

Problem Determination Guide

The items listed below are cross-referenced by Natural for DL/I error messages. They are supplied to advise Natural programmers, DL/I database administrators and system support personnel of actions required to correct a given problem.

Item 1: Activate Natural Trace Facility for DL/I

How to activate the Natural trace facility for DL/I:

- Dynamic trace activation:
Execute the command NDLTRACE in library SYSDDM as follows:
NDLTRACE ON *parm1 parm2 parm3*
Permitted values for trace parameters are either CMD, SER, ROU (according to the specifications in the given error message) or ALL to trace all events of Natural for DL/I.
- Initial trace activation:
 1. Either code the TRACE parameter in the NDLPARM module according to the specifications in the given error message or specify TRACE=ALL to trace all events of Natural for DL/I.
 2. Assemble the NDLPARM module.
 3. Link-edit the load module that contains Natural for DL/I.

How to create and display the Natural trace for DL/I:

1. Start the Natural session with DSIZE=64 (or smaller). This is required because the trace data is written into in the DSIZE buffer.
2. Activate the trace facility (see above) and specify the following commands:

```
TEST DBLOG D   Start DBLOG for DL/I.  
...           Reproduce your problem here.  
TEST DBLOG D   Display the data logged.
```

Note:

The Natural trace facility for DL/I is available in all Natural for DL/I environments.

Item 2: Obtain the Program Listing**Item 3: Obtain the View Listing****Item 4: Obtain the DBD Macros****Item 5: Obtain the PSB Macros****Item 6: Obtain the NDB Description Printout**

To obtain the printout, execute the Natural module NDLBLOCK in the library SYSDDM with the following parameters:

- block type (3 bytes alphanumeric) = NDB
- block name (8 bytes alphanumeric) = *dbd-name*

Item 7: Obtain the NSB Description Printout

To obtain the printout, execute the Natural module NDLBLOCK in the library SYSDDM with the following parameters:

- block type (3 bytes alphanumeric) = NSB
- block name (8 bytes alphanumeric) = *psb-name*

Item 8: Obtain the UDF Description Printout

To obtain the printout, execute the Natural module NDLBLOCK in the library SYSDDM with the following parameters:

- block type (3 bytes alphanumeric) = UDF
- block name (8 bytes alphanumeric) = *db-id**file-number*
(that is, 3 digits for the database ID, a literal separator "***" and 3 digits for the *file-number*)

Item 9: Obtain a DUMP**Item 10: Obtain the NDLPARM Listing****Item 11: Obtain the NATDBD Procedure Output****Item 12: Obtain the NATPSB Procedure Output**