Upgrading from Earlier Versions

Upgrading from Version 1.2

This section describes actions which must be taken when upgrading from Adabas Transaction Manager version 1.2.

Recovery Database

The FDTs of the PRR and STJ files in the Adabas Transaction Manager's recovery database changed with version 7.4. Moreover, these files must reside in the ATM daemon's own database at version 7.5. It is therefore necessary to load new files in the ATM daemon's database, as described in the installation instructions, once the version 1.2 daemon has been closed down for the last time.

When you upgrade a production Adabas Transaction Manager system, you should ensure that there are no global transactions in flight when the version 1.2 daemon is closed down for the last time; that is, the daemon must be closed down when there is no vital recovery information present in the recovery database. You should also check, using Online Services, that there is no useful information in the STJ file before you delete or discard it.

Next, load the daemon's database files, as described in the installation instructions. Remember to remove the ATM daemon's ADARUN `TMDBID` parameter.

When you first start the version 7.5 daemon using the new PRR and STJ files, the daemon's session number will revert to 1.

ET Data Management

A new file, the `ET` data file, is required from version 7.4, if Adabas Transaction Manager is to manage the installation's `ET` data.

If you used the ADARUN parameter setting `TMETDATA=ATM` for your version 1.2 installation, the Adabas Transaction Manager daemon database or the recovery database will contain the `ET` data of your applications. Versions 7.4 and 7.5 no longer store `ET` data in the checkpoint file; therefore, before running your applications with version 7.5, you might need to move the existing `ET` data from the checkpoint file of the Adabas Transaction Manager daemon or recovery database to the new `ET` data file (file 8) in the version 7.5 daemon's database. See Copy ET Data for more information.

Parameter Override Routine (PRMORID)

If you have Natural applications that use ATM's parameter override subroutine (PRMORID), be sure to `STOW` them using the PRMORID subroutine that is supplied with version 7.5.

Upgrading Online Services

The Online Services application (SYSATM) delivered with Adabas Transaction Manager version 7.5 can be installed alongside the version 1.2 equivalent. The installation process automatically loads the application into a library with a version-dependent name. The MENU program automatically invokes the most recent installed version, but a function key (PF12) can be used to switch to another installed version. If you plan to run versions 1.2 and 7.5 in parallel, use this feature to ensure that the correct version of SYSATM is used in conjunction with a particular ATM daemon or application environment.

Upgrading Daemons, Resource Managers and Client Jobs

ATM 7.5 provides an interoperability feature which makes it possible for you to upgrade one node at a time. This feature can be used if your installation runs ATM 1.2, with ATM daemons communicating with each other across Entire Net-Work connections. To take advantage of this feature, follow the steps described below.

Before upgrading any version 1.2 node, it is strongly recommended that you carry out a test installation of ATM 7.5 in a clean test environment, and verify that it operates correctly. Then you can plan to upgrade existing ATM environments according to the following strategy.

- Step 1: Implement an Adabas System Coordinator Daemon in Every Node
- Step 2: Prepare to Execute Version 7.5 on One Node
- Step 3: Upgrade the Node to Version 7.5
- Step 4: Upgrade Remaining Nodes to Version 7.5

Step 1: Implement an Adabas System Coordinator Daemon in Every Node

ATM 7.5 uses the services of the Adabas System Coordinator (SYSCO) daemon to learn about other ATM daemons in the network. By implementing a system coordinator group, consisting of a SYSCO daemon on each node where an ATM 1.2 or ATM 7.5 daemon runs, you make it possible for an ATM 7.5 daemon in any node to become aware of ATM 1.2 daemons and ATM 7.5 daemons in other nodes. This process takes place without any direct interaction between the ATM 1.2 daemon and its local SYSCO daemon.

For information about the Adabas System Coordinator, system coordinator groups and SYSCO daemons, please refer to the Adabas System Coordinator documentation, and also to the section Adabas Transaction Manager Daemons and Adabas System Coordinator Groups.

Step 2: Prepare to Execute Version 7.5 on One Node

Follow the detailed instructions in the Release Notes and in the Adabas Transaction Manager documentation for installing ATM 7.5. Prepare, so that you are ready to run:

- the ATM daemon at version 7.5

- DTP=RM databases, either using Adabas version 7.4 or using Adabas version 7.1 in compatibility mode (see section Using ATM with Adabas Version 7.1), with ATM 7.5
- application jobs and TP systems using Adabas System Coordinator version 7.4 and using the ATM 7.5 proxy.

Note:
You should not attempt to run an ATM 7.5 daemon and an ATM 1.2 daemon under the same Adabas ID table (SVC) at the same time.

Step 3: Upgrade the Node to Version 7.5

A node must be upgraded to version 7.5 in its entirety; it is not possible to mix version 1.2 and version 7.5 within the local scope of a single Adabas router. Here is a summary of the steps you will need to take:

- close down application jobs and TP systems in the local system
- ensure that there are no incomplete transactions or branches in the local ATM daemon's domain
- close down the DTP=RM databases in the local system
- close down the version 1.2 daemon and its recovery database
- ensure that the local SYSCO daemon is executing, and that there is a SYSCO daemon executing on all other connected nodes in the network where ATM daemons execute
- start the version 7.5 daemon
- start the DTP=RM databases, running either Adabas version 7.4, or Adabas version 7.1 in compatibility mode, using the ATM 7.5 load library
- start application jobs and TP systems, using ATM 7.5.

Step 4: Upgrade Remaining Nodes to Version 7.5

Repeat steps 2 and 3 for each of the remaining nodes in the network.

Upgrading from Version 7.4

This section describes actions which must be taken when upgrading from Adabas Transaction Manager version 7.4.

- Recovery Database
- Upgrading Online Services
- Parameter Override Routine (PRMORID)
- Upgrading Daemons, Resource Managers and Client Jobs
- Upgrading Job Parameters

Recovery Database

With version 7.5 of Adabas Transaction Manager, the PRR, STJ and ET data files must reside in the Adabas Transaction Manager daemon's own database, rather than in a separate recovery database. If you used a separate recovery database with ATM 7.4, you can simply unload these files from your recovery database, and load them into the daemon's database, using the same file numbers. Check that the ATM daemon's ADARUN TMDBID parameter specifies (or defaults to) the ATM daemon's database.

Upgrading Online Services

The Online Services application (SYSATM) delivered with Adabas Transaction Manager version 7.5 can be installed alongside the version 7.4 equivalent. The installation process automatically loads the application into a library with a version-dependent name. The MENU program automatically invokes the most recent installed version, but a function key (PF12) can be used to switch to another installed version. If you plan to run versions 7.4 and 7.5 in parallel, use this feature to ensure that the correct version of SYSATM is used in conjunction with a particular ATM daemon or application environment.

Parameter Override Routine (PRMORID)

If you have Natural applications that use ATM's parameter override subroutine (PRMORID), be sure to STOW them using the PRMORID subroutine that is supplied with version 7.5.

Upgrading Daemons, Resource Managers and Client Jobs

Once the Online Services application has been upgraded to version 7.5, you can begin to upgrade other components. The following sequence is recommended:

- Upgrade ATM daemons from version 7.4 to version 7.5. It is not necessary to upgrade all daemons at the same time, since the two versions of daemon are capable of interacting fully.
- Upgrade Resource Managers. Replace the ATM 7.4 load library with the version 7.5 library. It is not necessary to upgrade all resource managers at the same time. Note that the parameter setting DTP=ET is not supported by ATM 7.5, so any databases that run with this setting should be changed to run either with DTP=NO or with DTP=RM. Before converting a cluster database to ATM 7.5, refer to the section Configuration.
- Upgrade client jobs and TP systems. Replace the version 7.4 ATM load library with the version 7.5 library.

Upgrading Job Parameters

From version 7.5, every client job or TP system that uses Adabas Transaction Manager must be associated with an Adabas System Coordinator group. This association is made by means of a new job parameter. When you create new job parameters using version 7.5 Online Services, you will be forced to provide a value for this parameter. However, job parameters that were created using version 7.4 Online Services must be modified, using version 7.5 Online Services, so that a System Coordinator Group name can be provided. If a job's ATM job parameters specify that ATM processing is required, but no System Coordinator Group name is present, a warning message will be issued, the ATM proxy will fail to initialize, and ATM will take no part in processing the job.