

Installing NAF under IMS/DC

This section describes how to install Natural Advanced Facilities (NAF) under IMS/DC.

- Prerequisites
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- Installation Procedure

Prerequisites

- Base Natural Version 2.3 or above must be installed.
- The Natural IMS/DC interface must be installed.

Installation Tape

The installation tape contains the datasets listed in the table below. The sequence of the datasets is shown in the Report of Tape Creation which accompanies the installation tape.

Dataset Name	Contents
NAF nnn .LOAD	Natural Advanced Facilities executable load phases and modules which are necessary for the linkage editor
NAF nnn .INPL	Natural programs including sample source programs and system load modules which are necessary for Natural Advanced Facilities.
NAF nnn .SYSF	Empty sample spool file; input to Adabas load utility.
NAF nnn .ERRN	Natural Advanced Facilities error messages.

The notation nnn in dataset names represents the version number of the product.

Copying the Tape Contents to Disk

If you are not using System Maintenance Aid, adapt and run job NAFTAPE to copy the datasets from tape to disk. NAFTAPE is contained in job dataset NAT nnn .JOBS on the Natural installation tape.

The space each dataset requires on disk is shown in the Report of Tape Creation.

Installation Procedure

For installation, use the jobs provided on your Natural tape (names begin with NAF).

Step 1: Load the Spool File - Job I050, Step 0300

You **must** generate a new spool file because the Adabas FDT used in Version 2.3 is not compatible with the one used in Version 2.2.

Load the Natural Advanced Facilities spool file contained in `NAFnmn.SYSF` using the ADALOD utility. An initial size of one cylinder for this file will be sufficient. The following parameters are mandatory:

```
VERSION=6  
ISNREUSE=YES
```

to cause Adabas to reuse the ISN of a deleted record. For the file number `<fspool>`, you may choose any value.

Step 2: Modify NAFPARMI removed - Job I055, Step 0305

The NAFPARMI parameter module no longer exists in Version 2.3. To set the spool server options, see Step 11.

Step 3: Modify NATPARM for the BMP Nucleus - Job I060

Modify the parameters FSPOOL, NTPRINT, NAFUPF and NAFSIZE in NATPARM according to your site requirements. For more information on these parameters, see Natural Profile Parameters for NATSPOOL.

The Natural parameter module for the BMP Natural must contain a valid `FSPOOL=(dbid,fnr)` entry, and the values specified must be identical to those of the MPP Natural (Step 5).

Assemble and link the Natural parameter module NATPARM.

Step 4: Link the BMP Natural Nucleus - Job I060

Link your BMP frontend with the parameter module created in the previous step.

Step 5: Modify NATPARM for the MPP Nucleus - Job I060

Modify the parameters FSPOOL, NTPRINT, NAFUPF and NAFSIZE in NATPARM according to your site requirements. For more information on these parameters, see Natural Profile Parameters for NATSPOOL.

The Natural parameter module for the MPP Natural must contain a valid `FSPOOL=(dbid,fnr)` entry and the values specified must be identical to those of the BMP Natural (Step 3).

Assemble and link the Natural parameter module NATPARM.

Step 6: Link the MPP Natural Nucleus - Job I080

Add the following INCLUDE statements in the link steps for Natural and link-edit the executable module:

```
INCLUDE NAFLIB(NAFAF)  
INCLUDE NAFLIB(NAFNUC)
```

Include all modules of Natural Advanced Facilities, that is, NAFNUC and NAFAF, in the link-edit of Natural.

Note:

If a shared nucleus is created, the modules can be included in the shared nucleus.

Step 7: Load the System Programs - Job I061, Step 0300

Load the Natural Advanced Facilities system programs into the Natural system file using the Natural INPL utility. INPL loads the maintenance programs under the application IDs SYSPPOOL and SYSPRINT.

Ensure that INPL finishes with the message "Natural Advanced Facilities initialized by INPL". If this initialization fails, various problems will be encountered at execution time.

This INPL file contains the source for all maps used in the Natural Advanced Facilities system.

These maps are provided in source form to enable users to customize the system (for example, to translate the maps from English to another language).

If these maps are modified, ensure that all fields have the same format/length/relative position in the map. Failure to abide by this restriction will result in an invalid system.

Step 8: Load the Error Messages - Job I061, Step 0304

Load the Natural Advanced Facilities error messages file (dataset NAFnnn.ERRN) using the ERRLODUS program as described in the Natural SYSERR Utility documentation.

Step 9: Natural Advanced Facilities and Natural Security

This step must only be performed, if Natural Advanced Facilities is being installed in a Natural Security environment.

Define SYSPPOOL to Natural Security with startup program MENU.

Step 10: Start Natural

Start Natural and add the user profile, as defined in the NAFUPF parameter of NATPARM, to the SYSPPOOL file using Function 31.1.

Note:

A NAT7201 message is issued at the start of the session indicating that the profile has not yet been added to the SYSPPOOL file.

Step 11: Create NATSPOOL Environment

If you already have a Natural Advanced Facilities 2.2 spool file and you want to use it under Version 2.3, its contents must be converted to the newly generated Version 2.3 spool file. This is done using the CONVERT command in library SYSPPOOL, see Conversion from Version 2.2.

Note:

A Version 2.1.n spool file cannot be converted directly to Version 2.3.n. It must first be converted to Version 2.2.n.

After conversion, you must specify the general spool file options and the system-specific options for the spool server. See Function 30.5.

To initialize a new NATSPOOL environment, see NATSPOOL Initialization.

Step 12: Adapt the IMS/DC Environment

Adapting the IMS/DC environment, be sure that the following applies:

- The JCL for the BMP printer job must be stored in the appropriate IMS library with the member name specified in the IMS/DC options of Function 30.5.
- The BMP must have a PSB with at least two modifiable TP PCBs.
- The first control card for the BMP driver must specify at least one TP PCB by using the statement `WRKPCBS=001`.
- If the input transaction code for the BMP is **not** generated as WFI (see "Wait for input" in the IMS/DC options of Function 30.5), the MPP transaction code must be authorized to issue the `"/STA REG"` command. Otherwise, IMS will issue status code CD when trying to start the BMP.