

# ADAMODE - Adabas Call Interface Mode

This Natural profile parameter controls the Adabas call interface mode and the number of Adabas user sessions used by Natural to issue Adabas calls.

<b>Possible settings</b>	See below.
<b>Default setting</b>	2
<b>Dynamic specification</b>	yes
<b>Specification within session</b>	no

The following values are possible for the ADAMODE parameter:

<b>Value</b>	<b>Separate Adabas User Sessions for Nucleus and User Application Database Calls [1]</b>	<b>3GL Program Adabas Calls Use Natural's Adabas Session for User Application Calls [2]</b>	<b>Image Switching in a z/OS Parallel Sysplex Environment Supported [3]</b>
0	No	Yes	No
1	No	No	Yes
2	Yes	No	Yes
3	Yes	Yes	No

## Notes:

1.

### **Separate Adabas User Sessions for Nucleus and User Application Database Calls**

#### **Two Separate Adabas User Sessions**

If Natural uses two separate Adabas user sessions to issue Adabas calls, Natural uses one Adabas user session to handle Adabas calls issued by the Natural nucleus (for example, to load Natural objects from the system file), and the other Adabas user session to issue Adabas calls issued by the user application.

An Adabas timeout (leading to Natural error NAT3009) that occurs for the Adabas user session that is used to handle Adabas calls issued by the Natural nucleus does not affect the user application.

A separate Adabas user queue element (UQE) is generated for each Adabas user session, and it may be necessary to increase the Adabas ADARUN parameter NU.

#### **Single Adabas User Session**

If Natural uses only a single Adabas user session, `END TRANSACTION` and `BACKOUT TRANSACTION` statements issued by either the Natural nucleus or the user application affect transactions started by both the Natural nucleus and the user application.

An Adabas timeout (leading to Natural error NAT3009) that occurs for the Adabas user session is always reported to the user application, because it is not possible to check whether the timeout affects the application's transaction state.

If Natural uses a single Adabas user session to handle Adabas calls issued by the Natural nucleus as well as Adabas calls issued by the user application, only one UQE is necessary.

2.

### **3GL Program Adabas Calls Use Natural's Adabas Session for User Application Calls**

#### **Calls Using Natural's Adabas Session**

If a 3GL program, which is called from the user application, issues Adabas calls, and if these Adabas calls use Natural's Adabas session for user application calls, these Adabas calls participate in the user application's transaction handling (`END TRANSACTION` and `BACKOUT TRANSACTION` statements), and they are affected by Natural transaction processing related profile parameter settings (see the parameters mentioned below).

#### **Calls Not Using Natural's Adabas Session**

If a 3GL program, which is called from the user application, issues Adabas calls, and if these Adabas calls do not use Natural's Adabas session for user application calls, these Adabas calls will not participate in Natural's transaction handling for the Adabas user session. As a consequence, such 3GL programs need to perform their own transaction handling.

3.

### **Image Switching in a z/OS Parallel Sysplex Environment Supported**

If image switching in a z/OS Parallel Sysplex environment is supported, the Natural session may, after a terminal I/O operation, seamlessly continue to execute in a z/OS image that is different to the z/OS image where the Natural session has executed before the terminal I/O operation. Installation of the Natural Roll Server is required to support execution in a z/OS Parallel Sysplex environment.

To ascertain support of image switching in a z/OS Parallel Sysplex environment, even if `ADAMODE=0` is set, Adabas System Coordinator (product code COR) must be installed.



#### **Warning:**

**Setting the value of `ADAMODE` so that image switching in a z/OS Parallel Sysplex environment is not supported may lead to unpredictable results if the Natural session continues execution in a another z/OS image after a terminal I/O operation. Depending on Natural transaction processing related profile parameter settings (see the parameters mentioned below), this may include:**

- non-zero Adabas response codes (leading to, for example, Natural error NAT3021),**
- database updates that have not yet been committed by an `END TRANSACTION` statement are unintentionally backed out or applied to the database.**

Other transaction processing related parameters: DBCLOSE | DBOPEN | ENDBT | ET | ETDB | ETEOP | ETIO | ETSYNC