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SAP Best Practices for Insurance Solution v3 S/4HANA



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1 Solution Information

This guide provides general information for starting your 30-Day Free Trial¹ SAP Best Practices for Insurance Solution provided by SAP Cloud Appliance Library

1.1 Overview

SAP Best Practices for Insurance is an innovative solution allowing mid and large size Insurance companies to operate their entire business for P&C, and Life on the SAP HANA platform in the cloud.

The S/4HANA solution allows unprecedented performance on a dramatically simplified IT landscape enhancing the ability to make faster business decisions. It can accommodate multiple lines of business and enables real time analytics without data replication. Is compliant with multiple financial reporting standards (US GAAP, STAT), for all lines of business and currencies simultaneously

Cloud access combines cutting-edge methods and technologies that provide unparalleled security, keep the footprint required for solution exploitation to a minimum and optimize the user experience.

This trial edition is provided as virtual appliance by the SAP Cloud Appliance Library. The instance consists of four integrated systems deployed as an integrated cloud computing platform. The business user accesses and performs all operations from a unified Fiori Launchpad.

Supported Lines of Business

Using this trial edition you can execute complete end-to-end business processes encompassing the following lines of business (using predefined sample products):

- Property and Casualty (P&C)
- Individual Life
- Group Life
- Individual Health
- Group Health

Business process execution is supported with interactive help, which dramatically reduces the onboarding time for new employees.

All processing steps are carried out in their complete effect (e.g. financial entries, online reporting, etc.)

The trial provides complete “under the hood” visibility, relevant for future project team members.

Sample Activities

A typical end-to end process chain comprises

- Reporting Before (policies, applications, commissions, etc.) using a variety of reporting tools
- Create Account
- Create Lead
- Create Quote
- Underwrite and Issue Policy

¹ The 30-day Trial is free in what software licenses are concerned. The user is still bound to incur provision/consumption costs as billed by the hosting provider. The user does not retain any rights consequential to such usage. This solution can be used as a trial for the configured free period. Note that you are not allowed to install license keys under the Free Trial License Agreement.

- Process premium payment
- Claim recording and processing from invoice to payment
- Agent commission settlement and payment
- Display account balances
- Reporting After

The back office processing includes transferring cash- and non-cash items, period end closing, reconciliation, financial statement reporting.

You can also experience the complete onboarding process for new producers/agents.

1.2 Landscape Structure

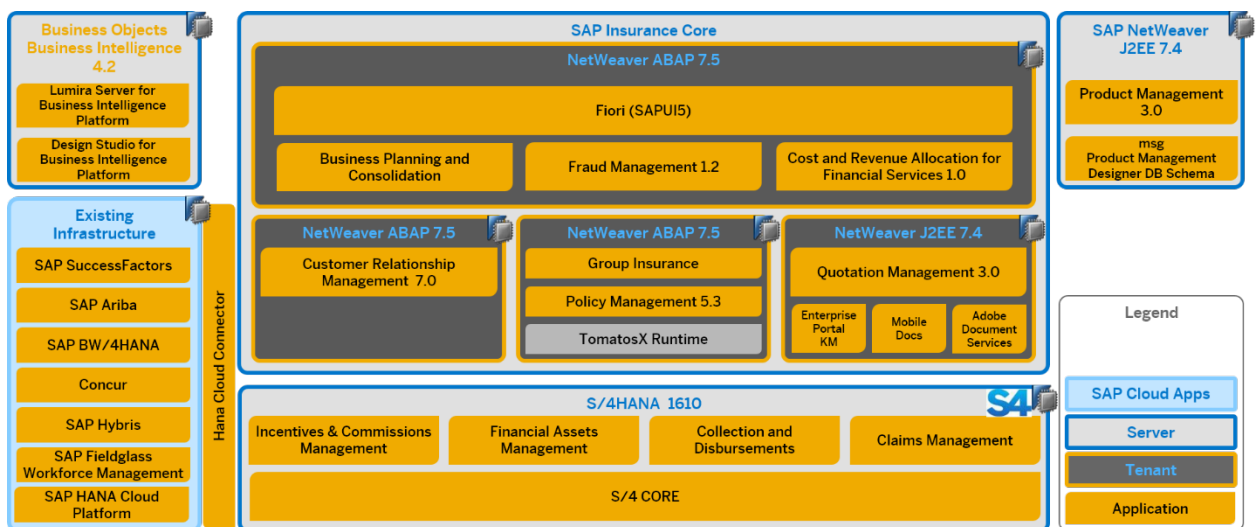
The landscape structure consists of four integrated instances deployed simultaneously.

AWS Instances

System	AWS Sizing	vCPU	RAM (GB)	Disk space (GB)	OS
A1_HANA_CORE	r3.8xlarge	32	244	451	SLES 11 SP 4
A2_HANA_PRO	r3.2xlarge	8	61	251	SLES 11 SP 4
A3_HANA_S4H	r3.4xlarge	16	122	280	SLES 11 SP 4
A4_BOBJ	r3.xlarge	4	30.5	87	SLES 11 SP 4

1.3 Components

The components and release levels included in the reference image landscape are shown below



1.4 Material Numbers

You get access to a Windows-based front-end and a Linux-based back-end system that has been built using the following media (one material number may be used on more than one virtual machine)

Material Number	Description
51048608	SAP Insurance FS-PM 5.3 Add-On
51049767	SAP Performance Management 1.0
51050040	SAP Product and Quotation Management for Insurance 3.0
51051151	SAP HANA Platf. Ed. 1.0 SPS12
51051283	SBOP BI PLATFORM 4.2 SPO3 SERVER LINUX (64B)
51051335	SAP Insurance FS-PM Group 1.0 Add-On
51051653	Lumira Server for BIP
51050375_4	SBOP Design Studio 1.6 BIP Add-on
51050423_3	SAP Kernel 7.45 Linux X86_64
51050711_1	EHP4 for SAP CRM 7.0 Installation Export (1/2)
51050711_2	EHP4 for SAP CRM 7.0 Installation Export (2/2)
51050819_6	NW 7.4 SR2 Java (1/2)
51050819_7	NW 7.4 SR2 Java (2/2)
51050829_3	NW 7.5 Installation Export
51050947_6	SAP S/4HANA 1610 Installation Export (1/4)
51050947_7	SAP S/4HANA 1610 Installation Export (2/4)
51050947_8	SAP S/4HANA 1610 Installation Export (3/4)
51050947_9	SAP S/4HANA 1610 Installation Export (4/4)
51051286_2	SAP BUSINESSOBJECTS EXPLORER 4.2 SPO3 LINUX (64B)
51051432_3	SAP Kernel 7.49 Linux on x86_64 64bit
SWPM10SP18_4-20009701.SAR	SOFTWARE PROVISIONING MGR 1.0 Linux on x86_64 64bit

1.5 Cost of Operation

Generally, solution usage entails two components of cost, one related to usage rights (equivalent to licensing) and one related to landscape provisioning. Note that all values indicated below are estimates. Check the actual values with your provider

Licensing

SAP CAL pricing is in effect for customers and partners.

The general pricing policy can be accessed in [SAP Jam](#) (SAP cloud identity required)

The 30-day free trial does not entail licensing costs, but is restricted to exploration only.

Provisioning

Providers bill the landscape as a whole, in hourly increments, depending on status (active/suspended).

Typical costs are indicatively presented in the table below. Please note that actual values and billing currency are determined by the provider and depend on the geographical location.

Instance Status	Indicative Cost Range	Notes
Active	5 – 12 USD/hour	The periods of instance activation (15 – 30 min) and suspension (1 – 5 min) are billed as 'active' Billing is usually in hourly increments
Suspended	0.5 – 1 USD/hour	
Private Static IP	25 – 50 USD/month	Optional, but highly recommended to avoid volatile logon URLs (that change at each activation)

As a rough estimate, an instance of the SAP Best Practices for Insurance Solution provided by AWS US-East, with a private static IP address would incur costs of about.

- ~1,000 USD/month when active 8 hours/day, 20 days/month
- ~4,000 USD/month when active 24/7

Establishing an activation schedule and/or activation/suspension responsibilities in your organization is the most effective cost control measure. More detail is available in Section 4.1

2 Prerequisites

This chapter addresses prerequisites for the external access to the 30-Day Trial solution for evaluation/discovery. The instance is provided by SAP CAL and hosted by Amazon Web Services (AWS)

2.1 Access Prerequisites

2.1.1 SAP Cloud Identity Account

A SAP Cloud Identity is required in order to access SAP proprietary product downloads such as SAP Front GUI and SAP Network Business Client from SAP Service Marketplace.

You may request the enrollment in the SAP community, personally or on behalf of your organization at <https://accounts.sap.com>

2.1.2 Standard Amazon Web Services (AWS) Account

Such an account must be established by any person (individually or on behalf of a Client/Partner organization), and is a prerequisite for establishing an external SAP CAL Account. Billing data are normally required.

If you are a new AWS customer, you can get started with Amazon EC2 for free. For more information, see [AWS Free Tier](#).

It is important to understand and abide by [the best access practices established by AWS](#).

We recommend you get familiar with the [AWS documentation](#) in detail before opening your account.

In a nutshell:

- Create an account owner account by opening <https://aws.amazon.com/> > *Create an AWS Account*
 - Follow the online instructions. Part of the sign-up procedure involves receiving a phone call and entering a PIN using the phone keypad.
Note down/save your AWS account number. It will be required subsequently
 - You can manage the security credentials for your account subsequently in the [AWS Console](#)
- As per AWS Best Practices use the Identity and Access Management (IAM) [console](#), to create one or more groups that are repositories of access policies, and one or more IAM user accounts as detailed in the next Section
 - IAM users are in turn assigned to groups.
 - IAM users receive an AWS Access Key and an AWS Secret Key
 - You can manage the security credentials for the IAM users subsequently in the [IAM Console](#)

EXTREMELY IMPORTANT:

- Save both keys locally in a secure location, immediately.
- The Secret Key is only shown once
- Both keys are required later during the CAL Account Setup

If you have already such an AWS account, and you know **both** your access key and your secret key, proceed to Section 2.1.3.

IAM Account Setup

According to AWS best practices, the IAM access users with suitable authorization policies are the infrastructure accounts that will be connected with the CAL solution accounts.

Log on into AWS. Go to the [IAM Console](#)

You will be working with the 'Groups' and 'Users' links on the left. At least one Group must exist and each IAM user must be assigned to a Group.

IMPORTANT: To be able to operate the instance, users must be assigned to a Group featuring the following **Inline policies**:

- AmazonEC2FullAccess
- AmazonVPCFullAccess
- ReadOnlyAccess
- AWSAccountUsageReportAccess

IMPORTANT: Copy/Download the Security Credentials to your local workstation. Keep these parameters at hand. They will be required later during CAL account setup (see next section)

IMPORTANT: When you create an access key, IAM returns the access key ID and secret access key. You should save these in a secure location. To ensure the security of your AWS account, **the secret access key is accessible only at the time you create it**. If a secret access key is lost, you must delete the access key for the associated user and then create a new key.

- Assign the User to the Group
 - Follow the 'Groups' link; select your group;
 - Go to Group Actions > Add Users to Group

IMPORTANT: If this is a new AWS account, allow at least two hours for activation

You may follow the same procedure to add other users in your organization.

2.1.3 SAP CAL Account

A SAP CAL account is required to access and manage your solution instance.

Access the SAP CAL at <https://cal.sap.com>. To register - follow the site instructions.

IMPORTANT: for instances provisioned by Amazon Web Services (AWS) the creation of your CAL account will require **both** your AWS access key and your secret key.

2.2 Technical Prerequisites

This release of SAP Best Practices for Insurance features significant advances in user experience.

It is assumed the applications below are present so all related benefits can be reaped.

Additionally required:

- A browser (Internet Explorer 11 recommended; empirical evidence suggests other major browsers can be used but certain features may be missing or function differently)
- A PDF reader application. [Adobe Acrobat Reader X](#) or higher is recommended for optimal document navigation as other PDF readers may not render bookmarks. [Sumatra PDF](#) is a free suitable light-weight alternative.

DO NOT INSTALL SAP SOFTWARE UNDER ANY CIRCUMSTANCE FROM SOURCES OUTSIDE SAP.COM!

2.2.1 SAP NetWeaver Business Client (NWBC)

A local installation of SAP NWBC 6 Patch Level 4 or higher is required for each workstation that will access the solution.

You may download the installation files and instructions from SAP Support Launchpad <https://launchpad.support.sap.com/#/softwarecenter> (search term: NWBC600)

2.2.2 SAP Frontend GUI (SAP GUI)

A local installation of SAP GUI 740 Patch Level 9 or higher is required for technical system/component level access.

You may download the installation files and instructions from SAP Support Launchpad <https://launchpad.support.sap.com/#/softwarecenter> (search term: SAP GUI WINDOWS S/4)

- To install the core for the first time: select "Installation Software Component" and download the component
- To patch your installation: select "Maintenance Software Component" and download/install the highest number patch level (on top of the initial core installation)

3 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

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](#).

4 Instance Creation and Operation

Get yourself familiar with the detailed [relevant CAL documentation](#)

The documentation below assumes this is your first CAL solution instance and that you have both an active infrastructure (AWS/Monsoon) account as well as an active CAL account.

4.1 Create Instance

In a nutshell, you will create a solution instance in **Advanced Mode**.

- Logon into CAL
- Identify the Best Practices for Insurance Solution in the *Solutions* tab
Alternatively you may be led here by clicking 'Try Now' or 'Get It' from other SAP solutions pages
- Choose *Create Instance*. You will be redirected to the *Instances* page
- Choose *Advanced Mode*. Follow the instructions.
- Indicate your infrastructure provider depending on the use case scenario
- Fill in the Access Key and the Secret Key of the access user.
- If you activate an instance provisioned by AWS **set/check the Public Static IP address** property.
While this will add a small fixed monthly cost to your bill (comparable with few hours of active operation), the IP addresses remain fixed until the instance is terminated, and functional users have a stable logon reference in any utilization scenario. With this parameter unchecked, the actual IP addresses of each component will change at each activation.
- Consider attentively each other available setup options.
- The *Schedule Details* step is **the most important setting affecting your overall costs**. Chose the alternative that best supports your goals. Note that the scheduling details will change depending on the scheduling type.
 - *Suspend on an exact date*: default setting. Manual suspend + Manual activation. The instance will run for a specified number of hours, then suspend automatically, to limit cost.
 - *Activate and suspend by schedule*: the instance will activate and suspend automatically every day, even if nobody is using it.
 - *Manually activate and suspend*: this setting is the most cost effective, but requires good communication between the instance administrator and the business users.

After clicking "Create Instance" allow time (up to one hour) for this initial activation to finalize

HINT: Add the URL address to your browser favorites for quick logon

4.2 Virtual Machines

The SAP Best Practices for Insurance landscape is deployed across four virtual machines

- A1_HANA_CORE
- A2_HANA_PRO
- A3_HANA_S4H
- A4_BOBJ

4.2.1 IP Addresses

Each VM in your landscape has an IP address assigned at the time of instance creation. **You must choose the Static IP option** to keep the address values constant for the duration of your project.

4.2.2 Fully Qualified Domain Names (FQDN)

An FQDN is required to be assigned to each machine for superior connectivity and access.

Monsoon Infrastructure

If your instance is provided on a Monsoon infrastructure, FQDN values are generated automatically.

To identify the FQDN use a command prompt to ping each virtual machine's IP address.

Use the ping command with the `-a` switch (e.g. `ping -a 999.999.999.999`)

AWS Infrastructure

If your instance is provided by Amazon Web Services (AWS) virtual FQDNs must be created uniformly.

See Section 5.2 for details

4.3 Manage Instance

The Operations area and drop-down menu are used by the instance administrator.

Possible operations are status-dependent (e.g. the operation 'Suspend' is only present when the status is 'Active', etc.). Only the current/critical operations are commented here. For more details, consider the relevant CAL support documentation.

4.3.1 Capture/Edit Instance Properties

Note: You may completely edit instance properties only when the status is 'Active'.

Properties can be reached using the drop-down menu in Operations

In the INSTANCES screen open the Properties > General Properties.

Note down the external IP address of each virtual machine from CAL Console

On a Monsoon Infrastructure – note down the FQDN of each the virtual machines from Monsoon Dashboard, or using the ping `-a` method as described in Section 0

4.3.2 Current Actions

Activate

Manual activation allows you to specify a duration in hours. By default, the instance will suspend after 8 hours to limit costs. The initial activation takes 45-60 minutes. Subsequent activations (after a Suspend operation) will take about 10 min.

NOTE: after the first activation, perform the one-time setup operations as per Section 6 using the admin user ID ZW00 (see Section 5.1)

Suspend

Manual suspension of the instance requires a coordination with the functional users. Please be patient for the few minutes required to perform this operation.

Terminate

Executing this action will completely delete the instance and all related data

5 Users and Logon

5.1 Pre-Delivered Users

This guide covers only the pre-delivered user IDs and their platform intended usage. A separate document (Business User Onboarding) describes the procedure for creating personal user IDs.

Note that the SAP Best Practices for Insurance Solution landscape is enabled for Central User Administration (CUA). All users are provided and managed centrally from the Fiori system (CN2)

The platform provides a number of pre-defined user IDs, with roles and functions described below.

- All user IDs are case-insensitive.
- All user IDs have the case-sensitive productive password **Welcome1** if not otherwise specifically indicated

All pre-defined users indicated below are very highly authorized in order to enable an unrestricted solution exploration.

IMPORTANT: The pre-delivered users, roles and authorizations must NOT be considered as best practice recommendations, or representative for business users in a real setting.

Solution's pre-delivered business content includes sample authorization profiles tailored to some specific business user roles specific to the industry mainly to guide navigation. While such profiles can be used as a mechanical reference, please note that **the roles and authorizations design, policy and implementation are specific to each project and must be understood in detail and approved by the actual customer before being deployed in a real life operation.**

General User IDs

Five user IDs **ZW01...ZW05** are provided for general solution exploration. These user IDs

- Can perform all insurance-related business functional activities across Front-, Middle-, and Back-Office
- Are available in all systems and can logon directly at system-level
- Can explore unhindered (including SPRO and equivalent)
- Cannot perform onboarding (i.e. completely create other users fully enabled to perform insurance-specific tasks)

You can use these IDs

- To immediately enable a small number of people to explore the solution
- As an onboarding reference to create dedicated users for more explorers in your organization

Special User ZW00

The user ID **ZW00** is specifically authorized and configured to enable certain administration tasks.

- Sign in as this user to perform the required **one-time basis setup activities** upon solution instantiation (detailed in Section 6)
- Sign in as this user to perform the business user onboarding process for an agent, as this user is authorized and configured as Commissions Manager

Special User ZWUI

The user ID **ZWUI** is specifically authorized to perform Fiori tiles maintenance.

Admin Users for FS-QUO and FS-PRO

For administration-level tasks in FS-PRO and FS-QUO the user ID is **admin** and the initial password is **password**
For product maintenance in FS-PRO the user ID is **system** and the initial password is **password**

5.2 Logon Connections

The regular access by the business user is done using a Fiori Launchpad Connection from SAP NetWeaver Business Client (SAP NWBC). Also recommended for solution walkthrough

A regular SAP NWBC System Connection is instrumental for localization projects (described separately)

Regular SAP GUI system connection may be used for technical access to individual machines, but are not to be recommended to business users

Browser connections may be used for FS-PRO and FS-QUO system level access

Use the file **BPINSv3_CAL_Bootstrap.xlsx** included in the Getting Started portfolio to generate the connection parameters for each modality as described below.

- Extract the file from the portfolio and save it locally
- In the worksheet [Connect]
 - Select your infrastructure provider from the drop-down list
 - If open for input, enter a project name (required for AWS infrastructure)
Note: 8-12 alphanumeric string; no special characters allowed; case-independent.
 - For each virtual machine, capture the External IP Address from the CAL dashboard and replace the corresponding generic value in the gold cells (see Section 4.2.1)
 - If the gold FQDN fields are open for maintenance, enter the corresponding actual FQDN values captured previously (see Section 4.2.2)

The spreadsheet will generate the parameters for SAP GUI connections as well as the URLs for the Fiori Launchpad connection and other subsystems.

Save the file for future reference.

Fiori Launchpad URL

This is the regular system connection used for solution exploration by the business users (ZW01...ZW05 and possible others that you onboard).

Walkthrough scripts are based on this connection.

The link must be shared with all users.

SAP GUI Connections

This section provides the maintenance parameters for the technical connections at ABAP system level.

Such connections are mostly interesting to system administrators and project team members with configuration responsibilities.

Not indicated for day-to-day operations or end-to-end walkthroughs.

Other Technical URLs

These URLs are used exclusively for maintenance and/or localization.

- FS-PRO System admin
- FS-PRO Product admin
- FS-QUO System Admin

6 One-Time Operations

6.1 Mandatory Initial Platform Setup

A number of Basis-level configuration activities are required after the solution platform is initially created, mainly to establish the relations of trust and communication between the various systems.

Complete in the order specified the operations delineated in the [Setup] worksheet of your saved **BPINSv3_CAL_Bootstrap.xlsx** file.

Estimated Duration

The initial platform setup will take 1-2 hours, possibly less depending on your level of familiarity with Basis operations. The process does NOT require however any pre-existent basis knowledge.

Hosts File Maintenance

Note that except for platforms on Monsoon infrastructure, appending the IP addresses and FQDNs to the Windows hosts file is a prerequisite for connection.

The procedure is described in the [Setup] worksheet and reviewed here:

- Open a text editor such as Notepad, with elevated privileges (Right-click > *Run as administrator*)
Do NOT use a word processor!
- From within the text editor, open the file *C:\Windows\System32\drivers\etc\hosts*
(note that the file has no extension)
- Copy the indicated block from the worksheet and append it into the hosts file at the end starting from a new line
- Save the hosts file (do NOT save with an extension such as hosts.txt)

IMPORTANT: the same append must be performed by each user for each machine that will access the platform. The procedure and the text to append must be communicated to all users.

6.2 Optional Platform Localization

The pre-delivered content of SAP Best Practices for Insurance v3 S/4HANA is localized for US.

In case you want to use the solution for a Proof of Concept (PoC) project and you want to localize the platform to your Country and Currency, a specific Localization Portfolio includes the guide and additional accelerator files.

Estimated Duration

A complete localization may take 4-8 hours, possibly less depending on your level of familiarity with SAP software and especially with FI/CI configuration operations. The process does NOT require however any pre-existent FI knowledge if your Fiscal Year is based on a Calendar Year (January 1 – December 31).

Fiscal Year Localization

Fiscal Year change affects just a couple of steps. It is a relatively simple configuration but requires a certain level of familiarity with the procedure and a thorough understanding of dependencies. If you cannot secure adequate knowledge for the PoC localization it is safer to postpone the relevant localization until the real implementation. The only net effect for PoC business processes is that financial postings will take place in the natural month rather than in your target fiscal period.