

OS/390, z/OS, and z/OS.e Systems Installation

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The Installation Tape

Review the *Report of Tape Creation* that accompanies the release package before restoring the release data to disk. Information in this report supersedes the information in this documentation.

The installation tape contains the following datasets in the sequence indicated in the report:

Dataset	Contents
COR vrs .LOAD	COR load modules
COR vrs .INPL	SYSCOR INPL file
COR vrs .ERRN	SYSCOR error messages file
COR vrs .SRCE	Source modules
COR vrs .JOBS	Installation jobs
COR vrs .SYSF	Base configuration file

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

Installation Overview

The steps needed for a successful installation are as follows:

Step	Description	Job Name
1	Restore the libraries from the installation tape	
2	Load (INPL) the SYSCOR application	CORI061
3	Load the configuration file and prepare SYSCOR	CORI050
4	Assemble the configuration module	CORI055
5	Add the System Coordinator to the Adabas clients	CORI060, CORI080x
6	Define the System Coordinator group and members	
7	Install the CICS node error program (optional)	
8	Add cache structure(s) to the CFRM policy	
9	Create startup procedures for the Adabas System Coordinator members	

System Programming Considerations

If the coordination group contains more than one member, the members use the IBM XCF facility to communicate. The coordination group name is used as the XCF group name.

The coupling facility cache structure must be used to support dynamic transaction routing in an IBM parallel sysplex. The cache structure name is defined in the coordination group definition as well as in the CFRM policy of the sysplex environment.

The Adabas System Coordinator daemon must execute:

- from an authorized load library; and
- at a higher priority than the TP monitors, databases, and jobs it is used to coordinate.

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: Restore Libraries from the Installation Tape

Use IEBCOPY to unload the libraries. Modify the following variables to reflect the standards at your site:

Variable	Is the...
<i>vrs</i>	version, revision, and system maintenance level
<i>ttttt</i>	volume serial number of the installation tape
<i>vvvvvv</i>	volume serial number for the target disk

```
//CORLOAD JOB (site-dependent data)
/* -----
/*---COPY THE LOAD LIBRARY
/* -----
//LOADLIB EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN DD DSN=CORvrs.LOAD,DISP=OLD,
// VOL=(,RETAIN,SER=ttttt),UNIT=TAPE,LABEL=(1,SL)
//OUT DD DSN=SAG.ADAvrs.LOAD,DISP=(,CATLG,DELETE),
// UNIT=SYSDA,VOL=SER=vvvvvv,SPACE=(CYL,(10,1,20),RLSE)
//SYSIN DD *
COPY INDD=IN,OUTDD=OUT
/* -----
/*---COPY THE SOURCE LIBRARY
/* -----
//SRCELIB EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN DD DSN=CORvrs.SRCE,DISP=OLD,
// VOL=(,RETAIN,SER=ttttt),UNIT=TAPE,LABEL=(3,SL)
//OUT DD DSN=SAG.CORvrs.SRCE,DISP=(,CATLG,DELETE),
// UNIT=SYSDA,VOL=SER=vvvvvv,SPACE=(TRK,(10,5,5),RLSE)
//SYSIN DD *
COPY INDD=IN,OUTDD=OUT
/*
/* -----
/*---COPY THE JCL LIBRARY
/* -----
//JOBSLIB EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN DD DSN=CORvrs.JOBS,DISP=OLD,
// VOL=(,RETAIN,SER=ttttt),UNIT=TAPE,LABEL=(4,SL)
//OUT DD DSN=SAG.CORvrs.JOBS,DISP=(,CATLG,DELETE),
// UNIT=SYSDA,VOL=SER=vvvvvv,SPACE=(TRK,(15,5,15),RLSE)
//SYSIN DD *
COPY INDD=IN,OUTDD=OUT
/*
```

Notes:

1. The load library contains the kernel module CORKRN, which must be available to the various databases, TP monitors, and batch jobs that will use the Adabas System Coordinator.
2. If you intend to run the Adabas System Coordinator daemon to manage clustered applications, you must APF-authorize the load library.
3. If you are installing under CICS, the Coordinator modules can be loaded either from the DFHRPL or the STEPLIB libraries. Software AG recommends that you use DFHRPL. If you are not using the CICS program autoinstall feature, you will need to define the Coordinator Client modules (CORKRN, CASPXY, CASKRN), and the configuration module (CORCFG) to CICS. All of the modules should be defined with the following characteristics: Language: Assembler ; REload :No ; DATalocation: Any ; EXECKey : User.

Step 2: Load (INPL) the SYSCOR Application (Job I061)

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

Step 3: Load the Configuration File and Prepare SYSCOR (Job I050)

Note:

If you are upgrading from version 7.1 of Adabas Vista or Adabas Fastpath, you can omit substep 1 below and use the existing configuration file. You must run the conversion program U1JPARM, located in the INPL file, to convert your existing job parameters.

Note:

If you are upgrading from version 7.3 of Adabas Vista or Adabas Fastpath, you can omit substep 1 below and use the existing job parameters.

To load the configuration file

1. Load the Adabas System Coordinator configuration file from the distribution tape using the standard Adabas load utility ADALOD. Use sample job CORI050.
2. If you are using Natural Security, define SYSCOR and SYSMPVRS to Natural Security with MENU as the start-up program name. Restrict the application to authorized personnel.
3. Use the following parameter to define the Natural session where SYSCOR is to be used:

```
LFILE=(152,dbid,fnr<,passwd<,ciph>)
```

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

Alternatively, assemble the Natural parameter module with:

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

Step 4: 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 SVC, database, and file number of the Adabas System Coordinator configuration file.

Keyword	Description
SVC=	Your installation's Adabas SVC number
DBID=	Database number for the System Coordinator configuration file
FNR=	File number for the System Coordinator configuration file
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, default job parameters will be assumed for the job when the configuration file is not active.

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

Use sample job CORI055.

Step 5: 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 CORS0*n* where *n* is a subsystem suffix.

The modified link module is for use by client jobs only. Refer to the section Mandatory Use of Unmodified ADALNK.

Job Type	Stub Module	Sample Job
Batch/TSO	CORS01	CORI060
Com-plete	CORS02	CORI080C
CICS command level	CORS03	CORI080B
IMS	CORS05	CORI080G

Note:

For CICS, ensure that the LUSAVE parameter in the Adabas link module is set to at least 72. Software AG recommends that you also use the XWAIT=YES parameter.

Note:

For a multitasking batch job, the client component (CORS01) must be linked with the reentrant link module (ADALNKR).

Step 6: Define a System Coordinator Group

Define your System Coordinator group and member(s). This is required if you intend to use:

- Adabas Fastpath
- clustered applications with dynamic transaction routing.

Job parameters for each product also contain settings that are relevant to the operation of the Adabas System Coordinator. For more information, see SYSCOR Administration.

Step 7: Install the CICS Node Error Program (Optional)

The node error program CORNEP is used by sites running CICS command-level applications in CICS/ESA or CICS Transaction Server for OS/390. It is not an essential component, but it does improve efficiency when reclaiming user memory after user sessions terminate.

CORNEP must be called as a started task (with Transaction ID ANEP) from the real CICS node error program DFHZNEP. If you do not use DFHZNEP, a sample is provided on the source library. If you do use DFHZNEP, you will need to implement the code for starting CORNEP into your own DFHZNEP as shown in the provided sample source.

Following are the required CICS resource definition parameters for CORNEP:

```
Language: Assembler
RESident: No
Datalocation: Any
EXECKey: User
```

Note:

To use CORNEP, assemble your Adabas link module with PARMTYP=ALL on the ADAGSET macro.

Step 8: Add the Cache Structure(s) to the CFRM Policy

Note:

This step is required if you intend to run clustered applications with dynamic transaction routing in an IBM sysplex environment.

Run a job similar to the following example to update the CFRM administrative policy data in the COUPLE dataset:

```
//STEP20 EXEC PGM=IXCMIAPU
//SYSPRINT DD SYSOUT=A
//SYSABEND DD SYSOUT=A
//SYSIN DD *
DATA TYPE(CFRM) REPORT(YES)
DEFINE POLICY NAME(POLICY1) REPLACE(YES)
CF NAME(CF)
TYPE(009674)
MFG(IBM)
PLANT(02)
SEQUENCE(000000040101)
PARTITION(1)
CPCID(00)
DUMPSPACE(2000)
.
.
STRUCTURE NAME(XXXXXXXXXX)
SIZE(500)
INITSIZE(10)
PREFLIST(
```

—where

Parameter	Is the . . .
STRUCTURE NAME	Cache structure name, which must match the name specified in the the Adabas System Coordinator group definition.
SIZE	Maximum size for the cache structure in the coupling facility. Calculate this by determining the maximum number of concurrent users of the clustered applications (CICS, IMS, etc) that will use this coupling facility. Each user will require approximately 256 bytes of cache memory.
INITSIZE	Initial size for the cache structure in the coupling facility. Use this together with the SIZE parameter to manage the difference between the average and maximum user sessions to be supported in coupling facility memory.

Step 9: Create Startup Procedures for the System Coordinator Daemon(s)

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

```
//SYSCO1 PROC
//*-----*
//* System Coordinator SYSCO Vv.r.s. STARTUP *
//*-----*
//SYSCO1 EXEC PGM=SYSCO,REGION=0M,TIME=1440
//STEPLIB DD DISP=SHR,DSN=SAG.CORvrs.LOAD
// DD DISP=SHR,DSN=ADABAS.Vvrs.LOAD
//SYSUDUMP DD SYSOUT=*
//CORDUMP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//DDPRINT DD SYSOUT=*
//DDCARD DD DISP=SHR,DSN=SAG.CORvrs.SRCE(CORCNTL)
//*
```

The file referenced by the DDCARD statement should contain the following control statements:

```
PRODUCT=CAS

PRODUCT=AFP (If FASTABM is to be run)

FORCE=NO
```

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