VectorCAST

Software Test Automation for High Quality Software

What is VectorCAST?
The VectorCAST embedded software testing platform is a family of products that automates testing activities across the software development lifecycle.

Overview of Advantages
> Focus on Embedded Systems
> Enable Continuous and Collaborative Testing
> Provide the most Automated Tools possible
> Works with your existing software development tools
> Enable white-box system testing with Probe Points
> Reduce the time it takes to test
> Allows you to test more frequently
> Full support in the development process from unit test to system integration
> Uniform test management, test automation (CI), results analysis, and traceability
> Certification Kits available
> Supports DO-178/ED-12, DO-330, ISO 26262, IEC 61508, FDA, IEC 62304, CENELEC Test Requirements

Highlights of VectorCAST 2020
> Base Source Directories for System Test Environments: VectorCAST has been updated to further improve the integration with your existing development infrastructure including expanded source folder location flexibility for code coverage environments. VectorCAST now allows for the creation of Base Directories to define where source code is located and can be set using an environment variable with multiple base directories allowed. This makes environment maintenance and relocation much easier and allows for better granularity in selecting which files should be included or excluded from the coverage instrumentation.
> Expanded Platform Support: VectorCAST supports both Windows and Linux development platforms and is now available for Windows 64. You will see a separate installer for Windows 64 on the product download page. Installation instructions are found in the VectorCAST Installation Guide for VectorCAST 2020.
> Support for C++17 and Visual Studio 2019: VectorCAST has been updated to support the latest C++ language standard and the most recent update for Visual Studio. These changes have been made to support projects using the latest technologies. VectorCAST is committed to supporting the latest advances in software technologies to keep pace with the evolving software development environment.
**Application Areas**

VectorCAST provides testing solutions for all phases of testing; from low level software testing to full system testing. Testing can be performed natively on a PC or on target hardware, at all levels. Testing metrics tie the various pieces together across the lifecycle. This dynamic test solution is widely used in the avionics, medical device, automotive, industrial controls, railway, and financial industries.

> **System Test Automation and Code Coverage**

VectorCAST/QA integrates with your build system and existing test infrastructure to silently collect key metrics such as code complexity, frequency of code changes, test case status, and code coverage data. VectorCAST/QA provides development and QA engineers a single point of control for test activities as well as a wealth of data that can be used to make quality improvement decisions.

> **Unit Testing for C++**

VectorCAST/C++ is a highly automated unit and integration test solution used by embedded developers to validate safety and business critical embedded systems. This dynamic test solution is widely used in the avionics, medical device, automotive, industrial controls, railway, and financial industries.

> **Unit Testing for Ada**

VectorCAST/Ada is a dynamic software test solution that automates Ada unit and integration testing, which is necessary for validating safety- and mission-critical embedded systems.

> **Quality Metrics**

VectorCAST/Analytics provides an easy to understand web-based dashboard view of software code quality and test completeness metrics, enabling users to identify trends in a single codebase or compare metrics between multiple codebases.

> **Static Analysis**

VectorCAST integrates with a number of static analysis tools to perform module based or whole-program source code analysis on C and C++ codebases and automatically identifies problems at their source, prior to compilation.

More information: [www.vector.com/vectorcast](http://www.vector.com/vectorcast)