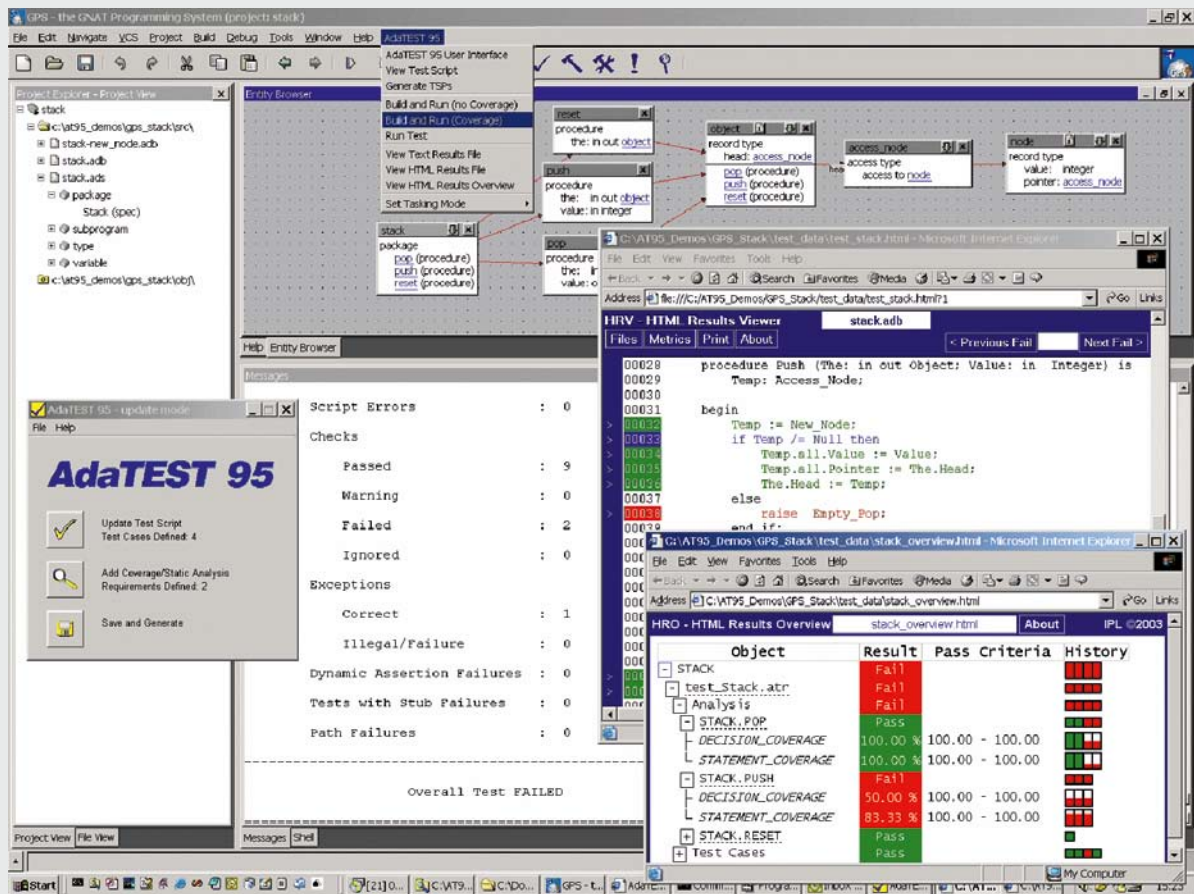


AdaTEST 95

INTELLIGENT TESTING

Technical Overview



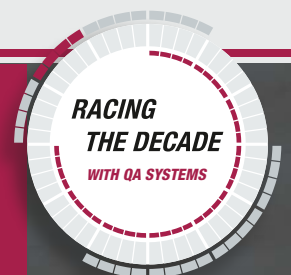
- › Efficient way to perform unit and integration testing
- › High productivity
- › Unique set of testing, coverage analysis and static analysis features



Free Trial
Free trial of AdaTEST 95 on your host or embedded target platform

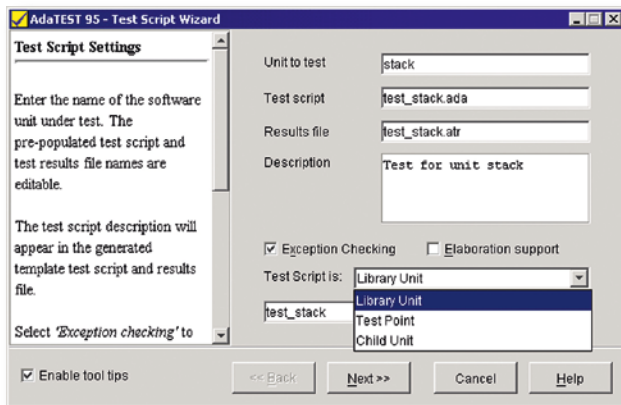
REQUEST NOW

Or contact your local supplier





AdaTEST 95 v2.0 is the latest version of the AdaTEST tool suite which has been designed around the requirements of the Ada language to produce a tool which allows developers to efficiently **perform unit and integration testing**. The product offers high productivity and a unique set of testing, coverage analysis and static analysis features.



The Test Script Wizard accelerates the testing process.

Its use has featured in many high profile projects ranging from airtraffic control, avionics, rail transport, space, defence, nuclear energy, and even financial and digital broadcast systems. The common factor in all of these areas is the imperative to produce software which reliably, “does what it should do”, in a cost-effective manner.

Dynamic Testing Features

Uses your compiler’s IDE to build and execute tests, minimizing the product’s learning curve.

Wizard driven Test Script generation includes on-line help and step-by-step facilities for creating a complete test driver environment.

White Box and Black Box testing techniques are supported.

Intuitive Test Directives for quickly developing structured, repeatable tests, and generating clear unambiguous results.

Automated Checks for all standard Ada 95 data types records and arrays, and generic Checks for instantiation with user-defined types.

Exception verification to check both the occurrence of expected exceptions and the non-occurrence of unexpected exceptions.

Stubbing to create programmable versions of external (‘separate’) subunits, and perform call sequence validation.

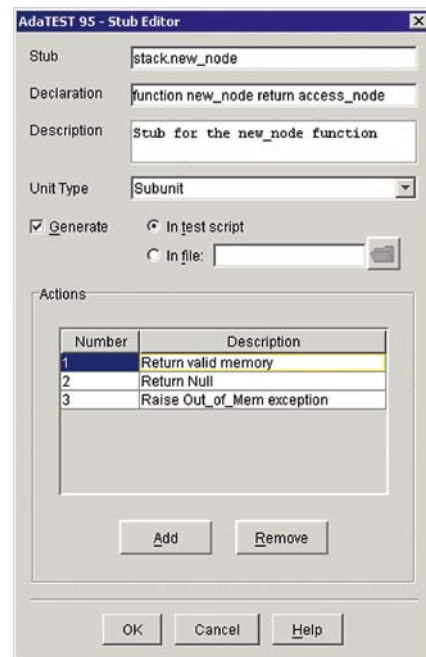
Real-Time Performance Analysis checks execution times for specified blocks of code.

Cross-Platform Execution of tests without modification from native host machine to embedded target.

Automated Regression Testing for re-running tests in batch mode.

Test Support Package automatic global data checking.

Test Script Generation from Test Case Definition files to speed script production.

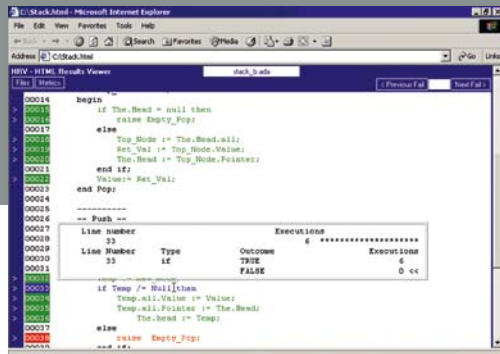


Coverage Analysis

Coverage analysis provides objective measurement of how effective the dynamic tests have been in executing the code. Code coverage requirements can be defined in RuleSets:

Code Coverage Metrics

- > Entry points
- > Call Returns
- > Statements
- > Basic Blocks
- > Decisions (branches)
- > Conditions
- > MC/DC (for D0-178B/C)



Configurable Coverage requirements are easily defined in simple Rule Sets.

Coverage Checks are integrated into dynamic tests resulting in Pass/Fail for coverage requirements.

Data Value coverage of specified variable values – ‘always true’ or ‘true at least once’.

Check Path and Trace to ascertain detailed path execution through code.

Coverage Statistics can be produced both as text file and HTML highlighted views of source code.

Static Analysis

Static analysis generates over 100 metrics on Ada source code. Simple RuleSets can be used to enforce ‘code quality’ standards such as restrictions on the use of specific code constructs, and in defining limits on complexity metrics.

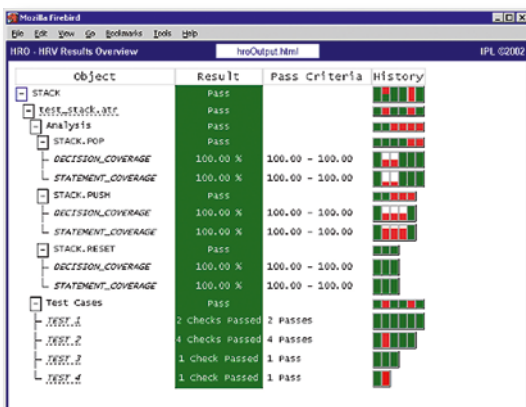
Metrics Reports in .csv format can be imported into spreadsheets for graphical and numerical analysis.

Basic Metrics include code lines, comments, number of Ada units, and counts of most code constructs defined by the Ada Language Reference Manual (LRM).

Complexity metrics include McCabe, Halstead, and many others.

Metrics Checks integrated into dynamic tests resulting in Pass/Fail/Warnings or run standalone.

Metrics Reports can be imported into spreadsheets for further analysis.



AdaTEST 95 HTML test results history

Major features

- › Unit and Integration Testing: on both host and target platforms
- › Full support for: Ada 83 and Ada 95
- › Wizard driven scripting
- › Automated checks
- › Integrated Code Coverage Analysis
- › Stubbing to simulate and control external interfaces
- › Exception checking
- › Timing Analysis
- › Automated regression testing
- › Automated global data checking
- › Integrated Static Analysis: code complexity and size metrics

Quality

Developed under the control of a Quality Management System which is certified to ISO 9001:2008 (TickIT)

Platforms

AdaTEST 95 is available as standard on Windows, Linux and Solaris and can also be deployed on Ada non-Standard Platforms on request.

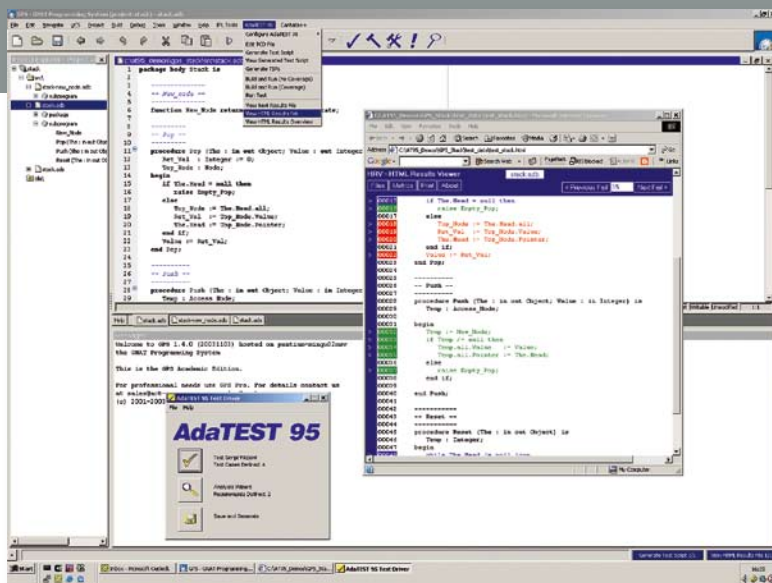
See back page for details of Standard and Non-Standard platforms.

Further Information

QA SYSTEMS’s testing tools are used for unit/class/package and integration testing on a wide range of C and C++ (Cantata) and Ada (AdaTest 95) high integrity and business critical development projects.

Further information and detailed product presentations are available from the QA Systems website or contact your local supplier.

”Its easy to be positive when working with such a superior tool as AdaTEST 95. I’ve worked with a few testing tools in my time, both commercial and free, and yours is by far the best.” ConsultIT/Kongsberg



Standard Platforms

Each AdaTEST 95 licence supports use on all supported Host Operating Systems with any of the available host compiler versions listed below at all business locations of the enterprise. Availability for these platforms is immediate (subject to terms in quote).

Standard Platform Availability

Host Operating System	Host Compiler
Windows (NT, 2000 and XP)	GreenHills AdaMULTI (3.5)
	Aonix Object Ada (7.2, 8.2)
	Ada Core GNAT-Pro (x.x)
	GNAT (3.15, 3.16)
Sun Solaris (2.x)	GreenHills AdaMULTI (3.1)
	Aonix Object Ada (6.2.1, 7.2, 8.2)
	Rational Apex Ada (4.2.06)
	Ada Core GNAT-Pro (x.x)
	GNAT (3.15, 3.16)
Linux (2.4, 2.6 kernel)	Ada Core GNAT-Pro (x.x)
	GNAT (3.15, 3.16)

Other Platforms

Other Platforms are supported in addition to Standard platforms through a build of the product library and configuration settings to deploy AdaTEST 95 on a combination of processor, target operating system and cross-compiler. AdaTEST 95 availability for these platforms is subject to an assessment of deploying AdaTEST 95 on that environment.

Availability for Other Platforms

Please note that the presence of an item in the list below does not imply immediate availability of AdaTEST 95, but that the product has been previously deployed to the operating system, compiler or processor.

Host OS	Target RTOS	Compiler	Processor
Windows	VxWorks	GNAT-Pro	Intel x86 and i960
Sun Solaris	INTEGRITY	GNAT	M680x0
Linux	RTEMS	XGC	Coldfire
AIX	(C)SMART	GreenHills AdaMULTI	PowerPC
SGI IRIX	LynxOS	Rational Apex Ada	TI TMS320 DSPs
Tru64 Unix	Real-time Linux	DDCI-SCORE	RAD6000
HP-UX	MontaVista Linux	Aonix Object Ada	Mil-Std 1750a
		Aonix Object Ada Real Time	HiCore
		Aonix Object Ada Raven	ERC32 / LEON
		OCS Power Ada	Xscale
		ICC	MIPS
		TLD	
		Tartan	

“I would like to thank * you * for being about the easiest and most professional company to deal with.

Rest assured that I will sing QA SYSTEMS’s praises at every opportunity.”

Thales ATM