

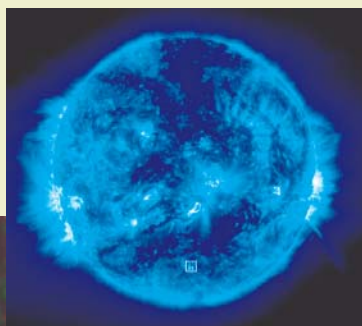
What you need to know about SNMP compliance testing

Whether your job is to find SNMP bugs or to fix them, the SilverCreek series of SNMP test suites is your most valuable ally. It's so easy to use, anyone who can navigate a graphical user interface can quickly run a battery of more than 1,000 individual, comprehensive tests designed with the help of Internet Engineering Task Force (IETF) experts to detect and diagnose a broad spectrum of SNMPv1, v2c, and v3 problems. Yet, it's so powerful, extensible, and flexible, power users who know their way around a command-line interface can create the ideal solution for virtually any testing environment.

Point and click testing with the power of SilverCreek

The SilverCreek series proves that a powerful SNMP test suite doesn't have to be difficult to use. A graphical user interface (GUI) allows users to automatically run all SilverCreek tests and save the results by pointing and clicking. The GUI also harnesses the powerful Test Suite Manager to simplify test customization, organization, and management.

Using the SilverCreek management information base (MIB) browser is just as easy. Clicking on any leaf automatically launches the SNMP Command Tool, which allows users to view the contents of the agent's object identifier (OID) tree and issue GETs and SETs. Because the MIB browser combines SNMP GET and NEXT requests on modified object identifiers, it discovers MIB branches in a



manner that is more efficient, more thorough, and more accurate than the average MIB walk. Combined with the MIB Lookup Tool and support for private MIBs, the SilverCreek MIB Browser boosts productivity to new levels.

As official as can be

The SilverCreek series was developed and refined by InterWorking Labs, Inc. with the help of our Advisory Board, which comprises key SNMP technology experts from the IETF. Three times per year, we attend the IETF meeting, comment on drafts in progress, and evaluate interoperability issues with other participants. The outcome of these meetings, as well as more than ten years of knowledge and experience gained working with leading SNMP authorities, is reflected in our products. So, you get the most accurate, credible, and comprehensive test suites possible.



Absolute unambiguous results

Status
PASSED
PASSED
PASSED
FAILED
PASSED

With the SilverCreek series, there is no need to interpret the results you get. It tells you that an SNMP agent passed, failed, or that the test could not be run—and then gives you the reason why. Furthermore, SilverCreek references the RFCs that correlate to each failure. These official IETF documents detail the Internet standards and best current practices that can point the user toward a better understanding of the problem.

Totally automated, unattended testing

Automation can yield even greater productivity gains. Using scripts to automate the testing process has enabled some of our customers to reduce the number of man-hours required to thoroughly test their products by as much as 83%. What's more, they could increase test coverage up to 300% and reduce manual test plan execution time by 80%.

Thanks to its flexible command-line interface and remote control API, SilverCreek is ideally suited to completely integrated test environments in which test gear and suites from multiple suppliers are all connected to a single test fixture that controls everything. Other test applications can control SilverCreek and/or SilverCreek can control other applications or equipment, such as a traffic generator. Customers who have established test harnesses will find this ability especially helpful.

Put our tests to the test

With the industry's most comprehensive test package, including innovative tools that address real-world concerns and more than 1,000 unique test cases that have been field-proven over the past ten years by thousands of engineers, no other product we know of can do as much to ensure the network compatibility of your device as SilverCreek.

SilverCreek

The screenshot displays the SilverCreek software interface. The title bar reads "SilverCreek - sysDescr: Hardware: x86 Family 6 Model 6 Stepping 2... [127.0.0.1:SNMPv1]". The interface includes a menu bar (File, Log, Test, View, Tools, Help) and a toolbar with various icons. The main window is titled "sysDescr: Hardware: x86 Family 6 Model 6 Stepping 2... [127.0.0.1:SNMPv1]". On the left, a tree view shows the "Test Suite 1.0" structure, including "Protocol Tests", "SNMPv1 Tests for All MIBs", "SNMPv2c Tests for All MIBs", "SNMPv3 Tests for All MIBs", "Standard Tests", "Docsis Tests", and "Private Test Suites". The "SNMPv1 Tests for All MIBs Tests" table is shown with the following data:

Test Name	Purpose	Status	Remarks
1.1.7.3	NEXT on columnar objects	PASSED	72 iterations
1.1.8	GET on each variable	PASSED	1897 iterations
1.1.9	GET on padded OIDs	PASSED	1897 iterations
1.1.9.1	GET on non-existent OIDs	PASSED	1861 iterations
1.1.10	SET read-only objects	FAILED	See Window "Details"
1.1.11.1	SET read-write objects	FAILED	See Window "Details"

The "Details of Test 1.1.11.3" window is open, showing the following text:

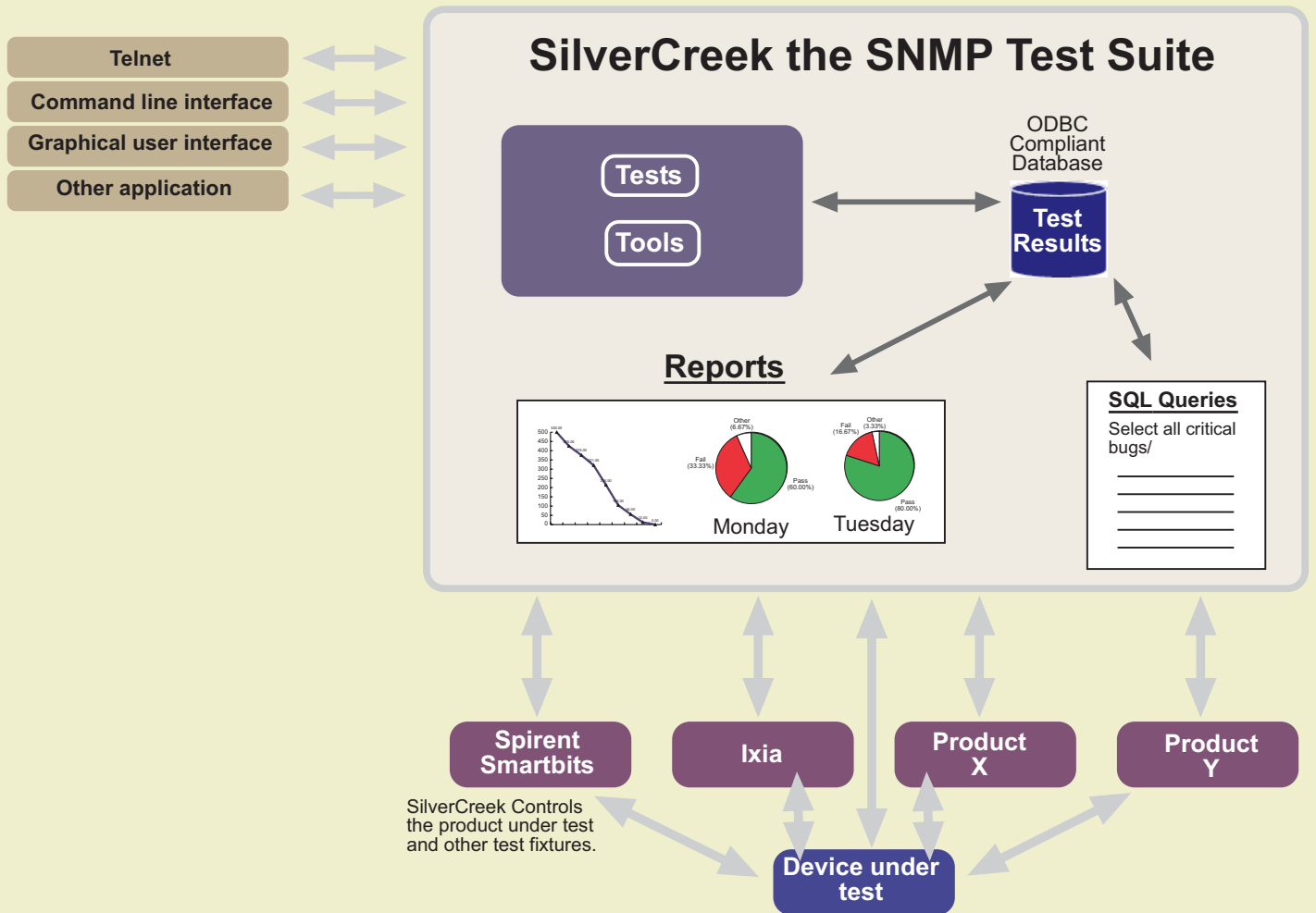
1.1.11.x The purpose of these tests is to verify that the agent returns the correct error-status when the test intentionally miswrites variables. The tests are run on each of the read-write variables returned in test 1.1.2.

1.1.11.3 This test issues a SET with a length field that is not minimally encoded. The expected outcome is for the agent to return noError.

Reference RFC 1157 § 4.1.5Details for Test 1.1.11.3
[FAILED] Remarks: SET request on 1.3.6.1.2.1.4.1.0 ipForwarding

The status bar at the bottom shows "Ready" and a summary of test results: Pass 16, Fail 17, Other 17.

Comprehensive Integration with SilverCreek



SilverCreek Pro

For those who want the ability to customize test scripts and access the full power for SilverCreek through a command-line interface in addition to a convenient GUI, we offer SilverCreek Pro. We've included the source code a serious test engineer needs to develop new tests to suit specific demands. And we didn't limit the source code to just a few tests or just a portion of the product. Users get the source code in its entirety for each and every test. A comprehensive developer's guide provides necessary information about APIs, libraries, and the structure of tests so that an experienced test engineer can easily achieve the desired results. Furthermore, the tests are written in Tcl/Tk, the industry-standard scripting language, to further simplify customization.

SilverCreek Pro also has the option of adding remote monitoring tests (RMON 1 and 2) and traffic generator tests.



SilverCreek Standard Edition

SilverCreek Standard Edition is ideal for users who want all of the capabilities SilverCreek has to offer, but do not need the ability to modify its source code. It delivers a combination of power and simplicity that satisfies the needs of users from research and development to quality assurance. This full-featured, robust, binary only-version includes all the SNMPv1, v2c, and v3 tests, a Diffie-Hellman test module, DOCSIS tests, a Command Script Wizard to simplify test creation, and a remote interface that allows other scripts to control its functions.

SilverCreek Pro for WorkGroups

While the per-CPU licenses of SilverCreek Standard Edition and SilverCreek Pro are ideal for test environments consisting of dedicated workstations, SilverCreek Pro for WorkGroups is better suited to departmental client/server deployment. It features all of the capabilities and features of SilverCreek Pro, but adds the ability to mix and match Solaris, Linux, and Windows operating systems. WorkGroups is a network license version that supports multiple platforms and multiple users.

SilverCreek Lite

In response to customers who want to visually evaluate, but not test, SNMP agents, we have developed SilverCreek Lite. This streamlined version of SilverCreek features the same tools as others in the SilverCreek series, but not the tests. And as your needs change, you can receive credit for the full purchase price when you upgrade to more powerful versions of SilverCreek.

So, if you want to quickly and positively identify the SNMP bugs that keep you from getting to market with a solid, SNMP-compliant product, contact your InterWorking Labs representative today to find out more about how the SilverCreek series of SNMP test suites can help you. Call 831.430.3610, email us at info@iwl.com, or visit our website: www.iwl.com.



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