

**Ameos®**

# ***Installing Ameos for UNIX Platforms***

UD/UG/AM0000-10123/007



# Installing Ameos for UNIX Platforms

October 2004

*Aonix® reserves the right to make changes in the specifications and other information contained in this publication without prior notice. In case of doubt, the reader should consult Aonix to determine whether any such changes have been made. The software described in this document is furnished under a license and may be used or copied only in accordance with the terms of such license.*

**Copyright** © 2004 by Aonix®. All rights reserved.

This publication is protected by Federal Copyright Law, with all rights reserved. Unless you are a licensed user, no part of this publication may be reproduced, stored in a retrieval system, translated, transcribed, or transmitted, in any form, by any means, without prior written permission from Aonix. **Licensed users may make copies of this document as needed solely for their internal use—as long as this copyright notice is also reproduced.**

## Trademarks

Aonix and its logo, Software through Pictures, StP, Ameos, RAVEN, ACD, Architecture Component Development, and ObjectAda are either trademarks or registered trademarks of Aonix. All rights reserved. Note that this product includes software developed by the Apache Software Foundation ([www.apache.org](http://www.apache.org)),

HP, HP-UX, and SoftBench are trademarks of Hewlett-Packard Company. Sun and Solaris are registered trademarks of Sun Microsystems, Inc. SPARC is a registered trademark of SPARC International, Inc. UNIX is a registered trademark in the United States and other countries, exclusively licensed through X/Open Company, Ltd. Windows, Windows NT, Windows 2000, and Windows XP are either trademarks or registered trademarks of Microsoft Corporation in the United States and other countries. Adobe, Acrobat, the Acrobat logo, and PostScript are trademarks of Adobe Systems, Inc. Sybase, the Sybase logo, and Sybase products are either trademarks or registered trademarks of Sybase, Inc. DOORS is a registered trademark of Telelogic. Continuus and Continuus products are either trademarks or registered trademarks of Telelogic. Rational Rose and ClearCase are registered trademarks of Rational Software Corporation. SNIFF+ and SNIFF products are either trademarks or registered trademarks of Wind River Systems, Inc. Segue is a registered trademark of Segue Software, Inc. All other product and company names are either trademarks or registered trademarks of their respective companies.

### US Headquarters

5040 Shoreham Place, Suite 100  
San Diego, CA 92122  
Phone: (800) 97-AONIX  
Fax: (858) 824-0212  
E-mail: [info@aonix.com](mailto:info@aonix.com)

### European Headquarters

Batiment B  
66/68, Avenue Pierre Brosolette  
92247 Malakoff cedex, France  
Tel: +33 1 4148-1000  
Fax: +33 1 4148-1020  
Email: [info@aonix.fr](mailto:info@aonix.fr)

# Table of Contents

---

## **Chapter 1 Basic Installation Instructions**

<a href="#">System Requirements</a> .....	5
<a href="#">Step 1: Determine Ameos Kernel Requirements</a> .....	5
<a href="#">Step 2. Install Ameos</a> .....	6
<a href="#">For a Client &amp; Server Installation</a> .....	6
<a href="#">For a Client Only Installation</a> .....	7
<a href="#">Complete the Installation</a> .....	7
<a href="#">Step 3. Set the Environment for Ameos</a> .....	7
<a href="#">Step 4. Install an Ameos License</a> .....	7
<a href="#">Step 5. Verify Installation: Start Ameos</a> .....	8
<a href="#">Step 6. Download SVG Browser Plug-In</a> .....	8

## **Appendix A Supplemental Information**

<a href="#">Removing Previous Versions of Ameos and/or Sybase</a> .....	9
<a href="#">Removing Prior Ameos Versions</a> .....	9
<a href="#">Removing Prior Sybase Versions</a> .....	9
<a href="#">Understanding the Ameos Message Router</a> .....	10
<a href="#">Message Router Defaults</a> .....	10
<a href="#">Designating a Message Router Server</a> .....	10
<a href="#">Understanding Message Passing and Subnets</a> .....	11
<a href="#">Connecting to an Existing Sybase Server</a> .....	13
<a href="#">Administering the Adaptive Server</a> .....	13
<a href="#">Starting Sybase ASE</a> .....	13
<a href="#">Shutting Down Sybase ASE</a> .....	14
<a href="#">ASE Administrator "sa" Database Account</a> .....	14
<a href="#">The Interfaces File</a> .....	15
<a href="#">Troubleshooting</a> .....	16
<a href="#">Files and Directories</a> .....	18



# 1 Basic Installation Instructions

---

This section gives a brief overview of the steps to install Ameos on Linux and Solaris platforms. If you need additional information, refer to [Appendix A, "Supplemental Information."](#)

## System Requirements

<b>Processor speed</b>	Minimum: 700 MHz Recommended: 1.3 GHz
<b>Operating system</b>	<i>Linux:</i> RedHat [Note 1], Mandrake, SuSE, Debian, Knoppix, and other distributions available up to October 2004 <i>Solaris 8</i> [Note 2] and 9
<b>RAM</b>	Minimum: 256 MB Recommended: 512 MB
<b>Free disk space</b>	Minimum: 150 MB Recommended: 700 MB [Note 3]

[Note 1] RedHat 9 works with the following RedHat *glibc* packages:  
glibc-2.3.2-71.i686.rpm, glibc-common-2.3.2-71.i386.rpm  
glibc-devel-2.3.2-71.i386.rpm, tzdata-2003a-2.noarch.rpm  
(Later RedHat 9 shippings may contain the needed patches.)

[Note 2] Solaris 8 requires patches 109147-28 and 108434-15.

[Note 3] Disk space needed for a *full* installation is about 1100 MB for Solaris and 900 MB for Linux.

Customer support websites and e-mail addresses are listed below

Canada	www.aonix.com	ameos-support@eonix.com
France	www.aonix.fr	ameos-support@eonix.fr
Germany	www.aonix.de	ameos-support@eonix.de
United Kingdom	www.aonix.co.uk	ameos-support@eonix.co.uk
United States	www.aonix.com	ameos-support@eonix.com
Sweden		ameos-support@eonix.se

Users in other countries should contact their local Aonix sales office or Ameos distributor directly.

## Step 1: Determine Ameos Kernel Requirements

The installation of the Sybase Server on Solaris requires a kernel parameter to be set.

Add the following line to the file */etc/system* and reboot your system:

```
set shmsys:shminfo_shmmax=131072000
```

## Step 2. Install Ameos

Because of possible system changes, you need root privileges to install Ameos.

You will need a license and a Sybase password to install Ameos. You can request one at [www.aonix.com/ameos\\_license\\_request.html](http://www.aonix.com/ameos_license_request.html).

1. Insert the Ameos CD-ROM and mount the device. Verify that your `DISPLAY` environment variable is set correctly and use 'xhost +' if necessary.
2. On the command line, run the Ameos install script from a CD-ROM:  

```
<cdrom_mount_point>/install
```

This script will guide you through the installation process.
3. A welcome screen appears. Click **Next Step**, then read the license information. Click **Next Step**.
4. From the **Ameos Destination** screen, choose the destination directory for the Ameos installation. The installation will then create the subdirectories `Sybase` and `Ameos_9.1.5`. Click **Next Step**.
5. Choose your setup type: **Client Only** or **Client & Server**. Then click **Next Step** and continue.

### For a Client & Server Installation

1. On the **Message router settings** screen that appears:
  - If you want to use the default settings (which in most cases is the recommended choice): Click **Next Step** and continue at Step 2.
  - If you want to customize the message router:

In the **Message router Host** field, enter the host name of the Ameos message router. This sets the `msgd_host` variable and disables the host's broadcast mechanism. The variable is stored in `ToolInfo.LINUX86` or `ToolInfo.SOL24SN2` (the default `ToolInfo` file location is at the top level of `Ameos_9.1.5`). Checking **Start message router at boot time** creates a startup script that enables the message router during the boot process.

**Note:** Only one machine on your local network can be the nominated Ameos message router host. All Ameos clients that work on common Ameos systems must have the same setting.

In the **Message router Port** field, specify the number used by the message router service. Then click **Next Step**.
2. The **License information** screen appears. Enter the license information via copy and paste from your license e-mail or read from an existing license file. Checking **Start FlexLM at boot time** will create a boot script that starts the license manager during the boot process.
3. On the **Enter the Sybase password** screen, specify the Sybase installation password. Click **Next Step**.
4. On the **Sybase Client Settings** screen:
  - Specify the **Server Name**. The default is `AMEOS_SERVER_12`. You can enter any string up to 32 characters long – as long as it does not contain blanks and special characters like umlauts and hyphens.
  - Enter the IP address and port number in the **Server Connection** field. The IP address and port number are separated by a comma (no spaces) – for example, `192.168.48.3,4100`.
  - Press **Next Step**.
5. On the **Sybase Server Settings** screen, specify the **Server Name** and the **Server Port** number. Use the same values as above. Click **Next Step**.
6. On the **Sybase Server Data Devices Settings** screen:
  - Specify the **Default Device Size**. The default is 200 MB (a minimum of 100 is required).
  - Specify the **Default Device Directory**. The default is `<Ameos_root>/Sybase/sybase_databases_12`.

7. On the **Sybase Users** screen, select all users for Ameos and click **Next Step**.
8. Continue with ["Complete the Installation"](#).

## For a Client Only Installation

1. From the **Message router settings** screen, provide message router information. You can use either the default settings or the values you used for the server installation. Be sure to check **Start message router at boot time**.  
To get the correct IP and port address, inspect the `<<path>>/Ameos_V9.XX/ToolInfo.<platform>` file in the Ameos Server installation. The `msgd_host` and `msgd_port` variables will show you the correct settings. Click **Next Step**.
2. The **License information** screen appears. Enter the license information via copy and paste from your license e-mail or read from an existing license file. Be sure to un-check **Start FlexLM at bootime**.
3. From the **Enter the Sybase password** screen, enter the Sybase installation password. Click **Next Step**.
4. From the **Sybase Client Settings** screen, specify the **Server Name** and the **Server Connection** (host IP address plus port). Use the same values as defined in the server installation. Click **Next Step**.

## Complete the Installation

1. On the **Selection** screen, verify the components you wish to install.
2. Click **Next Step** to begin copying files. Then click **Next Step** to close the setup screen.
3. On the **Installation Summary Screen** you can read information about the system changes occurring during the install process. Click **Finish**.

## Step 3. Set the Environment for Ameos

On the command line, enter "cd Ameos\_9.1.5". Then, depending on your shell, use one of the following commands:

- C-shell users:  
`source setup-ameos.csh`
- Bourne shell users:  
`. setup-ameos.sh`
- Korn and Bash shell users:  
`. setup-ameos.ksh`

The command can also be added to the `.profile` or `.bashrc` file for Ameos users by adding the following line:

```
[ -f /<<path...>>/Ameos_V9.1.5/setup-ameos.ksh ] && . /opt/Ameos_V9.x/setup-ameos.ksh
```

## Step 4. Install an Ameos License

1. If you did not enter license information during setup, you must save the license file you received from Aonix as `license.dat` in `Ameos_9.1/templates/ct/license/`.
2. Verify that the `LM_LICENSE_FILE` environment variable is set correctly. It must include the full path name as part of its value – for example:

```
LM_LICENSE_FILE=<Ameos_root>/templates/ct/license/license.dat
```

3. Start the license manager daemon, and redirect the output to a file:

```
lmgrd -c license.dat -l license.log
```

## Step 5. Verify Installation: Start Ameos

You are now ready to launch the Ameos desktop. To check the installation:

1. Start Ameos. From the command line:

```
ameos -license ameos_<type>
```

where <type> is *developer*, *modeler*, or *analyst*, depending on your license.

**Note:** After you start Ameos the first time, you no longer need to include the `-license` option.

**Note:** Sybase is started automatically during the installation. However, if you have rebooted the machine it, you must start the Sybase Server.

2. Open an example system.

- From the Ameos desktop, choose **File > Open System**.
- Select *uml\_email*. Click **OK**.

3. Open an editor.

Choose **File > New** and then select an item from the list (for example, **Use Case Diagram**). The appropriate editor opens.

## Step 6. Download SVG Browser Plug-In

To view the graphics in the HTML reports generated by Ameos, you need an SVG plug-in for your browser. This can be downloaded for free from the Internet for various browsers like Internet Explorer, Netscape, and Mozilla.

# A Supplemental Information

---

This section provides additional Ameos installation information. It includes:

- Removing previous versions of Ameos and/or Sybase
- Understanding the Ameos message router and its default behavior, and designating a message router server
- Connecting to an existing Sybase server
- Starting Sybase Adaptive Server Enterprise (Sybase ASE)

For information on starting Sybase ASE, refer to your Sybase documentation.

## Removing Previous Versions of Ameos and/or Sybase

When prior versions of Ameos are no longer being used, you may remove them.

### Removing Prior Ameos Versions

When prior Ameos versions and related products are no longer being used, the `Ameos_<prior_version>` directory can be removed. Before doing this, make sure that:

- All user customizations have been reviewed and moved to `Ameos_<current_version>` if appropriate.
- Any user systems in the `Ameos_<prior_version>/project` directory that you wish to keep have been moved.
- Sybase repositories for sample systems in the *Examples* and *project* subdirectories have been destroyed.
- The license server is running from the `Ameos_<current_version>` directory.
- The license server is running from the `Ameos_<current_version>` directory. Shut down the license server if it was running from `Ameos_<prior_version>` before you remove the old directory; install the new version by running the command:

```
/etc/init.d/lmstart stop (for Solaris and Linux)
```

or

```
/sbin/init.d/lmstart stop (for HP)
```

- The message daemon (*msgd* process) is running from the `Ameos_<current_version>` directory. Shut down the message daemon if it was running from `Ameos_<prior_version>` before you remove the old directory; install the new version by running the command:

```
/etc/init.d/msgdstart stop (for Solaris and Linux)
```

or

```
/sbin/init.d/msgdstart stop (for HP)
```

### Removing Prior Sybase Versions

If you have migrated all your systems from the Sybase `<prior_version>` server to Sybase `<current_version>`, you can safely delete the Sybase `<prior_version>` server and data files.

To delete the server and data files:

1. Shut down the `<prior_version>` server by running the command:

```
/etc/init.d/sybstart stop (for Solaris and Linux)
```

or

```
/sbin/init.d/sybstart stop (for HP)
```

2. Remove the Sybase *<prior\_version>* files, using the following commands:

```
cd <Ameos_root>/Sybase
```

```
rm -rf sybase_<prior_version>
```

```
rm -rf sybase_databases_<prior_version>
```

3. Remove the *Master* directory (if one exists):

```
rm -rf Master<prior_version>
```

Sybase *<prior\_version>* is removed.

## Understanding the Ameos Message Router

The Ameos message router is the internal communication system of Ameos. When an Ameos application starts, it registers within an Ameos message router. The Ameos message router transfers messages between the Ameos desktop, Ameos editors, and other Ameos utilities. In a multiuser environment it is used for synchronization and notifications.

The first-opened Ameos application broadcasts on a default port number and waits for a reply from the Ameos message router. If Ameos does not receive a reply, it assumes that no message router is running and starts one on the local machine.

If Ameos starts a local copy because it did not receive a message router reply or because of a temporary network condition, the running message routers will communicate when normal conditions are restored. Since only one message router can exist in the network, the running message routers will determine which one(s) should terminate activity.

**Note:** Be sure to check the “Product Limitations” section of the Release Notes for installation issues relating to Ameos message router issues in firewall environments and connections across routers that are not addressed in the following sections.

### Message Router Defaults

By default, the message router is installed with the current machine designated as the default host by setting the value of the `msgd_host` ToolInfo variable. The value of the `msgd_port` ToolInfo variable is assumed to be the default port, and the `msgd` start mode is set to `AUTOSTART`.

**Note:** If Ameos is installed with one system running in the `AUTOSTART` mode and another system running in the `BROADCAST ON-DEMAND` mode from a 2.6 version of Ameos, the `BROADCAST ON-DEMAND` system will render inactive the `msgd` that is running in the `AUTOSTART` mode, and will not permit it to be reactivated.

Make sure that you have only one message router machine and that all clients are running in either one mode or the other; do not mix `BROADCAST ON-DEMAND` and `AUTOSTART` modes.

### Designating a Message Router Server

Unless special measures are taken to ensure that broadcast requests are propagated, the TCP/IP broadcast mechanism does not function over certain network topologies. Such topologies include those involving Ameos client machines separated by gateways, subnets, routers, firewalls, bridges, and other such devices.

If any of these conditions exist, you should designate a machine to run the Ameos message router. The machine should have high availability in terms of connectivity, response, and uptime. A machine that

runs an Ameos message router does not listen for, or respond to, message router broadcast requests. If broadcasting is disabled, all Ameos clients will attempt to connect to this machine. You can specify a dedicated message router during the Ameos installation; refer to [“Step 2. Install Ameos” on page 6](#) for details.

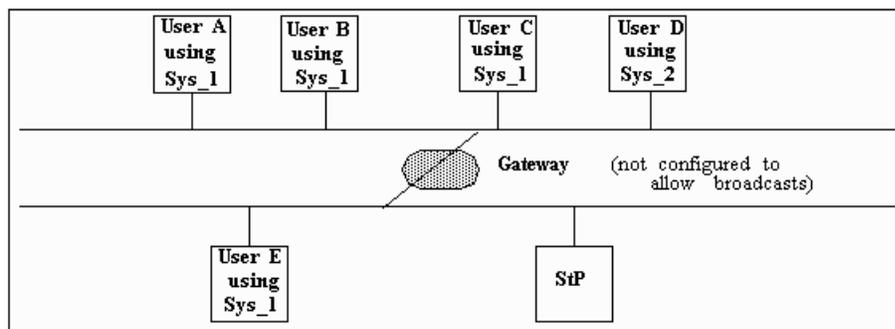
If none of the specialized conditions described above apply to you, accept the installation defaults to install the message router service in its default mode. The default mode gives the best results in the majority of installations.

## Understanding Message Passing and Subnets

To summarize, message routing problems arising from subnet configurations will occur if all of the following conditions apply:

- You have more than one subnet.
- Your netmask is such that broadcasts do not propagate.
- You have Ameos users accessing the same system from different subnets simultaneously.

The figure below shows an environment in which *msgd* problems can occur.



In the figure:

- When Users A, B, or C access Ameos, a *msgd* will run on Subnet A.
- When User E accesses Ameos, another *msgd* will run on Subnet B since the presence of the first *msgd* will not be detected.
- Users of system Sys\_1 on one subnet will not detect the presence of *msgd* on the other subnet and therefore will not get the messages it passes nor be able to pass messages to it.
- User D uses a different system than Users A, B, C, and E. Since there are no Sys\_2 users on Subnet B, no *msgd* occurs.

### Indications of Multiple Message Daemons

Symptoms of the multiple *msgd* problem are:

- Double-clicking on a list (such as a list of diagrams) on the desktop starts the editor but does not load
- Running **Rename Systemwide** results in incomplete renaming, creating new objects without deleting the old, and so forth.

### Workaround for Multiple Message Daemons

Ameos includes a workaround when you have multiple message daemons. You can specify a particular host as the message host (the machine where *msgd* runs) with a Toolinfo variable, *msgd\_host*. When this variable is set, Ameos processes do not broadcast for the *msgd* location, but contact it directly on the specified host.

To use this workaround, follow the directions below carefully (only a system administrator can perform these actions):

1. Request that all Ameos 8.x users exit Ameos.
2. Kill all existing *msgd* processes on each subnet, if any, by typing:  

```
Ameosem -C '>q'
```

This command requests any message daemon that receives it to terminate.
3. Set the `msgd_host` ToolInfo variable to the selected host.  
For example, to set host *rhapsody* as the `msgd` host, uncomment the following lines (by removing the “#” symbol) in *Ameos\_<version>/ToolInfo.<arch>*:  

```
#msgd_host=<hostname>
```

Next, insert “rhapsody” as the host name:  

```
msgd_host=rhapsody
```
4. Start the message daemon manually on the host specified with `msgd_host` by typing:  

```
msgd &
```
5. Optionally, arrange for *msgd* to start up automatically when the host reboots, by adding “msgd &” to a boot file following the examples used for automatically starting `lmgd`.  
For information, see the [Ameos Administration Guide](#).
6. Inform Ameos users they can restart Ameos.

The 8.x *msgd* can coexist on the same network as earlier production environments without the need to take any special measures to prevent conflict (such as setting `IDE_MSGD_PORT`). For detailed information about *msgd* and the *msgd* daemon, see the [Ameos Administration Guide](#).

### **Workaround for TCP/IP Port Number Conflicts**

It is possible that you have some other network service that conflicts with the message routing daemon (this is most likely to be some other *msgd* daemon that you have some good reason for wishing to keep entirely separate).

By default, the message routing daemon uses port number 37874, which is the best port number to use in the majority of installations. If by some chance this port number is being used by some other software, you can change the port number used by *msgd* by specifying a different port number. To do this, you must set a new ToolInfo variable `msgd_port`.

Note that only a system administrator can perform this procedure and that the default port number (37874) gives the best results in the majority of cases.

To set `msgd_port`:

1. Request that all 8.x Ameos users exit Ameos.
2. Kill all existing *msgd* processes on each subnet, if any, by using the command:  

```
ameosem -C '>q'
```

This command requests any message daemon that receives it to terminate. For more information, see the **msgdiag** man page.
3. Set the `msgd_port` variable to the desired TCP/IP port number.  
To ensure that this variable is set for all users, use the Ameos ToolInfo file in the *Ameos\_<version>* directory.  
For example, to set port number 37874 as the new port, add the following lines into the *<Ameos\_version>/ToolInfo* script:  

```
msgd_port=37874
```
4. Inform Ameos users they can restart Ameos.

## Connecting to an Existing Sybase Server

If you installed Sybase Open Client and are connecting to an existing remote database Sybase server, you need to add the Sybase server information to your local *interfaces* file. (*Sybase/sybase\_12.5/<arch>*, where *<arch>* is the target architecture).

To add the Sybase server information, copy the *interfaces* file from the Sybase server machine to your Sybase installation directory. The default path on your local machine running Ameos is *<Ameos\_root>/Sybase/sybase\_12.5/<arch>*.

Alternatively, create entries using *dsedit*.

1. First, make sure you have set up the needed environment by sourcing *setup-Ameos.<shell>* in the Ameos installation directory, then:
2. Start the **dsedit** program, which can be found in *<Ameos\_inst>/Sybase/sybase\_<version>/<platform>/OCS/bin/dsedit*.
3. In the **Select Directory Service** dialog, select **InterfacesDriver** and click **OK**.
4. Choose **Add new server entry**.
5. In the **Server Entry Editor** window, enter the name of the server.
6. Choose **Add new network transport**.
7. In the **Network Transport Editor** window, select the transport type, add the host name, fill in the port number, and click **OK**.
8. Click **OK** in the **Server Entry Editor** window.
9. Press **Close Session** in the **Directory Service Session**.
10. To exit **Dsedit**, choose **Exit**.

## Administering the Adaptive Server

The information in this section is more detailed than is generally required for installation, but may be needed by some users after the Ameos *RDBMS* has been configured.

If your repository is stored on Sybase ASE, you must start the Sybase server before creating or opening an Ameos system from the desktop.

**Note:** Make sure your Sybase environment variables are set correctly before continuing. To set them, run the appropriate *setup-Ameos.<shell>* script.

### Starting Sybase ASE

#### a. Starting Sybase ASE Automatically

You can have Sybase ASE start automatically when the server machine is rebooted, by issuing the following commands from the root account on the machine where ASE is running. These commands set up the machine startup operations, but they do not perform them.

**Note:** If you installed as root, the first step of this procedure has already been performed.

To perform an automatic restart after rebooting:

1. Execute the following commands:  

```
cd <sybase_dir>  
./sybase.start.config
```

where *<sybase\_dir>* is the home directory of the Sybase ASE software.

2. If you have changed the *sa* database account password, modify the password in the *sybstart.sh* file too. (Search for the “-P” option in the file and change “welcome” to the new password.) Depending on your operating system, the file is located in the */etc/rc.d*, */etc/init.d*, or */sbin/init.d* directory.

### b. Starting Sybase ASE Manually

If the machine on which you have installed Sybase ASE is rebooted, you must restart the database server by executing the following shell script from the Sybase administrator account:

```
$SYBASE/ASE-12_5/install/startserver -f RUN_<server>
```

*Sybase/sybase\_12.5/SOL24SN4/ASE-12\_5/install* contains some scripts for administration of Sybase ASE software. This will start the database server, and allow access from Ameos. You must have execute permissions on the *RUN\_<server>* file to start the server and write permissions to the error log.

**Note:** There is a script to start the Sybase server. To run the script, change directory to *Sybase/sybase\_12.5/<arch>*, then type:

```
./sybstart.sh start
```

## Shutting Down Sybase ASE

**Note:** The following information is taken directly from the Sybase document, *Configuring Adaptive Server for UNIX Platforms*.

Only the system administrator has permission to issue a shutdown command. Using a shutdown command minimizes the amount of work that automatic recovery needs to do when the servers are restarted.

The preferred method of stopping Sybase ASE or the backup server is to use the Transact-SQL shutdown command. For the monitor server, use the *sms\_shutdown* command.

To shut down ASE:

1. Use *isql* to log in to an ASE account with system administrator privileges:

```
isql -Usa -P<password> -S<server_name>
```

2. Enter the following command to shut down the server:

```
1> shutdown
2> go
```

**Note:** The default for the shutdown command is *with wait*. The *with wait* option allows ASE to finish executing SQL statements or procedures, perform a checkpoint in each database, disable new log-ins, and perform other shutdown tasks.

Entering the shutdown command prints a message like this to the *stderr* file:

```
Server SHUTDOWN by request. The SQL Server is terminating this process.
CT_LIBRARY error:
```

This is normal behavior. If the message indicates that ASE is waiting for processes to complete, and you need to stop ASE immediately, you can use the shutdown with *nowait*. Shutdown with *nowait* does not wait for currently executing statements to finish and does not perform checkpoints in every database.

**Note:** There is a script to stop the Sybase server. To run the script, change directory to *Sybase/sybase\_12.5/<arch>*, then type:

```
./sybstart.sh stop
```

## ASE Administrator “sa” Database Account

ASE maintains its own database account structure within its own environment. An account called *sa* is created during the configuration process, and appears in the *syslogins* system table. The *sa* account can

use any database on an adaptive server. The ASE supports password protection for database accounts, and the initial password on the *sa* account is “welcome”.

You may want to change the *sa* password, depending upon your security needs (see the *Ameos Administration* manual for more information). Type in the following commands to change the initial *sa* password:

```
isql -Usa -Pwelcome
1> sp_password welcome, <new password>, sa
2> go
1> quit
```

## The Interfaces File

The *interfaces* file provides TCP/IP communication information for the ASE. There should be an *interfaces* file for each installed platform. In general (non Solaris), the file format is:

```
## <Servername> on <hostname>
## Services:
##          query    tcp      (<tcp_port_number>)
##          master   tcp      (<tcp_port_number>)
<Servername> 0 0
<tab>query tcp ether <hostname> <tcp_port_number>
<tab>master tcp ether <hostname><tcp_port_number>
```

For example:

```
## Ameos_SERVER on hobbes
## Services:
##          query    tcp      (2035)
##          master   tcp      (2035)
Ameos_SERVER 0 0
<tab>query tcp ether hobbes 2035
<tab>master tcp ether hobbes 2035
```

For Solaris, a composite address entry is created using hex representations of the port number and network node address. The address is defined as:

```
First 4 digits:    0002
Second 4 digits:  <port number in hex>
Next 8 digits:    <network node address in hex>
Next 16 digits:  0000000000000000
```

The Solaris file format is:

```
## <Servername> on <hostname>
## Services:
##          query    tcp      (<address>)
##          master   tcp      (<address>)
<Servername> 0 0
<tab>query tli tcp /dev/tcp <address>
<tab>master tli tcp /dev/tcp <address>
```

For example, with network address 192.9.200.2 (c009c802 in hex)

```
## Ameos_SERVER on HOBBS
## Services:
##          query    tcp      (<2035>)
##          master   tcp      (<2035>)
Ameos_SERVER 0 0
<tab>query tli tcp /dev/tcp \x000207f3c009c8020000000000000000
<tab>master tli tcp /dev/tcp \x000207f3c009c8020000000000000000
```

# Troubleshooting

This section describes problems that can be encountered during installation and how to resolve those problems.

## Problem when installing on SuSE 8.0 Linux [ECR 8431]

Text in message windows in the installer are displayed in a very small font. This is caused by some default font in the file `/opt/kde3/share/config/SuSE/default/kdeglobals`. Tcl/Tk uses this font.

On other distributions, including SuSE 7.3, RedHat 7.3, and Mandrake 8.1, text in these message windows is displayed in a reasonably sized font.

This is not an Ameos bug.

*Workaround:* Remove the following lines in `/opt/kde3/share/config/SuSE/default/kdeglobals`:

```
menuFont=Nimbus Sans l, __FONT_SIZE__, -1, 5, 50, 0, 0, 0, 0, 0
taskbarFont=Nimbus Sans l, __FONT_SIZE__, -1, 0, 50, 0, 0, 0, 0, 0
toolBarFont=Nimbus Sans l, __SMALL_FONT_SIZE__, -1, 5, 50, 0, 0, 0, 0, 0
```

Or, change the name of the font to a font name that does not contain a space.

## Connection to '<hostname>:0.0' Refused by Server

This message usually appears when the machine used to run the software is not in the X Window System access list of the machine doing the displaying. To correct this condition, type the following command from a window that is logged into the machine acting as display server for X (this machine is usually indicated by the `DISPLAY` environment variable):

```
xhost +
```

For more information, refer to the man page for the `xhost` command, your system documentation, or your local X Window expert.

## Could Not Initialize Text from File

You may see this message repeated on your screen. The software cannot locate the message file called `msg_file`, which is used by all Ameos programs. There is a different `msg_file` for each platform supported by Aonix.

To solve the problem, determine whether you have a `ToolInfo` environment variable established. To do this, type the following command:

```
ameos -debug
```

and look for a line similar to:

```
ToolInfo: /home/users/joeuser/ToolInfo.local
```

There are three places that Ameos will look for a `ToolInfo` file. First it will check your `ToolInfo` environment variables, then it will check for the file `$HOME/ToolInfo.$IDEPLATFORM`, and finally the default file `Ameos_<version>/ToolInfo.$IDEPLATFORM` (to determine `$IDEPLATFORM`, run the command `ideplatform`).

If `Ameos -debug` does not find the `ToolInfo` file, it will display a line similar to:

```
ToolInfo: /home/users/joeuser/ToolInfo.local - not found
```

If it does, the file does not exist in that specific area. Check your directory for spelling errors (for example, "user" instead of "users") and, if necessary, reset your environment variable. You should also check to see if a reference to the base `ToolInfo` file is set within your local `ToolInfo` file and whether that path is correct.

Next, check to see if the `msg_file` `ToolInfo` variable is pointing to the correct location. To check this, type:

```
ls `toolloc msg_file`
```

If the `ls` command indicates that the `msg_file` file cannot be found, adjust the setting of the `msg_file` `ToolInfo` variable so that the path is correct.

If you can bring up Ameos on one machine, but not on another, check to see if the disk that the Ameos software was installed to is mounted on your machine. If so, make sure that it is mounted as the same partition name as on the first machine. For example, if the software was installed to a local disk on machine A called `/home` and `/home` is mounted under the name `/vida` on machine B and machine C, you should probably modify the `ToolInfo` file so that all occurrences of a path with `/home` in it are changed to `/vida` and establish a symbolic link from `/vida` to `/home` on machine A. That way, no matter what machine you use, you can access Ameos in the same way. Please see your system administrator or your workstation's documentation for more information on mounting disks and establishing symbolic links.

### Installing to Directories with Links

If you install to a location that is identified by a local name on your system (for example, `/home/Ameos`), but is identified by another name on most other systems (for example, `/production/Ameos`), create a symbolic link to use the more common of the two names.

To create a symbolic link:

1. As `root`, create a symbolic link on the local machine from the local name to the more common name:

```
ln -s /home /production
```

2. In the `setup-ameos.*` and `ToolInfo` files, change all instances of the local name to the more common name.

### Sybase Server Unavailable (Solaris 2.x)

If the Sybase Server becomes unavailable while in use, there may not be enough file descriptors to support the configured Sybase resources. Be sure you have the operating system patches required by the Sybase Adaptive Server. Make sure the Sybase server is started. Refer to [“Administering the Adaptive Server” on page 13](#) for more information.

### tr Errors

If you use Gnu `tr`, ensure that it is placed after the standard `tr` in the file path while the install is being performed.

### X Error: Cannot Open Connection to XWindow Server

This message appears when you have not set your environment variable for the X Window System display.

If you are using a C-shell to set this variable, type:

```
setenv DISPLAY `hostname`:0.0
```

If you are using a Bourne, Korn, or Bash shell to set this variable, type:

```
set DISPLAY=<hostname>:0.0
export DISPLAY
```

These commands assume that your display server is the same as the machine that is running the client Ameos software. If you are using an X terminal or a remote display, determine the name of the display server, the display number and screen number, and substitute that information for the “<hostname>:0.0” string in the command.

## Cannot Connect to License Server

Either you are not using the license file that you think you are (and the license file you're picking up either contains nonsense or a definition of a machine/port where there is no license server listening), or the license manager is not running. Check the value for `LM_LICENSE_FILE` by using `Ameos -debug`.

Check the log file (`/var/adm/IDEAmeos.log` or `/var/log/IDEAmeos.log`, depending on your operating system) to determine why the license server is not running.

## Encryption key Inconsistent in License File

This almost always means that there is a typographical error, trailing spaces at the end of the line, a bad date format, or an incorrect number of licenses.

If you get this error for all `FEATURE` lines, the problem is with the `SERVER` line. If you get the error for only some `FEATURE` lines, the problem is with the `FEATURE` lines.

Check the licensing information that you have very carefully. Read the section in this document on the format of the license file, and cross-reference this with the information in the license file.

Note that a change of `hostid` will also result in this message.

## No Such Feature in License File

You have attempted to check out a feature that does not appear in the license file, for whatever reason.

Check to make sure you're using the license file you think you are, and that the desired feature appears in that file. It may be that the feature you need is an add-on to the basic product.

# Files and Directories

There are many files and subdirectories on the Ameos distribution. Table 1 is a subset of the files and directories found relative to the `<Ameos_root>` directory.

**Table 1: Ameos Files and Directories**

Name	Description
<code>INIT_EXAMPLE</code>	File to run before starting Ameos to initialize examples
<code>Sybase/</code>	Sybase installation and database directory
<code>sybase_&lt;version&gt;/&lt;arch&gt;</code>	Sybase <code>&lt;version&gt;</code> files
<code>Ameos_&lt;version&gt;/</code>	Directory containing Ameos
<code>bin/</code>	Ameos binaries directory
<code>&lt;arch&gt;/</code>	Ameos binaries directory for platform <code>&lt;arch&gt;</code>
<code>&lt;arch&gt;/msg_file</code>	File containing messages used by Ameos
<code>Documentation/</code>	Online versions of the Ameos documentation (optional)
<code>Examples/</code>	Directory of sample systems that highlight the use of Ameos (optional)
<code>lib/</code>	Ameos libraries and support files
<code>&lt;arch&gt;/</code>	Ameos library for platform <code>&lt;arch&gt;</code>
<code>&lt;arch&gt;/app-defaults/C</code>	Ameos <code>app-defaults</code> file for platform <code>&lt;arch&gt;</code>

**Table 1: Ameos Files and Directories (Continued)**

Name	Description
project/	Default project directory
setup-Ameos.<shell>	Script for users to source before using Ameos; <shell> is one of <i>csh</i> (C-shell), <i>ksh</i> (Korn or Bash shell), or <i>sh</i> (Bourne shell)
templates/	Directory containing various templates used by Ameos
ct/	Core Technology template files directory
ct/license/	FLEXIm licenses directory
ToolInfo.<arch>	Configuration file for Ameos platform <arch>