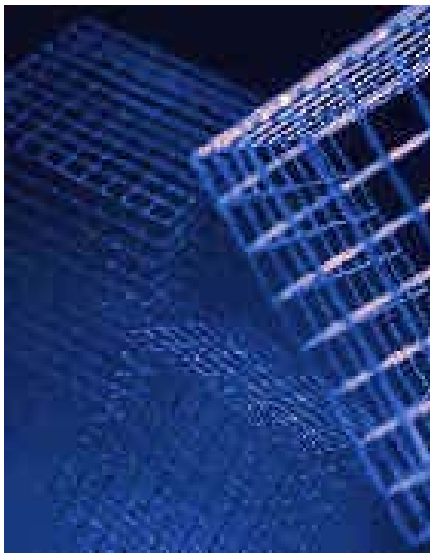
Installation Guide: SAP DB



Version 7.4

Copyright

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Typographic Conventions

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options. Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.
`EXAMPLE TEXT`	Keys on the keyboard, for example, function keys (such as `F2`) or the `ENTER` key.
`Example text`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Installation Guide: SAP DB 7.4

This document describes how to install and register the SAP DB software on UNIX/Linux and Microsoft Windows operating systems, how to upgrade existing SAP DB software or perform an update of the SAP DB software for a running database instance.

This guide is **not** relevant for standard installations or upgrades of SAP systems. The installation or upgrade of the SAP DB software required for SAP systems is described in SAP-specific guides. SAP customers can find these guides in the SAP Service Marketplace, at *http://service.sap.com*.

For general information on the SAP DB database system, see the User Manual: SAP DB [See SAP DB Library].

Conventions

Variables [Page 6]

Operating System Versions [Page 7]

Information About the Installation

When you unpack the desired software package, the required installation files [Page 36] and software packages [Page 39] are unpacked.

Installing/Upgrading the SAP DB Software

- For an installation/upgrade of the SAP DB software, you can decide which software packages you want to install/upgrade by selecting the required installation profile [Page 27].
- An installation or upgrade can be carried out interactively (Interactive Installation [Page 29]) or in the background (Background Installation [Page 29]).

Updating an Existing Database Instance

If certain prerequisites are met, you can perform an update of the SAP DB software [Page 30] for an existing database instance (interactively or in the background).

Procedure

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

Uninstalling the SAP DB Software

Follow the procedure described in Uninstalling the SAP DB Software [Page 25].

Variables

The following table lists the variable descriptions that are used.

<os>	Name of the operating system in the path specifications

<arch>	Name of the operating system architecture in the path specifications
<version>	Version number of the SAP DB software (four digit)
<build>	Build number of the SAP DB software
<apoversion>	Version number of the SAP APO component
<combuild>	Build number of the APO COM liveCache routines
<independent_data_path>	Version-independent path for all application data (configuration files and logs)
<independent_program_path>	Program path that is independent of the software version This directory contains all programs for managing the database instance and the client software. Ensure that the directory is large enough that it has sufficient disk space for future enhancements of the client software.
<dependent_path><n>	File path that is dependent on the software version. This path must be unique. This directory contains the programs of the database kernel with its runtime environment. A number of directories with different versions can exist side by side. All programs in these version-independent directories are called not directly by the user but through the programs stored in the <independent_program_path>.
<package>	Logical name of the software package [Page 39]
<package_directory>	Directory in which the software package is stored after its installation
<profile>	Name of the installation profile [Page 27]
<program_path>	Standard Microsoft Windows directory for the user software (such as C:\Program Files)
<owner>	UNIX/Linux: Name of the owner of the SAP DB database software
<group>	UNIX/Linux: Name of the group of the SAP DB database software
<database_name>	Name of the database instance [See SAP DB Library]
<userid>	Name of the DBM user [See SAP DB Library]
<password>	Password of the DBM user

Operating System Versions

The following table lists the operating systems that are supported.

os	arch
aix, aix5	ppc
linux	i386

solaris	sparc
tru64	alpha
hpux	hppa
win	i386, ia64

SAP DB OLTP supports Microsoft Windows NT, Windows 2000, and Windows XP.
liveCache supports Microsoft Windows NT and Windows 2000.

Procedure for UNIX Operating Systems

To install or update the SAP DB database software on an UNIX or Linux operating system, follow the procedure below:

1. Unpack the installation files (Unpacking the Installation Files [Page 8]).
2. Perform the installation or update. You have the following options:

- Installation/Upgrade of the Server and Client Software [Page 9]
- Installation/Upgrade of the Client Software [Page 13]
- Updating a Database Instance [Page 15]

3. Check the result using the log (Logging [Page 24]).

UNIX: Unpacking the Installation Files

Conventions

Variables [Page 6], Operating System Versions [Page 7]

Procedure

1. Log onto your computer.
2. Choose the appropriate software package (`<software_package_name>`) for your operating system architecture and your database instance type.

- For the SAP DB OLTP [See SAP DB Library] database instance type, choose **`SAPDB<version>_<build>.<sar|tgz>`**
- For the liveCache [See SAP DB Library] database instance type (SAP APO System), choose **`LC<version>A<apoversion>_<combuild>.sar`**

3. Copy the software package to a local directory of your choice.
4. Unpack the software. Use the `gnu tar` or `tar` program to do so.

- To unpack the software with `gnu tar`, enter the following command:
  `tar -xpvzf <software_package_name>`

- To unpack the software with `tar`, enter the following command:
  `gzip -dc <software_package_name> | tar -xvpf -`

Result

The following installation files are unpacked to the subdirectory `sapdb-server-<os>-<32|64>bit-<arch>-<version>` or `sapdb-apo<apoversion>_livecache-<os>-<32|64>bit-<arch>-<version>`:

`SDBINST`	SDBINST [Page 37]
`SDBUPD`	SDBUPD [Page 38]
`SDBRUN`	Program for installing the run-time environment. The program consists of a Perl interpreter and some Perl extensions. SDBRUN is not called directly.
`SDBINST.TGZ`	This package contains some Perl modules that are needed for the installation.

A number of software packages [Page 39] are also unpacked to the local directory.

Next Step

Perform the installation or update.

- Installation/Upgrade of the Server and Client Software [Page 9]
- Installation/Upgrade Client Software [Page 13]
- Updating a Database Instance [Page 15]

UNIX: Installing/Upgrading the Server and Client Software

The SAP DB database software (server and client) can be installed or upgraded interactively or in the background.

You have the following options:

- Interactive Installation [Page 10]
- Interactive Upgrade [Page 11]
- Installation/Upgrade in the Background [Page 11]

Note the background information about installing the server [Page 12].

On Linux operating systems, you can use the Red Hat Package Manager (RPM) to install the SAP DB software. If an RPM installation of the SAP DB software has been performed on Linux, you cannot additionally carry out an SDBINST installation or SDBINST upgrade on this host.

UNIX: Installing the Server (Interactive)

You can perform an interactive installation [Page 29] of the database software (server and client) on UNIX/Linux operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You are logged on as the **root** user on your host.
- You have unpacked the required installation files [Page 8].

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands to do this:
   dbmcli -d <database_name> -u <userid>,<password> db_offline
   dbmcli -d <database_name> -u <userid>,<password> x_server stop
2. Start the installation process by entering **./SDBINST**
3. Choose the installation profile [Page 27] by entering the appropriate profile ID.

- Server [Page 27] for the SAP DB OLTP [See SAP DB Library] database instance type
- APO LiveCache [Page 27] for the liveCache [See SAP DB Library] database instance type (for the SAP APO System)

   The software package [Page 39] Base [Page 40] is installed.
   You only need to specify the independent paths for data and programs during the first installation.

   Default value for <independent_data_path>: **/var/opt/sapdb/indep_data**
   Default value for <independent_program_path>: **/opt/sapdb/indep_prog**
   Confirm the default values by choosing Enter.

4. Specify the group for the SAP DB database software.

   Default value for <group> for a first installation: **sapdb**
   Specify the owner for the SAP DB database software
   Default value for <owner> for a first installation**: sapsys**
   Confirm the default values by choosing Enter.

   Specification of group and owner applies for all software packages that are selected over the course of the subsequent installation steps.
   For each subsequent installation, the default values for group and owner are the last values you selected.

   The PCR<version> [Page 40], Server Utilities [Page 40] and Database Analyzer software packages are tested.

5. Install the Database Kernel [Page 41] software package.
   The software package files that are specific to the software version must be stored in a directory with a unique name.

   Default value for <dependent_path>: **/opt/sapdb/depend**
   If this path name for the software package (<package_directory>) already exists, you can decide whether you want to upgrade the existing software. Otherwise, you must select another name.

6. For the installation profile *APO LiveCache* only: Install the software package APO COM [Page 41].

Result

All the required data has been specified and checked. The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

UNIX: Additional Steps [Page 15]

UNIX: Upgrading the Server (Interactive)

You can perform an interactive upgrade [Page 29] of the database software (server and client) on UNIX/Linux operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You are logged on as the **root** user on your host.
- You have unpacked the required installation files [Page 8].

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands to do this:
   ```
   dbmcli -d <database_name> -u <userid>,<password> db_offline
   dbmcli -d <database_name> -u <userid>,<password> x_server stop
   ```
2. Start the installation process by entering **./SDBINST**
3. Choose the installation profile [Page 27] by entering the appropriate profile ID.

- Server [Page 27] for the SAP DB OLTP [See SAP DB Library] database instance type
- APO LiveCache [Page 27] for the liveCache [See SAP DB Library] database instance type (for the SAP APO System)

  All of the existing installations are listed. If there is more than one, choose which of the installations you want to upgrade.
  Enter the number of this installation.

Result

All the required data has been specified and checked. The software packages [Page 39] are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

UNIX: Additional Steps [Page 15]

UNIX: Installing/Upgrading the Server in the Background

You can install or upgrade the database software (server and client) on UNIX/Linux operating systems in the background [Page 29] with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6], SDBINST Options [Page 37]

Prerequisites

- You are logged on as the **root** user on your host.
- You have unpacked the required installation files [Page 8].

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands to do this:
   ```
   dbmcli -d <database_name> -u <userid>,<password> db_offline
   dbmcli -d <database_name> -u <userid>,<password> x_server stop
   ```
2. Start the installation by executing the program SDBINST with the following options:
   ```
   ./SDBINST -b -profile <profile> -indep_data
   <independent_data_path> -indep_prog <independent_program_path> -
   depend <dependent_path> -o <owner> -g <group>
   ```
3. Specify the installation profile [Page 27] (<profile>):

- Server [Page 27] for the SAP DB OLTP [See SAP DB Library] database instance type
- APO LiveCache [Page 27] for the liveCache [See SAP DB Library] database instance type (for the SAP APO System)

  The installation program itself decides whether it is dealing with a new installation or an upgrade.

Result

The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

UNIX: Additional Steps [Page 15]

UNIX: Background Information About Installing the Server

Conventions

Variables [Page 6]

- The <independent_data_path> and <independent_program_path> path specifications are stored in the /usr/spool/sql/ini/SAP_DBTech.ini file when the system is installed for the first time. With every subsequent installation or upgrade process where you use SDBINST, these paths will be determined using the information contained in the SAP_DBTech.ini file.
- You can run more than one SAP DB Server installation on the same host.
- On Linux operating systems, you can use the Red Hat Package Manager (RPM) to install the SAP DB Server. If an RPM installation of the SAP DB Server software has been performed on Linux, you cannot additionally carry out an SDBINST installation or SDBINST upgrade on this host.

- The files required to uninstall, verify, and upgrade the installation are created in the `<independent_data_path>/config/install` directory when the software is installed. These files should never be modified.

UNIX: Installing/Upgrading the Client Software

The SAP DB software can be installed or upgraded interactively or in the background.

You have the following options:

- Interactive Installation [Page 13]
- Interactive Upgrade [Page 14]
- Installation/Upgrade in the Background [Page 14]

On Linux operating systems, you can use the Red Hat Package Manager (RPM) to install the SAP DB software. If an RPM installation of the SAP DB software has been performed on Linux, you cannot additionally carry out an SDBINST installation or SDBINST upgrade on this host.

UNIX: Installing the Client (Interactive)

You can perform an interactive installation [Page 29] of the client software on UNIX/Linux operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You are logged on as the **`root`** user on your host.
- You have unpacked the required installation files [Page 8].

Procedure

1. Start the installation process by entering **`./SDBINST`**
2. Choose the installation profile [Page 27] Runtime for SAP AS [Page 28] by entering the appropriate profile ID.

   The software package [Page 39] Base [Page 40] is checked.
3. Specify the group for the SAP DB database software.
   Default value for `<group>` for a first installation: **`sapdb`**
   Specify the owner for the SAP DB database software
   Default value for `<owner>` for a first installation**`: sapsys`**
   Confirm the default values by choosing `Enter`.

   Specification of group and owner applies for all software packages that are selected over the course of the subsequent installation steps.
   For each subsequent installation, the default values for group and owner are the last values you selected.

   The PCR<version> [Page 40] software packages are checked.

Result

All the required data has been specified and checked. The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

UNIX: Additional Steps [Page 15]

UNIX: Upgrading the Client (Interactive)

You can perform an interactive upgrade [Page 29] of the client software on UNIX/Linux operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You are logged on as user **root** on your host.
- You have unpacked the required installation files [Page 8].

Procedure

1. Start the installation process by entering **./SDBINST**
2. Choose installation profile [Page 27] Runtime for SAP AS [Page 28] by entering the appropriate profile ID.
3. All of the existing installations are listed. If there is more than one, choose which of the installations you want to upgrade.
   Enter the number of this installation.
4. Confirm the installation of the software packages [Page 39] by choosing **y**.

Result

All the required data has been specified and checked. The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

UNIX: Additional Steps [Page 15]

UNIX: Installing/Upgrading the Client in the Background

You can install or upgrade the client software on UNIX/Linux operating systems in the background [Page 29] with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6], SDBINST Options [Page 37]

Prerequisites

- You are logged on as user **root** on your host.
- You have unpacked the required installation files [Page 8].

Procedure

Start the installation by running the SDBINST program with the following options:
`./SDBINST -b -profile <profile> -indep_data <independent_data_path> -indep_prog <independent_program_path> -depend <dependent_path> -o <owner> -g <group>`
Specify the installation profile [Page 27] (`<profile>`) "Runtime For SAP AS [Page 28]".

The quotation marks are required.

The installation program itself decides whether it is dealing with a new installation or an upgrade.

Result

The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

UNIX: Additional Steps [Page 15]

UNIX: Additional Steps

You may have to perform a few of the steps described below to complete your installation or upgrade:

Conventions

Variables [Page 6]

Procedure

- The required `sql6` and `sql30` services are entered in the `/etc/services` file if they do not already exist. If these services are managed centrally on your network (NIS), they must be entered there.
- If the owner or group you have specified does not exist, you can create them locally. If the owner and group cannot be created, or if they are to be administered on the network, you will have to create them manually.
- Add the path `<independent_program_path>/bin` to the `PATH` environment variables. To do this, enter the following commands:
  `PATH=<independent_program_path>/bin:$PATH`
  `export PATH`

UNIX: Updating a Database Instance

You can update an existing database with the installation file SDBUPD [Page 38] interactively or in the background.

- Updating a Database Instance (Interactive) [Page 16]
- Updating a Database Instance in the Background [Page 16]

UNIX: Updating a Database Instance (Interactive)

Prerequisites

- You are logged on as user `root` on your host.
- You have unpacked the required installation files [Page 8].
- The prerequisites listed in Updating an Existing Database Instance [Page 30] have been fulfilled.

Procedure

1. Start the installation process by entering:
   `./SDBUPD`
2. Specify which database instance you want to start using the *instance ID*
3. Specify the name of the DBM user.

Result

SDBUPD determines the Update Strategy [Page 31] and performs the update. You can check the result of your update using the log (Logging [Page 24]).

UNIX: Updating a Database Instance in the Background

Prerequisites

- You are logged on as the `root` user on your host.
- You have unpacked the required installation files [Page 8].
- The prerequisites listed in Updating an Existing Database Instance [Page 30] have been fulfilled.

Procedure

Start the installation by executing the program SDBUPD [Page 38] with the following options [Page 38]:

```
./SDBUPD -b -d <database_name> -u <userid>,<password>
```

Result

SDBUPD determines the Update Strategy [Page 31] and performs the update. You can check the result of your update using the log (Logging [Page 24]).

Procedure for Microsoft Windows Operating Systems

To install or update the SAP DB database software on an Microsoft Windows operating system, follow the procedure below:

1. Unpack the installation files (Unpacking the Installation Files [Page 17]).
2. Perform the installation or update. You have the following options:

- Installation/Upgrade of the Server and Client Software [Page 18]
- Installation/Upgrade of the Client Software [Page 21]
- Updating a Database Instance [Page 23]

3. Check the result using the log (Logging [Page 24]).

SAP DB OLTP supports Microsoft Windows NT, Windows 2000, and Windows XP.
liveCache supports Microsoft Windows NT and Windows 2000.

Microsoft Windows: Unpacking the Installation Files

Conventions

Variables [Page 6], Operating System Versions [Page 7]

Procedure

1. Log onto your computer.
2. Choose the appropriate software package for your operating system architecture and your database instance type.

- For the SAP DB OLTP [See SAP DB Library] database instance type, choose **SAPDB<version>_<build>.<sar|tgz>**
- For the liveCache [See SAP DB Library] database instance type (SAP APO System), choose **LC<version>A<apoversion>_<combuild>.sar**

3. Use `WinZip` to unpack the software package to a local directory of your choice.

Result

The following installation files are unpacked to the subdirectory `sapdb-server-<os>-<32|64>bit-<arch>-<version>` or `sapdb-apo<apoversion>_livecache-<os>-<32|64>bit-<arch>-<version>`:

`SDBINST.EXE`	SDBINST [Page 37]
`SDBUPD.EXE`	SDBUPD [Page 38]
`SDBRUN.EXE`	Program for installing the run-time environment. The program consists of a Perl interpreter and some Perl extensions. SDBRUN is not called directly.
`SDBINST.TGZ`	This package contains some Perl modules that are needed for the installation.
`perl56.dll`	Perl library

A number of software packages [Page 39] are also unpacked to the local directory.

Next Step

Perform the installation or update.

- Installing/Upgrading the Server and Client Software [Page 18]
- Installing/Upgrading the Client Software [Page 21]
- Updating a Database Instance [Page 23]

Microsoft Windows: Installing/Upgrading the Server and Client Software

The SAP DB database software (server and client) can be installed or upgraded interactively or in the background.

You have the following options:

- Interactive Installation [Page 18]
- Interactive Upgrade [Page 19]
- Installation/Upgrade in the Background [Page 20]

  Note the background information about installing the server [Page 21].

Microsoft Windows: Installing the Server (Interactive)

You can perform an interactive installation [Page 29] of the database software (server and client) on Microsoft Windows operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands at the command prompt to do this:
   ```
   dbmcli -d <database_name> -u <userid>,<password> db_offline
   dbmcli -d <database_name> -u <userid>,<password> x_server stop
   ```
2. Start the installation by executing the **SDBINST.exe** program in the command prompt.
3. Choose the installation profile [Page 27] by entering the appropriate profile ID.

- Server [Page 27] for the SAP DB OLTP [See SAP DB Library] database instance type
- APO LiveCache [Page 27] for the liveCache [See SAP DB Library] database instance type (for the SAP APO System)

The software package [Page 39] Base [Page 40] is installed.
You only need to specify the independent paths for data and programs during the first installation.
Default value for `<independent_data_path>` :
`<program_path>/sapdb/indep_data`
Default value for `<independent_program_path>` :
`<program_path>/sapdb/indep_prog`
Confirm the default values by choosing `Enter`.
The PCR<version> [Page 40], Server Utilities [Page 40], *ODBC*, and *DB Analyzer* software packages are checked.

4. Install the Database Kernel [Page 41] software package.
   The software package files that are specific to the software version must be stored in a directory with a unique name.
   Default value for `<dependent_path>` : **`<program_path>/sapdb/depend`**
   If this path name for the software package (`<package_directory>`) already exists, you can decide whether you want to upgrade the existing software. Otherwise, you must select another name.
5. For the installation profile *APO LiveCache* only: Install the software package APO COM [Page 41].

Result

All the required data has been specified and checked. The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

Stop and restart your Microsoft Windows system, so that all changes take effect.

Microsoft Windows: Upgrading the Server (Interactive)

You can perform an interactive upgrade [Page 29] of the database software (server and client) on Microsoft Windows operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands at the command prompt to do this:
   ```
   dbmcli -d <database_name> -u <userid>,<password> db_offline
   dbmcli -d <database_name> -u <userid>,<password> x_server stop
   ```
2. Start the upgrade by executing the **`SDBINST.EXE`** program in the command prompt.
3. Choose the installation profile [Page 27] by entering the appropriate profile ID.

- Server [Page 27] for the SAP DB OLTP [See SAP DB Library] database instance type
- APO LiveCache [Page 27] for the liveCache [See SAP DB Library] database instance type (for the SAP APO System)

All of the existing installations are listed. If there is more than one, choose which of the installations you want to upgrade.
Enter the number of this installation.

Result

All the required data has been specified and checked. The software packages [Page 39] are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

Stop and restart your Microsoft Windows system, so that all changes take effect.

Microsoft Windows: Installing/Upgrading the Server in the Background

You can install or upgrade the database software (server and client) on Microsoft Windows operating systems in the background [Page 29] with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6], SDBINST Options [Page 37]

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands at the command prompt to do this:
   ```
   dbmcli -d <database_name> -u <userid>,<password> db_offline
   dbmcli -d <database_name> -u <userid>,<password> x_server stop
   ```
2. Start the installation by executing the SDBINST program at the command prompt with the following options:
   ```
   SDBINST.EXE -b -profile <profile> -indep_data
   <independent_data_path> -indep_prog <independent_program_path> -
   depend <dependent_path>
   ```
3. Specify the installation profile [Page 27] (`<profile>`):

- Server [Page 27] for the SAP DB OLTP [See SAP DB Library] database instance type
- APO LiveCache [Page 27] for the liveCache [See SAP DB Library] database instance type (for the SAP APO System)

  The installation program itself decides whether it is dealing with a new installation or an upgrade.

Result

The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

Stop and restart your Microsoft Windows system, so that all changes take effect.

Microsoft Windows: Background Information About Installing the Server

Conventions

Variables [Page 6]

- The <independent_data_path> and <independent_program_path> path specifications are stored in the registry when the system is installed for the first time. With every subsequent installation or upgrade process where you use SDBINST, these paths will be determined using the information contained in the registry.
- You can run more than one SAP DB Server installation on the same host.
- The files required to uninstall, verify, and upgrade the installation are created in the <independent_data_path>\config\install directory when the software is installed. These files should never be modified.

Microsoft Windows: Installing/Upgrading the Client Software

The SAP DB software can be installed or upgraded interactively or in the background.

You have the following options:

- Interactive Installation [Page 21]
- Interactive Upgrade [Page 22]
- Installation/Upgrade in the Background [Page 22]

Microsoft Windows: Installing the Client (Interactive)

You can perform an interactive installation [Page 29] of the client software on Microsoft Windows operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].

Procedure

1. Stop all SAP DB database systems (including VServer).
2. Start the installation by executing the **SDBINST.exe** program in the command prompt.
3. Choose installation profile [Page 27] Runtime for SAP AS [Page 28] by entering the appropriate profile ID.
   The software packages [Page 39] Base [Page 40] and PCR<version> [Page 40] are checked.

Result

All the required data has been specified and checked. The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

Stop and restart your Microsoft Windows system, so that all changes take effect.

Microsoft Windows: Upgrading the Client (Interactive)

You can perform an interactive upgrade [Page 29] of the client software on Microsoft Windows operating systems with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6]

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].

Procedure

1. Stop all SAP DB database systems (including VServer).
2. Start the installation by executing the **`SDBINST.exe`** program in the command prompt.
3. Choose installation profile [Page 27] Runtime for SAP AS [Page 28] by entering the appropriate profile ID.
   All of the existing installations are listed. If there is more than one, choose which of the installations you want to upgrade.
   Enter the number of this installation.
4. Confirm the installation of the software packages [Page 39] by choosing **`y`**.

Result

All the required data has been specified and checked. The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

Stop and restart your Microsoft Windows system, so that all changes take effect.

Microsoft Windows: Installing/Upgrading the Client in the Background

You can install or upgrade the client software on Microsoft Windows operating systems in the background [Page 29] with the installation file SDBINST [Page 37].

Conventions

Variables [Page 6], SDBINST Options [Page 37]

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].

Procedure

1. Stop all SAP DB database systems (including VServer).
2. Start the installation by running the SDBINST program from the command prompt with the following options:
   `SDBINST.EXE -b -profile <profile> -indep_data <independent_data_path> -indep_prog <independent_program_path> -depend <dependent_path>`
   Specify the installation profile [Page 27] (`<profile>`) "Runtime for SAP AS [Page 28]".

   The quotation marks are required.

   The installation program itself decides whether it is dealing with a new installation or an upgrade.

Result

The software packages are installed and registered. You can check the result of your installation using the log (Logging [Page 24]).

Next Step

Stop and restart your Microsoft Windows system, so that all changes take effect.

Microsoft Windows: Updating a Database Instance

You can update an existing database with the installation file SDBUPD [Page 38] interactively or in the background.

- Updating a Database Instance (Interactive) [Page 23]
- Updating a Database Instance in the Background [Page 24]

Microsoft Windows: Updating a Database Instance (Interactive)

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].
- The prerequisites listed in Updating an Existing Database Instance [Page 30] have been fulfilled.

Procedure

1. Start the installation by executing the **`SDBUPD.exe`** program in the command prompt.
2. Specify which database instance you want to start using the *instance ID*.
3. Specify the name of the DBM user.

Result

SDBUPD determines the Update Strategy [Page 31] and performs the update. You can check the result of your update using the log (Logging [Page 24]).

Microsoft Windows: Updating a Database Instance in the Background

Prerequisites

- You have administrator rights for your host.
- You have unpacked the required installation files [Page 17].
- The prerequisites listed in Updating an Existing Database Instance [Page 30] have been fulfilled.

Procedure

Start the installation by executing the program SDBUPD [Page 38] at the command prompt with the following options [Page 38]:

```
SDBUPD.exe -b -d <database_name> -u <userid>,<password>
```

Result

SDBUPD determines the Update Strategy [Page 31] and performs the update. You can check the result of your update using the log (Logging [Page 24]).

Logging

All steps of an installation or upgrade with SDBINST [Page 37] or an update with SDBUPD [Page 38] are stored in a log file:

Conventions

Variables [Page 6]

Log File for Installations and Upgrades

- UNIX/Linux: `<independent_data_path>/wrk/SAPDB<profile>_install-<date>-<time>.log`
- Microsoft Windows: `<independent_data_path>\wrk\SAPDB<profile>_install-<date>-<time>.log`

If the `<independent_data_path>` directory is not known when the installation process is terminated, the log will be created in the current directory.

If you have installed the software packages [Page 39] independently of the installation profiles [Page 27], the log is in the file `SAPDBSoftware_install-<date>-<time>.log`

Log File for Updates

- UNIX/Linux: `<independent_data_path>/wrk/SAPDBUpgrade_install-<date>-<time>.log`
- Microsoft Windows: `<independent_data_path>\wrk\SAPDBUpgrade_install-<date>-<time>.log`

Uninstalling the SAP DB Software

You can uninstall the SAP DB software using the SDBUNINST program with the specification of the appropriate SDBUNINST options [Page 26].

Conventions

Variables [Page 6]

Prerequisites

You have administrator rights for your host or are logged on as the **`root`** user (UNIX/Linux).

Procedure

1. Stop all SAP DB database systems (including VServer).
   You can use the following commands to do this:
   `dbmcli -d <database_name> -u <userid>,<password> db_offline`
   `dbmcli -d <database_name> -u <userid>,<password> x_server stop`
2. Remove all database instances of the database version that you want to uninstall.

	UNIX/Linux	Microsoft Windows NT/Windows 2000
3.	Start the uninstallation by entering **`sdbuninst -all`** or **`sdbuninst -package <package> [-package_dir <package_directory>] [-autoresolve]`**	Start the uninstallation by executing SDBUNINST at the command prompt with the following options: **`sdbuninst.exe -all`** or **`sdbuninst.exe -package <package> [-package_dir <package_directory>] [-autoresolve]`**

Result

- If you specified `-all`, all existing software packages [Page 39] are uninstalled.
- If you specify `-package <package> [-package_dir <package_directory>] [-autoresolve]`, the specified software packages are uninstalled.
  The dependencies between the software packages are always considered. If you want to uninstall a software package that is still required by another software package, the uninstall terminates with the following message: `cannot delete package \"<package>\" (<package_directory>) - other package (s) are dependent`
  To avoid this error, you can specify the option `-autoresolve`. This means that the software packages that are dependent on the specified software package are also uninstalled.
  If there are multiple identical software packages, specify the option `-package_dir` to specify the desired software package uniquely. You can determine the directory of a software package (`<package_directory>`) using the option `-l|-list`.
  If a software package is not uniquely specified, a list of the software packages with the same name is displayed. Then enter the desired package ID.

- If you do not specify any of the options listed above, the uninstallation is terminated with the following error: `no package selected`

SDBUNINST Options

To be able to carry out an uninstallation of the SAP DB software [Page 25] with SDBUNINST, you must enter options.

You can obtain an overview of the options with the command **`SDBUNINST -h`**

Conventions

Variables [Page 6]

Option	Explanation
`-h | -help`	List and description of options
`-v | -version`	Version of the uninstallation program SDBUNINST
`-l | -list`	Display all software packages [Page 39] and their directories <package_directory>
`-all`	All software packages registered for SAP DB are uninstalled.
`-package <package>`	Specifies the software packages that is to be uninstalled. Use the logical names of the software packages, **not** the file names You can make additional specifications about the software package with the options `-package_dir` and/or `-autoresolve`
`-package_dir <package_directory>`	Directory of the software package specified with `-package` This specification is only required if there are multiple software packages with the same name.
`-autoresolve`	If you specify this option, the package that you specify with `-package` is uninstalled, along with all of the software packages dependent on this software package. Example: Specifying the options `-package Base -autoresolve` has the effect that all software packages registered for SAP DB are uninstalled.

Information About Installing/Upgrading the SAP DB Software

You can install and upgrade the SAP DB database software both interactively and in the background. In both cases, you must specify the desired installation profile.

- Installation profile [Page 27]
- Information about interactive installation [Page 29]
- Information about installation in the background [Page 29]

Installation Profile

Every software package [Page 39] is assigned to one or more installation profiles. The following installation profiles exist:

- Server [Page 27]
- APO LiveCache [Page 27] (only for liveCache [See SAP DB Library] for SAP APO)
- Runtime For SAP AS [Page 28]
- DB Analyzer [Page 28]
- Web Tools [Page 28]
- all [Page 29]

Procedure

Once the installation program SDBINST [Page 37] has been started, the user can decide on one of these installation profiles. All software packages assigned to the installation profile are installed. For a more detailed description of the procedures for an installation/an upgrade, see the following sections:

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

Server

The *Server* installation profile [Page 27] contains the following software packages [Page 39]:

- Base [Page 40]
- Several PCR<version> [Page 40]
- Server Utilities [Page 40]
- ODBC* (Microsoft Windows only)
- DB Analyzer*
- Database Kernel [Page 41]

Use this installation profile to install or upgrade the database server and the client software.

*For information about the SAP DB database tools and interfaces and a documentation overview, see the *User Manual: SAP DB* under Database Tools [See SAP DB Library] and the overview of SAP DB Documentation [See SAP DB Library].

APO LiveCache

The *APO LiveCache* installation profile [Page 27] contains the following software packages [Page 39]:

- Base [Page 40]
- Several PCR<version> [Page 40]

- Server Utilities [Page 40]
- ODBC* (Microsoft Windows only)
- DB Analyzer*
- Database Kernel [Page 41]
- APO COM [Page 41]

Use this installation profile to install or upgrade the database server and the client software.

*For information about the SAP DB database tools and interfaces and a documentation overview, see the *User Manual: SAP DB* under Database Tools [See SAP DB Library] and the overview of SAP DB Documentation [See SAP DB Library].

Runtime For SAP AS

The *Runtime for SAP AS* installation profile [Page 27] contains the SAP DB client software for the SAP application server of a SAP system. The following software packages [Page 39] are contained in this profile:

- Administrative tools (in the Base [Page 40] software package)
- SAP DB Precompiler runtimes that the SAP application server loads in order to be able to connect to the SAP DB database (in several PCR<version> [Page 40] software packages)

Use this installation profile to install or upgrade the client software for the SAP application server.

DB Analyzer

The *DB Analyzer* installation profile [Page 27] contains the following software packages [Page 39]:

- Base [Page 40]
- ODBC* (Microsoft Windows only)
- DB Analyzer*

Use this installation profile to install or upgrade the DB Analyzer software.

*For information about the SAP DB database tools and interfaces and a documentation overview, see the *User Manual: SAP DB* under Database Tools [See SAP DB Library] and the overview of SAP DB Documentation [See SAP DB Library].

Web Tools

The *Web Tools* installation profile [Page 27] contains the following software packages [Page 39]:

- Base [Page 40]
- ODBC*

- Web Tools*

Use this installation profile to install or upgrade the SAP DB Web Tools software.

If you want to use the SAP DB Web Tools, you must configure and start the SAP DB Web Server after installing the software. For more information, see the Web Tools Installation Guide [See SAP DB Library].

*For information about the SAP DB database tools and interfaces and a documentation overview, see the *User Manual: SAP DB* under Database Tools [See SAP DB Library] and the overview of SAP DB Documentation [See SAP DB Library].

all

The installation profile [Page 27] *all* contains all software packages [Page 39] found in the local installation directory.

Interactive Installation

During interactive installation or upgrade with SDBINST [Page 37], the system requests all the required information in a preparatory phase:

- Installation profile [Page 27]
- Installation paths for the individual software packages [Page 39]

These entries are checked. The software packages are then installed and registered. Intervention by the user is no longer required, and is therefore no longer possible.

Procedure

For a more detailed description of an installation/an upgrade of the SAP DB database software, see the following sections:

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

The installation or upgrade is logged [Page 24].

Background Installation

You can perform an installation or upgrade of the SAP DB database software with SDBINST [Page 37] in the background, specifying the relevant SDBINST options [Page 37].

Advantages of Installation in the Background

Performing an installation or an upgrade in the background takes less time.

You can use a call script to generate identical software installations on different computers.

Disadvantages of Installation in the Background

You must enter all the required options in the call script correctly and completely. Some options are only determined from the software packages at runtime. As a result, it is not

possible to check whether the option list is complete at the start of an installation. This means that the system will terminate installation if it needs an option that is missing.

Installation or upgrade

During background installation, the installation program SDBINST itself decides whether it is dealing with a new installation or an upgrade. If the relevant software package [Page 39] already exists at this location, and an upgrade is possible for this version, an upgrade is performed. As a rule, an older package can be replaced by a new one.
On operating system platforms that support 32 bit and 64 bit applications, you can mix the software packages as desired (exception: SAP DB packages for Microsoft Windows 64 bit operating systems and the combination of *Database Kernel* and *APO COM*. These must always be either 32 bit or 64 bit applications.)

Procedure

For a more detailed description of the procedures for an installation/an upgrade of the SAP DB database software, see the following sections:

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

The installation or upgrade is logged [Page 24].

Information About Updating an Existing Database Instance

You can perform an update of the SAP DB software for an existing SAP DB database instance with the SDBUPD [Page 38] installation file. You can perform the update interactively or in the background, with the specification of the appropriate SDBUPD options [Page 38]. SDBUPD performs all necessary checks and selects the appropriate update strategy [Page 31].

Prerequisites

To be able to perform an update of the desired database instance, the following prerequisites must be fulfilled:

- Only this one database instance is registered for the relevant SAP DB software installation.
- If other SAP DB software installations are present on your host, you must ensure that the database instances of these software installations are in the OFFLINE operational state, or stop the X Server with the command
  `dbmcli -d <database_name> -u <userid>,<password> x_server stop`
- The database instance must be in a status from which it can be restarted (that is, data and log areas have the required information, and the database parameters are set in such a way that the last start of the database instance ran successfully with these settings).
- The system tables for the database instance have been loaded at least once.

Procedure

For a detailed description of the update of a SAP DB database instance, see:

- Procedure for UNIX Operating Systems [Page 8]

- Procedure for Microsoft Windows Operating Systems [Page 16]

The update is logged [Page 24].

Update Strategy

The update of an existing database instance [Page 30] with the installation file SDBUPD [Page 38] is performed in accordance with a certain update strategy. Which of the possible strategies is selected by SDBUPD depends on the database instance type and the software versions.

Database Instance Type

Currently, it is only possible to perform an update with SDBUPD for the database instance types SAP DB OLTP [See SAP DB Library] and liveCache [See SAP DB Library] (for SAP APO).

Software Versions

SDBUPD determines the SAP DB software versions (and, if appropriate, the SAP APO release) of the existing database instance and the software package to be installed. On the basis of this information, the program decides whether an update is possible and which strategy it uses.

- Update Strategy for SAP DB OLTP Database Instances [Page 31]
- Update Strategy for liveCache Database Instances [Page 33]

You can find the *Upgrade for SAP APO* documentation as follows: **`http://service.sap.com/instguides`**, *Integration & Upgrade Guides* → *mySAP SCM*.

Update Strategy for SAP DB OLTP Database Instances

For the selection of the update strategy, SDBUPD [Page 38] determines the SAP DB software version of the existing database instance (start version), and the SAP DB software version of the software package to be installed (target version).

Prerequisites

You are updating a SAP DB OLTP [See SAP DB Library] database instance.

SAP DB Software Versions

The following table shows which update strategy is selected for which start and target versions of the SAP DB software.

	Target Version 7.4.03
Start version from 7.2.05.19	INPLACE [Page 32]
Start version from 7.3.00.25	INPLACE [Page 32]
Start version 7.4.03	PATCH [Page 32]

INPLACE

Update strategy [Page 31] INPLACE (COMPATIBLE_DATA) for the database instance type SAP DB OLTP [See SAP DB Library]. With this update strategy, the database instance is restarted, if possible. The SAP DB software is then upgraded.
The INPLACE upgrade strategy is supported for the SAP DB versions listed in Update Strategy for SAP DB OLTP Database Instances [Page 31].

Prerequisites

- The general prerequisites for Updating an Existing Database Instance [Page 30] must be fulfilled.
- The database instance can be in any operational state.

Process Flow

SDBUPD proceeds as follows:

1. The X Server [See SAP DB Library] is started, if necessary.
2. General checks are performed:
   The status of the data and log areas, database parameter settings, operational states of other database instances, and so on.
3. If the required log entries exist, the database instance is restarted.
4. The database instance is transferred to the operational state OFFLINE.
5. The X Server is stopped.
6. The required SAP DB software is upgraded.
7. The X Server is started.
8. The database instance is transferred to the operational state ONLINE.
9. The system tables are loaded.

Procedure

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

PATCH

Update strategy [Page 31] PATCH (COMPATIBLE_LOG) for the database instance type SAP DB OLTP [See SAP DB Library]. With this update strategy, only the SAP DB software is upgraded.
The PATCH upgrade strategy is supported for the SAP DB versions listed in Update Strategy for SAP DB OLTP Database Instances [Page 31].

Prerequisites

- The general prerequisites for Updating an Existing Database Instance [Page 30] must be fulfilled.

- The database instance can be in any operational state.

Process Flow

SDBUPD proceeds as follows:

1. The X Server [See SAP DB Library] is started, if necessary.
2. General checks are performed:
   The status of the data and log areas, database parameter settings, operational states of other database instances, and so on.
3. The database instance is transferred to the operational state OFFLINE.
4. The X Server is stopped.
5. The required SAP DB software is upgraded.
6. The X Server is started.
7. The database instance is transferred to the operational state ONLINE.
8. The system tables are loaded.

Procedure

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

Update Strategy for liveCache Database Instances

For the selection of the update strategy, SDBUPD [Page 38] determines the software version of the existing SAP DB database instance and SAP APO release (start version), and the software version of the software packages and the APO release to be installed (target version).

Prerequisites

You are updating a liveCache [See SAP DB Library] database instance for SAP APO.

SAP DB Software Versions

The following table shows which update strategy is selected for which start and target versions.

	Target Version 7.4.02/30A	**Target Version 7.4.02/310**
Start Version 7.2.05/30A	Backup/Restore Upgrade [Page 34]	APO Extract/Load Upgrade [Page 35]
Start Version 7.4.02/30A	Inplace Upgrade [Page 34]	APO Extract/Load Upgrade [Page 35]
Start Version 7.4.02/310	not possible	Inplace Upgrade [Page 34]

Inplace Upgrade

Update strategy [Page 31] Inplace Upgrade (COMPATIBLE_LOG) for the database instance type liveCache [See SAP DB Library]. With this update strategy, only the liveCache software is upgraded.
The Inplace Upgrade update strategy is currently only used for the SAP APO liveCache (Update Strategy for liveCache Database Instances [Page 33]).

You can find the *Upgrade for SAP APO* documentation as follows:
`http://service.sap.com/instguides`, *Integration & Upgrade Guides* → *mySAP SCM*.

Prerequisites

- The general prerequisites for Updating an Existing Database Instance [Page 30] must be fulfilled.
- The database instance can be in any operational state.

Process Flow

SDBUPD proceeds as follows:

1. The X Server [See SAP DB Library] is started, if necessary.
2. General checks are performed:
   The status of the data and log areas, database parameter settings, operational states of other database instances, and so on.
3. The database instance is transferred to the operational state OFFLINE.
4. The X Server is stopped.
5. The required SAP DB software is upgraded.
6. The X Server is started.
7. The database instance is transferred to the operational state ONLINE.
8. The system tables are loaded.
9. The database instance is transferred to the operational state OFFLINE.

Procedure

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

Backup/Restore Upgrade

Update strategy [Page 31] Backup/Restore Upgrade (EXTERNAL_CONSISTENT_BACKUP) for the database instance type liveCache [See SAP DB Library]. A data backup is required for this update strategy. Only after you have backed up the data can the liveCache software be upgraded.
The Backup/Restore Upgrade update strategy is currently only used for the SAP APO liveCache (Update Strategy for liveCache Database Instances [Page 33]).

You can find the *Upgrade for SAP APO* documentation as follows: **`http://service.sap.com/instguides`**, *Integration & Upgrade Guides* → *mySAP SCM*.

Prerequisites

- The general prerequisites for Update of an Existing Database Instance [Page 30] must be fulfilled.
- The database instance must be in operational state ADMIN.
- A complete data backup [See SAP DB Library] of the database instance is created in operation mode ADMIN and the database is not restarted after this.

Process Flow

SDBUPD proceeds as follows:

1. The X Server [See SAP DB Library] is started, if necessary.
2. General checks are performed:
   The status of the data and log areas, database parameter settings, operational state of other database instances, and so on.
3. The existing data backup is checked.
4. The database instance is placed in operational state OFFLINE.
5. The X Server is stopped.
6. The required SAP DB software is upgraded.
7. The X Server is started.
8. The database instance is placed in operational state ADMIN.
9. The data and log areas are formatted and the necessary database parameters are adjusted.

Import the existing complete data backup. Use the Database Manager [See SAP DB Library] to do this.

Start SDBUPD. SDBUPD proceeds as follows:

1. The X Server is started.
2. The database instance is placed in operational state ADMIN.
3. The system tables are loaded.
4. The database instance is placed in operational state OFFLINE.

Procedure

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

APO Extract/Load Upgrade

Update strategy [Page 31] APO Extract/Load Upgrade for the database instance type liveCache [See SAP DB Library]. For this update strategy, application system transaction data must first be backed up. The liveCache software is then upgraded.

The APO Extract/Load Upgrade update strategy is currently only used for the SAP APO liveCache (Update Strategy for liveCache Database Instances [Page 33]).

You can find the *Upgrade for SAP APO* documentation as follows: **`http://service.sap.com/instguides`**, *Integration & Upgrade Guides* → *mySAP SCM*.

Prerequisites

- The general prerequisites for Updating an Existing Database Instance [Page 30] must be fulfilled.
- The database instance can be in any operational state.
- The liveCache transaction data must be backed up to the APO database.
  For more information, see *Upgrade for SAP APO 3.1: SAP liveCache 7.4* → *Upgrade Preparations*.

Process Flow

SDBUPD proceeds as follows:

1. The X Server [See SAP DB Library] is started, if necessary.
2. General checks are performed:
   The status of the data and log areas, database parameter settings, operational state of other database instances, and so on.
3. The database instance is placed in operational state OFFLINE.
4. The X Server is stopped.
5. The required SAP DB software is upgraded.
6. The X Server is started.
7. The database instance is placed in operational state ONLINE.
8. The system tables are loaded.
9. The database instance is placed in operational state OFFLINE.

Procedure

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

Installation File

After unpacking the software package that corresponds to your operating system architecture and your database instance type, the following installation files are available, among others:

- SDBINST [Page 37]
- SDBUPD [Page 38]

SDBINST

After unpacking the software package that corresponds to your operating system architecture and your database instance type, the installation file [Page 36] SDBINST is available, among others.

SDBINST is a program for the installation or upgrade of the SAP DB software. SDBINST can be used interactively [Page 29] or in the background [Page 29] (with the specification of the appropriate SDBINST options [Page 37]).

Procedure

For a more detailed description of an installation/an upgrade of the SAP DB database software, see the following sections:

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

SDBINST Options

To be able to carry out a background installation [Page 29] with SDBINST [Page 37], you must enter options.

You can obtain an overview of the options with the command **`SDBINST -h`**

Conventions

Variables [Page 6]

General Options

Option	Explanation
`-h | -help`	List and description of options
`-v | -version`	Display the version of the installation program SDBINST
`-l | -list`	Display of all software packages [Page 39] and installation profiles [Page 27]
`-b | -batch`	Start of installation program in the background
`-profile <installation profile>`	Specification of installation profile
`-package <package1>[,<package2>]`	Specification of software packages. Use the logical names of the software packages, **not** the file names
`-o <owner>`	Specification of the owner of the software (UNIX only)
`-g <group>`	Specification of the software group (UNIX only)

Options that can only be used for the Base [Page 40] software package

Option	Explanation
`-indep_data <independent_data_path>`	The `<independent_data_path>` can be specified the first time the system is installed.
`-indep_prog <independent_program_path>`	The `<independent_program_path>` can be specified the first time the system is installed.

<independent_data_path> and <independent_program_path> cannot be changed once the system has been installed for the first time, and are therefore not requested for subsequent installations. You can only change these path specifications by fully uninstalling the system.

Option that can only be used for the Database Kernel [Page 41] software package

Option	Explanation
-depend <dependent_path>	Specification of <dependent_path>

SDBUPD

After unpacking the software package that corresponds to your operating system architecture and your database instance type, the installation file [Page 36] SDBUPD is available, among others.

SDBUPD is a program for Updating an existing SAP DB Database Instance [Page 30]. SDBUPD can be used interactively or in the background (with the specification of the appropriate SDBUPD options [Page 38]).

Procedure

For a detailed description of the update of a SAP DB database instance, see:

- Procedure for UNIX Operating Systems [Page 8]
- Procedure for Microsoft Windows Operating Systems [Page 16]

SDBUPD Options

To be able to carry out an update of an existing database instance [Page 30] with SDBUPD [Page 38], you must enter options.

You can obtain an overview of the options with the command **SDBUPD -h**

Option	Explanation
-h | -help	List of options and description of options
-v | -version	Version of the SDBUPD installation program
-l | -list	Displays all software packages [Page 39]
-b | -batch	Start of update program in the background
-d <database_name>	Name of the database instance [See SAP DB Library]
-u <userid>,<password>	Name and password of the DBM user [See SAP DB Library]

Software Package

The SAP DB software is divided into the following software packages:

Software Package	Name
SAPDBBAS.TGZ	Base [Page 40]
PCR<version>.TGZ	PCR<version> [Page 40]
SAPDBUTL.TGZ	Server Utilities [Page 40]
SAPDBKRN.TGZ	Database Kernel [Page 41]
APOCOM.TGZ (only for liveCache [See SAP DB Library] for SAP APO)	APO COM [Page 41]
SAPODBC.TGZ	ODBC*
SAPDBANA.TGZ	DB Analyzer*
SAPDBWEB.TGZ	Web Tools*

Dependencies

The individual software packages are dependent on each other. This dependency can relate to the type of software package and the version details. Because the software packages are dependent on each other, there is a fixed installation sequence.

The following dependencies exist:

Base → PCR<version>
Base → Server Utilities → Database Kernel [→ APO COM]
Base [→ ODBC] → DB Analyzer
Base → ODBC → Web Tools

- The *Base* software package is independent of all other packages.
- The *PCR<version>* and/or *Server Utilities* software packages cannot be installed until *Base* has been installed.
- The *Database Kernel* software package cannot be installed until *Server Utilities* has been installed.
- You can only install the *APO COM* software package after you have installed *Database Kernel*.
- You can only install the Database Analyzer after you have installed *Base* (on UNIX operating systems) or *Base* and *ODBC* (on Microsoft Windows operating systems).
- You can only install the SAP DB Web Tools after you have installed *Base* and *ODBC*.

The software packages can be installed individually if their dependencies can be removed by the installation program. As a result, it is possible to install individual missing components at a later date, for example.

Installing/Upgrading the SAP DB Software

The software packages are assigned to installation profiles [Page 27]. These profiles are installed or upgraded using the installation file SDBINST [Page 37].

After installation has been successfully completed, the files for the software packages are stored in the directories required for the correct functioning of the SAP DB software (<package_directory>).

Updating a Database Instance

During an update of the software for a database instance, the required software packages are selected and updated by the installation file SDBUPD [Page 38].

*For information about the SAP DB database tools and interfaces and a documentation overview, see the *User Manual: SAP DB* under Database Tools [See SAP DB Library] and the overview of SAP DB Documentation [See SAP DB Library].

Base

The *Base* software package [Page 39] (`SAPDBBAS.TGZ`) is the basic SAP DB software package. It contains the following components:

- Programs for registering the installation
- Uninstallation tool, InstallRegistryViewer
- Programs needed by the SAP application server to access the SAP DB database

The *Base* software package must always be installed. Only then can further software packages be installed.

This software package is assigned to the following installation profiles [Page 27]: Server [Page 27], APO LiveCache [Page 27], Runtime for SAP AS [Page 28], all [Page 29], DB Analyzer [Page 28], Web Tools [Page 28]

PCR<version>

The *PCR<version>* software package [Page 39] (`PCR<version>.TGZ`) is the SAP DB Precompiler Runtime package. It contains runtime libraries for applications that were created with the SAP DB C/C++-Precompiler for Embedded SQL.

This software package can exist in several versions in the local installation directory. The `<version>` is entered with four digits.

The *PCR<version>* software packages cannot be installed until the Base [Page 40] software package has been installed. You can install all the *PCR<version>* packages, or just the ones you require.

This software package is assigned to the following installation profiles [Page 27]: Server [Page 27], APO LiveCache [Page 27], Runtime for SAP AS [Page 28], all [Page 29]

Server Utilities

The *Server Utilities* software package [Page 39] (`SAPDBUTL.TGZ`) contains all the tools needed for managing the database kernel.

The *Server Utilities* software package cannot be installed until the Base [Page 40] software package has been installed.

This software package is assigned to the following installation profiles [Page 27]: Server [Page 27], APO LiveCache [Page 27], all [Page 29]

Database Kernel

The *Database Kernel* software package [Page 39] (`SAPDBKRN.TGZ`) contains the database kernel with its runtime environment.

The *Database Kernel* software package cannot be installed until the Server Utilities [Page 40] software package has been installed.

This software package is assigned to the following installation profiles [Page 27]: Server [Page 27], APO LiveCache [Page 27], all [Page 29]

APO COM

The *APO COM* software package [Page 39] (`APOCOM.TGZ`) contains the libraries with the APO COM liveCache routines.

The *APO COM* software package cannot be installed until the Database Kernel [Page 41] software package has been installed.

This software package is assigned to the following installation profiles [Page 27], APO LiveCache [Page 27], all [Page 29]