

SBO

SYNCHRONOUS BANDWIDTH OPTIMIZER

A "POINT-TO-MULTI POINT" BANDWIDTH
OPTIMIZATION TECHNOLOGY FOR **VoIP** COMMUNICATION

Overview

- Technology for reducing bandwidth consumption of VoIP to a great extent (up to 80%).
- Uses lossless compression method, thus can be used with mostly used codecs i.e. G.729, G.723, GSM etc.
- Works from NAT - from real IP and/or public IP, static and/or DHCP.
- No change in voice quality and route statistics, rather it can increase Average Call Duration (ACD) to 1 minute.
- Works as a third party device/software with any Soft Switch.
- “Point-To-Multi Point” technology, requires native devices at both end. It works as like tunnel to secure packets and bypass all kind of firewall.

Protocols & Codecs

- SBO uses lossless compression method and do not use codec for providing better compression, rather it compresses transport (RTP). So it works with all commonly used codecs i.e. G.729, G.723, GSM, AMR etc.
- It works with Session Initiation Protocol (SIP).

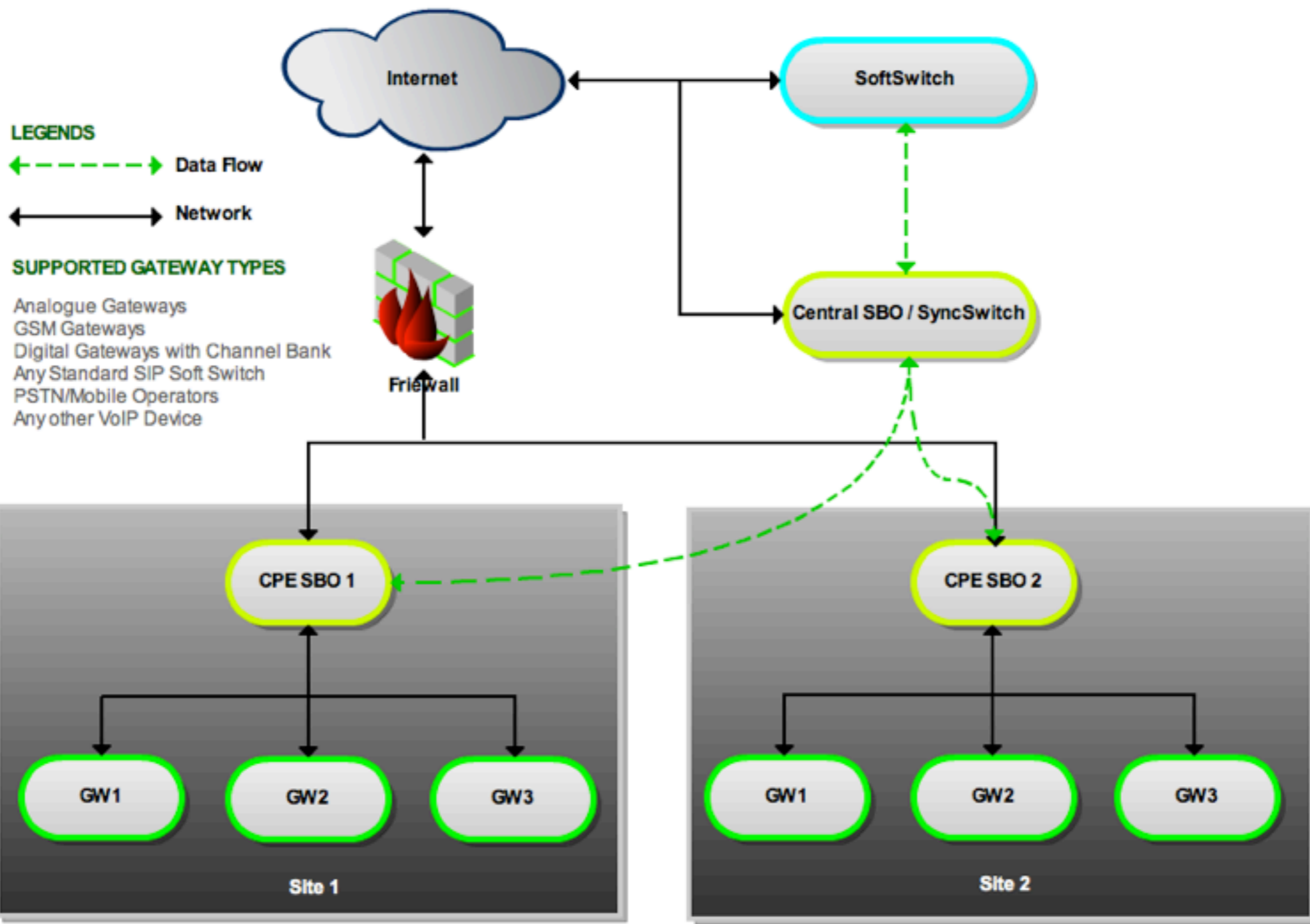
Why use SBO?

- SBO can make equipments working from behind NAT. So it works from real and/or private ip; static and/or DHCP. It works with WIMAX, Wi-Fi, 3G internet to make dream come true and to give flexibility of doing VoIP from anywhere, both origination and termination; bandwidth is not a problem anymore.
- SBO communicates with Synchronous Communication Protocol (SCP) - a proprietary binary protocol which can secure its packets and bypass any sort of firewall bringing flexibility to use any type of internet for VoIP.

- Generally, per E1 bandwidth consumption with G.729 Codec is 936 Kbps (31.2 Kbps per call, Cisco Standard) and with G.723 its 657 Kbps (21.9 Kbps per call, Cisco Standard). SBO can reduce consumption to -
 - 255 Kbps per E1 (8.5 Kbps per call) with G.729 Codec
 - 150 Kbps per E1 (5 Kbps per call) with G.729 Codec with Silence Suppression enabled
 - 180 Kbps per E1 (6 Kbps per call) with G.723 Codec
 - Bandwidth consumption reduces for other codecs proportionately.

- When number of concurrent call increases, bandwidth consumption decreased to some extent over described consumption above.
- Reduction of bandwidth consumption is up to 80%
- SBO reduces bandwidth utilization without compromising voice quality. Rather, it can increase Average Call Duration (ACD) up to 1 minute and decrease Post Dial Duration (PDD) up to 2 seconds resulting faster call setup.
- Complete routing with capacity control, priority of routes, quality control with least cost, quality, and priority based routing for every terminating end point/gateway.

Implementation & Workflow



SBO WORK FLOW DIAGRAM

- SBO works with any soft switch which has standard SIP compatibility.
- SBO requires 1 pair of SBO device/software to be installed, one at the switch premise and another at the device/gateway premise.
- SBO can be implemented for both origination and termination end points, literally for all sort of VoIP communication.
- SBO works as a add-on of SyncSwitch as well. All the facilities are integrated with SyncSwitch to provide best flexibility. In that case no need of SoftSwitch premise device/software since SyncSwitch can replace that.
- SBO works with GSM Gateways, Channel Bank (with SyncSwitch SS7 module), analogue gateways, digital gateways with channel bank, direct connectivity (IP <> SS7) with PSTN and Mobile Phone operators and all other forms of VoIP termination.

Distribution

- SBO is available as following distribution -
 - Hardware devices
 - Downloadable and bootable iso file with built in operating system and the software, which needs to be burned to USB flash drive or Compact Disc and run a computer from that.
 - SBO software installed on a server/pc with Cent OS 5 as operating system.

Contact With US

Should you have any query regarding SBO, please
feel free to contact with us.

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