

Installing Natural Security on UNIX

This document describes how to install Natural Security on a UNIX platform.

It is recommended that you install Natural Security *after* having installed all other subproducts of Natural, as this makes defining the subproducts' system libraries to Natural Security easier.

Important:

Once Natural Security is installed, Natural on the assigned system file (FNAT) can only be accessed under the control of Natural Security. Natural Security cannot be removed once it has been installed. It is therefore recommended that you make a backup copy of your FNAT system file before you install Natural Security.

The following topics are covered:

- Product Requirements
- Installation Steps
- After the Natural Security Installation

See also *Natural Security On Different Platforms* in the *Natural Security* documentation.

Product Requirements

The following topics are covered below:

- Prerequisites
- License Key File Issues
- Shared Natural Security System File FSEC

Prerequisites

Make sure that the following software has been installed on your computer:

- Natural (same version and update package or patch level as that of Natural Security).
- Adabas.
- Entire Net-Work (only required if the FSEC system file is located in a remote database).

Natural Security uses the same versions of Adabas and Entire Net-Work as Natural. For the supported versions, see *Related Software AG Products*.

Also, make sure that the environment variables for the above products have been set correctly.

License Key File Issues

You need a license key file to install and activate Natural Security.

During the Natural Security installation, you will be required to specify the location of the license key file provided by Software AG.

Before you start the installation, ensure that the license key file is available locally on the machine where you intend to install Natural Security.

In general, Software AG recommends you to place the license key file on the file system before starting the installation.

Shared Natural Security System File FSEC

With this version, you can continue to use your existing FSEC system file. No migration of Natural Security data from the previous version to the current version is necessary.

Installation Steps

The first steps of the installation are the same as during the installation of Natural. If you are installing Natural and Natural Security together, they need not be performed again. You can then continue the installation with the step *SAG Environment Shell*.

The installation can be performed in two installation modes, either in graphical mode or in character mode.

See the following list for an overview of the necessary steps:

- Step 1: Mount the Drive for Your Installation Medium
- Step 2: Choose Character or Graphical Mode
- Step 3: Start the Installation Process
- Step 4: Welcome
- Step 5: SAG User
- Step 6: Destination Location
- Step 7: SAG Environment Shell
- Step 8: Choose Programs
- Step 9: Software License Agreement
- Step 10: License File
- Step 11: Installation Information

- Step 12: Installation Status
- Step 13: Environment Check
- Step 14: Parameter File Template
- Step 15: FNAT System File Settings
- Step 16: FSEC File Selection
- Step 17: Log File Selection
- Step 18: Relinking Natural or Shared Library Nucleus
- Step 19: Parameters for Relinking Natural Nucleus
- Step 20: Relinking Process (for Natural Nucleus)
- Step 21: Parameters for Relinking Shared Library Nucleus
- Step 22: Relinking Process (for Shared Library Nucleus)
- Step 23: INPL Process
- Step 24: Installation Complete
- Step 25: Activate Installed Products
- Step 26: Installation Finished
- Step 27: Execute the SAG Environment File

Step 1: Mount the Drive for Your Installation Medium

- If your drive for the installation medium has not yet been mounted, mount it now as described in the section *Installing the Contents of the Installation Medium to Disk* of the steps common to all Software AG products.

When the installation is started, the setup procedure will check the hardware platform and operating system version and then start the appropriate installation program.

Step 2: Choose Character or Graphical Mode

The installation procedure examines the environment variable `DISPLAY` to determine whether to run in graphical or character mode.

- To use graphical mode, the environment variable `DISPLAY` must be set. If it is not yet set in your environment and you want to use graphical mode, set it using the following commands:

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

Character mode will be used automatically if the environment variable `DISPLAY` is not set. If `DISPLAY` has been set in your environment but you want to use character mode, you can use the `-nw` option when you start the installation.

At the end of an installation process, in either mode, a batch script is generated and written to the end of the installation log. It lists the parameters specified for that particular installation.

You can use the `-help` option to display a list of all supported parameters.

To display the Natural-specific batch mode parameters, enter the following command:

```
setup.ux nat version -help
```

where *version* represents the version of the current Natural installation medium; for example, "v6320".

To display the Natural Security parameters which are supported in batch mode, enter the following command:

```
setup.ux nsc version -help
```

where *version* represents the version of the current Natural installation medium; for example, "v6320".

Step 3: Start the Installation Process

To perform this step, you must be either the user "sag" or a member of the group "sag" to which the administrator and all users of Software AG products are assigned. 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 /mount_dir/setup.ux [-nw]
```

where *mount_dir* is the starting directory on your product installation medium. Upper/lower case usage is possible depending on your local settings.

Note:

The following descriptions of installation steps assume that the graphical installation mode is used. The step sequence is the same in character mode.

The setup program is started and guides you through the installation. During installation you have to provide the license key.

Step 4: Welcome

In this screen, the variant of Natural that is to be installed is displayed.

- Choose **Next** to proceed.

Step 5: SAG User

This screen appears only when you are logged in as the user "root".

It is not intended that you perform the installation as "root". It is recommended to use the Software AG user "sag" instead.

1. If you still need to perform the installation as "root", enter the user ID of the Software AG user to be able to continue.
2. Choose **Next** to proceed.

Step 6: Destination Location

In this screen, you can change the value of the *SAG* environment variable, which is the path name of the directory tree where all Software AG products are installed.

By default, the content of the current *\$SAG* variable is displayed.

1. Optional. Enter a different path or use the **Browse** button to change the path.
2. Choose **Next** to proceed.

Step 7: SAG Environment Shell

This screen appears only if you are installing Natural Security separately. In this case, you have to select the path to the environment file.

Note:

This screen does not appear if you have selected to install both Natural and Natural Security at the same time. In this case, the environment settings were selected during the Natural installation.

The default name is *sagenv.new*. This documentation assumes that the environment file is called *sagenv.new*.

1. Optional. Select another environment file.
You can use any name for your environment file.
2. Choose **Next** to proceed.

Step 8: Choose Programs

This screen appears only if you are installing Natural Security separately.

Note:

Natural must have been installed before you can install Natural Security.

1. Activate the check box for Natural Security.
2. Choose **Next** to proceed.

Step 9: Software License Agreement

When you have selected to install both Natural and Natural Security at the same time, this is the first Natural Security installation screen to appear after you have chosen **Finish** in the **Installation Complete** screen.

In this screen, the license agreement is displayed.

- Choose the **I Accept** button to proceed.

Note:

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

Step 10: License File

In this screen, you specify the path to the Natural Security license key file.

Note:

If no common Software AG environment exists yet, `<your-current-directory>/<product-code>.xml` is displayed.

1. If you do not want to use the displayed license key file, specify the path to your license key file.

Or:
Choose the **Browse** button to select the license key file from a dialog.
2. If you choose the **View** button, the content of your license key file is displayed in a separate screen. Choose **OK** or **Quit** to go back to the **License File** screen.
3. Choose **Next** to proceed.

Step 11: Installation Information

In this screen, the name of the source directory and `$SAG` directory are shown.

1. To review or change your settings, choose the **Back** button.
2. Choose **Next** to begin extracting files.

Step 12: Installation Status

This screen, which contains a progress indicator, informs you about the installation status.

- When all files have been extracted, choose **Next** to proceed.

Step 13: Environment Check

In this screen, you have to specify where Adabas is installed (*\$ADADIR/\$ADAVERS*).

If you use Natural Security on multiple platforms, see also the section *Central FSEC System File* in the Natural Security documentation.

1. Specify the path to the directory in which Adabas has been installed.

You can also use the browse button to select to the required directory.

Or:

To use a remote FSEC, select **Use remote database**.

Adabas databases outside of the current *\$\$SAG* directory (that is: in another *\$\$SAG* directory) must be defined as remote.

2. Choose **Next** to proceed.

Step 14: Parameter File Template

In this screen, you specify the Natural parameter file you want to use as a template.

1. Select the Natural parameter file.

The settings in this Natural parameter file will be used to create a new parameter file for Natural Security called NSCPARM. If NSCPARM already exists, a copy of it will be saved.

If you want to create a Natural Development Server environment with Natural Security, use the parameter file named NDVPARM as a template.

Note:

You can choose the command button displaying a magnifying glass to display the contents of the currently selected parameter file.

2. Choose **Next** to proceed.

Step 15: FNAT System File Settings

In this screen, the environment settings for FNAT are shown.

1. If required, select a different system file.
2. Choose **Next** to proceed.

Step 16: FSEC File Selection

In this screen, you have to enter a database ID and file number for the FSEC system file.

1. Select an existing DBID and FNR.

If you are using a local FSEC system file, all available databases are available for selection.

If you specified **Use remote database** in the step *Environment Check*, enter the DBID and FNR of an existing FSEC on your remote database you want to use.

Or:

To create a new system file, select an existing DBID and enter an unused number for FNR. In this case, you will be asked whether you want the new system file to be created.

If no local FSEC exists yet, the system file will be created and initialized. If you choose an existing FSEC, its contents will not be modified.

FNAT/FUSER reside on the file system and the FSEC in Adabas. It is therefore not possible to use the same DBID for FNAT/FUSER and FSEC.

2. Choose **Next** to proceed.

Step 17: Log File Selection

Before this screen appears, you are asked whether you want to use a log file with your Natural Security installation.

1. Choose **Yes**, if you want to use the Natural Security feature **Logging of Maintenance Functions** (see *Maintenance Log Records* in the *Natural Security* documentation).

Note:

The option **Logging of Maintenance Functions** must additionally be enabled in Natural Security after the installation.

2. Enter or select the database ID and file number for the Natural Security log file. If you do not want to use this feature, enter "0" as DBID.

If you are using a local database, all available database IDs and file numbers are available for selection.

If you want to use an existing log file, select the DBID and FNR. If no log file exists yet, the Natural Security installation creates a new log file. Enter a DBID and FNR.

If you specified **Use remote database** in the step *Environment Check*, enter the DBID and FNR of an existing log file on the remote database you want to use.

3. Choose **Next** to proceed.

You are asked whether you want to create a log system file with the specified numbers.

4. Choose **Yes** to create the log system file.

Step 18: Relinking Natural or Shared Library Nucleus

In this screen, you can decide whether you want to link a new Natural nucleus and/or a new shared library nucleus.

If you have selected Entire Screen Builder, ApplinX and/or Natural for Tamino or if Entire Access is installed, the option **Relink Natural nucleus** is preselected.

Natural Security is delivered with a prelinked Natural Security nucleus called "natsec" and a Natural Security shared library nucleus. However, if you want to use additional packages such as Entire Screen Builder, ApplinX, Natural for Tamino or Entire Access, you need to relink the Natural Security nucleus. See *Compilers Used to Build Natural* for the compiler you must use.

1. Select the option **Relink Natural nucleus** and/or **Relink shared library nucleus**
2. Choose **Next** to proceed.

Step 19: Parameters for Relinking Natural Nucleus

This screen appears only when you have selected the option **Relink Natural nucleus**.

1. Select the required options.
2. Choose **Next** to proceed.

Step 20: Relinking Process (for Natural Nucleus)

This screen appears only when you have selected the option **Relink Natural nucleus**. It displays the output of this relinking process.

The relinking process creates a new Natural Security nucleus called "natnsc".

When you have not selected to relink Entire Screen Builder or ApplinX, you are first asked whether the new nucleus shall be the default nucleus and replace the current Natural nucleus which is called "natural".

If you have selected to relink Entire Screen Builder or ApplinX, a nucleus called "natnsw" (for Entire Screen Builder) or "natapx" (for ApplinX) is created. The Natural nucleus called "natural" is not replaced in this case. Therefore, you are not asked whether you want to replace the current nucleus.

1. Review the results of the relinking process.
2. Choose **Next** to proceed.

Step 21: Parameters for Relinking Shared Library Nucleus

This screen appears only when you have selected the option **Relink shared library nucleus**.

The relinking process creates a new shared library nucleus.

1. Select the required options.
2. Choose **Next** to proceed.

Step 22: Relinking Process (for Shared Library Nucleus)

This screen appears only when you have selected the option **Relink shared library nucleus**. It displays the output of this relinking process.

However, you are first asked whether the new nucleus shall be the default nucleus and replace the current shared library nucleus.

1. Choose **Yes** to use the new nucleus.
2. Review the results of the relinking process.
3. Choose **Next** to proceed.

Step 23: INPL Process

This screen, which contains a progress indicator, appears after the above configuration steps have been completed. The installation now loads the libraries.

- When the loading of the libraries is complete, choose **Next** to proceed.

Step 24: Installation Complete

This screen informs you that the installation of Natural Security has finished successfully. You are asked whether you want to read the Readme file for Natural Security.

It is recommended that you read the Readme file.

1. If you do not want to display the Readme file, remove the corresponding selection.
2. Choose **Finish**.

Step 25: Activate Installed Products

You have to activate Natural Security in this screen.

Note:

This screen is also shown when you install both Natural and Natural Security at the same time.

1. Select the product(s) you want to activate in the Software AG environment file.
2. Choose **Next** to proceed.

Step 26: Installation Finished

This screen appears when the installation has finished.

- Choose **Finish** to exit the installation program.

Step 27: Execute the SAG Environment File

It is necessary to execute the *sagenv.new* file after finishing this installation program to set the environment variables NATDIR, NATVERS and PATH. You can do this now, if you want to work with Natural immediately, or later, if you want to perform other tasks first. But the environment file must have been executed before using Natural.

Note:

When you install both Natural and Natural Security at the same time, this step is required only once. When you install Natural and Natural Security separately and do not use Natural in the meantime, you can perform this step directly after the installation of Natural Security. Otherwise, you have to perform this step twice (after the installation of Natural and after the installation of Natural Security).

- Check these settings and insert them into your profile (for example, *.profile*).

Once the installation has been successfully completed, you can remove the working directory (which you specified in step *Start the Installation Process*) and all of its contents.

After the Natural Security Installation

If you have installed Natural Security for the very first time (that is, if the version you have installed is your first version of Natural Security on this FSEC system file), proceed as described in the *Natural Security* documentation under the heading *First Steps After the Installation*. Do this immediately after a successful installation of Natural Security.