



Sigma[®] Core

Virtualized Carrier-Grade VoIP Softswitch

The evolution to all-IP telephony networks is shrinking the boundaries between telecommunications and IT. REDCOM Sigma[®] Core software bridges both worlds by providing a robust and flexible Unified Communications platform that can be deployed in public, private, and hybrid cloud environments. Sigma Core enables service providers to capture new revenue, cap and reduce the costs of legacy infrastructure, and deliver new services for an increasingly mobile and web-centric customer base.



Deployment scenarios

Sigma Core can be deployed as a UC complement to existing switch networks or as a stand-alone solution. With a comprehensive suite of UC, PBX, and Class 4/5 features, Sigma Core is well positioned to fulfill a variety of applications including:

- Public Class 4/5 End-Office
- Unified Communications adjunct
- Virtual PBX
- Secure & Encrypted communications
- International Gateway



Drive new revenue with UCaaS

Sigma offers a comprehensive set of Unified Communications as a Service (UCaaS) functions to satisfy Business-to-Business demand:

- IP Trunking
- Video (P2P)
- Chat/XMPP with Presence
- Hosted PBX
- Conference Bridge
- Unified Messaging
- Voice Mail to Email
- Enterprise features
- White label web interfaces



Standards-based interoperability

Sigma will not lock you into a proprietary ecosystem. REDCOM follows industry standards in order to interoperate with third party phones, soft clients, and gateways.

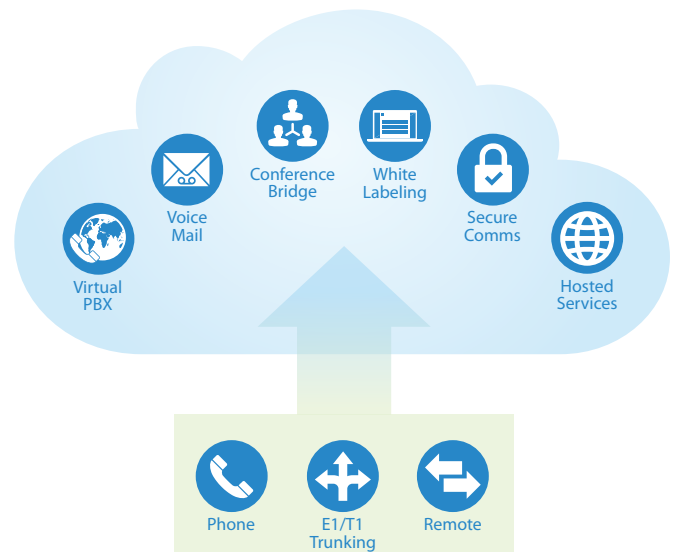


Cap & Grow

It doesn't make sense to connect more endpoints to aging hardware. Sigma Core enables service providers to cap legacy switches and begin offering VoIP-based services and features.

Carriers with an existing hybrid switch can retain this hardware for interoperability with the PSTN while offloading incremental VoIP call processing to Sigma Core. As access to broadband increases in the service area, customers can be migrated to Sigma Core and the legacy switch decommissioned. Once the full service area is hosted by Sigma Core, the service provider is equipped with a highly scalable carrier-class virtual softswitch.

Grow with Sigma[®] Core



Cap legacy services



Carrier-Grade software

Anyone who has ever tried to employ a low-end software solution knows that there is no truth in “software is just software”. With Sigma, REDCOM designed the software for serious use and reliability—hallmarks of REDCOM’s reputation. Carrier-grade elements include:

- Trunking and alternate routing
- Least Cost and Time of Day routing
- Toll Restriction
- Auto attendant
- PBX-style SMDR and BellCore AMA
- TLS and SRTP encryption
- Integrated Firewall



Security & encryption

Corporate and government espionage is rampant in VoIP networks. Spoofing (fraudulent emulation of mobile calls) costs carriers hundreds of thousands of dollars. Sigma Core includes defensive mechanisms for secure communications to those supporting banking, government, and exploration sectors. This includes:

- SRTP payload encryption
- TLS encryption for call set-up
- Spoofing prevention with comparison of incoming credentials



Multi-tenant PBX for businesses

With businesses wanting to divest themselves from PBX hardware ownership, and service providers able to take over those responsibilities, Sigma Core’s IP PBX features are a win-win for carriers and business customers alike.

With Sigma Core, providers can deliver reliable, feature-rich, and mobile-enabled IP PBX services to business clients and resellers. Sigma Core is multi-tenant, which means it can provide services to multiple premises or clients from a single instance of the software.

Featuring UC services such as conferencing, single-number service (Find Me Anywhere), Presence, Voice Mail, and Wi-Fi mobility, Sigma Core enables carriers to offer multiple business customers the features they demand from next generation IP PBX services.



UC for the IT Generation™

Developed from the ground up, Sigma Core is designed to appeal to IT specialists.

- OA&M graphical web interface with a customizable dashboard and a gallery of apps for rapid provisioning of services
- Self care portal empowers service providers to offload administrative functions to end users
- Graphic charts and performance reports
- White Label functionality enables service providers to fully customize the interface



Virtualization and the Cloud

Sigma Core is intended for deployment in public, private, and hybrid cloud environments. The software operates under a variety of hypervisor platforms including VMware® vSphere®, Hyper-V®, and KVM. As an alternative, the software can also operate in bare-metal installations without the need for a hypervisor.

Sigma Core can run on a single processor core with just 1GB RAM and 100GB of disk space.



Simple licensing model

Set up a softswitch or virtual PBX with just a handful of licenses. The Sigma Core architecture enables scalability without increasing system complexity.



Integrated Voice Mail

Voice mailboxes can be fully customized by the end user via a web browser on their desktop or mobile device. Users can even have voice mail messages forward to an email address.



Conferencing

Fully customizable conferencing including meet-me (scheduled) and Blast Dial conferences with announcement and password options that are easily configured through a web interface.

©2017 REDCOM Laboratories, Inc. REDCOM, the REDCOM logo, Sigma, and SLICE are registered trademarks of REDCOM Laboratories, Inc. All other trademarks are property of their respective owners. Subject to change without notice or obligation. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/). This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software developed by the Computer Science Department at University College London.