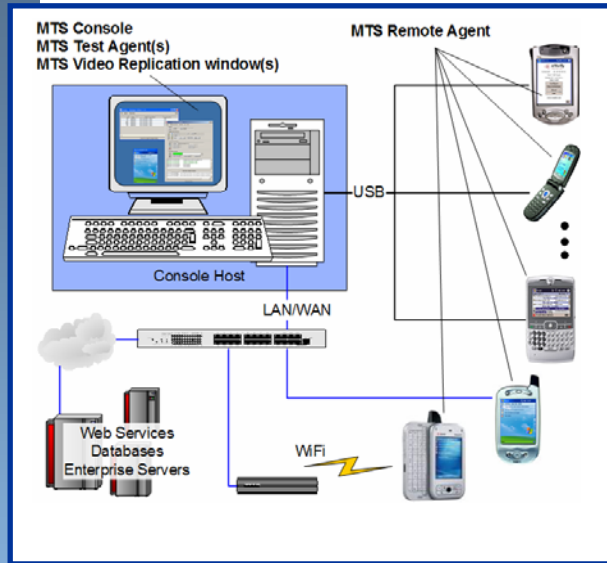


About MTS Tester Edition

MTS Tester Edition 1.5 provides scalable, end-to-end automated testing for mobile and distributed applications. The core of MTS is a distributed, object-oriented testing framework designed for tester productivity and interoperation with any testable software interface.



An End to End Solution. MTS (*mVerify Testing System*) spans today's multi-tier mobile application systems. You can easily cover a wide range of end-to-end test scenarios because MTS simultaneously applies and evaluates tests on many interfaces.

For example, suppose you need to test a critical transaction that starts as an SMS message, updates a database, then triggers a notification sent to a PDA. All this can be done with MTS test objects running on a single workstation.

- The first test object causes a Smartphone to send an SMS message to a service provider, who updates the database under test.
- Another test object monitors the database.
- When the update is confirmed, a third test object taps PDA menus to start a Web Service client that queries the database, over WiFi.
- A fourth test object monitors another Smartphone for an expected incoming SMS event which confirms the round trip transaction.

How it Works

You start the MTS Console and then launch Test Agents. To test, you create a test object, load it into a Test Agent, and then run it. You can create an MTS test object several ways.

- *Record.* While interacting with a virtual representation of your mobile device, your actions are automatically recorded. You interleave video compare criteria at any point to check future test runs.
- *Modify.* Record a test object with necessary test actions, and then add data-driven tests.
- *Develop.* Generate a baseline test object, and then add calls to MTS services or any Tcl command.

Because all MTS test objects are derived from the MTS framework, you can run any test object (no matter how it was created) from any Test Agent. Test objects easily combine into powerful suites of tests. So you can create and organize test objects in whatever way works best for you.

Console. The MTS Console manages Test Agents. For example, you start six Test Agents, hide their windows, and then use the Console to control each agent. As each agent independently executes its test run, the Console displays current status of all agents. You can control up to ten Test Agents from the Console.

Test Agent. An MTS Test Agent connects to a Remote Agent and can then generate and run test objects for any app on a connected device. During a test run the Test Agent displays detailed progress information. Complete test run reports can be viewed with your web browser.

Remote Agent. The MTS Remote Agent runs on a device under test. It connects with a Test Agent, and then applies test inputs and captures the resulting output. With the fully integrated **Remote Performance Monitor**, you can easily capture performance metrics during a test run.

Capability Highlights

Extended Stability Support
Data-Driven Testing
One-Click Repeat
Test Run Reports
Test Object Generation
Test Object Browser
Test Suites
Test Object Structure Report
Smart Progress Bar
High Performance USB
Pre- and Post-conditions
Email notification
Resource Manager
Performance Monitor

Technology

Test Objects
Adapters
Tcl
Relational Database
Security

System Requirements

Supported CE Versions
Certified Mobile Devices
Console Workstation

Capability Highlights

Extended Stability Support. MTS' optimized high-performance USB interface supports high-availability testing. Customers can run simultaneous tests on tens or hundreds of devices, 24x7. With Extended Stability Support, one test engineer can achieve up to 80 times more testing than a manual tester.

Data-Driven Testing. The MTS *submit* feature supports on-the-fly, data-driven testing. You can quickly create, change, and generate test cases. You don't have to do any recording. Test with data from a file, database, or your own data generation strategy.

One-Click Repeat™. You can easily repeat any MTS test run up to 10,000 times. Use the One-Click Repeat feature to assess system stability, run regression tests, reveal resource-utilization bugs, and debug intermittent failures.

Test Run Reports. Each time you run a test object, a new XML test log is created. Video compare results are automatically added. You can insert images and notes any time during a test run. Custom reports can be produced with any XML report generator.

Test Object Generation. You can record test inputs and create compare frames for any connected PDA or Smartphone. With one click, generate a test object that performs these test actions. Or generate a baseline test object and add your own test actions.

Test Object Browser. View, analyze, check, and edit test object files with the Test Object Browser.

Test Suites. An MTS Test Suite is a test object that uses the *run* feature to automatically start another test object. You can reuse any test suite or test object in any other. Test suites for any purpose are easily created. This greatly reduces test asset maintenance.

Test Object Structure Report. Display a road map of your test suites, showing how each test object and test action in a test suite is run.

Smart Progress Bar. You can intuitively gauge the progress of your test run from the Test Agent's Smart Progress Bar. The status of any test run is visible at a glance, even from across the room.

High Performance USB. For locally connected devices, the MTS USB protocol coexists with ActiveSync, achieving very high throughput for Remote Agent communication.

Pre- and Post-conditions. Pre- and post-condition checking is built in to MTS test objects. A test run can continue or complete without generating an unexpected test run error or test failure.

Email notification. Use the built-in SMTP client to automatically send email and file attachments to anyone during a test run.

Resource Manager. MTS Resource Manager provides a single point of control to manage test assets and streamline test lab configuration.

Technology

Test Objects. MTS test objects can perform any imaginable testing task. The MTS framework assures that they are all interoperable and reusable. If you're familiar with proprietary test scripting environments that rely on procedural programming, you may be surprised at how easy it is to use test objects and open source Tcl.

Adapters. An MTS Adapter is a logical interface to a specific physical API, platform, or device. Adapters allow test objects to use platform-independent test actions to control and observe a physical interface. For example, a popular Adapter supports testing of any Windows Mobile 5.0 Smartphone connected over a TCP channel.

Tcl. Tcl (Tool Command Language) is a robust, widely used open source scripting language. Tcl is a de facto standard for test automation. MTS includes a full Tcl interpreter built from ActiveState's quality-assured distribution. Any Tcl package, library extension, or procedure can be used in a test object.

Relational Database. MTS uses the MySQL 5.0 relational database to store serialized objects and test asset meta-data. This assures data integrity and scalability.

Security. All MTS components are digitally signed following best practices for network security.

System Requirements

Supported Windows CE Versions. The MTS Remote Agent supports testing for the following versions of the Microsoft Windows CE operating system family: Smartphone 2003, Pocket PC 2003, CE 4.2, CE 5.0, Windows Mobile 5.0 Smartphone, Windows Mobile 5.0 Pocket PC, Windows Mobile 6 ("Crossbow").

Certified Mobile Devices. The following mobile devices are certified as MTS-compatible: DAP Technologies Microflex 3240; Dell Axim x50; Grayhill Custom Mobile Series; HandHeld Products 7600, 7850, 7900, 9500 Series; Hewlett-Packard iPAQ 1950, 2100, 2200, 4700, 6315, IKE; HTC/UT Starcom 2125, 6700, 8125; Motorola IMD, MC50, MC70, MPx200, MPx220, Q-Phone; Palm Treo 700w, PSC 4500 Series, TDS Recon, Ranger.

Console Workstation. MTS components are supported on Microsoft's XP Professional Service Pack 2 and Windows 2000 Service Pack 4. To run five or more Test Agents at the same time, we recommend at least 2 Gbytes of RAM and a processor rated at 2 GHz or higher.

Interested? To request your own MTS Trial Use license, go to www.mverify.com