VAS Monitoring

Key Operator Benefits

- **Customer Retention:** Increases subscriber satisfaction by enhancing service experience with 'always on communications experience'.
- **Revenue Protection:** Ensures value added services are functioning properly and charged accurately.
- **Effective:** Centralized testing based on human behavior simulation through distributed devices.
- **Real-time Monitoring:** Timely detection and reporting of all service, network and charging errors ensures quality.
- **OPEX Reduction:** Replaces manual tests carried out by multiple operational resources (hence both error-prone, and costly), with specially developed autonomous computer software that simulates user behavior.
- **Increased Resource Productivity:** Valuable resources can now work more efficiently on analysis and problem solving.
- **Reduces Cost of Ownership:** Feature rich, cost and resource effective solution that improves network efficiency and lowers operational costs and capital expenses.

Market Dynamics

Fierce competition from mobile operators and over-the-top (OTT) players and decreasing ARPU from voice services, place innovative Value Added Services (VAS) as the driving force behind revenue growth in telecom. Mobile network operators and service providers need to develop and launch a massive number of new VAS and try out new voice/data service packages rapidly and inexpensively.

Being first to market with new innovative services and applications is crucial for customer retention and revenue generation but speed is not enough if not accompanied by quality. Subscribers expect a flawless communications experience and anything less often results in churn and revenue loss. With increasing number of VAS and complexity of networks, mobile operators need a real-time testing and monitoring solution that will help them:

- ***Offer their services and tariff plans with confidence***
- ***Pinpoint any quality, charging and network/service error issues***
- ***Ensure their services are continuously evaluated from a subscriber's perspective***
- ***Keep operating expenses under control***

Product Overview

Defne's **VAS Monitoring** solution provides mobile operators with the capability to remotely test/monitor their basic and value added services on their GSM/GPRS networks before launch and during live operations for service availability, functionality and charging. The tests are carried out through special M2M terminal devices with GSM/GPRS modem capabilities that are distributed throughout several locations of the operator's network and that talk with centrally located servers that host the testing software and database.

By simulating the exact human behavior, these terminals act as a real subscriber and test the defined functionality of services from initiation to end. Success and failure results are captured and reported in real time for immediate action. There are no limits on the number of VAS that the VAS Monitoring solution can test and monitor simultaneously. The solution can perform tests on voice calls, video calls, A2P and P2P SMS, MMS, USSD, and Mobile Data and HTTP. The solution also has the ability to remotely monitor the status/sanity of the M2M terminal devices and the SIM cards installed on them.

Key Subscriber Benefits

- **Enhanced Service Experience:** Improves communications experience with high quality services.
- **Peace of Mind:** Ensures the right party is charged the right cost for the service.

The tests and monitoring can be scheduled per multiple services, per day, and per period/interval by starting and following service flow, performing expected results comparison, reporting any failures and raising alarms.

The solution seamlessly integrates with billing and charging systems deployed on the network to ensure there is no revenue leakage and that all services are charged correctly. The VAS Monitoring solution has the ability to check whether the correct charging actions (whether or not the correct party has been properly charged with the right amount) have been carried out. In addition to live service testing and monitoring, The VAS Monitoring tool can be used to test any value added services and/or tariff plans before launch.

Key Features

- Human behavior simulation through M2M devices with SIM cards
- Ability to perform a variety of tests in real time for multiple services:
  - Basic voice calls; one time CLIR (unknown number) call; call hold
  - Multiparty (conference) call
  - Call forwarding - unconditional, on busy, no reply, not reachable
  - Collect call
  - Prepaid IVR
  - SMS - Peer-to-Peer (P2P), Application-to-Peer (A2P), SMS to email, SMS auto reply, SMS forward, SMS nick name, Internet setting via SMS
  - MMS - MMS to prepaid number, MMS to email
  - USSD - service tariff change, Call me service, balance check, promised payment, service activation and deactivation
  - Data and HTTP tests
  - Additional services that can be tested centrally - Voice SMS, Voice mail, RBT, Video, M2M device
  - Web portal tests for different browsers
- In addition, other services can also be tested by simply creating a service flow through the easy-to-use Service Creation Environment (SCE)
- Mobile application tests
- Graphical User Interface
- Reporting and alarm management

Corporate Headquarters: ITU Ayazaga Kampusu, Ari-2 Teknokent A-Blok 3-1, Maslak 34469, Istanbul, Turkey Phone: +90.212.285.7575

MEA Office: Dubai Silicon Oasis HQ Building, 4th Floor, Wing C, Dubai Silicon Oasis, Dubai, 341041 UAE Phone: +971.4.372.4037

Asia Pacific Office: 807, 8th Floor, Ithum Tower A, Plot No A40, Sector-62, Noida, Uttar Pradesh, 201309 India Phone: +91.120.4570667

www.defne.com.tr
sales@defne.com.tr