

LT - Limit for Processing Loops

This Natural profile and session parameter is used to limit the number of database records which can be retrieved within Natural applications. This limit applies to all statements retrieving records from the database, that is:

- statements that initiate processing loops, such as READ, FIND, HISTOGRAM or SELECT and
- statements that retrieve only a single record, such as FIND UNIQUE, FIND NUMBER, FIND FIRST, GET (SAME) and SELECT SINGLE.

All retrieved records are counted and the result of the count is compared with the LT limit. The count also includes those records which were rejected by a WHERE clause of a FIND, READ or HISTOGRAM statement. The LT limit does not affect the statements STORE, UPDATE, DELETE, END TRANSACTION and BACKOUT TRANSACTION.

Within a Natural session, the profile parameter LT can be overridden by using the session parameter LT.

When a record is retrieved from the database, the count of retrieved records is incremented before it is compared with the current value of the LT parameter. If the incremented count exceeds the current LT value, Natural error NAT1003 (“Global limit for database calls reached”) is raised. The count of retrieved records is reset to zero whenever a Natural program is started on Level 1. The count is not reset if the program on Level 1 invokes another Natural object (for further information, see *Multiple Levels of Invoked Objects* in the *Programming Guide*). Therefore the LT parameter limits the number of records retrieved from the database by a Level 1 program and objects invoked by that program on a level other than 1.

If the value of the LT parameter is dynamically changed within a program by using a SET GLOBALS LT=*n* statement, the new limit value becomes effective for the next statement that retrieves a record from the database.

Possible settings	0 - 2147483647 Within a session: 0 to <i>n</i> (<i>n</i> = value of profile parameter LT at session start)	Maximum number of records that can be retrieved. All retrieved records (including records rejected by means of a WHERE clause) are counted and compared with this limit. LT=0 defines that no limit is in effect for the number of retrieved records.	
Default setting	99999999		
Dynamic specification	yes		
Specification within session	yes	Applicable Statements:	SET GLOBALS, see Note.
		Applicable Command:	GLOBALS, see Note.
Application Programming Interface	USR1005N	See <i>SYSEXT - Natural Application Programming Interfaces</i> in the <i>Utilities</i> documentation.	

Note:

When the LT parameter is used in conjunction with the statement SET GLOBALS or the system command GLOBALS, the limit value that can be set may not exceed the LT value defined in the Natural parameter module NATPARM.