

Virtualize your SBC with SYSTM and Sangoma



Let's Build a Strong Partnership

Presented by:

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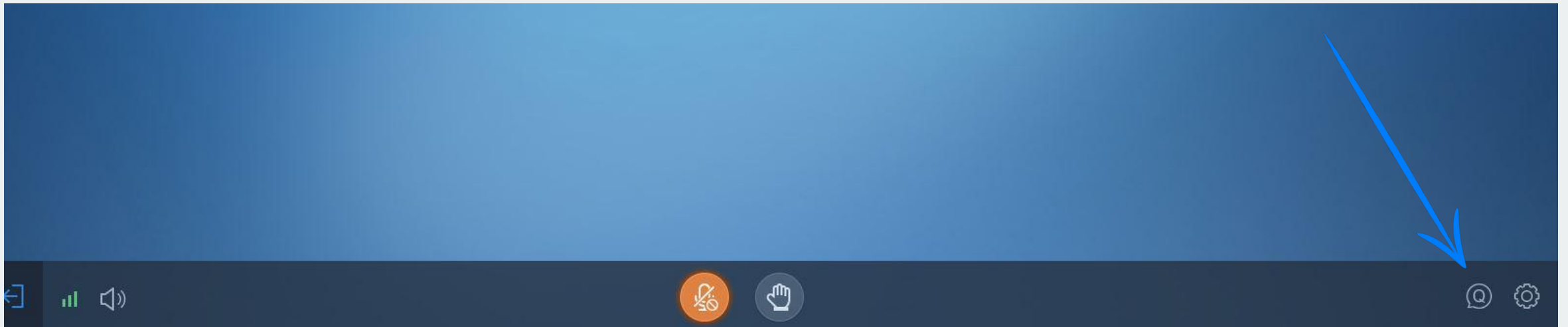
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**During the webinar please use the Q&A feature
located in bottom right corner of your screen!**

**We will answer the questions at the end of the presentation
Thank you!**



We Are VoIP Supply

Reseller Benefits



Since 2002 VoIP Supply has delivered unparalleled service and expertise to over 125,000 customers worldwide.

VoIP Rental Program

our Device as a Service (DaaS) rental program gives your customers the widest variety of VoIP Products for a low monthly payment!

Hardware & Provisioning

featuring over 60 manufacturers that offer over 16,000 products and the ability to provision for you!

CloudSpan MarketPlace

a single place to shop various VoIP service providers - build up your MRR and receive discounts on hardware selling through VoIP Supply

Fulfillment

provisioning and professional services from multiple warehouse locations in North America; providing real-time access to manage your projects from order through delivery

Refresh & Reclaim

offering certified reconditioned devices at a fraction of the cost plus offering an outlet for selling off used and excess VoIP equipment

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Sangoma at a Glance



Over **35** Years
experience

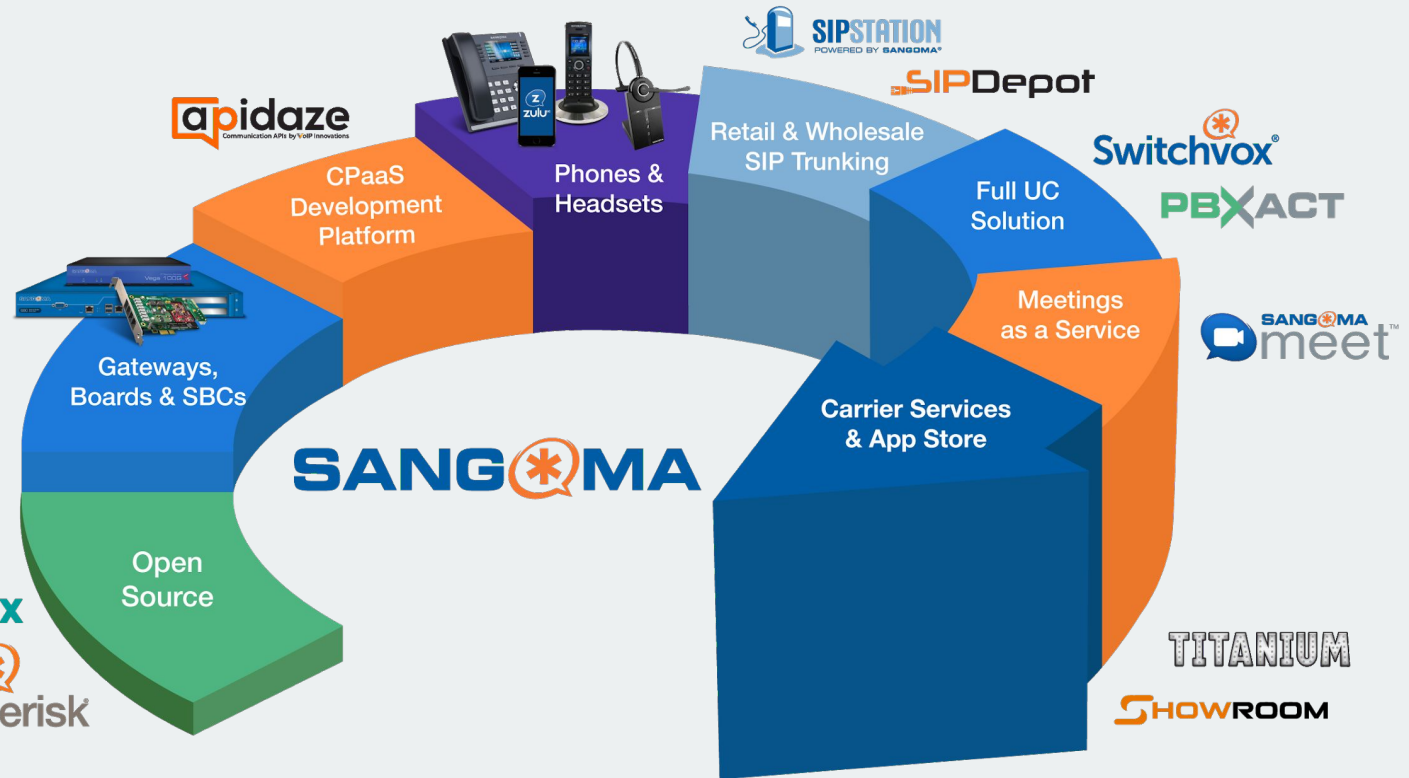
**Proven Financial
Performance**
(increasing profitability
and revenue)

Publicly Traded
TMX | Toronto Stock
Exchange

Global Presence
HQ: Toronto Canada
Over 15+ Regional Offices

Customers
Range from
SMB to SP

**Sponsor of the Two
Largest Open Source
Communications
Projects in the World**



Leading Unified Communications Solution Provider



SYSTM provides simple to deploy, highly available, cloud-based, voice infrastructure.

- Infrastructure-as-a-Service
- Enabling you to host your voice only applications
- Making it simple to -- Create, launch, support your application
- With flexibility and scale

Own your customers, not the infrastructure

Hosted Switchvox Today

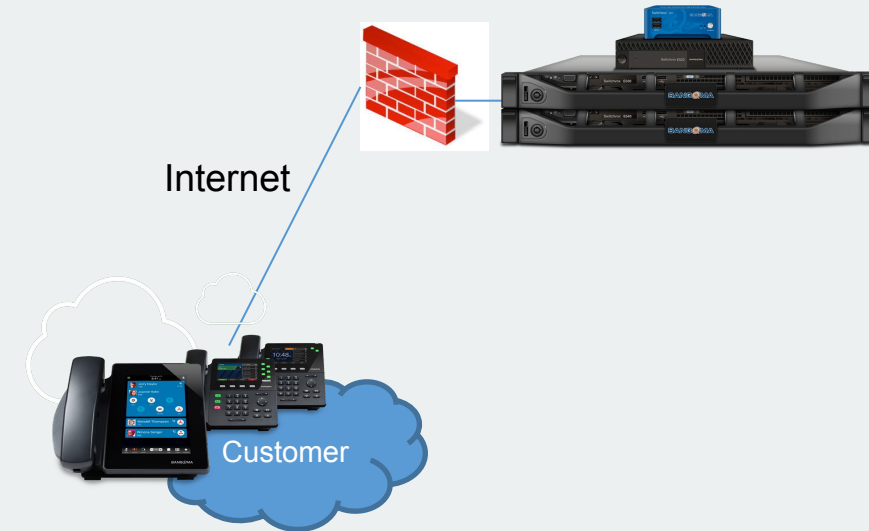
Leverages the Security Features of a Firewall

Firewall Settings

- Port Forward VoIP ports (i.e. 5060)
- Access Control from trusted IP address
- Block everything else

Switchvox Settings

- Configure Access Control List Rules
- Very Strong extension & voicemail passwords
- Restrict Admin GUI to known IP address ranges



Security and Protection of Your VoIP environment is not trivial

- Can't protect your entire network by implementing only one method
- Hackers only need one exposed area of your network to take it all down

Malicious activity caused by hackers is growing and businesses are being compromised

- Because business owners are not educating themselves about VoIP security.
- The transition from legacy phone system environments to VoIP environments is creating an increasing gap of ignorance, benefiting hackers
 - The ubiquitous network firewall is no longer the one-stop shop for protection, as in 'the old days'. They protect ONLY your data
 - Hackers are hoping that you don't know that your VoIP network is an open door

LET'S PUT THIS TO A STOP

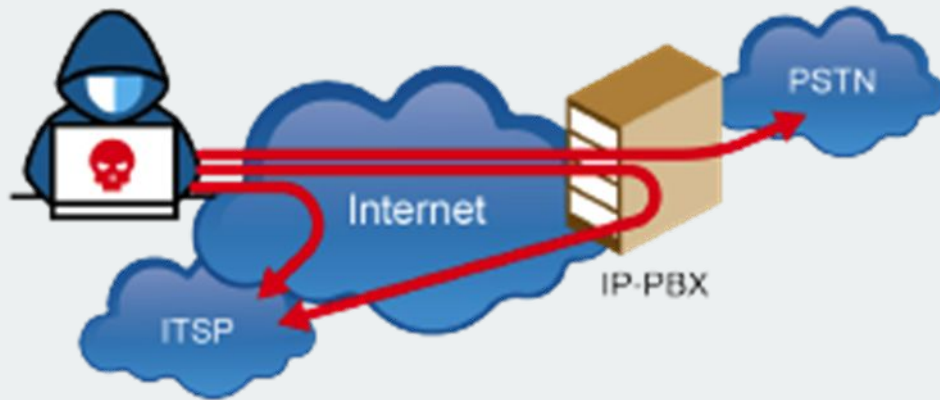
Why SBC's



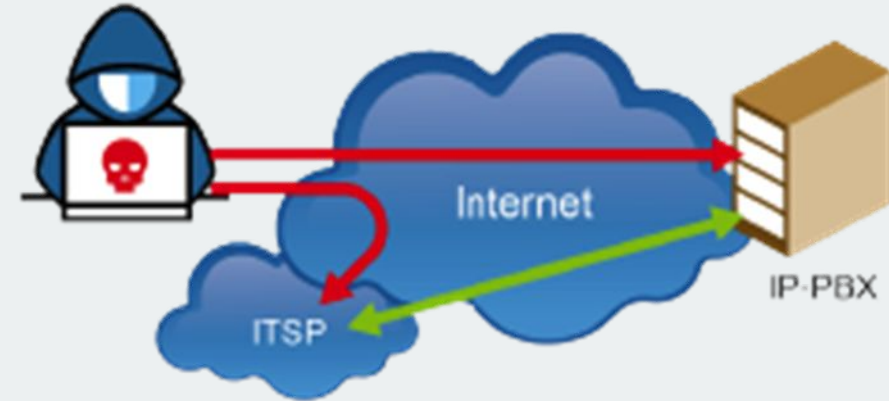
- Security and Protection is a layered approach
- Create multiple roadblocks for hackers that together form an entire shield
- Maintain your protection methods too! Have policies in place to routinely check and monitor
- We will show you how to create a layered protection approach with Sangoma SBCs to form a rock solid shield against hackers
- SBCs Compliment existing Security infrastructure, by adding VoIP specific security policies to the Firewall.

Types of Attacks

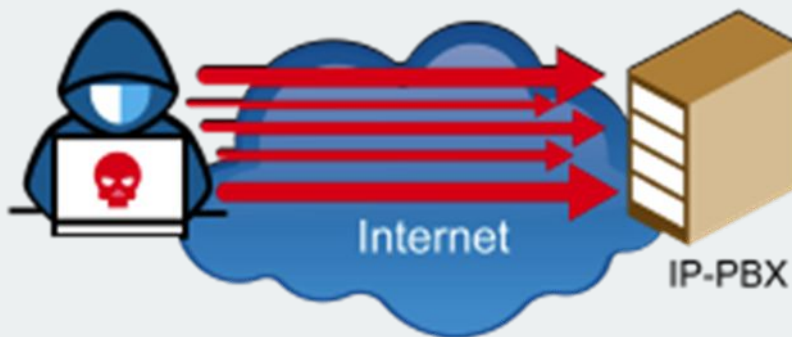
- Toll Fraud



- Identity Theft



- Denial of Service

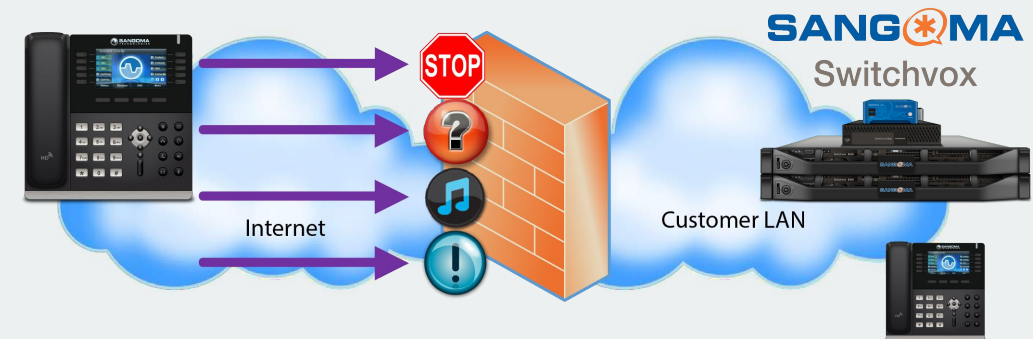


- Eavesdropping



Firewalls are Not Enough

- Simply put - Firewalls were never designed for VoIP traffic
- Inherent function is to Deny ALL unsolicited traffic
- Do Not understand SIP protocol and routing needs (SIP is the protocol used for VoIP)
- Audio Media requires separate negotiation
- Not setup for Real Time communication
- Won't a SIP ALG work?
 - NO. They understand SIP, but not the audio, which means one-way or no-audio issues



Firewalls are Not Enough

- Work around when using a firewall for VoIP: “Poking Holes” to allow VoIP Traffic through – SIP and Audio/Video
 - This is why businesses get hacked!
- Cons
 - Switchvox must deal with VoIP Security threats directly
 - Requires some Firewall configuration knowledge
 - Poking Holes in Firewall to route insecure traffic into a Private Network

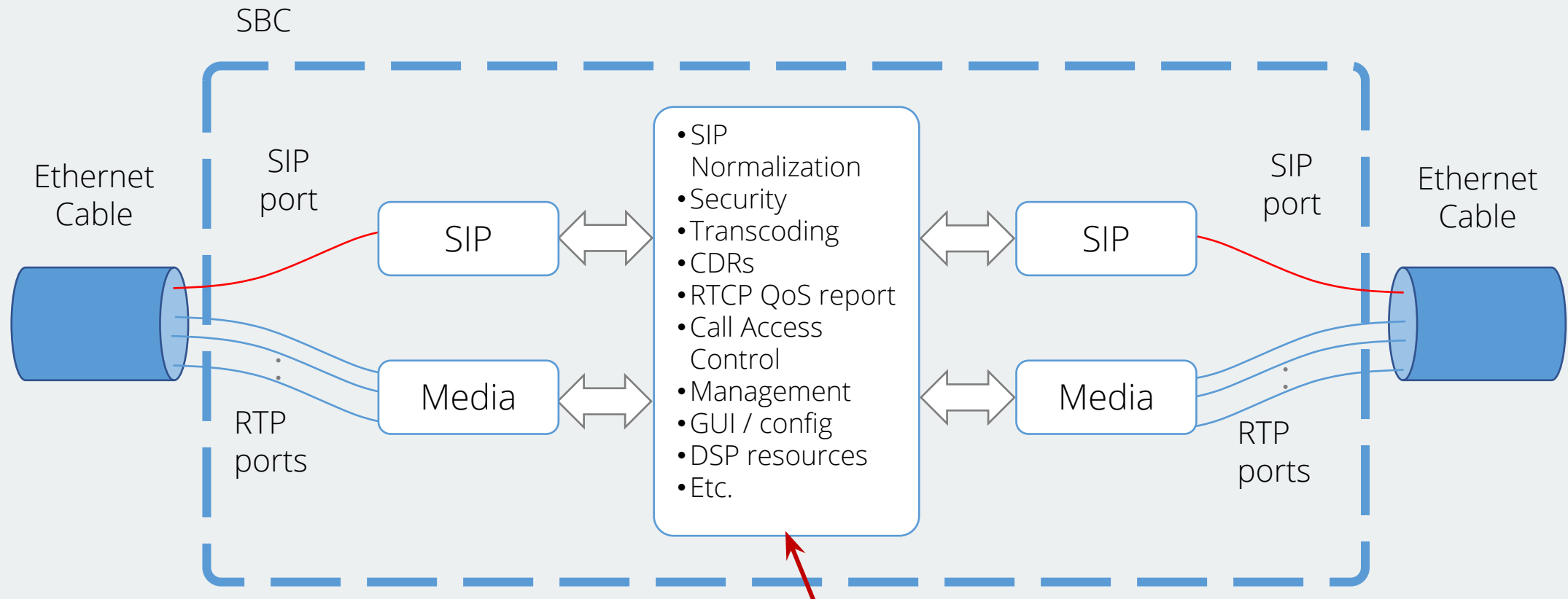


SBC is the Solution

- SBC's are not well understood and require some VoIP education
- If you create a data network, you buy a firewall
- If you have a VoIP network you buy an SBC
- SBC is a device placed at the edge of your VoIP network, which monitors ALL of the VoIP traffic going in and out
- Based on the type of traffic it will intelligently make decisions to block/deny, re-route...etc.



SBC is the Solution



Because the SBC 'sees' all SIP and RTP traffic coming from both sides, it can analyze, fix, control, report, etc.

Security:

- Protect from denial of service attacks (DoS or DDoS), fuzzing, and toll fraud
- ACLs
- SIP Protocol Filtering and Rate Limiting
- SIP Protocol IDS/IPS

Encryption:

- Prevent eavesdropping and authenticate the call end points

Registration Policy:

- Prevent unregistered end points from getting access to your VoIP service

Call Routing:

- Provide dynamic routing – LCR & Load Balancing
- Survivable and Resilient Routing

SIP Conversion:

- Interoperability: Allow SIP-based equipment from different vendors to interconnect

Media Transcoding:

- Generate the best quality of service the connection can provide, from HD Voice quality to small bandwidth optimized codecs

Scalability:

- Respond to increasing demand on your VoIP services



- Remote Workers
- SIP Trunking
- SBC for TDM Support
- Virtual SBC
- Transcoding
- Security
- High Availability
- Interoperability



Most popular Request by Switchvox Customers

- How do we secure remote phones?!!!!

The Sangoma SBC supports DPMA for Digium IP phones

- Allows access to authorized endpoints on remote worker premises. Eliminate interoperation and firewall issues on corporate and remote worker networks, maintain security.

Features

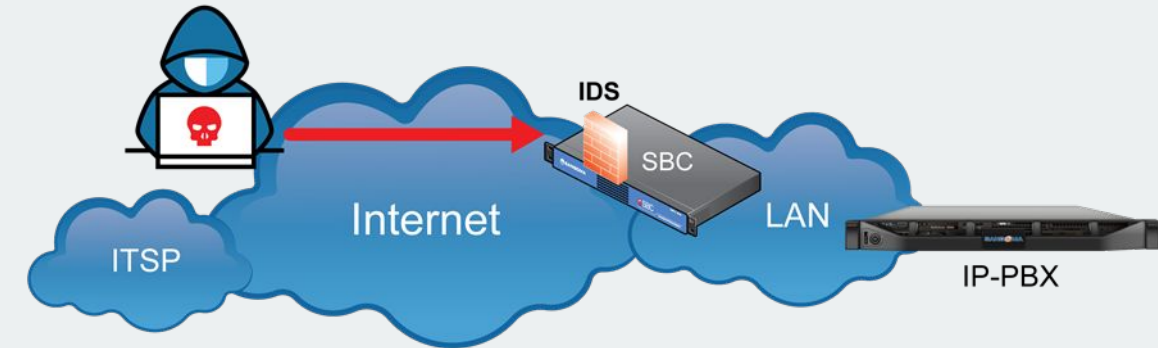
- No VPN required
- Pass-through SIP registration on Switchvox
- Remote FW/NAT traversal
- Call Admission Control
- Topology Hiding
- TLS and SRTP encryption

- Without SBC



- Firewall - Open Ports to allow SIP Application through
- And other Port for needed applications
- This moves the Security responsibility to the IP-PBX

- With SBC



- Phones register through the SBC which is able to detect and handle any attacks
- Adds a layer of Control

Remote Worker



Configuration Guide: <https://wiki.sangoma.com/display/SBC/Switchvox+-+Remote+D-Series+Phones>

Switchvox Configuration

- Configure the Outbound Proxy for each remote Phone to be the SBC
- All remote phones will communicate with SBC and the SBC will relay, securely, to Switchvox
- All done from admin GUI, under Server > Phone Networks
- Verify remote phones are connected to Switchvox correctly, view Server>Connection Status> SIP Phones

SBC Configuration

- Create Internal (trusted) Profiles, and External (Untrusted) Profiles
- Call Routing to shape the call flow
- Apply ACLs, SIP Security and IDS/IPS

- Reduce costs of local and long distance dialing charges by using VoIP delivered via SIP trunks
- The SBC provides a defined demarcation point between the internet telephone service provider (ITSP), and the enterprise's corporate network
 - Provides VoIP Security
 - Solves Interoperating issues
 - Provides Media Transcoding

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SIP Trunking



Switchvox Configuration

- Configure the SBC as a VoIP Provider
- Assign Outgoing Calls and Incoming Calls to/from the SBC
- That's all!

SBC Configuration

- Create Internal (trusted) Profiles, and External (Untrusted) Profiles
- Call Routing to shape the call flow
- Apply ACLs, SIP Security and IDS/IPS

Configuration Guide:

<https://wiki.sangoma.com/display/SBC/Switchvox+-+SIP+Trunking>

SMB SBC

- 5-30 Sessions/Calls



Enterprise SBC

- 25-250 Sessions/Calls



NetBorder SBC

- 250-4000 Sessions/Calls



VM Enterprise SBC →

- 25-1000 Sessions/Calls
- Software Only/Virtual Machine Ready



Ease of Use

- WebGUI configuration, operation, backup and restore
- Simplified licensing, field upgradable, all features one SKU
- Security
- DDOS attack protection, advanced firewall for signaling and data

Advanced Call Routing

- Advanced WebGUI or XML dial plan, database routing, load balancing

Troubleshooting

- WebGUI Network Capture
 - PCAP signaling and media capture on the SBC
- E-mail notifications
- Ability to debug in real time with no delays with quick troubleshooting turnaround time

HTTP Dynamic Call Routing

- Easy integration into Web Business Logic
- Zero touch provisioning and management

High Availability/Redundancy

- 1:1 active/standby two-box redundancy to guarantee business continuity
(Available free-of-charge!)

Load Balancer

- Balance call load across multiple SIP trunk providers.
- Reroute calls in case a trunk fails or becomes congested.
- Great for environments with more than one Switchvox

SBC Software installed with SYSTM

- Infrastructure-as-a-Service
- Enabling you to host your SBC VoIP Security applications
- Making it simple to -- Create, launch, support your SBC
- With flexibility and scale that comes with easy SBC licensing



Training

- Sangoma University (training.sangoma.com)
- Free online SBC training videos

Documentation

- Sangoma.com – sales and marketing collateral
- Wiki.sangoma.com– technical instructions
- Step-by-Step configuration guides available to setup S



Professional Service

- Remote configuration available
- Remote Installation Support
- Some installations will require less hours due to simplicity and network

Support

- All SBCs require annual maintenance plans for any support requests
- Support credits are required in order to receive assistance
- Hourly blocks purchased through support.sangoma.com



Gold Level Maintenance Plans

- Sangoma Support provide Tier 3 Support
 - Customer comes to Sangoma with Problem In-Hand
 - Providing Logs, Captures and detailed analysis
- Severity Based SLA, Response and Resolution Goals
- 9x5 Regional Business Hours Support Access
- 30 Support Credits included on initial purchase
 - 30 Credits = 30 Minutes Credits usage;
 - Case Management; Problem Identification and resolution
 - Configuration and Implementation Support
 - More Credits can be purchased
 - Support Credits have a limited One Year activation from time of purchase
- Software Releases
- No Extended Hardware Warranty



Platinum Level Maintenance Plans

- Severity Based SLA, Response and Resolution Goals
- 24x7 Emergency Support for Critical Severity Issues Only
 - Critical Severity Only
 - Dead Production Environments Support Requests Only
 - Complete System Outages
- 60 Support Credits included on initial purchase
 - 60 Credits = 60 Minutes Credits usage;
 - Case Management; Problem Identification and resolution
 - Configuration and Implementation Support
 - More Credits can be purchased
 - Support Credits have a limited One Year activation from time of purchase
- Software Releases
- No Extended Hardware Warranty

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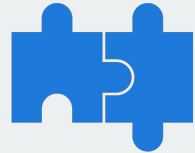
Partner with Sangoma



Expand your offerings, grow your customer base, and build recurring revenue with Sangoma solutions.



Exceptional
Margins



Total
Solutions



Sangoma
University



Exclusive
Portal



SANG*MA

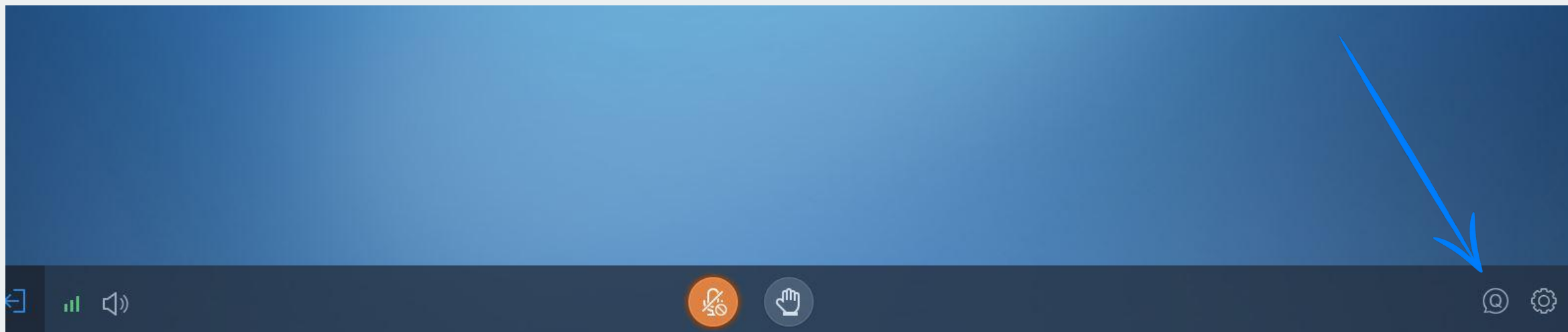
sangoma.com/partners/

SIMPLE VOICE INFRASTRUCTURE
SYSTEM

Thank you for participating in the webinar today!

Contact **VoIP Supply** to request your **FREE** 30 day trial of hosting Sangoma's SBC or schedule access to the **VoIP Supply** sandbox!

Q&A



CONTACT INFORMATION



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