

# NGN *Softswitch*



**Product ID : MAC-SSW210**  
**Version : 1.0**

**MAC-SSW210** Softswitch solution deliver full telephony services over an IP based network with telecom-grade scalability and quality of service beyond the straightforward transport of voice calls, the functions and services provided by MAC-SSW-210 Softswitch solutions include the subscriber services, signaling interoperability, charging functions and operator services of the traditional PSTN.

**MAC-SSW210** can be used for both fixed and mobile applications with supplementary telephony application shared between NGN and session initiation protocol (SIP). It is scalable from single shelf configuration for small entry solutions, to multi-rack configurations for very large solution. This flexibility enables scenarios that range from thousands of users to large network transformation scenarios with many millions of users.

## Key Features:

- Carrier- grade Softswitch offering full feature set of class 4 and class 5 services.
- Modular design enables for feature scalability
- Enables continuity of interfaces and features from TDM line.
- Supports NGN protocols (SIP) for controlling gateway equipments.
- Enables access to advanced voice servers, which provide functionality such as Centrex.
- Supports operation in multi-prefix areas.

## Key Benefits:

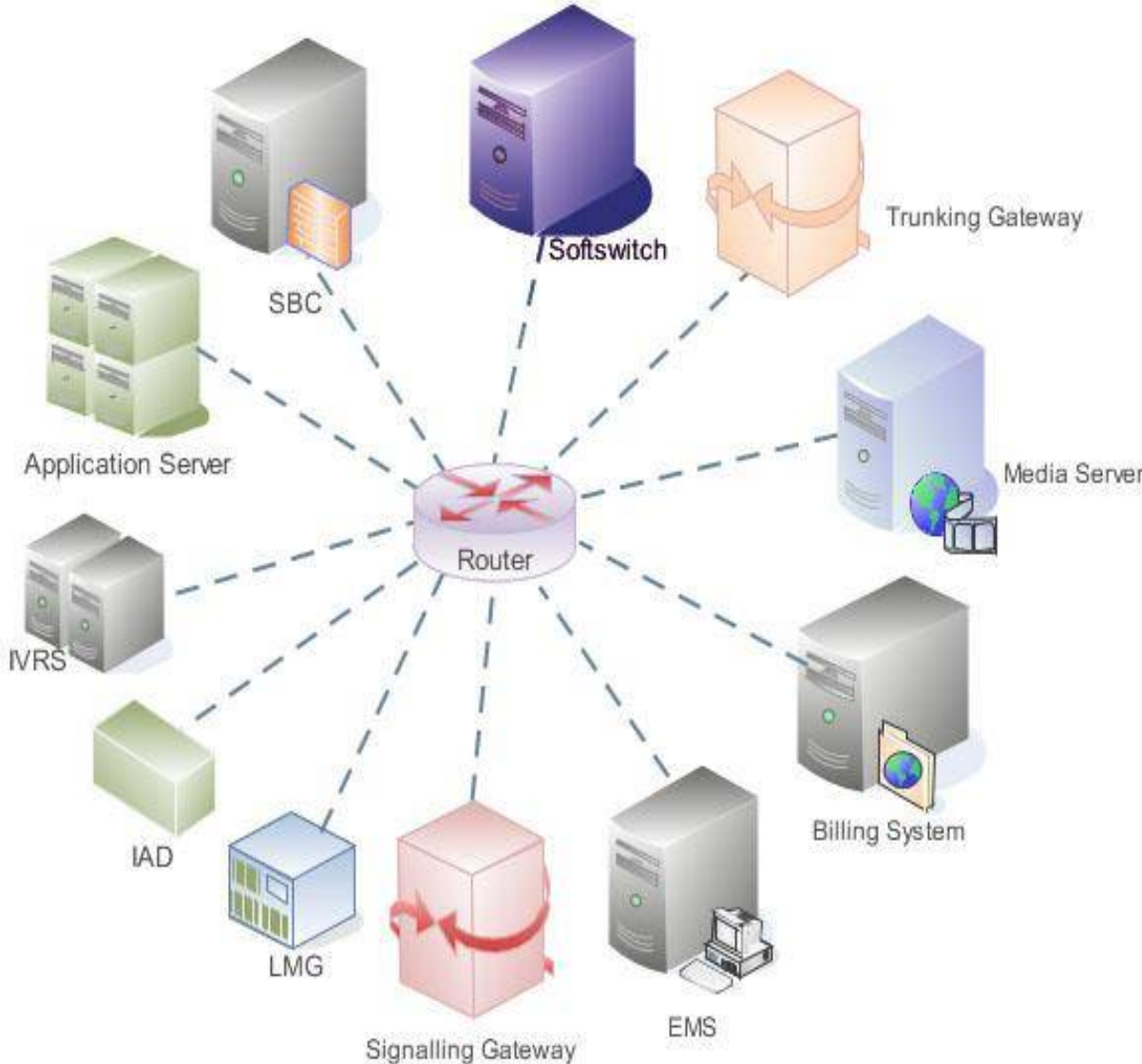
- Guarantees feature continuity for highly profitable telephony services.
- Supports voice services at any terminal, including SIP terminals.
- Allows fast introduction of new voice services (e. g announcements).
- Guarantees continuity of all proprietary management interfaces (operation support systems, billing, etc).

## System View





## Softswitch Supporting NGN Elements



## Features / Supplementary Services

- Basic call
- Service Activation / Deactivation
- Abbreviated Dialing
- Outgoing call restriction
- Hot line
- Do not disturb
- Malicious call trace
- Wakeup service
- Intercept service
- Busy register
- Call forward unconditional
- Call forward No reply
- Call forward Busy
- Call forward Not reachable
- Hook flash transfer
- Absentee service
- Call hold
- Call waiting
- Automatic callback
- Three way call
- Conference
- Calling Number presentation
- Calling number presentation restriction
- Calling number presentation restriction override
- Destinated destination code restriction
- Destinated destination code connection

- Deny Incoming Forwarded Call
- Selective Call Acceptance or Rejection
- Anonymous Call Acceptance or Rejection
- Tele marketer
- Deny Telemarketer call

## Centrex service

- Direct inward dialing
- Direct outward dialing
- Call transfer
- Call pickup
- Call forward
- Secretary service

## Routing and Call management

- Called / Calling party number
- Originated Route
- Call blocking
- Digit manipulation
- Protocol manipulation

## Billing

- CDR – CSV format for easy analysis
- Automated FTP upload

## Registration Server

- SIP Proxy Server

## Statistics

- Call Statistics (Ingress. Egress)
- CDR analysis

## Operating system

- Linux

## System Logging

- Real Time configurable logging levels
- System and exception logs
- User and Administrator History

## Element Management System

- Security
- Secure user certification, Multi-user security levels.

## High Availability

- Load sharing clustering
- Dual plane HA redundant architecture.

## Scalability

- Entry level from 10,000 BHCA (Busy Hour Call Attempts)
- Upgradeable up to Few Million BHCA (Depends on customer / Network requirements)

## Capacity and Reliability

- Racking - Multiple Racked chassis managed as single virtual switch
- Software - Fault tolerant software architecture with call preserved across CPU
- Hardware - Modular design to meet the network challenge
- Hardware Redundancy - 1+1, n+1 multiple processor bank for real time distributed and scalable control, No single point failure
- Availability - 99.999% availability.

## Power

- 230V AC Rack Power
- Approx – 2KW per Rack.

## Operating Environment

- Operating Temperature Range - 50 C to 450 C (410 F to 1130 F)
- Operating Humidity - 5% to 90% relative humidity non-condensing
- Storage Temperature Range - -400 C to +700 C (-400 F to +1580 F)