

# **Adabas for Linux, UNIX and Windows**

## **Installation on UNIX**

Version 6.7.1

October 2019

This document applies to Adabas for Linux, UNIX and Windows Version 6.7.1 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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# Preface

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This documentation describes the installation of Adabas 6.7 and the Adabas Client 6.7 on a UNIX/Linux platform.

Hereafter, the generic term Adabas will be used to describe both the Adabas and the Adabas Client.

Adabas is installed using the Software AG Installer, which you download from the Software AG Empower website at <https://empower.softwareag.com/>.

This documentation provides product-specific instructions for installing Adabas. It is intended for use with *Using the Software AG Installer*. That guide explains how to prepare your machine to use the Software AG Installer, and how to install and uninstall your products. The most up-to-date version of *Using the Software AG Installer* is always available at <https://empower.softwareag.com/>.

This documentation is organized under the following headings:

<b>System Requirements</b>	Supported operating system platforms and prerequisites.
<b>Components Installed With Adabas</b>	General information on Adabas, on Adabas Client, on Adabas Client for Java, on Adabas Administration Services, and on the required license files.
<b>Important Information</b>	Important information that you should be aware of before you start the installation.
<b>Installing Adabas</b>	How to install Adabas and Adabas Client with the Software AG Installer.
<b>Completing the Installation</b>	How to proceed after the installation.
<b>Uninstalling Adabas</b>	How to uninstall Adabas.
<b>Installing Fixes from Software AG Update Manager</b>	How to install and uninstall fixes for Adabas using the Software AG Update Manager (SUM).
<b>Upgrade Guide</b>	How to upgrade from a previous version or previous Service Pack.

For important last-minute information, see the readme file that is provided with Adabas. You can find it in the Adabas product documentation at <https://empower.softwareag.com/>.

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# 1 About this Documentation

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## Document Conventions

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Convention	Description
<b>Bold</b>	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies:  Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies:  Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the   symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

## Online Information and Support

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### Software AG Documentation Website

You can find documentation on the Software AG Documentation website at <https://documentation.softwareag.com>.

### Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to [empower@softwareag.com](mailto:empower@softwareag.com) with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at <https://empower.softwareag.com/>.

You can find product information on the Software AG Empower Product Support website at <https://empower.softwareag.com>.

To submit feature/enhancement requests, get information about product availability, and download products, go to [Products](#).

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the [Knowledge Center](#).

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at [https://empower.softwareag.com/public\\_directory.aspx](https://empower.softwareag.com/public_directory.aspx) and give us a call.

### **Software AG Tech Community**

You can find documentation and other technical information on the Software AG Tech Community website at <https://techcommunity.softwareag.com>. You can:

- Access product documentation, if you have Tech Community credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

## **Data Protection**

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Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

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# 2 System Requirements

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## Supported Operating System Platforms

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Adabas supports a variety of operating environments. For information on the support platforms for this release of Adabas, read *Supported Platforms*, in the *Release Notes*.

## Disk Space Requirements

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Approximately 1 GB of hard-disk space is required for Adabas (including Adabas, Adabas Client and Software AG Installer packages).

## Additional Software Requirements

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For the installation of Adabas, the following additional software requirements apply:

Operating System Platforms	Requirement
Red Hat Enterprise Linux Server 7 (IBM System z 64bit)	Please ensure that your host name is correctly configured. Issue the following command <code>hostname</code> or <code>uname -u</code> .
Red Hat Enterprise Linux Server 7 (x86-64)	If these commands return a fully-qualified domain name (FQDN), no additional actions are required.
SUSE Linux Enterprise Server 12 (x86-64)	If, however, they return only the node name (other than localhost), you should look in the file <code>/etc/hosts</code> and ensure that the node name is not an alias for localhost. You may have to reconfigure your network and set an FQDN as host name.
	The <code>libstdc++</code> package must be installed.

## Adding User Account for Administration of Software AG Products

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In this section the following is assumed:

- The user account for the administrator of Software AG products is called "sag".
- The group to which the administrator and all users of Software AG products are assigned is called "sag".
- The home directory for the user "sag" is `/opt/softwareag`.
- The root directory for Software AG products is `/opt/softwareag`.

 **Caution:** If you use a different administrator user and/or group name, `showipc`, which is also used by the Adabas nucleus, only works after some environment variables have been set. For further information, please refer to ADANUC in the *Utilities* documentation and `showipc` in the *Database Monitoring and Tuning* documentation.

➤ To perform the following steps, use an appropriate system administration tool (e.g. `smit`).

- Create the administrator's account and group
  1. Create one administrator's account and one group for all Software AG products when you install your first Software AG product.
  2. Define an administrator account to which all of the Software AG products installed at your site belong. Since all environment definition files for the products are written for the Bourne shell, this shell is required as the login shell for the administrator account.
  3. Define a group to which the administrator and all users of Software AG products belong.
  4. Create a login directory for the user "sag".

#### Example:

It is assumed that user and group accounts are defined in the respective files in */etc*.

The following is a possible entry in the system file */etc/group*:

```
sag:*:21:sag
```

The following is a possible entry in the system file */etc/passwd*:

```
sag::100:21:SAG - Product Administrator:/opt/softwareag:/bin/sh
```

## Increasing the System Kernel Limits

Adabas requires increased System V resources. You can check your current settings by using the command `showipc -s`. In the following, the resources required for Adabas are described. Note that there are also other processes running on your system that require IPC resources. Therefore, you must add the IPC resources required by the other processes to parameters that describe a system-wide maximum number or size of resources. For parameters that describe the maximum size of a resource, the value must, of course, be large enough for the other processes.

#### Notes:

1. One or more of these parameters may not exist on all UNIX platforms.
2. Adabas must already be installed before you can execute the `showipc` command.

Kernel Parameter	Description	Recommended Minimum Value
SHMMAX	The maximum size in bytes of a shared memory segment.	The size of SHMMAX limits the size of the Adabas buffer pool and the number of attached buffers (LBP and LAB nucleus parameters).  The maximum value for all databases of  LBP + LWP + (number of worker threads/10 +1) MB  LAB  LABX  <b>Note:</b> For the number of worker threads, see the description of the ADANUC parameters NT and APU. If you use Adabas-to-Adabas replication add the number of replication threads (default: 3 * number of target databases).
SHMMNI	The maximum number of shared memory segments, system-wide.	Number of databases * 4.
SHMSEG	The maximum number of shared memory segments, per process.	4 Segments.
SEMVMX	The maximum value of any semaphore.	32767
SEMAEM	The maximum value of any semaphore's adjust-on-exit value.	1024
SEMMNI	The maximum number of semaphore sets, system-wide.	Number of databases * 2
SEMMNS	The maximum number of semaphores, system-wide.	Number of databases * (2 + NCL)
SEMMNU	The maximum number of undo structures, system-wide.	For all databases - calculate the SUM (2 + NCL)
SEMMSL	The maximum number of semaphores per semaphore set.	This parameter limits the number of users per database (NCL parameter).  This parameter should be at least as large as the largest NCL value of all databases + 1.
MSGMAX	The maximum number of bytes of a message we can send.	64 Bytes.
MSGMNB	The maximum number of bytes that can be queued in a single queue (i.e., the sum of all messages in that queue).	For all databases - select the maximum value of the NCL parameter * 32 Bytes.
MSGMNI	The maximum number of message queues, system-wide.	For all databases - calculate the SUM of (2 + NCL + maximum of (2 or NT/3)).

Kernel Parameter	Description	Recommended Minimum Value
MSGTQL	The maximum number of messages, system-wide.	For all databases - calculate the SUM of (32 * NCL).

## Solaris

Solaris 10 and later provides the Resource Control Facility feature for setting kernel parameters. Refer to the *Solaris* documentation for information about this feature.

Kernel parameter changes should be made to the Solaris Resource Control Facility whether or not you are using zones in Solaris. In a configuration with zones, make these changes in the global zone.

Kernel Parameter	Solaris Parameter	Description
SHMMAX	max-shm-memory	The maximum size in bytes of a shared memory segment.
SHMMNI	max-shm-ids	The maximum number of shared memory segments, system-wide.
SEMNI	max-sem-ids	The maximum number of semaphore sets, system-wide.
SEMMSL	max-sem-nsems	The maximum number of semaphores per semaphore set.
MSGMNB	max-msg-qbytes	The maximum number of bytes that can be queued in a single queue (i.e., the sum of all messages in that queue).
MSGMNI	max-msg-ids	The maximum number of message queues, system-wide.
MSGTQL	max-msg-messages	The maximum number of messages, system-wide.

## Additional Kernel Parameters on Linux

In addition to the general kernel parameters described above, on Linux systems it is necessary to configure the kernel parameters for the "inotify" file system monitoring mechanism. The following parameters should be set in the */etc/sysctl.conf* according to the number of Adabas client processes:

- **fs.inotify.max\_user\_instances**  
This specifies an upper limit on the number of inotify instances that can be created per real user ID (at least number of parallel used databases multiplied with the number of client processes).
- **fs.inotify.max\_user\_watches**  
This specifies an upper limit on the number of watches that can be created per real user ID (at least number of parallel used databases multiplied with the number of client processes).

See also */proc/sys/fs/inotify* for further details.

## Changing the Thread Scheduling Model on AIX

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The performance of Adabas can be improved by making some changes to the thread scheduling model. By default, AIX uses 8:1 as the ratio of user threads to kernel threads. There are two ways in which you can change this ratio:

- By setting the environment variable `AIXTHREAD_MNRATIO`. You can choose any ratio.

**Example:**

```
AIXTHREAD_MNRATIO=1:1
export AIXTHREAD_MNRATIO
```

- By setting the environment variable `AIXTHREAD_SCOPE`.

**Example:**

```
AIXTHREAD_SCOPE=S
export AIXTHREAD_SCOPE
```

This gives you a 1:1 ratio.

**Example:**

```
AIXTHREAD_SCOPE=P
export AIXTHREAD_SCOPE
```

This gives you an M:N ratio.

`AIXTHREAD_SCOPE=S` is the recommended setting, which gives you a 1:1 ratio.

# 3 Components Installed With Adabas

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## Adabas

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Adabas covers all components of the Database Management System itself. Adabas requires the Adabas Client and the Infrastructure subcomponent Security Libraries.

To complete the Adabas installation, you must activate the license files as described in the section [Completing the Installation](#).

## Adabas Client

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Adabas Client covers all components needed to access Adabas from Client applications. It is used by several Software AG products such as Adabas and Entire Net-Work.

## Adabas Client for Java (optional)

---

The Adabas Client for Java is an interface to Adabas for Java-based applications. The product consists of three individual components:

- The Java-based API itself;
- the Adabas Rest Interface, which can be used to access data from any programming language that supports HTTP request handling;
- the Adabas Data Designer, which is used to configure the Java API maps from Adabas FDT, Natural DDM or XSD definitions, as well as to browse the data in Adabas files.

If you have installed the Adabas Client for Java, see the description of the appropriate *Adabas Client for Java* documentation in Empower for further information. This documentation is available separately.

## Adabas Administration Services (optional)

---

Adabas Administration Services is a communication component required by Adabas Manager. It must be installed and running if you want to monitor and administer Adabas databases with Adabas Manager.

See the appropriate *Adabas Manager* and *Adabas Administration Services* documentation in Empower for further information.

## Adabas Manager (optional)

---

Adabas Manager is used to interactively monitor and administer Adabas databases. See the appropriate *Adabas Manager* documentation in Empower for further information.

## Infrastructure

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Adabas, or the components installed with Adabas, require a number of infrastructure components that are automatically installed with the Software AG Installer. For instance, the Infrastructure Security Libraries are required by Adabas. These libraries contain the functionality required to implement the Adabas Authentication feature.

## Further Products

---

Depending on your credentials, you may see (and can select or deselect) further entries in the **Adabas Products** node. Please refer to the separate documentation of the individual product(s) for a detailed description of the required installation steps.



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## User ID for Installation

---

When installing Adabas, the user ID under which you run the Software AG Installer must not be longer than eight characters. If you use a longer user ID, an error message is shown.

The user ID that you use to install the product must have full read and write permissions to the installation directory. In addition, it is helpful if the user has extended security privileges (sudo or su rights).

It is recommended that you use the user *sag*, for further information see *Adding User Account for Administration of Software AG Products* .

## Administrator Status

---

During the installation, the **Sudo** panel may appear. When you enter the sudo password in this panel, the installer will execute the scripts which require sudoers privileges. If sudoers privileges are not available you may run the script manually after installation as explained later in the section *Final Installation Steps*.

## Installation Directory

---

During the installation, you are asked to specify an installation directory in which to install your Software AG products. By default, the name of the main installation directory is */opt/softwareag*.

The directory name should not contain embedded spaces. For further information, see *Using the Software AG Installer*.

The default Start Menu Group is **Software AG**.

## Software AG Environment

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The installation procedure generates the environment file called *sagenv.new* in the *bin* directory under the main installation directory. This script creates all environmental variables needed to run the Software AG products installed under the same main installation directory. It must be sourced before any of the products run.



**Note:** If you schedule the automatic execution of a batch script, the Software AG environment is usually not defined when the script is started. Therefore, the script must first source the environment file before performing any Adabas activities.

## Side-by-Side Installations

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You can install the same Adabas version more than once on the same machine. And you can also install several different versions of Adabas on the same machine. Each version, however, must be installed in a separate directory. You cannot overwrite an existing version, you can only uninstall it.

Choose for instance `/opt/softwareag/Suite1` for the first installation and `/opt/softwareag/Suite2` for the second one.

If several Adabas versions are installed on the same machine, any other Software AG products using Adabas must be installed into the directory where the specific Adabas version had been installed. As an alternative, you can create your own *sagenv.new*, which sets up the appropriate settings for other products installed in different libraries. This script can be called, for example, in the login script. Regardless of the option chosen, the Adabas SQL Gateway and Adabas Event Replicator must be installed in addition to each Adabas installation (for further information see *Reinstall Adabas SQL Gateway and Adabas Event Replicator*).

Adabas requires that every Adabas installation is licensed separately. The Adabas license has to be activated for each installation directory. For further information see *Final Installation Steps*.

## Adabas Data Directory

---

Adabas stores its configuration data and information about the available databases in a directory identified by the environment variable `ADADATADIR`. In particular, if you use Adabas Extended Operations or the Adabas Manager, the descriptions of all databases to be accessed must be stored in `ADADATADIR`.

By default, `ADADATADIR` is the installation directory. If you install more than one Adabas version on the same machine, you will have to put those versions into different directories and therefore you will have several `ADADATADIR`s.

However, the database IDs used should be unique on the same machine. Moreover, the file *ADABAS.INI* located in `$ADADATADIR/etc` contains setup data that should be unique on your machine as well. Therefore, it is recommended to have all databases located in a directory common to all Adabas installations on the machine. A supplied script modifies the related environment file to let `ADADATADIR` point to such a common directory (for further information see *Final Installation Steps*).

- Database IDs must be unique on the computer. In order to avoid double usage of database IDs it is useful to see all defined databases.
- Typically you have installed an earlier Adabas version used for all databases. Then you install a higher version, and afterwards you want to convert the databases to the higher version. If you want to see which databases have already been converted, you must use the same ADADATADIR.

For this reason, a script is provided to change ADADATADIR.

## Canceling the Installation

---

As you move through the wizard, the installer stores some of the files it requires in a temporary directory. If you cancel the installer and later restart it on the same machine, the installer will use the stored files rather than downloading them from the installer server again, to improve performance. After a successful installation, the installer deletes the stored files.

If you cancel the installation before it has finished and if you want to remove already installed files, you have to do this manually. For further information, see [Uninstalling Adabas](#).

## Mandatory Environment Variable for Adabas Utilities

---

The environment variables ADADATADIR and ADAPROGDIR are mandatory environment variables which must be defined for Adabas utilities. If either one or both is undefined, this will result in failure and Adabas utilities execution will end. Both environment variables ADADATADIR and ADAPROGDIR have a default value defined.

# 5 Installing Adbas

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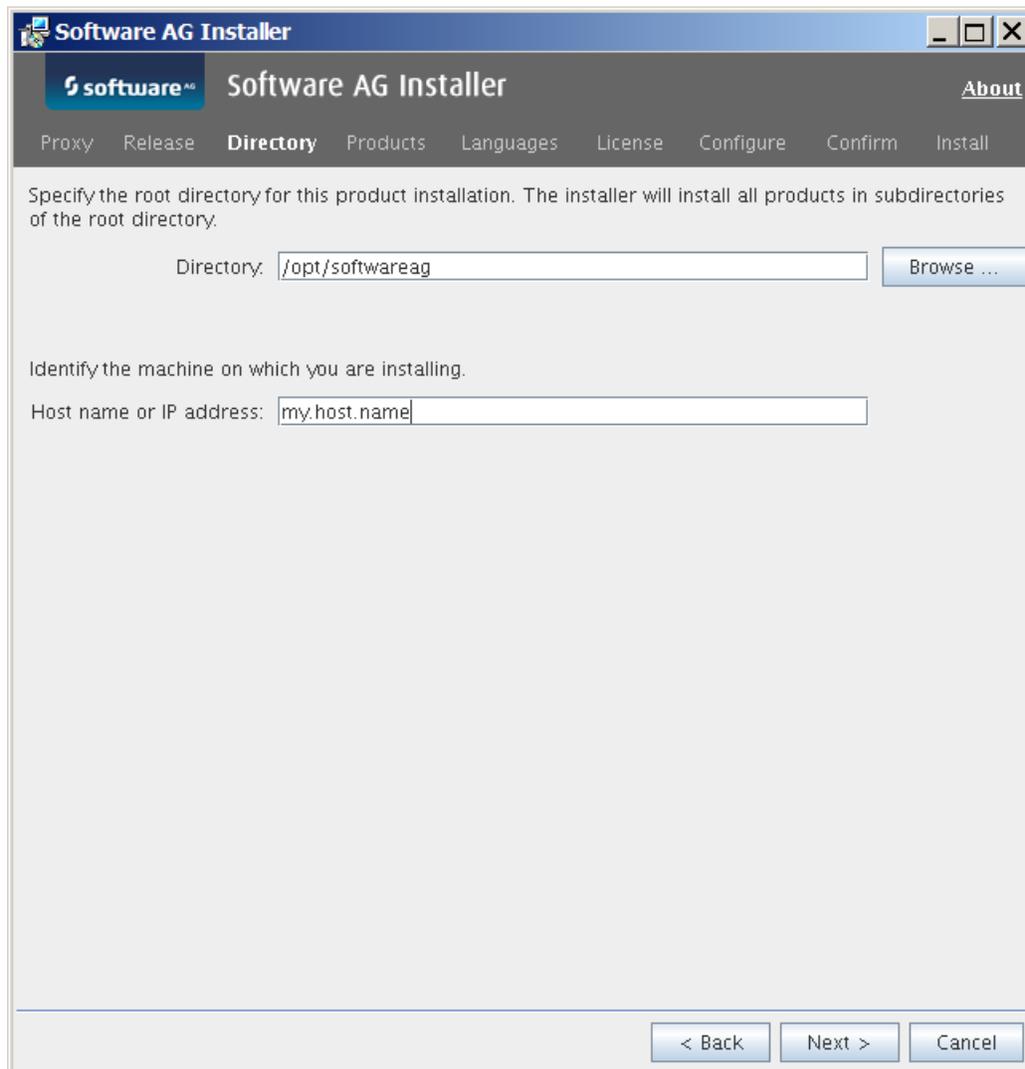
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## Using the GUI to Install Adabas

This installation documentation provides just a brief description on how to install Adabas directly on the target machine using the Software AG Installer GUI. For detailed information on the Software AG Installer, see *Using the Software AG Installer*.

### > To install Adabas

- 1 Start the Software AG Installer GUI as described in *Using the Software AG Installer*.
- 2 When the first page of the Software AG Installer GUI (the so-called Welcome panel) is shown, press the **Next** button repeatedly (and specify all required information on the shown panels as described in *Using the Software AG Installer*) until the panel containing the installation directory appears.



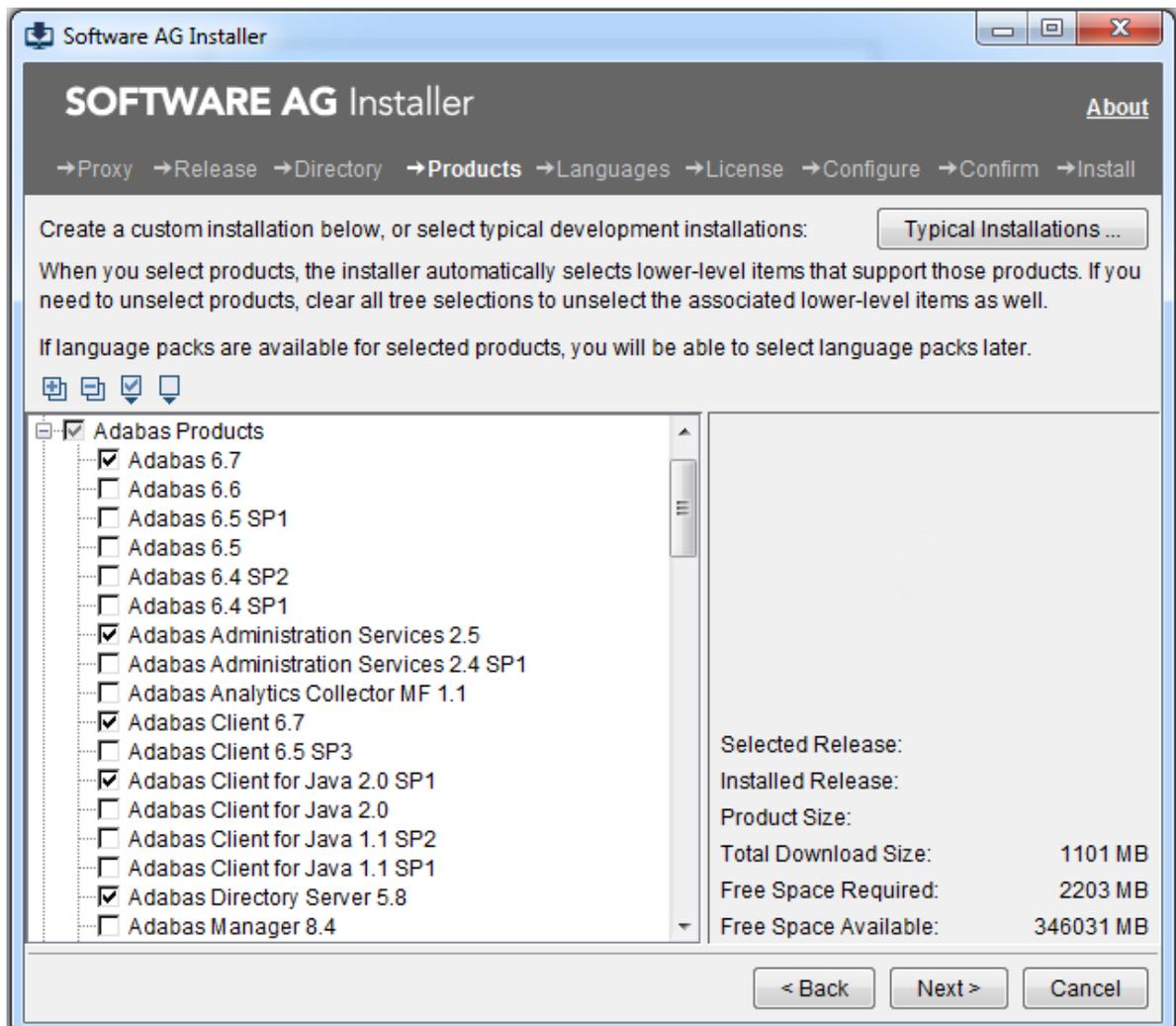
- 3 Specify the root directory and host name or IP address (optional).

 **Note:** If you opt to install several versions of Adabas in parallel directories, you should not use the proposed installation directory `/opt/softwareag` but a subdirectory, for example `/opt/softwareag/ada67` to install the release version of Adabas 6.7. The installation wizard does not allow you to install two Adabas versions into the same directory.

- 4 Press the **Next** button.

 **Note:** The panel shown below is an example of a possible product selection.

The panel containing the product selection tree appears. This tree lists the products for which you have valid credentials and which can be installed on the operating system of the machine on which you are installing.





**Note:** Products or product versions which are already installed in the selected installation directory are shown as disabled.

- 5 If you want to install Adabas and pre-selected product components, select the **Adabas Products** node.



**Notes:**

1. You may deselect the Adabas Administration Services component if the Adabas Manager is not used to administer Adabas.
2. During the Adabas Administration Services installation, you will be asked for the Adabas Directory Server URL. If your databases are to be remotely administered via Adabas Manager, the URL should point to the same Adabas Directory Server instance as your Adabas Manager installation.

Or:

If you want to customize the list of selected product components, expand the **Adabas Products** node, deselect Adabas Products and select the product components that you want to install.

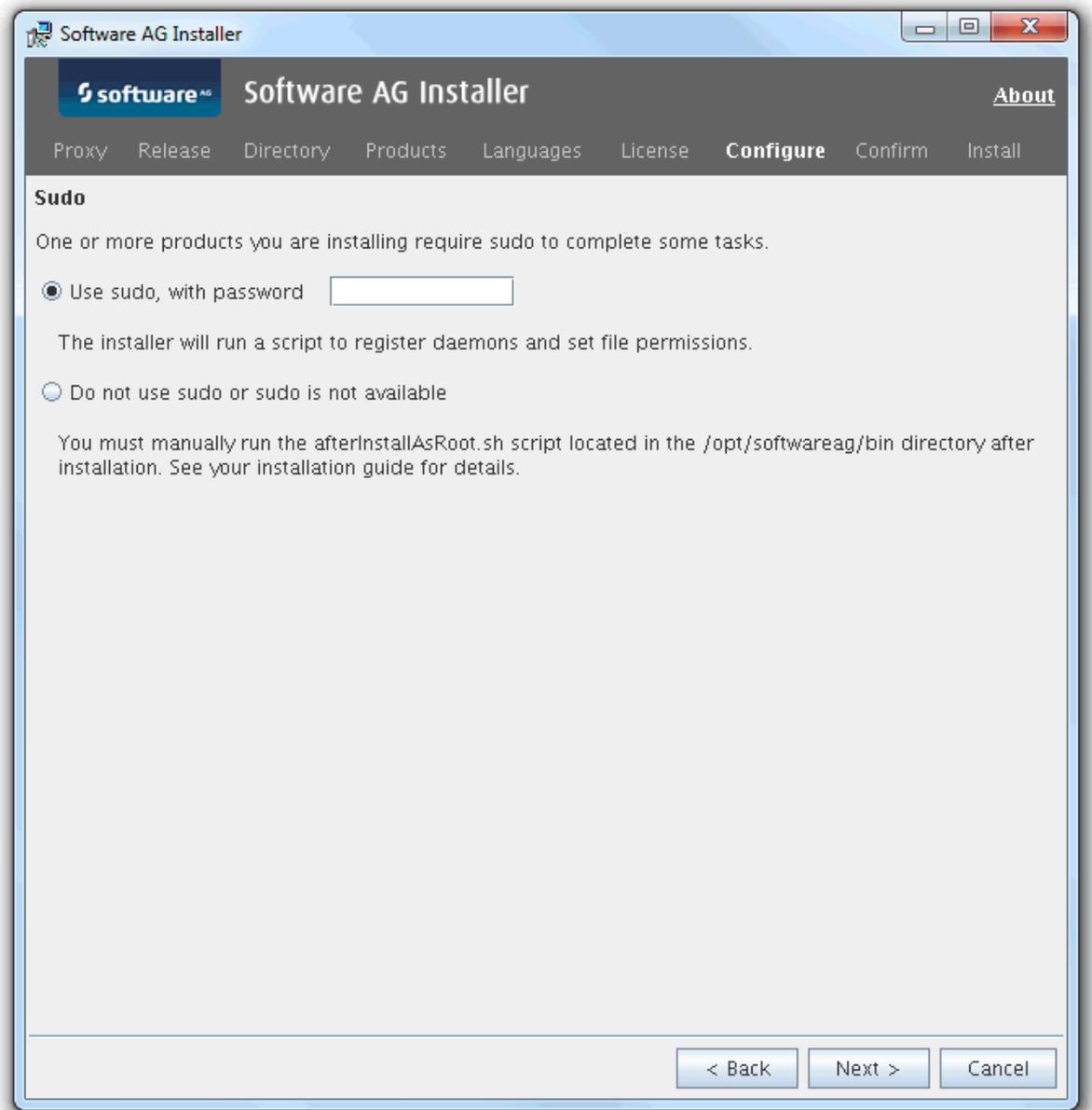
- 6 If you want to install Adabas Client, select **Adabas Client** in the product selection tree. The Adabas Client is always installed together with Adabas, but can also be installed separately.
- 7 Press the **Next** button.
- 8 Read the license agreement, select the check box to agree to the terms of the license agreement, and press the **Next** button.
- 9 Specify whether to use sudo or not.

Some parts of the installation require root permissions. On the following sudo panel you must either select **Use sudo, with password** supplying a valid sudo password or you can skip these installation steps by selecting **Do not use sudo or sudo is not available**.

You will then have to execute those steps as described on the panel shown below. Both alternatives are equivalent.



**Note:** Using sudo without specifying a password is not possible.



- 10 If you chose to install other products than Adbas in this installation run, you will be prompted for details on the installation of those products. For more information consult the installation description of those products.
- 11 On the last panel, review the list of products and items you have selected for installation. If the list is correct, press the **Next** button to start the installation process.

When the Software AG Installer has completed the first-time installation, additional configuration steps are required. See [Completing the Installation](#) for further details.



# 6 Completing the Installation

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## Final Installation Steps

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This section describes the steps, which are to be completed after the installation of Adabas 6.7 on UNIX.



**Note:** All scripts mentioned in the following steps are to be executed in a Bourne shell.

➤ **To complete the installation of Adabas 6.7 on UNIX.**

- 1 Change to the bin directory of your main installation directory.
- 2 If you did not use sudo during the installation, you must run the script *afterInstallAsRoot.sh* to complete the installation or some products might not work correctly.
  - Run the script *afterInstallAsRoot.sh* with root privileges.

- 3 Source the environment settings by executing the command

```
./sagenv.new
```

- 4 Activate the Adabas License.

1. Copy the license key to a temporary location on your UNIX machine.
2. Change to the *Adabas/INSTALL* directory of your main installation directory.
3. Execute the `adalic` command. Enter:

```
adalic activate license_file
```

Where *license\_file* represents the fully qualified path to your license file.

- 5 Change the default Adabas Data directory.



**Notes:**

1. This step is optional.
2. If this step is omitted, the Adabas Data directory is set to the default.
3. The `adaenv` environment file will be modified by these steps.

The default Adabas Data directory is the Adabas installation directory (i.e. */Adabas*). If you want to choose a different location:

1. Change to the *Adabas/INSTALL* directory of your main installation directory.

2. Execute the `change_adadatadir.sh` command. Enter:

```
change_adadatadir.sh new_location
```

Where *new\_location* represents the fully qualified path to the new location of your Data directory.

3. Source the environment settings to enable the change. Execute the command:

```
. ./adaenv
```

Or close the current shell, open a new shell, change to the *bin* directory of your main installation directory, then source the environment by executing

```
. ./sagenv.new
```

4. If installed, restart the Adabas Administration Service with the changed environment.

## 6 Verify the Installation.



**Note:** This step is optional.

To verify your installation you may choose to:

- Create the Demo Database
- Start the database
- Generate a database report
- Terminate the database

To achieve this, execute the following steps:

1. Open a command shell.
2. Source the environment settings.
3. Create the Demo Database
  - Execute the `crdemodb` command. Enter:

```
crdemodb dbid
```

Where *dbid* represents the Database ID of your database.

4. Start the database issuing the command:

```
adastart dbid
```

Where *dbid* represents the Database ID of your database.

For further details on `adastart`, refer to the section *Start Database: adastart* in the *Extended Operation* documentation

5. Generate a database report issuing the command:

```
adarep dbid=dbid contents
```

Where *dbid* represents the Database ID of your database.

For further details on `adarep`, refer to the section *ADAREP* in the *Utilities* documentation.

6. Terminate the database issuing the command:

```
adastop dbid
```

Where *dbid* represents the Database ID of your database.

For further details on `adastop`, refer to the section *Stop Database: adastop* in the *Extended Operation* documentation

## Information about the Installed Version

---

### Adabas

Information about the version number can be obtained using either of the following methods:

- Open a command shell. Then source the environment settings and execute

```
sagver $ADAPROGDIR/bin/adanuc.bin
```

- Open a command shell. Then source the environment settings and execute

```
cat $ADAPROGDIR/version.txt
```

## Adabas Client

Information about the version number can be obtained using the following method:

- Open a command shell. Then source the environment settings and execute

```
sagver $ACLDIR/lib/libada1nkx.so
```

## Reinstall Adabas SQL Gateway and Adabas Event Replicator

If you are also using the Adabas SQL Gateway or the Adabas Event Replicator, you must reinstall these products. For further information, refer to the related product documentation.

## Adapting the Installation for Use with other Products

If you are also using other Software AG products, you must either install those products into the same directory where you installed Adabas, or you must modify the generated script *sagenv.new* to setup up your environment properly. For further information see *Side-by-Side Installations*.

## Adabas Client and Applications using s-bits

The default installation directory for Adabas Client is */opt/softwareag/AdabasClient*.

If you are installing Adabas Client into a directory which is not the default (e.g. */opt/software-ag/Suite1/Adabas Client*) and you want to use an Adabas interface with applications that have the s-bit set, you must create a symbolic link pointing the directory */opt/softwareag/AdabasClient* to the physical location of the Adabas Client Installation directory..

### ➤ To create a new symbolic link

- 1 Open a command shell.
- 2 Source the environment settings.
- 3 Create the symbolic link by executing:

```
ln -s <installation_directory> /opt/softwareag/AdabasClient
```

For example:

```
ln -s /opt/softwareag/Suite1/AdabasClient /opt/softwareag/AdabasClient
```



**Note:** These operations require root permissions.

# 7 Uninstalling Adabas

---

- Uninstalling Adabas ..... 32

You uninstall Adabas using the Software AG Uninstaller. For detailed information on how to use the uninstaller, see the *Using the Software AG Installer* guide.

## Uninstalling Adabas

---

To uninstall Adabas, proceed as follows:

1. Ensure that all databases and processes, which use the directory that is to be removed, have been terminated.
2. Open a command shell and go to the *bin* directory of your main installation directory.
3. Execute the script *beforeUninstallAsRoot.sh* with root privileges.
4. Run the command `uninstall`. This starts the Software AG Uninstaller.

All files created or modified by the user are not removed. Scripts in the *Adabas/INSTALL* directory which may be needed to stop services or daemons are not removed either

# 8

## Installing Fixes from Software AG Update Manager

---

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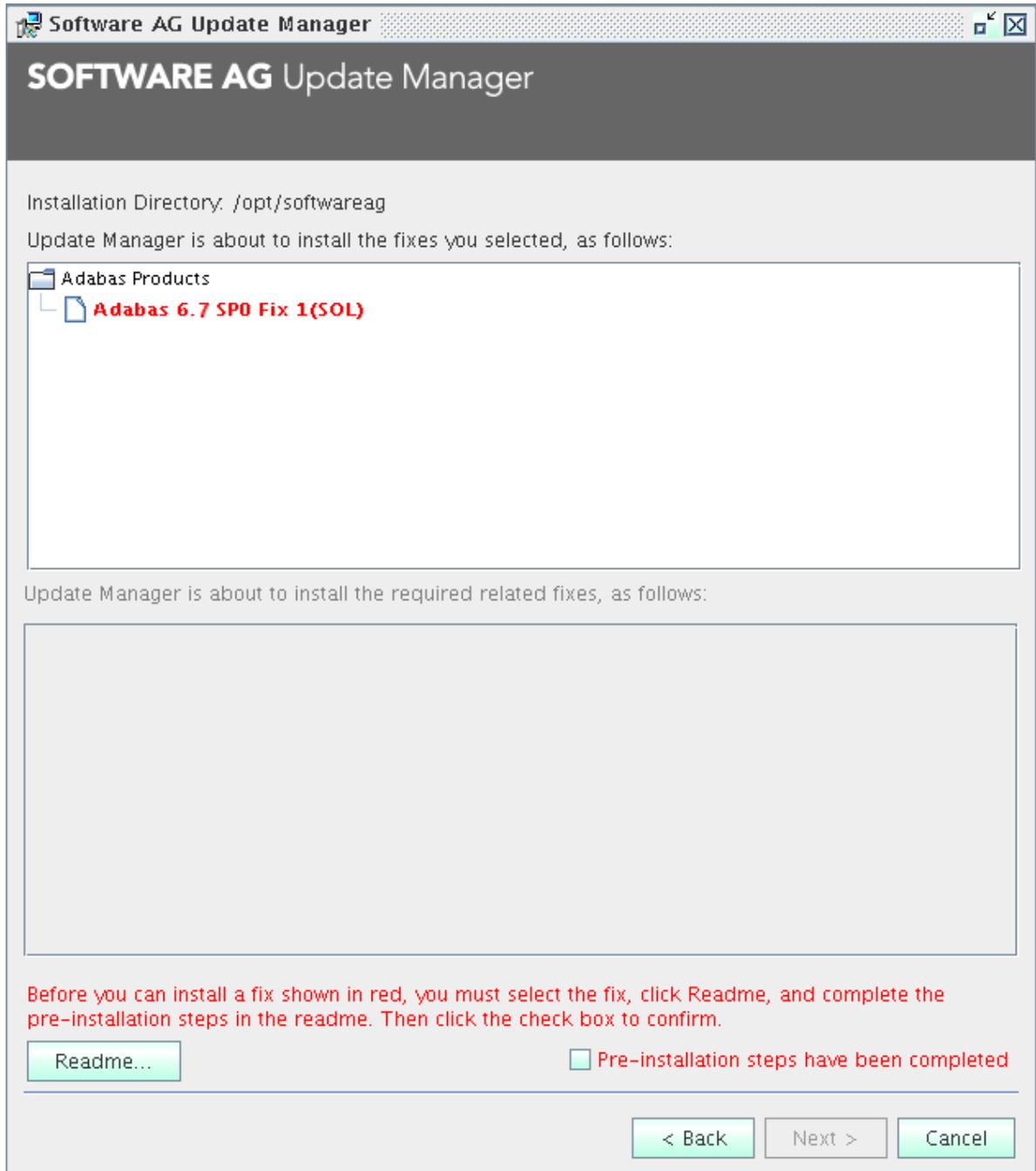
With the Software AG Update Manager (SUM) you can download and install fixes for Adabas.

## Installation Steps

---

### ➤ To install a fix using the Software AG Update Manager

- 1 Make sure that all Adabas processes and all application accessing Adabas are terminated.
- 2 Start the Software AG Update Manager and choose **Install fixes from Software AG Empower**.
- 3 Specify the installation directory and supply your Empower credentials, and choose **Next**.
- 4 Specify the fix you want to install and choose **Next**.
- 5 Complete the pre-installation steps that are shown in the readme file, and click on the **Pre-installation steps have been completed** check box to confirm that you have performed them.

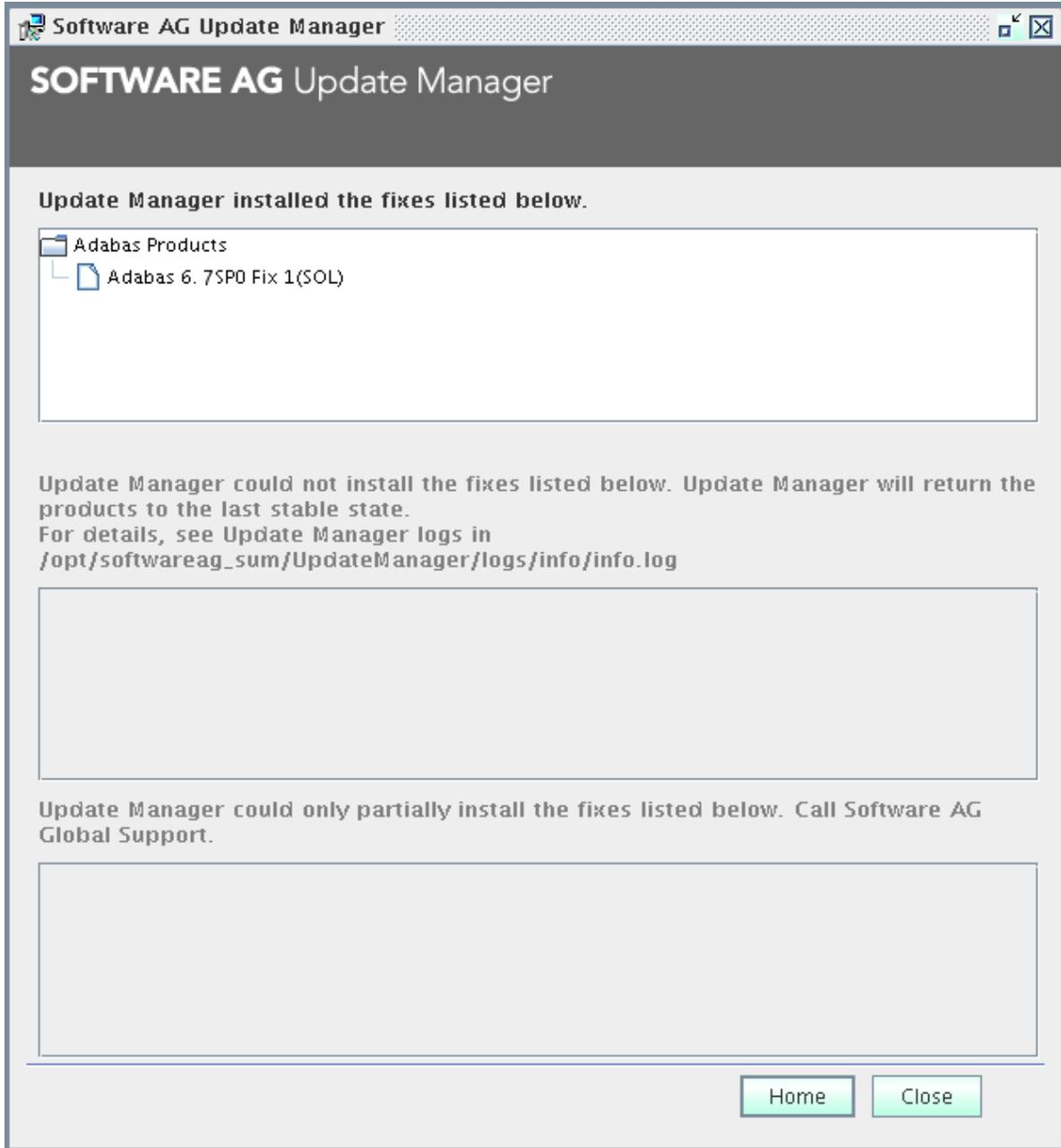


Choose **Next** to start the installation of the fix.



**Note:** **Next** is only enabled after you have confirmed performing the pre-installation steps.

- 6 Once the fix has been successfully installed, details of the installation are displayed in the Software AG Update Manager. Choose **Close** to terminate the Update Manager, or choose **Home** to return to the main screen.



## Verifying the Fix Version

---

You can verify the version of the installed fix by starting a utility (for example, ADAREP) from the command line; the version number of the fix is displayed in the first line of the output.

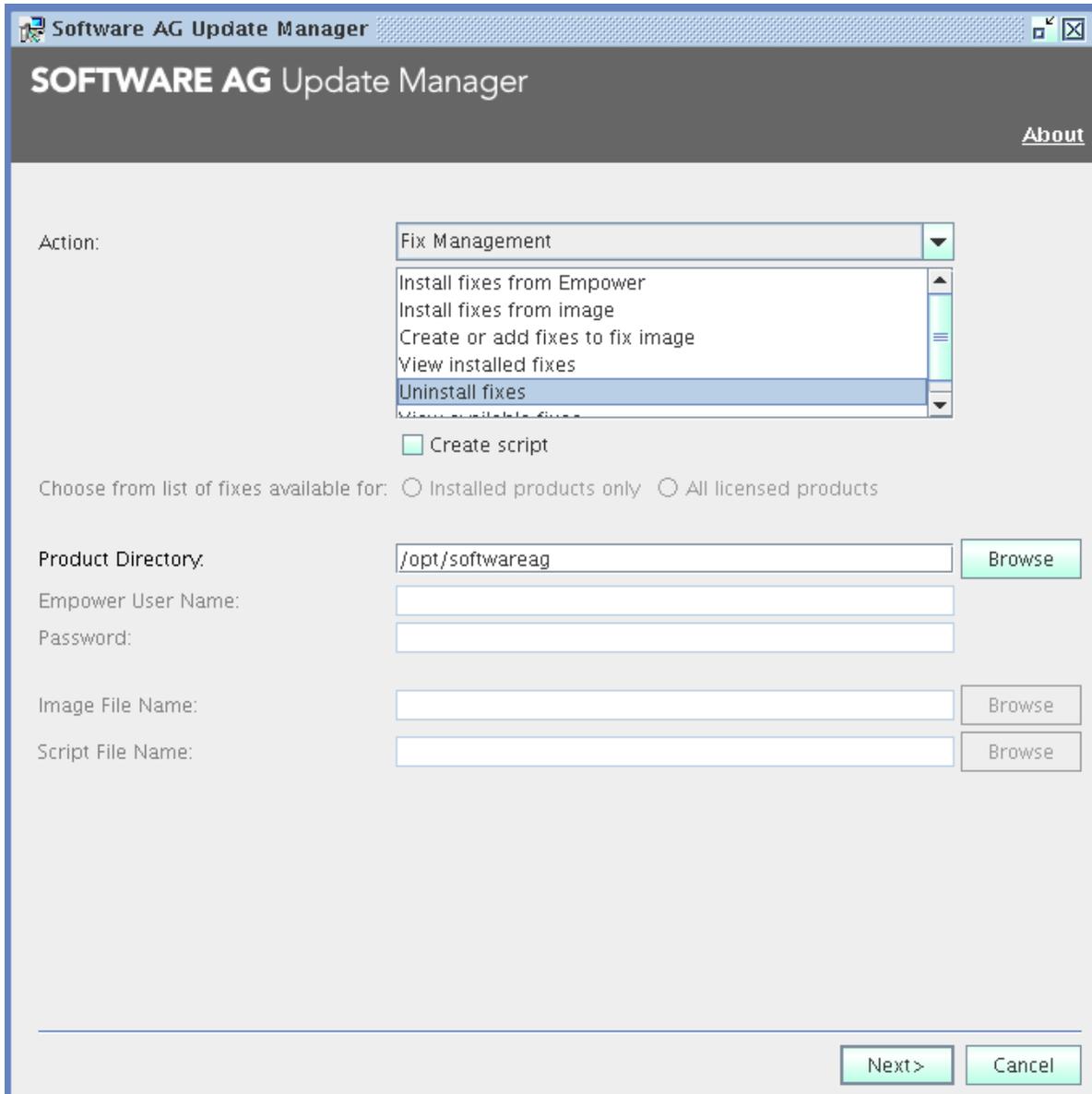
## Uninstalling a Fix

---

You can use the Software AG Update Manager to uninstall the fix and thereby go back to the previous fix version.

### ➤ To uninstall a fix using the Software AG Update Manager

- 1 Make sure that all Adabas processes and all application accessing Adabas are terminated.
- 2 Start the Software AG Update Manager and choose **Uninstall fixes** , then choose **Next**.
- 3 Specify the fix you want to uninstall and choose **Next**.



- 4 Complete the pre-uninstallation steps that are shown in the readme file, and click on the **Pre-uninstallation steps have been completed** check box to confirm that you have performed them.

Choose **Next** to start uninstalling the fix.

 **Note:** **Next** is only enabled after you have confirmed performing the pre-uninstallation steps.

Once the fix has been successfully uninstalled, details of the uninstallation are displayed in the Software AG Update Manager. Choose **Close** to terminate the Update Manager, or choose **Home** to return to the main screen.

# 9 Upgrade Guide

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## Upgrading from a previous Adabas Version

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This section is intended to assist a user upgrading to Adabas 6.7 from an older version of Adabas.

- [Installation](#)
- [Adabas License and ADADATADIR](#)
- [Converting a Database from a previous Version to Version 6.7 and vice versa](#)

### Installation

One of the major new features of Adabas 6.7 is that installation of the product is now performed by the SAG Installer, which requires different handling procedures compared to previous versions.

On Unix platforms, the default installation directory is `/opt/softwareag`. Nevertheless, it is recommended that you install in a separate subdirectory (e.g. `/opt/softwareag/Suite1`) or in another location because it is not possible to install more than one Adabas version into the same directory. You cannot overwrite an existing version, you can only uninstall it.

For further information see the section [Important Information](#) and follow the instructions in the section *Installing Adabas*.

### Adabas License and ADADATADIR

Adabas 6.7 requires that every Adabas installation is licensed separately. If you are upgrading to Adabas 6.7 from an older version and want to access existing databases, ADADATADIR must be changed to point to the directory where the database directories are located.

Follow the instructions in the section [Completing the Installation](#) to complete the installation, to activate the license, and to change the default ADADATADIR.

### Converting a Database from a previous Version to Version 6.7 and vice versa

After installing Adabas, the databases to be used need to be prepared for use with this version. Several options to convert those databases are described in the *Release Notes*. The conversion back to a previous version is also described there.

Before a database is converted to a different version, you are strongly recommended to make a backup of that database with utilities provided for the version of the database, and, following successful conversion, to run ADAVFY's FIELD and INDEX functions to check the consistency of the database.

## Upgrading from a previous Adabas 6.7 Service Pack

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This section is intended to assist a user upgrading from a previous Adabas 6.7 Service Pack to the current Adabas 6.7 version.

- [Installation](#)
- [Adabas License and ADADATADIR](#)

### Installation

You can install multiple versions of Adabas on the same machine, but each version must be installed in a separate directory, over-installing is not allowed. Therefore, you must choose a separate installation directory for installing the current Service Pack.

For further information see the section *Important Information* and follow the instructions in the section *Installing Adabas*.

### Adabas License and ADADATADIR

Adabas 6.7 requires that every Adabas installation is licensed separately.

If you want to access existing databases, ADADATADIR must be changed to point to the directory where the database directories are located.

Follow the instructions in the section *Completing the Installation* to complete the installation, to activate the license, and to change the default ADADATADIR.

