INPL Utility INPL Utility

# **INPL** Utility

The INPL utility (Initial Natural Program Load) is used to load or scan Natural objects from datasets supplied by Software AG.

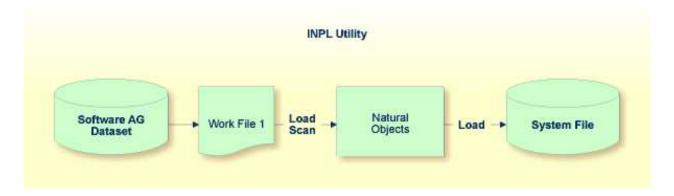
The INPL Utility documentation covers the following topics:

- Introducing the INPL Utility
- Load Libraries Only
- Load DDMs Only
- Load Error Messages Only
- Load All Objects
- Replace Product Installation
- Scan INPL File
- Natural Security Recover

## **Introducing the INPL Utility**

The INPL utility processes Natural objects provided by Software AG.

The following diagram is a basic illustration of the INPL functionality:



The Natural objects are delivered as installation or update datasets which are assigned to Work File 1. The INPL utility loads the Natural objects from Work File 1 into Natural system files.

The Natural objects include cataloged objects and source objects that are contained in libraries in the Natural system files FNAT and FUSER, or in the system file FDIC where DDMs (data definition modules) are stored.

In addition to loading Natural objects, the INPL utility provides a scan function to check the contents of the dataset assigned to Work File 1 and a **Natural Security Recover** function which forces initialization of the Natural Security environment.

INPL Utility Restrictions

If an error occurs during INPL execution, the INPL will be interrupted and terminate abnormally with Condition Code 40.

This section covers the following topics:

- Restrictions
- Special Cases
- Invoking INPL
- Options Available
- INPL Report
- Check Commands

#### **Restrictions**

You can process only datasets which are marked as "SAG system INPL dataset".

#### **Special Cases**

In all of the following cases, the INPL command must be specified using the dynamic Natural profile parameter STACK:

- when an INPL is to be performed on an empty FNAT system file;
- when a new system maintenance upgrade INPL is to be performed;
- when an existing product installation is to be replaced;
- when an INPL is to be performed in a Natural Security environment.

### **Invoking INPL**

### To invoke the INPL utility

1. Enter the following Natural system command:

INPL

An INPL menu similar to the example below is displayed:

Options Available INPL Utility

```
18:32:19
                       ***** NATURAL INPL UTILITY *****
                                                                    2005-04-21
User: SAG
                                                            Library: SYSTEM
                     Code
                           Function
                      L
                           Load Libraries Only
                           Load DDMs Only
                      D
                           Load Error Messages Only
                      E
                      В
                           Load All Objects
                      Р
                           Replace Product Installation
                           Scan INPL File
                      S
                           Natural Security Recover
                      R
                       ?
                           Help
                           Exit
         Code ..... B
        Replace ..... Y (Y/N/P/O)
                                     Load Except . N (Y/N)
        DDM Name ....
        Library .....
         Object Name .
                                                                (YYYY-MM-DD)
                                     Date .....
         Check Date .. N (Y/N)
                                     Number ..... 0
```

- 2. From the INPL menu, you can choose one of the following functions by entering the corresponding function code in the **Code** field:
  - Load Libraries Only
  - Load DDMs Only
  - Load Error Messages Only
  - Load All Objects
  - Replace Product Installation
  - Scan INPL File
  - Natural Security Recover

For detailed information on these functions, refer to the corresponding sections.

- 3. Modify or complete the remaining input fields as described in *Options Available*.
- 4. Choose ENTER to confirm your entries.

### **Options Available**

The following section describes the input fields on the INPL menu where you can specify one or more parameters as object selection criteria for the INPL function specified in the **Code** field. The use of a parameter depends on the respective function as indicated in the relevant documentation sections.

INPL Utility Options Available

Field	Description
Replace	Specifies whether the Natural objects to be processed are to replace any that already exist on the system files.
	Possible settings are:
	Y All existing objects are replaced. This is the default setting.
	N Existing objects are <i>not</i> replaced.
	P All existing objects are replaced. Additionally, existing Natural or Natural add-on product installations are replaced depending on the corresponding check commands (see below) executed during INPL processing.
	O Resets the owner information of specified objects. Only applies to the function <b>Natural Security Recover</b> .
	See also <b>Check Date</b> to replace only objects that are older than the objects to be processed.
	If you use the function <b>Natural Security Recover</b> , you can enter option O in this field to reset the owner information of specified objects.
DDM Name	The name of a DDM or a range of names.
	If you enter a value that ends with an asterisk (*), each DDM with a name that starts with the specified value is processed. If only an asterisk (*) is entered or if this field is empty, all DDMs are processed.
Library	The name of a library or a range of names.
	If you enter a value that ends with an asterisk (*), each library with a name that starts with the specified value is processed. The library name is mandatory if <b>Object Name</b> is specified.
Object Name	The name of a Natural object (except DDMs) or a range of names.
	If the value ends with an asterisk (*), each object with a name that starts with the specified value is processed.
	If this field is empty, all objects contained in the library specified in the <b>Library</b> field are processed.
Check Date	Specifies whether existing Natural objects are to be replaced depending on their time stamp.
	This parameter has no effect if <b>Replace</b> is set to N.
	Possible settings are:
	Y Only objects which are older than the objects of the same name are replaced. An object is older if it was saved or cataloged before the object to be loaded.
	N All objects are replaced. This is the default setting.

INPL Report INPL Utility

Field	Description
Load Except	Specifies whether to exclude Natural objects from processing.
	This parameter does not apply to error messages.
	Possible settings are:
	Y All objects are processed except for the objects specified in the fields <b>DDM Name</b> , <b>Library</b> and/or <b>Object Name</b> .
	N No exceptions; all objects are processed. This is the default setting.
	Examples of load exceptions:
	All libraries except the library ABC are loaded:  Code = L
	Library = ABC
	All DDMs with a prefix other than XY are loaded: <b>Code</b> = D
	DDM Name = XY*
	All objects contained in libraries with a prefix other than AB and all DDMs with a prefix other than CD are loaded:  Code = B
	Library = AB* DDM Name = CD*
Date	Restricts processing to Natural objects which were saved or cataloged on or after the date entered in this field.
	The date must be entered in the format $YYYY-MM-DD$ ( $YYYY = year$ , $MM = month$ , $DD = day$ ).
Number	Limits processing of Natural objects to a specified number. All objects are counted which are loaded or scanned according to the selection criteria specified in the INPL menu.
	If the number of objects processed has reached the value entered in the <b>Number</b> field, processing is terminated with a corresponding message.

### **INPL Report**

When the selected INPL function is complete, a corresponding INPL report is displayed on the screen.

#### **Check Commands**

The INPL utility processes internal check commands which are executed automatically when performing an INPL. Check commands are used to control the load or the scan process and react on certain events. The check commands which are executed during an INPL are written into the INPL report.

INPL Utility Load Libraries Only

The parameters used by the check command to react on an event are, for example, STOP, LOAD, CONTINUE, SKIP, USERLOAD or USERCONTINUE. You can display all parameters by using the **Scan INPL File** function. These parameters, for example, are used to verify that the version of a product to be installed is higher than the version of the product already installed.

You cannot modify a check command but you can influence the effect of the parameters USERLOAD and USERCONTINUE by selecting the function Replace Product Installation (function code P) or by setting the **Replace** option to P.

USERLOAD (or USERCONTINUE) means: Load (or continue loading) only if function code P has been selected or if the **Replace** option is set to P.

#### **Example of USERLOAD and USERCONTINUE**

In the example of a check command below, the Natural version currently installed is checked before the INPL is performed:

CHECK VERSION NAT 421 LT USERLOAD EQ LOAD GT USERLOAD

If the Natural (NAT) version installed is below (LT) or above (GT) 421, the INPL function is only performed if function code P has been specified or if the **Replace** option has been set to P. Otherwise, the INPL utility stops or terminates with Condition Code 40 in batch and writes a corresponding message into the INPL report.

If the version is equal to 421, the INPL function is always performed, irrespective of whether function code P has been specified or the **Replace** option has been set to P.

# **Load Libraries Only**

This function of the INPL utility is used to load Natural cataloged objects and source objects into specified libraries in the Natural system file FNAT or FUSER.

#### To load libraries

- 1. In the INPL menu, enter function code L. You can specify parameters to be valid during execution of this function:
  - Replace (Y/N)
  - Load Except (Y/N)
  - Library
  - Object Name
  - Date (YYYY-MM-DD)
  - Check Date (Y/N)

Load DDMs Only INPL Utility

Number

For detailed information on these parameters, refer to *Options Available* in the section *Introducing the INPL Utility*.

2. Confirm your entries.

When the function is complete, a corresponding INPL report (see the section *Introducing the INPL Utility*) is output.

# **Load DDMs Only**

This function of the INPL utility is used to load DDMs into the system file FDIC.

#### To load DDMs

- 1. In the INPL menu, enter function code D. You can specify parameters to be valid during execution of this function:
  - Replace (Y/N)
  - Load Except (Y/N)
  - DDM Name
  - Number

For detailed information on these parameters, refer to *Options Available* in the section *Introducing the INPL Utility*.

2. Confirm your entries.

When the function is complete, a corresponding INPL report (see the section *Introducing the INPL Utility*) is output.

# **Load Error Messages Only**

This function of the INPL utility is used to load user-defined error messages or system error messages into specified libraries in the Natural system file FUSER or FNAT respectively.

### To load error messages

- 1. In the INPL menu, enter function code E. You can specify parameters to be valid during execution of this function:
  - Replace (Y/N)
  - Library

For detailed information on these parameters, refer to *Options Available* in the section *Introducing the INPL Utility*.

INPL Utility Load All Objects

2. Confirm your entries.

When the function is complete, a corresponding INPL report (see the section *Introducing the INPL Utility*) is output.

# **Load All Objects**

This function of the INPL utility is used to load all Natural objects (including error messages and DDMs) into the libraries indicated in Work File 1. DDMs are loaded into the system file FDIC.

### To load all objects

- 1. In the INPL menu, enter function code B. You can specify parameters to be valid during execution of this function:
  - Replace (Y/N)
  - Load Except (Y/N)
  - DDM Name
  - Library
  - Object Name
  - Date (YYYY-MM-DD)
  - Check Date (Y/N)
  - Number

For detailed information on these parameters, refer to *Options Available* in the section *Introducing the INPL Utility*.

2. Confirm your entries.

When the function is complete, a corresponding INPL report (see the section *Introducing the INPL Utility*) is output.

# **Replace Product Installation**

In addition to the function **Load All Object**, this function replaces any existing Natural or Natural add-on products installed in the current system environment. The replacement of existing product installations depends on the execution of the corresponding check commands described in the section *Introducing the INPL Utility*.

### To load all objects and replace existing product installations

1. In the INPL menu, enter function code P. You can specify parameters to be valid during execution of this function:

Scan INPL File INPL Utility

- Replace (Y/N)
- Load Except (Y/N)
- DDM Name
- Library
- Object Name
- Date (YYYY-MM-DD)
- Check Date (Y/N)
- Number

For detailed information on these parameters, refer to *Options Available* in the section *Introducing the INPL Utility*.

2. Confirm your entries.

When the function is complete, a corresponding INPL report (see the section *Introducing the INPL Utility*) is output.

#### Scan INPL File

This function of the INPL utility is used to scan the contents of the dataset assigned to Work File 1.

### To scan an INPL File

- 1. In the INPL menu, enter function code S. You can specify parameters to be valid during execution of this function:
  - Load Except (Y/N)
  - DDM Name
  - Library
  - Object Name
  - Date (YYYY-MM-DD)
  - Number

For detailed information on these parameters, refer to *Options Available* in the section *Introducing the INPL Utility*.

2. Confirm your entries.

When the function is complete, a corresponding INPL report (see the section *Introducing the INPL Utility*) is output.

# **Natural Security Recover**

This function of the INPL utility is used to force initialization of the Natural Security environment.

The following options are provided:

- Reset Environment
- Remove Owners

#### **Reset Environment**



#### Warning:

Execution of this function will reset the user profile DBA and the library profile SYSSEC as well as the link between these two objects as they were after the initial installation; all other links to the library SYSSEC will be canceled. Other Natural Security profiles and links will not be modified. Contact Software AG technical support for further information.

#### To reset the environment

• In the INPL menu, enter function code R.

#### **Remove Owners**

#### To remove owners

• In the INPL menu, enter function code R and enter an O in the **Replace** field to reset the owner information of specified objects.