

# 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:

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

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

| <b>Software Prerequisites for Linux</b> |  |
|---|--|
| Operating System:                       | SUSE Linux Enterprise Server 10 (x86, EM64T, AMD64).   |
|   | Red Hat Enterprise Linux 4 and 5 AS (x86, EM64T, AMD64).<br><br>1. Please ensure that your host name is correctly configured. Issue the following command<br><br><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> |
| Remote Access:                          | Entire Net-Work Client 1.4 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. |
| Drive:                                       | A 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 1.4 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.

#### **Important:**

Before you start the installation, read the *install.txt* on the distribution medium and ensure that all prerequisites for the installation have been satisfied.

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 distribution medium (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 drive, it is necessary to perform the following preparations prior to the actual installation:

**▶ To copy the distribution medium contents to a zLinux system and prepare the installation**

1. Load the distribution medium on a Windows or UNIX machine that has a network connection to the zLinux system.
2. Copy the file *AMA773n.tgz* that is located in the root directory of the distribution medium 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 -xzf AMA773n.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.

## Batch Installation

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.**

When Adabas Manager is installed, a script `$$SAG/ama/v773/INSTALL/AMAv773Inst.sh` is created, which can be modified and then used for batch installation.

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   |
|------------------------|--------|--------|---|
| <code>-user</code>     | string | ( )    | Software AG administrator                             |
| <code>-password</code> | string | ( )    | System administrator password (usage not recommended) |
| <code>-authcmd</code>  | 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

This example shows a generated batch file *AMAv773Inst.sh* that was created during installation. The user is sag and does not have a root login on the machine (-authcmd none)

```
#!/usr/xpg4/bin/sh
# ----- <Start of generated batch script> -----
# -- <Adapt the following lines until end of generated> --
# ----- < batch script to your needs > -----
#
# Please consult the installation documentation for the
# necessary prerequisites.
#
# Make sure that the following Internal Products are installed
# below the same $SAG, before the batch is actually started.
# - arg v812 "System Management Hub"
# 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 /cdrom/setup.ux ama v773 -batch -directory a64b \
    -user sag \
    -authcmd none \
    -password SECRET \
    -sagenv /opt/softwareag/sagenv.new \
    -packages "" \
    -products "
        cjp v16 : on
        ctp v80 : on
        adi v541 : on
        acl v6315 : on
        ada v63002 : on
        wcl v140 : on
        wcb v110 : on
        ama v773 : on"
```

To run an installation of Adabas Manager for administrating only local databases on Open Systems with batch scripts, the following steps must be executed:

```
sh CJPv16Inst.sh
su root -c "sh CTPv80Inst.sh"      (or sudo sh CTPv80Inst.sh)
su root -c "sh ARGv812Inst.sh"    (or sudo sh ARGv812Inst.sh)
sh AMAv773Inst.sh
```

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

```
sh CJPv16Inst.sh
su root -c "sh CTPv80Inst.sh"      (or sudo sh CTPv80Inst.sh)
su root -c "sh ARGv812Inst.sh"    (or sudo sh ARGv812Inst.sh)
sh ADIv541Inst.sh
sh WCLv140Inst.sh
sh WCBv110Inst.sh
sh AMAv773Inst.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. When the installation has completed, the SAG environment must be set and the System Management Hub must be restarted using the command: `argsrvs.bsh restart`.

## 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/ama/vnnn*. The contents of this file are displayed automatically after the basic component has been installed.

This section contains the following topics:

- Unlocking the Installation
- Verifying the Installation

### Unlocking the Installation

By convention, a link to 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 link remains 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 into this *\$SAG* or uninstall. 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 for administrating databases on mainframe:**

1. From a web browser, logon to System Management Hub at `http://"<hostname>":49981/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 the plus sign (+) to the left of its name.
5. Expand the tree-view for Adabas Manager.
6. Right-click **Adabas Databases** in the tree-view.
7. Select **Register DB** in 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 **Register** 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 **Close** in detail-view to complete the transaction.

 **To verify your Adabas Manager installation for administrating local databases on open systems :**

- 1.

**Note:**

Before you verify your installation, ensure that the prerequisites listed in the *install.txt* on the distribution medium have been met.

From a web browser, logon to System Management Hub at <http://<hostname>:49981/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 the plus sign (+) to the left of its name.

5. Expand the tree-view for Adabas Manager.
6. Right-click **Adabas Databases** in the tree-view.
7. Select **Create DB** in the drop-down menu.

The **Create New Database** panel appears in detail-view.

8. Enter the ID of the database to be created.
9. Click **Update Locations** and check **Load Demofiles**.
10. Click **OK** to create the database
11. Expand **Adabas Databases** and right-click the new database you have just created..
12. Select **Start Database**.

The detail-view panel displays a message that the database has been started successfully. Confirm and return to the Database Overview information.

## 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

Start the SAGRM utility from the \$SAG directory by issuing the `sagrm` command.

For more detailed information please see the *install.txt* on the distribution medium.