Getting Started with "SAP S/4HANA 1610 (FPS01): Fully Activated Appliance" on SAP Cloud Appliance Library

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1   Introduction

This guide provides information about SAP S/4HANA 1610 feature package stack (FPS) 01 - Fully Activated Landscape on SAP Cloud Appliance Library, and includes:

- o Technical components and business content within the solution.
- o System access information after you create your own solution instance.
- o Evaluation of business content.

This guide focuses on system landscape aspects as well as the steps to get the appliance initially available in SAP Cloud Appliance Library.

A general introduction into the appliance and the usage as trial or sandbox system for SAP S/4HANA can be found on https://blogs.sap.com/?p=406099.

More detailed information sources are also mentioned in chapter 4 of this guide.

Known issues will be continuously updated in this blog: https://blogs.sap.com/?p=424027

Video tutorials how to create an AWS account and how to launch the appliance can be found here.

Validity of this guide:

The SAP S/4HANA 1610 (FPS00) trial version was updated to SAP S/4HANA FPS01 in May 2017.

This guide in general is valid for both versions (the initial FPS00 and the FPS01 version) but you might find minor inconsistencies depending on what version you are using e.g. the screenshots are taken from the SAP S/4HANA 1610 version.

The FPS01 version is linked from the SAP S/4HANA trial home page but the FPS00 version will be available in SAP CAL for a certain timeframe after May 2017.

You can find the FPS00 version in http://cal.sap.com → Solutions → SAP S/4HANA 1610 Fully-Activated Appliance.

A note on browsers:

In the Fiori launchpad, you might find slightly different rendering behaviors depending on the browser version. If you encounter rendering problems, please search for SAP Notes how to potentially fix them.

Google Chrome is not pre-installed on this Remote Desktop. If you want to use it, either use a local installation of it or install it on the remote desktop from here (pick the version for Windows 10/8.1/8/7 64-bit).

For all browsers, you need to add the Fiori Launchpad to the trusted sites since the certificates in this trial are no signed/trusted. The screens and needed clicks will vary depending on the browser.

If you want to access the Fiori Launchpad with a local browser, please be sure to map your local host file as described in section 3.3 of this document or on https://www.sap.com/cmp/oth/crm-s4hana/s4hana-on-premise.html > Quick Start Guide.

For all browsers, you need to add the Fiori launchpad to the trusted sites since the certificates in this trial are no signed/trusted. The screens and needed clicks will vary depending on the browser.

1.1 About the Solution - Technical Components

In SAP Cloud Appliance Library (SAP CAL), the SAP S/4HANA 1610 FPS01 - Fully Activated Landscape on SAP Cloud Appliance Library consists of three virtual machines that are bundled into one solution:

1. SAP NetWeaver 7.51 application server ABAP incl. SAP S/4HANA 1610 FPS01
2. SAP NetWeaver 7.50 application server JAVA with installed Adobe Document Services.
3. Microsoft Windows Server 2012 (as remote desktop / Windows Terminal Server) for easy frontend access.
4. SAP BusinessObjects BI Platform 4.2 SP3 (containing pre-defined BI assets for analysis of SAP S/4HANA data)

Please refer to the appendix for details about technical software components included in this solution.

1.2 More Information & Support

A blog with more information can be found on https://blogs.sap.com/?p=406099.

If you are using the 30-day trial in SAP CAL (i.e. you haven't licensed a CAL subscription package), support is provided via the SAP Community. Please ask a question in https://answers.sap.com/questions/metadata/22943/sap-s4hana.html

If you have licensed the CAL subscription package, you can either ask a question in the above community or open an incident on

- component BC-VCM-CAL for CAL & connectivity issues
- sub-components of SV-CLD-… for application errors:

1.3 Operating system & platform users

If you need OS access, you must use SSH connectivity.

Use the default user root and the private key for the instance that is automatically generated while the SAP Cloud Appliance Library activates your instance. You can either store the key file within SAP CAL as attachment to your instance, or download it to a local secure file share on your computer.

Information how to connect using PuTTY can be found here.

The root user on Linux operating system level is defined as follows:

Parameter ID	Parameter Value	Note
OS User Name	root	The default OS Administrator user for Linux SUSE.
OS Password	<none>	Use the generated private key with SSH tools

The administration users for HANA and ABAP on operating system level are defined as follows:

Parameter ID	Parameter Value	Note
HANA administrator name	HDBADM	Additional user for HANA lifecycle management – start/stop, administration functions, recovery.
HANA administrator password	<Master Password>	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.
HANA SYSTEM user name	SYSTEM	
HANA SYSTEM user password	<Master Password>	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.
ABAP administrator name	s4hadm	Additional user for ABAP lifecycle management – start/stop, administration, functions, recovery.
ABAP administrator password	<Master Password>	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.
SAP Web Dispatcher administrator name (default)	BPINST	
SAP Web Dispatcher administrator password (default)	Welcome1	

The administration users for ASE and JAVA on operating system level are defined as follows:

Parameter ID	Parameter Value	Note
ASE administrator name	sybadm	Additional user for ASE lifecycle management – start/stop, administration, functions, recovery.
ASE administrator password	<Master Password>	The password is the same as the master password provided during

Parameter ID	Parameter Value	Note
		instance creation in the SAP Cloud Appliance Library.
JAVA administrator name	Administrator	Additional user for JAVA lifecycle management – start/stop, administration, functions, recovery.
JAVA administrator password	Welcome1	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.

The administration users for SAP BusinessObjects BI Platform are defined as follows:

Parameter ID	Parameter Value	Note
Administrator name	Administrator	Use for all administrative functions of the BI platform
Administrator password	Welcome1	
BI Power User	BPINST	
BI Power User password	Welcome1	

In the logon screen (http://bihost:8080/BOE/BI), use *bihost:6400* as system. Usage of *bihost* alias requires local host file mapping when using local PC access (see section 3.2). Windows remote desktop has the mapping pre-configured.

The administration users for MS Windows Remote Desktop are defined as follows:

Parameter ID	Parameter Value	Note
Administrator name	Administrator	Administration user (depending on your domain setup, you might need to use .\Administrator)
Administrator password	<Master Password>	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.

Please note the restrictions for logging on to the remote desktop:

- Only one concurrent logon session with user Administrator is possible at the same time
- Only two concurrent users can log on to the remote desktop at the same time i.e. you will have to create another user besides Administrator if you want to log on with two users in parallel

Additional users on operating system level are listed below:

Parameter ID	Parameter Value	Note
\<SID>adm User Group	sapsys	Group containing all \<SID>adm users (should be a group in a central user storage like LDAP, NIS, or Active Directory)
SAP System Administrator	daaadm	
SAP System Administrator password	\<Master Password>	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.

1.4   About the Solution - Business Content

The *SAP S/4HANA, on-premise edition - Fully Activated Landscape on SAP Cloud Appliance Library* provides you with a pre-configured SAP S/4HANA, on-premise landscape, including the following business content in dedicated ABAP clients.

Please see chapter 3 for logon procedure and users/passwords.

Client	Business Content	Sample users (all with password *Welcome1*)
000 Standard delivery client	o None (standard customizing only)	BPINST
100 Trial & Exploration client	o Pre-activated SAP Best Practices for SAP S/4HANA 1610 (Germany & US, sample demo flow localized for US) * o Customizing and transactional data in US company code (CC 1710) o SAP Fiori Apps o Based on the <u>merged-client</u> approach	S4H_FIN S4H_CO S4H_CASH S4H_EXT S4H_MDG S4H_MM S4H_PERS S4H_SD S4H_PP BPINST BPINST_ALL (caution: long loading times in Fiori Launchpad)

Client	Business Content		Sample users (all with password *Welcome1*)
200 Ready-to-Activate client(white list)	o	Ready-to-Activate client with all pre-activation preparation activities executed	BPINST
300 SAP Best Practices reference client (white list)	o o	Pre-activated SAP Best Practices for SAP S/4HANA 1610 (all 14 localizations) without transactional data Based on the white-list approach	BPINST
400 SAP BW client	o	Pre-activated BW content for SAP Integrated Business Planning for Finance	BPINST
500 SAP Best Practices reference client (merged-000-client)	o o	Pre-activated SAP Best Practices for SAP S/4HANA 1610 (all 14 localizations) without transactional data Based on the merged-client approach	BPINST

For more information about SAP Best Practices for SAP S/4HANA 1610, please visit:
http://service.sap.com/s4op

For information on the 'white-list' and 'merged-client' approach, please see here

For the Administrator Guide of SAP Best Practices for SAP S/4HANA 1610, please visit:
http://help.sap.com/s4hana_op_1610 → Additional Information → Administration Guide for the Implementation of SAP S/4HANA 1610.

* Please notice the following important notes:

(1) The US Best Practices localization have been configured without a Vertex account connected (i.e. tax codes etc. were entered manually as described in the attachments of SAP note 2330455).
If you would like to use VERTEX as part of your project, please configure your own Vertex account (see http://help.sap.com/s4hana_op_1610 → Additional Information → Administration Guide for the Implementation of SAP S/4HANA →PREREQUISITE settings →Carrying out technical setup (table section 'Set up VERTEX integration').

(2) Ariba Network integration: The system allows connection to the ARIBA network using the authentication via Shared Secret, however, this requires that you use your own Ariba credentials.
In order to proceed with the testing of SAP Best Practices scope items *J82 (Ariba - Business Network Integration)* and *19O (Ariba - Integration for Finance)* scenarios, the ARIBA Network ID and the Shared Secret of the ARIBA buyer need to be maintained with the help of the specific customizing activities as detailed on http://help.sap.com/s4hana_op_1610.

(3) Financial Services Network (FSN) is not configured / connected.

(4) The organizational structure and chart of accounts are activated in client 100 and client 300/500 as SAP Best Practices content provided. Client 200 & 400 don't contain these settings.

1.5   Security Aspects

By default, some ports are opened for the security group formed by the server components of your solution instance. The access from your local computer to your system instance happens via those ports (see 'Description' what port is used where).

Virtual Machine*	Protocol	Port (open by default)	Description
JAVA	SSH	22	Used for secure connection to Linux-based server operating system
JAVA	HTTPS	50001	Used for access to SAP NetWeaver Administrator and other web-based J2EE applications
ABAP	SSH	22	Used for secure connection to Linux-based server operating system
ABAP	HTTPS	44301 & 44300	Used for access of a local web browser to appliance (Fiori Launchpad of SAP S/4HANA)
ABAP	SAP GUI	3200	Used for access of local SAP GUI to appliance
ABAP	TCP	3300	Used for connection of ABAP Development Tools (Eclipse-based) to SAP S/4HANA ABAP repository
ABAP	TCP	30215	Used for connection of SAP HANA Studio to HANA DB
BIP	SSH	22	Used for secure connection to Linux-based server operating system
BIP	HTTP	8080 & 6400	Used for HTTP connection to BI platform
WIN	RDP	3389	Used for access from MS Windows remote desktop connection

JAVA = SAP NetWeaver 7.50 AS JAVA incl. ADS
ABAP = SAP NetWeaver 7.51 AS ABAP incl. SAP S/4HANA
BIP = SAP BusinessObjects BI Platform 4.2
WIN = MS Windows Remote Desktop

You can edit/add/remove ports manually in the instance details (click on the instance link in the CAL console → Edit → Virtual Machine → Access Points).

Be aware that creating your instances in the public zone of your cloud computing platform is convenient, but less secure. We recommend that in this case, you only open port 22 (SSH) when working with Linux-based solutions, and port 3389 (RDP) when working with Windows based solutions if your business requirements allow for this.

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.

Note that when using HANA-based appliances, HANA systems are not installed individually, but cloned from a template system. Consequently, 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.

General Security Guidelines

To access the latest version of the SAP system Security Guide, please refer to http://help.sap.com/s4hana_op_1610 → Product Documentation → Security Guide

1.6 Solution Usage and Licenses

1.6.1 SAP Free Trial License Agreement

You can start to use this solution within SAP CAL under an SAP Free Trial License Agreement for 30 days. The trial software is licensed, not sold. The Trial Software is licensed to you free of charge during the term of this Agreement. During this period, the system is up-and-running using a temporary SAP product license.

1.6.2 SAP Product License Agreement

For a longer period of usage, you can switch the solution usage from a SAP Free Trial License Agreement to a SAP Product License Agreement. This requires that you

1. own the required SAP product licenses and
2. purchase a SAP Cloud Appliance Library subscription package.

Once you have fulfilled these requirements, please see Unlocking Solutions in the SAP Cloud Appliance Library how to use a solution beyond the first 30 days,

1.6.2.1 SAP Product License Keys Installation

If you want to use the solution under a SAP Product License Agreement (e.g. beyond the SAP-license-free trial), you should install the following relevant SAP product license keys:

1. SAP HANA license key, to be installed via SAP HANA Studio / Eclipse

2. SAP S/4HANA 1610 license key, to be installed via SAP Logon (tCod SLICENSE)
3. SAP NetWeaver 7.5 J2EE, to be installed via SAP NetWeaver Administrator

Note:

The SAP NetWeaver J2EE engine (JAVA stack) is used as platform for the Adobe Document Services.
The separate licensing of Adobe Document Services / Interactive Forms by Adobe (IFbA) is not mandatory for SAP S/4HANA, however, the following conditions apply.

      a) The use of SAP print forms is always free of charge.

      b) For SAP Interactive Forms, using the pre-delivered interactive forms is free of charge.

      c) Also, if you make cosmetic changes to these forms, it is still free of charge.

      d) However, if you make non-cosmetic changes to the forms or create new forms, you need a separate license for Adobe Document Services / IFbA

Use the link https://launchpad.support.sap.com/#/licensekey to apply the related license keys:

SID	Product	Version	DB	OS	Comment
HDB	SAP HANA, platform edition	SAP HANA 1.0, platform edition	n/a	Linux	Please choose 256 GB Memory Volume
S4H	SAP S/4HANA	SAP S/4HANA 1610	SAP HANA	Linux	N/A
J2E	SAP NetWeaver	SAP NetWeaver 7.5	Sybase ASE	Linux	As license type, select 'J2EE - Web AS JAVA'
BIP	SAP BusinessObjects Business Intelligence platform	SAP BusinessObjects Business Intelligence platform 4.2	N/A	Linux	Please choose XI 4.2 as version in the license key generator

For more information on how to request and install product license keys, see this SCN blog.

2 Solution Provisioning in SAP Cloud Appliance Library

Note: The screenshots in this guide mention SAP S/4HANA 1610 Fully-Activated appliance, but the same procedure is valid for the SAP S/4HANA 1610 FPS01 Fully-Activated appliance.

2.1 Prerequisite: Possess a cloud provider account

You need to have a valid account in one of the cloud providers supported by SAP Cloud Appliance Library including the corresponding secret keys for this account.

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.
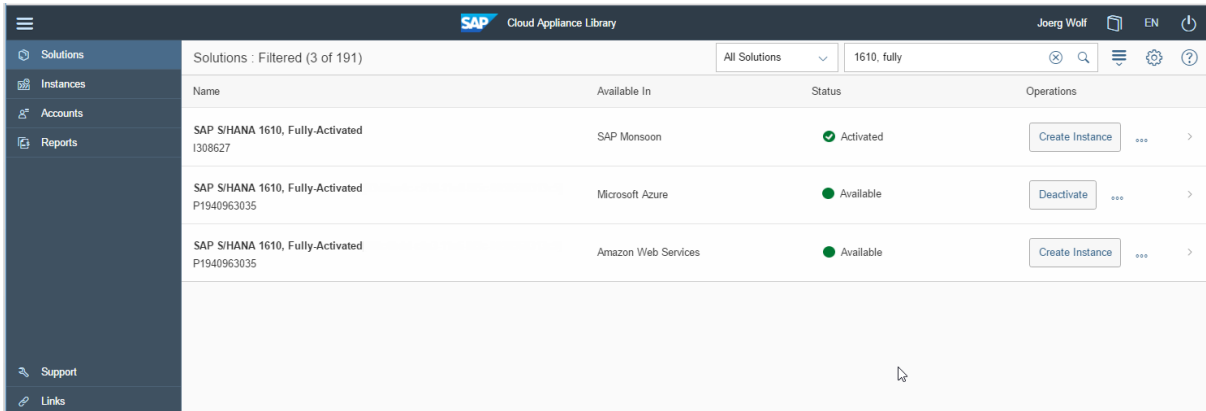
2.2 Access SAP Cloud Appliance Library (SAP CAL)

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

If you don't have an account in SAP CAL (this is different from the cloud provider account), please register. This will not raise any additional costs.

2.3 Create your system instance within the SAP CAL console

Once the SAP CAL console is displayed, go to *Solutions* (list of available system templates) and search for SAP S/4HANA. Click on *Create Instance* (this will become your personal system) and follow the steps on the screen.

A 'Quick Start Guide' with step-by-step instructions can be found on the SAP S/4HANA 1610 trial home page.

For general information on how to create an instance (i.e. your personal system) from any solution (i.e. a template) in the SAP Cloud Appliance Library, see the official documentation of SAP Cloud Appliance Library (choose the *Support → Documentation* link and select the *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.

3   Connecting to Your Solution

3.1   Choose your option for connecting to the appliance: Windows remote desktop or local PC

The appliance can be accessed via a preconfigured Windows remote desktop (option 1) or via client tools on your local PC (option 2).

For first steps with the appliance, we recommend access via the remote desktop since you only need to have the Windows remote desktop client installed on your PC which in most cases will be the case,

Since UI performance and flexibility are usually better via access from your local PC, please evaluate if you can use this method as standard access. It requires administrator access on your PC and 5 minutes of effort.

3.2   Option 1: System access via embedded Windows Remote Desktop frontend server

1.   After your own solution instance is created (~ 60 minutes), click the *Connect* button in the Instances view of the console.
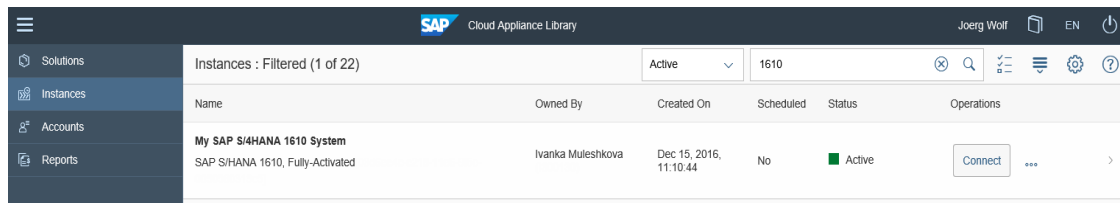
2.   In the pop-up, click *Connect* in the RDP Virtual Machine: Windows Remote Desktop line .
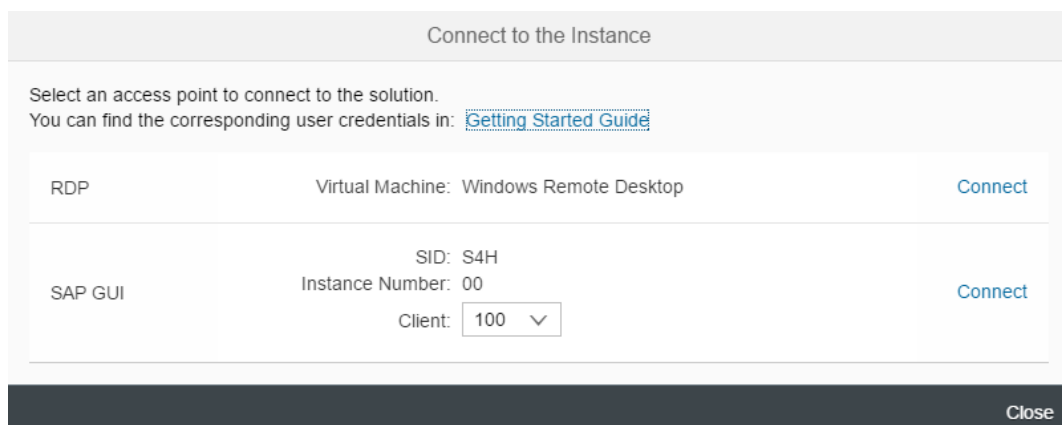
3.   Confirm the pop-up window to allow Remote Desktop Connection.
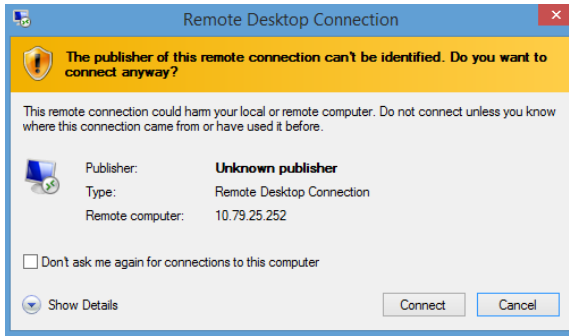
4. Enter user *Administrator* and your solution master password generated during the solution instance creation.
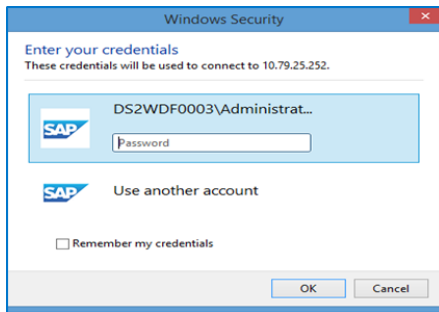
You are now in the pre-configured Windows Frontend Server. Follow the information on the Welcome page to logon, and to run sample scenarios. More details on system connectivity can be found in section 3.3.
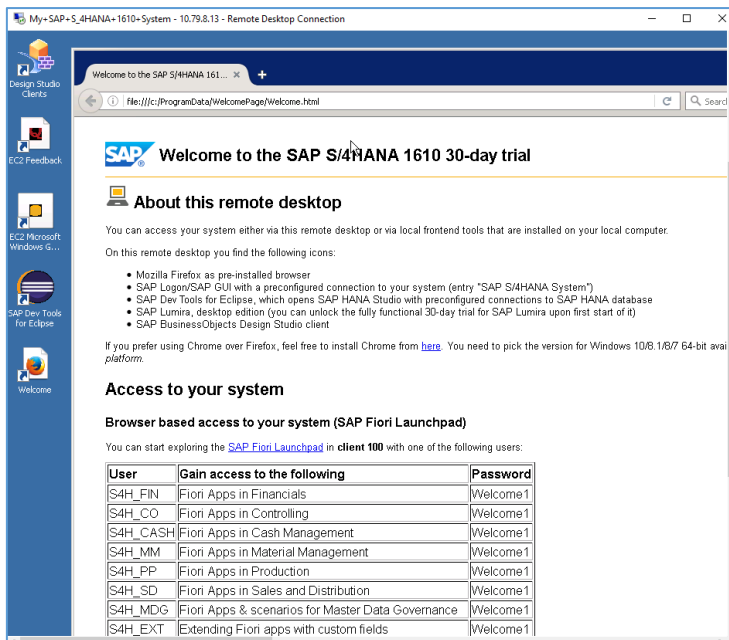
Note that the embedded Windows Frontend Server license allows 2 concurrent sessions (one for user Administrator and one for another user that you first have to create on the remote desktop).

3.3 Option 2: System access via local PC

3.3.1 Mapping local /etc/hosts file

In order to logon to web access, as for example the Fiori Launchpad from your local PC, you need to ensure that you have mapped the IP address to the Hosts file on your local PC:

1. Open *Notepad* as administrator (search for *Notepad* on your computer, right mouse click, 'Run as administrator'):
2. Click *File → Open* and enter the following path:

   For Windows operating system: `c:\windows\system32\drivers\etc\hosts`
   For Linux operating system: `/etc/hosts`
3. Ensure to select *All Files (*.*)*
4. Open the *hosts* file and add the following lines to it (the IP addresses for the servers are displayed in the CAL console in the instance properties):

   ```
   # S4H Appliance
   <IP Address SAP S/4HANA / HDB server> vhcals4hci.dummy.nodomain vhcals4hci
   vhcals4hcs.dummy.nodomain vhcals4hcs vhcalhdbdb vhcaldhbdb.dummy.nodomain
   <IP Address SAP NW JAVA/ASE/ADS server> vhcalj2eci.dummy.nodomain vhcalj2eci
   vhcalj2ecs.dummy.nodomain vhcalj2ecs vhcalj2edb vhcalj2edb.dummy.nodomain
   <IP Address SAP BI Platform > bihost bihost.dummy.nodomain
   ```

5. Save the *hosts* file and exit.

3.3.2 Configure ";*.dummy.nodomain" for Web Browser

Working with the <dummy.nodomain> might require changes in your web browser, in case there is a web proxy defined (if you are unsure or detect connectivity issues, please contact your network administrator):

1. If you are using Google Chrome as web browser, follow these steps:
   1. Logon to *Chrome → Settings → Show Advanced Settings → Network → Change proxy settings → LAN Settings → Proxy Server → Advanced*
   2. In the *Exceptions*, add **;*.dummy.nodomain** directly at the end of the existing entry.
   3. Click OK.

2. If you are using Internet Explorer as web browser, follow these steps:
   1. Logon to *Internet Explorer → Internet Options → Connections → LAN Settings → Proxy Server → Advanced*
   2. In the *Exceptions*, add **;*.dummy.nodomain** direct at the end of the existing entry.
   3. Click OK.

   See an example in the screenshot below:
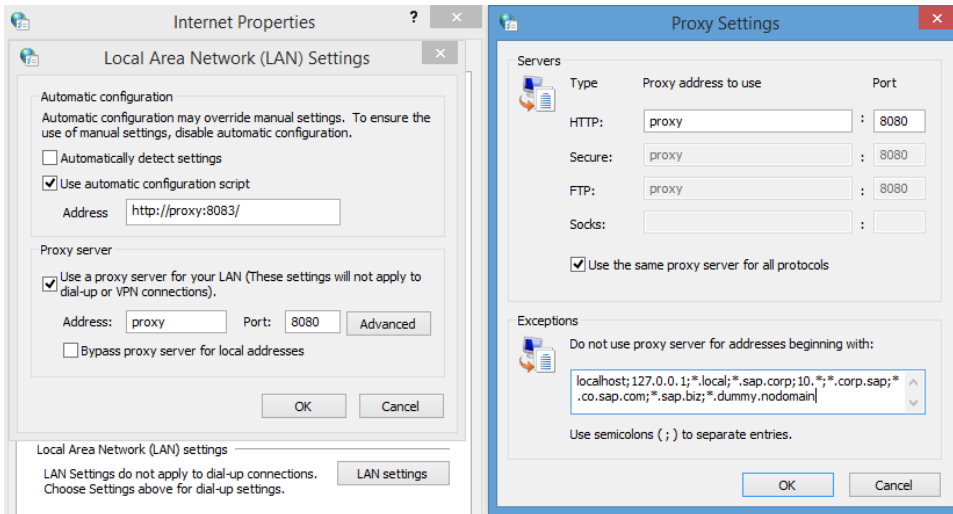
3.3.3 Install SAP Client Software Locally

Note upfront:
The path to download SAP software might change after publication of this document so please search on the SAP support portal also in other places if these paths do not work.

We recommend to have SAP GUI and SAP HANA Studio installed (the latter potentially in combination with the ABAP Development tools).

3.3.3.1 SAP GUI for S/4HANA

If not already installed on your PC, download SAP GUI 7.40 or higher.

Open the SAP Support Portal Software Download page https://support.sap.com/swdc and search for SAP GUI.

Note:
The remote desktop has the SAP GUI incl. a defined connection to your SAP S/4HANA system already installed.

3.3.3.2 SAP HANA Studio

Download the SAP HANA Studio for your operating system from the SAP Support Portal or embed into an existing Eclipse installation as mentioned on https://tools.hana.ondemand.com/#hanatools

Note:
The remote desktop has the SAP HANA Studio incl. a defined connection to your SAP S/4HANA system already installed as part of the ABAP Development Tools (SAP HANA Modelling and some other perspectives in Eclipse).

3.3.3.3 ABAP Development Tools (ADT) (optional)

You can find the installation package for the ABAP Development Tools (ADT) at
https://tools.hana.ondemand.com.

Note:
The remote desktop has the ADT tools incl. a defined connection to your SAP S/4HANA system already installed.

3.3.3.4 SAP BusinessObjects tools for analytical scenarios beyond the embedded analytics of SAP S/4HANA

The SAP BusinessObjects tools can be used to connect to an SAP S/4HANA system and analyze data based on the Core Data Services Views (CDS views) of SAP S/4HANA.

The following tools might be worth looking into
1. **SAP Business Objects tools for analysis, edition for Microsoft Office**
    - o Requires an installed Microsoft Office suite on your local PC and can then be downloaded from
       https://support.sap.com/swdc
    - o The remote desktop has no MS Office installed (due to licensing constraints) so we recommend to use
       SAP Business Objects Analysis, edition for Microsoft Office on a local PC only.

2. **SAP Lumira**
    - o Can be downloaded from https://support.sap.com/swdc
    - o The remote desktop has SAP Lumira pre-installed.

3. **SAP BusinessObjects Design Studio**
    - o Can be downloaded from https://support.sap.com/swdc
    - o The remote desktop has SAP Design Studio pre-installed.

3.4 Connecting to SAP S4HANA & SAP HANA DB

3.4.1 Connecting to SAP S/4HANA via Fiori Launchpad

The Fiori Launchpad follows the standard address format: https://<hostname>.<domain name>:<port>/sap/bc/ui5_ui5/ui2/ushell/shells/abap/fiorilaunchpad.html

After you have mapped the IP address and hostname in the hosts file, you can access the default Fiori Launchpad at the link below.

https://vhcals4hci.dummy.nodomain:44300/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html?sap-client=100&sap-language=EN

When you get the warning "Your connection is not private" (or similar as this depends on the browser), click "Advanced", click "Proceed to vhcals4hci.dummy.nodomain (unsafe)", and then proceed with the user/client below.

Parameter ID	Parameter Value	Note
User Name	BPINST BPINST_ALL S4H_FIN S4H_CO S4H_CASH S4H_EXT S4H_MDG S4H_MM S4H_PERS S4H_SD S4H_PP	Caution: BPINST_ALL has a large number of business roles and Fiori tiles assigned. Initial loading times will be significant and not all tiles will be working properly since not all are configured. Use BPINST_ALL to browse through the Fiori tiles to understand what ins delivered with SAP S/4HANA in general. S4H_* users have application related business roles and have access to the respective application web-based apps. Please see the demo guide on https://go.sap.com/cmp/oth/crm-s4hana/s4hana-on-premise.html for details on demo scenarios and respective users.
Password	Welcome1	
Client	100	

3.4.2   Connecting to SAP S/4HANA via SAP GUI

Procedure

1. Start the SAP Logon.
2. Choose *New entry → User defined*.
3. In the System wizard, specify the following parameters:

Parameter ID	Parameter Value	Note
Application Server	<IP Address of SAP S/4HANA ABAB Virtual Machine> or alternatively, a mapped host name from	The IP address of the S4HANA instance from the SAP Cloud Appliance Library

Parameter ID		Parameter Value	Note
		your hosts file e.g. vhcals4hci (see 3.2.1)	
Instance Number		00	ABAP instance number used by the appliance.
System-ID		S4H	ABAP system id used by the appliance.
Client /User and Password	000	Client 000: SAP*, <Master Password> Client 000: DDIC, <Master Password> BPINST/Welcome1	Default technical users
	100	BPINST / Welcome1 S4H_FIN / Welcome1 S4H_CO/ Welcome1 S4H_Cash / Welcome1 S4H_MM / Welcome1 S4H_MM1 / Welcome1 S4H_SD / Welcome1 S4H_PP / Welcome1	Exploration client
	200	BPINST /Welcome1	SAP Best Practices content reference client
	300	BPINST /Welcome1	Pre-activated SAP Best Practices based on the white-list approach
	400	BPINST /Welcome1	BW Client
	500		Pre-activated SAP Best Practices based on the merged-client approach

3.4.2.1   Connecting to HANA via SAP HANA Studio

Procedure

1. Start the installed SAP HANA Studio

2. Open the Navigator view and right click on this view. Then choose Add System.

In the System wizard, specify the following parameters:

Parameter ID	Parameter Value	Note
Hostname	<IP Address of SAP S/4HANA ABAB Virtual Machine> or alternatively, a mapped host name from your hosts file e.g. vhcals4hci (see 3.2.1)	The IP address of the S4H/HANA instance from the SAP Cloud Appliance Library since the SAP HANA DB runs on the same host.
Instance Number	02	HANA instance number used for the appliance.
HANA SYSTEM User Name	SYSTEM	Default administrator user for HANA access to HANA
Password SYSTEM User Name	<Master Password>	The password is the same as the master password provided during instance creation in the SAP Cloud Appliance Library.
User for HANA Rules Framework	HRF_TECH_USER	Background user in HANA used
Password for HANA Rules Framework	Welcome1	

The system ID of the database is HDB. It is recognized automatically via the host name.

3.4.2.2 Connecting to SAP JAVA Administrator Portal

Enter the URL http://vhcalj2eci.dummy.nodomain:50000/ into your browser (this works only if you have maintained your host file).

If you haven't maintained the hosts file yet the URL http://<IP address of NW JAVA / ASE virtual machine>:50000/ will also work.
Administrator user and password are described in chapter 1.3.

3.4.2.3 Connecting to SAP BusinessObjects BI Platform

For the BI Launchpad, enter the URL http://bihost:8080/BOE/BI into your browser. For the central management console, enter http://bihost:8080/BOE/CMC (this works only if you have maintained your host file).

If you haven't maintained the hosts file yet the URLs http://<IP address of SBOP BI Platform virtual machine>:8080/... will also work.
Administrator user and password are described in chapter 1.3

4 Evaluate Business Content and Processes for Pre-Deployed Scenarios

4.1 Pre-configured Demo Guide

On the SAP S/4HANA, on-premise trial landing page https://go.sap.com/cmp/oth/crm-s4hana/s4hana-on-premise.html, you can find a `Demo Guide`, which describes end-to-end business processes, such as Order-to-Cash; Procure-to-Pay; Plan-to-Production, and others.

4.2 SAP Best Practices in general

To evaluate SAP Best Practices for SAP S/4HANA please see http://service.sap.com/s4op.

There, you can find process diagrams, test scripts and configuration guides for the SAP Best Practices.

4.3 SAP Best Practices Administration Guide & SAP Note

For the Administrator Guide of SAP Best Practices for SAP S/4HANA 1610, please visit
http://help.sap.com/s4hana_op_1610 → *Additional Information* → *Administration Guide for Solution Implementation of SAP S/4HANA, on-premise edition.*

This guide has been the basis for creating this appliance.

The central SAP Note for this appliance is https://launchpad.support.sap.com/#/notes/2396478

5 Additional Information

5.1 Integrated User Assistance ('Web Assistant')

You can also explore the integrated user assistance of the SAP Fiori Launchpad that gives users in-context-help for a select number of Fiori apps.

For Fiori apps that are enabled for the Web Assistant, you will find a questions mark in a circle on the upper right corner of your browser. When you click on it, help items will be displayed for this tile.

As an example, open the Manage Customer Line Items app with user S4H_FIN (password Welcome1, language EN, client 100).

Once the page is loaded, click on the question mark icon and hover over the respective topics to see help content.

Notes:

1. The question mark icon will only be displayed on pages where an online help entry has been defined by SAP.

2. If you create your own solution **in public cloud** (i.e. no proxy needed), you can experience the online help function without changing any parameters.
   If you create your own solution **via VPN as extension to your company network** (i.e. the proxy settings of your company are used), you will need to adjust the web dispatcher configuration parameters accordingly by maintaining the parameters "wdisp/system_xx" following the web dispatcher guide on *http://help.sap.com/saphelp_nw75/helpdata/en/48/99d142ee2b73e7e10000000a42189b/frameset.htm* → Tasks → Parameterization/configuration

5.2   Calling a web-based ABAP Transaction

If you call any web based transaction via a transaction from the ABAP layer (for example, transactions NWBC or BRF+), a blank browser page will show up.

The root cause of this behavior are the self-signed certificates and trust relationship between your browser and the server called when running the transaction.

The workaround for eliminating this behavior is to launch the web-based transactions for a second time from SAP GUI while add the certificate to the IE trust root certificates as follows (instead of IE, it can also be another browser called on your pc).

1. Call the transaction that launches the web application (for example, NWBC)
2. A browser window with a certificate warning will pop up (exact message depends on browser version)
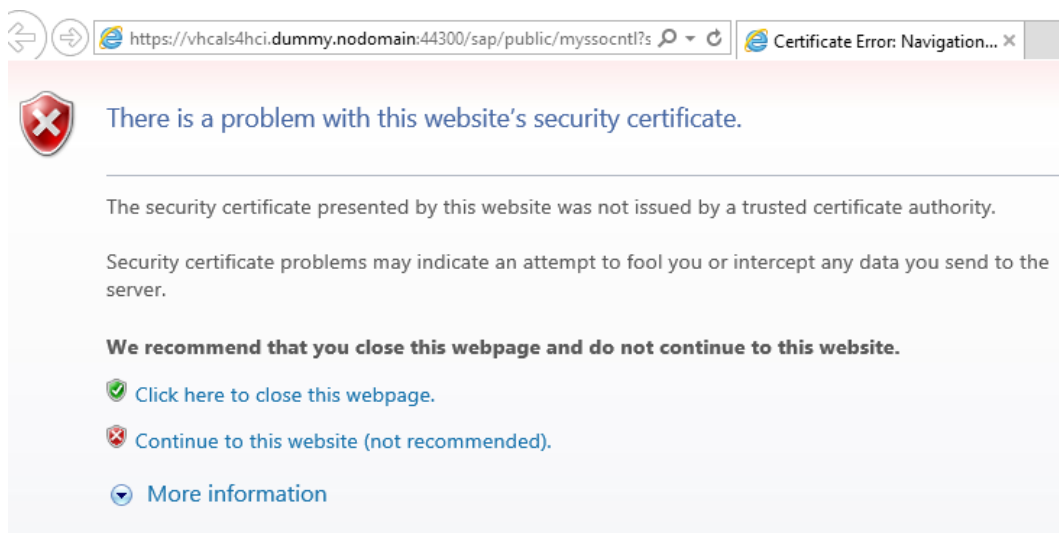
3. Select *Continue to this website* and you will see a message like this and an empty browser page (exact message depends on browser)

4. Leave the browser session open and launch the same transaction again from SAP GUI. This time, the transaction will open in the browser.

6　Appendix

6.1　Installed Technical Component Details

6.1.1　SAP NetWeaver 7.51 application server ABAP incl. SAP S/4HANA 1610 FPS01

Installed Software Components

Component	Release	SP-Level	Support Package	Short Description of Component
SAP_BASIS	751	0001	SAPK-75101INSAPBASIS	SAP Basis Component
SAP_ABA	75B	0001	SAPK-75B01INSAPABA	Cross-Application Component
SAP_GWFND	751	0001	SAPK-75101INSAPGWFND	SAP Gateway Foundation 7.40
SAP_UI	751	0002	SAPK-75102INSAPUI	User Interface Technology 7.40
ST-PI	740	0006	SAPK-74006INSTPI	SAP Solution Tools Plug-In
SAP_BW	751	0001	SAPK-75101INSAPBW	SAP Business Warehouse
UIBAS001	200	0001	SAPK-20001INUIBAS001	UI for Basis Applications 1.0
MDG_FND	801	0001	SAPK-80101INMDGFND	MDG Foundation
WEBCUIF	801	0001	SAPK-80101INWEBCUIF	SAP Web UI Framework
MDG_APPL	801	0001	SAPK-80101INMDGAPPL	MDG Applications
MDG_UX	801	0001	SAPK-80101INMDGUX	MDG Applications
S4CORE	101	0001	SAPK-10101INS4CORE	S4CORE

Component	Release	SP-Level	Support Package	Short Description of Component
SAP_HR	608	0036	SAPKE60836	Human Resources
SAP_HRCAE	608	0036	SAPK-60836INSAPHRCAE	Subcomponent SAP_HRCAE of SAP_HR
SAP_HRCAR	608	0036	SAPK-60836INSAPHRCAR	Subcomponent SAP_HRCAR of SAP_HR
SAP_HRCAT	608	0036	SAPK-60836INSAPHRCAT	Subcomponent SAP_HRCAT of SAP_HR
SAP_HRCAU	608	0036	SAPK-60836INSAPHRCAU	Subcomponent SAP_HRCAU of SAP_HR
SAP_HRCBE	608	0036	SAPK-60836INSAPHRCBE	Subcomponent SAP_HRCBE of SAP_HR
SAP_HRCBG	608	0036	SAPK-60836INSAPHRCBG	Subcomponent SAP_HRCBG of SAP_HR
SAP_HRCBR	608	0036	SAPK-60836INSAPHRCBR	Subcomponent SAP_HRCBR of SAP_HR
SAP_HRCCA	608	0036	SAPK-60836INSAPHRCCA	Subcomponent SAP_HRCCA of SAP_HR
SAP_HRCCH	608	0036	SAPK-60836INSAPHRCCH	Subcomponent SAP_HRCCH of SAP_HR
SAP_HRCCL	608	0036	SAPK-60836INSAPHRCCL	Subcomponent SAP_HRCCL of SAP_HR
SAP_HRCCN	608	0036	SAPK-60836INSAPHRCCN	Subcomponent SAP_HRCCN of SAP_HR
SAP_HRCCO	608	0036	SAPK-60836INSAPHRCCO	Subcomponent SAP_HRCCO of SAP_HR
SAP_HRCCZ	608	0036	SAPK-60836INSAPHRCCZ	Subcomponent SAP_HRCCZ of SAP_HR
SAP_HRCDE	608	0036	SAPK-60836INSAPHRCDE	Subcomponent SAP_HRCDE of SAP_HR
SAP_HRCDK	608	0036	SAPK-60836INSAPHRCDK	Subcomponent SAP_HRCDK of SAP_HR
SAP_HRCEG	608	0036	SAPK-60836INSAPHRCEG	Subcomponent SAP_HRCEG of SAP_HR
SAP_HRCES	608	0036	SAPK-60836INSAPHRCES	Subcomponent SAP_HRCES of SAP_HR
SAP_HRCFI	608	0036	SAPK-60836INSAPHRCFI	Subcomponent SAP_HRCFI of SAP_HR

Component	Release	SP-Level	Support Package	Short Description of Component
SAP_HRCFR	608	0036	SAPK-60836INSAPHRCFR	Subcomponent SAP_HRCFR of SAP_HR
SAP_HRCGB	608	0036	SAPK-60836INSAPHRCGB	Subcomponent SAP_HRCGB of SAP_HR
SAP_HRCGR	608	0036	SAPK-60836INSAPHRCGR	Subcomponent SAP_HRCGR of SAP_HR
SAP_HRCHK	608	0036	SAPK-60836INSAPHRCHK	Subcomponent SAP_HRCHK of SAP_HR
SAP_HRCHR	608	0036	SAPK-60836INSAPHRCHR	Subcomponent SAP_HRCHR of SAP_HR
SAP_HRCHU	608	0036	SAPK-60836INSAPHRCHU	Subcomponent SAP_HRCHU of SAP_HR
SAP_HRCID	608	0036	SAPK-60836INSAPHRCID	Subcomponent SAP_HRCID of SAP_HR
SAP_HRCIE	608	0036	SAPK-60836INSAPHRCIE	Subcomponent SAP_HRCIE of SAP_HR
SAP_HRCIN	608	0036	SAPK-60836INSAPHRCIN	Subcomponent SAP_HRCIN of SAP_HR
SAP_HRCIT	608	0036	SAPK-60836INSAPHRCIT	Subcomponent SAP_HRCIT of SAP_HR
SAP_HRCJP	608	0036	SAPK-60836INSAPHRCJP	Subcomponent SAP_HRCJP of SAP_HR
SAP_HRCKR	608	0036	SAPK-60836INSAPHRCKR	Subcomponent SAP_HRCKR of SAP_HR
SAP_HRCKW	608	0036	SAPK-60836INSAPHRCKW	Subcomponent SAP_HRCKW of SAP_HR
SAP_HRCKZ	608	0036	SAPK-60836INSAPHRCKZ	Subcomponent SAP_HRCKZ of SAP_HR
SAP_HRCMX	608	0036	SAPK-60836INSAPHRCMX	Subcomponent SAP_HRCMX of SAP_HR
SAP_HRCMY	608	0036	SAPK-60836INSAPHRCMY	Subcomponent SAP_HRCMY of SAP_HR
SAP_HRCNL	608	0036	SAPK-60836INSAPHRCNL	Subcomponent SAP_HRCNL of SAP_HR
SAP_HRCNO	608	0036	SAPK-60836INSAPHRCNO	Subcomponent SAP_HRCNO of SAP_HR

Component	Release	SP-Level	Support Package	Short Description of Component
SAP_HRCNZ	608	0036	SAPK-60836INSAPHRCNZ	Subcomponent SAP_HRCNZ of SAP_HR
SAP_HRCOM	608	0036	SAPK-60836INSAPHRCOM	Subcomponent SAP_HRCOM of SAP_HR
SAP_HRCPH	608	0036	SAPK-60836INSAPHRCPH	Subcomponent SAP_HRCPH of SAP_HR
SAP_HRCPL	608	0036	SAPK-60836INSAPHRCPL	Subcomponent SAP_HRCPL of SAP_HR
SAP_HRCPT	608	0036	SAPK-60836INSAPHRCPT	Subcomponent SAP_HRCPT of SAP_HR
SAP_HRCQA	608	0036	SAPK-60836INSAPHRCQA	Subcomponent SAP_HRCQA of SAP_HR
SAP_HRCRO	608	0036	SAPK-60836INSAPHRCRO	Subcomponent SAP_HRCRO of SAP_HR
SAP_HRCRU	608	0036	SAPK-60836INSAPHRCRU	Subcomponent SAP_HRCRU of SAP_HR
SAP_HRCSA	608	0036	SAPK-60836INSAPHRCSA	Subcomponent SAP_HRCSA of SAP_HR
SAP_HRCSE	608	0036	SAPK-60836INSAPHRCSE	Subcomponent SAP_HRCSE of SAP_HR
SAP_HRCSG	608	0036	SAPK-60836INSAPHRCSG	Subcomponent SAP_HRCSG of SAP_HR
SAP_HRCSI	608	0036	SAPK-60836INSAPHRCSI	Subcomponent SAP_HRCSI of SAP_HR
SAP_HRCSK	608	0036	SAPK-60836INSAPHRCSK	Subcomponent SAP_HRCSK of SAP_HR
SAP_HRCTH	608	0036	SAPK-60836INSAPHRCTH	Subcomponent SAP_HRCTH of SAP_HR
SAP_HRCTR	608	0036	SAPK-60836INSAPHRCTR	Subcomponent SAP_HRCTR of SAP_HR
SAP_HRCTW	608	0036	SAPK-60836INSAPHRCTW	Subcomponent SAP_HRCTW of SAP_HR
SAP_HRCUA	608	0036	SAPK-60836INSAPHRCUA	Subcomponent SAP_HRCUA of SAP_HR
SAP_HRCUN	608	0036	SAPK-60836INSAPHRCUN	Subcomponent SAP_HRCUN of SAP_HR

Component	Release	SP-Level	Support Package	Short Description of Component
SAP_HRCUS	608	0036	SAPK-60836INSAPHRCUS	Subcomponent SAP_HRCUS of SAP_HR
SAP_HRCVE	608	0036	SAPK-60836INSAPHRCVE	Subcomponent SAP_HRCVE of SAP_HR
SAP_HRCZA	608	0036	SAPK-60836INSAPHRCZA	Subcomponent SAP_HRCZA of SAP_HR
SAP_HRGXX	608	0036	SAPK-60836INSAPHRGXX	Subcomponent SAP_HRGXX of SAP_HR
SAP_HRRXX	608	0036	SAPK-60836INSAPHRRXX	Subcomponent SAP_HRRXX of SAP_HR
EA-DFPS	801	0001	SAPK-80101INEADFPS	SAP Enterprise Extension Defense Forces & Public Security
EA-HR	608	0036	SAPK-60836INEAHR	SAP Enterprise Extension HR
EA-HRCAE	608	0036	SAPK-60836INEAHRCAE	Subcomponent EA-HRCAE of EA-HR
EA-HRCAR	608	0036	SAPK-60836INEAHRCAR	Subcomponent EA-HRCAR of EA-HR
EA-HRCAT	608	0036	SAPK-60836INEAHRCAT	Subcomponent EA-HRCAT of EA-HR
EA-HRCAU	608	0036	SAPK-60836INEAHRCAU	Subcomponent EA-HRCAU of EA-HR
EA-HRCBE	608	0036	SAPK-60836INEAHRCBE	Subcomponent EA-HRCBE of EA-HR
EA-HRCBG	608	0036	SAPK-60836INEAHRCBG	Subcomponent EA-HRCBG of EA-HR
EA-HRCBR	608	0036	SAPK-60836INEAHRCBR	Subcomponent EA-HRCBR of EA-HR
EA-HRCCA	608	0036	SAPK-60836INEAHRCCA	Subcomponent EA-HRCCA of EA-HR
EA-HRCCH	608	0036	SAPK-60836INEAHRCCH	Subcomponent EA-HRCCH of EA-HR
EA-HRCCL	608	0036	SAPK-60836INEAHRCCL	Subcomponent EA-HRCCL of EA-HR
EA-HRCCN	608	0036	SAPK-60836INEAHRCCN	Subcomponent EA-HRCCN of EA-HR
EA-HRCCO	608	0036	SAPK-60836INEAHRCCO	Subcomponent EA-HRCCO of EA-HR

Component	Release	SP-Level	Support Package	Short Description of Component
EA-HRCCZ	608	0036	SAPK-60836INEAHRCCZ	Subcomponent EA-HRCCZ of EA-HR
EA-HRCDE	608	0036	SAPK-60836INEAHRCDE	Subcomponent EA-HRCDE of EA-HR
EA-HRCDK	608	0036	SAPK-60836INEAHRCDK	Subcomponent EA-HRCDK of EA-HR
EA-HRCEG	608	0036	SAPK-60836INEAHRCEG	Sub component EA-HRCEG of EA-HR
EA-HRCES	608	0036	SAPK-60836INEAHRCES	Subcomponent EA-HRCES of EA-HR
EA-HRCFI	608	0036	SAPK-60836INEAHRCFI	Subcomponent EA-HRCFI of EA-HR
EA-HRCFR	608	0036	SAPK-60836INEAHRCFR	Subcomponent EA-HRCFR of EA-HR
EA-HRCGB	608	0036	SAPK-60836INEAHRCGB	Subcomponent EA-HRCGB of EA-HR
EA-HRCGR	608	0036	SAPK-60836INEAHRCGR	Subcomponent EA-HRCGR of EA-HR
EA-HRCHK	608	0036	SAPK-60836INEAHRCHK	Subcomponent EA-HRCHK of EA-HR
EA-HRCHR	608	0036	SAPK-60836INEAHRCHR	Subcomponent EA-HRCHR of EA-HR
EA-HRCHU	608	0036	SAPK-60836INEAHRCHU	Subcomponent EA-HRCHU of EA-HR
EA-HRCID	608	0036	SAPK-60836INEAHRCID	Subcomponent EA-HRCID of EA-HR
EA-HRCIE	608	0036	SAPK-60836INEAHRCIE	Subcomponent EA-HRCIE of EA-HR
EA-HRCIN	608	0036	SAPK-60836INEAHRCIN	Subcomponent EA-HRCIN of EA-HR
EA-HRCIT	608	0036	SAPK-60836INEAHRCIT	Subcomponent EA-HRCIT of EA-HR
EA-HRCJP	608	0036	SAPK-60836INEAHRCJP	Subcomponent EA-HRCJP of EA-HR
EA-HRCKR	608	0036	SAPK-60836INEAHRCKR	Subcomponent EA-HRCKR of EA-HR

Component	Release	SP-Level	Support Package	Short Description of Component
EA-HRCKW	608	0036	SAPK-60836INEAHRCKW	Subcomponent EA-HRCKW of EA-HR
EA-HRCKZ	608	0036	SAPK-60836INEAHRCKZ	Subcomponent EA-HRCKZ of EA-HR
EA-HRCMX	608	0036	SAPK-60836INEAHRCMX	Subcomponent EA-HRCMX of EA-HR
EA-HRCMY	608	0036	SAPK-60836INEAHRCMY	Subcomponent EA-HRCMY of EA-HR
EA-HRCNL	608	0036	SAPK-60836INEAHRCNL	Subcomponent EA-HRCNL of EA-HR
EA-HRCNO	608	0036	SAPK-60836INEAHRCNO	Subcomponent EA-HRCNO of EA-HR
EA-HRCNZ	608	0036	SAPK-60836INEAHRCNZ	Subcomponent EA-HRCNZ of EA-HR
EA-HRCOM	608	0036	SAPK-60836INEAHRCOM	Subcomponent EA-HRCOM of EA-HR
EA-HRCPH	608	0036	SAPK-60836INEAHRCPH	Subcomponent EA-HRCPH of EA-HR
EA-HRCPL	608	0036	SAPK-60836INEAHRCPL	Subcomponent EA-HRCPL of EA-HR
EA-HRCPT	608	0036	SAPK-60836INEAHRCPT	Subcomponent EA-HRCPT of EA-HR
EA-HRCQA	608	0036	SAPK-60836INEAHRCQA	Subcomponent EA-HRCQA of EA-HR
EA-HRCRO	608	0036	SAPK-60836INEAHRCRO	Subcomponent EA-HRCRO of EA-HR
EA-HRCRU	608	0036	SAPK-60836INEAHRCRU	Subcomponent EA-HRCRU of EA-HR
EA-HRCSA	608	0036	SAPK-60836INEAHRCSA	Subcomponent EA-HRCSA of EA-HR
EA-HRCSE	608	0036	SAPK-60836INEAHRCSE	Subcomponent EA-HRCSE of EA-HR
EA-HRCSG	608	0036	SAPK-60836INEAHRCSG	Subcomponent EA-HRCSG of EA-HR
EA-HRCSI	608	0036	SAPK-60836INEAHRCSI	Subcomponent EA-HRCSI of EA-HR

Component	Release	SP-Level	Support Package	Short Description of Component
EA-HRCSK	608	0036	SAPK-60836INEAHRCSK	Subcomponent EA-HRCSK of EA-HR
EA-HRCTH	608	0036	SAPK-60836INEAHRCTH	Subcomponent EA-HRCTH of EA-HR
EA-HRCTR	608	0036	SAPK-60836INEAHRCTR	Subcomponent EA-HRCTR of EA-HR
EA-HRCTW	608	0036	SAPK-60836INEAHRCTW	Subcomponent EA-HRCTW of EA-HR
EA-HRCUA	608	0036	SAPK-60836INEAHRCUA	Subcomponent EA-HRCUA of EA-HR
EA-HRCUN	608	0036	SAPK-60836INEAHRCUN	Subcomponent EA-HRCUN of EA-HR
EA-HRCUS	608	0036	SAPK-60836INEAHRCUS	Subcomponent EA-HRCUS of EA-HR
EA-HRCVE	608	0036	SAPK-60836INEAHRCVE	Subcomponent EA-HRCVE of EA-HR
EA-HRCZA	608	0036	SAPK-60836INEAHRCZA	Subcomponent EA-HRCZA of EA-HR
EA-HRGXX	608	0036	SAPK-60836INEAHRGXX	Subcomponent EA-HRGXX of EA-HR
EA-HRRXX	608	0036	SAPK-60836INEAHRRXX	Subcomponent EA-HRRXX of EA-HR
EA-PS	801	0001	SAPK-80101INEAPS	SAP Enterprise Extension Public Services
ECC-SE	801	0001	SAPK-80101INECCSE	ECC-SE
ERECRUIT	801	0001	SAPK-80101INERECRUIT	E-Recruiting
FI-CA	801	0001	SAPK-80101INFICA	FI-CA
FI-CAX	801	0001	SAPK-80101INFICAX	FI-CA Extended
INSURANCE	801	0001	SAPK-80101ININSURANC	SAP Insurance
IS-H	801	0001	SAPK-80101INISH	SAP Healthcare
IS-M	801	0001	SAPK-80101INISM	SAP MEDIA
IS-OIL	801	0001	SAPK-80101INISOIL	IS-OIL
IS-PRA	801	0001	SAPK-80101INISPRA	SAP IS-PRA

Component	Release	SP-Level	Support Package	Short Description of Component
IS-PS-CA	801	0001	SAPK-80101INISPSCA	IS-PUBLIC SECTOR CONTRACT ACCOUNTING
IS-UT	801	0001	SAPK-80101INISUT	SAP Utilities/Telecommunication
LSOFE	801	0001	SAPK-80101INLSOFE	SAP Learning Solution Front-End
GBX01HR	600	0005	SAPK-60005INGBX01HR	FIORI X1 HCM
GBX01HR5	605	0003	SAPK-60503INGBX01HR5	FIORI X1 HCM
SAPUIFT	100	0001	SAPK-10001INSAPUIFT	SAP UI Frontend Implementation Technology
SRA004	600	0009	SAPK-60009INSRA004	Create Travel Request OData Integration
UIAPFI70	400	0001	SAPK-40001INUIAPFI70	UI SFIN
UIMDG001	200	0001	SAPK-20001INUIMDG001	UI for MDG
UIS4HOP1	200	0001	SAPK-20001INUIS4HOP1	UI for S/4HANA On Premise
UIX01CA1	200	0003	SAPK-20003INUIX01CA1	UI for Cross-Applications
BSNAGT	200	0002	SAPK-20002INBSNAGT	BSN AGENT
PERSONAS	300	0004	SAPK-30004INPERSONAS	PERSONAS - SAP GUI PERSONALISATION
ST-A/PI	01S_731	0001	SAPKITAB9R	Servicetools for SAP Basis 731

In addition, 37 languages are installed.

6.1.2 SAP NetWeaver 7.50 application server JAVA with Adobe Document Services installed

Product Name	Name	Version	Vendor	Description
SAP NETWAVER J2EE	7.50	04	sap.com	SAP NETWEAVER 7.5: Adobe Document Services
SAP NETWAVER J2EE	7.50	04	sap.com	SAP NETWEAVER 7.5: Application Server Java

6.1.3 Windows Remote Desktop

- o ABAP Development Tools
- o BW Modeling Tools
- o SAPUI5 Tools
- o SAP GUI for Windows
- o SAP BusinessObjectsDesignStudio Client
- o SAP Lumira Desktop edition

6.1.4 SAP BusinessObjects BI Platform 4.2

- o SBOP BI PLATFORM 4.2 SP03 SERVER LINUX (64B)
- o SBOP EXPLORER 4.2 SP03 LINUX (64B)
- o SAP Lumira Server for BI Platform 1.30 Linux (64B)
- o SP03 for DESIGN STUDIO BIP ADD ON 1.6

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