

Using eBinder IDE

Abstract

This document describes the setup and handling for eSOL's eBinder IDE version 2.1 and later.

Table of Contents

Abstract	1
1 Introduction.....	2
2 Setup	2
2.1 Install the TESSY adapter plugins.....	2
2.2 TESSY Environment Editor (TEE) Settings.....	2
3 Starting the Debug Service.....	2
4 Interactive Debugging.....	4

1 Introduction

TESSY supports the latest eBinder IDE from eSOL (currently ver2.1 rev1) that is based on Eclipse. The integration requires the presents of special TESSY plugins within the eBinder IDE installation directory (see 2.1).

The communication between TESSY and eBinder is based on eclipse plugins that need to be running when executing the tests.

Important Note: You need a functional eBinder project which can successfully launch a debug session and which matches your target environment.

2 Setup

This chapter describes the prerequisites required within TESSY and eBinder.

2.1 Install the TESSY adapter plugins

Please copy all jar packages from TESSY's installation folder

```
...\TESSY_4.0\sys\targets\ebinder
```

into the `dropins` folder of the eBinder IDE installation directory, e.g.

```
C:\Program Files (x86)\eSOL\ebinder-2.1\eclipse\dropins\ebinder\eclipse\plugins
```

2.2 TESSY Environment Editor (TEE) Settings

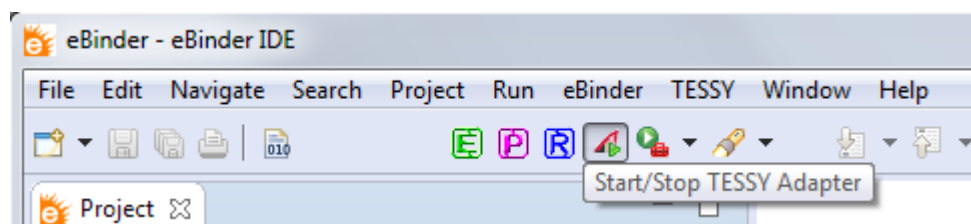
Please consult chapter 6.5 *TEE: Configuring the test environment* from TESSY's user manual if you have not done by now.

Normally no special settings are required for this environment except for the startup code which is usually needed for ARM targets. Please consult application note *Startup Code of the Test Program* for more information about startup code. This adaption supports the latest `InitObjDir` feature as described in chapter 3.2 *Linking Multiple Board Files* of the respective application note.

3 Starting the Debug Service

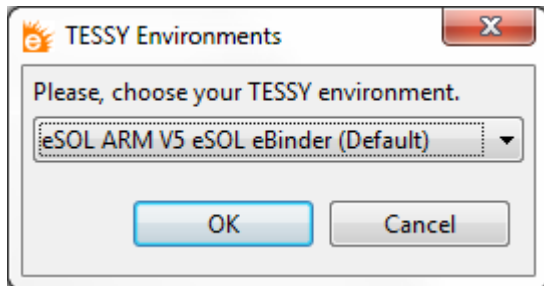
When the TESSY plugins have been installed successfully into the eBinder IDE there should be a **Start/Stop TESSY Adapter** button within eBinder's main toolbar.

In order to prepare eBinder for test execution, you need to start the TESSY adapter by pressing the TESSY button from within the eBinder toolbar as shown below:



TESSY Application Notes

If you have setup more than one TEE configuration for your target a dialog will be shown and let you choose the environment you want to use.

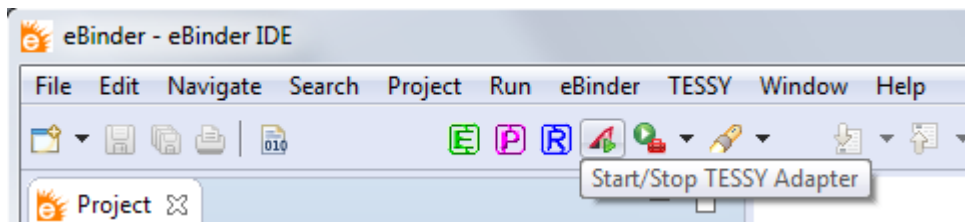


If there is only one TEE environment the dialog will not be displayed.

The TESSY service will launch a network server which listens on a port chosen by the operating system. As soon as the server is ready the lower right corner of eBinder will look as shown below.



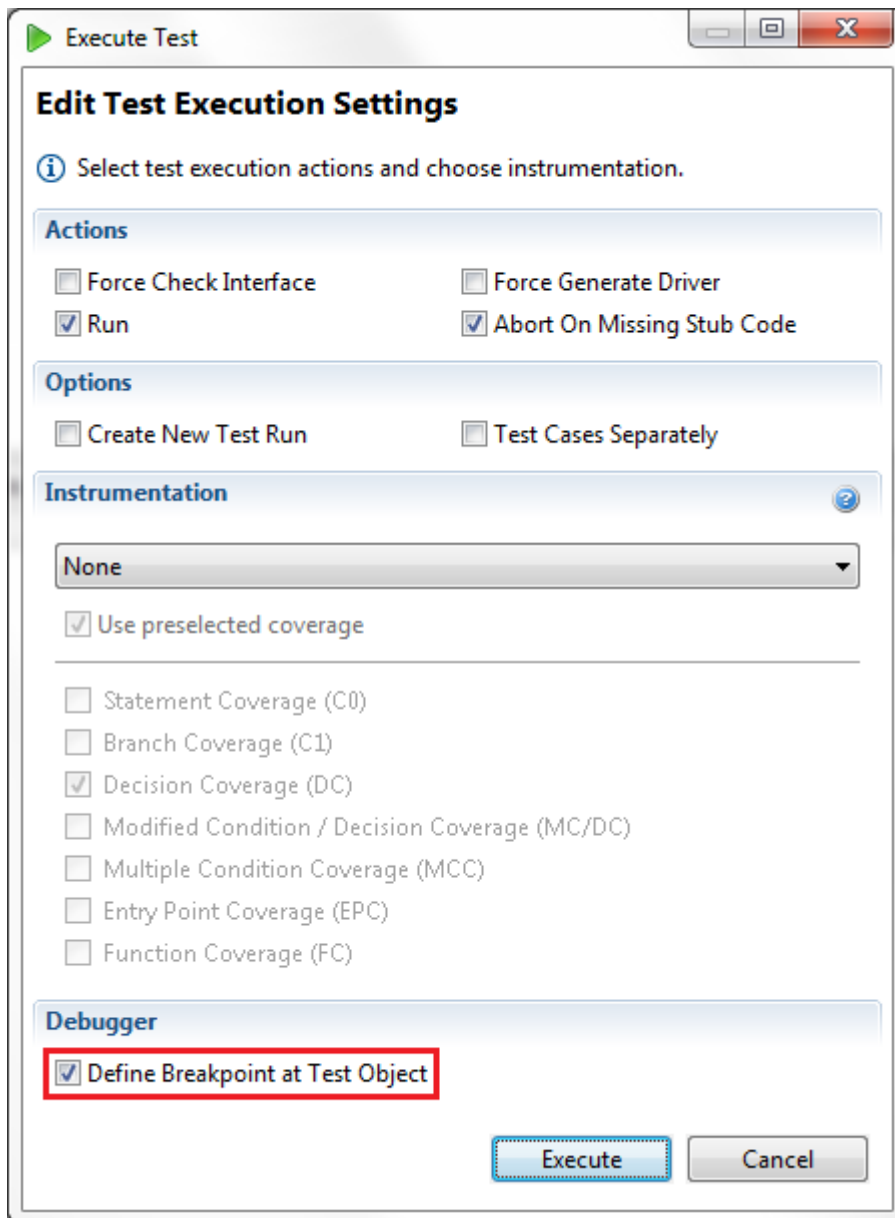
You can now start your TESSY test runs. When done you may stop the TESSY server by pressing the TESSY button again.



The server stops automatically when eBinder is being closed.

4 Interactive Debugging

This adaption supports interactive debugging, i.e. by starting the test run from within TESSY with option **Define Breakpoint at Test Object** as shown below the eBinder debugger will halt at your test object having all test data properly loaded, so that you can step through the test object's code.



TESSY Application Notes

The screenshot shows the eBinder IDE interface with the following components:

- Top Panel:** Includes a menu bar (File, Edit, Source, Refactor, Navigate, Search, Project, Run, eBinder, TESSY, Window, Help) and a toolbar with various icons for file operations, debugging, and navigation.
- Left Panel:** Shows a project tree for 'tessy' with a 'SYSTEM [PID = 0]' folder containing several source files like 'is_value_in_range(struct range, int)+4 (0x001103b4) [ts_src01.c#33]'. Below this is a 'Jump:' dropdown menu.
- Center Panel:** Displays the source code for 'ts_src01.c'. The function 'is_value_in_range' is visible, with lines 33-41. Line 33, 'if (v1 < r1.range_start)', is currently selected.
- Right Panel:** Contains a 'Register' window showing the state of registers. The 'r1' register is expanded to show its fields: 'range_start' (int, 0x0000000a), 'range_len' (int, 0x00000014), 'TS_CURRENT_TESTCASE' (unsigned long, 0x00000001), and 'TS_CURRENT_TESTSTEP' (unsigned long, 0x00000001). Below the register window is an 'Outline' and 'Memory' section with an empty table.
- Bottom Panel:** Features a 'Console' window titled 'eBinder IDE Script Console' and a 'Session' indicator at the bottom right.