Add-On Product Support for Adabas 8

This chapter describes Version 8 plans for the following add-on products.

- General Compatibility Information of Client-Based Add-On Products

- Adabas System Coordinator Version 8 Support

- Adabas Fastpath Version 8 Support

- Adabas SAF Security Version 8 Support

- Adabas Transaction Manager Version 8 Support

- Adabas Vista Version 8 Support

⚠ **Warning:**
The material presented here is subject to change before product release. Software AG reserves the right to change the content of this product and this documentation prior to release and does not guarantee that all functionality mentioned will be implemented. However, this information is sufficiently accurate to allow you to successfully evaluate your upgrade to Version 8.

General Compatibility Information of Client-Based Add-On Products

The client-based add-on products include:

- Adabas Fastpath

- Adabas SAF Security

- Adabas Transaction Manager

- Adabas Vista

- Adabas System Coordinator

Many of the base Adabas 8 enhancements do not have a direct effect upon these add-on products. This means that the Adabas 8 enhancements provide no obstacle to upgrading. For example, these products are not affected by internal Adabas 8 characteristics such as spanned records or internal changes to utilities.

These products will support the new and changed Adabas features in the following ways (where relevant):

Specific Adabas 8 Feature Support	When a specific Adabas 8 feature directly affects current add-on product functionality, the appropriate add-on products are enhanced to support the Adabas 8 feature enhancements.
Adabas 8 Feature Tolerance	When a specific Adabas 8 feature does *not* directly affect current product functionality, the Adabas 8 functionality can be freely used, but the add-on product might not take advantage of it.

This section covers the following topics:

- Specific Adabas 8 Feature Support

- Adabas 8 Feature Tolerance

- Required Actions to Support Adabas 8

- Adabas 7.4 Compatibility

Specific Adabas 8 Feature Support

The following Adabas 8 features are supported in the client-based add-on products:

- The new ACBX calling protocol

- The new FDT layout

- Large object (LB) fields, where relevant

- MU/PE limit increases, where relevant

Adabas 8 Feature Tolerance

All other Adabas 8 features are tolerated by the client-based add-on products, since they have no specific effect upon the functionality of these products.

Required Actions to Support Adabas 8

There are no specific actions needed to be taken in the client-based add-on products to make them support Adabas 8 because detection of the Adabas version level is automatic, where relevant. However, there are some conversion requirements.

Specifically, the client-based add-on products share the same *system configuration file*. The system configuration file is an Adabas file container for all the information needed to enable the software to operate effectively at runtime. Conversion of the system configuration file from previous releases is mandatory, as follows:

- A new file must be used for the Version 8 level

- A conversion utility will be available to copy Version 7.4 file contents and convert them into the new Version 8 file format.

- If the conversion step fails, the new file must be reset to an empty state before starting the conversion again.

Adabas 7.4 Compatibility

The Version 8.1 client-based add-on products can be used with Adabas 7.4 and Adabas 8 databases simultaneously under the following conditions:

- Adabas 8 functionality is *not* used when targeting Adabas 7.4 databases

- Fixes (to be clarified when the client-based add-on products are released) may be necessary to enable Version 8.1 client-based add-ons to operate with Adabas 7.4 and other Version 7.4-compatible Adabas add-ons.

- All of the client-based add-on products must be at the same level. For example, you cannot mix Adabas Fastpath 7.4 functionality with Adabas Vista 8.1 functionality.

Adabas System Coordinator Version 8 Support

Adabas System Coordinator is a client-based add-on product for Adabas. Please read *General Compatibility Information of Client-Based Add-On Products* for general information on migrating Adabas System Coordinator and the other client-based add-on products to Version 8.

The Adabas System Coordinator provides base technology for Adabas Fastpath, Adabas SAF Security, Adabas Transaction Manager, and Adabas Vista. Consequently, some enhancements have been implemented in the Adabas System Coordinator to provide benefit for these other products in a highly integrated way.

This section covers the following topics.

- More Focused Client Runtime Configuration

- Fully Dynamic Client Runtime Configuration for Experts

- Alternate System Configuration File

- Variable Data Container

- Versioning Feature

- Applying Adabas System Coordinator To a Client Job Without Other Client-Based Add-On Products

More Focused Client Runtime Configuration

There is increasing need for Adabas client sessions to operate differently within the same job. For example:

- Client "ABC" in CICSXYZ needs special tracing controls to be in use, all other clients do not.

- Transaction "D412" in CICSXYZ must be able to operate with a lower timeout limit than other transactions.

- Stepname "S0010" in job PRODA032 must be excluded from using the Adabas System Coordinator.

This level of runtime control is becoming extremely important. For example, tracing options can be directed at a very few sessions, rather than globally. This can mean overall memory consumption can be kept to a minimum, while at the same time aggressively pursuing a problem by investigating only the sessions to be scrutinized.

Adabas System Coordinator Version 8.1 allows these configuration controls to be prescribed in advance by adding optional override controls to the original base job level controls. With Version 8.1 it is possible to preconfigure overrides as follows:

Job Type	Override Controls
Batch job	1. Stepname 2. LOGIN (e.g. RACF LOGIN userid) 3. Special API
TSO, CMS, TIAM, etc	Special API
COM-PLETE, CICS, IMS, UTM	1. Special API 2. LOGIN 3. Transaction code

As a terminal operator moves from one transaction to another, the runtime behaviors can be altered dynamically according to what is prescribed in the configuration file.

Fully Dynamic Client Runtime Configuration for Experts

In addition to being able to preset the different configurations to be adopted at runtime, you can now dynamically change the runtime controls for your current session. So, you may decide to switch tracing on or off, for example, regardless of what is prescribed in the configuration file.

These truly dynamic changes can be performed in Natural by logging onto one of the product libraries (SYSMP812, SYSMT812, SYSMV812, SYSMW812 or SYSMX812) and entering `CORENV xxx` on the command line, where *xxx* is the product code AFP, AVI, ATM or COR.

Alternate System Configuration File

The system configuration file is now a vital part of the runtime operation. As such, it can become a single point of failure. Adabas System Coordinator 8.1 now allows you to define an alternate configuration file.

Note:
It is your responsibility to ensure the two configuration files are identical at all times.

Each session will attempt to use the primary system configuration file. If it is unavailable, the alternate system configuration file will be used, if one is defined. Once a configuration file has been identified for a session, that file will continue to be the primary configuration file for that session until it becomes unavailable, at which point the alternate configuration file will be used. Over time, different sessions may be using different files at the same time until you forcibly cause all sessions to switch over by making one

or the other configuration file unavailable for a long period.

If you use an alternate configuration file, then both the primary and alternate configuration files must be available at both Coordinator daemon startup and shutdown. This is necessary because recovery and restart information is placed in the file, and the same information must be placed in both files so they do not get out of step.

Variable Data Container

Your own variable data can now be stored in the configuration file. You can enter this data at the same time as the base or override configuration. This can be used simply for your own documentation purposes, but you can also use a runtime API call to retrieve the data (up to 256 bytes). This means you can easily recognize differences between sessions at runtime for your own purposes according to the configuration being used.

Versioning Feature

The versioning feature allows you to go through a gradual upgrade before fully using Version 8.1. This covers the clients and databases where this software is introduced. In TP systems, a front-end to the ADALNK technology is introduced allowing (for example) ADALNK74 versus ADALNK81 to be used within the same client job. The ADALNK path is chosen according to transaction code (by default). This allows you to convert gradually.

A similar approach is taken for the software in Adabas target databases. For example, you can use Adabas System Coordinator and Adabas Fastpath 7.4 in parallel with Adabas System Coordinator and Adabas Fastpath 8.1. This accomodates clients coming through the 7.4 versus 8.1 paths simultaneously.

Applying Adabas System Coordinator To a Client Job Without Other Client-Based Add-On Products

Adabas System Coordinator provides some general features that are applicable even if the other client-based add-on products are not to be used for a job. For example, the command retry feature may be needed for a job but not Adabas Fastpath. Adabas System Coordinator 8.1 can be activated without needing any of the other products.

Adabas Fastpath Version 8 Support

Adabas Fastpath is a client-based add-on product for Adabas. Please read *General Compatibility Information of Client-Based Add-On Products* for general information on migrating Adabas System Coordinator and the other client-based add-on products to Version 8.

The Adabas System Coordinator provides base technology for Adabas Fastpath, Adabas SAF Security, Adabas Transaction Manager, and Adabas Vista. Consequently, some enhancements have been implemented in the Adabas System Coordinator to provide benefit for these other products in a highly integrated way. For further information, read *Adabas System Coordinator Support*. Adabas Fastpath is compliant with the dynamic client runtime configuration introduced in Adabas System Coordinator 8.1.

This section covers the following topics.

- Automated Buffer Restart Enhancements

- Direct Access Optimization for Secured Files

- AFPLOOK Changes

Automated Buffer Restart Enhancements

The automated buffer restart feature is enhanced so that you can now control: "Restart every "n" hours but only at "n" o'clock".

This is enhanced to provide some help for sites where the Adabas Fastpath buffer operates 24 hours, 7 days a week, but the commands statistics exceed the present 4G limit, which means the displays lose significance. With this feature, you can make sure a restart occurs prior to the normal time span in which the limit is exceeded. In addition, you can isolate the actual restart time into a quiet period of your day to make sure it does not take place at peak times.

A future release will allow statistics to exceed the 4G limit.

Direct Access Optimization for Secured Files

Adabas Fastpath's default behavior is to avoid caching for secured files because the assumption is that security is used to differentiate between data used by different sessions. However, some sites do not secure data in this way, and so find that it is satisfactory for their secured files to be cached in this way. This feature, however, should be used with caution.

AFPLOOK Changes

The predictions made by the AFPLOOK sampler have been changed to be more in line with the optimization achieved by the present level of Adabas Fastpath. It will also be possible to preconfigure the AFPLOOK version that is shipped with Adabas without having to use the online administration tool.

Adabas SAF Security Version 8 Support

Adabas SAF Security is a client-based add-on product for Adabas. Please read *General Compatibility Information of Client-Based Add-On Products* for general information on migrating Adabas System Coordinator and the other client-based add-on products to Version 8.

This section covers the following topics.

- Variable Resource Renaming

- Stored Procedure Protection

- Hold-Based Commands

- Adabas Security

- Adabas SAF Security Deactivation

Variable Resource Renaming

With Adabas SAF Security 8.1, you will be able to use logical names for protected resources, rather than number-based names. This will make it much more flexible to make collections of resources to be gathered together.

Stored Procedure Protection

An option to protect execution of PC calls will be introduced.

Hold-Based Commands

An option to assess hold-based commands (L4, L5, etc.) as update commands rather than access commands will be introduced.

Adabas Security

An option to use the SAF-based GROUP identity as the ADASCR password will be introduced.

Adabas SAF Security Deactivation

In some cases, it is possible that Adabas SAF Security fails to initialize within a database. Some sites wish to be able to configure whether this should force Adabas nucleus termination or not, by database. This feature will be introduced in Adabas SAF Security Version 8.1.

Adabas Transaction Manager Version 8 Support

Adabas Transaction Manager is a client-based add-on product for Adabas. Please read *General Compatibility Information of Client-Based Add-On Products* for general information on migrating Adabas System Coordinator and the other client-based add-on products to Version 8.

The Adabas System Coordinator provides base technology for Adabas Fastpath, Adabas SAF Security, Adabas Transaction Manager, and Adabas Vista. Consequently, some enhancements have been implemented in the Adabas System Coordinator to provide benefit for these other products in a highly integrated way. For further information, read *Adabas System Coordinator Support*. Adabas Transaction Manager is compliant with the dynamic client runtime configuration introduced in Adabas System Coordinator 8.1.

This section covers the following topics.

- Nonactivity Timeout Handling

Nonactivity Timeout Handling

This will now be handled by the equivalent general Adabas System Coordinator facility rather than by any specific facility to Adabas Transaction Manager.

Adabas Vista Version 8 Support

Adabas Vista is a client-based add-on product for Adabas. Please read *General Compatibility Information of Client-Based Add-On Products* for general information on migrating Adabas System Coordinator and the other client-based add-on products to Version 8.

The Adabas System Coordinator provides base technology for Adabas Fastpath, Adabas SAF Security, Adabas Transaction Manager, and Adabas Vista. Consequently, some enhancements have been implemented in the Adabas System Coordinator to provide benefit for these other products in a highly integrated way. For further information, read *Adabas System Coordinator Support*. Adabas Vista is compliant with the dynamic client runtime configuration introduced in Adabas System Coordinator 8.1.

This section covers the following topics.

- Generations Replace Publish and Draft Copies

- File Translation Pages

- Source Name Removed

- Target Category Removed From Partitioned Files

Generations Replace Publish and Draft Copies

Previous versions of Adabas Vista allowed individual file rules to have published and draft copies. This allowed the active runtime rules to be left in place while changes were being made. However, this meant that many draft rules could not be simultaneously activated into the operational runtime.

Organizing the rules into *generations* means that a complete new set of rules can be prepared in the background and then simultaneously activated. This is a far better control mechanism for introducing change to the runtime operation.

Multiple generations of rules can be constructed at the same time, but only one generation can be named as the *active* one. At any time, you can define a different generation as the active generation. This automatically places the originally active generation in inactive status.

The base rules for a generation cannot be directly modified. You must define a *delta* modification to a generation to make changes. You can have multiple deltas in parallel to a generation. Once you are happy with a delta modification you can *apply* it to update the base generation.

File Translation Pages

With Adabas Vista 8.1, you can now define multiple pages of translation rules. The name of each page is chosen by your data base administrator. Each page contains one or more file translation file rules. Each job that is defined to use Adabas Vista can have up to eight pages named for use at runtime for that job. Adabas Vista merges all these pages into one set of translation rules for runtime use.

Some rules can be defined as being mandatory, or have a numeric priority setting. During the merge the mandatory and priority settings are honored.

In addition, it is possible to set up a mandatory page itself, but the translation rules contained within that page do not themselves have to be mandatory. The mandatory page is always used, when it exists. The mandatory page does not have to be named on Adabas Vista job controls; this is how previous version compatibility is most likely to be maintained. The Adabas Vista 8.1 conversion utility will arrange to convert your existing 7.4 rules accordingly

Source Name Removed

The source name field is removed from translation rules. The Adabas Vista 8.1 conversion utility will discard these translation rules automatically.

Target Category Removed From Partitioned Files

The target category is no longer a part of the partitioned file definition. It is only used for translation rules.