

ADARUN Parameters for Adabas Review in BS2000

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 more specific job information, refer to the appropriate section of this documentation.

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 section of the documentation apply to Adabas Review in BS2000 environments.

This chapter covers the following topics:

- PROGRAM Parameter: Program to Run
- REVIEW Parameter: Adabas Review Control
- CMDQMODE Parameter: Command Queue Mode
- FORCE Parameter: Allow Nucleus Database ID or Review Hub Table Entry Overwrite
- NAB Parameter: Number of Attached Buffers
- NC Parameter: Number of Command Queue Elements
- REVFILTER Parameter: Review Record Filtering Control
- SUBMPSZ Parameter: GETMAIN Memory Pool for Subtasks

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

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
<u>REVIEW</u>	whether to run Adabas Review in local or hub mode specifying the hub ID, or not at all.	NO <u>LOCAL</u> 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.
<u>LOCAL</u>	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 <ul style="list-style-type: none"> 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). <p>In hub mode, Adabas Review job control statements should be added to the Adabas Review hub startup JCL.</p>

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
```

CMDQMODE Parameter: Command Queue Mode

This parameter applies to the BS2000 operating system only.

Parameter	Specify . . .	Possible Values	Default
CMDQMODE	whether to allocate the command queue memory pool below or above the 16-MB line.	BELOW ABOVE	ABOVE (BELOW for Adabas versions prior to Version 8)

CMDQMODE specifies whether to allocate the BS2000 memory pool for the Adabas command queue below or above the 16-MB line.

Value	Meaning
BELOW	The default setting. Places the BS2000 memory pool for the Adabas command queue below the 16-MB line in one or more 64-kilobyte segments.
ABOVE	Places the BS2000 memory pool for the Adabas command queue above the 16-MB line in one or more 1-MB segments.

Example

The following example, places the Adabas command queue memory pool above the 16-MB line in 1-MB segments.

```
ADARUN PROG=ADANUC,CMDQMODE=ABOVE
```

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

Parameter	Specify . . .	Possible Values	Default
<u>FORCE</u>	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
```

NAB Parameter: Number of Attached Buffers

Parameter	Specify . . .	Minimum	Maximum	Default
<u>NAB</u>	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
```

SUBMPSZ Parameter: GETMAIN Memory Pool for Subtasks

Parameter	Specify . . .	Possible Values	Default
SUBMPSZ	the common memory pool size, in bytes, for subtask communication in products such as Adabas Review, Adabas Parallel Services, and Event Replicator for Adabas.	100000 - address-limit	1,024,000

For Adabas Review on BS2000 systems, the recommended value is 140,000,000 bytes.

Notes:

1. Setting this parameter for Adabas Review replaces an optional zap for increasing the subtask common memory.
2. This parameter must be set to the recommended value for the Adabas Review hub and the Adabas Review nuclei, irrespective of the value of the REVIEW parameter.

Example

The following example allows for four (4) megabytes of common memory pool storage for use in the communication between the Adabas nucleus and the subtasks.

```
ADARUN PROG=ADANUC,SUBMPSZ=4096000
```