

# Installing Adabas Manager on UNIX

This section provides you with the information necessary to install and to configure Adabas Manager on UNIX platforms.

The following main topics are described:

- Installing Adabas Manager
  - After the Installation
  - Uninstalling Adabas Manager under UNIX
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## Installing Adabas Manager

This section describes the prerequisites for installing Adabas Manager and how to perform the Adabas Manager installation on UNIX.

This section contains the following topics:

- Before You Start the Installation
- Installing the Product
- Batch Installation

### Before You Start the Installation

Before you start installing Adabas Manager make sure that you meet the prerequisites for your environment as described below.

## Hardware and Software Prerequisites for Linux

For the installation of Adabas Manager, the following hardware requirements apply:

Hardware Prerequisites for Linux	
Processor:	x86, EM64T and AMD64 (at least Intel Pentium III 300 MHz)
RAM:	1GB
Disk space:	Installing Adabas Manager requires approximately 85MB.
CD-ROM drive:	A CD-ROM drive to install the software.

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

Software Prerequisites for Linux	
Operating System:	<p>SUSE Linux Enterprise Server 10 (x86, EM64T, AMD64).</p> <p>Red Hat Enterprise Linux 4 and 5 AS (x86, EM64T, AMD64).</p> <p>1. Please ensure that your host name is correctly configured. Issue the following command</p> <pre>hostname</pre> <p>or</p> <pre>uname -u</pre> <p>If these commands return a fully-qualified domain name (FQDN), everything is OK. If, however, they return only the node name (other than localhost), you should look in the file <i>/etc/hosts</i> 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.</p>
Remote Access:	Entire Net-Work Client 1.3 or above is required for remote access to mainframe machines.

### Note:

It is recommended to use the file system ext3 on Linux.

**Hardware and Software Prerequisites for IBM zLinux**

For the installation of Adabas Manager, the following hardware requirements apply:

<b>Hardware Prerequisites for IBM zLinux</b>	
Architecture:	IBM zSeries (s390x)
RAM:	1GB
Disk space:	Installing Adabas Manager requires approximately 85MB.
CD-ROM drive:	A CD-ROM drive to install the software.

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

<b>Software Prerequisites for IBM zLinux</b>	
	SUSE Linux Enterprise Server 10
Operating System:	<p>Red Hat Enterprise Linux 4 and 5 AS</p> <ol style="list-style-type: none"> <li>1. Please ensure that your host name is correctly configured. Issue the following command           <pre>hostname</pre> <p>or</p> <pre>uname -u</pre> <p>If these commands return a fully-qualified domain name (FQDN), everything is OK. 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.</p> </li> <li>2. If you want to perform a graphical installation, you will need the following additional 31-bit packages (the version or release number may vary):           <ul style="list-style-type: none"> <li>● xorg-x11-libs-6.8.1-23.EL.s390.rpm</li> <li>● xorg-x11-Mesa-libGL-6.8.1-23.EL.s390.rpm</li> <li>● zlib-1.2.1.2-1.s390.rpm</li> <li>● expat-1.95.7-4.s390.rpm</li> <li>● fontconfig-2.2.3-7.s390.rpm</li> <li>● freetype-2.1.9-1.s390.rpm</li> </ul> <p>Otherwise start the installation as described below and add <code>-nw</code> as an option to <code>setup .ux</code>.</p> </li> </ol>
Remote Access:	Entire Net-Work Client 1.3 or above is required for remote access to mainframe machines.

### **Adding User Account for Administration of Software AG Products**

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*.

▶ **To perform these steps, use an appropriate system administration tool (e.g. *smit*).**

### 1. 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
```

### 2. Define the SAG environment variable

The environment variable "SAG" defines the default location under which the directory trees of installed Software AG products are located. In the Bourne shell you can define it like this:

```
SAG=/opt/softwareag ; export SAG
```

The Adabas Manager software will be installed in, and under the subdirectory *ama* of the location specified by \$SAG.

## Installing the Product

Once you have set up your installation environment as described above, you can proceed with the installation itself, which will only take a few minutes.

The Adabas Manager installation offers the possibility to install the product with or without Event Replicator Administration. If you choose not to install Event Replicator Administration during the installation procedure, you can add it at a later stage by re-running the Adabas Manager installation procedure.

The installation procedure examines the environment variable `DISPLAY` to determine whether to run in graphical or interactive text-oriented mode. If the environment variable `DISPLAY` points to an active X-Server, the graphical installation mode starts, otherwise the interactive text-oriented installation mode starts. There is also a batch mode available (see Batch Installation for further information).

**Note:**

If you run the installation procedure in character mode, at each command prompt, you must type in the exact wording (for example: "accept" for "accept", not just "y" or the ENTER key).

 **To set the DISPLAY environment variable**

- Enter the following shell commands (this example is for Bourne shell):

```
DISPLAY="<machine_name>:0"  
export DISPLAY
```

replace "*<machine\_name>*" by the name of your terminal device.

Note that the graphical mode can only start if there is an X-Server currently active.

 **To install the Adabas Manager product**

1. To perform this step, you must be the user "sag" with "su" or "sudo" privileges.

You need to have superuser permissions for some parts of the installation procedure. You can choose between entering the password of the root user and entering your own password if the third party tool "sudo" is installed and configured.

Mount the installation CD (in the following it is assumed that the mountpoint is "/cdrom").

Start the installation procedure from a writable working directory.

Enter the command:

```
/bin/sh /cdrom/setup.ux
```

The setup program is started and guides you through the installation.

Since Linux S/390 systems usually do not have a CD-ROM drive, it is necessary to perform the following preparations prior to the actual installation:

▶ **To copy the CD-ROM contents to a zLinux system and prepare the installation**

1. Load the CD-ROM on a Windows or UNIX machine that has a network connection to the zLinux system.
2. Copy the file *AMA763n.tgz* that is located in the root directory of the CD-ROM to a temporary area such as */tmp/cdrom* in your zLinux environment, using for example *ftp* in the binary mode.
3. Unpack the *tgz* file using the command `tar -xzvf AMA763n.tgz`, where "n" is the number of the Adabas Manager patch level. Now follow the subsequent instructions for the main installation process.

▶ **To install the Adabas Manager product on a zLinux system**

- To perform this step, you must be the user "sag". Do not perform this step as the user "root".

Start the installation procedure from a writable working directory. We recommend *\$\$SAG/INSTALL*.

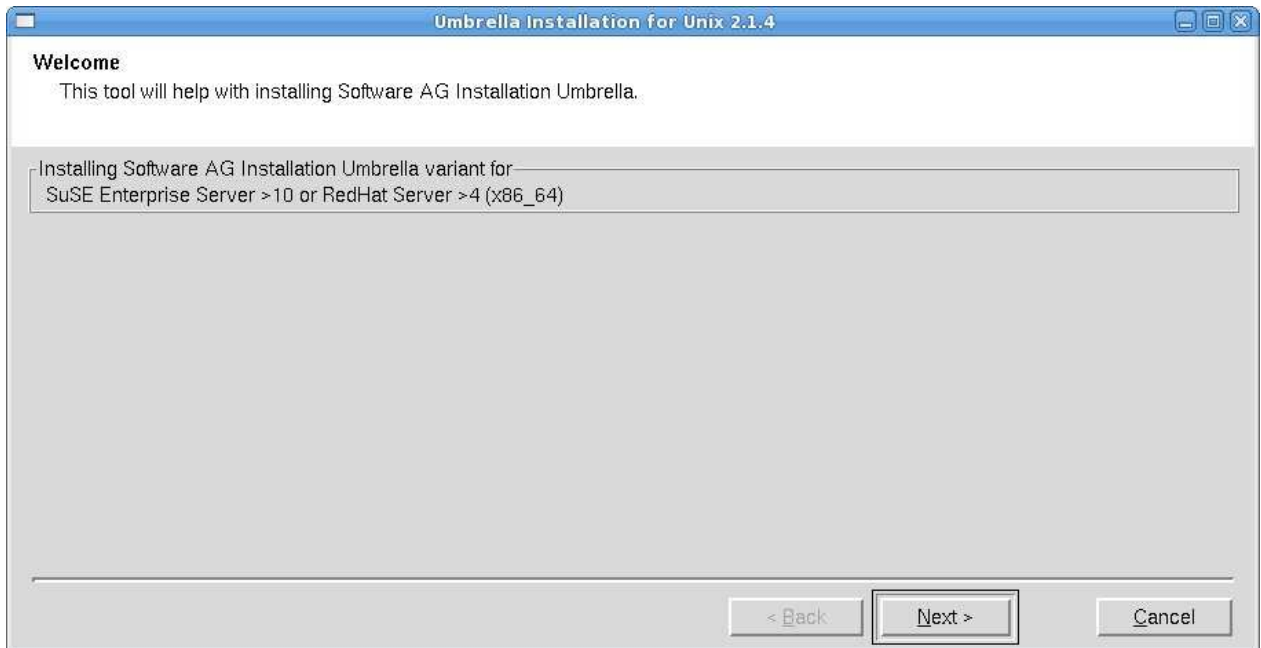
Enter the command:

```
sh <AdabasManagerRoot>/setup.ux
```

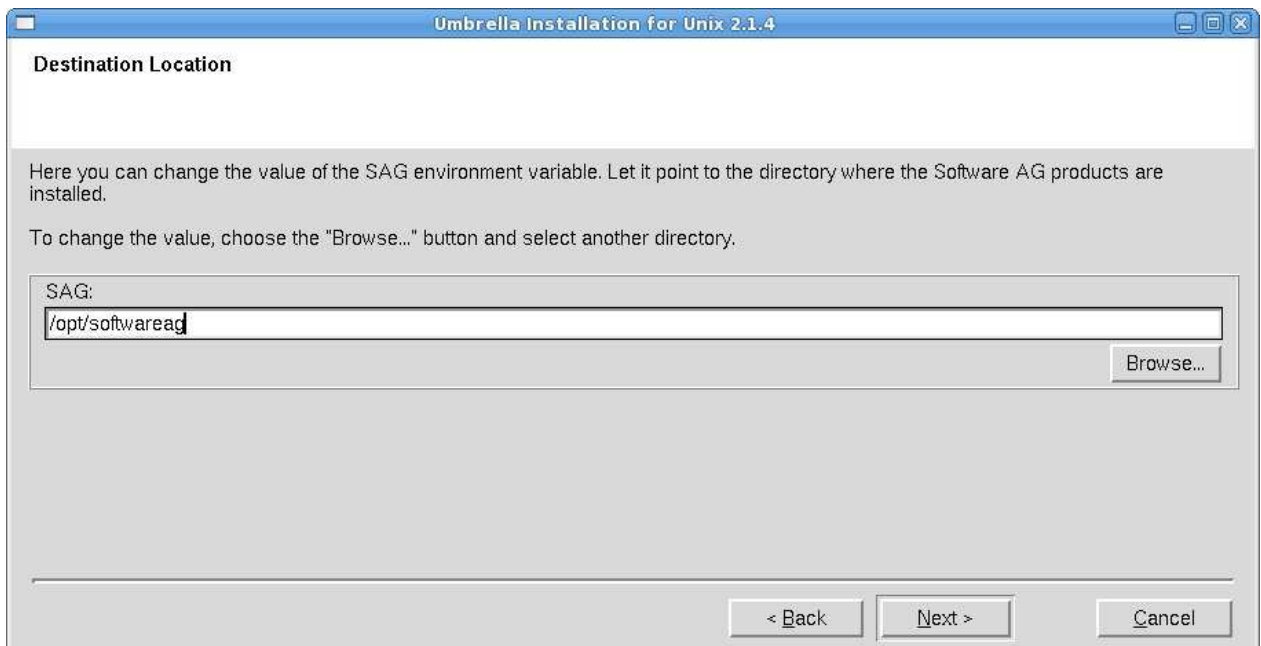
The setup program is started and guides you through the installation.

The following screen shots show an installation made on a Linux machine - please note, that the exact number of the patch level may differ from the actual patch level that you are installing.

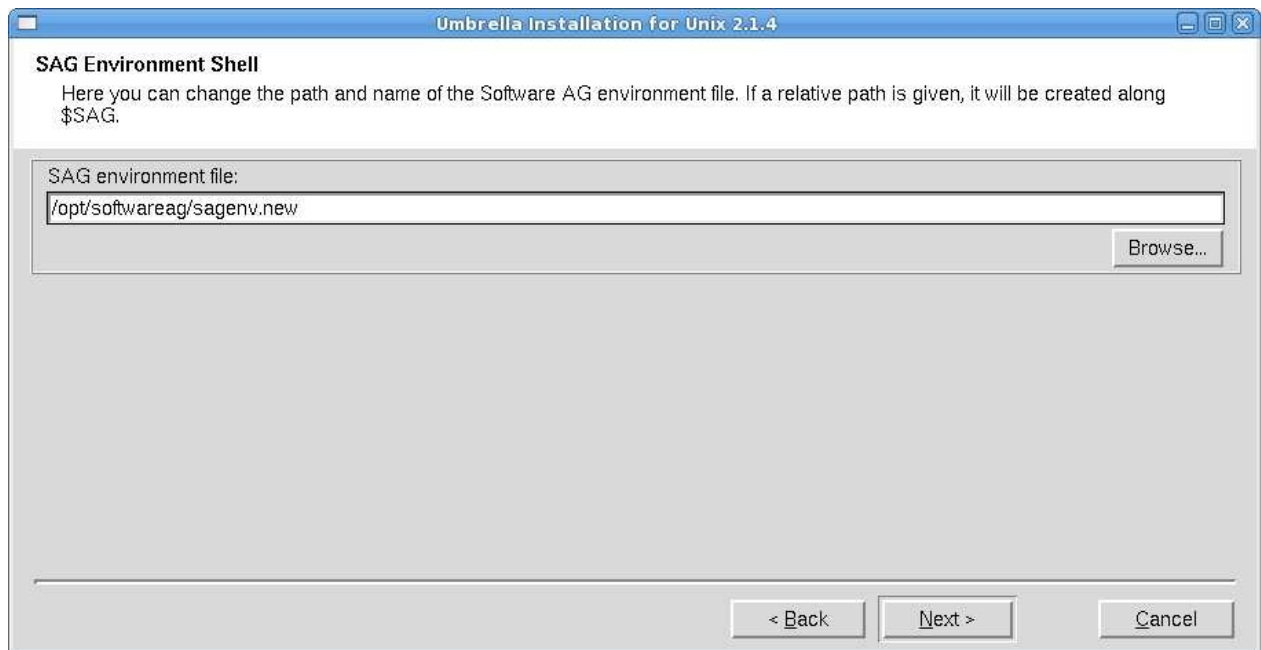




Choose **Next** to continue.

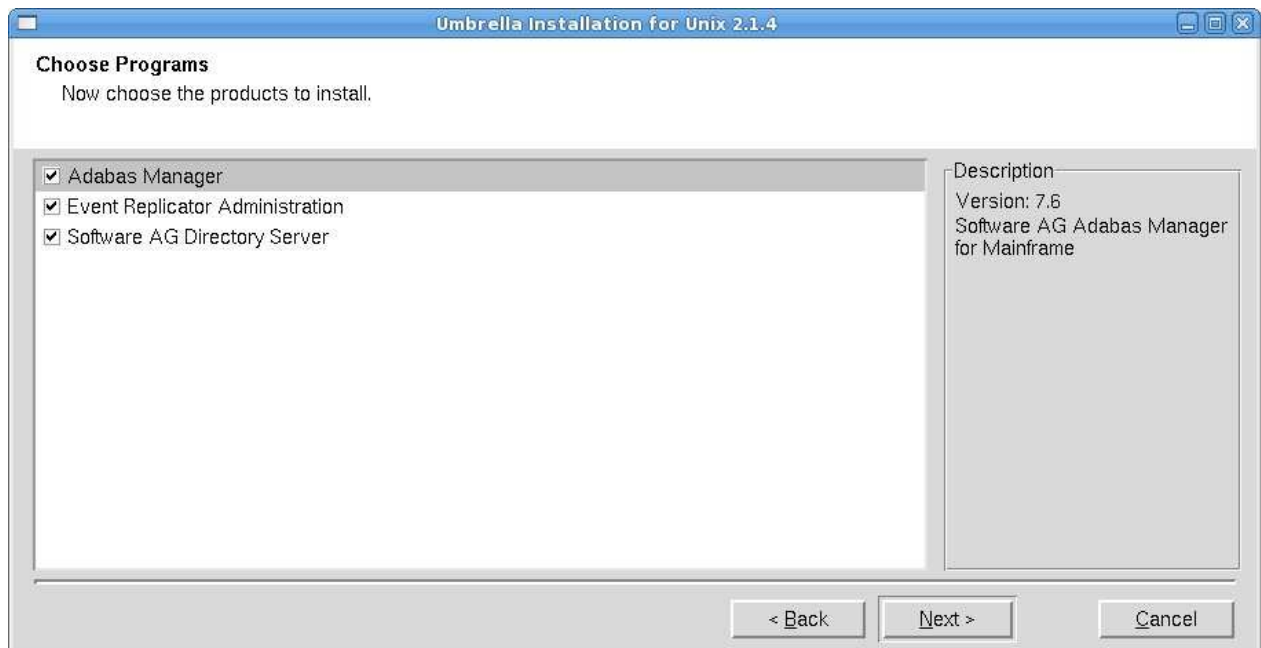


The **Destination Location** dialog box is displayed. Enter the value of the directory of the \$SAG environment variable, or browse to a SAG directory if you already have one. If the destination you specify does not exist, you will be asked if you want to create it. Choose **Next** to continue.



The name of the environment settings file generated by the installation in the SAG directory will be *sagenv.new*.

Choose **Next** to continue with the installation.

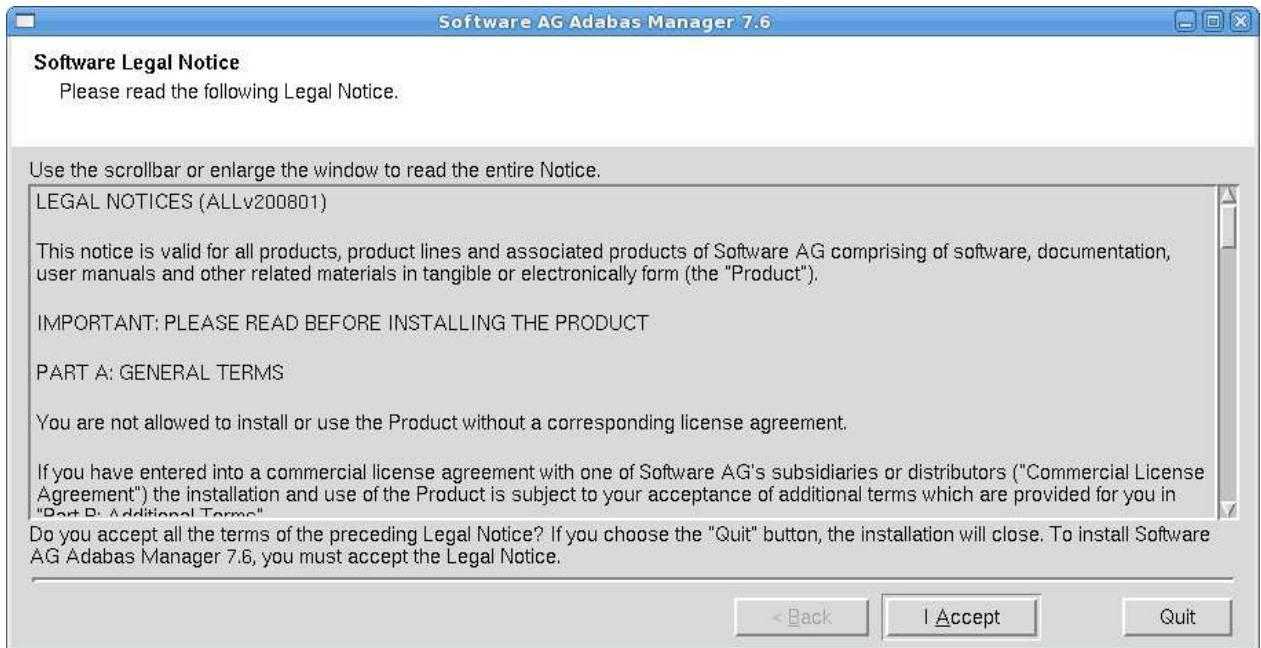


Select the products you want to install. You can install Adabas Manager with or without Event Replicator Administration. If you choose not to install Event Replicator Administration now, you can add it at a later stage by re-running the Adabas Manager installation procedure.

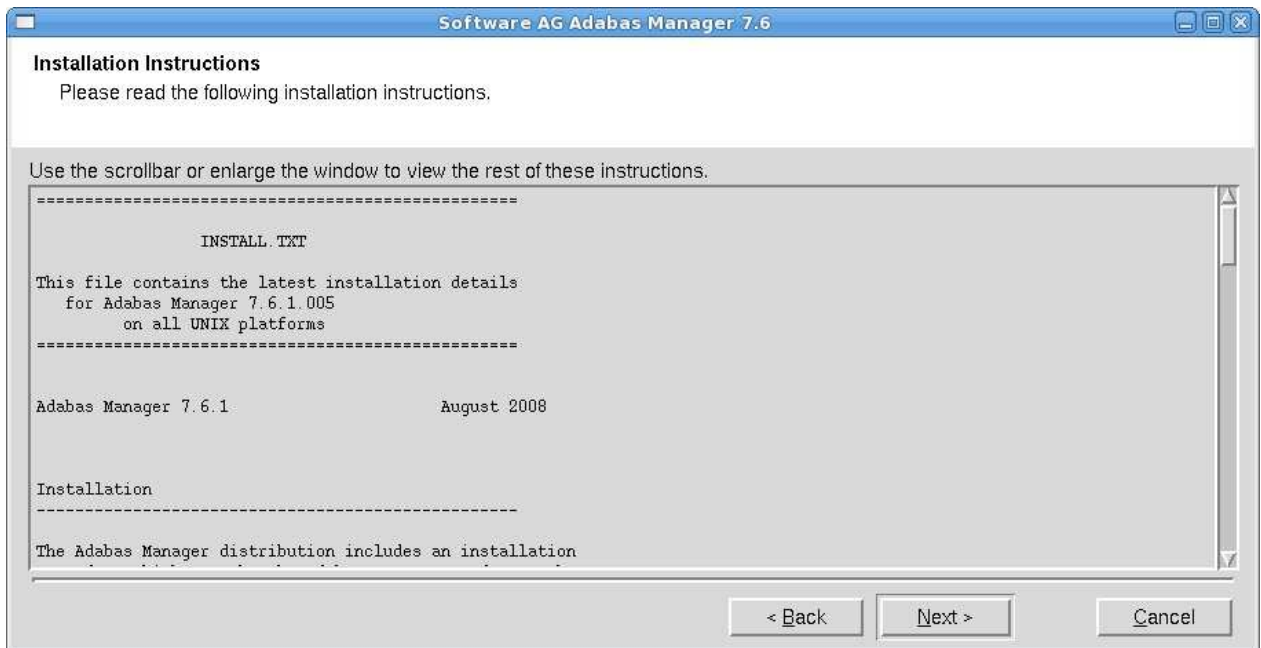
**Note:**

If Software AG Directory Server is not already installed on your system and you have selected it for installation, it will be installed at this point of the process before the Adabas Manager installation continues. Installation of the Directory Server also includes installation of System Management Hub (for more information see section *Installing Management Components* in the *Entire Net-Work Client Installation and Administration* documentation).

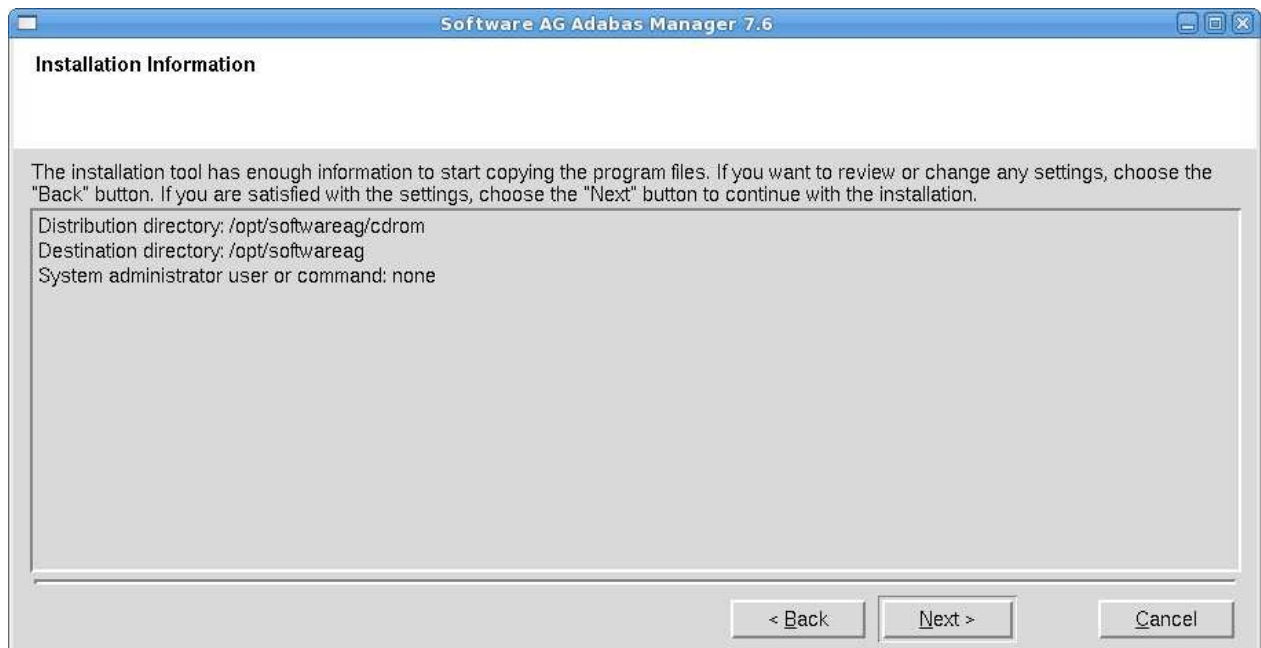
Choose **Next** to continue.



The Software AG Legal Notice is displayed. After reading the text, choose **I Accept** to continue with the installation.



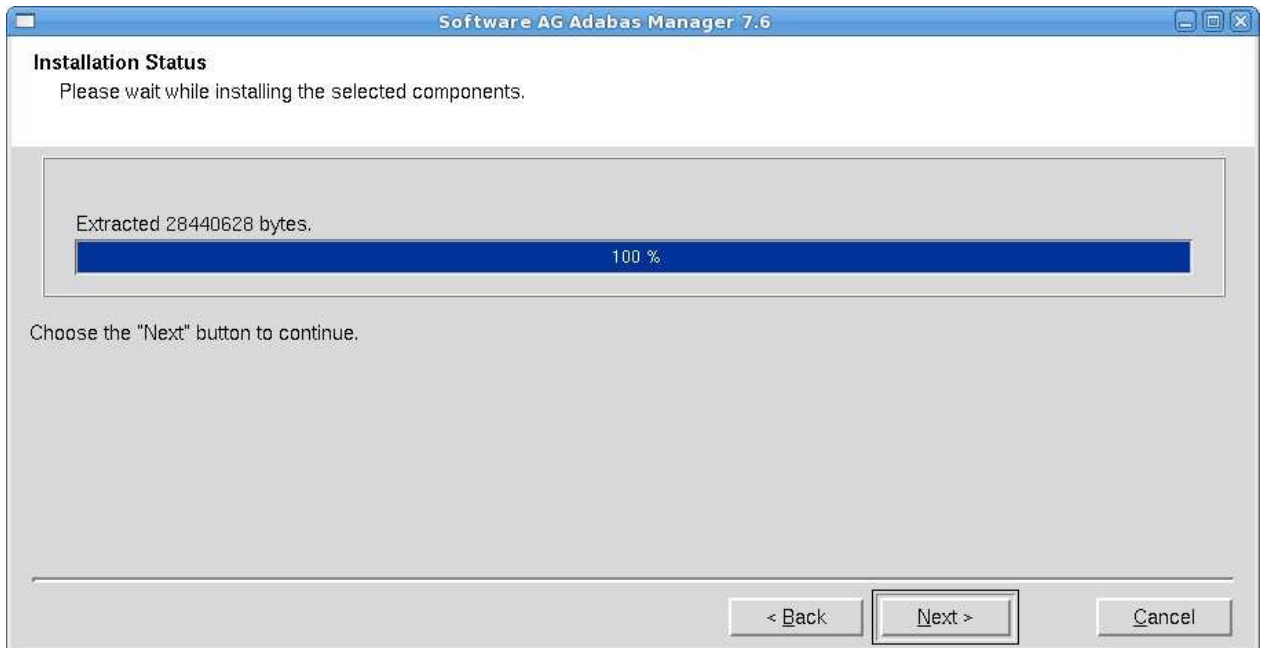
The Adabas Manager Installation Instructions are displayed. After reading the text, choose **Next** to continue with the installation.



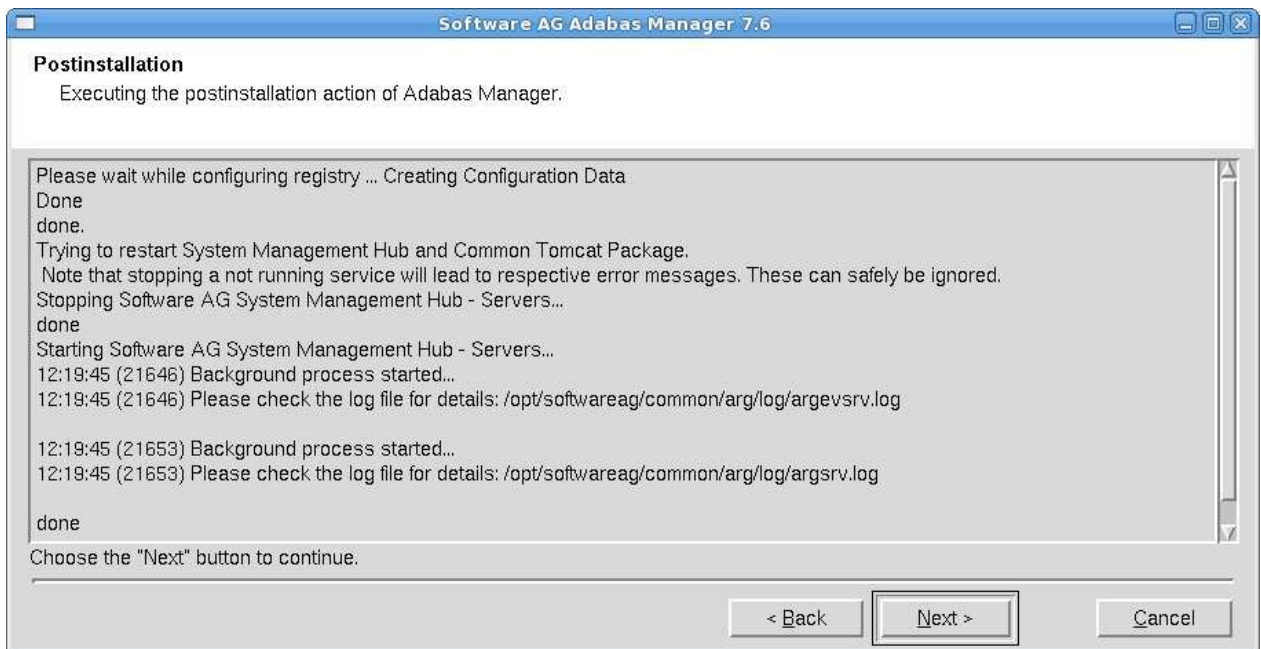
The settings you have selected are now displayed. Choose **Back** to change the settings, or choose **Next** to start extracting the files.

**Note:**

If you did not install the Software AG Directory Server with System Management Hub during this installation, the system will check at this point if SMH is available and install it if this is not the case. The system will also check if Entire Net-Work Client is available and install it at this point if this is not the case.

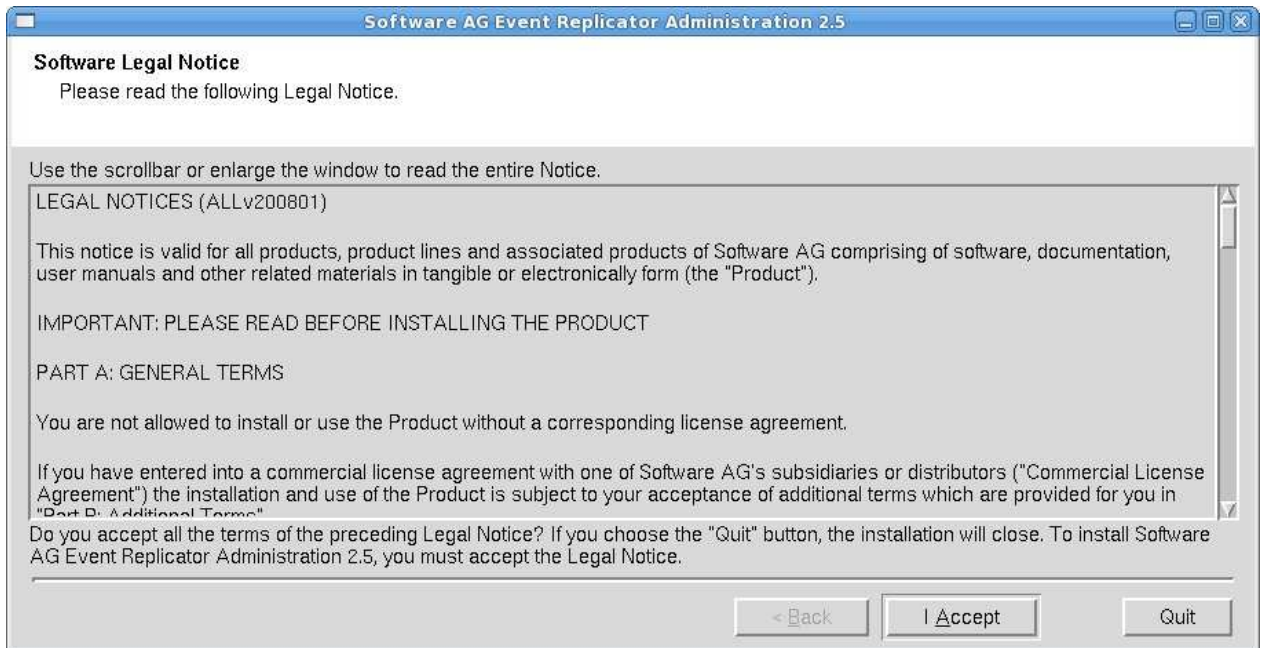


Choose **Next** to continue.

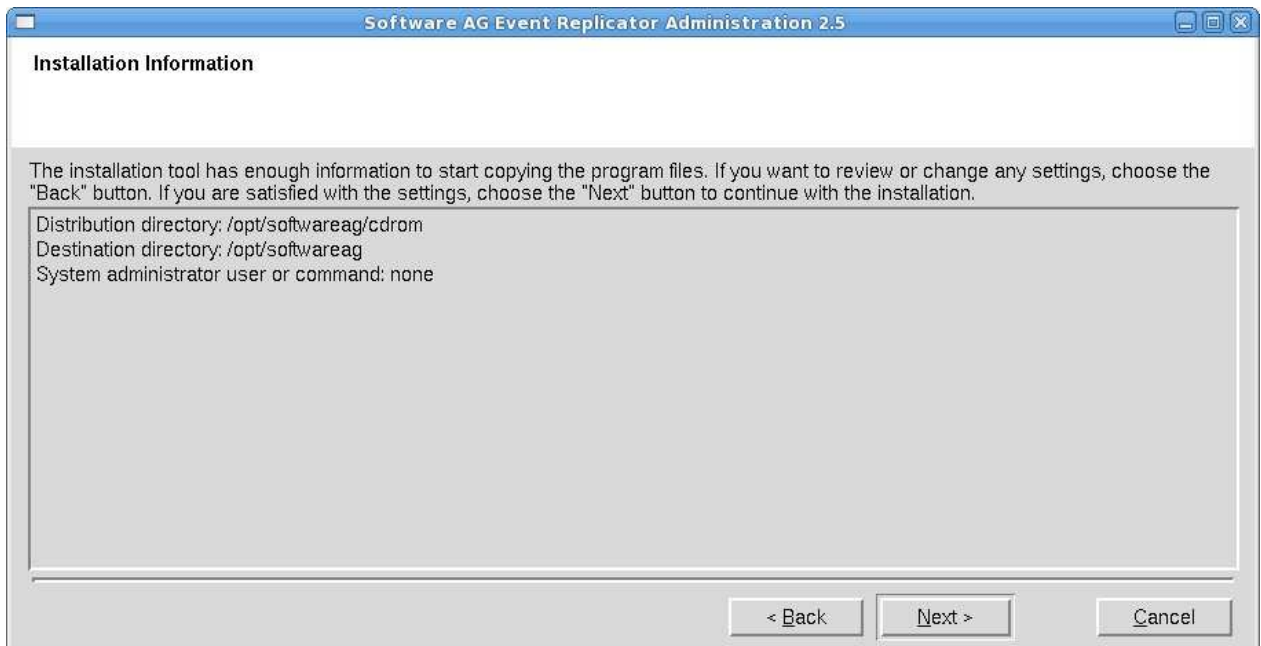


The postinstallation actions of Adabas Manager are displayed. Once they have finished, choose **Next** to continue.



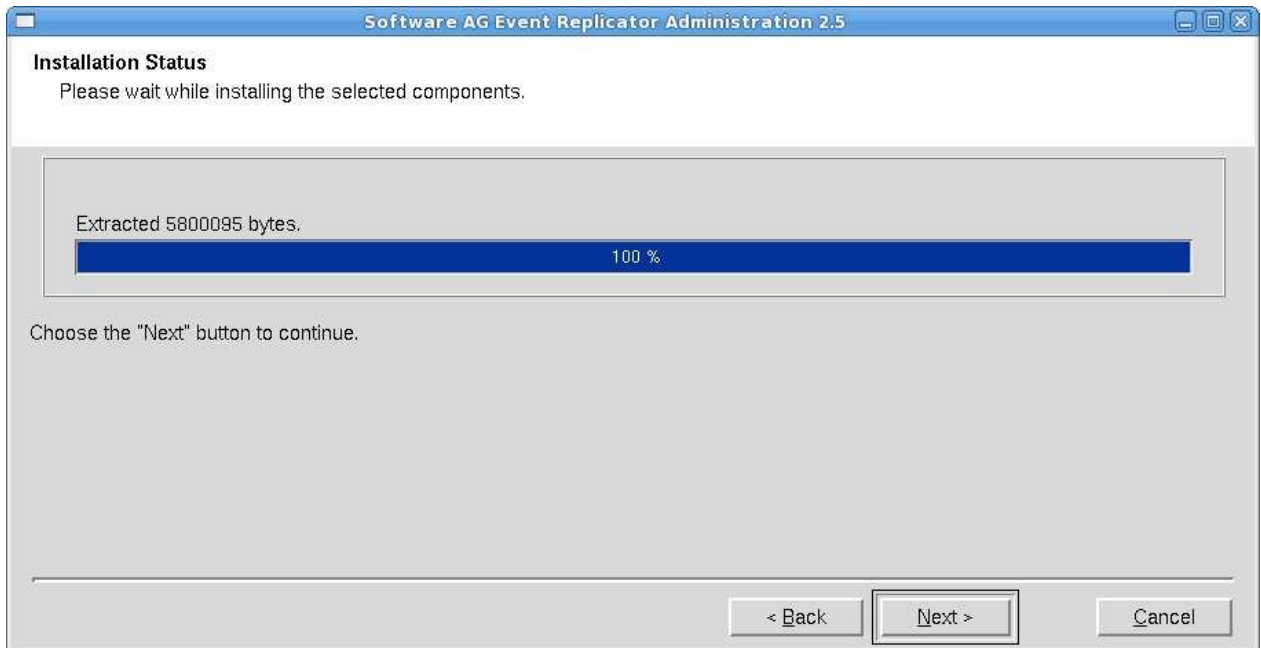


The Software AG Legal Notice is displayed. After reading the text, choose **I Accept** to continue with the installation.

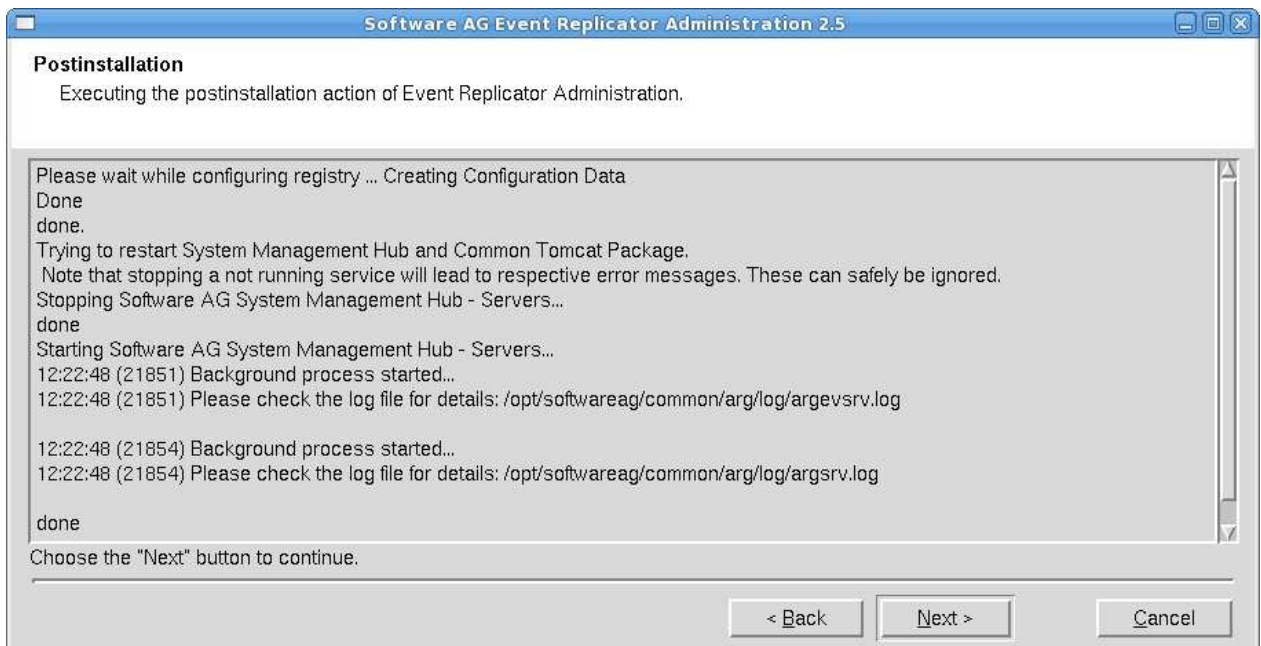


The settings you have selected are now displayed. Choose **Back** to change the settings, or choose **Next** to start extracting the files.

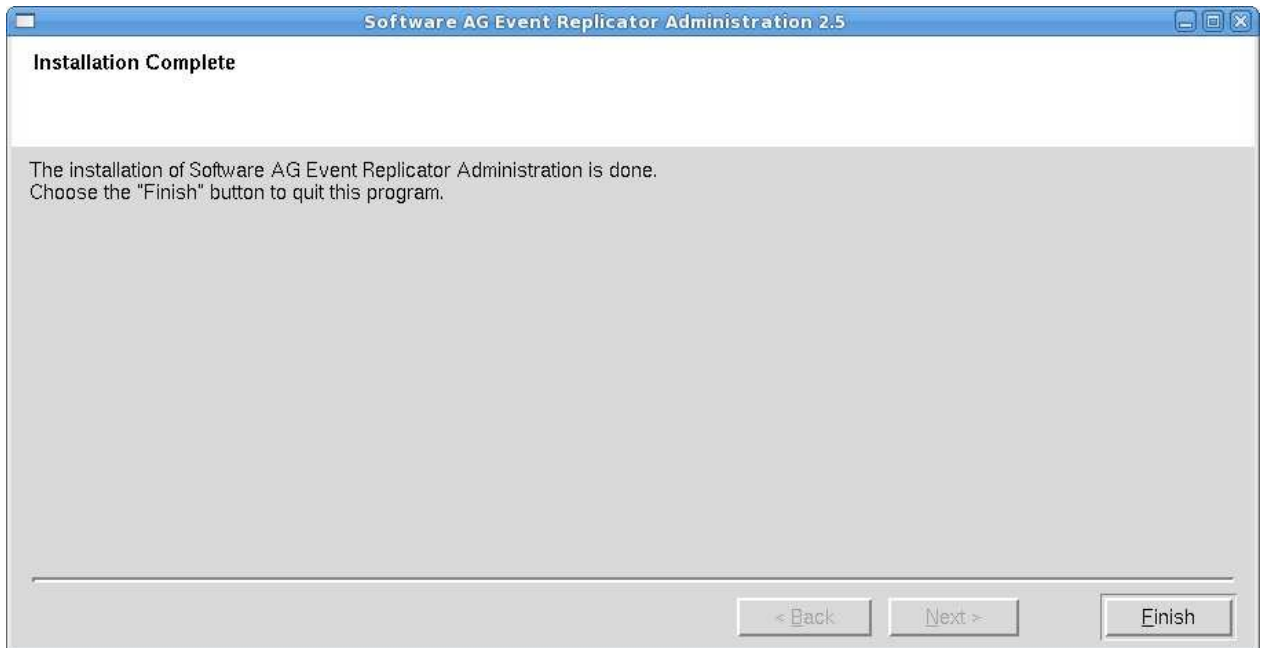




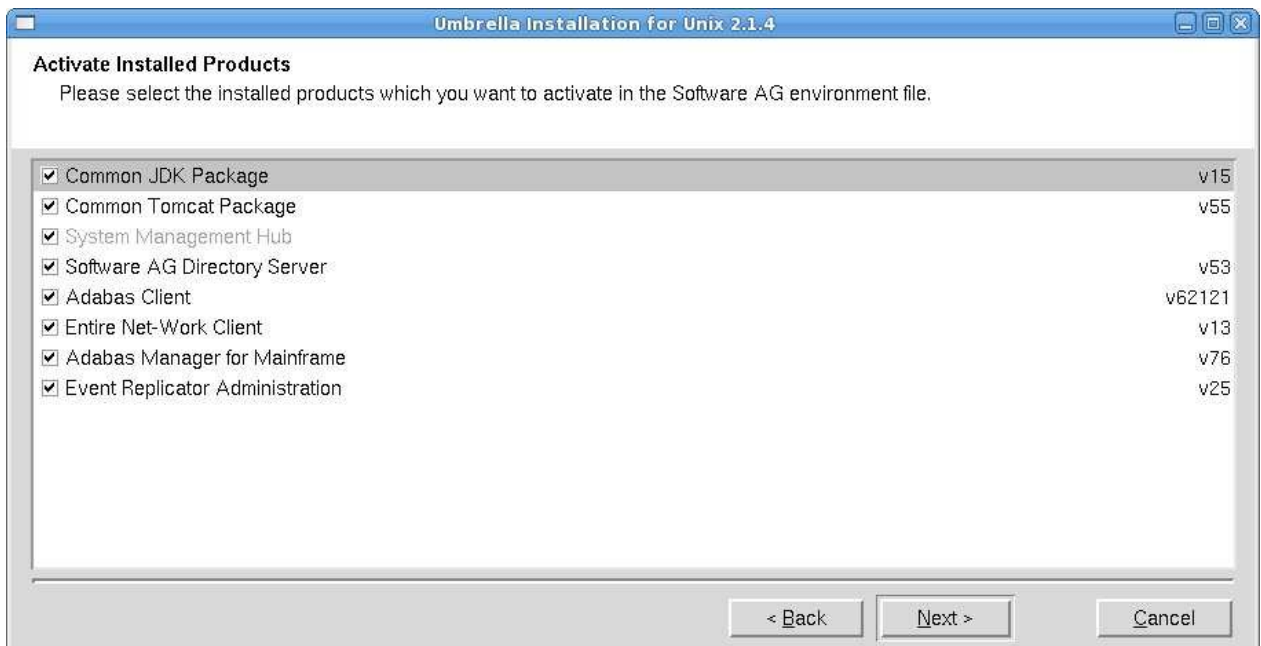
Choose **Next** to continue.



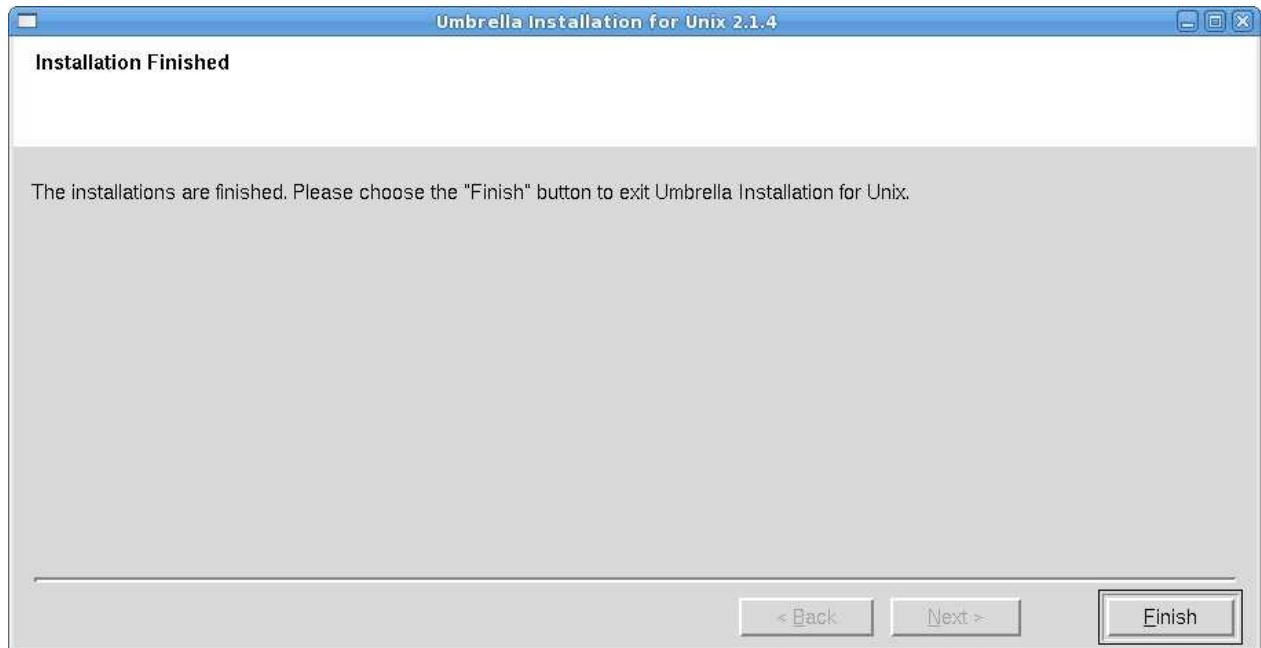
The postinstallation actions of Event Replicator Administration are displayed. Once they have finished, choose **Next** to continue.



Choose **Finish** to complete the installation of Event Replicator Administration.



The Activate Installed Products screen is displayed. Select the products you want to activate in the Software AG environment file and choose **Next** to continue.



The installation process is completed. Choose **Finish** to leave the installation program.

## Batch Installation

When Adabas Manager is installed, the log file *AMFv76Inst.log* is written, and another file, *AMFv76Inst.sh*, which contains the batch installation settings of this particular installation, is written to `$$SAG/amf/v76/INSTALL`. This file can then subsequently be executed as a shell script. An example is shown below.

### Note:

Corresponding files are written for Event Replicator Administration (ARMv26).

If you install the product in character mode, the option `-batch` can be used to execute the installation program without further user interaction. If user input is required, the default values are used; if these values are not appropriate, the correct values have to be set using the corresponding options in the command line. The available command line options can be displayed by calling the installation program with the `-help` option.



### Warning:

**Since the value of `$$SAG` cannot be set using an option, it must already have the correct value in the calling shell.**

All prerequisites and parameters are checked for correctness: missing or invalid values will cause the batch installation to terminate.

## Root Authentication

Installation programs that require post-installation actions executed as a system administrator usually have the following three options:

Variable/Flag Name	Type	Value	Explanation
-user	string	()	Software AG administrator
-password	string	()	System administrator password (usage not recommended)
-authcmd	string	(none)	System administrator user or command

It is possible to specify a password for the system administrator (or the user's password in connection with -authcmd sudo) as value of the -password option; however, this should be avoided for security reasons. The password would appear as readable plain text on screen, or be stored in the calling shell script, or, in the worst case, be stored in the user's shell history file. It may also be looked up with ps -ef during the installation's runtime by every user on the system.

```
# Unsafe, because everyone can see the password:
sh /cdrom/setup.ux -batch -authcmd sudo -password secret
```

It is recommended to start the installation program using su or sudo, specifying the name of the administrator for the Software AG products as value of the -user option:

```
# Recommended way to start the installation with super user
# permissions:
su root -c "sh /cdrom/setup.ux -batch -user sag"
```

## Example 1

This example shows the generated batch file *AMFv76Inst.sh* for Adabas Manager that was created during installation. The user is sag and does not have a root login on the machine (-authcmd none).

```
#!/bin/sh
# ----- <Start of generated batch script> -----
# -- <Adapt the following lines until end of generated> --
# ----- < batch script to your needs > -----
# Make sure that the following Internal Products are installed
# below the same $SAG, before the batch is actually started.
# - arg v411 "System Management Hub"
# You can install the following Software AG products separately
# below the same $SAG, after the batch is successfully finished.
# - wcl v13 "Entire Net-Work Client"
# You will find the batch scripts for the other installations
# in the respective INSTALL/ directories of the products.
#
# You should replace SECRET by the actual password
# or (even better) call this script with superuser privileges.
#
SAG="/opt/softwareag"; export SAG
/bin/sh /opt/softwareag/cdrom/setup.ux amf v76 -batch -directory ng64 \
    -user sag \
    -authcmd none \
    -password SECRET \
    -sagenv /opt/softwareag/sagenv.new \
```

```

    -packages "" \
    -products "
        cjp v15 : on
        ctp v55 : on
        acl v62121 : on
        wcl v13 : on
        amf v76 : on"
# ----- <End of generated batch script> -----

```

## Example 2

This example shows the generated batch file *ARMv26Inst.sh* for Event Replicator Administration that was created during installation of Event Replicator Administration. The user is sag and does not have a root login on the machine (-authcmd none).

```

#!/bin/sh
# ----- <Start of generated batch script> -----
# -- <Adapt the following lines until end of generated> --
# ----- < batch script to your needs > -----
# You should replace SECRET by the actual password
# or (even better) call this script with superuser privileges.
#
SAG="/opt/softwareag"; export SAG
/bin/sh /opt/softwareag/cdrom/setup.ux arm v26 -batch -directory ng64 \
    -user sag \
    -authcmd none \
    -password SECRET \
    -sagenv /opt/softwareag/sagenv.new \
    -packages "" \
    -products "
        cjp v15 : on
        ctp v55 : on
        acl v62121 : on
        wcl v13 : on
        amf v76 : on
        arm v26 : on"
# ----- <End of generated batch script> -----

```

The batch scripts are stored in `$$SAG\amf\v76\INSTALL` and `$$SAG\arm\v26\INSTALL`, respectively, and can be run with the following commands:

```

sh AMFv76Inst.sh
# or
sh ARMv26Inst.sh

```

However, the scripts must be adapted before they can be used. If a script is to be run with superuser privileges, the following lines must be removed from the script:

```

-authcmd su \ (or -authcmd sudo \)
-password SECRET \

```

If a script is to be run without superuser privileges, i.e., as user sag, the following lines must be removed from the script:

```

-user sag \
-authcmd none \
-password SECRET \

```

To run a full installation with batch scripts, the following steps must be executed:

```
sh CJPv15Inst.sh
su root -c "sh CTPv55Inst.sh"      (or sudo sh CTPv55Inst.sh)
su root -c "sh ARGv411Inst.sh"    (or sudo sh ARGv411Inst.sh)
sh ADIv53Inst.sh
sh WCLv13Inst.sh
sh AMFv76Inst.sh
sh ARMv26Inst.sh
```

Note that CTP and ARG must always be installed with root privileges. ADI and WCL must be installed with root privileges if they are installed as system services.

**Note:**

The SAG environment defined in *sagenv.new* must always be set before the execution of each script, i.e., the command `. sagenv.new` must be executed in a shell which is compatible to the Bourne Shell.

## After the Installation

This section contains information about what to do after the actual Adabas Manager installation. For a summary of bug fixes, known problems and restrictions and last-minute news please see the *README.TXT* file, which has been copied to *\$\$SAG/amf/vnnn*. The contents of this file are displayed automatically at the end of the installation procedure.

This section contains the following topics:

- Unlocking the Installation
- Verifying the Installation

### Unlocking the Installation

By convention, a lock file (*install.lock*) is written to *\$\$SAG* during the installation in order to prevent parallel installation into *\$\$SAG* at the same time.

This may happen if you accidentally close XWindows sessions, or if you end your installation/uninstallation process with a kill command.

You must remove this link, because as long as this link exists, it is not possible to install/uninstall into this *\$\$SAG*. Before you remove *install.lock* make sure that the process on the machine mentioned in the link no longer exists.

### Example

The link below contains the current user, host ip address and process id.

```
lrwxrwxrwx  1 sag      sag          22 Feb 12 10:25 install.lock -> sag@10.20.96.151:26372
```

## Verifying the Installation

Verify your Adabas Manager installation by registering an Adabas database.

 **To verify your Adabas Manager installation:**

1. From a web browser, logon to System Management Hub at `http://"<hostname>":49991/smh/login.htm`.

The logon screen for the System Management Hub (SMH) appears.

2. Logon to the System Management Hub...

The System Management Hub main panel appears.

3. Select the name of the managed host on which Adabas Manager is installed.
4. Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
5. Expand the tree-view for Adabas Manager.
6. Right-click on **Adabas Databases** in the tree-view.
7. Select **Register DB** on the drop-down menu.

The **Database Registration** panel appears in detail-view.

8. Enter the ID and name of the database to be registered.
9. Click the **Register** button to complete the registration, or the **Cancel** button to quit the registration window without registering the database. Press the **Help** button for more information about registering a database.

**Note:**

If the database is currently unreachable, you will be prompted to verify that you still want to register it.

If you clicked **Register**, a message is eventually returned indicating that the database has been successfully registered. The database appears as an option in tree-view.

10. Click on the **Close** button in detail-view to complete the transaction.

## Uninstalling Adabas Manager under UNIX

In order to uninstall AdabasManager on UNIX platforms, perform the steps that are described in the following section.



## Remove the Adabas Manager Files

Remove the Adabas Manager files (which were extracted from the installation CD to your machine) and the Adabas Manager product entry in the SAGInst.xml installation catalog.

**Note:**

If Event Replicator Administration is installed, it must be uninstalled before the uninstallation of Adabas Manager.

 **To remove the Adabas Manager files**

1. Start the SAGRM utility from the \$SAG directory or a directory above it by issuing the following command:

```
sagrm
```

2. Select **Adabas Manager for Mainframe**. All files which have been extracted from CD will now be removed and the selected product is removed from the SAGInst.xml installation catalog.

## Adapt sagenv.new

### ▶ To adapt the file sagenv.new

- By default, the script sagenv.new to set up the environments for all Software AG products is generated during installation. This script is not adapted by SAGRM. If you use this script, or any copy of this script or any other script to set up your Adabas Manager environment, remove the instructions which set up the Adabas Manager environment for the uninstalled version, as shown in the following example:

### Example

```
# Adabas Manager for Mainframe
# -----
if [ -f "$SAG"/amf/v76/INSTALL/amfenv ]; then
    . "$SAG"/amf/v76/INSTALL/amfenv
fi
```