

# BS2000 Installation

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## The Installation Medium

Review the *Software AG Product Delivery Report* that accompanies the release package before restoring the release data to disk. Information in this report supersedes the information in this documentation.

The installation medium contains the following files in the sequence indicated in the report:

File	Contents
COR <sub>vrs</sub> .SRC	COR source modules
COR <sub>vrs</sub> .JOBS	COR installation jobs
COR <sub>vrs</sub> .MOD	COR load modules
COR <sub>vrs</sub> .INPL	SYSCOR objects
COR <sub>vrs</sub> .ERRN	SYSCOR error messages
COR <sub>vrs</sub> .SYSF	COR base configuration file
COR <sub>vrs</sub> .LX01	COR 8.2 database components (ADAP0x, AFPADA, AVIADA). This library must be named in the DDLIB and BLSLIB00 ADD-FILE-LINK statements in all database startup procedures, thereby overriding modules of the same name in the base Adabas library.

where *vrs* in file names represents the version, revision, and system maintenance level of the product.

## Installation Checklist

After copying the medium contents to disk, the following checklist identifies the steps necessary to complete the installation:

Step	Description	Required	Job Name
1	Load (INPL) the SYSCOR application	Yes	CORI061
2	Load the configuration file and prepare SYSCOR	Yes	CORI050
3	Assemble the configuration module	Yes	CORI055
4	Add the Adabas System Coordinator to the Adabas clients	Yes	CORI060, CORI080x
5	Define a System Coordinator group and member(s)	Required if a COR daemon is to be used	
6	Create startup procedures for the Adabas System Coordinator daemon(s)	Required if a COR daemon is to be used	
7	Define runtime controls for Client jobs and TP systems	Yes	

## System Programming Considerations

The Adabas System Coordinator daemon must execute at a higher task priority than the TP monitors and jobs it coordinates. The daemon requires system administrator (TSOS) privileges because it uses a JOBINFO macro to monitor job activity.

Multiple jobs (UTM jobs, for example) defined in the Adabas System Coordinator groups use memory allocated from shared memory pools. For BS2000, Adabas System Coordinator requires that you specify the virtual start address and size of the shared pool. This is done when the Coordinator daemon is set up in the SYSCOR administration application. The start address selected must be valid in all UTM jobs that will use Adabas System Coordinator, and also in the Adabas System Coordinator daemon task. The size of the shared pool depends on whether you use shared memory for activity displays and/or latency.

Additionally, the daemon allocates a shared pool for each UTM service. The virtual start address and size is defined as a runtime control for the UTM service. This pool should be sized at a minimum of 100kb per job in this UTM service. Ensure the memory pool addresses do not overlap for different services and the sizes defined are large enough to accommodate the defined memory pools.

## Copying the Medium Contents to a BS2000/OSD Disk

### To copy the medium contents to a BS2000/OSD disk:

1. Copy the library SRV $nnn$ .LIB from medium to disk.

This action is not necessary if you have already copied the library SRV $nnn$ .LIB from another Software AG medium. For more information, refer to the element #READ-ME in this library.

The library SRV $nnn$ .LIB is stored on the medium as the sequential file SRV $nnn$ .LIBS containing LMS commands. The current version  $nnn$  can be obtained from the Software AG Product Delivery Report. To convert this sequential file into an LMS-library, execute the following commands:

```

/IMPORT-FILE SUPPORT=*TAPE(FILE-NAME=SRVnnn.LIBS, -
/ VOLUME=<volser>, DEV-TYPE=<tape-device>)
/ADD-FILE-LINK LINK-NAME=EDTSAM, FILE-NAME=SRVnnn.LIBS, -
/ SUPPORT=*TAPE(FILE-SEQ=3), ACC-METH=*BY-CAT, -
/ BUF-LEN=*BY-CAT, REC-FORM=*BY-CAT, REC-SIZE=*BY-CAT
/START-EDT
@READ '/'
@SYSTEM 'REMOVE-FILE-LINK EDTSAM'
@SYSTEM 'EXPORT-FILE FILE-NAME=SRVnnn.LIBS'
@WRITE 'SRVnnn.LIBS'
@HALT
/ASS-SYSDTA SRVnnn.LIBS
/MOD-JOB-SW ON=1
/START-PROG $LMS
/MOD-JOB-SW OFF=1
/ASS-SYSDTA *PRIMARY

<tape-device> = device-type of the tape, e.g. TAPE-C4
<volser> = VOLSER of tape (see Software AG Product Delivery Report)

```

## 2. Copy the procedure COPY.PROC from medium to disk

Call the procedure P.COPYTAPE in the library SRVnnn.LIB to copy the procedure COPY.PROC to disk:

```

/CALL-PROCEDURE (SRVnnn.LIB,P.COPYTAPE), -
/ (VSNT=<volser>, DEVT=<tape-device>)

```

If you use a TAPE-C4 device, you can omit the parameter DEVT.

## 3. Copy all product files from medium to disk

Enter the procedure COPY.PROC to copy all Software AG product files from medium to disk:

```

/ENTER-PROCEDURE COPY.PROC, DEVT=<tape-device>

```

If you use a TAPE-C4 device, you can omit the parameter DEVT. The result of this procedure is written to the file L.REPORT.SRV.

# Installation Procedure

Following is the general Adabas System Coordinator installation procedure. The actual installation depends on your particular requirements and the specific contents of the release package provided by Software AG for your site. Information in the release package is intended for your system. If that information differs from the information in this section, use the release package information or contact Software AG technical support for assistance.

## Step 1: Load (INPL) the SYSCOR Application (Job I061)

Use sample job CORI061 to load the SYSCOR online administration and error messages file into Natural.

## Step 2: Load the Configuration File and Prepare SYSCOR (Job I050)

System Coordinator and related products operate according to definitions contained in the configuration file. You must allocate a new Adabas file for the Version 8.1 configuration file and load `CORvrl.SYSF` into it using the supplied sample job `CORI050`. The online services will guide you through the steps required to make the new file ready for use, including conversion from previous versions of System Coordinator.

### ▶ To load the configuration file

1. Load the Adabas System Coordinator configuration file from the distribution medium using the standard Adabas load utility `ADALOD`. Use sample job `CORI050`. If you are using an alternate configuration file you need to run this job to initialize both files.
2. If Natural Security is installed, define the libraries `SYSCOR` and `SYSMPvrs` (where *vrs* is the version you are installing, for example 812) and protect as required. You may define `MENU` as the startup transaction for `SYSCOR`. DO NOT define a startup transaction for `SYSMPvrs`.
3. Use the following parameter to define the Natural session where `SYSCOR` is to be used:

```
LFILE=(152,dbid,fnr<,passw><,cipht>)
```

where *dbid* and *fnr* define the primary Adabas System Coordinator file.

Alternatively, assemble the Natural parameter module with:

```
NTFILE ,ID=152,DBID=dbid,FNR=fnr
```

### ▶ To convert a previous version's definitions to version 8 format

1. Logon to library `SYSCOR` and enter `MENU`. `SYSCOR` will detect that the configuration file is new and will guide you through the steps required to copy and convert the definitions from a previous version.
2. Repeat this procedure for each configuration file to be converted. The procedure only needs to be done once for each configuration file, regardless of how many products use it. Other products may have additional conversion requirements.

## Step 3: Assemble the Configuration Module (Job I055)

Adabas System Coordinator parameters are located in the configuration file. At job start, the Adabas System Coordinator needs to know the location of this file. This information is kept in the configuration module.

Create the configuration module by assembling the `CORMCFG` parameters defining the database and file number of the Adabas System Coordinator configuration file.

Keyword	Description
DBID=	Database number for the System Coordinator configuration file
FNR=	File number for the System Coordinator configuration file
ADBID=	Database number for the alternate System Coordinator configuration file. If not specified, an alternate file will not be used.
AFNR=	File number for the alternate System Coordinator configuration file. If not specified, an alternate file will not be used.
SF148=WAIT	Use this keyword if you want client jobs to wait when the specified configuration file is not active. If you omit this keyword, the <code>RETRY=</code> setting takes effect (see below).
CRITICAL=	Use this keyword if you want System Coordinator to check for availability and correct functioning of supported add-on products. You may specify one or more of the following, separated by commas: <ul style="list-style-type: none"> <li>● AVI -Adabas Vista</li> <li>● AFP - Adabas Fastpath</li> <li>● ATM - Adabas Transaction Manager</li> </ul> <p>If any critical product is not functioning correctly, all Adabas requests will be rejected with response code 101, subcode 59.</p>
DMWAIT=	Specifies a maximum time (in minutes) that the System Coordinator daemon will wait for the configuration file database to be activated. If not specified, the daemon will wait indefinitely. The default is 60.
RETRY=	<code>RETRY</code> specifies the frequency (number of Adabas calls issued in this client job) at which System Coordinator in the client job will retry access to its configuration file after a response 148. The default is 1000. Client services provided by System Coordinator and its supported add-on products are not available until the configuration file becomes active. <code>RETRY</code> only takes effect if <code>SF148=WAIT</code> has not been specified.

Name the resulting load module CORCFG (this is required).

Use sample job CORI055.

#### Step 4: Add the System Coordinator to the Adabas Client (Jobs I060, I080x)

Link the appropriate Adabas System Coordinator client component with your Adabas link modules.

The stub modules are called `CORS2n` where *n* is a subsystem suffix.

The modified link module is for use by client jobs only.

The load library contains the kernel modules `CORKRN` and `CASKRN`, which must also be available to all client jobs that will use the Adabas System Coordinator.

If you are migrating from a previous version, you must ensure that you use the new load library modules. It is not possible to use the Version 8 link module stub with Coordinator modules from a previous version.

Job Type	Stub Module	Sample Job	Natural Link Job
Batch	CORS21	CORI060	LNATBAT
TIAM	CORS21	CORI060	LNRTFRNT
UTM	CORS26	CORI080B	LNUTFRNT

**Note:**

If you are installing System Coordinator for use with Adabas Version 7.4, the sample jobs must be modified to include module ADAL2P. The INCLUDE statement for this module is supplied in the sample jobs as a comment statement.

**Note:**

The stub module can be added directly to the Natural link job (see the appropriate name in above table,) instead of creating an additional link job.

## Step 5: Define an Adabas System Coordinator Group

Define an Adabas System Coordinator group and members. This is required if you intend to use:

- Adabas Fastpath
- Adabas Vista or Adabas Fastpath with UTM with dynamic transaction routing.

For more information, refer the section SYSCOR Administration.

## Step 6: Create Startup Procedures for the System Coordinator Servers

The following is a job example for running a Adabas System Coordinator daemon:

```

/.SYSCO LOGON
/ ASSIGN-SYSLST L.SYSCO
/ ASSIGN-SYSOUT O.SYSCO
/ MOD-JOB-OPT LOG=(LIST=*YES)
/ SHOW-JOB-STATUS
/ REMARK +-----+
/ REMARK I CREATE SYSCO PARAMETER FILE (SYSCO.DDCARD) I
/ REMARK +-----+
/ MOD-JOB-SW ON=(4,5)
/ DELETE-FILE SYSCO.DDCARD,SUPPRESS-ERRORS=DMS0533
/ START-EDT
@ CR 1'MPMWTO=YES'
@ CR 2'PRODUCT=CAS'
@ CR 3'TIMER=10'
@ WR 'SYSCO.DDCARD'
@ HALT
/ REMARK +-----+
/ REMARK I CREATE ADALNK PARAMETER FILE (SYSCO.DDLNKPAR) I
/ REMARK +-----+
/ DELETE-FILE SYSCO.DDLNKPAR,SUPPRESS-ERRORS=DMS0533
/ START-EDT
@ CR 1'ADALNK IDTNAME=idtname'
@ CR 2'ADALNK DBID=dbid'
@ WR 'SYSCO.DDLNKPAR'
@ HALT
/ MOD-JOB-SW OFF=(4,5)
/ REMARK +-----+

```

```
/ ADD-FILE-LINK DDLIB, $SAG.ADAvrs.MOD
/ ADD-FILE-LINK BLSLIB01, $SAG.ADAvrs.MOD
/ ADD-FILE-LINK BLSLIB02, $SAG.CORvrs.MOD
/ ADD-FILE-LINK DDCARD, SYSCO.DDCARD
/ ADD-FILE-LINK DDLNKPAR, SYSCO.DDLNKPAR
/ REMARK +-----+
/ REMARK I START-PROG SYSCO I
/ REMARK +-----+
/ START-PROG *MOD($SAG.CORvrs.MOD,ELEM=SYSCO,PROG-MODE=ANY)
/LOGOFF
```

If SYSCO terminates abnormally, it may be necessary to specify FORCE=YES on restart.

## Step 7: Define Runtime Controls for Client Jobs and TP Systems

System Coordinator can be installed for all client jobs, but will be inactive until runtime controls are defined. Controls are defined in the SYSCOR Natural application, using the Maintenance menu. Refer to the Online Services section for further information.

Alternatively, you can delay this task until you have installed the appropriate add-on product(s). You may then use any of the supplied maintenance applications (SYSAFP, SYSAVI or SYSATM).