



## Telephony Test Suite

### Automated Telephony Test Tool

- ▶ Available for:
  - Android
  - Windows Mobile
  - Windows Embedded CE
- ▶ Runs unattended on target device
- ▶ Extensible with additional test cases

### Ensure High-Quality Telephony Subsystem

- ▶ Regression testing
- ▶ Boundary case testing
- ▶ Stress testing
- ▶ Testing on target device, not emulated
- ▶ Supports live or simulated network testing

### Deliver More Connected Devices Faster

- ▶ Tests any number of target devices
- ▶ Integrates into automated build and test tools
- ▶ Extensive reporting
- ▶ Suitable for testing in both field and lab environments

### Automated Testing for Faster Development

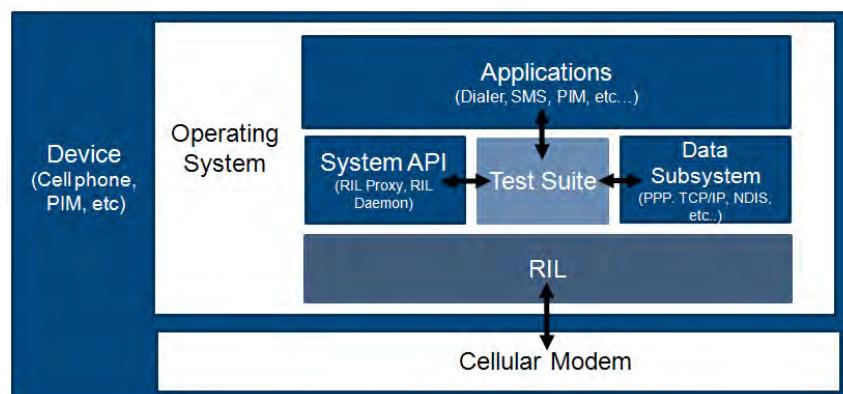
Testing the telephony functionality of mobile phones and other connected devices is a repetitive and time-consuming process. In fact, developers face a common dilemma when it comes to testing telephony features: how much testing is enough? On the one hand, thorough testing of a device under development can lengthen the entire project schedule. On the other hand, defects found late in the development cycle are often difficult and expensive to fix. Now there's a solution from the experts at Intrinsic.

### Expertise in telephony testing

The Intrinsic telephony team has successfully custom developed dozens of Radio Interface Layer (RIL) drivers for baseband processors used in mobile phones and connected devices. One of the hallmarks of the team's success is rigorous and thorough testing of core telephony functionality, ensuring the high quality of final products.

The Intrinsic Telephony Test Suite was originally created as an internal tool for testing of RIL implementations on target devices. Now everyone can leverage this automated, configurable, and extensible tool for testing mobile phones and other connected devices. The test suite provides:

- Fast, efficient, repeatable, and documented testing
- An end-to-end solution for live or simulated network testing
- Boundary, stress, and special network case tests
- An extensible framework for adding new tests



### Automation lowers costs and boosts quality

The test suite runs as a lightweight application on the target device. The application accesses RIL APIs to automate test scenarios. The tests run unattended and reporting data is gathered throughout each test run.

Automated, continuous testing yields higher initial product quality at a lower cost because it allows developers to conduct more in-depth lab testing. The net benefits are higher levels of team productivity and faster time to market.

## Test Android, Windows Mobile Devices, and Windows Embedded CE

Telephony Test Suite is available for Android, Windows Mobile, and Windows Embedded CE operating systems. It is the only automated telephony test suite currently available for Android. For OEMs who develop connected devices on multiple operating systems, the test suite reduces the learning curve and eliminates the cost of utilizing separate test programs for each OS.

### Complete testing of voice and data applications

Telephony Test Suite covers all aspects of voice and data telephony testing prior to industry certification and carrier tests. The test suite goes beyond the scope of the Logo Test Kit (LTK) for Windows Mobile, with critical boundary tests that can expose software bugs and stress tests that are impossible to conduct without an automated solution. It fills important gaps with sets of tests covering not just the depth of voice features but also the data paths.

Test Class	Feature to be Tested
Core Test Suite	<ul style="list-style-type: none"> <li>• Call Busy</li> <li>• Call Loop Back</li> <li>• Call Conference</li> <li>• Call Baring</li> <li>• Flight Mode</li> <li>• Call Forwarding</li> <li>• Call Waiting</li> <li>• Send DTMF</li> <li>• Caller ID</li> <li>• Get Network Registration</li> <li>• Get Signal Strength</li> <li>• Get Phone Numbers</li> <li>• Get &amp; Set Network Operator</li> <li>• Data Add/Delete Context</li> <li>• Set/Get Data QoS</li> <li>• Get GPRS State</li> <li>• Set CSD Bearer</li> <li>• Data Packet Transfer</li> <li>• Multi-Channel Data Transfer</li> <li>• CSD Data Transfer</li> <li>• Connection Stress Test</li> <li>• Multi-Channel Connection Stress Test</li> <li>• GPRS Suspend/Resume</li> <li>• Preferred Operator Get Device Info</li> <li>• SMS Msg</li> <li>• Store SMS Msg</li> <li>• Send Stored Msg</li> <li>• SMS Cell Broadcast</li> <li>• Set SMS Parameters</li> <li>• Registration Settings</li> <li>• Audio Settings</li> <li>• SIM Locking</li> <li>• SIM Set Locking Password</li> <li>• SIM Phonebook Settings</li> <li>• SIM Read/Write/Delete Phonebook</li> <li>• SIM Read/Write/Delete Record</li> </ul>
Extended Test Suite	<ul style="list-style-type: none"> <li>• Abort Outgoing Call</li> <li>• Refuse Incoming Call</li> <li>• Maximum Number of Conference Call Members</li> <li>• Data Rates and Throughput Tests</li> <li>• Full SIM (for Phone Book and SMS for GSM)</li> <li>• No SIM System Reactions</li> <li>• Multi-part SMS (max size)</li> <li>• SMS Boundary (eg 159 or 161 Char)</li> <li>• Long Calls (60 Minutes+)</li> <li>• Service Interleave (Voice/Data/SMS)</li> <li>• Burst Send Receive SMS</li> </ul>

## Device Development Solutions

Telephony Test Suite is part of a family of mobile device development products from the experts at Intrinsic. Our products provide innovative and proven solutions to some of the most complex technical obstacles faced by mobile device manufacturers, silicon vendors, and carriers.

**RapidRIL™** – 3G radio interface layer implementation for Windows Mobile and Android

**Telephony Test Suite** – Script-based automated telephony test suite for automated telephony validation

**Touch UI Framework** – Powerful touch and gesture based UI framework

**Power Optimizer** – Predictive power management technology for optimal device performance

**Intelligent Remote Update** – Scripted boot loader and OS updater

### About Intrinsic

Intrinsic empowers device makers, mobile operators, and silicon vendors to deliver compelling, next generation mobile devices with faster time-to-market, higher quality, and differentiating innovation. Our customers and partners rely on our award-winning device development software and services and our industry-leading navigation software and location-based services solutions. Intrinsic globally supports customers with solutions that span all major mobile operating systems and platforms, including Windows Embedded CE and Windows Mobile, Linux/Android, and Nokia/Symbian. Intrinsic is publicly traded (TSX: ICS) and headquartered in Vancouver, Canada, with offices in China, Israel, Taiwan, U.K. and the United States.

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## Alliances & Credentials

- ▶ Open Handset Alliance membership pending
- ▶ Deep Expertise in Android and Linux
- ▶ 2007 & 2008 Windows Embedded Excellence Awards
- ▶ Certified Microsoft Gold Partner
- ▶ Windows Embedded Gold Partner
- ▶ Windows Mobile RIL Code Contributor
- ▶ Symbian Foundation and Competence Center
- ▶ Nokia S60 Competence Center

## Our Partners



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