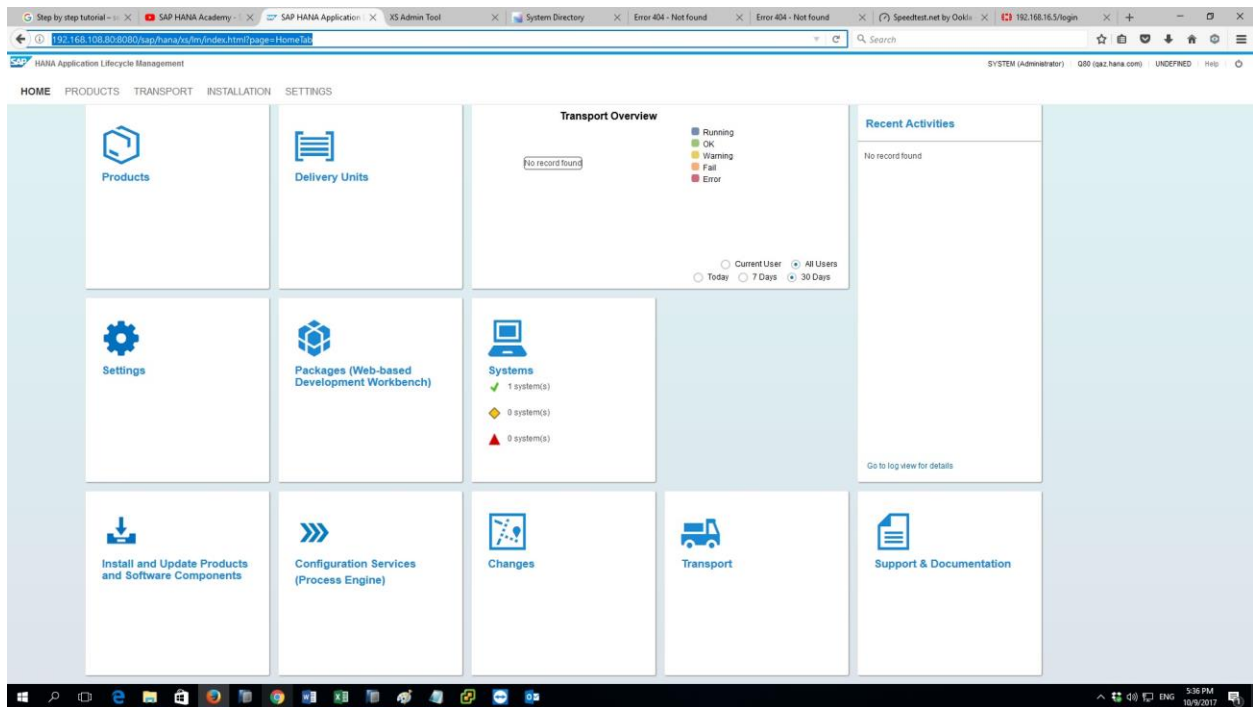
SHINE

IN data base have shine folder:

1:open link: <http://<ip>:80##/sap/hana/xs/lm/index.html>



2:log in by :system user



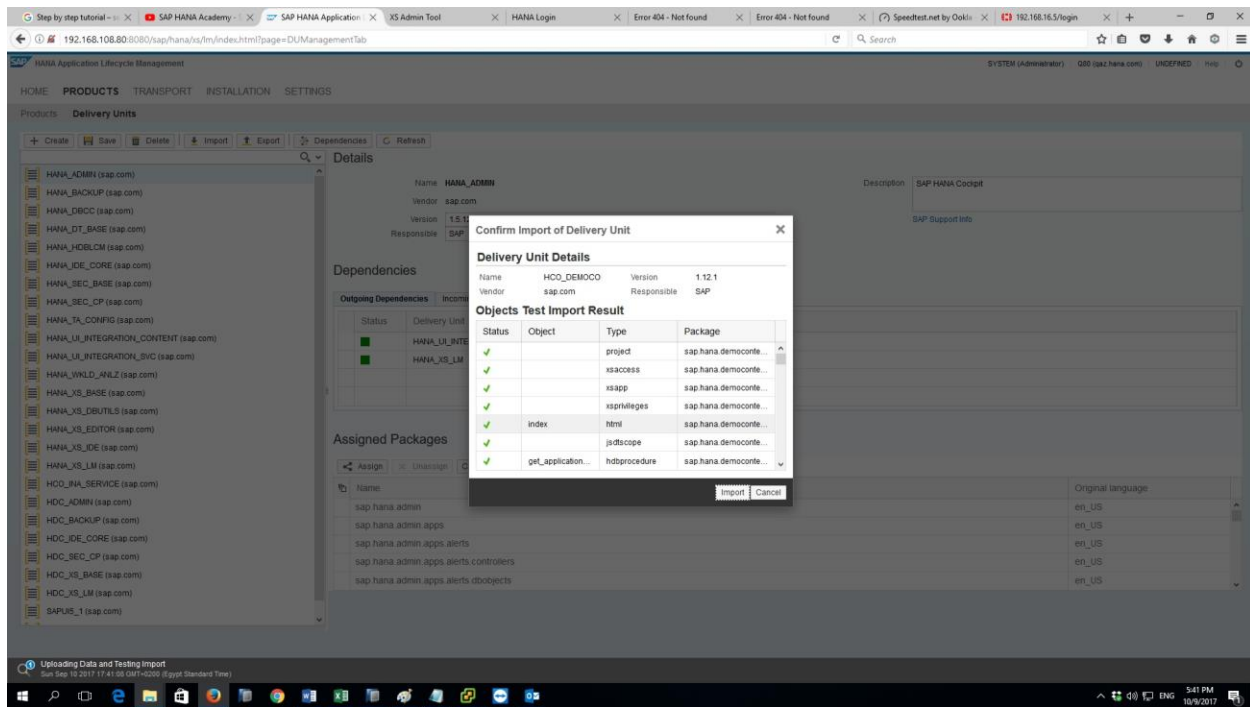
3:select Delivery united

The screenshot displays the SAP HANA Application Lifecycle Management (ALM) interface. The left sidebar shows a tree view of delivery units, with 'HANA_ADMIN (sap.com)' selected. The main area shows the details for 'HANA_ADMIN', including its name, vendor (sap.com), version (1.5.12), and responsible party (SAP). Below the details, there are sections for 'Dependencies' and 'Assigned Packages'. The 'Assigned Packages' section shows a list of packages with their original languages, all set to 'en_US'.

4:select Import:

The screenshot shows the same SAP HANA Application Lifecycle Management (ALM) interface, but with an 'Import Delivery Unit' dialog box open. The dialog box prompts the user to select an archive file for import. The background shows the same 'Delivery Units' section as the previous screenshot, but it is dimmed.

5: browse location shine:



6: log in cockpit: <http://192.168.108.80:80800/sap/hana/admin/cockpit>

Log by system user

SAP HANA Cockpit - Q80

SAP HANA System Administration

+

SAP HANA Database Administration

Manage Services
Overall Database Status - Q80 - 1 Host
Running with Issues 0
Services not running 2
Services running 9
1 related alert

Alerts
High Priority 1
Medium Priority 1

Used Memory
9.37 GB
21.94 GB

CPU Usage
31 %
15.57 15.57 now

Disk Usage
1 Disk
17 %
Total Disk Usage

User Tables
High Priority 0
Medium Priority 0
Table Alerts

Monitor Statements
Long-Running Statements 0
Long-Running Blocking Situations 0

Manage Workload Classes

Threads
Active 41
Blocked 0

Service Restarts
Restarted Services 2
Since: 9/10/17, 6:06 PM

Number of Dumps
Dumps 7
Since: 9/7/17, 4:14 AM

General Information
SAP HANA Version 1.00.122.06.1485334242
Installation 8/30/17, 11:27 AM
Platform Red Hat Enterprise Linu...

Configure Alerts

Manage Roles and Users

SAP HANA Cockpit
for Offline Administration

SAP HANA
Documentation
Database Administration

SAP HANA Application Lifecycle Management

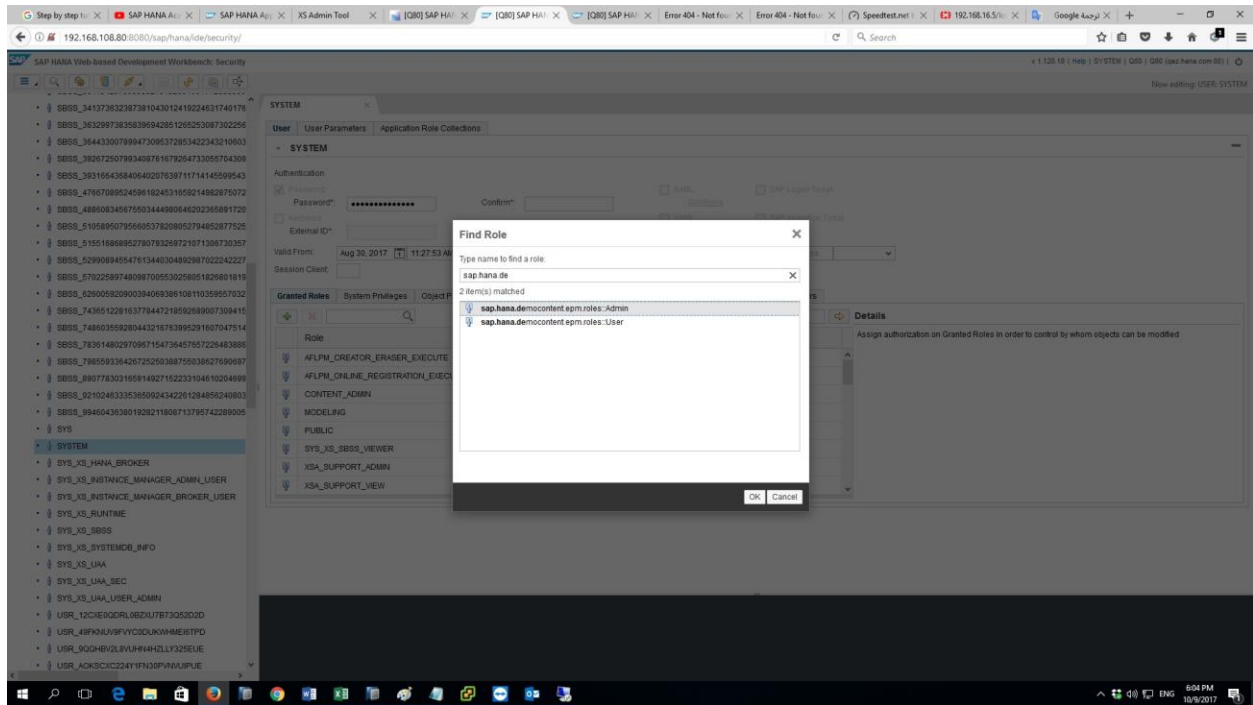
192.168.108.80:8080/sap/hana/clients/ushell-app/shell/For/Launchpad.html?steld=sap/hana/admin/cockpit/app/cockpit

SAP HANA Web-based Development Workbench: Security

v 1.120.18 | Help | SYSTEM | Q80 | (sap.hana.com/80) |

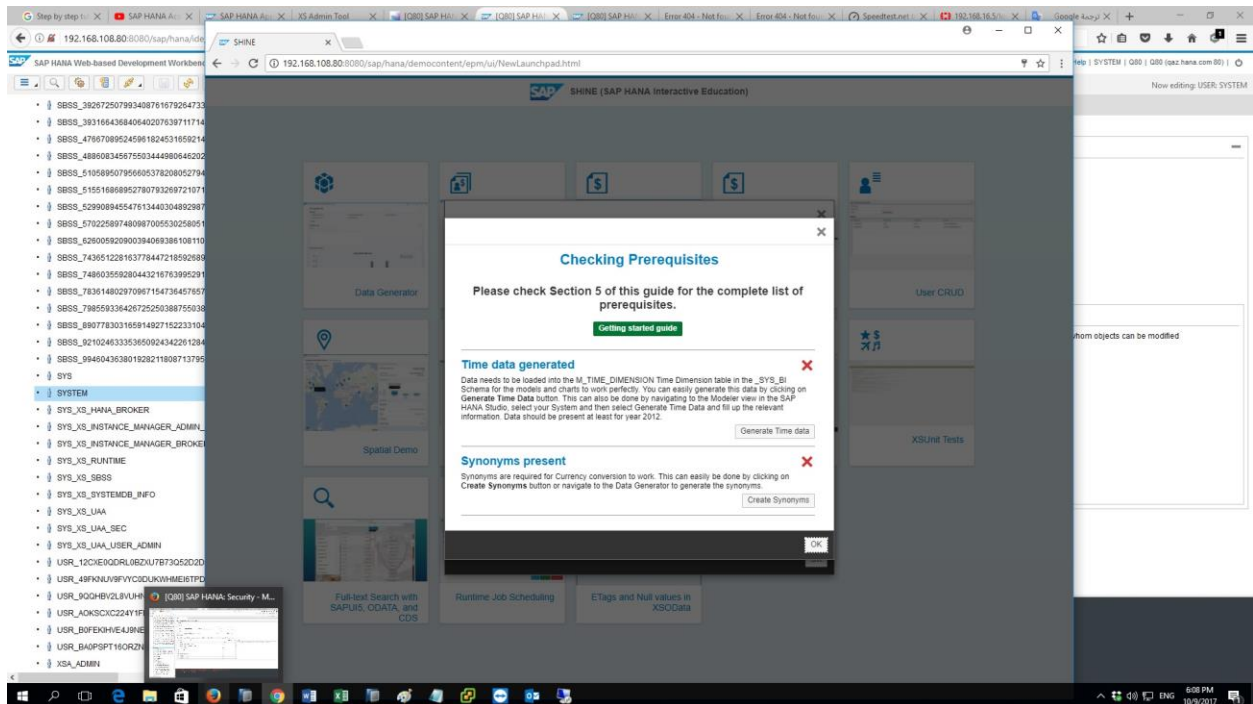
Security

- Users
 - 674A9DD0C89414490C84F78BC419865
 - 674A9DD0C89414490C84F78BC419865RDI
 - 674A9DD0C89414490C84F78BC419865ROO
 - 9401E357FE95480D88702935E2E80EC
 - 9401E357FE95480D88702935E2E80ECROI
 - 9401E357FE95480D88702935E2E80ECROO
 - ABF3CEBF4854C5384B3294D35C569E
 - ABF3CEBF4854C5384B3294D35C569ERDI
 - ABF3CEBF4854C5384B3294D35C569EROO
 - BF5C65E5631D4A75943C58382191AD14
 - BF5C65E5631D4A75943C58382191AD14ROI
 - BF5C65E5631D4A75943C58382191AD14ROO
 - D446DB8EC4004FCTAC9F4FE8797C99F9
 - D446DB8EC4004FCTAC9F4FE8797C99F9ROI
 - D446DB8EC4004FCTAC9F4FE8797C99F9ROO
 - DCC_ADM
 - DCC_COLLECTOR
 - DCC_USR
 - HDL_ADMIN_USER
 - HDL_BROKER_CONTROLLER
 - SAPDBCC
 - SARA
 - SARASUBEH
 - SB88_008332470366194352936530803199649245
 - SB88_150873430304875299389331204673086897
 - SB88_15320828785959613141822282500374781
 - SB88_16148748985000222813536727657437620
 - SB88_18832826933961006004306666195821305
 - SB88_22200276028729524969057817517024251
 - SB88_2553836678389107024247113312659500
 - SB88_264436217928596274663730024296260297
 - SB88_27849470665745123827013878882301797



Add role:sap.hana.democontent.rpm.roles::Admin

Open chin by link: <http://192.168.108.80:8080/sap/hana/democontent/epm/ui/NewLaunchpad.html>



Go to hana studio to date:

Industrio - SAP HANA Modeler - Systems: QBO Host: 192.168.108.80 Instance: 80 Connected User: SAPDBCC System Usage: Custom System - SAP HANA Studio

File Edit Navigate Project Run Window Help

Search QBO (SAPDBCC)

Systems: QBO (DCC_COLLECTOR) QBO (SAPDBCC) QBO (SYSTEM)

QBO (SAPDBCC) 192.168.108.80

Overview | Landscape | Alerts | Performance | Volumes | Config

General Information

Operational Status: Some HANA Services are not running

Start Time of First Started Service: Sep 10, 2017

Start Time of Most Recent Started Service: Sep 10, 2017

Distributed Systems: 1

Version: 1.6.0.10

Build Time: Jan 25, 2017

Platform: Red Hat

Linux Kernel Version: 3.10.0-6

Hardware Manufacturer: VMware

System Usage:

SAP HANA Used Memory

Used Memory/Peak Used Memory/Allocation Limit (GB)

On Host qas.hana.com: 8.94/9.01

More Information

Resident Memory

Database Resident/Total Resident/Physical Memory (GB)

On Host qas.hana.com: 7.64/8.32

More Information

CPU Usage

Database CPU Usage/Total CPU Usage/Maximum CPU Usage

On Host qas.hana.com: 0/27

More Information

Generate Time Data

Load time data into time attribute view table

Calendar Type: Gregorian

From Year: 2017

To Year: 1999

Variant Scheme:

Granularity: Year

Back Next Finish Cancel

Quick View: Filter values

SAP HANA Modeler

- Delivery Units
- Generate Time Data
- Configure Import Table
- Data Partitioning
- Import
- Export
- Mass Copy
- Migrate
- Validate
- Activate
- Redeploy
- Auto Documentation
- Switch Ownership
- Change Authoring Schema
- Schema Mapping
- Maintain Package Specific Default Schema
- Repair Dependencies
- Delete Inactive Objects

Where-Used List: Selected: Number of Usages:

Type	Used In	Package
------	---------	---------

Properties: Property Value

Job Log: Current | History | Progress

Job Type	System	User	Submitted At	Status
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SHINE (SAP HANA Interactive Education)

Data Generator

Purchase Order Worklist

Sales Dashboard

Sales Worklist

User CRUD

Spatial Demo

Sales Dashboard Mobile

Flori Launchpad

XS Data Services (XS)

XSUnit Tests

Full-text Search with SAPUI5, QDATA, and CDS

Runtime Job Scheduling

ETags and Null values in XSODATA