

SAP BW/4HANA 1.0 SPS02
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SAP BW/4HANA Master Guide

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Document History

The following table provides an overview of the most important document changes.

Table 1:

Version	Date	Description
1.0	September 07, 2016	Initial Version
1.1	January 27, 2017	Corrections

1 Getting Started

1.1 About this Document

This Master Guide is the central starting point for the technical implementation of SAP BW/4HANA 1.0. It provides you with information about the use cases as well as the installable product instances.

Note

The *Master Guide* is regularly updated on SAP Help Portal. Make sure that you have the latest version by checking SAP Help Portal at <http://help.sap.com/download/bw4hana10/MasterGuide.pdf> immediately before starting the installation.

Constraints

The scenarios that are presented here serve as examples of how you can use SAP software in your company. The scenarios are intended only as models and do not necessarily run the way they are described here in your customer-specific system landscape. Check your requirements and systems to determine whether these scenarios can be used productively at your site. Furthermore, we recommend that you test these scenarios thoroughly in your test systems to ensure that they are complete and free of errors before going live.

1.2 Glossary

Short overview of some technical terms as well as key terms

Table 2:

Term	Explanation
Client	Clients are additional installable programs or tools. They reside either on local front-end PCs accessed by users or on back-end systems where they act as client programs within an SAP system landscape.
Landscape Pattern	Defines if a technical system is used by one or several product systems to calculate update and upgrade methods. The landscape pattern can be defined as "hub" system (if used by several product systems) or as "sidecar" system (if used by one product system).
Logical Component	Group of technical systems that provide a concrete business function by installed product instances and by different roles (such as development, test, or production system).

Term	Explanation
Maintenance Planner	<p>Tool on SAP Support Portal to visualize the existing system landscape, and to plan and simulate updates, upgrades, and new installations.</p> <p>Maintenance planner is a solution hosted by SAP and helps you plan and maintain systems in your landscape. You can plan complex activities like installing a new system or updating existing systems. All changes can be scheduled to be deployed at a convenient time, to minimize downtime. Maintenance planner is the successor of Maintenance Optimizer, Landscape Planner, and Product System Editor. It simplifies the maintenance process by consolidating critical tasks such as definition of product maintenance dependencies, implementing changes by generating stack configuration, downloading archives, and so on, in one tool.</p>
Operating Scope	<p>Operating scope describes the usage of a system with regard to SAP BW/4HANA. It determines which SAP BW/4HANA objects are installed to make the system work for the defined use case.</p> <p>For Post-Installation set the operating scope to a value appropriate for your system use case.</p>
Product	<p>An SAP offering in the SAP price list that performs business tasks.</p> <p>The complete product model is shipped as SAP Software Catalog. The availability of products is published in the Product Availability Matrix (PAM). The product model defines the product structure with its product instances, software components, version, and technical dependencies between product and its components. Products typically have a name starting with 'SAP...' and are characterized by a version period and a maintenance cycle. A product can be installed on one or more technical systems. All technical systems that are involved form the product system.</p> <p>Example for product is SAP BW/4HANA.</p>
Product Instance	<p>Part of a product version that bundles one or more software components.</p> <p>A product instance is part of only one product version. It must be installed and updated as a whole on a single technical system. Patches can still be installed for individual software components. A product instance can contain other product instances. It can be re-used across products.</p> <p>Example for product instance is SAP NetWeaver AS for ABAP.</p>
Product System	<p>A group of technical systems on which a product version is installed. Product system descriptions are used to maintain and plan products in the system landscape.</p>
Product Version	<p>A release of a SAP product.</p> <p>It bundles product instances and the included software component versions that are available at a particular time for a specific scope of functionality. Like products, product versions are shipped in the SAP Software Catalog. They are the basis for the compatibility of closely coupled systems and the maintenance of product systems.</p>

Term	Explanation
SLD	<p>System Landscape Directory</p> <p>Central provider of information on technical systems, for consumers in the system landscape and for external consumers. The SLD obtains its information mainly from SLD data suppliers, which are installed on the technical systems, and from the SAP software catalog.</p> <p>With the SLD, you collect and edit system data that is required for system landscape management.</p>
Software Component	<p>Delivery and product unit of an SAP software product</p> <p>A software component comprises a set of packages that are delivered in a single unit. You always assign repository objects to a software component by assigning the package containing these objects. This makes it possible to move repository objects from one software component to another during a release upgrade. A software component is released in successive releases with new functions. You can import patches into each software component separately.</p>
Software Provisioning Manager	<p>A tool that performs software provisioning processes such as installation, uninstallation, system copy, or system transformation. The Software Provisioning Manager is delivered with the Software Logistics Toolset.</p>
Stack configuration file	<p>The stack configuration file is created by the Maintenance Planner and is system-specific. Depending on the software components that are installed in a system, the Maintenance Planner calculates the required software components that have to be updated to reach a certain target configuration.</p>
Technical System	<p>Describes a part of a product's software that is installed on one or several physical or virtual hosts.</p> <p>A technical system is installed and administered as a whole. It is identified by a system ID (SID) or extended SID, a host, and an installation number. There are different technical system types, for example Application Server (AS) ABAP. Technical systems are central elements when it comes to software component deployment and operational activities, such as monitoring and alerting.</p>
Update	<p>Activities to maintain or enhance a system, such as installing enhancement packages, installing add-ons, or applying support package stacks or support packages.</p> <p>Note: The tool for system maintenance tasks is the Software Update Manager (SUM). In the SUM guide, the term "Update" is used as collective term for all the tasks that can be performed using this tool (such as performing release upgrades, installing enhancement packages, or updating a system with Support Package Stacks).</p>
Use Case	<p>A definition of use from the end users' perspective for accomplishing a specific goal within a system. Use cases represent the main capabilities of the system to fulfill specific requirements.</p>

1.3 SAP BW/4HANA Use Case

SAP BW/4HANA is a data warehouse solution which is highly optimized for the SAP HANA platform. It offers a managed approach to data warehousing. This means that prefabricated templates (building blocks) are offered for building a data warehouse in a standardized way. The use case illustrates how you can use your SAP BW/4HANA implementation. The main use case of SAP BW/4HANA is Data Warehousing.

SAP BW/4HANA provides you with a simplified Data Warehouse, with agile and flexible data modeling, SAP HANA-optimized processes and state of the art user interfaces. The core functionality of SAP BW is preserved. In SAP BW/4HANA, objects for data modeling, as well as processes and user interfaces, are especially primed for use with a SAP HANA database. Data modeling is restricted to the small number of objects that are well suited for modeling the layer architecture of a data warehouse on SAP HANA (LSA++). In SAP BW/4HANA, data warehouse models can be flexibly combined with SAP HANA views. An intuitive Eclipse-based modeling environment supports object modeling here.

Customers running SAP Business Warehouse on any database

These customers perfectly benefit from moving their current SAP BW to SAP BW/4HANA, because in this context they will not only experience a premium performance for data loads and analysis but also a highly simplified BW in terms of reduced data layers and a consolidation of modelling objects. This enables much higher agility when it comes to business process changes and new business requirements.

SAP BW/4HANA is open to SAP systems as well as non SAP systems via the SAP HANA EIM integration with its predefined adaptors and flexible access methods like virtualization, real time replication etc. or an automated switch between the different methods. This means a decisive step towards a scalable, service-driven Logical Data Warehouse.

The possibility to automatically generate SAP HANA views for data models that can then be consumed by any SQL tool or SAP HANA modeling studio provide additional flexibility and the openness to SQL based Data Warehouse approaches.

All of this comes along with a unified modern UI across all modeling tools.

For these customers it is highly recommended to go to SAP BW/4HANA because their legacy BW objects can now be transferred to the SAP HANA optimized BW objects. SAP BW/4HANA only provides the new SAP HANA optimized BW objects and does not contain any BW legacy.

Customers running SAP Business Warehouse on any database and decide to move to SAP BW/4HANA will either take a migration approach or a green field implementation.

For those customers overall it is the move from a traditional Data Warehouse to a Business Analytics Platform.

Customers running SAP BW powered by SAP HANA already

Customers running SAP BW powered by SAP HANA benefit already from performance improvements, reduced data layers and partially also from simplifications based on the consolidation of modeling objects. They are usually

in the process to further convert their old objects to the new modeling objects e.g. the advanced DataStore Object and the new CompositeProvider.

The recommendation for already existing SAP BW powered by SAP HANA customers would be to implement SAP BW powered by SAP HANA, release 7.5. Now you can switch to the B4H compatibility mode which enables you to use the existing transfer tools, combined with SAP's service offering, to convert their old objects to the SAP HANA optimized BW objects. This will bring them as close as possible to SAP BW/4HANA.

Customers running a SQL based Data Warehouse today

For customers running a SQL based Data Warehouse e.g. based on Oracle etc. and have now decided to move to a SAP HANA based Data Warehouse it depends on their preferences, skill set, modeling approaches (degree of freedom) whether SAP BW/4HANA will be an option. For those customers SAP BW/4HANA needs to be positioned in the context of mixed scenarios with the openness towards SQL based approaches.

More Information

You can obtain all information about the product in the SAP Help Portal and in SAP Community Network (SCN):

- **SAP Help Portal**

SAP Help Portal bundles access to SAP product documentation and also related information, such as SAP Notes, product availability information, as well as community content.

For SAP BW/4HANA, you access the Help Portal using the address <http://help.sap.com/bw4hana10>.

- **SAP Community Network (SCN)**

The SCN is organized into more than 300 "spaces", which support small, self-contained communities. These communities are typically focused around a topic, an SAP product, or an industry. Each space contains a complete set of social networking tools including a discussion forum, a blogging area, and an area where you can publish and collaborate on documents.

As a logged-on member, you can go to any space in the SCN landscape but it's likely that you will be interested in visiting and following a particular set of spaces that reflect your particular range of interests and where members who share your interests are likely to hang out.

SCN spaces are where you get the latest news from SAP and the community, where you interact with your peers, where you earn points for your contributions, and where you establish reputation as being expert on certain topics

To get started with SAP BW/4HANA, access <http://scn.sap.com/docs/DOC-74554> .

1.4 Mapping of Use Case to Installable Software Unit

To give you a quick overview, the table below shows the mapping between use case and required SAP software units.

Table 3:

Use Case	Product Instance	Standalone Engines	Optional Standalone Units	Clients
Data Warehousing	<ul style="list-style-type: none">• SAP_BASIS• SAP_GWFND• SAP_UI• SAP_ABA• DW4CORE			<ul style="list-style-type: none">• SAP GUI• Modeling Tools for SAP BW/4HANA (BW Modeling Tools)• SAP BusinessObjects Analysis, Edition for Microsoft Office*• SAP BusinessObjects Design Studio*

*Note that SAP BusinessObjects products require separate licenses.

Related Information

[Description of Software Units \[page 17\]](#)

2 Planning SAP BW/4HANA 1.0

The general sequence for the implementation of an SAP BW/4HANA system is as follows:

1. You plan the implementation (such as scope, hardware and software requirements, release restrictions).
2. You plan the system landscape for the use cases.

Related Information

[Major Planning Steps and Related Documentation \[page 10\]](#)

[Planning the Use Case and its System Landscape \[page 11\]](#)

2.1 Major Planning Steps and Related Documentation


During an implementation project, you have to take into account many aspects and to take various decisions. The major planning steps of this process are outlined below.

Caution

Unicode

SAP BW/4HANA supports Unicode only. Make sure, that the original system already supports Unicode.

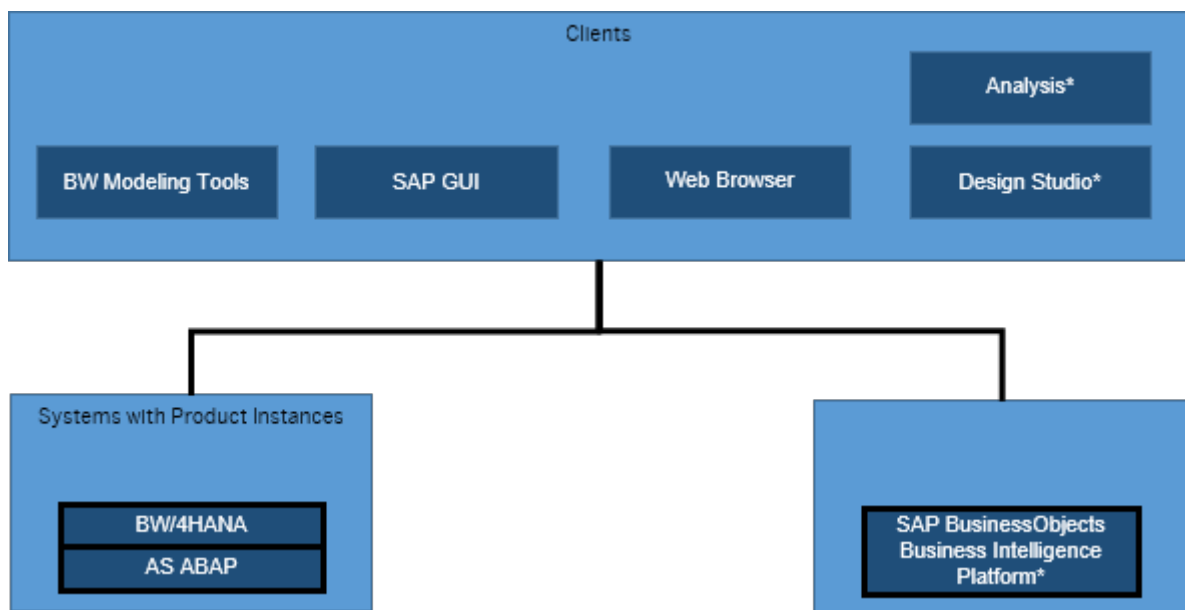
Table 4:

Step	Step Description	Further Information
Scope and Requirements	You determine the scope of your SAP BW/4HANA implementation.	For more information, see SAP BW/4HANA Use Case [page 7] .
Landscape Planning	You determine the system landscape and consider the landscape-relevant aspects concerning your required use case.	See Planning the Use Case and its System Landscape [page 11] .
Hardware & Software Prerequisites	Use the <i>Product Availability Matrix</i> (PAM) to check which platforms (operating systems, databases, browsers) are supported for your SAP BW/4HANA components.	http://support.sap.com/pam 

Step	Step Description	Further Information
	Check the recommended minimum data-base versions.	See SAP Note 2347382 - SAP BW/4HANA Information (installation, data-base).
Release Restrictions	Check SAP Notes for any release restrictions.	See SAP Note 2347392 - SAP BW/4HANA 1.0 Release Restrictions.

2.2 Planning the Use Case and its System Landscape

The following figure shows the software units that are used for data warehousing.



* Note that SAP BusinessObjects products require separate licenses.

- With SAP BW/4HANA, SAP offers the SAP HANA database being the in-memory deployment option for the data warehousing use case. In combination with SAP BW/4HANA 1.0, it is necessary to use SAP HANA SPS 12 or a higher revision.
- The Modeling Tools represent a modeling IDE (Integrated Development Environment) build on top of the Eclipse platform. Its main objective is to support SAP BW/4HANA model developers in today's increasingly complex BI environments by offering state-of-the-art modeling tools. These tools include integration with SAP HANA modeling and the consumption of SAP HANA elements in Open ODS Views or CompositeProviders with powerful UI (user interface) capabilities.

3 Implementing SAP BW/4HANA 1.0

The general sequence for the implementation of an SAP BW/4HANA system is as follows:

1. You install the components of your SAP BW/4HANA system.
2. You configure your systems.

Related Information

[Installation Procedure \[page 12\]](#)

[Installation Tool \[page 14\]](#)

[Post-Installation \[page 15\]](#)

[System Copy \[page 16\]](#)

3.1 Installation Procedure

The installation procedure is divided into the following sections: Preparation, Installation of required SAP BW/4HANA systems, Installation of standalone engines, Installation of clients.

1. You prepare the installation procedure.

Table 5:

Tasks	Documentation
You identify the DVDs and archives required for the installation of the required software units.	<p>You normally obtain the installation media as part of the installation package from SAP. However, you can also download installation media from the SAP Software Center on the SAP Support Portal at https://launchpad.support.sap.com/#/softwarecenter.</p> <div><p>Note</p><p>Since the material numbers of the corresponding DVDs, CDs, and archives may change when new updates become necessary, we recommend visiting the SAP Software Distribution Center to make sure that you always use the most recent version of the indicated data carriers.</p></div>

Tasks	Documentation
SAP BW/4HANA is running only on SAP HANA. Please install at minimum SAP HANA SPS12.	SAP HANA Master Guide on the SAP Help Portal at http://help.sap.com//hana_platform ► Installation and Update ► SAP HANA Master Guides ►

2. You install the required SAP BW/4HANA systems.

Table 6:

Tasks	Documentation
You install SAP BW/4HANA systems with the required product instances.	See the following SAP Notes in addition: <ul style="list-style-type: none"> • 2347382 ► - SAP BW/4HANA Information (installation, database) • 2347392 ► - SAP BW/4HANA 1.0 Release Restrictions • 2347384 ► - SAP BW/4HANA 1.0 Important Notes
Apply the corrections in the SAP note for creating a new client in system with transaction SCC4.	See 2354516 ►.
Optional: To set up a SAP BW/4HANA system, you can install the following Content Add-Ons: <ul style="list-style-type: none"> • SAP BW/4HANA Content Basis Add-On 1.0 includes basic BI Content objects and functions to enable SAP HANA-optimized BI Content data models. The Add-On can be separately installed on SAP BW/4HANA. • SAP BW/4HANA Content Add-On 1.0 includes SAP Hana-optimized BI Content and data flows for master data provisioning of InfoObjects. The Add-On requires SAP BW4 HANA Content Basis Add-On. 	See 2393067 ►.
SAP Kernel Update Make sure that you apply the latest kernel as described in the Installation Guide.	Installation Guide <i>Installing SAP Systems Based on SAP NetWeaver 7.1 and Higher - Using Software Provisioning Manager 1.0</i> There are specific installation guides for all supported combinations of technologies (ABAP), databases and operating systems, available at: http://service.sap.com//sltoolset ► Software Logistics Toolset 1.0 ► Documentation ► System Provisioning ►
Support Package Stack Update We recommend that you always apply the latest Support Package Stack.	You can apply Support Package Stacks on top of SAP BW/4HANA 1.0 and higher by using the Software Update Manager tool (http://support.sap.com/sltoolset ►).

4. You install the standalone engines.

Table 7:

Tasks	Documentation
Web Dispatcher	<i>Installing Web Dispatcher for SAP Systems using Software Provisioning Manager 1.0</i>
Standalone Gateway	<i>Installing Gateway for SAP Systems and higher using Software Provisioning Manager 1.0</i>
SAP HANA	

5. You install the clients.

Table 8:

Tasks	Documentation
SAP GUI for Windows	<i>SAP Front End Installation Guide</i>
ABAP Development Tools for SAP NetWeaver (ADT)	<p>Installation Guide <i>ABAP Development Tools for SAP NetWeaver</i></p> <p>ADT can be downloaded from the SAP Software Download Center at https://support.sap.com/swdc</p>
BW Modeling Tools	<i>Installation Guide for Modeling Tools for SAP BW/4HANA and SAP BW powered by SAP HANA</i> at SAP Help Portal using the address http://help.sap.com/bw4hana10 .
SAP NetWeaver Business Client	SAP Help Portal at http://help.sap.com/nw75 ► <i>System Administration and Maintenance Information</i> ► <i>Technical Operations for SAP NetWeaver</i> ► <i>Technical Operations for SAP NetWeaver Business Client</i> ►

3.2 Installation Tool

For the new installation of an SAP BW/4HANA system you use the standard installation tool `software provisioning manager 1.0`.

The software provisioning manager performs software provisioning processes such as installation, uninstallation, system copy, or system transformation.

Software provisioning manager is the successor of the product- and release-specific delivery of provisioning tools, such as `SAPinst`. Before you perform an installation or system copy, we recommend that you always download the latest version of the software provisioning manager, which is part of the Software Logistics Toolset (SL Toolset for short). This way, you automatically get the latest `SAPinst` version including latest fixes in the tool and supported processes.

For more information about software provisioning manager as well as products and releases supported by it, see SAP Note [1680045](#).

See also the information in the SAP Community Network at <http://scn.sap.com/docs/DOC-30430> and on the SAP Support Portal at <http://support.sap.com/sltoolset> ► *Software Logistics Toolset 1.0* ► *System Provisioning*.

3.3 Post-Installation

This section includes the post-installation steps that you have to perform.

1. After the installation and before you start working with SAP BW/4HANA, you need to run tasklist `SAP_BW4_SETUP_SIMPLE` in transaction `STC01`. This tasklist performs the basic system setup tasks, like creating and configuring the SAP BW/4HANA background user, setting the SAP BW/4HANA client and installing the essential technical content (content objects, mainly InfoObjects and variables which are needed to make SAP BW/4HANA work).

The technical content is grouped by the **operating scope**. In the SAP BW/4HANA use case as a data warehouse, the maximum scope is required. Please therefore set the parameter to 16 in the tasklist.

Note

It is **not** possible to **remove** an operating scope using a lower number. You can always **add** usages to the SAP BW/4HANA system by increasing the operating scope.

2. After running the task list, use the Implementation Guide (IMG) to add further settings.

Note

We are working on including more settings from IMG in this task list to further automate. After applying a Support Package, run tasklist `SAP_BW4_AFTER_UPDATE` to update your essential objects if required by SAP. More details can be found in the documentation of the tasklist.

3. You must install a permanent SAP license. When you install your SAP system, a temporary license is automatically installed.

Caution

Before the temporary license expires, you must apply for a permanent license key from SAP. We recommend that you apply for a permanent license key as soon as possible after installing your system.

For more information about SAP license keys and how to obtain them, see <http://support.sap.com/licensekey>.

3.4 System Copy

Use

At several stages in the lifecycle of your SAP solution, you will face the requirement to perform a system copy. For example, SAP recommends that you perform a system copy to create test, demo and training systems.

For this, SAP is offering system copy services (Backup and Recovery) that enable you to create consistent copies of your SAP systems, flexibly adapted to your needs - be it an SAP system distributed to several hosts, a high-availability system or a system on a rather exotic operating system/database combination.

More Information

- For an introduction into system copy, see <http://scn.sap.com/docs/DOC-8324> in the SAP Community Network.
- System copy guides are available on SAP Service Marketplace at <http://service.sap.com/installnw75>.

4 Appendix

4.1 Additional Information for Implementing SAP BW/4HANA

The following table contains links to information available on SAP Service Marketplace or in the SAP Library which is relevant for implementing SAP BW/4HANA.

Table 9:

Content	Location on SAP Service Marketplace or in SAP Library
The latest version of the installation and upgrade guides for AS ABAP	See http://service.sap.com/instguidesnw75
Information about security	<i>Security Guide for SAP BW/4HANA</i> , see http://help.sap.com/bw4hana10 .
Information about SAP BW/4HANA Support Package Stacks	http://support.sap.com/sp-stacks
Information about Maintenance Tools: Maintenance Planner and Maintenance Optimizer	See SAP Community Network at http://wiki.scn.sap.com/wiki/x/VlwqCw

4.2 Description of Software Units

The following sections provide more details about product instances, standalone engines, and clients of SAP BW/4HANA.

Caution

Uninstalling additional product instance

Note that it is not possible to uninstall additional product instances and that this is also not supported by SAP.

4.2.1 Systems with Product Instances

Installation Options for SAP BW/4HANA Systems With Product Instances

The standard SAP installation tool `software provisioning manager 1.0` offers the following options for installing SAP BW/4HANA systems with product instances:

- **Application Server ABAP**
This installation option installs an Application Server ABAP which is the basis for product instance SAP BW/4HANA.
Application Server ABAP provides a complete development and runtime environment for ABAP-based applications. It is optimized for the development of highly scalable business applications. The ABAP development environment is used both for developing completely new applications and extending and modifying SAP standard applications for customers. The entire, powerful infrastructure of the Application Server for ABAP can be used, which even supports the creation of the most complex applications by large groups of developers.

SAP BW/4HANA

SAP BW/4HANA provides the infrastructure for the following functions:

- Data warehousing
- Various analytical technologies and functions
- Open analysis interfaces that make available various interfaces for connecting front-end tools of third-party providers

4.2.2 Standalone Engines

For SAP BW/4HANA, the following standalone engines are available:

Content Server

Content Server is a separate server instance that is used to store documents or other types of content related to SAP applications. The accompanying cache server can cache content if your company operates in several locations. This reduces load on the wide area network when working with documents.

SAP NetWeaver Gateway

SAP NetWeaver Gateway facilitates easier provisioning and consumption of business logic and content of SAP back-end systems for mobile and web applications. It aims to reduce the complexity and the skill set required to access SAP data, thereby removing deployment barriers. Simple interfaces also help to shorten development times.

SAP NetWeaver Gateway enables people-centric applications to consume SAP Business Suite data through popular platforms and devices (such as the iPad and Blackberry) in an easy and standards-based manner. It is a framework that connects business users to SAP systems using consumer technologies, groupware, and mobile devices and is based on open standards (such as the Atom Publishing Protocol and OData) that offer simple services based on the REST principle.

For more information, see SAP Help Library at <http://help.sap.com/nwgateway>

4.2.3 Clients

SAP NetWeaver Business Client

SAP NetWeaver Business Client (NWBC) is a high fidelity desktop client that allows users to display their assigned roles and to launch applications. SAP NetWeaver Business Client offers a unified environment for and a single point of entry to SAP business applications and technologies. NWBC is ideal for displaying business applications such as classical SAP GUI UIs, Web Dynpro UIs, BSP pages, and other content using its multiple rendering engines. NWBC provides role-based access to applications either via the portal or directly using role maintenance (transaction PFCG). In addition to the basic capabilities detailed above, the SAP NetWeaver Business Client makes use of its tight desktop integration to provide additional benefits such as desktop search functionality. In the newest SAP NetWeaver Business Client version you will find the improved user interface (UI) based on the SAP Signature design. This UI offers in part an expert-based interactive paradigm and a superior look and feel matching the expectations of today's users aiming to maximize their daily activities.

SAP NetWeaver Business Client is one of the main components of the User Interface Add-On for SAP NetWeaver. For more information, see the SAP Help Portal at <http://help.sap.com/nw-uiaddon> ► [Application Help](#) ►.

SAP GUI

SAP offers three different client applications for accessing ABAP applications in SAP systems (such as SAP NetWeaver systems with product instance AS ABAP). This SAP GUI family consists of:

- **SAP GUI for HTML**
SAP GUI for HTML is based on the SAP integrated Internet Transaction Server (ITS) which is included in the installation of SAP NetWeaver systems as of SAP NetWeaver 7.0. On the client side, only a suitable browser and a virtual machine are required. For information about supported browser versions, see the Product Availability Matrix on SAP Service Marketplace at <http://service.sap.com/pam> ►.
- **SAP GUI for the Java environment (SAP GUI for Java)**
SAP GUI for Java is a generic SAP GUI that covers a variety of platforms.
For more information about the installation of SAP GUI for Java, see the documentation *Installation Guide – SAP Front End*.
- **SAP GUI for the Windows environment (SAP GUI for Windows)**
SAP GUI for Windows is SAP's universal client for accessing all SAP applications built on ABAP technology. It is available on the Microsoft Windows platform only and offers the broadest feature set of all members of the SAP GUI family.
For more information about the installation of SAP GUI for Windows, see the *Installation Guide – SAP Front End*.

The following SAP GUI versions are supported with SAP NetWeaver 7.5:

- SAP GUI for Windows 7.40 (or higher)
- SAP GUI for Java 7.40 (or higher)
- SAP integrated ITS

For more information about the SAP GUI family, see SAP Community Network at <http://scn.sap.com/community/gui> ►.

Modeling Tools for SAP BW/4HANA

The Modeling Tools represent a modeling IDE (Integrated Development Environment) build on top of the Eclipse platform.

Its main objective is to support SAP BW/4HANA model developers in today's increasingly complex BI environments by offering state-of-the-art modeling tools for objects such as InfoObjects, DataStoreObjects (advanced), or Queries. These tools include integration with SAP HANA modeling and the consumption of SAP HANA elements in Open ODS Views or CompositeProviders with powerful UI (user interface) capabilities.

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contact.html**

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