



VoIP technology has matured in the last few years and has gained wide acceptance in the market place. As a result, VSC Solution's technology has also evolved into the VSC Multimedia Suite (VMS) to provide the convergence technology and infrastructure to support voice, video, data and multimedia on a single IP-based platform.

VMS was created to provide carriers with an open and independent solution in order to build and enhance a softswitch-enabled network. With our softswitch technology, our customers are able to deploy next generation (NGN) and non-NGN networks and elements in a highly scalable and cost effective manner.

The benefits of carrying the growing packet voice traffic for a carrier's network are obvious. The challenge is to do it in the most cost effective way to maximize profits. Equally challenging is to ensure that today's investments can be utilized as long as possible. That is to say, today's solution pays future benefits.

Many of the major vendors offer softswitch solutions that are optimized for their own proprietary equipments. While a single vendor solution may be attractive, this is simply not an option for many carriers. Their networks will be heterogeneous. VMS softswitch platform solutions utilize open standards and can interoperate with many other 3rd party products providing the benefits of the new IP technology without the need to replace all their equipments.

Overview

There are Four (4) main components in the VMS architecture:

Core Server is the heart of system, providing signaling communication between all the components. Core Server also provides the critical routing service between application and layers. The backup of route plan will be equipped in core in any case of system failure. The VMS Core server can support up to 10,000 concurrent sessions per node and 720,000 of BHCA.

Core server also provides RTP Proxy to bridge and exchange RTP packets between destinations. Used in conjunction with the VMS RTP Proxy, the packet headers are modified to provide maximum security and assign bandwidth dynamically.

Billing Server provides accurate and real-time rating service for prepaid and postpaid account. Powerful billing algorithm to combine different charge segment, time base charging, holiday definition, charge block, access charge and connection charge in order to provide the complete picture of billing function. Billing Server deployed Radius protocol to communicate between Application server and core server for providing Accounting, Authorization, and Authentication for prepaid and postpaid services.

Routing Server provides intelligent routing Algorithm. Making use of 3 routing layers, route profile, route plan and route list to have an easy way to handle list of area codes. Route Profile contains

Each route list supports up to 64 route depth. The Routing engine employs memory based routing which reduce the database loading and speed up the routing decision.

Application Server provides the functional logistics for different application services for retail service, which allow Telecom Service Operators to provide extra services for generating new revenue, such as International Call Forwarding (FollowMe) and International Call Back (ConnectMe)