

Agilent T&M Toolkit 2.1 with Test Automation Read Me

Agilent T&M Toolkit with Test Automation v2.1

For Visual Studio 2005

Agilent T&M Toolkit with Test Automation is a suite of tools and libraries for building electronic test, measurement, and instrument control applications in Microsoft® Visual Studio® 2005. The T&M Toolkit provides tools, wizards, and instrument-related classes to speed your test and measurement application development. It adds Agilent's extensive instrument and measurement expertise to the power and ease of use of Microsoft's Visual Studio 2005. The result is a great development platform for T&M engineers!

Integration with Visual Studio 2005

- Migrate to Visual Studio 2005 when you're ready. You can install both Toolkit 2.0 with Visual Studio 2003 and Toolkit 2.1 (both included) with Visual Studio 2005 on the same PC, and create projects in both.
- Integrated T&M Toolkit Help and Visual Studio 2005 Help assist you in finding just what you need.
- Integrated Intellisense suggests completion of your command while you type code by displaying T&M Toolkit language syntax information and lists of available methods and properties.
- Create your Visual C++, Visual C# or Visual Basic project and have access to both the Microsoft .NET 2.0 Framework and the T&M Framework 2.1 class libraries.

Easier Development of Test Automation Applications

- You can now freely distribute your Test Automator runtime application! Just like other Toolkit solutions, you can now load and run a Test Automator sequence and resulting output without licensing!
- You can also develop and debug Test Automator sequences on a PC that doesn't have a Toolkit development license by using a Test Automator Runtime and Debug license.
- Easily load and run your Test Automator sequences and use the resulting graphs and tables from your application aided by several new controls.
- Test Automator 2.1 sequences can now reference the parameters of the previous items, speeding up development time.

Enhanced Results from Instrument Data

- T&M Toolkit 2.1 now automatically handles results data in the form of numeric array, waveform, and spectrum data types. This allows easy presentation of data as graphs or tables from typical instrument sources.
- For high speed data collection or large data volumes, Test Automator's Results Manager now allows referencing a result data file URL for display and analysis.

NOTE: Toolkit 2.0 supports Visual Studio .NET 2003. Please use that version if you are using VS 2003.

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Install the Software

This software can be installed as a time-limited evaluation or as a full-use product. Purchase of T&M Toolkit is required for full use and requires a Product Key which is included with software purchase. You can install and run Toolkit or Test Automator for 30 days as an evaluation without a Product Key.

NOTE: You must install the software logged in as a user with administrator privileges. If you are using the "Run As..." or "Install Program as Other User" facility in Windows XP, please see the FAQ item #3 below.

What else is part of the download?

Multimedia Demos

1. Introduction and Overview
2. Visual Studio .NET Basic Information
3. Building Test & Measurement applications in VS.NET
4. Data Display Features
5. Integrated Help in VS.NET

Product Literature

1. Fault Detective Data Sheet
2. Toolkit Data Sheet
3. IO Libraries Suite Data Sheet
4. IO Hardware Summary Data Sheet
5. Agilent 82357A: USB/GPIB Interface Data Sheet
6. Agilent E5810A: LAN/GPIB Gateway Data Sheet
7. Agilent 82350B: High-Performance PCI GPIB Interface Data Sheet
8. Agilent E5805A USB/4-Port RS232 Interface
9. Agilent E5813A Networked 5-Port USB Hub

Product Manuals

1. *Getting Started Manual* for Toolkit
2. *Getting Started Guide* for Test Automator
3. *QuickStart Card* is a two-page overview of the features of Toolkit and the Test Automator.

Limitations of the Evaluation

The T&M Toolkit evaluation is a fully functional copy of the standard application which runs for 30 days. After 30 days, you need to purchase the software, or remove all copies of the T&M Toolkit and all copies of any applications or programs developed using the evaluation software. Use of the evaluation version of the software does not give you the right to distribute any applications built with it. It is solely intended for you to evaluate its suitability for your application development. Upon purchase of the software you will be sent a Product Key that you can use to enable the software for full use. To purchase T&M Toolkit, go to the [T&M Toolkit product page](#) and select the "How to Buy" link near the top of the page.

Product Key instructions

Upon purchase of the software you will be sent via email a Product Key that you can use to enable the software for full use. The physical box should also have a copy of your Product Key included in it.

How do I convert my installation from a time-limited evaluation to a full-use product? Agilent T&M Toolkit and the Test Automator uses a Product Key to enable the product for full use. The Product Key is part of the media and manuals kit sent to you when you purchase the product. Once purchased and you receive your Product Key, you can do one of the following:

- During the 30-day evaluation period:
 - **Toolkit:** Enter the Product Key via the menu item in Visual Studio labeled Toolkit → Product Key.

- **Test Automator:** Enter the Product Key via the menu item labeled Help → Product Key.
- You can review the Product Key(s) at any time after you enter it.
- After the 30-day evaluation period, Toolkit or Test Automator will not run but will give you a chance to enter your Product Key. Enter the Product Key when prompted in the dialog box that appears.

Combined System Requirements for Visual Studio 2005 & Agilent T&M Toolkit

The minimum system requirements for Agilent T&M Toolkit with Test Automation are as follows:

Development Environment supported for T&M Toolkit:

Microsoft's Visual Studio 2005, any version except for Express Editions (addins are not supported)

Operating Systems supported for Toolkit Development:

Windows 2000 Professional (SP 4 or later)

Windows XP Professional (SP 2 or later)

Internet Explorer 5.5 or later

Operation Systems supported for Test Automator and Toolkit Run Time:

Windows 2000 Professional (SP 4 or later)

Windows XP Professional & Home (SP 2 or later)

Microsoft .NET Framework 2.0 (www.microsoft.com/downloads). Note this software is installed with Visual Studio 2005. It can also be installed by running the Windows Update service from Internet Explorer

Internet Explorer 5.5 or later

Processor:

Pentium II 600 MHz or better, 1GHz or equivalent recommended

Memory:

196 MB minimum

512 MB or more recommended

Free Disk Space:

2 GB on the installation drive for a complete installation of Visual Studio with documentation

100 MB for Agilent T&M Toolkit

Peripherals: A display with a minimum 1024x768 resolution, 16k colors. Only small fonts are supported.

IO Libraries Suite version 14.1 or higher. See IO Libraries documentation for further details.

One of the following physical connectivity options is required for the PC-to-instrument connection:

- Agilent 82357A USB/GPIB Interface
- Agilent E5810A or E2050A/B LAN/GPIB gateway
- Agilent 82350A/B GPIB interfaces
- USB connect to instruments supporting the TMC protocol
- Standard RS-232
- LAN connect to instruments supporting the VXI-11 protocol.
- National Instruments I/O hardware using NI 488 version 1.5 (or higher)
- National Instruments I/O hardware using NI VISA version 3.0 (or higher)

Dependencies

1. The *VXIplug&play* Wrapper Generator can only wrap *VXIplug&play* drivers that are already installed on your computer. You can download drivers for Agilent/HP instruments from: <http://www.agilent.com/find/drivers>
2. T&M Toolkit requires the installation of Agilent I/O Libraries Suite version 14.1 or higher. Note: The Agilent I/O libraries can be installed "side-by-side" with the NI VISA library.

Uninstall Notes

1. If the T&M Toolkit is uninstalled, Visual Studio pauses and displays a message the next time it is started. The message box says:

"Help is updating to reflect your recent changes. This may take several minutes."

This is caused by the removal of the integrated Agilent T&M Toolkit Help from Visual Studio. It is normal and does take more than a minute.

2. If Toolkit 2.0 and 2.1 are installed at the same time, and Toolkit 2.0 is uninstalled, when Toolkit 2.1 is uninstalled a Windows Installer error dialog saying "This action is only valid for products that are currently installed" comes up. This dialog can be ignored. Click 'Ok' to allow the uninstall to complete.
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Bugs fixed in this release

Defect	Description
27517	The InteractiveIO tool sometimes crashed with an Interop.SEHException error. Now it reports the problem to the status window.
27518	The InteractiveIO tool sometimes crashed when the command list drop down were requested. Now it catches the problem.
27120	Test Automator sometimes crashed when it could not create a temporary results file because Windows performance counters were disabled. Now it does not crash.
27524	Some utilities that attached themselves to windows processes for font access or display control could crash Toolkit applications like IOMonitor, InteractiveIO, InstrumentExplorer, and Test Automator. Now these applications work correctly even when such utilities are used.
27520	When the correct version of Ivi Shared components were not installed, Instrument Explorer crashed. Now it stops more gracefully, providing information on the underlying problem.
27521	When the correct version of Ivi Shared components were not installed, IOMonitor crashed. Now it stops more gracefully, providing information on the underlying problem.
27364	When the correct version of Ivi Shared components were not installed, Test Automator crashed. Now it stops more gracefully, providing information on the underlying problem.
26326	Test Automator did not allow use of array elements in general assignment expressions. Now it does.
26015	Illegal VxiPnP and IviC drivers could crash the driver wrapper wizard. Now the errors are reported rather than crashing the wizard.
27522	Occasionally, when exiting Visual Studio while using the Instrument Explorer, an AppDomainUnloadedException occurred. Now InstrumentExplorer catches this condition and shuts down normally.
27681	Instrument Explorer did not display the Agilent34410 IviCOM driver as an option for a driver session. Now it does.

Frequently Asked Questions

- 1. Where do I go for instrument drivers and other related information?** The Driver Wrapper Wizard will walk you through the steps needed to use a driver in Toolkit, including where to get drivers. You can download drivers for Agilent/HP instruments from: <http://www.agilent.com/find/drivers>
- 2. How do I convert my installation from a time-limited evaluation to full-use product?** The T&M Toolkit uses a Product Key to enable the product for full use. The Product Key is part of the media and manuals kit sent to you when you purchase Toolkit. Once the product is purchased, you can do one of the following:
 - During the 30-day evaluation period, enter the Product Key on the T&M Toolkit > Product Key menu item while Visual Studio 2005 is running. Using the same menu item, you can review the Product Key at any time.
 - After the 30-day evaluation period, Toolkit will allow you to enter your Product Key in a dialog box that appears when you try to start the software.

3. **Will my Product Key from Toolkit or Test Automator 2.0 work with the 2.1 versions?** Yes it will. Toolkit 2.1 is a no-cost upgrade for existing Toolkit 2.0 users and the Product Key from either will work with both products.
4. **To install on Windows XP under a non-administrator account.** Please follow these instructions. This is not an issue on Windows 2000.
 1. On the **Start** menu, choose **Run**.
 2. Type the following command. Substitute your own domain name & administrator account name in the italicized text. Change the "D:" to the appropriate drive letter or path to the installation program.

```
runas /user:<domain name>\<admin user name>  
"D:\Toolkit\setup.exe /runas"
```

Thank you for your interest in Agilent Technologies T&M Toolkit with Test Automation v2.1. We invite you to visit our web site at www.agilent.com/find/toolkit for additional product information.

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