

Enhancements

The following enhancements were made in this release.

Note:

You must have Adabas 8.2 SP4 installed to use the new features in this release.

- Support for Adabas Review Client Reporting
 - New User Profile DBID/Hub and Repository Settings
 - New Command to Display Available Hubs
 - New Valid Value for HUB Command
 - SVC and ADATMZ Information Provided with the TECH Command
 - DCLIENT Operator Command Output Changes
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 - Statistics Integrated into webMethods Optimize for Infrastructure
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Support for Adabas Review Client Reporting

This release introduces support for Adabas Review *client reporting*. Client reporting allows you to collect client data you can use to determine where command processing time is spent. It is currently provided for Adabas Review hub only in z/OS environments using the TSO , CICS and IMS monitors; it is not currently supported in batch or Com-plete. Client reporting is intended as a diagnostic tool and can be activated and deactivated as needed.

Caution:

The process required to collect client data increases the resource overhead of your system. We therefore recommend that you activate client reporting only for as long as it takes to diagnose a problem. We do not recommend that client reporting be activated all the time.

SYSREVDDB (which is used to activate and deactivate client reporting) must be running in the same CICS and using the same task-related user exit (TRUE) that will process client data. If you will be using client reporting, Natural zap NA77060 must be applied to support use of SYSREVDDB activation of client reporting. In addition, you must have Adabas 8.2 SP4 installed to use this new feature.

For complete information about client reporting, read *About Adabas Review Client Reporting*

This section describes all of the areas of change made to Adabas Review and Adabas in support of client reporting:

- New Client Reporting Fields
- New CLASS Parameter for Batch REPORT Statement
- SYSREVDB Menu Changes
- New SYSREVDB Screens
- SYSREVDB Report Field Selection Changes
- SYSREVDB Report List Changes
- New SYSREVDB Commands
- REVEXITB Name Changed
- Adabas Link Routine Support
- TECH Command Support

New Client Reporting Fields

A new field category, CMON, has been added in this release to support client reporting. CMON fields are report fields that are derived from client reporting log records. They include the following fields:

Field System Name	Description
CDURA	<p>The total client duration time. This is the total time (in seconds) in which the client waits for the command to be processed by the server and the time it takes the ADALNK portion of the client to retrieve the command results. CDURA is the sum of the CRCVDURA and CWRKDURA fields.</p> <p>Measurement for this field starts immediately after the command is passed to the server (when it is posted from the Adabas link routine to the Adabas address space and SVC-4 router processing is performed). Measurement stops when the client picks up the command result information from the server (performing SVC-16 router processing within the Adabas link routine).</p>
CRCVDURA	<p>The client receive time. This is the time (in seconds) it takes the Adabas link routine to retrieve a processed command from the server.</p> <p>Measurement for this field starts immediately after the server posts the Adabas link routine to retrieve the command result information (performing SVC-12 router processing) . Measurement stops when the Adabas link routine retrieves the command information from the server address space (performing SVC-16 router processing).</p>
CWRKDURA	<p>The client wait time, or the time in which the server works for the client. This is the time (in seconds) in which the client waits for the command to be processed by the server.</p> <p>Measurement for this field starts immediately after the command is passed to the server for processing (when it is posted from the Adabas link routine to the Adabas address space and SVC-4 processing is performed). Measurement stops when the Adabas link routine retrieves the command information from the server address space (performing SVC-12 router processing).</p>

For more information about these fields, read *Client Reporting Fields (CMON)*.

New CLASS Parameter for Batch REPORT Statement

The batch REPORT statement has a new parameter, CLASS, you can use to specify whether the report to be generated is a client reporting report. Valid values are "STANDARD" (the report is a standard report) and "CLIENT" (the report is a client reporting report). The default is "STANDARD". The CLASS parameter can be specified on both detailed and summary reports.

For more information about the CLASS parameter, read *REPORT Statement*.

SYSREVDB Menu Changes

Some reorganization of the SYSREVDB menus was necessary to support client reporting. Specifically:

- A new **Specialty Report Types** menu is not provided to provide access to Adabas Review specialty reports. You can access this menu from the SYSREVDB **Main Menu** using a new **Edit Specialty Reports (ES)** function.
- The **Edit Buffer Pool Report (EB)**, **Edit Pulse Report (EL)**, and **Edit Cluster Services Report (EX)** functions originally on the SYSREVDB main menu have been moved to the new **Specialty Report Types** menu.
- A new **Review Client Management (CM)** function is now provided on the **Specialty Report Types** menu. You can use this function to turn the client reporting engine on and off. The client reporting engine is must be on if you want to run client reporting reports.
- A new **Edit Client Report (EC)** function is now provided on the **Specialty Report Types** menu. You can use this function to maintain client report definitions.

To see these altered menus and for more information, read *Maintaining Report Definitions*.

New SYSREVDB Screens

The following new screens have been added to SYSREVDB in support of client reporting:

- A new Client Management screen is now available. You can use this screen to manage the client reporting engine on and off. The client reporting engine is must be on if you want to run client reporting reports.

To see these new screens and for more information, read *Managing Client Reporting*.

- A new Edit Client Report screen is now available. You can use this screen to maintain client report definitions

For more information, read *Maintaining Standard Database and Client Reporting Reports*.

SYSREVDB Report Field Selection Changes

A new Report Field Selection screen replaces the original Database Field Selection screen. The Report Field Selection screen can be accessed when you are editing any Adabas Review database or client reporting report. It can be used to select the field categories from which you select fields for the report.

The new Report Field Selection screen includes logic that limits the categories you can select to those appropriate for the type of report (database or client reporting) that you are editing. Depending on the type of report, some categories of may or not be available. For example, the client reporting field category is only available if you are editing a client reporting report.

In addition, even if a field category is available for both database and client reporting reports, some fields are not applicable to both report types, so the fields available for selection within the category differ. For example, only a subset of the fields included in the Adabas Control Block field category are available for client reporting reports.

To see these changed screens and for more information, read *Maintaining Report Definitions*

SYSREVDDB Report List Changes

The Report Definitions and Started Reports list screens in SYSREVDDB have been altered to support client reporting. Each of these screens now include a column that identifies the type of report so you can easily identify the client reports in the list. Normal database reports are identified by a "D" in the column; client reports are identified by a "C" in the column. The Report Definitions screen shows this information in the **Type** column; the Started Reports screen shows this information in the **Typ** column.

To see these changed screens and for more information, read *Maintaining Report Definitions*

New SYSREVDDB Commands

The following new commands have been added to SYSREVDDB in support of client reporting:

Command	Use to...
CM	manage the client reporting engine (turn it on or off). This command displays the new Client Management screen.
EC	access and edit a client report. This command displays the new Edit Client Report screen.
ES	access the Specialty Report Types menu, which provides access to the buffer pool, pulse, client monitor, and cluster services reports. This menu also allows you to review client monitor management settings.

For complete information about Adabas Review commands, refer to the *Command Reference*.

REVEXITB Name Changed

The name of REVEXITB has been changed to REVEXIT1 in this release.

The REVEXIT exits include REVEXIT1 (formerly REVEXITB) and REVEXIT2. REVEXIT should be linked with ADALNK during installation, with the appropriate Adabas link globals table parameters (LGBLSET). The link globals table parameters specified via LGBLSET identify which REVEXIT entry points (REVEXIT1 or REVEXIT2) are called. If LGBLSET parameter REVIEW=YES is set, then REVEXIT is called by ADALNK before the Adabas call as entry point REVEXIT1; if LGBLSET parameters RVCLNT and REVHID are also specified, REVEXIT is also called after the Adabas call as entry point REVEXIT2.

The modules used to perform the linkage between REVEXIT and ADALNK are provided with your Adabas Review installation with names in the format RDBLXsys, where sys is a three-character code representing the link environment (for example, MVS for z/OS environments, VSE for z/VSE, COM for Com-plete environments, IMS for IMS environments, and BS2 for BS2000 environments). For more information about performing this linkage, read the appropriate Adabas Review installation documentation.

Note:

A return code 4 from the link-edit of the globals table is acceptable because it indicates that the Review exit (REVEXITB or REVEXIT1) has not been resolved by this step. The next link-edit step in the sample jobs should resolve this and finish with return code zero.

An additional keyword was added to the Adabas link globals table (LGBLSET) to support the use of the name REVEXITB in releases prior to Adabas Review 4.6.

Parameter	Description	Syntax
REVREL	<p>Specifies the level of Adabas Review support to be generated in the link globals table module. This is necessary because Review 4.6 and later releases have changed the Review pre-call exit name from "REVEXITB" to "REVEXIT1". Valid values are "45" or "46" (without the quotes). If other values are given the assembly of the globals table will fail with condition code 16 and MNOTE messages from the assembler.</p> <p>When REVREL=45 is specified, it indicates that support for Adabas Review release 4.5 and earlier should be used. The Adabas Review REVEXITB exit name is used and an associated external reference statement is generated when the globals table is assembled. When REVREL=45 is specified, the RVCLNT keyword must be set to NO. If RVCLNT=YES and REVREL=45 are both specified, the assembly of the globals table will fail with condition code 16 and MNOTE messages from the assembler.</p> <p>When REVREL=46 is specified it indicates that support for Adabas Review release 4.6 and later should be used. The Adabas Review REVEXIT1 exit name is used and an associated external reference statement is generated when the globals table is assembled.</p> <p>In either case, use of the REVREL keyword alone does not provide support for Adabas Review. To provide support for Adabas Review, the REVIEW keyword must also be set to YES.</p> <p>The default is currently "45", but will be changed to "46" in a future release.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> REVREL={ 45 46 } </div>

Adabas Link Routine Support

Two new keywords have been added to the Adabas link globals table (LGBLSET) in support of client reporting:

Parameter	Description	Syntax
REVHID	<p>Specifies the preferred Adabas Review hub ID. This value can be checked during Adabas CICS TP monitoring installation or during the monitor activate process.</p> <p>If REVHID is set to zero (0), the preferred Adabas Review hub ID is dynamic. When the hub ID is dynamic, it cannot be checked during Adabas CICS TP monitoring installation and the call to turn on client reporting must supply the correct Adabas Review hub ID to use.</p> <p>If REVHID is specified, REVIEW=YES must also be specified. If REVHID is specified and REVIEW=NO is also specified, the assembly of the globals table will abort with condition code 16 and the following message is given:</p> <p>REVHID requires REVIEW=YES</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">REVHID=<i>hubid</i></div>
RVCLNT	<p>Indicates whether the Adabas Review client reporting exit should be active. The default is NO.</p> <p>If RVCLNT=YES is specified, REVIEW=YES must also be specified. If RVCLNT=YES is specified and REVIEW=NO is also specified, the assembly of the globals table will abort with condition code 16 and the following message is given:</p> <p>RVCLNT=YES requires REVIEW=YES</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">RVCLNT={YES NO}</div>

TECH Command Support

The Database System Environment screen that appears when you enter the TECH command has been updated to include a line indicating whether or not client reporting is turned on or not or if it is not installed.

For more information, read *Accessing Technical System Information* in *Getting Started*.

New User Profile DBID/Hub and Repository Settings

This release introduces some new values that can be specified in some of the fields of an Adabas Review user profile:

- Values "AUTO" or "LFILE" can be specified for the default Adabas Review target DBID or hub ID.

Note:

Support for the new "AUTO" value executes module ADATMZ in the Natural environment, which dynamically loads CCSTCK and ADALNKR. If CCSTCK or ADALNKR cannot be loaded, subsequent calls to ADATMZ might lead to problems. Be sure that the modules ADATMZ, ADALNKR, and CCSTCK, which are available in the Adabas or WAL load libraries, are also available for the TP monitor.

- The value "LFILE" can be specified for the Adabas Review repository DBID and file number.

In all cases, specifying "LFILE" causes the value to be taken from the LFILE value of the Natural session.

If "AUTO" is specified, the value is determined from the SVC(IDTNAME) of the current Natural session. If a single hub is running under the current SVC(IDTNAME), that hub ID is used. If more than one hub ID is active, a pop-up dialog appears allowing you to select the hub. If no hub is running, the value is determined as if "LFILE" were specified.

For complete information, read *Customizing the Default Profile*.

New Command to Display Available Hubs

A new AH command has been added that allows you to display the hubs available for the selected SVC(IDTNAME) and to select one from the list.

For complete information about the AH command, read *Listing and Selecting Available Adabas Review Hubs*.

New Valid Value for HUB Command

The HUB command now has a new valid value: "AUTO". Traditionally, only a hub ID could be specified on the HUB command. If "AUTO" is specified, the value of the hub ID is determined from the SVC(IDTNAME) of the current Natural session. If only one hub is running under the current SVC(IDTNAME), that hub ID is used; if multiple hubs are running on this SVC(IDTNAME), a pop-up window appears allowing you to select the hub to use.

For complete information about the HUB command, read *HUB Command*.

SVC and ADATMZ Information Provided with the TECH Command

This version displays the SVC of the Natural session on the Database System Environment screen. This provides a quick method for you to determine the SVC number.

In addition, the version of ADATMZ code used by Adabas Review to obtain hub location information is also displayed on the Database System Environment screen.

For more information, read *Accessing Technical System Information* in *Getting Started*.

DCLIENT Operator Command Output Changes

The output of the DCLIENT operator command has been changed in this version of Adabas Review. The new output no longer includes the Wbuf column, which was redundant as the same information is provided in the Buf column. In addition, the columns have been slightly renamed and the number of DBID=ALL reports as well as the number of database reports is now available.

For complete information about the new format of the DCLIENT command output, read *DCLIENT Operator Command*.

New DBID Specification in Hub Mode

When running reports in hub mode, you can now specify the database ID value for the reports as "ALL". This will trigger a DBID=ALL report.

- In hub mode, a DBID=ALL report collects data from all databases running on the same SVC as the hub (the databases must have been started with the ADARUN REVIEW parameter set to a hub ID). For such reports, the reporting link is automatically established with Adabas Review. You can specify DBID=ALL for user-defined reports and for most of the predefined Adabas Review reports except for the Buffer Pool reports, the Pulse reports, and the Cluster Services reports.
- In local mode, a DBID=ALL report collects data only from the local database.

Note:

You must have Adabas 8.2 SP4 installed to use this new feature.

For more information, read *Specifying the Report DBID* in *Maintaining Report Definitions*.

Statistics Integrated into webMethods Optimize for Infrastructure

In this release, Adabas Review key performance indicator (KPI) statistics are now provided to webMethods Optimize for Infrastructure. Using the Optimize component of webMethods Optimize for Infrastructure, you can monitor the status of these statistics as well as the overall status of your system. This support is available in version 8.2 (and later versions) of webMethods Optimize for Infrastructure.

The key performance indicator statistics that are passed from Adabas Review to Optimize provide information about the Adabas Review system itself and not about the monitoring data collected by Adabas Review. The KPIs that are passed include statistics such as the number of records sent to Adabas Review, the CPU time used by Adabas Review, the memory usage of Adabas Review, and number of I/Os performed by Adabas Review.

Field Changes

The following table summarizes the changes made to Adabas Review fields in this release. For complete information about fields, read *Field Reference*.

Field Name	Change
CDURA	This is a new field that shows the total client duration time. This is the total time (in seconds) in which the client waits for the command to be processed by the server and the time it takes the ADALNK portion of the client to retrieve the command results. CDURA is the sum of the CRCVDURA and CWRKDURA fields. For complete information, read <i>About Adabas Review Client Reporting</i> .
CRCVDURA	This is a new field that shows the client receive time. This is the time (in seconds) it takes the Adabas link routine to retrieve a processed command from the server. For complete information, read <i>About Adabas Review Client Reporting</i> .
CWRKDURA	This is a new field that shows the client wait time, or the time in which the server works for the client. This is the time (in seconds) in which the client waits for the command to be processed by the server. For complete information, read <i>About Adabas Review Client Reporting</i> .
ROUTDURA	This is a new alternate field name for field ROUETIME.
THDURA	This is a new alternate field name for field THETIME.

Command Changes

The following table summarizes the changes made to Adabas Review commands in this release.

Command	Change
AH	This is a new command that allows you to list the available Adabas Review hubs for a selected SVC. For complete information about the AH command, read <i>Listing and Selecting Available Adabas Review Hubs</i> .
HUB	A new valid value, "AUTO", has been added to the HUB command. For complete information, read <i>HUB Command</i> .
TECH	The SVC of the Natural session is now displayed on the Database System Environment screen produced by running this command. For more information, read <i>Accessing Technical System Information in Getting Started</i> .

Operator Command Changes

The following table summarizes the changes made to operator commands in this release.

Command	Change
DCLIENT	The output for this command has changed. For complete information about the new format of the command output, read <i>DCLIENT Operator Command</i> .