TestStudio™ Software

Web-Based ATE Operating Environment

Teradyne offers a powerful new solution for test system integrators and electronics suppliers who configure in-house automatic test equipment. TestStudio, the industry's first open-architecture, Web-based ATE operating environment, provides a flexible and powerful solution for managing the entire test process— from development and documentation through debug and execution. TestStudio integrates common Windows NT Application Development Environments (ADEs), including HP VEE, LabVIEW, LabWindows/CVI, Visual Basic, and Visual C++. Plus, users can easily integrate in-house programming tools.

Open-Architecture Environment for Test System Integrators

Using Web-based browser and hyperlink technologies, TestStudio provides a single, intuitive user interface across all these programming tools—reducing the costs of training, documentation, and ongoing maintenance.

Teradyne's industry-leading LASAR and VICTORY™ test generation tools can also be tightly integrated within the TestStudio environment.
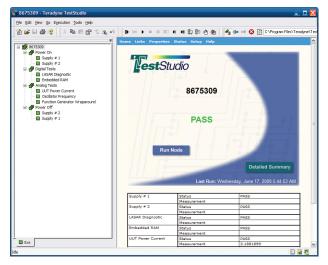
TestStudio Integrates a Wide Variety of Software Tools and Environments

TestStudio provides a versatile, open-architecture environment for test development, documentation, debug, and execution that can be easily reconfigured to support a variety of integration requirements.

TestStudio provides integration for these popular ADEs:

- HP VEE
- National Instruments LabVIEW
- National Instruments LabWindows/CVI
- Microsoft Visual Basic
- Microsoft Visual C++

Using the Microsoft Windows NT and COM interface standards, TestStudio enables users to integrate a wide range of programming languages as well as specialized in-house programming tools.

Features

- Common operating environment for development, documentation, debug, and execution
- Integration of popular ADEs using Microsoft COM-based "add-in" technology
- Open architecture allows easy reconfiguration of test tools and reuse of test programs
- Hierarchical project trees provide visual index of test programs, execution, and documentation
- Drag-and-drop manipulation of tree "nodes" makes it easy to reorder test steps or reuse test data
- Dynamic HTML technology allows users to share data across all test activities
- Familiar user interface for all levels of experience, from non-technical operators to experienced developers

For digital functional tests, users can import LASAR simulation results directly into TestStudio. Boundary scan test data generated by the VICTORY toolset can also be imported directly into TestStudio.

An Entire Test Effort Organized Into Project Trees

Within TestStudio, an entire test effort is organized into project trees: generation, execution, and library. Each tree consists of "nodes" that contain test programs, test execution steps, documentation, and other supporting data. By manipulating the content and sequence of nodes on the tree, users can quickly and visually build a complete test plan. Through these trees, users have real-time access to all the resources in the TestStudio environment.

Advanced Test Sequencing Engine for Development, Debug, and Execution

A key component of TestStudio's versatility is its advanced test sequencing engine, which gives TPS developers the flexibility to reorder test steps and reuse existing test code from any number of sources. TestStudio can execute the code seamlessly from multiple ADEs, sharing data among the various nodes as needed.

User-Generated Documentation is Available in Real-Time

Using TestStudio, TPS developers can capture test program documentation in real-time, as part of the test process. Documentation, including photos and multimedia video, can be captured online in HTML or any other format viewable by the Internet Explorer, including Microsoft Word, PowerPoint, Excel—eliminating the need to reformat data for exchange across user networks or applications.

With documentation available as part of the test process, users have immediate access to the test data they need—reducing the cost of training and increasing productivity.
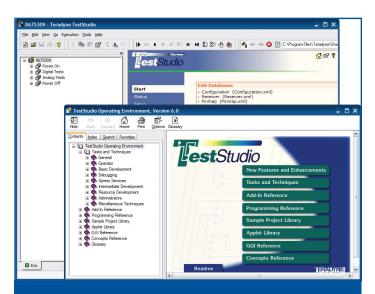
Recommended Hardware Requirements

• 200 MHz Pentium CPU or greater
• 32 MB memory (minimum)
• 256 color support (minimum) with 65536 or greater preferred

•100 MB free disk space or greater
• Windows NT 4.0 and Windows 95 or greater

User Interface Requirement

To support its Web-based user interface, TestStudio automatically loads Internet Explorer 4.01 if it is not already installed.

TestStudio gives users direct access to documentation via hyperlinks. This screen shows an example of the online help supplied with TestStudio. User-generated documentation can be hyperlinked to test programs in the same way.

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