

SAP HANA Platform 2.0 SPS 01  
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# SAP HANA Client Installation and Update Guide



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# Content

<b>1</b>	<b>SAP HANA Client Installation and Update Guide. . . . .</b>	<b>3</b>
<b>2</b>	<b>Introduction. . . . .</b>	<b>4</b>
2.1	Supported Platforms. . . . .	4
2.2	Software Download. . . . .	4
<b>3</b>	<b>SAP HANA Client on UNIX or Linux. . . . .</b>	<b>8</b>
3.1	Planning on UNIX or Linux. . . . .	8
	Available Clients on UNIX or Linux. . . . .	8
	Default Installation Paths for UNIX or Linux. . . . .	8
3.2	Installing the SAP HANA Client on UNIX or Linux. . . . .	9
	Install the SAP HANA Client on UNIX or Linux. . . . .	9
	Logging the Installation on UNIX or Linux. . . . .	10
3.3	Uninstalling the SAP HANA Client on UNIX or Linux. . . . .	11
	Uninstall on UNIX or Linux in Interactive Mode. . . . .	11
	Uninstall on UNIX or Linux in Batch Mode. . . . .	12
<b>4</b>	<b>SAP HANA Client on Windows. . . . .</b>	<b>13</b>
4.1	Planning on Windows. . . . .	13
	Available Clients on Windows. . . . .	13
	Default Installation Paths for Windows. . . . .	14
4.2	Installing the SAP HANA Client on Windows. . . . .	14
	Install the SAP HANA Client on Windows. . . . .	15
	Logging the Installation on Windows. . . . .	16
4.3	Uninstall the SAP HANA Client on Windows. . . . .	16
<b>5</b>	<b>Command and Call Option Reference. . . . .</b>	<b>17</b>

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# 1 SAP HANA Client Installation and Update Guide

This guide describes how to install the SAP HANA database clients (for connecting applications).

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## 2 Introduction

SAP HANA provides client interfaces for connecting applications as part of the SAP HANA client software package. The SAP HANA client can be installed on both UNIX/Linux and Microsoft Windows operating systems, as well as on an SAP HANA server host during server installation.

### 2.1 Supported Platforms

The SAP HANA client software can be installed on various platforms.

The following platform types are supported:

- AIX
- HP-UX (IA64)
- Linux (x86, x86\_64, Power PC BE and LE, zSeries 64-bit)
- Microsoft Windows (x86, x64)
- Solaris (x64, SPARC)
- Mac OS

For more information about supported platforms, see SAP Product Availability Matrix (PAM) in Related Information.

#### Related Information

[SAP Product Availability Matrix \(PAM\)](#) 

### 2.2 Software Download

In the SAP Software Download Center, you have access to the installation media and components for SAP HANA.

#### Installation Media and Components for SAP HANA

##### Installation Media for an SAP HANA SPS

1. Open the [SAP Software Download Center](#).

2. Choose [Software Downloads](#).

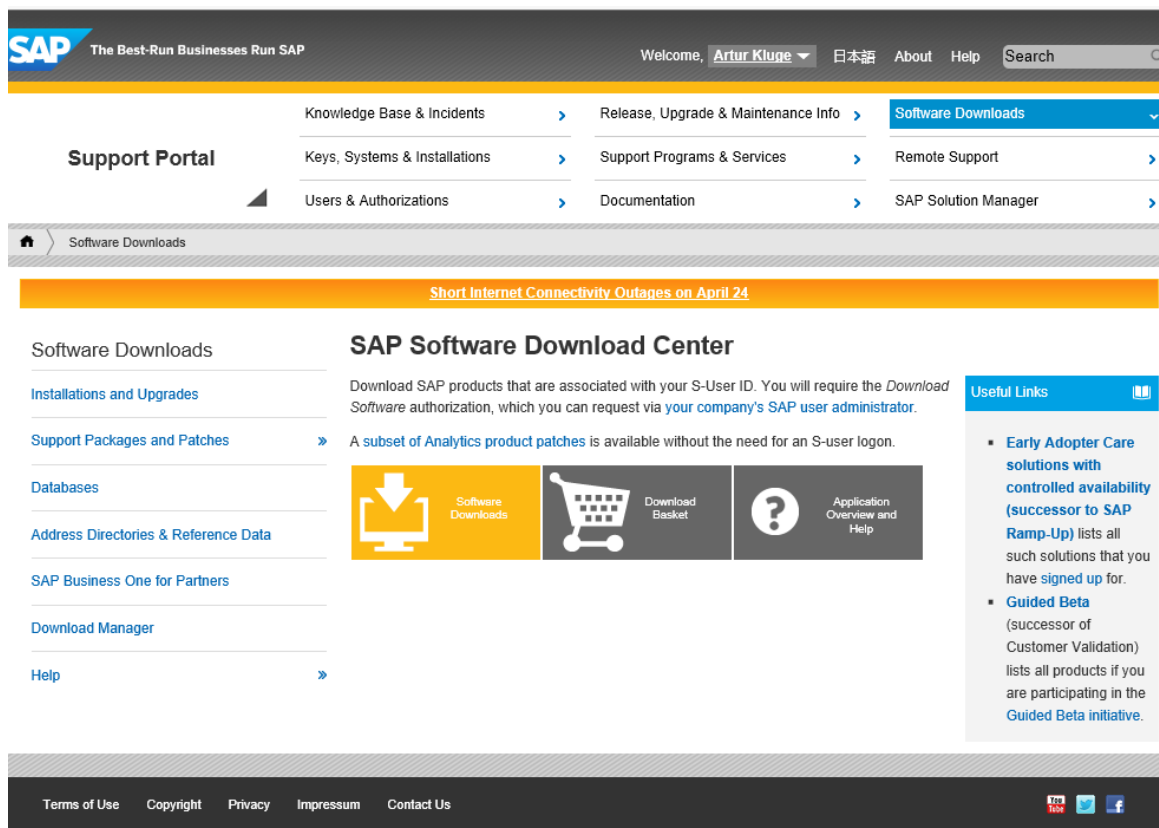
The screenshot shows the SAP Software Download Center. At the top, there's a header with the SAP logo, the tagline 'The Best-Run Businesses Run SAP', a welcome message for 'Artur Kluge', a language selector for '日本語', and links for 'About' and 'Help'. A search bar is also present. Below the header is a navigation menu with categories like 'Knowledge Base & Incidents', 'Release, Upgrade & Maintenance Info', 'Software Downloads' (which is selected), 'Keys, Systems & Installations', 'Support Programs & Services', 'Remote Support', 'Users & Authorizations', 'Documentation', and 'SAP Solution Manager'. The main content area has a banner for 'Short Internet Connectivity Outages on April 24'. Below this, the 'SAP Software Download Center' section explains that users need an S-User ID and software authorization. It also mentions that a subset of Analytics product patches is available without an S-user login. There are three main action buttons: 'Software Downloads' (with a download icon), 'Download Basket' (with a shopping cart icon), and 'Application Overview and Help' (with a question mark icon). On the left, there's a sidebar with links for 'Installations and Upgrades', 'Support Packages and Patches', 'Databases', 'Address Directories & Reference Data', 'SAP Business One for Partners', 'Download Manager', and 'Help'. On the right, there's a 'Useful Links' section with links for 'Early Adopter Care solutions with controlled availability (successor to SAP Ramp-Up)' and 'Guided Beta (successor of Customer Validation)'. The footer contains links for 'Terms of Use', 'Copyright', 'Privacy', 'Impressum', and 'Contact Us', along with social media icons for YouTube, Twitter, and Facebook.

3. Choose [INSTALLATIONS & UPGRADES](#).
4. Choose [By Alphabetical Index \(A-Z\)](#).
5. Choose [H](#).
6. Choose [SAP HANA PLATFORM EDITION](#).
7. Choose [DOWNLOADS](#).
8. Choose [SAP HANA PLATFORM EDITION 2.0](#).
9. Choose [DOWNLOADS](#).
10. Choose [INSTALLATION](#).

## Support Packages and Patches for SAP HANA

1. Open the [SAP Software Download Center](#).

2. Choose [Software Downloads](#).



3. Choose [SUPPORT PACKAGES & PATCHES](#).
4. Choose [By Alphabetical Index \(A-Z\)](#).
5. Choose [H](#).
6. Choose [SAP HANA PLATFORM EDITION](#).
7. Choose [DOWNLOADS](#).
8. Choose [SAP HANA PLATFORM EDITION 2.0](#).
9. Choose [DOWNLOADS](#).
10. Choose [ENTRY BY COMPONENT](#) or [SUPPORT PACKAGE STACK DOWNLOAD](#).

For more information, see *Application Overview and Help* on SAP Software Download Center.

## Responsibilities

The responsibility for acquiring and installing SAP HANA depends on the chosen deployment model:

- If a customer chooses the **SAP HANA Tailored Datacenter Integration**, the components of SAP HANA must be installed on validated hardware by a certified administrator or official SAP HANA hardware partner.
- If a customer chooses an **SAP HANA appliance**, then the components of SAP HANA can only be installed by certified hardware partners on validated hardware running a specific operating system. Any other system or content developed with systems of this type is not supported by SAP. For more information, see the information page of the product version. Support Package Stacks (SPS) can be downloaded and applied to appliances in accordance with agreements with the respective hardware partner.

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## Related Information

[SAP Software Download Center](#) 

[Application Overview and Help](#) 

## 3 SAP HANA Client on UNIX or Linux

The SAP HANA client can be installed or uninstalled on supported UNIX and Linux operating systems.

### 3.1 Planning on UNIX or Linux

Before installing the SAP HANA client on a supported UNIX or Linux operating system, review the available supported clients and the default installation paths.

#### 3.1.1 Available Clients on UNIX or Linux

When you install the SAP HANA client software package, supported clients are installed and available.

The clients available on UNIX and Linux platforms are as follows:

- SQLDBC
- ODBC  
When using unixODBC, install release 2.3.0 or higher (check with command `isql --version`).
- JDBC
- Python (PyDBAPI)
- Node.js

#### 3.1.2 Default Installation Paths for UNIX or Linux

The SAP HANA client software is unpacked to a default path during installation, depending on the platform type and user. Change the default value can by using the `path` call option.

##### **i** Note

If you do not specify an installation path during installation, then the following default values apply:

Table 1:

Platform	Package Version	Installation Path
Linux x86, 32-bit	32-bit	<code>/usr/sap/hdbclient</code>
Linux x86, 64-bit	64-bit	<code>/usr/sap/hdbclient</code>



Platform	Package Version	Installation Path
Linux x86, 64-bit	32-bit	/usr/sap/hdbclient32
Other platforms	-	/usr/sap/hdbclient

When installing the SAP HANA client without administrative rights, the installed SAP HANA client is only available to the user who installed it, and the default installation folder is `<$HOME>/sap/hdbclient`.

## Related Information

[Command and Call Option Reference \[page 17\]](#)

## 3.2 Installing the SAP HANA Client on UNIX or Linux

The SAP HANA client can be installed from a graphical user interface or on the command line.

Until SAP HANA SPS 06, the installation of the SAP HANA client was performed as root user. As of SAP HANA SPS 07, the installation of the SAP HANA client can also be performed without administrative rights and is only available to the user who installed it.

### 3.2.1 Install the SAP HANA Client on UNIX or Linux

Install the SAP HANA client from a graphical user interface or on the command line.

## Prerequisites

If you plan to use the GUI option, `hdbsetup`, then you need a local X11 graphical environment and an X server on the machine where you perform the installation.

## Procedure

1. Download and extract the software to an empty directory.
2. Open a shell and go to the directory where you unpacked the software.
3. Call the program `hdbsetup` (GUI installation) or `hdbinst` (command-line installation) by entering one of the following commands:

Option	Description
GUI	<code>./hdbsetup [-a client]</code>
Command line	<code>./hdbinst [-a client] [&lt;option list&gt;]</code>

You can omit the call option `-a client` if you only have one installation kit (one installation variant) on your system.

- Follow the instructions displayed by the installation tool.
- For the environment of users that will use the client, including the user `<sid>adm`, add the installation path to the library path environment variable. The library path environment variable differs according to the operating system:

Operating System	Library Path Environment Variable
AIX	LIBPATH
HP-UX	SHLIB_PATH
Linux	LD_LIBRARY_PATH
Solaris	LD_LIBRARY_PATH

For information on how to set environment variables, see your operating system documentation.

## Results

The client software is installed.

## Related Information

[Command and Call Option Reference \[page 17\]](#)

### 3.2.2 Logging the Installation on UNIX or Linux

The SAP HANA client installation is logged by the system. There are two log files written during installation.

- `*.log`: can be read using a text editor
- `*.msg`: XML format for the display in the installation tool with the graphical user interface

The log files are stored here:

```
/var/tmp/hdb_client_<timestamp>
```

---

## 3.3 Uninstalling the SAP HANA Client on UNIX or Linux

Each installation has its own uninstallation tool. Use the hdbuninst program of the software package for which you want to uninstall the client software.

### 3.3.1 Uninstall on UNIX or Linux in Interactive Mode

Each installation has its own uninstallation tool. Use the hdbuninst program of the software package for which you want to uninstall the client software. Interactive mode requires call options to be accepted or changed during installation. Defaults are offered for some call options.

#### Prerequisites

You are logged on to the host where the client software is installed.

#### Procedure

1. Open a shell and go to the directory in which the client is installed.
2. Enter the following command:  
`install/hdbuninst`
3. Select ☐y to finalize the configuration.

#### Results

The client software is removed from this host.

---

## 3.3.2 Uninstall on UNIX or Linux in Batch Mode

Each installation has its own uninstallation tool. Use the hdbuninst program of the software package for which you want to uninstall the client software. Batch mode runs the installation without interaction. Required call options must be specified with the command; defaults are accepted for all un-specified call options.

### Context

To call the hdbuninst program in batch mode, specify the installation path of the client software using the `--path` option.

If you omit the installation path, the program does not run in batch mode but instead queries the installation ID.

### Procedure

1. Open a shell and go to the directory in which the client is installed.
2. Enter the following command:

```
install/hdbuninst --path <installation path> -b
```

### Results

The client software is removed from this host.

---

## 4 SAP HANA Client on Windows

The SAP HANA client can be installed or uninstalled on supported Windows operating systems.

### 4.1 Planning on Windows

Before installing the SAP HANA client on Windows, review the available supported clients and the default installation paths.

#### 4.1.1 Available Clients on Windows

When you install the SAP HANA client software package, supported clients are installed and available.

The clients available on Microsoft Windows platforms are as follows:

- SQLDBC
- ODBO
- ODBC
- JDBC
- Microsoft ADO.NET
- Python (PyDBAPI)
- Node.js

#### **i** Note

To access the SAP HANA database from Microsoft Excel, you can install the 32-bit or 64-bit SAP HANA client for Microsoft Excel. This is a self-extracting archive, which you can install independently of the other Windows clients. It uses an ODBC driver. If you are using Microsoft Excel 64-bit, then you additionally need to install the 64-bit SAP HANA client for Windows.

For more information on the supported clients for SAP HANA, see SAP Note 1577128.

### Related Information

[SAP Note 1577128](#) 



## 4.1.2 Default Installation Paths for Windows

The SAP HANA client software is unpacked to a default path during installation, depending on the platform type and user. The default value can be changed by using the `path` call option.

### **i** Note

If you do not specify an installation path during installation, then the following default values apply:

Table 2:

Platform	Package Version	Installation Path
Microsoft Windows x86, 32-bit	32-bit	C:\Program Files\SAP\hdbclient
Microsoft Windows x86, 64-bit	64-bit	C:\Program Files\SAP\hdbclient
Microsoft Windows x86, 64-bit	32-bit	C:\Program Files (x86)\SAP\hdbclient

When installing the SAP HANA client without administrative rights, the installed SAP HANA client is only available to the user who installed it, and the default installation folder is `<%USERPROFILE%>\SAP\hdbclient`.

## Related Information

[Command and Call Option Reference \[page 17\]](#)

## 4.2 Installing the SAP HANA Client on Windows

The SAP HANA client can be installed from a graphical user interface or on the command line.

An administrator can perform the installation of the SAP HANA client. If the SAP HANA client is installed by a user without administrative rights, then it is only available to the user who installed it.

## 4.2.1 Install the SAP HANA Client on Windows

Install the client from a graphical user interface or on the command line.

### Procedure

1. Download and extract the software to an empty directory.
2. Open a command prompt and go to the directory where you unpacked the software.
3. Call the program `hdbsetup` (GUI installation) or `hdbinst` (command-line installation) by entering one of the following commands:

Option	Description
GUI	<code>hdbsetup [-a client]</code>
Command line	<code>hdbinst [-a client] [&lt;option list&gt;]</code>

If you only have one installation kit (one installation variant) on your system, then you can omit the call option `-a client`.

4. Follow the instructions displayed by the installation tool.
5. Add the installation path to the `PATH` environment variable.  
For information on setting environment variables, see the documentation for your operating system.
6. To install the SAP HANA client for Microsoft Excel, double-click the self-extracting file `SAP_HANA_client_package_for_MS_Excel.exe` and follow the instructions in the installation manager. If you are using Microsoft Excel 64-bit, then you also need to install the 64-bit SAP HANA client for Windows.

### Results

The client software is installed.

### Related Information

[Command and Call Option Reference \[page 17\]](#)

## 4.2.2 Logging the Installation on Windows

The SAP HANA client installation is logged by the system. There are two log files written during installation.

- \*.log: can be read using a text editor
- \*.msg: XML format for the display in the installation tool with the graphical user interface

The log files are stored here:

```
%TEMP%\hdb_client_<time stamp>
```

## 4.3 Uninstall the SAP HANA Client on Windows

Each installation has its own uninstallation tool. Use the hdbuninst program of the software package for which you want to uninstall the client software.

### Procedure

1. Open a command prompt and go to the directory where you unpacked the software for this installation.
2. Enter the following command:  
`hdbuninst`
3. Enter the installation ID assigned to the client software installation and press .

### Results

The client software is removed from this host.

#### Note

You can also use the standard Windows functionality ► [Start](#) ► [Control Panel](#) ► [Add or remove programs](#) ► to remove the client software.

## 5 Command and Call Option Reference

The SAP HANA installation tool, hdbinst, can be called on the command line in combination with call options.

Table 3: Commands

Operating System	Syntax
UNIX or Linux	<pre>./hdbinst [-a client] [&lt;option list&gt;]</pre> <pre>&lt;option list&gt; :: = &lt;option&gt; &lt;option&gt; ...</pre>
Microsoft Windows	<pre>hdbinst [-a client] [&lt;option list&gt;]</pre> <pre>&lt;option list&gt; :: = &lt;option&gt; &lt;option&gt; ...</pre>

The following call options can be used in combination with the call to the SAP HANA lifecycle management tool hdbinst.

archive\_dir

### Description

Specifies the installation variant - a directory containing the installation kit.

### Syntax

In the command line, the following syntax is used:

```
--archive_dir=<dir>
```

or, in short form:

```
-a <dir>
```

### Remarks

The default for this parameter is --archive\_dir=server. If the server installation kit is not present, default values are (in order): client, studio.

batch

### Description

---

Runs the SAP HANA lifecycle management tool from the command line in batch mode using default values for unspecified parameters. If mandatory values are omitted or if invalid values are specified, the program issues an error message.

### Syntax

In the command line, the following syntax is used:

```
--batch
```

or, in short form:

```
-b
```

`check_files`

### Description

Checks whether components of the installation kit are already installed on this host.

### Syntax

In the command line, the following syntax is used:

```
--check_files
```

`configfile`

### Description

Loads a configuration file of call option key-value pairs to be passed to the SAP HANA lifecycle management program.

### Syntax

In the command line, the following syntax is used:

```
--configfile=<file path>
```

### Remarks

The configuration file makes installation and configuration tasks more efficient and reliable. For more information, see Related Information.

This complement to this call option is the call option `dump_configfile_template`.

`dump_configfile_template`

### Description



---

Specifies a file path to which a template configuration file is exported. The call options in the template configuration file are set to their default values, and can be edited.

### Syntax

In the command line, the following syntax is used:

```
--dump_configfile_template=<file path>
```

### Remarks

The configuration file makes installation and configuration tasks more efficient and reliable. For more information, see [Related Information](#).

This complement to this call option is the call option `configfile`.

## help

### Description

Displays the inline help information.

### Syntax

In the command line, the following syntax is used:

```
--help
```

or, in short form:

```
-h
```

### Remarks

A general help output is available for all SAP HANA lifecycle management programs. Task-specific help output is available for some programs. Refer to the task documentation for more details.

## hostname

### Description

Specifies the host name of the machine.

### Syntax

In the command line, the following syntax is used:

```
--hostname=<host name>
```

or, in short form:

```
-H <host name>
```

## Remarks

Restrictions apply to host names in SAP systems. For more information, see SAP Note 661361.

The default for this parameter is the host name of the current machine.

`ignore`

## Description

Ignores failing prerequisite checks. Refer to the inline help output for program-specific checks that can be ignored.

## Syntax

In the command line, the following syntax is used:

```
--ignore=<check1>[,<check2>]...
```

`list_packages`

## Description

Displays available software components and their versions.

## Syntax

In the command line, the following syntax is used:

```
--list_packages
```

or, in short form:

```
-l
```

`list_systems`

## Description

Displays a list of the installed SAP HANA systems on the current host, including the SAP system ID (SID), instance number, version number, and hosts.

## Syntax

In the command line, the following syntax is used:

```
--list_systems
```

---

or, in short form:

```
-L
```

`no_debug_packages`

#### Description

Suppresses the installation of debug packages.

#### Syntax

In the command line, the following syntax is used:

```
--no_debug_packages
```

`path`

#### Description

Specifies the installation path of a client or studio installation.

#### Syntax

In the command line, the following syntax is used:

```
--path=<path>
```

or, in short form:

```
-p <path>
```

#### Remarks

The default for this parameter is `--path=/usr/sap/hdbclient` or `--path=/usr/sap/hdbstudio`.

This parameter is available in interactive mode.

`sapmnt`

#### Description

Specifies the path to the SAP mount directory, which can be used as a shared directory between multiple hosts.

#### Syntax

In the command line, the following syntax is used:

```
--sapmnt=<installation path>
```

## Remarks

The default for this parameter is `--sapmnt=/hana/shared`.

`sid`

## Description

Specifies a system ID. The SAP system ID (SID) is the identifier for the SAP HANA system.

## Syntax

In the command line, the following syntax is used:

```
--sid=<SID>
```

or, in short form:

```
-s <SID>
```

`version`

## Description

Displays the version of the SAP HANA lifecycle management tool.

## Syntax

In the command line, the following syntax is used:

```
--version
```

or, in short form:

```
-v
```

## Related Information

[Default Installation Paths for UNIX or Linux \[page 8\]](#)

[Default Installation Paths for Windows \[page 14\]](#)

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# Important Disclaimer for Features in SAP HANA Platform, Options and Capabilities

SAP HANA server software and tools can be used for several SAP HANA platform and options scenarios as well as the respective capabilities used in these scenarios. The availability of these is based on the available SAP HANA licenses and the SAP HANA landscape, including the type and version of the back-end systems the SAP HANA administration and development tools are connected to. There are several types of licenses available for SAP HANA. Depending on your SAP HANA installation license type, some of the features and tools described in the SAP HANA platform documentation may only be available in the SAP HANA options and capabilities, which may be released independently of an SAP HANA Platform Support Package Stack (SPS). Although various features included in SAP HANA options and capabilities are cited in the SAP HANA platform documentation, each SAP HANA edition governs the options and capabilities available. Based on this, customers do not necessarily have the right to use features included in SAP HANA options and capabilities. For customers to whom these license restrictions apply, the use of features included in SAP HANA options and capabilities in a production system requires purchasing the corresponding software license(s) from SAP. The documentation for the SAP HANA options is available in SAP Help Portal. If you have additional questions about what your particular license provides, or wish to discuss licensing features available in SAP HANA options, please contact your SAP account team representative.



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