TM Controls

This section describes the TM Controls used for Adabas Transaction Manager.

- Maintenance

- Descriptions

Maintenance

TM controls are set using the daemon maintenance (within group) function in System Coordinator administration. For more information refer to How to maintain TM controls.

Descriptions

- Distributed transaction timeout

- Transaction recovery

- Enforce ADARUN DTP=RM

- Open distributed transaction (system)

- Open distributed transaction (system)…Concurrency

- ET data storage location

Distributed transaction timeout

Parameter Type	Use	Possible Values	Default
TM runtime	Time limit for a distributed transaction.	1 - 16777215	720

When the limit is exceeded, the TM component backs out the transaction. The next time the client issues a transactional Adabas command, a response code 9 (ADARSP009) is returned; prior to that point pending response codes can be viewed online. Refer to Pending Response Codes in the *Adabas Transaction Manager Programmers Guide*.

Note:
It is strongly recommended this distributed transaction timeout setting is lower than the ADARUN TT settings for all Adabas that are to be involved in distributed transactions, otherwise unpredictable results can occur.

This parameter value can be overridden by using the client runtime control of the same name.

Transaction recovery

Parameter Type	Use	Possible Values	Default
TM runtime	Recovery processing for transactions at TM startup.	NORMAL | FORCE | FORCEALL	NORMAL

Possible values:

Value	Description
NORMAL	Any incomplete transactions remain in an incomplete state until such time as they can be completed.
FORCE	Details of every incomplete transaction that has its root local to this TM are transferred to the suspect transaction journal (STJ). The details of these transactions are deleted from the TM's recovery file, the originating clients are closed, and any related internal resources are freed. Adabas Transaction Manager can no longer guarantee integrity for such transactions.
FORCEALL	Details of all incomplete transactions and transaction branches are transferred to the suspect transaction journal (STJ). The details of these transactions are deleted from the TM's recovery file, the originating clients are closed, and any related internal resources are freed. Adabas Transaction Manager can no longer guarantee integrity for such transactions.

Enforce ADARUN DTP=RM

Parameter Type	Use	Possible Values	Default
TM runtime	Make sure all databases in distributed transactions are running with ADARUN DTP=RM, and are successfully connected to the TM.	YES | NO	NO

Possible values:

Value	Description
YES	ADARUN DTP=RM is enforced. Response code 240 sub-code 188 is returned to the client if RM is not in force for any modified database in a distributed transaction.
NO	ADARUN DTP=RM is not enforced.

Open distributed transaction (system)

Parameter Type	Use	Possible Values	Default
TM runtime	Indicates whether or not the TM is to interoperate with other open vendors. **Note:** Interoperation with TP frameworks such as the CICS Syncpoint Manager is still allowed at the client level whether this setting is YES or NO.	NO | YES	NO

Possible values:

Value	Description
NO	The TM will not interoperate with any other open vendor at the system level.
YES	z/OS only. The TM registers with the IBM Recoverable Resource Management Services so that it can participate in transactions that involve other RRMS-enabled resource managers. The current version of Adabas Transaction Manager offers participation in RRMS-coordinated two-phase commit for single-user, single-TCB batch applications and for applications running under Com-plete or IMS TM.

Open distributed transaction (system)…Concurrency

Parameter Type	Use	Possible Values	Default
TM runtime	The maximum concurrent number of open vendor requests to be processed by the TM.	10 - 32767	100

This control is only applicable when Open distributed transaction (system) is set to YES and should reflect the anticipated number of distributed transactions that may reach a syncpoint at the same time. You may specify a higher value without incurring any performance degradation, and specifying too small a value may cause backouts resulting in response code 9. You can use Online Services to monitor usage of this control.

ET data storage location

Parameter Type	Use	Possible Values	Default
TM runtime	The location where ET data is to be stored.	TM | RM	RM

Possible values:

Value	Description
TM	ET data is always stored in and read from the TM recovery file, without regard to the database to which the command was issued. ● ET data does not belong to one database; ● There is one copy of a client's ET data in a system; ● Eliminates confusion resulting from the existence of different ET data in different databases under the same ETID; ● Overrides the Natural ETDB parameter; ● Should not be used if the client runtime control Continuous operation mode will be set to YES or FORCE for any client environment in which ET data is stored or read.
RM	ET data is stored during the commit process in all changed databases that are running with DTP=RM ET data that is stored by an ET or CL command is always stored in the database to which the command was issued, whether or not that database runs with DTP=RM. If the database runs with DTP=NO, the ET data is written to the database only after any open distributed transaction has been committed. ET data is always read from the database to which the command was issued. ● Treats ET data as belonging to a database or a local database transaction rather than to a distributed transaction; ● A client's ET data might exist in several databases in a system; ● A client can have several different ET data values in different databases at the same time; ● 3GL application programs using ET data must have knowledge of the database that holds ET data for a given transaction; ● Honors the Natural ETDB parameter.

This parameter value can be overridden by using the client runtime control of the same name.

Notes:

1. The recommended setting for this control is "RM". This setting eliminates the danger associated with running in continuous operation mode when the TM is unavailable.
2. See also the section entitled ET data and ET identity processing in your *Adabas Transaction Manager Programmers Guide* documentation.