SVP – Supplementary Services

Key Features

- **Validation of supplementary services from a subscriber perspective**

- **Tests caller ID, call waiting, forwarding, call hold and call barring within an operator's network**

- **Enables continuous monitoring of service quality and availability from large numbers of geographically-dispersed locations**

- **Supports JDSU's Mobile Identity (MI) Server, providing a centrally-located pool of SIM modules for testing various subscriber profiles in remote locations**

- **Flexible and extensible script language with advanced parameterization, control and logging functionality**

- **HLR access and control via custom integration or telnet-based CLI scripts**

- **Interactive mode for test development and troubleshooting**

Benefits

- Increases customer satisfaction by reducing the time required to detect customer-impacting problems
- Reduces operating cost by automating monitoring, testing and reporting
- Increases operator visibility of service quality by providing network-wide, real-time reporting of measurements and key performance indicators (KPIs)
- Improves consistency in customer experience by performing a common set of tests throughout the entire network footprint
- Reduces the time and risk to install or modify network infrastructure by providing extensive recursive testing capability
- Increased revenue and reduced churn through positive customer satisfaction

RCATS® SVP – Supplementary Services enables wireless service providers to test the expected behavior and quality of service experienced by end users for supplementary services such as caller ID, call waiting, forwarding, call hold and call barring.

The Supplementary Services SVP provides test profiles to verify that supplementary services operate as intended and provisioned for both local and roaming subscribers. Specific to mobile phones and networks, the test profiles are fully-parameterized and extensible, enabling operators to develop their own profiles to address complex or operator-specific test requirements. In addition to the fully-automated test mode, the solution also provides operators with an interactive mode for validating network modifications prior to deployment or for trouble-shooting network or service issues.

For testing that requires HLR interaction, the Supplementary Services SVP enables access and control of external network nodes via custom integration or telnet-based programs.

The Supplementary Services SVP is part of the patented JDSU RCATS® solution, which enables automated testing, centralized management and aggregated reporting for large numbers of deployed probes. The solution allows wireless operators to access real-time, network-wide performance and availability information, enabling them to use this information to increase service quality, increase revenue and reduce costs.

Specifications

Service and Feature Validation

- Caller ID
- Call waiting
- Call forwarding
- Call hold
- Call multiparty
- Call barring

Test Profile Functionality

- Advanced script language specific to mobile phones and networks
- Fully-parameterized and extensible
- Advanced loop control
- Event logging (standard and custom)
- Support for script versioning, labeling and commenting
- Control of external network elements (HLRs, MSC, etc) via custom integration or configurable telnet-based CLI commands

RTP Functionality for Supplementary Services

- 2 or 3 mobile phones (depending on RTP model)
- 2 Landline phones
- Supports simultaneous usage of phones

Operational Test Modes

- Automated
- Interactive

Phone Control for Supplementary Services

- Power on/off; battery removal
- Dial/answer/terminate
- Send/receive DTMF tones
- Activate, deactivate, interrogate
- SIM select (GSM) among 4 local or unlimited number of remote SIMs with MI Server
- SIM (GSM) or MIN programming (CDMA2000)

Measurements and Key Performance Indicators (KPIs)

Call Features (pass/fail, success rate)

- Caller ID
- Call waiting
- Call forwarding
- Call hold
- Call multiparty

Call Barring (pass/fail, success rate)

- Incoming/outgoing calls (BAIC, BAOC)
- Incoming calls when roaming (BIC Roams)
- International incoming/outgoing calls (BOIC)
- Incoming/outgoing calls except home (BOICexHC)

Call/Mobile Information

- Signal strength
- IMEI, IMSI and MSISDN (GSM)
- ESN and MIN (CDMA)
- BSC/RNC
- Switch name

This is a sample of available measurements and KPIs.

Additional measurements may be available or created upon request.

Solution Requirements and Options

Required RCATS® Solution Components

- RCATS® Remote Test Probes (RTPs)
- QoS*Executive*
- QoS*Manager*
- *Optional:* MI Server (centralized SIM repository)
- *Optional:* MI Server Controller

RCATS® Remote Test Probes (RTPs)

- RCATS® RTP – GPRS/GSM
- RCATS® RTP – EDGE/GPRS/GSM
- RCATS® RTP – HSDPA/EDGE/GPRS/GSM
- RCATS® RTP – 1xEV-DO Rev. 0/1xRTT
- RCATS® RTP – 1xEV-DO Rev. A/1xRTT
- RCATS® RTP – iDEN

RCATS® Managed Services

- RCATS® RoamerNet®

RCATS® Service Validation Packages (SVPs)

- RCATS® SVP – Basic Voice
- RCATS® SVP – Supplementary Services
- RCATS® SVP – Basic Data
- RCATS® SVP – WAP
- RCATS® SVP – SMS
- RCATS® SVP – MMS
- RCATS® SVP – Voice Quality
- RCATS® SVP – IVR

Test & Measurement Regional Sales