

Installing Adabas Transaction Manager for BS2000

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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.

The installation medium contains the following data sets in the sequence indicated in the report:

Data Set	Contents
ATM vrs .JOBS	Installation jobs, utility jobs
ATM vrs .MOD	Executable modules
ATM vrs .INPL	Online Services application
ATM vrs .ERRN	Online Services messages

where vrs is the version, revision, and system maintenance level of the product.

Installation Checklist

The Adabas System Coordinator must be installed prior to the installation of Adabas Transaction Manager. See the Adabas System Coordinator documentation for detailed information.

Once the required System Coordinator components have been installed, you can proceed to install Adabas Transaction Manager. The following checklist identifies the steps necessary to complete the installation:

Step	Description
1	Copy the Medium Contents to a BS2000/OSD Disk
2	Prepare SYSATM
3	Enable the client process
4	Enable the database process for two-phase commit
5	Prepare the recovery file
6	Enable the Transaction Manager to run as a Service within Adabas System Coordinator daemons
7	Verify the installation

Installation Procedure

Following is the general Adabas Transaction Manager 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: Copy the Medium Contents to a BS2000/OSD Disk

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

1. Copy the library SRVnnn.LIB from medium to disk.

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

The library SRVnnn.LIB is stored on the medium as the sequential file SRVnnn.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=9), 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 SRV*nnn*.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.

Step 2: Prepare SYSATM

The Adabas Transaction Manager Online Services (SYSATM) objects are delivered on the Adabas Transaction Manager distribution medium.

To prepare SYSATM:

1. Use your everyday Natural INPL job to load the administration tool (Natural application SYSATM) and associated message texts into your Natural system. For reference a sample Natural INPL job called CORI061 can be found with the sibling System Coordinator product in the jobs distribution file. The INPL job's work file 1 must reference the distribution file ATM*vrs*.INPL and work file 2 must reference ATM*vrs*.ERRN.

Note:

If you use Natural Security in this system, define the libraries SYSATM and SYSMT*vrs* (where *vrs* is the level you are installing, for example 821) and protect as you require. You may define MENU as the startup transaction for SYSATM. However, you must not define a startup transaction for SYSMT*vrs*.

2. Use the following parameter to define the Natural session where SYSATM is to be used:

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

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

Alternatively, assemble the Natural parameter module with

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

Step 3: Enable the Client Process

To enable the Adabas Transaction Manager client process:

1. For the Adabas System Coordinator:
 - make the modified Adabas link module available (BLSLIBnn);
 - make the generated configuration module CORCFG available (BLSLIBnn); and
 - make the Adabas System Coordinator load library available (BLSLIBnn).
2. For Adabas Transaction Manager:
 - make the Adabas Transaction Manager load library available (BLSLIBnn).
3. For each Client:
 - refer to the section Client Runtime Controls for details on how to define the necessary runtime controls to enable a client for transaction management.

Step 4: Enable the Database Process for Two-Phase Commit

 **To enable the Adabas Transaction Manager database process for two-phase commit:**

1. For the Adabas System Coordinator:
 - make the Adabas System Coordinator load library available (BLSLIBnn).
2. For Adabas Transaction Manager:
 - set the Adabas parameter `ADARUN DTP=RM`.
 - include a DD statement for DDWORKR4.

Ensure this identifies a suitable WORK dataset which is allocated and formatted in the same way as the main WORK data set. In the case of a Cluster Services or Parallel Services database, the WORK 4 dataset is shared by all members of the cluster.

Important:

For details about the WORK4 dataset, including information about sizing, please refer to the Adabas documentation, under *Defining an Adabas Database*, which is part of *Database Maintenance Tasks* in the section *DBA Tasks*.

- make the Adabas Transaction Manager load library available (BLSLIBnn).

Note:

An unmodified ADALNK must be available to the database in preference to the ADALNK created during the installation of the Adabas System Coordinator.

Step 5: Prepare the recovery file

All recovery information is maintained in a single direct access file defined to the Adabas System Coordinator daemon where the transaction manager service runs. The recovery file is shared by all transaction managers operating in the same Adabas System Coordinator group. For reference a sample formatting job called CORI040 can be found with the sibling System Coordinator product in the jobs distribution file. Change the parameters in this sample job with the following considerations:

"dsname" (file name)

Specify the file name, for example SAG.ATMvrs.cor-group-name.TMRFI


"nn" (file size in cylinders) and "@@@" (device type)

The minimum block size of the file must be 4096 bytes, and we recommend a minimum size of 13,500 blocks for each transaction manager sharing the file. With reference to the Adabas Device Types and Block sizes section of the DBA Reference Summary, calculate how many cylinders are required for this many blocks based on the device type(s) available at your site. For example, when formatting a file assigned as a WORK component (as defined in the sample job), 13,500 blocks equates to 100 cylinders (nn) when using a 3390 device type ("@@@").

Note:

It is very important that all transaction managers operating within the same Adabas System Coordinator group **share the same recovery file**.

Step 6: Enable the Transaction Manager to run as a Service within Adabas System Coordinator Daemons

 **To enable the Transaction Manager to run as a Service within Adabas System Coordinator daemons:**

1. set PRODUCT=ATM in the parameter input of each System Coordinator daemon within which you wish to run the Transaction Manager.
2. ensure the TM controls are correctly defined for each System Coordinator daemon within which you wish to run the Transaction Manager. See the section Parameters for a description of all TM controls which affect Transaction Manager operation. These TM controls are maintained using an Adabas Transaction Manager administrative function within Adabas System Coordinator online administration.
3. make the Adabas Transaction Manager load library available (BLSLIBnn).
4. refer to the section Prerequisites...Adabas System Coordinator for information on the System Coordinator daemon dataset definitions necessary for the correct operation of the Transaction Manager.

Step 7: Verify the Installation

Use the procedure described in section Verifying the Installation to ensure that the installation has been successful.