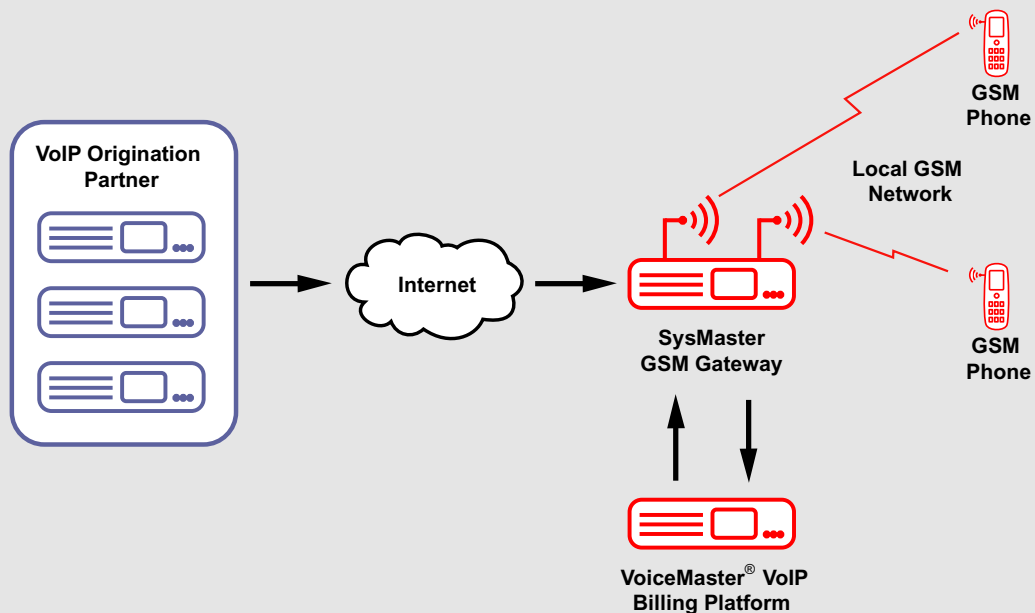# SysMaster
GSM Gateway

KEY FEATURES

- Intelligent Mechanism to Bypass Roaming Fraud Protection Procedures
- Up to 64 GSM Channels on a Single Chassis
- GSM Callback Support
- GSM Termination Support
- GSM Calling Cards Support
- Deployable in SIP, H.323 and MGCP VoIP Networks
- Support for Multiple Radius Servers
- Route Fail-over Support
- Multiple Callback Triggers
- Support for IVR over IP

Product Overview

SysMaster SM7000 VoIP Gateway offers optional GSM functionality ("SysMaster GSM Gateway") which enables providers to directly originate/terminate calls from/to local GSM networks. The SysMaster GSM Gateway employs an intelligent mechanism to bypass roaming fraud protection procedures, typically used by the GSM operators to restrict access to their networks. Such product functionally enables a more cost-effective transport of calls between VoIP and GSM networks. It also opens up new revenue generating opportunities for providers, who can now offer GSM Callback, GSM Calling Card and GSM Termination services at competitive prices.

SYSMASTER GSM GATEWAY

NETWORK DIAGRAM WITH SYSMASTER GSM GATEWAY

SysMaster
GSM Gateway

Intelligent Mechanism to Bypass Roaming Fraud Protection Procedures

SysMaster GSM Gateway offers an intelligent mechanism to bypass roaming fraud protection procedures. The gateway can generate random inbound and outbound calls between its GSM channels, thereby emulating natural call traffic. Because such call traffic closely resembles live calls between users, it cannot be detected and blocked by the roaming fraud protection procedures of GSM operators. That allows the GSM channels to be used for direct call origination/termination from/to local GSM networks.

Up to 64 GSM Channels on a Single Chassis

SysMaster GSM Gateway offers up to 64 GSM channels on a single chassis. GSM channels can be added in multiples of 8 which allow providers to start with smaller capacity and scale up cost-effectively when needed.

GSM Callback Support

SysMaster GSM Gateway also offers GSM Callback functionality which enables providers to offer cost-effective long distance and international calls to their subscribers. The gateway can receive callback requests via SMS, email and web as well as via GSM, VoIP and PSTN channels. Subsequently, it can originate/terminate calls via VoIP, PSTN or GSM channels.

GSM Termination Support

SysMaster GSM Gateway supports direct termination of calls to GSM networks. Such calls can be received by the GSM Gateway directly from VoIP, PSTN or GSM networks. In a typical GSM termination scenario, the GSM Gateway utilizes the VoiceMaster® VoIP Billing server for authentication and billing services.

GSM Calling Cards Support

SysMaster GSM Gateway also supports GSM Calling Cards which enables providers to add yet another revenue stream to their operations. When a user dials a GSM number connected to the gateway, the GSM gateway authenticates the user by his Caller ID or PIN number and presents him with a dial tone. After the user dials a number, the gateway routes the call to its destination cost-effectively via VoIP, PSTN or GSM channels.

Deployable in SIP, H.323 or MGCP VoIP Networks

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

Route Fail-over Support

SysMaster GSM 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.

Multiple Callback Triggers

SysMaster GSM 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 GSM 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.