

# Adabas Transaction Manager Components

- ATM Transaction Manager
  - Adabas Transaction Manager Client Proxy
  - Recovery Database
  - Administration
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## ATM Transaction Manager

The Adabas Transaction Manager component which contains all logic for managing the two-phase commit process for global transactions is referred to as ATM transaction manager, the Transaction Manager, the TM, or simply, the Manager.

An ATM transaction manager is required for each instance of the operating system. Each Manager executes in its own address space as a special kind of Adabas nucleus. An ATM transaction manager can interact with peer ATM transaction managers in other systems to provide global transaction integrity across systems. Adabas Transaction Manager can also interact with the CICS Syncpoint Manager and with RRMS, enabling Adabas databases to participate in global transactions that affect other database or file systems. The Transaction Manager is invoked transparently on behalf of applications.

ADARUN parameters are used to control processing of the Transaction Manager. These parameters are described in the section Parameters.

For information on execution of the Transaction Manager, see section Operations.

Execution of an ATM transaction manager requires that an associated Adabas System Coordinator daemon be active and available. For information about the Adabas System Coordinator, refer to the *Adabas System Coordinator* documentation. For information about configuring ATM Transaction Managers and Adabas System Coordinator for different environments, see the section Configuration.

## Adabas Transaction Manager Client Proxy

The transaction manager client proxy represents the application in two-phase commit processing. Executing as a subroutine of the Adabas link module and functioning as a transparent application stub, the client proxy invokes the ATM transaction manager on behalf of the application and responds to the application according to the result.

A job or TP system that requires ATM services must execute alongside an ATM transaction manager and an Adabas System Coordinator daemon, executing in the same system and under the same Adabas SVC or ID table. For information about the Adabas System Coordinator, refer to the *Adabas System Coordinator* documentation.

For information on client controls, which control the operation of the client proxy, see the section Parameters.

For information on client proxy execution, see the section Operations.

## Recovery Database

The ATM transaction manager uses database files to store vital recovery information about incomplete transactions, and for other purposes. With some earlier versions of Adabas Transaction Manager, it was strongly recommended that these files be defined in a separate database, which was referred to as the recovery database. These files must now reside in the ATM transaction manager's own database. There is no longer any need for a separate database to contain these files.

For more information see section Restart and Recovery.

## Administration

- Online Services
- Operator Commands
- Diagnostic Log

### Online Services

Adabas Transaction Manager Online Services can be used to perform the following activities:

- set the parameters that control the way that Adabas Transaction Manager processes application jobs,
- list client sessions and global transactions,
- display detailed status information,
- view the status of Adabas Transaction Manager throughout the network,
- display runtime statistics for any ATM transaction manager in the network.

Online Services can also be used to force selectively the termination of one or more transactions. In an emergency, a transaction can be flushed from the system and its resources released without regard for transaction integrity. If this happens, all available details of the transaction are stored in the Transaction Manager's database and can be printed.

For more information see Online Services.

### Operator Commands

Operator commands are provided to control Adabas Transaction Manager operation. See section Operations for more information.

### Diagnostic Log

An ATM transaction manager can produce a diagnostic log that uses a dual logging system. If a log file becomes full, the Manager closes that log file and switches to the other one. Logs may also be switched by using the operator command `TM FEOFLOG`. The JOBS library contains the sample job `ATMLPRNT` that can be used to produce a formatted report of the diagnostic log.