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Getting Started with SAP S/4HANA 1809



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1 Solution Information

1.1 Installed Products

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

- SAP S/4HANA 1809
- SAP Kernel 773 PL 10
- SAP Hana 2.0 Platform Edition SPS03 Revision 32
- SAP Fiori for S/4HANA 1809

1.2 Overview

- Solution name: SAP S/4HANA 1809
- Standard installation enriched with
 - Embedded Deployment of Frontend Components (SAP Fiori for S/4HANA 1809)
 - Pre-activated Fiori Content/Apps based on shipped SAP Business Roles (=> ca. 90% apps working out of the box*)
- Clients:
 - Client 000 - Main/Fiori client
 - Client 100 - BW client (not used)

* remaining apps require additional functional customizing or authorizations, that have to be performed manually

1.3 Scenario Description

This solution represents a plain initial S/4HANA 1809 installation including out of the box activated Fiori Apps based on over 400 shipped SAP Business Roles for Fiori. Moreover, also the Enterprise Search, Embedded Analytics and Classic UIs based on Web Dynpro ABAP & WebGUI are ready to use.

On top of the base config, the following steps have been executed:

- Install SAP_UI 7.53 SP01
- Install UIBAS, Install SAP Fiori for S/4HANA 1809
- Follow Steps „Rapid Activation for Fiori in S/4HANA 1809“:
<https://launchpad.support.sap.com/#/notes/2704570>
- Business functions Oil & Gas have been activated (OIL_UOM*)

2 Accessing the Solution

2.1 Overview

Solution runs on a S/4HANA system with ABAP and SAP HANA, and a Windows Remote Desktop "Frontend" server with connectivity to the backend.

- Solution can be accessed via browser / Fiori Launchpad
- Backend systems can be accessed via remote desktop server and via SAP logon directly
- Solution can be accessed on OS level

2.2 Browser Access / Fiori Launchpad

You can start exploring the SAP Fiori Launchpad in client 000 with one of the users in the table below. These users are based on 402 pre-activated SAP Business Roles for Fiori.

Note: For direct access from your local machine, please ensure the respective ports are opened (see chapter 4).

URLs to Fiori Launchpad

https://<IP-Address>:50001/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html?sap-client=000&sap-language=EN

or (see chapter 2.2.1 / 2.2.2)

https://vhcals4hci.dummy.nodomain:50001/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html?sap-client=000&sap-language=EN

Please also check their respective apps/content via the [Fiori Apps Library](#) -> "All apps for SAP S/4HANA" -> "by Roles" (filter by Product Version "1809").

User (client 000)	Password	Purpose
T1_AAAC	Welcome1!	Based on Business Role: Asset Accountant
T2_AAACBG	Welcome1!	Based on Business Role: Asset Accountant Bulgaria
...	Welcome1!	<i>see su01, filter by T*</i>
T138_CAMA	Welcome1!	based on Business Role: Cash Manager
T337_PU	Welcome1!	based on Business Role: Purchaser
T361_SAMA	Welcome1!	based on Business Role: Sales Manager

User (client 000)	Password	Purpose
T397_WACL	Welcome1!	based on Business Role: Warehouse Clerk
FIORIADMIN	FIORI100#fiori	Access to Admin tools e.g. Fiori Launchpad Designer
FIORIUSER	FIORI100#fiori	Base user with empty Fiori Launchpad

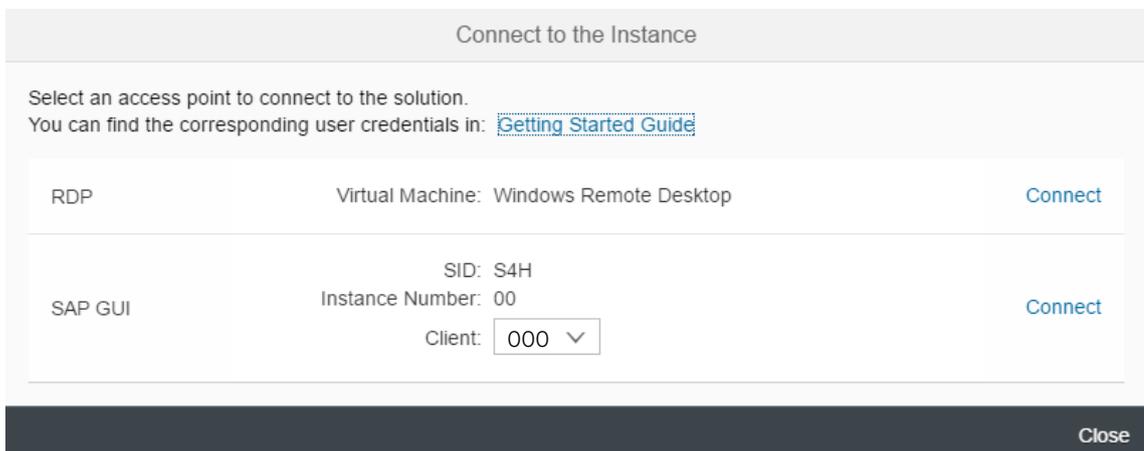
Connect to the SAP backend system for clients 000 and 100 via SAP Logon as user SUPPORT (user has SAP_ALL permission!) with the Master Password (the password that you provided when creating the instance in SAP CAL).

2.2.1 Option 1: System access via embedded Windows Remote Desktop server

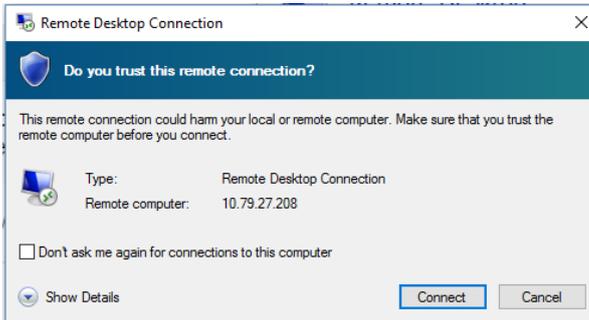
1. After your own solution instance is created, click the [Connect](#) button in the Instances view of the console.



2. In the pop-up, click [Connect](#) in the RDP Virtual Machine: Windows Remote Desktop line.

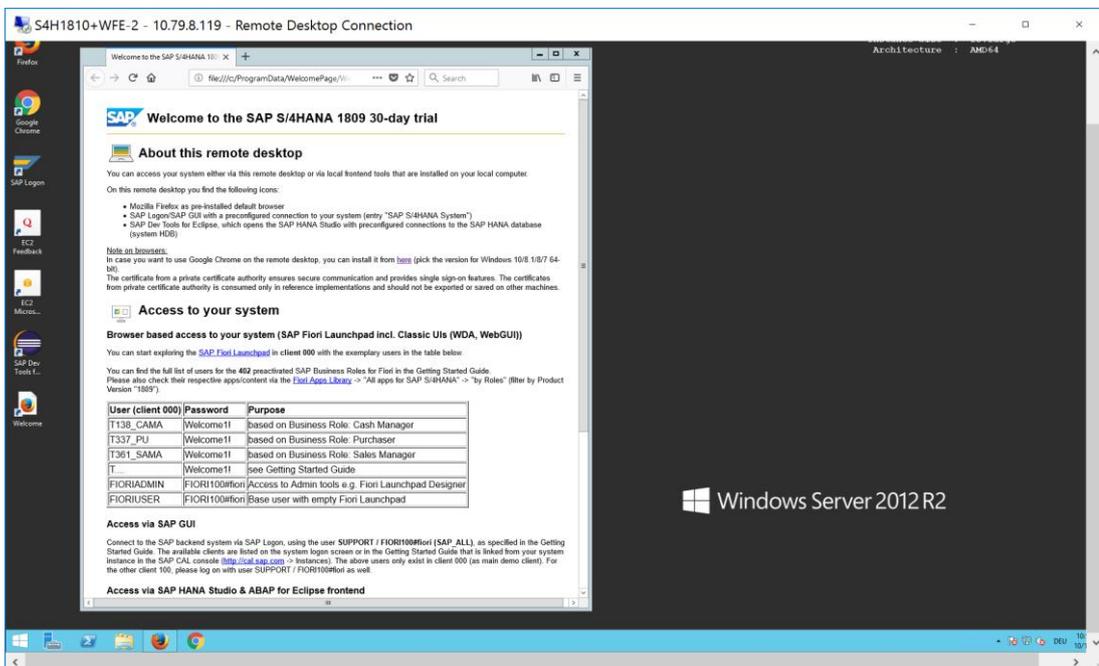


3. Confirm the pop-up window to allow Remote Desktop Connection (click on "Connect"). Enter user *Administrator* (local domain of the remote desktop) and your <Master Password> that you specified during the instance creation in the SAP CAL console.



- Next you will see the pre-configured Windows Frontend Server. Follow the information on the Welcome page to logon to the SAP S/4HANA system, and to run sample scenarios. More details on system connectivity can be found in section 3.3.

Note: The embedded Windows Remoted Desktop license allows 2 concurrent sessions (one for user Administrator and one for another user that you first would have to create on the remote desktop).



2.2.2 Option 2: System access via local PC

Note: For direct access from your local machine, please ensure the respective ports are opened (see chapter 4).

2.2.2.1 Mapping your local hosts file

To log on to the Fiori Launchpad from your local PC, you need to ensure that you have mapped the IP addresses of your instance against clear text host names. This mapping step is needed since the connection to the cloud providers uses IP addresses, whereas the S/4HANA system needs dedicated host names to work correctly. After you have done the mapping (by editing a local file on your computer), you will be able to access the Fiori Launchpad of SAP S/4HANA via this URL:

https://vhcals4hci.dummy.nodomain:50001/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html

If you cannot map your local hosts file (e.g. you don't have administrator rights on your computer), you can use the IP address of your instance in the URL (https://<IP_Address>:50001/...), however, not all applications and scenarios will work correctly with it. Another option could be to use browser plugins (e.g. Chrome Virtual Host) that simulate the mapping in the browser session only (again, not all scenarios might work correctly with it).

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:
3. For Windows operating system: c:\windows\system32\drivers\etc\hosts For Linux operating system: /etc/hosts
4. Ensure to select *All Files (*.*)*
5. 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, take the external IP address):
S4H Appliance
<External IP Address SAP S/4HANA Server> vhcals4hci.dummy.nodomain vhcals4hci
vhcals4hcs.dummy.nodomain vhcals4hcs vhcaldhdbdb vhcaldhdbdb.dummy.nodomain
6. Save the *hosts* file and exit.

Note:

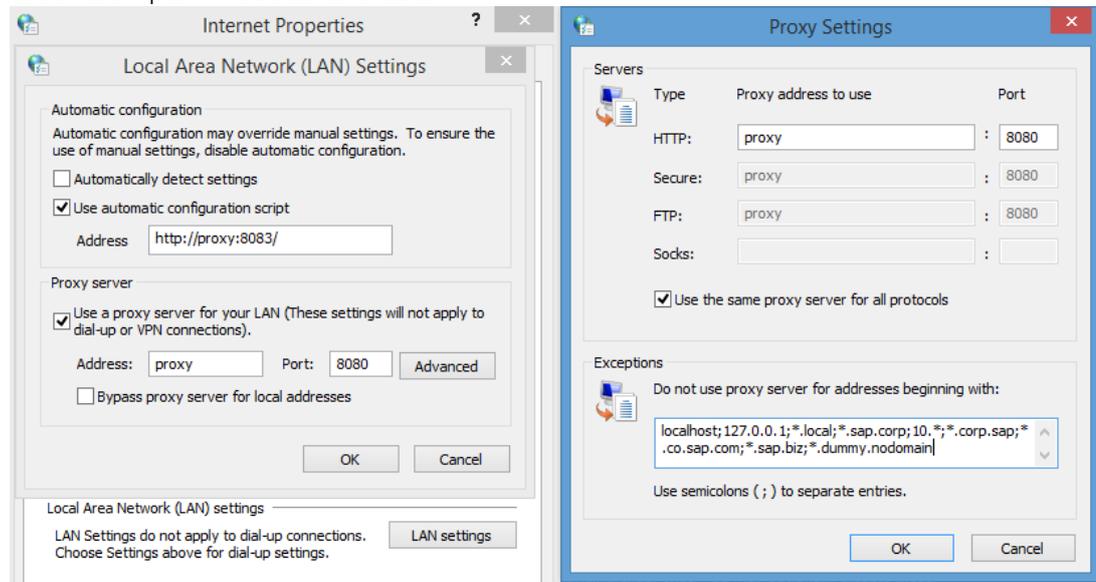
Altering the /etc/hosts file on your local machine is not recommended, as it could lead to a security vulnerability.

2.2.2.2 Configure ";*.dummy.nodomain" for Web Browser ABAP Application Server Details

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:



2.3 Users & passwords for the system components

2.3.1 ABAP Application Server Details

Connect to the SAP S4H 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	S4H	System ID of the SAP system
Instance Number	00	The instance number of the central instance (CI)
Password	<Master Password>	The initial master password of the system you provided in the SAP Cloud Appliance Library when creating the instance.
Username	DDIC SAP*	These are the standard users which you can use to access the ABAP server.
Clients	000 100	These are the standard clients available in a newly installed SAP system.

2.3.2 Database Server Details

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

Name	Value	Description
DB SID	HDB	Database System ID of the SAP system
Instance Number	02	Instance number of the central instance of the SAP System
Database Tenants	SYSTEMDB HDB	Name of tenant database of the SAP System
DB Type	HDB	Type of the database
Username	HANA users <u>TENANT: SYSTEMDB</u> USER: SYSTEM <u>TENANT: HDB</u> USER: SYSTEM USER: SAPS4H	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.

2.3.3 Windows Frontend Server Details

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

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.

2.3.4 Accessing Your Instance on OS Level

For information on 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)?

2.3.5 OS Users and Groups

Name	Description
s4hadm	SAP system administrator
hdbadm	SAP database administrator
sapsys	Group containing all SAP OS users

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, request and install the following license keys:

SID	Product	Version	DB	OS	Comment
<i>S4H</i>	<i>SAP S/4HANA 1809</i>	<i>SAP S/4HANA 1809</i>	<i>SAP HANA</i>	<i>Linux</i>	<i>Please choose 256 GB Memory Volume</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
hdbsql	30213	Used for RDP connection to Windows based servers
hdbsql	30215	Used for RDP connection to Windows based servers

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

To access the Fiori Launchpad or SAP GUI directly from your local machine, the following ports would have to be opened:

Protocol	Port	Description
TCP	3200	SAPGUI
HTTP(S)	50001	Fiori Launchpad

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

Installed Software Components

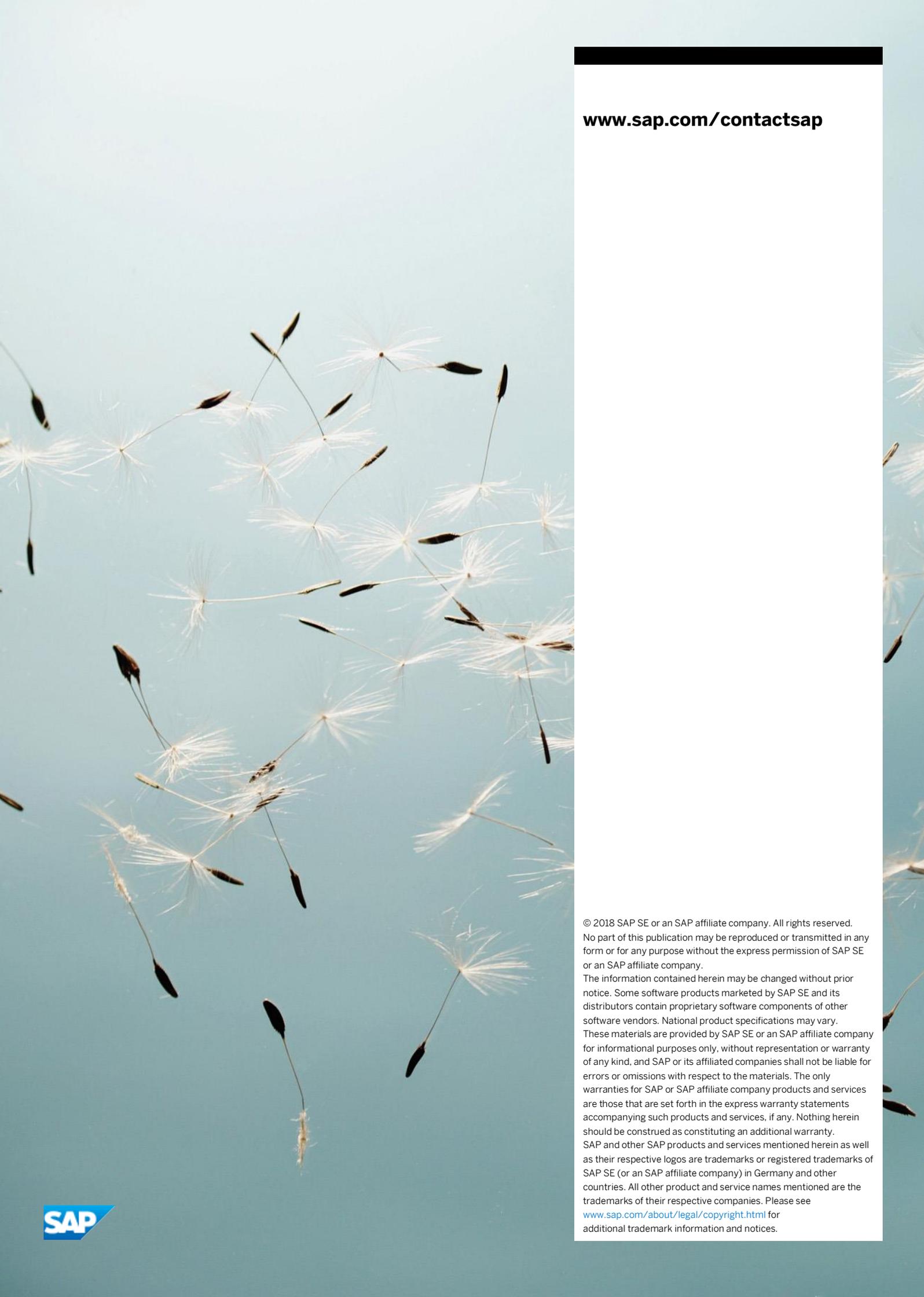
Component	Release	Support Package	Description
SAP_BASIS	753	0	SAP Basis Component
SAP_ABA	75D	0	Cross-Application Component
SAP_GWFND	753	0	SAP Gateway Foundation 7.40
SAP_UI	753	1	User Interface Technology
ST-PI	740	8	SAP Solution Tools Plug-In
SAP_BW	753	0	SAP Business Warehouse
UIBAS001	400	0	UI for Basis Applications 1.0
MDG_FND	803	0	MDG Foundation
S4FND	103	0	Foundation 103
MDG_APPL	803	0	MDG Applications
MDG_UX	803	0	MDG Additional User Interface
S4CORE	103	0	S4CORE
SAP_HR	608	56	Human Resources
SAP_HRCAE	608	56	Subcomponent SAP_HRCAE of SAP_HR
SAP_HRCAR	608	56	Subcomponent SAP_HRCAR of SAP_HR
SAP_HRCAT	608	56	Subcomponent SAP_HRCAT of SAP_HR
SAP_HRCAU	608	56	Subcomponent SAP_HRCAU of SAP_HR
SAP_HRCBE	608	56	Subcomponent SAP_HRCBE of SAP_HR
SAP_HRCBG	608	56	Subcomponent SAP_HRCBG of SAP_HR
SAP_HRCBR	608	56	Subcomponent SAP_HRCBR of SAP_HR
SAP_HRCCA	608	56	Subcomponent SAP_HRCCA of SAP_HR
SAP_HRCCH	608	56	Subcomponent SAP_HRCCH of SAP_HR
SAP_HRCCL	608	56	Subcomponent SAP_HRCCL of SAP_HR
SAP_HRCCN	608	56	Subcomponent SAP_HRCCN of SAP_HR
SAP_HRCCO	608	56	Subcomponent SAP_HRCCO of SAP_HR
SAP_HRCCZ	608	56	Subcomponent SAP_HRCCZ of SAP_HR

Component	Release	Support Package	Description
SAP_HRCDE	608	56	Subcomponent SAP_HRCDE of SAP_HR
SAP_HRCDK	608	56	Subcomponent SAP_HRCDK of SAP_HR
SAP_HRCEG	608	56	Subcomponent SAP_HRCEG of SAP_HR
SAP_HRCES	608	56	Subcomponent SAP_HRCES of SAP_HR
SAP_HRCFI	608	56	Subcomponent SAP_HRCFI of SAP_HR
SAP_HRCFR	608	56	Subcomponent SAP_HRCFR of SAP_HR
SAP_HRCGB	608	56	Subcomponent SAP_HRCGB of SAP_HR
SAP_HRCGR	608	56	Subcomponent SAP_HRCGR of SAP_HR
SAP_HRCHK	608	56	Subcomponent SAP_HRCHK of SAP_HR
SAP_HRCHR	608	56	Subcomponent SAP_HRCHR of SAP_HR
SAP_HRCHU	608	56	Subcomponent SAP_HRCHU of SAP_HR
SAP_HRCID	608	56	Subcomponent SAP_HRCID of SAP_HR
SAP_HRCIE	608	56	Subcomponent SAP_HRCIE of SAP_HR
SAP_HRCIN	608	56	Subcomponent SAP_HRCIN of SAP_HR
SAP_HRCIT	608	56	Subcomponent SAP_HRCIT of SAP_HR
SAP_HRCJP	608	56	Subcomponent SAP_HRCJP of SAP_HR
SAP_HRCKR	608	56	Subcomponent SAP_HRCKR of SAP_HR
SAP_HRCKW	608	56	Subcomponent SAP_HRCKW of SAP_HR
SAP_HRCKZ	608	56	Subcomponent SAP_HRCKZ of SAP_HR
SAP_HRCMX	608	56	Subcomponent SAP_HRCMX of SAP_HR
SAP_HRCMY	608	56	Subcomponent SAP_HRCMY of SAP_HR
SAP_HRCNL	608	56	Subcomponent SAP_HRCNL of SAP_HR
SAP_HRCNO	608	56	Subcomponent SAP_HRCNO of SAP_HR
SAP_HRCNZ	608	56	Subcomponent SAP_HRCNZ of SAP_HR
SAP_HRCOM	608	56	Subcomponent SAP_HRCOM of SAP_HR
SAP_HRCPH	608	56	Subcomponent SAP_HRCPH of SAP_HR
SAP_HRCPL	608	56	Subcomponent SAP_HRCPL of SAP_HR
SAP_HRCPT	608	56	Subcomponent SAP_HRCPT of SAP_HR
SAP_HRCQA	608	56	Subcomponent SAP_HRCQA of SAP_HR
SAP_HRCRO	608	56	Subcomponent SAP_HRCRO of SAP_HR
SAP_HRCRU	608	56	Subcomponent SAP_HRCRU of SAP_HR

Component	Release	Support Package	Description
EA-HRC DK	608	56	Subcomponent EA-HRC DK of EA-HR
EA-HRCEG	608	56	Sub component EA-HRCEG of EA-HR
EA-HRCES	608	56	Subcomponent EA-HRCES of EA-HR
EA-HRCFI	608	56	Subcomponent EA-HRCFI of EA-HR
EA-HRCFR	608	56	Subcomponent EA-HRCFR of EA-HR
EA-HRCGB	608	56	Subcomponent EA-HRCGB of EA-HR
EA-HRCGR	608	56	Subcomponent EA-HRCGR of EA-HR
EA-HRCHK	608	56	Subcomponent EA-HRCHK of EA-HR
EA-HRCHR	608	56	Subcomponent EA-HRCHR of EA-HR
EA-HRCHU	608	56	Subcomponent EA-HRCHU of EA-HR
EA-HRCID	608	56	Subcomponent EA-HRCID of EA-HR
EA-HRCIE	608	56	Subcomponent EA-HRCIE of EA-HR
EA-HRCIN	608	56	Subcomponent EA-HRCIN of EA-HR
EA-HRCIT	608	56	Subcomponent EA-HRCIT of EA-HR
EA-HRCJP	608	56	Subcomponent EA-HRCJP of EA-HR
EA-HRCKR	608	56	Subcomponent EA-HRCKR of EA-HR
EA-HRCKW	608	56	Subcomponent EA-HRCKW of EA-HR
EA-HRCKZ	608	56	Subcomponent EA-HRCKZ of EA-HR
EA-HRCMX	608	56	Subcomponent EA-HRCMX of EA-HR
EA-HRCMY	608	56	Subcomponent EA-HRCMY of EA-HR
EA-HRCNL	608	56	Subcomponent EA-HRCNL of EA-HR
EA-HRCNO	608	56	Subcomponent EA-HRCNO of EA-HR
EA-HRCNZ	608	56	Subcomponent EA-HRCNZ of EA-HR
EA-HRCOM	608	56	Subcomponent EA-HRCOM of EA-HR
EA-HRCPH	608	56	Subcomponent EA-HRCPH of EA-HR
EA-HRCPL	608	56	Subcomponent EA-HRCPL of EA-HR
EA-HRCPT	608	56	Subcomponent EA-HRCPT of EA-HR
EA-HRCQA	608	56	Subcomponent EA-HRCQA of EA-HR
EA-HRCRO	608	56	Subcomponent EA-HRCRO of EA-HR
EA-HRCRU	608	56	Subcomponent EA-HRCRU of EA-HR
EA-HRCSA	608	56	Subcomponent EA-HRCSA of EA-HR

Component	Release	Support Package	Description
EA-HRCSE	608	56	Subcomponent EA-HRCSE of EA-HR
EA-HRCSG	608	56	Subcomponent EA-HRCSG of EA-HR
EA-HRCSI	608	56	Subcomponent EA-HRCSI of EA-HR
EA-HRCSK	608	56	Subcomponent EA-HRCSK of EA-HR
EA-HRCTH	608	56	Subcomponent EA-HRCTH of EA-HR
EA-HRCTR	608	56	Subcomponent EA-HRCTR of EA-HR
EA-HRCTW	608	56	Subcomponent EA-HRCTW of EA-HR
EA-HRCUA	608	56	Subcomponent EA-HRCUA of EA-HR
EA-HRCUN	608	56	Subcomponent EA-HRCUN of EA-HR
EA-HRCUS	608	56	Subcomponent EA-HRCUS of EA-HR
EA-HRCVE	608	56	Subcomponent EA-HRCVE of EA-HR
EA-HRCZA	608	56	Subcomponent EA-HRCZA of EA-HR
EA-HRGXX	608	56	Subcomponent EA-HRGXX of EA-HR
EA-HRRXX	608	56	Subcomponent EA-HRRXX of EA-HR
EA-PS	803	0	SAP Enterprise Extension Public Services
ECC-SE	803	0	ECC-SE
FI-CAX	803	0	FI-CA Extended
INSURANCE	803	0	SAP Insurance
IS-OIL	803	0	IS-OIL
IS-PRA	803	0	SAP IS-PRA
IS-PS-CA	803	0	IS-PUBLIC SECTOR CONTRACT ACCOUNTING
IS-UT	803	0	SAP Utilities/Telecommunication
GBX01HR	600	10	FIORI X1 HCM
GBX01HR5	605	7	FIORI X1 HCM
SRA004	600	10	Create Travel Request OData Integration
UIAPFI70	600	0	UI SFIN
UIHR001	100	0	UI for ERP Human Capital Management
UIHR002	100	3	UI for ERP Human Capital Management 100
UIILM001	100	7	UI for ILM
UIMDC001	200	4	UI for MDG Consoliation and Mass Process
UIMDG001	200	6	UI for MDG

Component	Release	Support Package	Description
UIS4HOP1	400	0	UI for S/4HANA On Premise
UITRV001	200	6	UI for Travel
BSNAGT	200	2	BSN AGENT
MSGPMCON	200	3	msg.PM Connection
ST-A/PI	01T_731	0	Servicetools for SAP Basis 731 and higher



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