# SVP – Basic Data

**Key Features**

- **Validation of basic data access and services from a subscriber perspective**

- **Establishes data connections and test ping and FTP through the 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 – Basic Data enables wireless service providers to test the quality of service experienced by end users for basic access to data services.**

The Basic Data SVP validates the quality and performance for basic data connectivity, including session establishment, session connection, and session integrity. For each data test, it records detailed information regarding the data service, as well as information on the subscriber, the mobile phone, and the network infrastructure used to provide the data service. The results are reported in real-time, providing operators with full visibility into current network performance and enabling rapid response to issues.

The SVP provides test profiles to validate a variety of data service 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 Data SVP enables access and control of external network nodes via custom integration or telnet-based programs.

The Basic Data 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

- Accessibility (attach/detach; activate/deactivate)
- Connectivity (ping internal/external IP address)
- Throughput (FTP upload/download)

### RTP Functionality for Data

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

### Phone Control for Basic Data

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

### 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

### Operational Test Modes

- Automated
- Interactive

# Measurements and Key Performance Indicators (KPIs)

### Data Attach

- Success rate
- Start/end time
- Duration

### PDP Context Activation

- Success rate
- Start/end time
- Connect time
- Start-to-end duration
- Authentication duration
- Bytes sent/received

### Ping

- Success rate
- Start/end time
- Latency (Min, Max, Avg)

### FTP (Upload/Download)

- Success rate
- Start/end times
- Data rate
- Transfer size
- Transfer duration

### Call/Mobile Information

- IP Address of mobile phone
- 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

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