

Installing Natural SAF Security

This section describes how to install Natural SAF Security. It covers the following topics:

- Prerequisites
- Tape Contents
- Installation Procedure

Prerequisites

Natural SAF Security can only be installed if the following products have been installed:

- Natural Version 3.1.6 (or above),
- Natural Security Version 3.1.6 (or above),
- Adabas (or Adabas Limited library) Version 6.2 (or above),
- the SAF server,
- an SAF-compliant security system.

Tape Contents

The Natural SAF Security installation tape contains the following datasets (*nnn* in the dataset names denoting the version number):

Dataset	Contents
NSF <i>nnn</i> .ALLINPL	The Natural INPL dataset containing updates to Natural Security.
NSF <i>nnn</i> .ALLERRN	Natural error messages.
NSF <i>nnn</i> .MVSSRCE	The source library, containing Assembler source books, macros and examples.
NSF <i>nnn</i> .MVSLOAD	The load library, containing the Natural SAF Security assembly module NATGWSAF.
NSF <i>nnn</i> .MVSJOBS	Example jobs for installing Natural SAF Security.

Installation Procedure

This section describes step by step how to install Natural SAF Security.

Step 1: Load Modules and Error Messages

(Job I005)

Note:

The INPL job will overwrite the Natural Security user exit LOGONEX1. If you have modified this user exit, please take care to secure your modified copy appropriately (by copying it into one of your own libraries) before you execute this job.

Load the Natural SAF Security modules and error messages using the Natural utility INPL (assigning NSF*nnn*.ALLINPL to CMWKF01) and the SYSERR utility program ERRLODUS (assigning NSF*nnn*.ALLERRN to CMWKF02) respectively.

Step 2: Adjust Natural Parameter Module

(Job I010)

Add the following parameters to your Natural parameter modules:

```
IDSIZE=8
RDCSIZE=4
```

Then reassemble the parameter modules.

Step 3: Relink Natural

(Job I060 from the Natural installation tape)

Relink your Natural nucleus to include the modified parameter module and Natural SAF Security modules:

```
INCLUDE SMALOAD (NATPARM)
INCLUDE NSFLOAD (NATGWSAF)
```

Step 4: Install the SAF Server

Install the SAF server as described in the SAF Security Kernel documentation.

In the configuration module of the SAF server, the following Natural SAF Security options may have to be set:

Number of Cached Resource Checks

Natural SAF Security allows you to have resource checks cached. If you wish resource checks to be cached, you have to specify the number of successful resource checks to be cached for each resource class, using the following parameters of the configuration module:

Parameter	Default Value	Function
NANUSF	0	Number of cached environment checks.
NANUTC	0	Number of cached library checks.
NANUSV	0	Number of cached RPC-service checks.

Alternate Resource Names

If you wish to change the default names for the resource classes, you have to change the following parameters of the configuration module:

Parameter	Default Value	Function
NACLSF	NSFSAG	Resource-class name for environments.
NACLTC	NTCSAG	Resource-class name for libraries.
NACLSV	NSVSAG	Resource-class name for RPC services.
NACLAP	NPGSAG	Resource-class name for user-defined resources.

Natural SAF Security Options

The following parameters need not be set in the configuration module; the corresponding options are defined in the General NSF Options.

Parameter	Option
NAXTPG	User Options: NSF *GROUP
NAXTNM	User Options: NSF *USER-NAME
NAGENET	User Options: NSF *ETID
NACKSF	Environment Options: Protect Environments
NAUNSF	Environment Options: Allow Undefined Environments
NACKTC	Library Options: Protect Libraries
NAENVTC	Library Options: with Environment
NACMDL	Library Options: Disable Natural Commands
NAPOBJ	Library Options: Set FUSER Read-Only
NACKSV	RPC Options: Protect Services
NAENVSV	RPC Options: with Environment
NACKPG	User-Resource Options: with Environment
NAUNAP	User-Resource Options: Allow Undefined Resources

Note:

Any configuration-module parameters whose names begin with "NA" and which are *not* listed in the three tables above, need not be specified. They will not be evaluated by Natural SAF Security.

Step 5: Activate Natural SAF Security

To perform this step, the following prerequisites must be met in Natural Security: You have to be defined as a user of type "Administrator", and you have to be linked to the library SYSSEC.

To activate Natural SAF Security:

1. Invoke Natural and log on to the Natural Security library SYSSEC.
2. On the Natural Security Main Menu, select "Administrator Services". The Administrator Services Menu will be displayed.
3. Select "Set general options". The Set General Options screen will be displayed.
4. Press PF8 (NSF1). The General NSF Options screen will be displayed.
5. Set all four options listed under "Security System" on this screen.

The setting of these options activates Natural SAF Security with default settings. Once the SAF server has been configured appropriately and has been started, access to Natural is now controlled by Natural SAF Security.

Note:

Before you change any default settings, make sure that the corresponding resources are defined in the external security system being used. For resource definitions, see the section Defining Resources in the External Security System.

The load job performed in Step 1 loads the new utility library SYSNSFOS. This library contains the NSF Online Services (it corresponds to the library SYSSAF supplied with Entire Security SAF Security). To be able to access this utility, a utility security profile has to be defined for it in Natural Security.

