

Adabas System Coordinator Components

This section describes the main Adabas System Coordinator components:

- Client and Server Components
 - Daemon Component
 - Administration Component
 - Configuration File
 - Node Error Program
 - Plug-in Service Routine
-

Client and Server Components

The Adabas System Coordinator client component is bound with the Adabas client link module during installation for use in batch, CICS, z/VM, UTM, etc. It functions as the interface between the link module and the installed Adabas options. It provides a common execution environment under which all options run, and a common set of system-dependent services that are used by all options.

The server component, ADAPOP, is loaded by the Adabas server when required. As the Adabas database interface component, it monitors various database functions and makes them known to the Adabas options that may have an interest in them. Like the client component, the server component provides a common execution environment under which all options run.

The common execution environment and common services are packaged in a single kernel module CORKRN that is used by both the client and server components.

The client and server components must be installed if any of the following Adabas options are to be used:

- Adabas Fastpath Version 8.1
- Adabas Vista Version 8.1
- Adabas SAF Security Version 8.1 (only requires the server component)
- Adabas Transaction Manager Version 8.1

Daemon Component

The Adabas System Coordinator daemon SYSCO is used by most installations, especially those using clustered applications, databases, or operating systems such as the IBM sysplex environment. The daemon component executes various services for the Adabas options such as the Adabas Fastpath Asynchronous Buffer Manager and the Clustered Application Service (CAS). The daemon component also uses the common services packaged in the kernel module CORKRN.

Administration Component

The Adabas System Coordinator Online Services tool (SYSCOR) is a Natural application which is used to administer the Adabas System Coordinator and the associated Clustered Application Service (CAS) by

- entering runtime controls for Adabas System Coordinator jobs and groups; and
- viewing active runtime information.

Configuration File

Runtime controls are maintained in a configuration file that is held in an Adabas database. The configuration file is shared with Adabas Fastpath, Adabas Vista and Adabas Transaction Manager.

The configuration file contains:

- Runtime controls for client jobs and TP systems using Adabas System Coordinator and/or Adabas Fastpath, Vista, and Transaction Manager executing in client jobs and TP systems
- Runtime controls for the Adabas System Coordinator daemon

The configuration file is now a vital part of the runtime operation. As such it can become a single point of failure. Version 8.1 now allows you to nominate a primary and an alternate configuration file. Each session will attempt to use the primary and if it is unavailable the alternate will be used if it is nominated. Once a configuration file has been identified for a session that file will continue to be the primary file for that session until it becomes unavailable, and then the other file will be used. Consequently, over time different sessions may be using different files at the same time until you forcibly cause all sessions to switchover by making one or the other unavailable for a long period. If an alternate Configuration file approach is used then both files must be available at both Coordinator daemon startup and shutdown. This is necessary because the same recovery/restart information must be placed in both files so they do not get out of step.

Node Error Program

The node error program CORNEP is used by sites running CICS command-level applications in CICS/ESA, CICS Transaction Server for z/OS, CICS for VSE/ESA, or CICS Transaction Server for VSE/ESA.

CORNEP is not an essential component, but it does provide efficient memory reclamation for user sessions that terminate without releasing precious memory resources.

Important:

Use of CORNEP requires modification of your installation CICS DFHZNEP program. CORNEP must only be called from DFHZNEP.

Plug-in Service Routine

The Adabas error handling and message buffering facility helps implement 24*7 operations by analyzing and recovering from certain types of errors automatically with little or no manual intervention. It also generates additional information so that the error can be diagnosed. See the *Adabas DBA* documentation

for more information.

To work within this feature, the Adabas System Coordinator delivers a plug-in service routine PINCOR, which is established automatically when the Adabas System Coordinator server component (ADAPOP) initializes at nucleus startup.

If a program interrupt occurs in the Adabas System Coordinator server component, control is passed to PINCOR, which formats and prints the main memory areas used by the component.

These diagnostics are written to the DDPRINT dataset with the following title:

COMMON RUNTIME - memory-area-name : SNAP BY SMGT

PINCOR then returns control to the error handling and message buffering facility so that Adabas can terminate abnormally.