ADARUN Parameters for Adabas Review in z/OS

ADARUN performs the following functions:

- Loads the ADAIOR module, which performs all database I/O and other functions that depend on the operating system.

- Interprets the ADARUN parameter statements; then loads and modifies the appropriate Adabas nucleus or utility modules according to the ADARUN parameter settings.

- Transfers control to Adabas.

The ADARUN statement, normally a series of entries each specifying one or more ADARUN parameter settings, is specified in the DDCARD data set for z/OS. For more specific job information, refer to the appropriate chapter in this manual.

The ADARUN control statement defines and starts the Adabas operating environment. The ADARUN control statement also starts Adabas utilities.

The ADARUN parameters described in this chapter apply specifically to Adabas Review.

This chapter describes the ADARUN parameters that apply to the Adabas nucleus and the Adabas Review Hub in z/OS environments.

- ADARUN Parameter Syntax

- PROGRAM Parameter: Program to Run

- REVIEW Parameter: Adabas Review Control

- CT Parameter: Command Timeout Limit

- FORCE Parameter: Allow Nucleus Database ID or Review Hub Table Entry Overwrite

- LOCAL Parameter: Local Nucleus or Adabas Review Hub

- NAB Parameter: Number of Attached Buffers

- NC Parameter: Number of Command Queue Elements

- REVFILTER Parameter: Review Record Filtering Control

- REVLOGBMAX Parameter: Logged Buffer Size Limit for Review

- REVLOGMAX Parameter: Total Logged Buffer Size Limit for a Review Command

- SVC Parameter: SVC Number

ADARUN Parameter Syntax

The syntax for the ADARUN statement and parameters is:

```
ADARUN parameter=value,...
```

In this syntax, *parameter=value* is one or more of the ADARUN parameters described in this section.

Any number of blanks is permitted between "ADARUN" and the first parameter, but no blanks are permitted within the *parameter=value* string. Commas (,) must be used as separators. A blank following a *parameter=value* entry indicates the end of the statement.

The literal "ADARUN" must be entered in positions 1-6 of each ADARUN statement. All *parameter=value* entries must end before position 73. Any *parameter=value* entries that would extend beyond position 72 must be coded on a new statement as shown below. The comma following the last *parameter=value* entry of a statement is optional, and is not interpreted as a continuation character. Positions 73-80 are ignored. An asterisk (*) in position 1 indicates a user comment line.

The following example summarizes the ADARUN statement format. The first statement cannot continue beyond position 72. The second statement represents a continuation of the first statement. All ADARUN continuation statements have the same format and restrictions as the first statement.

Positions 1-6	Positions 8-72
ADARUN	*parameter=value.parameter=value,...*
ADARUN	*parameter=value*

The ADARUN parameters are summarized in the following table, and described in detail in the section following the table.

Unless noted otherwise, each parameter has a default value that ADARUN uses if the parameter is not specified.

PROGRAM Parameter: Program to Run

Parameter	Specify:	Possible Values	Default
PROGRAM	the program to be executed.	see table below	USER

This parameter specifies what to execute. The possible values are described in the following table:

Specify:	To start:
ADACOM	an ADACOM task (used in Adabas Cluster Services and Adabas Parallel Services environments) For more information, refer to your Adabas Cluster Services and Adabas Parallel Services documentation.
ADANUC	an Adabas nucleus For more information about executing an Adabas nucleus, read *Adabas Session Execution*, in the *Adabas Operations Manual*.
ADAREV	an Adabas Review hub. Specify this in conjunction with the ADARUN REVIEW parameter. For more information, refer to your Adabas Review documentation.
NETWRK	an Entire Net-Work node For more information, refer to your Entire Net-Work documentation.
RENTUSER	a user program to be run using a reentrant Adabas batch/TSO link routine. For more information, refer to description of the Adabas TP monitor installation in your Adabas installation documentation.
USER	a user program to be run using a non-reentrant Adabas batch/TSO link routine. For more information, read *Linking Applications to Adabas*, in the *Adabas Operations Manual*
utility-name	an Adabas utility Specify an Adabas utility for *utility-name*. For more information, refer to the *Adabas Utilities Manual*.

Examples

The following example specifies that an Adabas nucleus is running.

```
ADARUN PROGRAM=ADANUC
```

The following example specifies that an Adabas Review hub is running.

```
ADARUN PROGRAM=ADAREV, REVIEW=202
```

The following example specifies that an Entire Net-Work node is running.

```
ADARUN PROGRAM=NETWRK
```

REVIEW Parameter: Adabas Review Control

Parameter	Specify . . .	Possible Values	Default
REVIEW	whether to run Adabas Review in local or hub mode specifying the hub ID, or not at all.	NO | LOCAL | dbid	NO

Note:
The parameter name REVIEWHUBID is a synonym for REVIEW, provided to ensure downward compatibility with past Adabas releases. We recommend that you use the parameter name REVIEW instead, wherever possible.

REVIEW controls the use of the Adabas Review product:

Value	Meaning
NO	The default setting. Adabas Review is not started.
LOCAL	Adabas Review is started in local mode running as an extension to ADALOG.

In local mode, Adabas Review job control statements should be added to the Adabas nucleus startup JCL.

Note:
If an Adabas Review load library is not included in the startup JCL, the REVIEW parameter is automatically changed from LOCAL to NO.

dbid   Adabas Review is started in hub mode. The physical database ID that you specify for the hub identifies

- the hub (server) itself (with PROGRAM=ADAREV) that is being started; or

- from an Adabas nucleus (client), the hub that is the target for Adabas Review processing for that nucleus (with PROGRAM=ADANUC).

In hub mode, Adabas Review job control statements should be added to the Adabas Review hub startup JCL.

Dynamic Modification

The setting of the ADARUN PROG=ADANUC,REVIEW=dbid parameter can be changed dynamically using the REVIEWHUBID command from the operator console, the ADADBS OPERCOM REVIEWHUBID function, or the Modify Parameter function of Adabas Online System.

Examples

The following example starts hub 202 for the Adabas Review hub (server) installation.

```
ADARUN PROGRAM=ADAREV,REVIEW=202
```

The following example starts the Adabas nucleus that will log to Adabas Review hub 202 for the Adabas Review (client) installation.

```
ADARUN PROGRAM=ADANUC,REVIEW=202
```

CT Parameter: Command Timeout Limit

Parameter	Specify . . .	Minimum	Maximum	Default
CT	the maximum time (seconds) for interregion communication of results from Adabas to the user.	1	16777215	60

For Adabas Review, this is the maximum number of seconds (more precisely, units of 1.048576 seconds) that can elapse from the time an Adabas Review hub command has been completed until the results are returned to the user through the interregion communication (operating-system-dependent).

This parameter is used to prevent a command queue element and attached buffer from being held for a long period of time for a user who has terminated abnormally.

Possible causes of a command timeout are

- user region is swapped out or cannot be dispatched;

- user is cancelled;

- user has low priority in high activity system.

If the CT limit is exceeded,

- the command queue element and attached buffer are released;

- a message ADAM93 is printed; and

- if the user has not terminated, response code 254 is returned to the user program.

Example

The following example permits about 30 seconds to obtain a result through interregion communication from the Adabas Review hub

```
ADARUN PROG=ADAREV,CT=30
```

FORCE Parameter: Allow Nucleus Database ID or Review Hub Table Entry Overwrite

Parameter	Specify . . .	Possible Values	Default
FORCE	whether the nucleus or Adabas Review hub can overwrite an existing ID table entry.	YES | NO	NO

If running Adabas Review, this indicates whether the Adabas Review hub can overwrite an existing ID table entry. When a Review hub starts up, ADARUN scans the ID table to ensure that no entry exists for the Review hub. You can use the FORCE parameter to indicate whether the Review hub can overwrite an existing ID table entry.

The ID table entry is derived from the database ID and the job name. For Adabas Review, the ID table entry is derived from the Review hub ID (REVIEW=). The ID table entry is deleted when the nucleus terminates normally.

The FORCE parameter allows the nucleus or Adabas Review hub to overwrite the existing ID table entry and access the database.

⚠ **Warning:**
Do not use the FORCE parameter unless absolutely necessary, or the integrity of the database could be lost. Ensure that no nucleus or Review hub is active for the ID table entry being overwritten.

Value	Meaning
YES	The nucleus or Adabas Review hub that is starting can overwrite an existing ID table entry. FORCE=YES is required when restarting a session that terminated abnormally with an ADAM98 message. In this case, the ID table still contains an active entry for the nucleus or Review hub. Overwriting the existing entry by specifying FORCE=YES prevents further communication to the overwritten nucleus or hub and causes loss of cross-memory environment resources, which cannot be restored until the next IPL.
NO	(default) If the ID table contains an entry for the nucleus or Adabas Review hub that is starting, the nucleus is denied access to the database or the Review hub is not permitted to start.

Note:

In an Adabas Cluster Services or Adabas Parallel Services environment, the FORCE parameter applies to the NUCID, rather than the database ID, because a cluster nucleus builds an ID table entry for the NUCID.

A data integrity block (DIB) entry will only be removed once the ID Table initialization has been successful. Therefore, you must set IGNDIB and FORCE both to "YES" if either of the following occur:

- You receive a PARM ERROR 26 after parameter settings IGNDIB=NO and FORCE=YES were applied;

- You receive a PARM ERROR 23 after parameter settings IGNDIB=YES and FORCE=NO were applied.

Examples

The following example specifies that if the ID table contains an active entry for DBID 7, overwrite the entry.

```
ADARUN PROG=ADANUC,FORCE=YES,DBID=7
```

The following example specifies that if the ID table contains an active entry for the Adabas Review hub, overwrite the entry.

```
ADARUN PROG=ADAREV,FORCE=YES,REVIEW=202
```

LOCAL Parameter: Local Nucleus or Adabas Review Hub

Parameter	Specify . . .	Possible Values	Default
LOCAL	whether an Adabas nucleus or Adabas Review hub is isolated and available for local use only.	YES | NO	YES

Defines an isolated Adabas nucleus or Adabas Review hub that is only available locally. The nucleus or hub is unknown to Entire Net-Work. A nucleus or Adabas Review hub specifying LOCAL=YES (the default) can have the same database ID or hub ID as another database nucleus or Review hub on another network node.

Value	Meaning
YES	Isolates this nucleus or Adabas Review hub (that is, makes it unaddressable) from other Entire Net-Work nodes.
NO	Allows the nucleus or Adabas Review hub to receive calls from other Entire Net-Work nodes.

Example

In the following example, the Adabas nucleus is isolated and cannot be addressed by other Entire Net-Work nodes.

```
ADARUN PROG=ADANUC,LOCAL=YES
```

NAB Parameter: Number of Attached Buffers

Parameter	Specify . . .	Minimum	Maximum	Default
NAB	the number of attached buffers to be used.	1	varies, depending on the amount of available virtual storage	16

The NAB parameter defines the number of attached buffers to be used during the session. An attached buffer is an internal buffer used for interregion communication. It is required in all environments. Adabas allocates an attached buffer pool with a size equal to the value of NAB multiplied by 4096 bytes.

You may specify as many attached buffers as fit into the available virtual storage.

In environments running in 31-bit addressing mode, the attached buffer pool space is allocated above the 16-MB line.

The NAB parameter syntax is:

```
NAB={ n | 16 }
```

Specific Product Recommendations

- For Event Replicator Server databases, set parameter NAB to a value greater than or equal to: `41 * 10 * `*the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server*.

  For example, if one Adabas nucleus will be sending data to the Event Replicator Server, set the NAB parameter greater than or equal to 410 (for example NAB=420).

- If data is sent through Entire Net-Work from one or more Adabas nuclei to an Event Replicator Server, the Entire Net-Work NAB parameter must also be 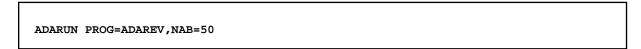set to a value greater than or equal to: `41 * 10 * `*the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server*.

- If the Event Replicator Server is set to support updates by multiple concurrent users to Adabas targets (when the NPADACALLS initialization parameter is set to any value greater than "1"), consider adjusting the value of this parameter in the target Adabas nucleus to ensure the target nucleus can handle updates from multiple concurrent users.

- Users of the Adabas Review hub should read *Storage Requirements* for more information about the space requirements of the Command Queue for Adabas Review.

Example

The following example runs the Adabas Review hub nucleus with 50 attached buffers.

```
ADARUN PROG=ADAREV,NAB=50
```

NC Parameter: Number of Command Queue Elements

Parameter	Specify . . .	Minimum	Maximum	Default
NC	the maximum number of command queue elements.	20	32767	200

The number of command queue elements (CQEs) established for the Adabas or Review hub session determines the maximum number of Adabas commands that may be queued or be in process at any one time during the session.

Each call from the Adabas nucleus is assigned a CQE. The CQE is released when the user receives the results of the command, the Adabas Review hub has processed the command, or the user has been timed out..

192 bytes are required for each CQE.

Software AG recommends that you set NC high enough to allow one command per active user for possible synchronization during execution of the online SAVE database function of the ADASAV utility.

The Adabas session statistics or Adabas Online System can be used to tune this parameter for the next session.

For more information about the space requirements of the Command Queue for Adabas Review, refer to *Storage Requirements*.

Specific Product Recommendations

- For Event Replicator Server databases, set parameter NC to a value greater than or equal to: `10 * the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server`. For example, if one Adabas nucleus will be sending data to the Event Replicator Server, set the NC parameter greater than or equal to 10 (for example NC=20).

- If data is sent through Entire Net-Work from one or more Adabas nuclei to an Event Replicator Server, the Entire Net-Work NC parameter must also be set to a value greater than or equal to: `10 * the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server`.

- If the Event Replicator Server is set to support updates by multiple concurrent users to Adabas targets (when the NPADACALLS initialization parameter is set to any value greater than "1"), consider adjusting the value of this parameter in the target Adabas nucleus to ensure the target nucleus can handle updates from multiple concurrent users.

Example:

Run the Adabas nucleus with a maximum of 500 elements in the command queue.

```
ADARUN PROG=ADANUC,NC=500
```

The following example runs the Adabas Review hub nucleus with a maximum of 500 elements in the command queue.

```
ADARUN PROG=ADAREV,NC=500
```

REVFILTER Parameter: Review Record Filtering Control

Parameter	Specify . . .	Possible Values	Default
REVFILTER	whether to allow Adabas Review record filtering during the session.	YES | NO	YES

REVFILTER determines whether command log record filtering may be activated. Filtering can decrease the number of command log records passed to Review for report processing.

Value	Meaning
YES	The default setting. Database command log records may be filtered from report processing, depending upon Review report rules.
NO	All command log records will be passed to Review for report processing.

Examples

In the following example, Adabas Review's record filtering may be activated during the Adabas nucleus session.

```
ADARUN PROG=ADANUC,REVFILTER=YES
```

In the following example, Adabas Review's record filtering will not be in effect for the Adabas nucleus session.

```
ADARUN PROG=ADANUC,REVFILTER=NO
```

REVLOGBMAX Parameter: Logged Buffer Size Limit for Review

Parameter	Use	Values	Default
REVLOGBMAX	Specify the maximum allowable number of bytes of a logged buffer for Review.	Any integer ranging from 0 to 30000	5120

If a buffer is longer than this value, the logged buffer is truncated from the point at which its size exceeds the setting of the REVLOGBMAX parameter. The REVLOGBMAX setting affects the ADARUN LOGGING parameter specifications only for both CLOGLAYOUT=8. The minimum value (368) is the size of the length of the CLOGLAYOUT=8 basic record plus the length of the extended Adabas control block (ACBX).

Example

The following example runs the Adabas nucleus using a logged buffer size limit of 512. Individual logged buffers, such as the format buffer for an Adabas command, will be truncated if they exceed 512 bytes.

```
ADARUN PROG=ADAREV,LOGBMAX=512
```

REVLOGMAX Parameter: Total Logged Buffer Size Limit for a Review Command

Parameter	Use	Values	Default
REVLOGMAX	Specify the maximum size of all of the logged buffers allowed for an Adabas Review command.	Any integer ranging from 2000 to 32768 (32K).	16384

When the sum of sizes of the logged buffers for an Adabas Review command reaches the value of the REVLOGMAX parameter, the buffer exceeding the limit is truncated and all following buffers are omitted. The size of REVLOGMAX must at least be as large as the REVLOGBMAX + 2000 in order to accommodate the largest buffer of the Adabas command. The minimum value (2000) is the size of the length of the CLOGLAYOUT=8 basic record plus the length of the extended Adabas control block (ACBX) and the CLEX information.

The CLOGMAX setting affects the ADARUN LOGGING parameter specifications only for CLOGLAYOUT=8.

Example

The following example runs the Adabas nucleus using a command logged buffer size limit of 32000 bytes. The sum of all logged buffers for an Adabas Review command to this nucleus cannot exceed 10000 bytes.

```
ADARUN PROG=ADAREV,REVLOGMAX=10000
```

SVC Parameter: SVC Number

This parameter applies to the operating environments z/OS and z/VSE only.

Parameter	Specify . . .	Possible Values	Default
SVC	the Adabas SVC number or Adabas Review hub SVC number to be used for the session.	see text	45 (z/VSE) 249 (z/OS)

The SVC number is specified as an integer. It must correspond to the number used for the Adabas SVC at your installation.

The Adabas SVC or Adabas Review hub SVC are used to perform various Adabas internal functions under z/OS and z/VSE.

Valid SVC values are as follows:

z/OS	200-255
z/VSE	45 is recommended; any free SVC value can be used. See the Adabas Installation documentation for information about finding free values for z/VSE.

Example

The following example runs an Adabas session under z/OS using SVC 202 for the Adabas SVC.

```
ADARUN PROG=ADANUC,SVC=202
```

The following example runs an Adabas Review hub session under z/VSE using SVC 45 for the Adabas Review hub SVC.

```
ADARUN PROG=ADAREV,SVC=45
```