SVP – Basic Voice

Key Features

- **Validation of voice calls from a subscriber perspective**
- **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 – Basic Voice enables wireless service providers to test the quality of service experienced by end users in making basic voice calls.

The Basic Voice SVP validates the quality and performance of mobile-to-mobile, mobile-to-landline and landline-to-mobile calls for local, long-distance and international calling scenarios. For each call, it records detailed information regarding the call, as well as information on the subscriber, the mobile phone, and the network infrastructure used to make the call. The results are reported in real-time, providing operators with full visibility into current network performance and enabling rapid response to issues.

The Basic Voice SVP provides test profiles to validate a variety of QoS test scenarios. 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 troubleshooting network or service issues.

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

The Basic Voice 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 Validation

- Mobile-to-mobile voice calls
- Mobile-to-landline voice calls
- Landline-to-mobile voice calls
- Local, long distance, international voice calling
- Message Waiting Indicator (MWI)

RTP Functionality for Voice

- 2 or 3 mobile phones (depending on RTP model)
- 2 landline phones
- Supports simultaneous phone usage

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

Phone Control for Basic Voice

- Power on/off; battery removal
- Dial/answer/terminate
- Send/receive DTMF tones
- Audio play/record
- Detect call progress tones
- Query/set call features
- Call state monitoring (idle, dialing, ringing, in use, etc)
- Voice mail deposit/retrieval
- SIM select (GSM) among 4 local or unlimited number of remote SIMs with MI Server
- SIM (GSM) or MIN programming (CDMA2000)

Operational Test Modes

- Automated
- Interactive

Measurements and Key Performance Indicators (KPIs)

Voice Calls

- Success rate
- Call start time
- Call end time
- Ring time
- Answer time
- Channel assign time
- Channel release time
- Send-to-allocate time
- Send-to-ring time
- Send-to-end time
- Answer-to-end time
- Release-to-end time

Voice Mail

- Success rate
- Latency

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

NORTH AMERICA	LATIN AMERICA	ASIA PACIFIC	EMEA	WEBSITE: www.jdsu.com
TOLL FREE: 1 866 228 3762	TEL: +55 11 5503 3800	TEL: +852 2892 0990	TEL: +49 7121 86 2222	
FAX: +1 301 353 9216	FAX: +55 11 5505 1598	FAX: +852 2892 0770	FAX: +49 7121 86 1222	