Adabas Cluster Services and Other Software AG Products

This section describes the interaction of Adabas Cluster Services with other Software AG products.

The chapter covers the following topics:

- Adabas Online System

- Adabas Caching Facility

- Adabas Delta Save Facility

- Adabas Fastpath

- Adabas Review

- Adabas Transaction Manager

- Adabas Vista

- Adabas SAF Security

Adabas Online System

Adabas Online System communicates with all nuclei within the Adabas cluster and with all clusters in the sysplex environment. It includes functions related to Adabas Cluster Services.

Adabas Caching Facility

Adabas Caching Facility can provide a performance boost to the Adabas cluster. It augments the Adabas buffer manager by reducing the number of read "execute channel programs" (EXCPs) to the database so that the available operating system facilities can be used without monopolizing valuable virtual memory resources.

Adabas Caching Facility is required if you want to take advantage of 64-bit virtual storage in an Adabas environment.

Note:
Write EXCPs are always issued to maintain the integrity of the database.

Adabas Delta Save Facility

Software AG's Adabas Delta Save Facility (DSF) offers significant enhancements to ADASAV utility processing by backing up and restoring only the changed (delta) portions of Adabas databases. It supports the Adabas Cluster Services environment.

DSF is intended for Adabas sites with one or more large, heavily updated databases that need to be available most of the time. Especially for sites where the volume of data changed on a day-to-day basis is considerably smaller than the total database volume, DSF provides for

- more frequent saves without interrupting database availability;

- enhanced "24 x 7 x 52" operation;

- full offline saving in parallel with the active database; and

- shorter REGENERATE duration during recovery.

Adabas Fastpath

Whenever possible, Adabas Fastpath reduces CPU consumption and increases throughput for Adabas systems by processing Adabas calls to completion in the client process. Database processing is thus avoided and capacity is increased for the whole operation.

Fastpath optimizes two types of database calls: direct access and sequential access. The results of direct access calls to the database are saved in a cache and repeat calls are satisfied from the cache rather than directly from the database. Read-ahead optimization routines are applied to sequences of commands to reduce redundant activity and thus accelerate the sequence.

Adabas Fastpath seamlessly optimizes database processing across multiple nuclei in one or more operating system images.

Adabas Review

Adabas Review monitors the performance of Adabas environments and the applications executing within them. You can use information retrieved about Adabas usage when tuning application programs to achieve maximum performance with minimal resources.

Adabas Review supports Adabas Cluster Services version 7.4.

Adabas Transaction Manager

The Adabas Transaction Manager (ATM), a selectable unit of Adabas, is a server for coordinating "distributed transaction processing" (DTP) in distributed Adabas environments. It manages "global" transactions that are distributed across multiple Adabas databases by coordinating changes to the databases in a seamless, integrated way, using a "two-phase commit" protocol when necessary.

At any time, ATM can account for in-flight transactions, suspect transactions, participating databases, and more.

ATM addresses two basic needs of the enterprise object revolution:

- the need to deliver industrial strength enterprise objects for widespread commercial use in mainstream, critical business systems.

- the need to spread the masses of data that Adabas customers manage more evenly across the computer(s) and organization.

ATM includes an online administration system based on Natural and available through Adabas Online System.

ATM provides limited support for Adabas Cluster Services. For more information, see the *Adabas Transaction Manager Version 7.4.2 Release Notes*.

Adabas Vista

Adabas Vista is used to partition an Adabas file into multiple, separate files, each containing a part of the original larger whole. Partitioning makes it possible to distribute a file across multiple volumes or computers based on a criterion such as region or date. Adabas Vista is also used to translate Adabas database and file numbers, which allows an application to remain independent of the underlying physical layer.

Adabas Vista supports Adabas Cluster Services in sysplex and CICSplex environments.

Adabas SAF Security

Adabas SAF Security enhances the scope of standard security packages based on the System Authorization Facility (SAF) such as RACF, CA-ACF2, and CA-Top Secret to encompass Adabas resources. It integrates Adabas into a central security repository and enables you to derive maximum benefit from your investment in that repository.

Adabas SAF Security provides protection for Adabas resources in sysplex environments.