

# SysMaster

## SS7 Gateway

### KEY FEATURES

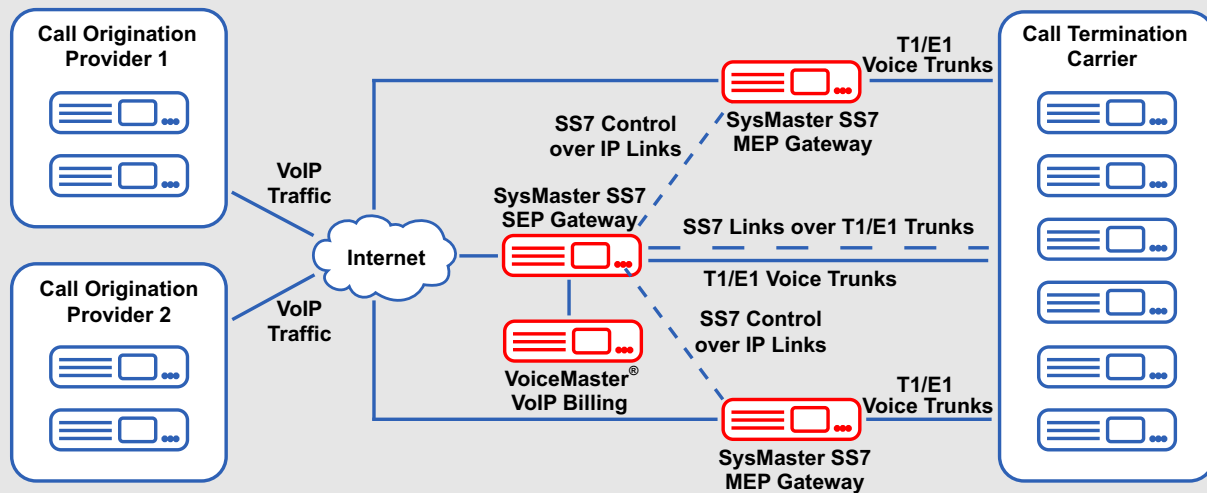
- Scalable and Customizable SS7 Implementation with M3UA, MTP, and ISUP Stacks
- A Single SEP Channel Controls Over 1,000 MEP Channels
- SEP Redundancy
- Support for Multiple ISUP Stacks and Implementations
- Deployable in SIP, H.323 and MGCP VoIP Networks
- Support for Multiple Radius Servers
- Route Fail-over Support
- Support for Callback with Multiple Triggers
- Support for IVR over IP

### Product Overview

SysMaster SM7000 VoIP Gateway offers optional SS7 functionality ("SysMaster SS7 Gateway") which allows a large number of Media End Point (MEP) channels to terminate over redundant SS7 signaling trunks to multiple telecom operators. A single SysMaster SS7 Gateway can support up to 8 Signaling End Point (SEP) channels or up to 4 redundant SEP channels. Each SEP channel can control over 1,000 MEP channels. The SysMaster SS7 Gateway can seamlessly bridge SS7 PSTN networks with next-generation VoIP networks, while offering SIP, H323, and MGCP protocol conversion in the same physical unit that does SS7 trunking.

### SYSMASTER SS7 GATEWAY

#### NETWORK DIAGRAM WITH SYSMASTER SS7 GATEWAY



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## SS7 Gateway

### Scaleable and Customizable SS7 Implementation with M3UA, MTP, and ISUP Stacks

SysMaster SS7 Gateway offers a customizable and scaleable SS7 implementation that runs on E1/T1 trunks. The gateway uses a Signaling End Point server with multiple signaling links to manage SS7 signaling. The SS7 Gateway utilizes the M3UA protocol to transport SS7 signaling data to Media End Point channels over the Internet or other IP based networks.

### A Single SEP Channel Controls Over 1,000 MEP Channels

SysMaster SS7 Gateway can control up to several thousand MEP channels. Each gateway can accommodate up to 4 SEP redundant trunks (a total of 8 SEP channels). Each SEP channel can control over 1,000 remote MEP channels over the Internet or other IP based networks. Each gateway can be connected with up to 4 providers using 8 redundant signaling channels.

### SEP Redundancy

SysMaster SS7 Gateway comes with redundant signaling channels to ensure minimum network interruptions. The SS7 Gateway can be configured to connect to a single provider with redundant channels to ensure that if one channel goes down, the redundant one will pick up the signaling traffic and continue to process data and control the remote MEP gateways.

### Support for Multiple ISUP Stacks and Implementations

SysMaster SS7 Gateway supports multiple ISUP stacks, including:

- SS7/ISUP Circuit: Q.764
- MTP2 - ITU-T Q.703
- MTP3 - ITU-T Q.704, ITU-T Q.710
- ISUP - ITU-T Q.763, 1993
- SCTP - RFC 2960
- M3UA - RFC 3332

### Deployable in SIP, H.323 or MGCP VoIP Networks

SysMaster SS7 Gateway supports all major VoIP protocols, including H.323, SIP and MGCP and easily integrates into modern VoIP networks. The gateway also supports multiple PSTN protocols such as SS7, ISDN/PRI, CAS, GR-303, and MFC/R2 to ensure seamless connectivity with virtually any PSTN/SS7 network worldwide.

### Support for Multiple RADIUS Servers

SysMaster SS7 Gateway can operate in complex billing environments with multiple RADIUS servers. For authentication and authorization purposes, the SS7 gateway can work with a single RADIUS server; for accounting, however, it can communicate with multiple RADIUS servers simultaneously.

### Route Fail-over Support

SysMaster SS7 Gateway offers a mechanism to ensure high network availability. The gateway can be configured to periodically conduct L3, L4, and L7 remote service checks and re-route (fail-over) calls to alternative remote gateways if current terminals become unavailable.

### Support for Callback with Multiple Triggers

SysMaster SS7 Gateway can be implemented in different callback scenarios with multiple callback triggers. The gateway can initiate a callback after receiving a PIN number from a subscriber via web, SMS or email. Alternatively, it can recognize the caller ID (ANI/DNIS) of a subscriber and initiate callback accordingly.

### Support for IVR over IP

SysMaster SS7 Gateway offers a unique IVR over IP functionality which enables it to encode and transport IVR messages over IP channels to gateways which don't natively support IVR. Such product feature allows service providers to add IVR functionality to their existing VoIP infrastructure with low incremental investment.



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