

# Installation Procedures for Con-form

This section describes step by step how to install Con-form under the operating systems z/OS, VSE/ESA, VM/CMS and BS2000/OSD. It contains the following topics:

- Step 1. Loading the System File (Job I050, Step 0201)
- Step 2. Relinking Your Natural Nucleus (Job I060 for Batch Mode or Job I080 for Online Operation)
- Step 3. Loading Error Messages (Job I061, Step 0202)

**Note:**

Before you begin the installation procedures, determine if this is the first time that Con-form is being installed or whether this version is to replace an existing Con-form version. See Using System Maintenance Aid .

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## Step 1. Loading the System File (Job I050, Step 0201)

If you are migrating from another version of Con-form, skip this step and continue with the next step.

If this is a first time installation, proceed with this step.

One Adabas file will be used by Con-form for storage and retrieval of texts, documents and other information (this is referred to as the Con-form system file). The following procedure prepares the file for subsequent use by Con-form.

Create the new Adabas file using the Adabas utility program ADALOD. Use the dataset CMF $nnn$ .SYS1 as input. The ISN REUSE flag of the Con-form system file should be set to ON. The specifications of the NTLFILE macro call in the Natural parameter module must correspond to the file number and the DBID of the database in which this file is contained. The internal file identification number 251 refers to the Con-form system file (CMF $nnn$ .SYS1).

**Note:**

Whenever this file is loaded and reloaded, you must specify the USERISN option to ensure that the ISN assignments of the database records remain unchanged.

For a medium-sized installation the following ADALOD parameters can be used for the system file:

```
ADALOD LOAD FILE=16,MAXISN=350000,ASSOPFAC=5,DATAOPFAC=15,  
ADALOD DSSIZE=100,TEMPSIZE=20,SORTSIZE=10,ISNREUSE=YES
```

## Step 2. Relinking Your Natural Nucleus (Job I060 for Batch Mode or Job I080 for Online Operation)

### 2.1 Modify Parameter Modules

Generating an executable Natural/Con-form nucleus is almost identical to generating a standard Natural nucleus. The changes that must be applied are given below.

1. The keyword parameter CSIZE=*nn* must be set to a value of 30 or more. This parameter can be specified either in the NTPRM macro call, or dynamically when Con-form is invoked. If this parameter is not specified correctly, Natural error 5300 or 5319 will occur whenever Con-form is called.
2. The keyword parameter MAXCL (maximum number of program calls between successive terminal dialogue steps) should reflect the number of program calls during execution of the COMPOSE statement.
3. The keyword parameter MADIO (maximum number of DBMS calls between successive screen I/O operations) should reflect the number of times the database is accessed during execution of the COMPOSE statement.
4. The profile parameter RCA (controls dynamic loading of the CSTATIC programs) in the macro NTPRM can be set to ON.
5. If Con-form is to be link-edited as a separately loadable module, NTALIAS must be specified within the Natural parameter module. For example:
  - **NTALIAS NATGWCNT, *load module name***
  - **NTALIAS CONFORMR, *load module name***
  - **NTALIAS CONFORMA, *load module name***
  - **NTALIAS CONFORME, *load module name***
  - **NTALIAS CONFORMM, *load module name***
  - **NTALIAS CONFORMF, *load module name***
  - **NTALIAS CONFORMU, *load module name***

"NTALIAS NATGWCNT, *load module name*" is specified only when the load module name is different from NATGWCNT.

6. An additional macro call must be specified to define the Con-form system file to the nucleus. The name of the macro is NTLFILE. The NTLFILE macro call must be placed after the NTPRM macro call.

NTLFILE is a keyword macro with the following parameters:

Parameter	Explanation
ID	Internal identifier. Must be set to 251 for the Con-form system file. This parameter is mandatory.
DBID	ID of the database where the Con-form system file resides. This parameter may be specified if necessary.
FNR	Number of the Con-form system file. This parameter is mandatory.
PASSW	Adabas password that may be required to gain access to the Con-form system file. This parameter may be specified if necessary.
CIPH	Adabas cipher key that may be required to encipher or decipher records in the Con-form system file. This parameter may be specified if necessary.

The NTLFILE macro is contained in the appropriate Natural source library.

As an alternative to using this macro, the dynamic parameter LFILE can be specified when Con-form is invoked. The format is:

```
LFILE=(251,dbid,fnr<,passw><,ciph>)
```

where the parameters shown in pointed brackets are optional.

## 2.2 Assemble and Link Parameter Module

## 2.3 Link-edit a Natural/Con-form Nucleus

Use the standard link procedure as described in the *Natural Installation and Operations* documentation.

Include the load modules CONFRUN, CONFUPP, CONFLOW, CONFTRA, CONFSRT, CONDCA, CONDTR1 and CDFTTAB from the Con-form load library (for both batch and TP environments).

If Con-form is to be link-edited as a separately loadable module, those modules may form a module of their own. In this case, CONFRUN must be the first module to be included.

## Step 3. Loading Error Messages (Job I061, Step 0202)

The Natural utility program ERRLODUS is used in batch mode to load the Con-form error texts into the Natural system system file (required). The dataset CMF $nnn$ .ERRN must be assigned to workfile 02.

If Natural Security is not installed, use the following:

```
LOGON SYSERR  
ERRLODUS  
FIN
```

If Natural Security is installed, use the following:

```
SYSTEM,USER ID, PASSWORD  
ERRLODUS  
FIN
```