z/VSE Installation

- The Installation Tape

- Installation Overview

- System Programming Considerations

- Installation Procedure

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 data sets in the sequence indicated in the report:

Data Set	Contents
COR*vrs*.LIBR	Source, macro, object, and load modules
COR*vrs*.INPL	SYSCOR INPL file
COR*vrs*.ERRN	SYSCOR error messages file
COR*vrs*.SYSF	Base configuration file

where *vrs* in data set 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	Required	Job Name
1	Restore the libraries from the installation tape	Yes	
2	Load (INPL) the SYSCOR application	Yes	CORI061.J
3	Load the configuration file and prepare SYSCOR	Yes	CORI050.J
4	Assemble the configuration module	Yes	CORI055.J
5	Add the Adabas System Coordinator to the Adabas clients	Yes	CORI060.J, CORI080x.J (for Version 8 Adalnks) CORI0607.J, CORI070x.J (for Version 7 Adalnks)
6	Define the Adabas System Coordinator group and members	Required if a COR daemon is to be used	
7	Install the CICS node error program (optional)	Optional	
8	Create startup procedures for the Adabas System Coordinator daemon(s)	Required if a COR daemon is to be used	
9	Define runtime controls for Client jobs and TP systems	Yes	

System Programming Considerations

The Adabas System Coordinator daemon must execute at a higher priority than the TP monitors and jobs it coordinates.

Corrections for the Adabas System Coordinator will be distributed as zaps which are applied using the MSHP CORRECT facility. Before applying corrections you must define Adabas System Coordinator to MSHP with the MSHP ARCHIVE command. Here is a sample job to do this:

```
// JOB ARCHIVE ARCHIVE COORDINATOR
// OPTION LOG
// EXEC MSHP
ARCHIVE CORvrs
COMPRISES 9001-COR-00
RESOLVES 'SOFTWARE AG - SYSTEM CORDINATOR Vv.r'
ARCHIVE 9001-COR-00-vrs
RESIDENCE PRODUCT=CORvrs -
PRODUCTION=saglib.CORvrs -
GENERATION=saglib.CORvrs
/*
/&
```

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 the following sample JCS to restore the Adabas System Coordinator library. Modify the following variables to reflect the standards at your site:

Variable	Is the...
cuu	tape unit number
tttttt	volume serial number of the installation tape
vrs	version, revision, and system maintenance level
xx	file spacing information; see the Report of Tape Creation

```
* $$ JOB JNM=LIBREST,CLASS=O,DISP=D
* $$ LST CLASS=A,DISP=H
// JOB LIBREST
// ASSGN SYS006,cuu,VOL=tttttt
// ASSGN SYS005,IGN
// MTC REW,SYS006
// MTC FSF,SYS006,xx
// EXEC LIBR
RESTORE S=SAGLIB.CORvrs:SAGLIB.CORvrs -
TAPE=SYS006 TL=tttttt LIST=Y
/*
// MTC REW,SYS006
/&
* $$ EOJ
```

Note:
The library contains the kernel phases CORKRN and CASKRN, which must be available to the various databases, TP monitors, and batch jobs that will use Adabas System Coordinator.

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

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

Step 3: 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.J. 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 tape using the standard Adabas load utility ADALOD. Use sample job CORI050.J. 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 SYSMP*vrs* (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 SYSMP*vrs*.

3. Use the following parameter to define the Natural session where SYSCOR is to be used:

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

   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 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
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 RETRY= 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: • AVI -Adabas Vista • AFP - Adabas Fastpath • ATM - Adabas Transaction Manager If any critical product is not functioning correctly, all Adabas requests will be rejected with response code 101, subcode 59.
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=	RETRY 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. RETRY only takes effect if SF148=WAIT has not been specified.

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

Use sample job CORI055.J.

Step 5: Add the System Coordinator to the Adabas Client (Jobs I060, I070x, I080x)

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

The stub modules are called CORS1*n* where *n* is a subsystem suffix.

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

Adabas System Coordinator is compatible with Version 8 and Version 7 link modules. When using Version 8 link modules you must re-assemble the LNKGBLS table, specifying the parameter COR=YES in the LGBLSET macro.

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
Batch	CORS11	CORI060.J (Version 8 link), CORI0607.J (Version 7 Link)
Com-plete	CORS12	CORI080C.J (Version 8 link), CORI070C.J (Version 7 Link)
CICS Command Level	CORS13	CORI080B.J (Version 8 link), CORI070B.J (Version 7 Link) **Note:** If you are installing under CICS, and 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. **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.
Triggers and Stored Procedures	CORS18	CORI080S.J (Version 8 link), CORI070S.J (Version 7 Link)

Step 6: Define a System Coordinator Group

Define a 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. It is not an essential component, but it does improve efficiency when reclaiming memory after user sessions terminate.

CORNEP is started (with Transaction ID ANEP) from the real CICS node error program DFHZNEP. The source for DFHZNEP is supplied on the installation tape and can be installed without change. If you have your own DFHZNEP program already installed, you will need to implement the code for starting CORNEP into your own DFHZNEP.

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 (Version 7 link module) or LGBLSET (Version 8 link module) macro.

Note:
CORNEP must be called only from DFHZNEP.

Step 8: Create Startup Procedures for the Adabas System Coordinator Daemon(s)

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

```
* ££ JOB JNM=SYSCO1,CLASS=5,DISP=D
* ££ LST CLASS=A,DISP=D
* ******************************************************
// JOB SYSCO1
* ******************************************************
* JOB TO RUN SYSCO: THE SYSTEM COORDINATOR *
* ******************************************************
// OPTION NOSYSDUMP

// LIBDEF PHASE,SEARCH=(SAGLIB.CORvrs,SAGLIB.ADAvrs)
// EXEC SYSCO,SIZE=AUTO
PRODUCT=CAS
FORCE=NO
/*
* *********** JOB END SYSC01
/&
* ££ EOJ
```

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

Step 9: 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).