Release Notes TestBase Version 2.4.0 August 2, 2002

1. Overview

Important: It is recommended to uninstall the 2.4.0 Alpha or 2.4.0 Beta release before installing 2.4.0.

This release includes the following main items:

- TestBase installation package, including a complete set of sample files, documentation and tutorial slides
- TYX License Manager
- Installation instructions

2. Detailed Description

2.1. Critical items

2.1.1. IDE execution error caused by an Internet Explorer security upgrade

After installing one of the new security updates for Internet Explorer, you might encounter the following behavior: a "File download" dialog will be displayed upon trying to open TestBase, asking if the users wants to Open or Save a file with the .vsd extension.

In order to prevent this behavior, you will have to manually re-associate files having "vsd" extension with file type "Microsoft Visio Drawing" by executing the following operations:

- In Windows Explorer, select menu **Tools** | **Folder Options...**, than click the **File Types** tab.
- Select the "VSD" extension from the list of "Registered File Types". Click **New**. In the dialog that appears, type "vsd" in the "File Extension" input field and click **Advanced**.
- A Drop-down list will be displayed (this may take some time). Select "Microsoft Visio Drawing" from this list and press **OK**. Press **Yes** on the message warning that the extension is already associated with the file type "Microsoft Visio Drawing".
- Press Close on the initial Folder Options dialog.

2.1.2. HTML Report Generation Error

When generating an HTML report for a diagnostic strategy, you may get the error message "Unable to export CFD". The report files containing the Visio diagram are not generated. The report file containing the text description of the diagnostic strategy is generated, but its hyperlinks will not operate.

This problem occurs if Visio was installed on the system but was never started by itself. To fix the problem, simply start Visio standalone.

2.1.3 Operating system compatibility

The product works properly with Windows NT 4.0 SP 6 and Windows 2000 SP 2 and Windows XP.

2.1.4. Internet Explorer compatibility

The product works properly with Microsoft Internet Explorer 5.5 and 6.0. It does not work with Internet Explorer 5.0.

2.1.5. <u>Microsoft Office compatibility</u>

The display of Excel reports works properly with Microsoft Office 2000 Service Release 1 and Microsoft Office XP.

2.1.6. Microsoft Visio compatibility

The product works properly with Microsoft Visio 2000. The current version of the product is not compatible with Visio 2002.

2.1.7. Oracle compatibility

The source of the compatibility problem that occurred for previous versions was identified as being caused by an inconsistency between the Oracle software and the Microsoft libraries used internally by TestBase. For Oracle 8 versions, this problem may be fixed by configuring the system registry as described in the document <u>Connectivity Issue with MDAC and Oracle8i.pdf</u>. For Oracle 9, use the information provided in the above document for version 8.1, performing the following replacements in the strings to be entered in the registry:

- 1. replace oraclient8.dll with oraclient9.dll
- 2. replace orasql8.dll with orasql9.dll

The MTI Controller distributed with the current version of the product was tested with the following combinations of versions :

- Oracle 8.1.5 and 8.1.7, under Windows NT 4.0
- Oracle 8.1.5 and 8.1.7, under Windows 2000
- Oracle 9.0.1.1, under Windows NT 4.0.

<u>Note:</u> According to the TestBase documentation for the MTI subsystem, the specification of Data Source Names for Oracle databases uses the string "Oracle8". This string should be also used with Oracle 9.x software.

2.1.8. LabWindows/CVI compatibility

The Adapter for LabWindows/CVI works properly with the following versions: 5.0, 5.5 and 6.0. Minor changes to the sample test code must be performed in order to compile it under version 5.0. The TestBase installation package redistributes version 5.5 of the LabWindows/CVI Run Time Engine. You may obtain version 6.0 of the Run Time Engine from the National Instruments web site, at http://www.ni.com

2.1.9. Opening database files directly from the Windows Explorer

This version offers a temporary solution for opening TestBase files (extensions .tdd, .ttd and .ted) by double-clicking their icons in the Windows Explorer. While fully functional, the solution requires an initial manual setup. An automatic setup during installation will be provided in a later release. To use this feature, perform the following operations after installing the current version:

- 1. In the Windows Explorer, select menu Tools | Folder options, than click on the File Types tab.
- 2. Look for the extension "TDD" in the "Registered File Types" list. If not present, click **New**, than in the "File Extension" field of the displayed dialog enter "TDD" and press OK. The extension "TDD" should appear in the list
- 3. Select the extension "TDD" in the "Registered File Types" list and click the Advanced... button. In the upper edit box of the displayed dialog, enter "TestBase Diagnostic Database". Click the Change Icon... button, than Browse, navigate to the directory where TestBase was installed and select the file "IDE.exe", than press Open. The "Edit File Type" dialog will display the TestBase IDE icon. Click New. In the displayed dialog, enter the Action Name "open". Click Browse, navigate to the directory where TestBase was installed and select the file "IDE.exe", than press Open. Click OK. The "Edit File Type" dialog will display "open" in the "Actions" list. Click OK to close this dialog.
- 4. In the "Registered File Types" list you should see the association of the "TDD" extension with the "IDE" application.
- 5. Repeat steps 2 ... 4 for the extension "TTD". Use the file name "TestBase Test Database".
- 6. Repeat steps 2 ... 4 for the extension "TED". Use the file name "TestBase TED Database".
- 7. Click Close.

2.1.10. Case sensitivity of Outcome comparisons

When a Test block is followed by decision blocks, the compiler compares the outcome values tested by the decision blocks against the set of possible outcomes returned by the called Test procedure. In previous releases, the above comparison was case insensitive. For consistency with other comparisons in TestBase, the comparison algorithm was changed to case sensitive. This does change not affect the operation of existing projects and does not require their recompilation.

2.1.11. Project save before execution

A Save operation is automatically triggered in the IDE before starting an execution. In releases earlier to 2.4.0, any change made to the design of a test strategy triggered an automatic recompilation, which in turn triggered a Save. Starting with release 2.4.0, recompilation is triggered only if the design changes impact the control flow. When recompilation does not occur, the automatic saving prevents the loss of data if the IDE

2.2. Known Limitations

2.2.1 TestBase IDE

The "Undo" command used during flowchart editing does not operate properly in some situations. It is recommended to avoid using it.

The "Undo" command for the addition of an Off-Page Reference block does not delete the "pair" block that was automatically appended. Workaround: delete manually the "pair" block.

When running a test strategy in debug mode, with execution stopped between steps, if the user clicks on a different Control Flow Diagram then clicks the Run, Step, SimulatedStep or SimulatedStepWithUI buttons, an error message may be displayed: "Automation Error. Illegal to call out while inside message filter". Press OK, click on the Control Flow Diagram that is currently debugged and continue using the IDE. The error indicated before has no impact on subsequent operation.

In some situations accelerator keys (Ctrl-O for **File** | **Open**, F5 for **Debug** | **Go**, etc.) do not work. Use menus or toolbar buttons instead.

A General Protection Fault occurs when closing IDE or DC GUI after an Abort operation. Because it occurs only when the application is terminated, this behavior does not have harmful effects.

If the type of a test procedure parameter is changed in the Test Database and if immediate values are assigned for that parameter in a Project,

2.2.2. LabWindows support library

A limited subset of scalar data types is currently supported in the library. Workaround: use direct access to VARIANT fields for other data types.

2.2.3. PAWS Adapter

Array parameters are not supported.

Debugging of ATLAS TPSs launched from TestBase is not supported. Workaround: debug TPSs in standalone execution mode.

2.2.4. User control of Debug and Simulate flags is incompletely documented

Test procedures receive a "Simulate" flag, usable for implementing simulation in the test procedure code, and a "Debug" flag that may be used, for example, to limit the display of Soft Front Panels to debug mode. The values of these flags may be set as run-time options for all user interface modules. The "Simulate" flag may not be set in IDE, where it is controlled by the toolbar button used to execute a step (the flag is "False" when the **Step** button is used and "True" when the **Simulated Step** button is used).

The values of flags are set using the **Flags** tab added to the multi-tab **Options** dialog. Please see the Help System of each user interface module.

2.2.5. Permissions for installation

The user performing the installation must have Administrator permissions. After installing TestBase, this user must start the IDE once, to perform a Registry initialization. After that, users with more restricted

permissions can use TestBase modules. The user performing security administration from the IDE must have Administrator permissions.

2.2.6. MTI error on Global Parameters Values with the same name

If Global Parameter Values with identical names are defined at multiple level of the Project tree and the storage of test results in MTI databases is enabled, an error will be generated at run-time. Workaround: avoid using identical names, until this problem is fixed.

2.3 Enhancements

2.3.1. Diagnostic Procedure Calls

This feature enables the calling of Diagnostic Procedures from other Diagnostic Procedures. See Topic "Using Diagnostic Procedure Calls" in the IDE Help System for details

2.3.2. DiagML Import/Export

TestBase is able to export Diagnostic and Test data to XML files compatible with the DiagML format. These files may be subsequently imported in other TestBase databases, allowing the transfer of design information between Projects. See the IDE Help System for details

2.3.3. Support for custom MTI Controllers

The support for developing custom MTI Controllers was enhanced. A COM type library was added to the distribution. Documentation describing the development of custom MTI Controllers will be added in a future release.

2.3.4. XML Generation

TestBase is able to store MTI data in XML files. The import feature is at Beta release level. While the complete functionality is implemented, it is not fully tested and is not documented. Please contact TYX Customer Support for details on usage and configuration.

2.3.5. HTML Report

The format of the report generated by pressing the IDE toolbar button "Display DP Report" was changed from Excel to HTML. This eliminates the need to have Excel available for displaying Diagnostic Procedure reports. The HTML reports show detailed information on each flowchart block, hyperlinked to the visual representation of the flowchart.

To generate a report, press the "Display DP Report" button. When prompted for a file name, select an empty directory and a file name of your choice.

Click the links "Go to flowchart" to display the visual representation of the flowchart. Click flowchart blocks to display the detailed information.

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To transfer the report to another location or machine, copy all the files generated by TestBase to the new location. To display the report, double-click the file whose name you selected at export time.

2.3.6. Display of Global Parameter Values in IDE

When displayed in the IDE, the names of Global Parameters (GPs) are prefixed by a location indicator, which is "PROJ" for GPs defined at the Project level, "UUT" for GPs defined at the UUT Model level, and "TS" for GPs defined at the Test Strategy level.

2.3.7. Samples

The sample test procedures described in the Test Database "Demo.ttd" support simulation mode.

2.4 Problem Reports

The problems and limitations identified in releases 2.4.0 Alpha and 2.4.0 Beta are fixed in the current release.