

**Release Notes
TYX TestBase
Version 2.9.0
31 July 2008**

1. Overview

Support for Visio 2007 has been added to this release.
Starting with this release Visio 2000 and Visio 2002 are no longer supported.

New features have been added to this new major TestBase release:

- The design of Test Strategies supports looping
- Print operation available at all levels
- Complex report generation for the entire Project

The release includes the following main items:

- TestBase installation package, including a complete set of sample files, documentation and tutorial slides
- Redistributables, including:
 - TYX License Manager
 - Third-party run-time engines
 - Support for interfacing with Sun RPC
 - Instrument drivers needed for running some of the samples
- Installation Guide

2. Detailed Description

2.1. Critical items

2.1.1. Permissions for installation & security administration

The user performing the installation **must have Administrator permissions** for the Windows operating system. **After installing TestBase, this user must start the IDE once, to perform a Registry initialization.** After that, users with more restricted permissions can use the TestBase modules.

The user performing security administration from the IDE **must also have Administrator permissions** for the Windows operating system. The TestBase user who wants to change his password **must also have Administrator permissions** for the Windows operating system.

2.1.2. Configuration of environment variables (general)

The TestBase environment variables are reset to their default values during the installation of a new version. **They must be manually set to the values used by the previous version of TestBase.**

2.1.3. Configuration of environment variables when using the LabVIEW Adapter

The LabVIEW Adapter loads the LabVIEW engine when it is loaded by TestBase, and unloads the engine when it is unloaded. It appears that the repeated unloading and reloading of the LabVIEW engine causes unreliable operation. Thus, for a reliable operation of the LabVIEW test procedures it is recommended to set the value of the environment variable **TB_TCA_UNLOAD** to 0 (zero).

2.1.4. Security setting for third-party applications

Recent versions of Microsoft Excel and Visio support a more flexible configuration of their security features, which includes the ability to execute macros. TestBase uses such macros to implement integration with Excel and Visio. Consequently, **these products have to be configured properly, to accept the execution of macros**. Detailed instructions are provided in the TestBase Installation Guide.

2.1.5. Configuration of Functional Test Controller (FTC) execution reports

When generating FTC Execution Reports that include Test Information and Parameter Values, it is strongly recommended to **use separate files**, instead of appending information to the same file. If information is appended to the same file, this file will eventually become very large and this will increase the execution time. Use the FTC menu **Tools | Options | UI_FT Specific** to configure the generation of execution reports.

2.1.6. Limitations of Evaluation License

The evaluation license is valid for 30 days from the date you install TestBase and provides you with full functionality with the following exceptions:

- you will not be able to *build* test strategies with more than *15 blocks*
- you will not be able to *execute* more than *15 test procedure calls*, during a test strategy execution

2.1.7. Shortcut keys (functionality change)

The shortcut keys (accelerators) that did not operate properly in some contexts were removed from the menu. The shortcut keys that are currently shown in the menu do operate properly. You should **avoid using any shortcut keys that are not in the menu**.

2.1.8. Case sensitivity of Outcome comparisons (functionality change)

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 some of the previous releases, the above comparison was case insensitive. For consistency with other comparisons in TestBase, the comparison algorithm was changed to case sensitive, starting with release 2.4.0. This change does not affect the operation of existing projects and does not require their recompilation.

2.1.9. Running ATLAS Test Procedure from sample database used in the Developer's Manual

To run the ATLAS Test Procedure from Developer's Manual sample database you must disable the run-time Test Diagram Viewer from PAWS Run Time System.

2.1.10. Operating system compatibility

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

2.1.11. Internet Explorer compatibility

The product works properly with Microsoft Internet Explorer 5.5 or later. **It does not work with Internet Explorer 5.0.**

2.1.12. Microsoft Office compatibility

The display of Excel reports works properly with Microsoft Office 2000 Service Release 1, Microsoft Office XP, Microsoft Office 2003 and Microsoft Office 2007.

2.1.13. Microsoft Visio compatibility

The product works properly with Microsoft Visio 2003 and 2007.

2.1.14. Oracle compatibility

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

- 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.

A compatibility problem exists between the Oracle software and the Microsoft libraries used internally by TestBase. This problem may be corrected, for Oracle 8 versions, by configuring the system registry as described in the document [Connectivity Issue with MDAC and Oracle8i.pdf](#). For Oracle 9, use the information provided for version 8.1 in the above document, 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

2.1.15. 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 6.0 of the LabWindows/CVI Run Time Engine. You may obtain other versions of the Run Time Engine from National Instruments.

2.1.16. Adobe PDF compatibility

The product works properly with Adobe Acrobat 6.0 or later.

2.2. Known Limitations

2.2.1. TestBase IDE

The “Undo” command used during flowchart editing operates with some limitations (see examples below). After performing an Undo, it is recommended to verify its effect on the flowchart and the parametric data displayed in the grid. 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. The “Undo” command for the deletion of a block

does not recover the parametric data originally assigned to that block. All parameter values are reset to their defaults.

The Off-Page Reference blocks cannot be copied/cut/pasted if they are part of a group selection. The copy/cut/paste operation works fine if the only shape selected for the operation is the Off-Page Reference.

When running a test strategy in debug mode, with execution stopped between steps, if the user clicks on a different Control Flow Diagram (flowchart) 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”. This is normal. 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.

A General Protection Fault may occur when closing the IDE or a Diagnostic Controller user interface after an Abort operation. Because it occurs when the application is terminated, this behavior does not have harmful effects.

2.2.2. LabWindows/CVI Adapter

A limited subset of scalar data types is currently supported in the TestBase Support Library for LabWindows/CVI. Use direct access to VARIANT fields for other data types.

The execution of samples that use Custom Data Type Editors as ActiveX controls requires a LabWindows/CVI installation (the run-time engine is not sufficient).

2.2.3. PAWS Adapter

Array parameters are not supported.

Debugging of ATLAS test procedures launched from TestBase is not supported. Workaround: debug test procedures standalone execution mode, in the PAWS environment.

2.2.4. LabVIEW Adapter

The documentation for developing test procedures with LabVIEW does not cover the use of Custom Data Type Editors as ActiveX controls on LabVIEW panels.

2.2.5. VEE Adapter

The documentation for developing test procedures with VEE does not cover the use of Custom Data Type Editors.

2.2.6. Custom Data Types (CDTs)

- a. The use of CDT Editors is currently not supported in test procedures developed with PAWS ATLAS, SMART ATLAS, VISUAL-ATEC and Agilent VEE.
- b. Support for CDTs is limited in the reports included in the TestBase distribution. These reports display the values of CDTs as follows:
 - The Diagnostic Procedure report displays the generic text “<Value for Custom Data Type Editor with ProgID: ”, followed by the ProgID of the CDT Editor.
 - The sample Excel report “Sample_MTI_offline.xlt” displays the generic text “<Value for Custom Data Type Editor with ProgID: ”, followed by the ProgID of the CDT Editor.

c. The values of Global Parameters with Custom Data Types are not stored in Oracle and Access MTI databases. You may retrieve these values from the Input Parameters to whom the Global Parameters are assigned.

2.2.7. Diagnostic Procedure reports

The internal links of text-based reports will not operate if the set of files generated for a report is moved to a different location in the file system or on a web server.

2.2.8. Export/Import of Actions with duplicate names

It is not recommended to use duplicate Names for Actions in the same Diagnostic Procedure. This becomes a problem during an export/import operation when the connection between the shapes and actions can be improperly reconstructed during import.

2.2.9. Print To PDF

In some cases the Print to PDF command launched for printing all Diagnostic Procedures defined at Project, UUT or Test Strategy levels fails to create all the PDFs. It is recommended to manually open all Diagnostic Procedures that will be printed before launching the Print command.

2.3. Fixes

PR08027: IDE – Error in exporting Diagnostic Procedures

The Diagnostic Procedure defined at UUT or Project level that contains a DP call block could not be exported.

Problem is fixed.

On French OS there was an error in importing Diagnostic Procedures containing parameters of type real or double.

Problem is fixed.

IDE – Action Names lost during Copy/Cut/Paste operations

Action Names are preserved during Copy/Cut/Paste operation

IDE – Current Parameter Values not displayed upon returning from a DP call when using Step In

Problem is fixed.

2.4. Enhancements

- Loop blocks have been added to the stencil to support the design of repeated execution of a set of actions in a test strategy
 - For Loop block
 - For Loop with Condition block

- The Print command has been added for Project, UUT Model and Test Strategy, as a result all Diagnostic Procedures defined at the selected level will be automatically printed. This command can be launched from the tree toolbar. The Document Print command available in the main menu and toolbar prints only the currently opened Diagnostic Procedure.
 - The Printing to File (PDF) has been improved; the process is fully automated and configurable by the user
 1. The name of the PFD Printer (default is Adobe PDF) must be specified in the Development Options window
 2. The PDFs will be created in a subfolder of the folder selected by the user in the Development Options window; the subfolder name will start with “PrintJob” and will have appended the current date and time
 3. The PDF file names will be in the following format:
 <Project.Name>[-<UUT.Name>][-<TS.Name>]-<DP.Name>, where the UUT.Name and TS.Name are optional, their presence in the file name is determined by where the DP is defined.

Note: It is recommended to open all Diagnostic Procedures that will be printed before launching the Print command.

- A new command that lists all called DPs for a specific Test Strategy has been added to the IDE. The command can be launched from the tree toolbar when a Test Strategy is selected in tree. The list of called DP (if any are defined) will be displayed in the Output area in a new tab named “Other”.
- The Project report generation has been enhanced with an option of generating the Diagnostic Procedure reports for all DPs defined in the project, in the same folder with the Project report.
 - The names of the generated HTML files for the DPs will have the same format as described for the generated PDF files
- The display of Target Test Procedures and Diagnostic Procedures for selected Actions (Test or DP call blocks) has been improved. The items are displayed in alphabetical order facilitating the search in the lists, especially for projects with a large number of TPs and DPs (PR08035)
- The display of Parameters as Source for IPVs or Destination for OPVs has been improved in the same fashion. (PR08035)
- The Importer from **eXpress** offers the option to import the Diagnostic Study into one Diagnostic Procedure or multiple Diagnostic Procedures