

Adabas Databases

The ADARUN DTP parameter indicates whether or not a database is capable of full participation in Distributed Transaction Processing. Normally, when a database is started with DTP=RM, it is immediately “signed on” to the Transaction Manager for Distributed Transaction Processing. This means that the Transaction Manager uses two-phase commit protocol to guarantee the integrity of distributed transactions that modify this database.

There might be occasions, however, when the process of “signing on” for DTP cannot be completed immediately, perhaps because of a planned or unplanned outage of another component that is itself going through startup processing at the time. During this transient period, Adabas Transaction Manager ensures uninterrupted operation by treating databases that have not signed on for DTP as if they were running with DTP=NO. In these circumstances, a commit operation is applied to all “unsigned on” databases in turn immediately after DTP commit has been completed for all databases in the transaction that are signed on, by means of serial ET commands. At some later point this transient “not signed on” period ends because the sign-on eventually succeeds, Adabas Transaction Manager recognizes the change, and from that point the database is treated as a DTP=RM database.

In a multi-system environment, it is possible to run completely separate System Coordinator groups in the separate systems. For example, a “production” group might run on system A, while a “test” group might run on system B. The DTP=RM databases used by the “production” environment would be executing outside the scope of the “test” System Coordinator group. If an application in the “test” environment modifies a DTP=RM database in the “production” environment, Adabas Transaction Manager recognizes that the database is executing outside the scope of the current System Coordinator group, and it manages the database (for the “test” client) as if it were running with DTP=NO.