

Adabas System Coordinator

Adabas System Coordinator Parameters

Version 8.2.2

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This document applies to Adabas System Coordinator Version 8.2.2 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Preface

Adabas System Coordinator operation is controlled by the following types of parameters:

- **Client Runtime Controls**
- **Daemon Parameters**

Adabas System Coordinator parameters can be maintained using Adabas System Coordinator Online Services, function Maintenance.

1 Client Runtime Controls

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Runtime controls are used to control the operation of the jobs managed by Adabas System Coordinator

Client Runtime Controls	Overridable
Control Name	-
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Client Runtime Control Descriptions

This section provides a description of each Adabas System Coordinator parameter:

Control Name

Parameter Type	Use	Minimum	Maximum	Default
Client Runtime Control	<p>Within a particular Job Type (eg. Batch, COM-LETE, CICS, etc.), this is the name of a specific job and the controls defined will apply solely to this job.</p> <p>If the value '*' is specified, the controls defined will apply to all jobs, within the corresponding Job Type, that do not have explicit Control Names defined for them.</p> <p>For a multi-job TP monitor service (eg. Job Type=CICS(DTR) or UTM(DTR)), this is a unique name for the multi-job service. The controls defined will apply to each of the individual jobs defined as a <i>Service Member Name</i> within the multi-job service.</p>	1 character	8 characters	see text

Service Member Name

Parameter Type	Use	Minimum	Maximum	Default
Client Runtime Control	The name of a job that runs as part of a multi-job TP monitor service. These job names are maintained by selecting the appropriate <i>Control Name</i> with 'J' for Jobs.	1 character	8 characters	see text

Operation Mode

Parameter Type	Use	Possible Values	Default
Client Runtime Control	Indicate operation mode for COR	<p>Normal autodetect</p> <p>COR detects other products and switches itself off if none are found</p> <p>Enable without products</p> <p>COR remains active, even if no other products are detected</p> <p>Disable all</p> <p>COR switches itself off and disables any other active products</p>	Normal autodetect

Activity pulse

Parameter Type	Use
Client Runtime Control	<p>You can use a System Coordinator daemon to enable “single-seat” display of session activities in any client job. To enable a client job for this feature, specify:</p> <ul style="list-style-type: none"> ■ The group in which the daemon runs. When you choose to make these statistics available externally a daemon is required. During periods when the daemon is unavailable (planned or unplanned outage) statistics are unavailable. ■ The frequency at which statistics are pulsed to the daemon: <ul style="list-style-type: none"> ■ Every <i>nnnnnnnn</i> Adabas calls and/or ■ Every <i>nnnnnn</i> seconds <p>Set both to zeroes to disable the refresh.</p> <p>The statistics are held in shared memory, so you must configure your daemon to use shared memory (refer to <i>Considerations and Configuration for using a Daemon in the Adabas System Coordinator Operations and Programming Guide</i> for information on configuring the daemon to use shared memory).</p> <p>Note: For dynamic transaction routing (DTR) systems (CICS/MRO, CICS/PLEX, IMS/TM, UTM) you must always specify a group, even if you do not want to make use of “single-seat” activity displays. This is because the System Coordinator daemon is also responsible for managing DTR client sessions while they are at rest.</p>

Daemon connection messages

Parameter Type	Use	Possible Values	Default
Client Runtime Control	Indicates whether or not the client job should issue information messages when it connects (message COR060I) or disconnects (message COR061I) from the daemon.	Y N	N

API Runtime Overrides

Parameter Type	Use	Possible Values	Default
Client Runtime Control	<p>Indicates whether controls can be dynamically overridden at runtime via a customised API call to COR.</p> <p>Note: This feature is not currently supported.</p>	Y N	N

Threadsafe operation

Parameter Type	Use
Client Runtime Control	<p>This parameter is only applicable to runtime controls of type CICS and CICS/DTR and specifies whether or not the System Coordinator client environment runs in CICS threadsafe mode.</p> <p>When running in threadsafe mode the installation recommendations to make COR modules available in DFHRPL will be enforced. (Refer to the <i>Installation Procedures</i>).</p> <p>Note: The Debug Event Monitor and local DDMSG files are disabled when running in threadsafe mode. If you wish to use either of these facilities, set the “Threadsafe operation” runtime control to N and then set it back after you have finished.</p>

Use Additional Exits

Parameter Type	Use	Default
Client Runtime Control	Enables calling of additional installation exits (IEXIT1, IEXIT2) before and after the Adabas command. Refer to <i>Before You Install</i> in the Installation section for information about installing additional exits.	N

Maximum Idle Time

Parameter Type	Use	Possible Values	Default
Client Runtime Control	Indicates a time limit after which terminal sessions are eligible for timeout termination if no activity has occurred.	0 - nnnnnnnnn seconds A value of “0” means no time limit.	For job types where there are Terminal Sessions the default value is 3600. For all other job types the default value is 0.

Non-Terminal Idle Time

Parameter Type	Use	Possible Values	Default
Client Runtime Control	<p>Indicates a time limit after which non-terminal sessions are eligible for timeout termination if no activity has occurred.</p> <p>Note: This parameter is now redundant. Resources used by non-terminal tasks are automatically released at task end.</p>	0 - nnnnnnnnn seconds A value of “0” means no time limit.	none

Generate RSP009/79

Parameter Type	Use	Possible Values	Default
Client Runtime Control	<p>Indicates a time limit for sessions that are timed out to receive response code 9, subcode 79 if they are re-activated.</p> <p>Specifies a number of seconds after which response code 9, subcode 79 will no longer be returned to re-activated sessions that were previously timed out. 0 means that response code 9, subcode 79 is always returned to sessions that were previously timed out, no matter how much time has passed since they were timed out.</p>	<p>Y N (enable or disable RSP009/79 setting)</p> <p>0-nnnnnnnnnnn (time limit for setting RSP009/79)</p>	<p>Y</p> <p>0</p>

Latency Controls

Parameter Type	Use
Client Runtime Control	<p>Specify where session-related information is stored when sessions are at rest.</p> <p>Latency – Local (Y/N)</p> <p>For standard job types, this is set to Y by default so that session-related information resides in the job's private memory.</p> <p>TSQ prefix</p> <p>For CICS, temporary storage queues are required and you can specify an optional prefix for the queue name. The default prefix is "COR" followed by a hexadecimal "FF". On z/OS systems the queue name includes the CICS job-name to ensure that it is unique in a multi-job CICS system. However, the CSD TSMODEL definition for these temporary storage queues should not specify a POOLNAME or REMOTESYSTEM, as they cannot be shared.</p> <p>Note: If you use the Client Versioning feature, be sure to specify a different queue name prefix for each System Coordinator version active in the CICS job.</p> <p>Latency – Daemon (Y/N)</p> <p>Daemon managed latency is required by dynamic transaction routing (DTR) systems (eg. CICS/MRO, CICS/PLEX, IMS and/or UTM). For these jobs, Daemon managed latency is enforced (Y) as is Group name. For any other job type the default value is N and you should only change this if advised by Software AG.</p> <p>When this parameter is set to Y, by default, the session-related information is maintained in the local daemon's private memory. For performance and resilience you are recommended to use daemon shared memory (see Daemon Group parameter <i>Daemon latency/pulse services</i>).</p> <p>To Disk (Y/N)</p>

Parameter Type	Use
	The default value for this parameter is N. However, for clustered applications where client sessions can dynamically move between multiple systems (Multi-system dynamic transaction routing), this parameter should be set to Y to notify the daemon that session-related information must be stored in the common daemon latency file on disk. For more information refer to <i>Multi-system Dynamic Transaction Routing</i> in the <i>Adabas System Coordinator Operations and Programming Guide</i> .

Site Information Menu Function

Parameter Type	Use
Client Runtime Control – Information Menu option	Used to define up to 256 bytes of alphanumeric data, which is stored with the runtime control definition and may be retrieved at runtime using the site information API. Refer to <i>API To Retrieve Runtime Control Site Information</i> for more information.

Transaction, Stepname or Login Override (Override function)

Parameter Type	Use	Possible Values
Client Runtime Control – Override Menu option	Used to define runtime overrides of the basic control for the job. After definition the override can be modified with the Modify menu option.	Depending on Job Type, Stepname, Login or Transaction overrides can be defined.

Cleanup at Start, Cleanup at End

Parameter Type	Use	Possible Values	Default
Client Runtime Control Override	Indicate whether session cleanup is required when a session override is activated (Cleanup at Start) or deactivated (cleanup at End).	Y N	N

Message Controls

Parameter Type	Use	Possible Values	Default
Client Runtime Control	<p>Indicates where messages are written.</p> <p>If you elect to use a DDMSG file, you must select “Forward to the Daemon DDMSG file” for TP systems because sequential files are not suited to TP.</p> <p>If you select “Local DDMSG file” for batch type systems, you must add the Adabas load library to the job’s loading environment.</p> <p>The DDMSG file should be defined as fixed records of length 133, with an appropriate blocksize. It is possible that operating system factors (such as blocking, caching) may cause messages not to be seen until the job terminates.</p>	<p>Console message job log</p> <p>Local DDMSG file</p> <p>Forward to the Daemon DDMSG file</p>	Console

Command Retry

Parameter Type	Use	Default
Client Runtime Control	<p>Allows automatic retry of Adabas commands that receive the specified response codes. You can also</p> <ul style="list-style-type: none"> ■ restrict retry to particular sub-codes ■ restrict it to certain database ids and file numbers ■ specify the number and frequency of retry attempts ■ specify whether or not command retry should cause a console message to be issued ■ specify whether or not retried commands should be shown to user exits 	None

Debug Settings

Parameter Type	Use	Default
Client Runtime Control	<p>Define client debug events. For more information, refer to the section <i>Using the Client Event Debug Monitor</i> in the <i>Adabas System Coordinator Operations and Programming Guide</i>.</p>	None

Unified Trace Settings

Parameter Type	Use	Default
Client Runtime Control	Define unified trace settings. For more information, refer to the section <i>Using the Unified Trace</i> in the <i>Adabas System Coordinator Operations and Programming Guide</i> .	None

UTM pool settings

Parameter Type	Use	Possible Values	Default
Client Runtime Control	Specify the virtual address and size of the shared memory pool for this UTM service. Required on BS2000. All UTM service task related memory is maintained in this shared memory pool.		
	Pool address: The virtual start address of the UTM service shared memory pool. The start address (and size) must be valid for the Adabas System Coordinator daemon.	Hexadecimal address	None
	Size(mb): The size of the UTM service shared memory pool. This should allow 1mb for each UTM task. For example, if there are 6 UTM tasks, the Pool Size should be set to 6. This size removes the risk of pool fragmentation and allows diagnostic tools, if called upon, access to the additional memory they may require.	Pool size in megabytes	None

Site-dependent controls

Parameter Type	Use	Possible Values	Default
Client Runtime Control	You can define two eight-character runtime controls for your own use. By default the controls are called "Area" and "System". They can be specified for jobs, overrides and dynamically and are shown in the Adabas Client Activities displays.	Anything	None

Review

Parameter Type	Use	Possible Values	Default
Client Runtime Control	<p>Controls whether or not the REVEXIT1 link module component of the Adabas Review performance monitor is to be called.</p> <p>This control is only available for z/OS Com-plete, CICS and Batch/TSO systems and is only honored if the link module globals table was assembled with the option REVIEW=COR.</p> <p>This control can be overridden and can also be changed dynamically via the SYSCOR Current Activities “Controls” task or by use of Natural or 3GL APIs (refer to <i>API to Modify Runtime Controls</i>).</p>	Y N	N

Client Monitor

Parameter Type	Use	Possible Values	Default
Client Runtime Control	<p>Controls whether or not the Adabas Review client monitoring component REVEXIT2 is to be called.</p> <p>This control is only available for z/OS CICS and Batch/TSO systems and is only honored if the link module globals table was assembled with the options REVIEW=YES or COR and RVCLNT=COR. If REVIEW=COR, this control is only honored if the Review client runtime control is also set to Y.</p> <p>This control can be overridden and can also be changed dynamically via the SYSCOR Current Activities “Controls” task or by use of Natural or 3GL APIs (refer to <i>API to Modify Runtime Controls</i>).</p>	Y N	N

2 Daemon Parameters

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Daemon parameters are used to define the environment and operational requirements for Adabas System Coordinator daemons. *Daemon Group* parameters apply to all daemons in that group. *Daemon Group Member* parameters apply to individual daemons and may differ from one daemon to another in the group.

Daemon Group Parameters

Daemon group parameters are used to define the Adabas System Coordinator daemon environment.

Daemon Group Parameters
Daemon Group Name
Daemon SVC
System Type
Full crash recovery disk file
Messages - database
Messages - daemon

Daemon Parameters Descriptions

This section describes the daemon parameters.

Daemon Group Name (Daemon Group Parameter)

Parameter Type	Use	Default
Daemon Group	The identifier for a daemon group. In a sysplex environment, this is the XCF group name.	none

Daemon SVC

Parameter Type	Use	Default
Daemon Group	The router (SVC) number that is used for communicating with the group. This must be the same in all parts of a cluster.	none

System Type

Parameter Type	Use	Possible Values	Default
Daemon Group	<p>Type of coordination to be performed by the daemon group</p> <p>Possible values are:</p> <ul style="list-style-type: none"> ■ Single: A single system is to be coordinated. ■ Multi - XCF: Multiple systems are to be coordinated with no dynamic transaction routing support across the systems. XCF is used for cross-system communications. ■ Multi - Net-Work: Multiple systems are to be coordinated with no dynamic transaction routing support across the systems. Entire Net-Work is used for cross-system communications. 	<p>Single</p> <p>Multi-XCF</p> <p>Multi-Net-Work</p>	none

Full Crash Recovery Disk File

Parameter Type	Use	Possible Values	Default
Daemon Group	<p>Indicates whether a common daemon latency file is to be used to store session-related information when sessions are at rest.</p> <p>For more information, refer to <i>Multi-system Dynamic Transaction Routing</i> in the <i>Adabas System Coordinator Operations and Programming Guide</i>.</p>	Y N	N

Messages – database

Parameter Type	Use	Possible Values	Default
Daemon Group	<p>Indicates where messages are written for databases.</p> <p>The DDMSG file should be defined as fixed records of length 133, with an appropriate blocksize. It is possible that operating system factors (such as blocking, caching) may cause messages not to be seen until the database terminates.</p>	<p>Console message job log</p> <p>Local DDMSG file in the database job</p>	Console

Messages – daemon

Parameter Type	Use	Possible Values	Default
Daemon Group	Indicates where messages are written for daemons. The DDMSG file should be defined as fixed records of length 133, with an appropriate blocksize. It is possible that operating system factors (such as blocking, caching) may cause messages not to be seen until the database terminates.	Console message job log Local DDMSG file in the daemon job	Console

Daemon Group Member Parameters

Daemon Group Member Parameters
Daemon job name
Node id
Recovery
Daemon latency/pulse services
Unified trace settings
Debug settings
Pool settings for BS2000

Daemon Job Name

Parameter Type	Use	Default
Daemon Group Member	The job name under which this daemon executes. This is the name of the job or started task as known to the operating system.	none

Node id

Parameter Type	Use	Default
Daemon Group Member	Daemons sign on as targets to the Adabas router. Specify the node id to be used by the daemon. This node id must be unique across all your systems.	none

Recovery

Parameter Type	Use	Possible Values	Default
Daemon Group Member	<p>Setting Continuous Operation to “Y” causes the daemon to intercept failures, react by automatically terminating and restarting the appropriate component(s) and then continuing.</p> <p>Setting Continuous Operation to “N” causes the daemon to react to a failure by terminating.</p> <p>You are recommended always to set Continuous Operation to “Y”.</p>	Y N	N

Daemon latency/pulse services

Parameter Type	Use	Possible Values	Default
Daemon Group Member	<p>Defines the shared memory limits for holding at-rest session-related information and also activity information for jobs defined to use activity pulsing.</p> <p>Shared memory is mandatory if you want to use activity pulsing (see Client Runtime control Activity pulse) and is recommended for dynamic transaction routing (DTR) systems (eg. CICS/MRO, CICS/PLEX, IMS and/or UTM) that require daemon latency for performance and resilience (see Client Runtime control Latency controls).</p> <p>The required shared memory area size depends on the number of sessions, the installed product mix and configuration, and the nature of the application workload and also on how extensively you use activity pulsing.</p> <p>If the shared memory area is not large enough, the daemon will transparently use its own local memory for DTR systems latency. You should monitor the shared memory area usage with the DRES daemon operator command which shows the maximum, current and highwater-mark allocations for Shared Memory.</p> <p>This shared memory may optionally be allocated within a dataspace of the specified name.</p> <p>For BS2000, this shared memory is taken from the daemon shared memory pool as defined by the daemon parameter Pool settings for BS2000.</p> <p>For more information on shared memory requirements, refer to <i>Considerations and Configuration for using a Daemon in the Adabas System Coordinator Operations and Programming Guide</i>.</p>	<p>0 – 2097151</p> <p>Valid dataspace name.</p>	none

Unified trace settings

Parameter Type	Use	Possible Values	Default
Daemon	Define unified trace settings. For more information, refer to the section <i>Using the Unified Trace</i> in the <i>Adabas System Coordinator Operations and Programming Guide</i> .	Refer to <i>The Daemon Unified Trace</i> in the <i>Adabas System Coordinator Operations and Programming Guide</i> .	None

Debug settings

Parameter Type	Use	Possible Values	Default
Daemon	CORDUMP for transient situations...Some internal communications (for example) may suffer intermittent, transient failure. System Coordinator automatically tolerates and recovers from these issues without problem. However, sometimes Software AG may ask that diagnostics are taken when investigating a problem by requiring this setting to be Y.	N Y	N
	Number of outputs...when diagnostics are being taken it is possible (and wise) to limit the number of times diagnostics are taken using this number.	0-65535	0

Pool settings for BS2000

Parameter Type	Use	Possible Values	Default
Daemon	Specify the name, virtual address and size of the daemon shared memory pool. Required on BS2000. This shared memory pool is used to hold latent session-related information for UTM services and also activity information for jobs defined to use activity pulsing as well as internal daemon control information. Note: You must also set the “Shared memory area size (k)” in the Daemon Group parameter <i>Daemon latency/pulse services</i> .		
	Name :	16 character pool name	None
	The name of the daemon shared memory pool.		
	Address:	Hexadecimal address	None
	The virtual start address of the daemon shared memory pool. The start address (and size) must be valid for the daemon, all UTM services managed by the daemon, and any jobs defined to use activity pulsing.		
	Size(mb)	Pool size in megabytes	None

Parameter Type	Use	Possible Values	Default
	<p>The size (in megabytes) of the daemon shared memory pool.</p> <p>This shared memory pool size must be large enough to contain the “Shared memory area size” defined within the Daemon Group parameter <i>Daemon latency/pulse services</i> plus 1 megabyte for control information.</p>		

Daemon Runtime Parameters

For detailed information refer to Daemon Runtime Parameters in the *Adabas System Coordinator Operations and Programming Guide*.

