

# Start the Natural Debugger

Below are basic operational requirements and a rough guideline on how to proceed when planning to apply the Natural Debugger:

- Object Requirements
  - Invoke the Natural Debugger
  - Default Object
- 

## Operation Requirements

The Natural Debugger can only be applied to stowed or cataloged Natural objects. It cannot be applied to objects executed with the RUN command.

The Natural Debugger investigates all Natural objects stored in the current library or in one of its steplibs. The Natural Debugger does not investigate Natural objects stored in the Natural system library SYSLIB or SYSLIBS.

The Natural Debugger can only be applied to objects of Natural Version 2.3 and above, but not to objects stowed with any previous version.

## Batch Processing

Although the Natural Debugger is mainly designed for interactive usage in online mode, the Natural Debugger commands can also be used for batch execution, such as for setting breakpoints or watchpoints.

### Note:

There are restrictions for batch processing which can cause a Natural Debugger command to be rejected. For example, the Natural Debugger does not support the commands ++ and +4.

## Invoke the Natural Debugger

### To invoke the Natural Debugger

1. Establish a debug environment for a Natural object or application:
  - Invoke the Debug Main Menu by entering the direct command TEST.  
Or, from within a running application, enter the terminal command %<TEST.
2. Use the functions of the Debug Main Menu to specify debug entries for a Natural object or application:
  - Debug Environment Maintenance
  - Spy Maintenance
  - Breakpoint Maintenance
  - Watchpoint Maintenance
  - Call Statistics Maintenance
  - Statement Execution Statistics Maintenance
  - Variable Maintenance
  - List Object Source
3. Activate the Natural Debugger:
  - In the direct command line or in the NEXT line, enter TEST ON.  
Or, on the Debug Main Menu, enter Function Code T.
4. Execute the Natural object or application.

## Default Object

The maintenance functions of the Natural Debugger as described in the relevant sections, refer to objects you specify either in the corresponding name fields of menus or with direct commands. If you do not specify an object name, by default, the Natural Debugger assumes the name of the current object as it is displayed in the field Object, in the upper right corner of the screen. With a default object defined, no object name is required in direct commands and menu options used to specify breakpoints or watchpoints. To change the default object, see the syntax of the command SET in the section Command Summary and Syntax.