TS - Translate Output from Programs in System Libraries

Important:
The `TS` parameter applies only to primary output (`CMPRINT`, see Natural in Batch Mode in the *Operations* documentation).

This Natural profile and session parameter is used to translate output from Natural system libraries (that is, libraries whose names begin with `SYS`) using a translation table. This may be necessary for locations which have non-standard lower-case usage (for example, Middle East or Far East countries).

Error messages or warnings are translated if the English version of the text is displayed. If the text is displayed in the local language (for example, Hebrew), it is not translated into upper-case characters. The translation of messages and warnings does not depend on the library from where the program is executed.

Within a Natural session, the profile parameter `TS` can be overridden by the session parameter `TS`.

Possible settings	ON	Output is translated.
		With `TS=ON`, the profile parameter `LC=OFF` and the session parameter `AD=T`, both of which translate input to upper case, are ignored, as they would cause undesired character translation for special character sets.
	OFF	Output is not translated.
Default setting	OFF	
Dynamic specification	yes	
Specification within session	yes	Applicable Statements: `SET GLOBALS`
		Applicable Command: `GLOBALS`
Application Programming Interface	USR1005N	See *SYSEXT - Natural Application Programming Interfaces* in the *Utilities* documentation.

Note:
The translation table can be modified with the `NTTABL` macro or the corresponding dynamic profile parameter `TABL`.

Support of TS=ON for Natural under IMS TM Messages

All Natural under IMS TM messages are translated into upper case if `TS=ON` is specified in the Natural session.

Support of TS=ON for RPC Server Trace

All messages in the Natural RPC server trace are translated into upper case if `TS=ON` is specified in the Natural RPC server session. The trace of the data from/to the client is not affected by `TS=ON` and remains unchanged.

Other Parameters to Provide Upper Case Translation

In addition to honoring `TS=ON`, several Natural components provide an `UCTRAN` parameter to provide for translation of messages into upper case, even if the setting of the `TS` parameter is not (or not yet) available. These components are:

- Authorized Services Manager

- Roll Server

- Global Buffer Pool Manager under z/OS and z/VSE

- Natural Com-plete/SMARTS Interface

- Natural Remote Procedure Call

  See *Startup Parameters* in z/OS Batch Mode and *Startup Parameters* under CICS in the *Natural Remote Procedure Call* (RPC) documentation.

For the Natural Development Server, the configuration parameter `UPPERCASE_SYSTEMMESSAGES` with similar functionality is available, for details, see *Configuring the Natural Development Server* in the *Natural Development Server* documentation.