

Getting Started with SAP SQL Data Warehousing



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1 Solution Information

Important: please follow the instructions in chapter 2.2 on installing Google Chrome.

1.1 Installed Products

You get access to a system (landscape) that has been built using the following installation media:

- SAP HANA Platform Edition 2.0 SP03
- SAP Data Warehouse Foundation 2.3.1
- SAP HANA Studio 2.2.15 (112.5) Windows x64B

1.2 Overview

This guide provides general information you need to use the solution SAP SQL Data Warehouse 2.0 SP03 Revision 1.0.

- SAP SQL Data Warehouse 2.0 SP03 revision 1.0 Trial Edition
- Short description of content;

Component	Version
SAP HANA Platform Edition	2.00.030.00.1522209842
SAP Data Warehouse Foundation	2.3.1
SAP Enterprise Architect Designer for HANA	1.4.0

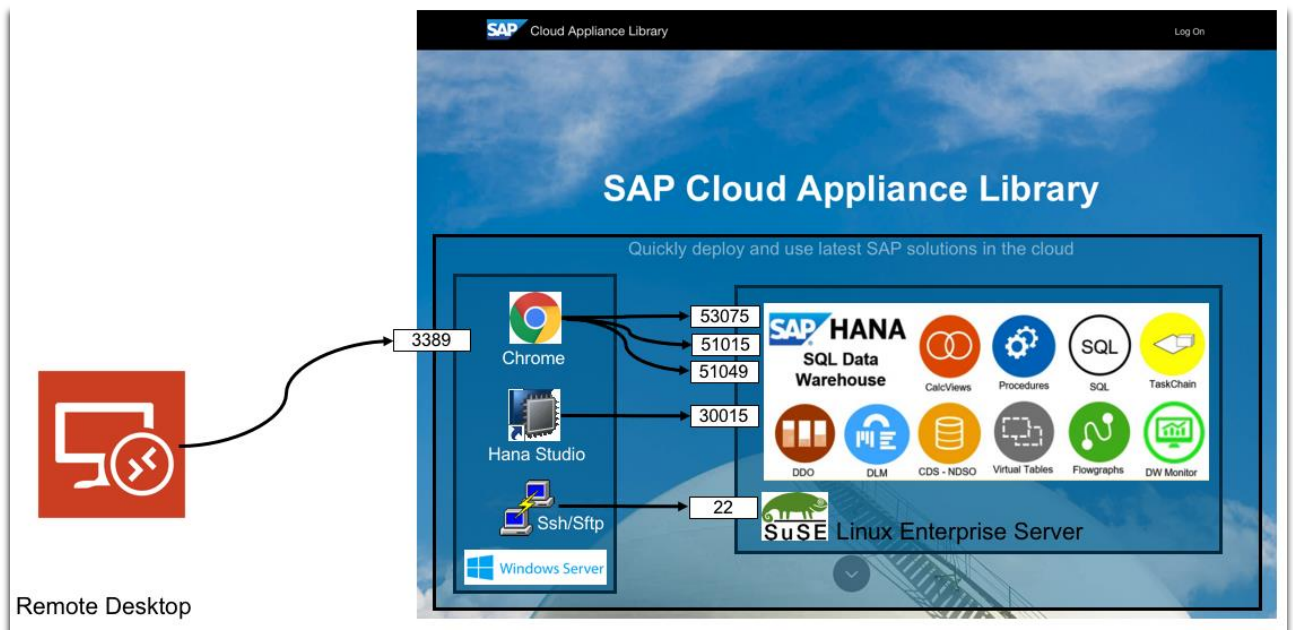
2 Accessing the Solution

2.1 Overview

Be aware that creating your instances in the public zone of your cloud computing platform is convenient but less secure. Ensure that only port 22 (SSH) is opened when working with Linux-based solutions and port 3389 (RDP) when working with Windows based solutions. In addition, we also recommend that you limit the access to your instances by defining a specific IP range in the Access Points settings, using CIDR notation. The more complex but secure alternative is to set up a virtual private cloud (VPC) with VPN access, which is described in this [tutorial on SCN](#).

To access back-end server, SAP SQL Data Warehouse Foundation services, use Remote Desktop and the RDP definition file supplied in with the instance. Procedures to access and download the Remote Desktop Definition file flows in the next section of this document:

CAL Solution Architecture:



The list in chapter 4 describes the ports opened for the security group formed by the server components of your solution instance.

Note that when using **HANA based appliances**, HANA systems are not installed individually but **cloned from a template system**. As a consequence of this cloning process, the existing root keys are cloned. For more information, see this [SAP Note 2134846 - HANA encryption key handling during system cloning](#).

2.2 Windows Frontend Server Details

The solution consists of a Windows Client system that contains the necessary SAP Client tools and the Chrome Web browser, one can access the Windows Client system using MS Remote Desktop and the remote desktop definition file located in the SAP CAL Instance

Connect to the Frontend server using the information in the table below. You can also configure manually your Remote Desktop client.

Important: Before you start accessing SQL Data Warehousing, you need to install Google Chrome! Follow the download link on the Welcome guide, installation takes only a few seconds. Make Chrome your Default browser. For easy access of the provided URLs in Chrome, you can find a copy of the Welcome page here:

Q:\flavor\BW4HANAAppliance\WelcomePage\Welcome.html

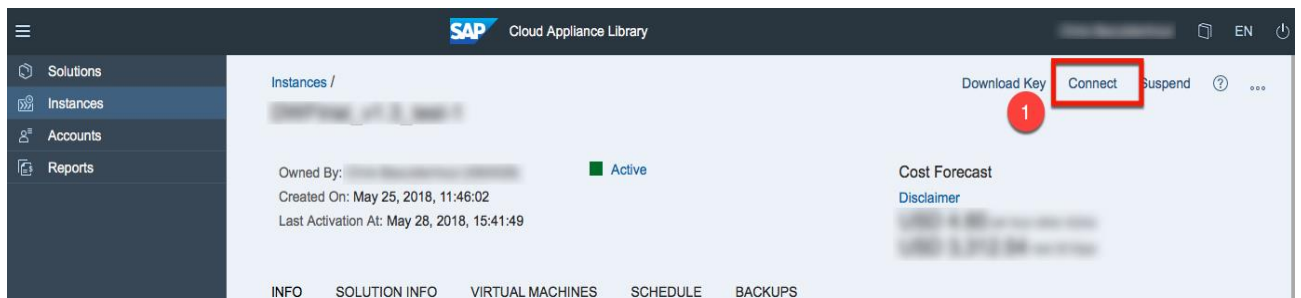
For more information, how to connect to the Frontend Server, see [Connecting to a Solution Instance](#).

Name	Value	Description
IP Address	<IP Address>	The IP address of your frontend server instance you created in SAP CAL.
User	Administrator	User for the Windows frontend server. Note: Only one user is allowed to logon at the front-end server at the same point in time.
Password	<Master Password>	The initial master password of the system you provided in the SAP Cloud Appliance Library when creating the instance.

Step-By-Step Access guide:

Once the instance is active and running, the CAL console is used to access and download the Remote Desktop definition file follow the three easy steps below to save the definition file to a location on your local machine:

Click on "Connect".



Launch Remote Desktop and import the downloaded definition file, use the login credentials supplied in above table:

2.3 SQL Data Warehouse Foundation Server Details

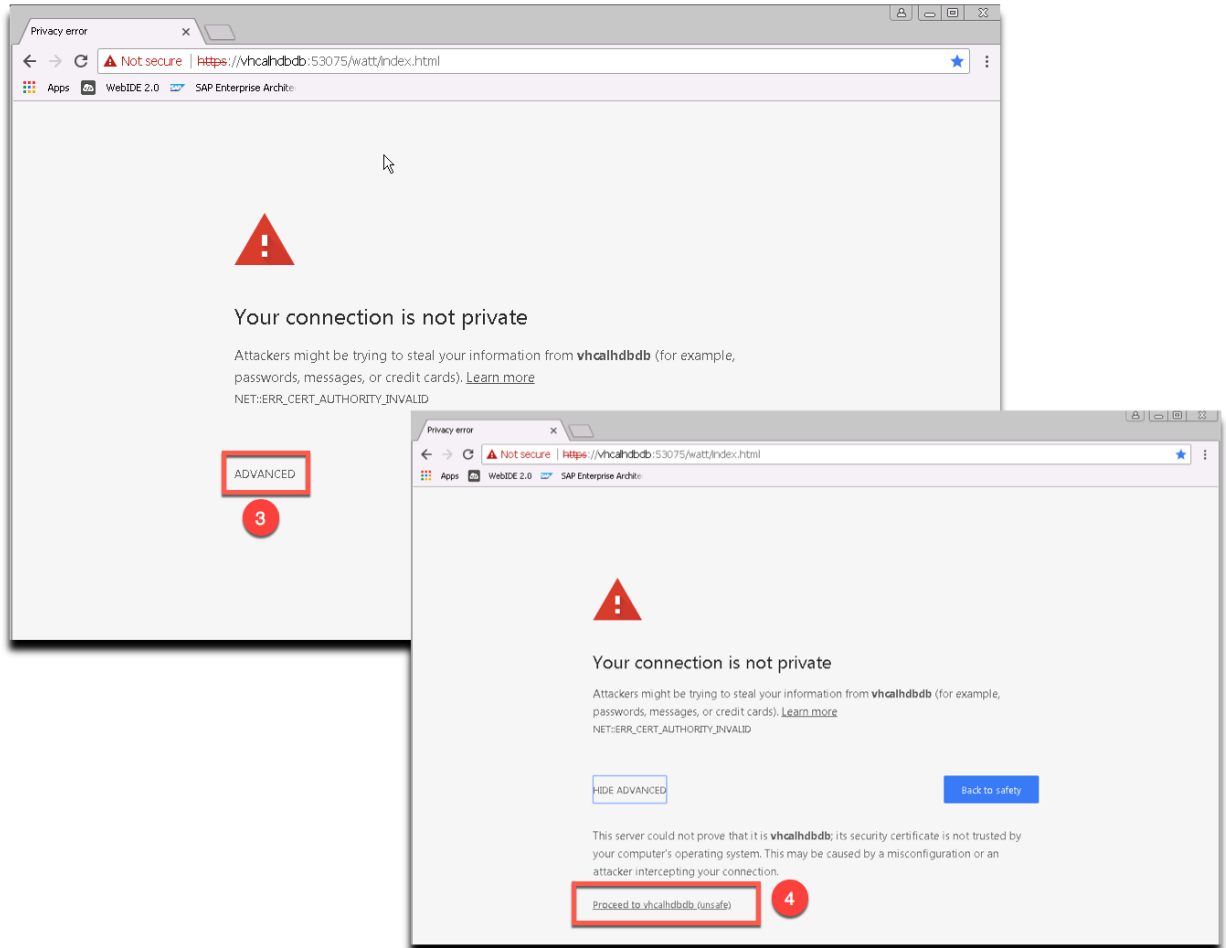
Connect to SAP SQL Data Warehouse Foundation using the information in the table below.

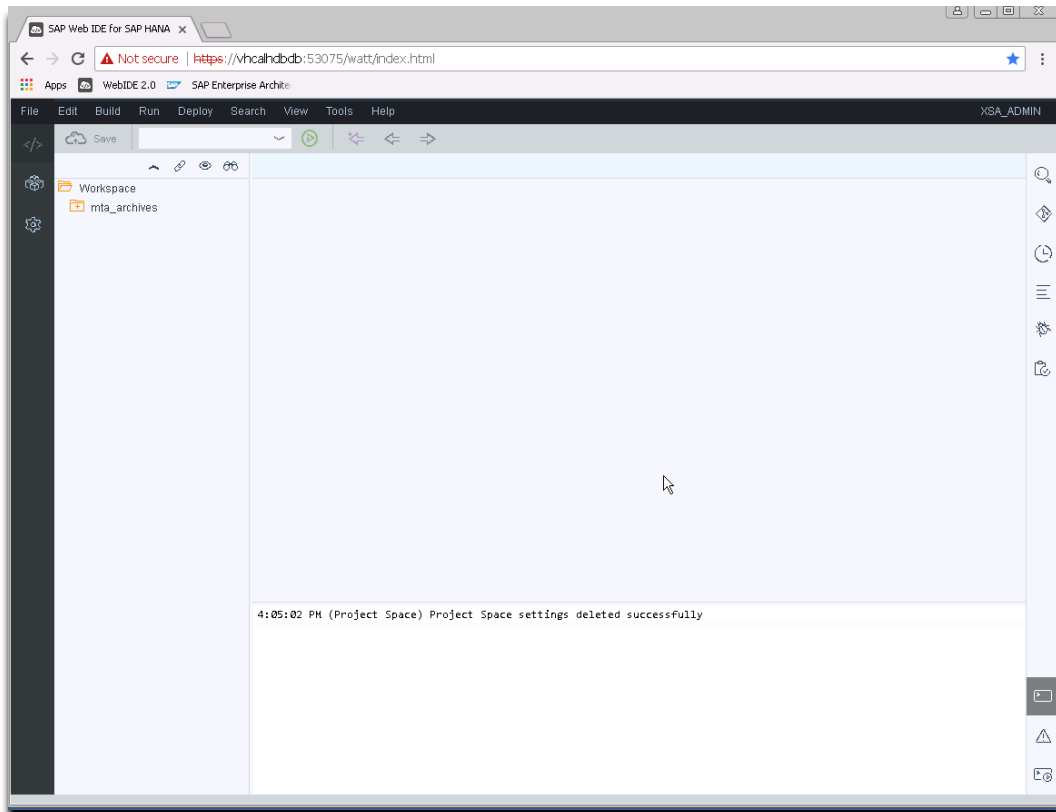
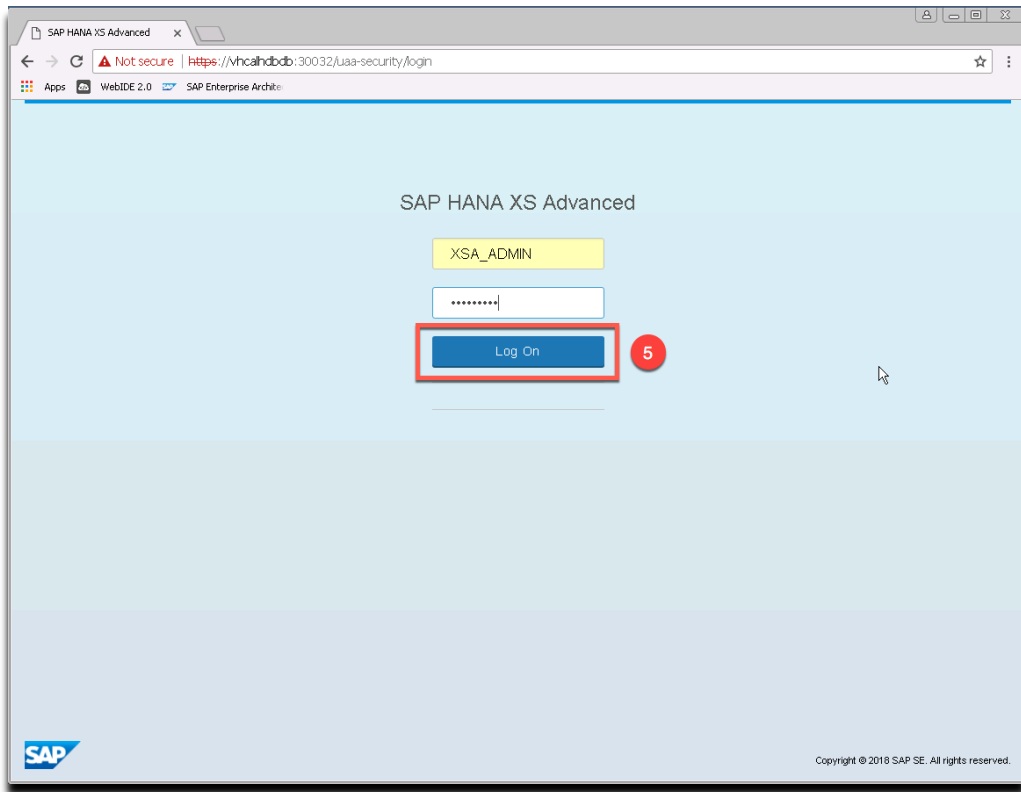
For more information, how to connect to the Frontend Server, see [Connecting to a Solution Instance](#).

SAP HANA Data Warehousing Foundation XS advanced applications are provided with a product archive file that can be installed either via the XS install command line interface or via the XSA application lifecycle management graphical user interface (HALM).

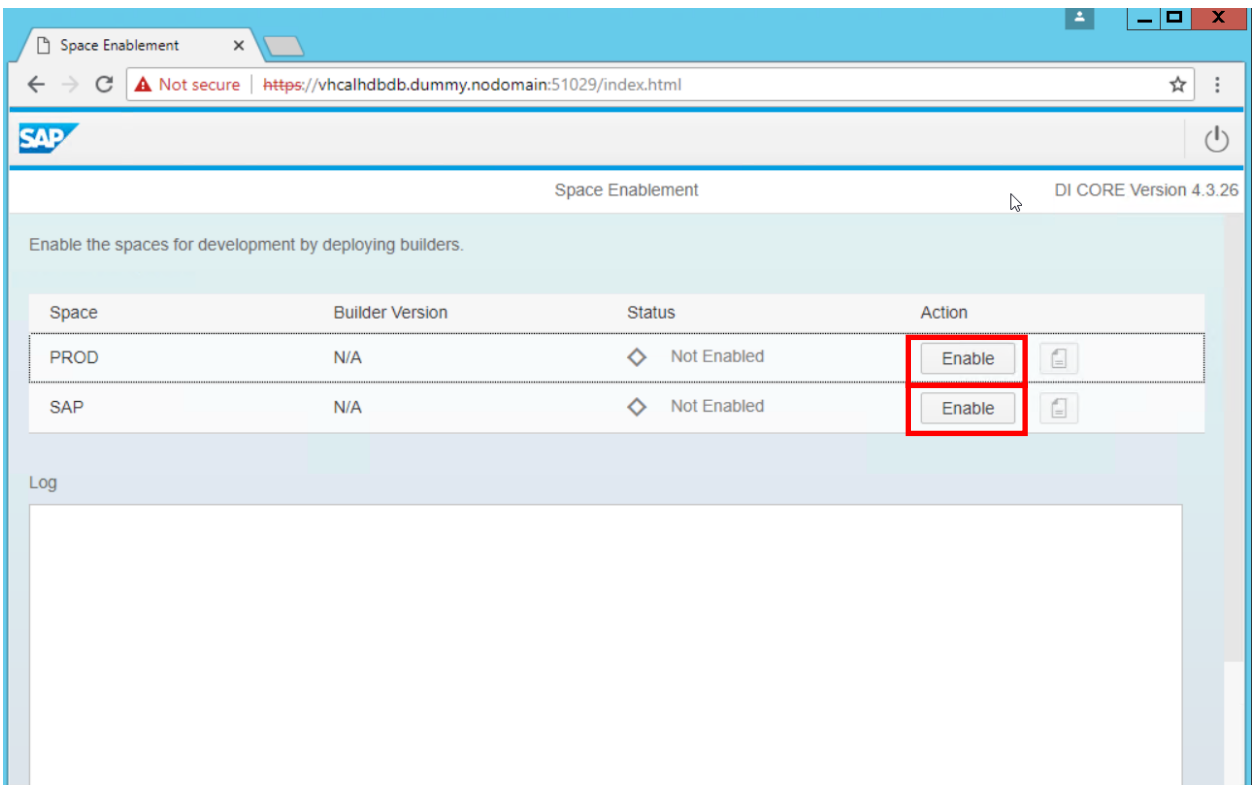
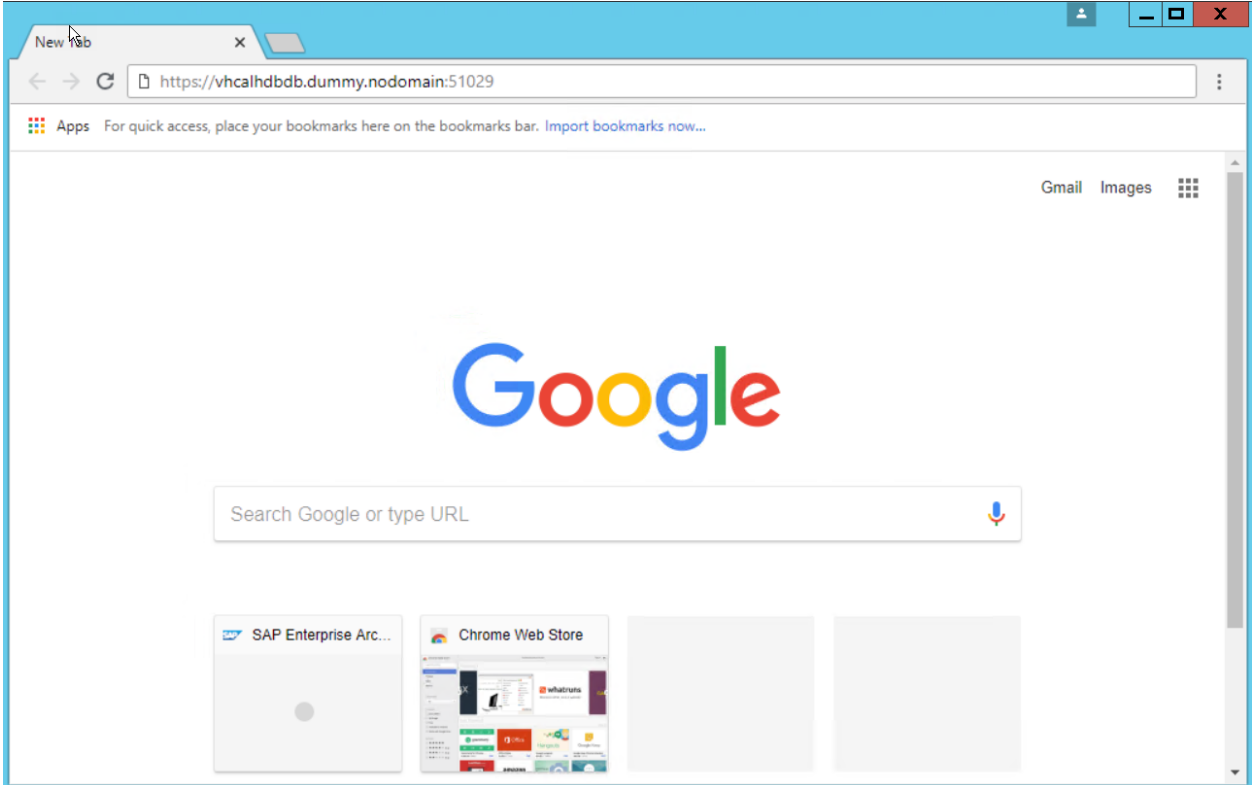
Name	Value	Description
Host name	vhcalhdbdb	The hostname of your Data Warehouse Foundation server instance you created in SAP CAL.
User	XSA_ADMIN	User for Data Warehouse server. Note: This user is an administrative user and can be used to create and manage other user accounts.
Password	<Master Password>	The initial master password of the system you provided in the SAP Cloud Appliance Library when creating the instance.

Once logged into the Windows Client system, you will be greeted by a Welcome page with all relevant URLs
You will have to accept the security warnings





Logon to the Space Enablement UI (<https://vhcalhdbdb.dummy.nodomain:51029>) to enable the DI-Builder within both SPACES (SAP & PROD).





Space Enablement

Not secure | https://vhcalhdbdb.dummy.nodomain:51029/index.html

SAP

Space Enablement DI CORE Version 4.3.26

Enable the spaces for development by deploying builders.

Space	Builder Version	Status	Action
PROD	4.3.26	✓ Enabled	Redeploy 
SAP	N/A	◇ Not Enabled	Enable 

Log

```
Application "di-builder" started and available at "https://vhcalhdbdb.dummy.nodomain:51041"
Publishing public provided dependencies for application "di-builder"...
Deleting discontinued configuration entries for application "di-builder"...
Creating subscriptions...
Registering service URLs...
Deleting discontinued subscriptions...
Deleting discontinued published dependencies...
Unregistering discontinued service URLs...
Creating service brokers...
Updating subscribers...
Process finished
The builder has been deployed successfully in space PROD.
The builder deployment has finished with status: SUCCESSFUL in space PROD.
The builder has been deployed successfully.
```

Space Enablement

DI CORE Version 4.3.26

Space	Builder Version	Status	Action
PROD	4.3.26	✓ Enabled	Redeploy
SAP	4.3.26	✓ Enabled	Redeploy

Log

```
1 of 1 instances running (1 down,1 running)
Application "di-builder" started and available at "https://vhcalhdbdb.dummy.nodomain:51040"
Publishing public provided dependencies for application "di-builder"...
Deleting discontinued configuration entries for application "di-builder"...
Creating subscriptions...
Registering service URLs...
Deleting discontinued subscriptions...
Deleting discontinued published dependencies...
Unregistering discontinued service URLs...
Creating service brokers...
Updating subscribers...
Process finished
The builder has been deployed successfully in space SAP.
The builder deployment has finished with status: SUCCESSFUL in space SAP.
The builder has been deployed successfully.
```

2.4 Database Server Details

Connect to SAP HANA using the information in the table below.

For more information, how to connect to the Frontend Server, see [Connecting to a Solution Instance](#).

Name	Value	Description
SID	HDB	System ID of the SAP system
Instance Number	00	Instance number of the central instance of the SAP System
DB Type	HDB	SAP HANA
Username	SYSTEM	These are the standard users which you can use to access the database server.
Password	<Master Password>	The initial master password of the system you provided in the SAP Cloud Appliance Library when creating the instance.
System Database	SYSTEMDB	SAP HANA SYSTEM Database, not for user data.
Tenant Database	HDB	SAP HANA Tenant database, this database is used for user data.

2.5 OS Users and Groups

Name	Description
hdbadm	SAP system administrator
sapsys	Group containing all <SID>adm users (should be a group in a central user storage like LDAP, NIS, or Active Directory)

2.5.1 Accessing Your Instance on OS Level

For information how to access a solution on OS level, go to [this FAQ wiki page](#) and check this question: How to connect to a running instance via the secure shell protocol (SSH)?

3 Licenses

3.1 Running Solution as a Trial for a Free Period

This solution can be used with a Free Trial License Agreement for the configured free period. You will be asked to agree to the Free Trial License Agreement during the instantiation steps.

Once you create the solution instance, the SAP system will generate a temporary license key that is sufficient for exploration purpose. After the expiration of the pre-installed temporary license a valid license is required to keep using the solution instance.

Note that you are not allowed to install license keys under the Free Trial License Agreement. You can continue the solution with the Product License Agreement any time prior to the end of the free period by unlocking it.

3.2 Running Solution with a Product License Key

To use the instance created from this solution under your own SAP Product License Agreements, you have to unlock the solution in SAP Cloud Appliance Library. As a prerequisite you must own the required SAP Product licenses and need to purchase the SAP Cloud Appliance Library subscription package. For more information, see [Unlocking Solutions](#).

3.3 License Key Installation

After unlocking the solution, you need to apply a valid license key to it. For this solution you have to request and install the following license keys:

SID	Product	Version	DB	OS	Comment
<i>HDB</i>	<i>SAP HANA, platform edition</i>	<i>SAP HANA 2.0, platform edition, in-memory Appliance</i>	<i>SAP HANA</i>	<i>Linux</i>	<i>Please choose the correct Memory Volume</i>
<i>HDB</i>	<i>SAP HANA, platform edition</i>	<i>SAP HANA, platform edition, Dynamic Tiering</i>	<i>SAP HANA</i>	<i>Linux</i>	<i>N/A</i>

To check the Product and the Version for your solution, go to the SAP License Keys application:

<https://launchpad.support.sap.com/#/licensekey>

For more information about how to request and install product license keys, see [this blog](#).

4 Security Aspects

Be aware that creating your instances in the public zone of your cloud computing platform is convenient but less secure. Ensure that only port 22 (SSH) is opened when working with Linux-based solutions and port 3389 (RDP) when working with Windows based solutions. In addition, we also recommend that you limit the access to your instances by defining a specific IP range in the Access Points settings, using [CIDR notation](#). The more complex but secure alternative is to set up a virtual private cloud (VPC) with VPN access, which is described in [this tutorial on SCN](#).

The list below describes the ports opened for the security group formed by the server components of your solution instance:

To access back-end servers on the operating system (OS) level, use the following information:

Protocol	Port	Description
SSH	22	Used for SSH connection to Linux-based servers
RDP	3389	Used for RDP connection to Windows based servers
https	51042	https://vhcalhdbdb.dummy.nodomain:51042 Capture, analyze, and present your organization's landscapes, strategies, requirements, processes, and data through your Web browser.
https	51041	https://vhcalhdbdb.dummy.nodomain:51041 DI-Builder within SPACES
https	53075	https://vhcalhdbdb.dummy.nodomain:53075 Use SAP WebIDE to create and manage Data Warehouse Foundation projects.
https	51029	https://vhcalhdbdb.dummy.nodomain:51029 Use the Space Enablement UI to enable the DI-Builder within the 2 SPACES (SAP & PROD)
https	51039	https://vhcalhdbdb.dummy.nodomain:51039 At runtime, you can use the SAP HANA XS Advanced Cockpit to perform the following: <ul style="list-style-type: none">• Manage Organizations and Spaces• Manage Users• Manage Hosts• Monitor Applications• Configure Trust and Manage Identities Manage Tenant Databases

You must change the initial user passwords provided by SAP when you log onto the system for the first time.

Note that when using **HANA based appliances**, HANA systems are not installed individually but **cloned from a template system**. As a consequence of this cloning process, the existing root keys are cloned. For more information, see this [SAP Note 2134846 - HANA encryption key handling during system cloning](#).

For more information about security vulnerabilities, see this [community page](#).

5 Solution Provisioning in SAP Cloud Appliance Library

If you have a user in SAP Cloud Appliance Library, you need to meet the following prerequisites before starting to use the SAP Cloud Appliance library:


- Cloud Provider Configurations

You have a valid account in one of the cloud providers supported by SAP Cloud Appliance Library. If you already have an active cloud provider account, you can proceed directly with the next section. Otherwise, navigate to the cloud provider home page and sign up.

For more information about the supported cloud providers, see the [FAQ page](#).

- Navigate to SAP Cloud Appliance Library

Open the SAP Cloud Appliance Library in your Web browser using the following link: <https://cal.sap.com>

For more information about how to use solutions in SAP Cloud Appliance Library, see the official documentation of SAP Cloud Appliance Library (choose [Support](#) → [Documentation](#) link and choose  (expand all) button to see all documents in the structure). You can also use the context help in SAP Cloud Appliance Library by choosing the [Help](#) panel from the right side.

6 Appendix



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