

REDCOM® Sigma®

Virtualized carrier-grade softswitch that grows revenue

The evolution to all-IP telephony networks is shrinking the boundaries between telecommunications and IT. REDCOM Sigma® software bridges both worlds by providing a robust and flexible Unified Communications platform that can be deployed in public, private, and hybrid cloud environments. REDCOM Sigma 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

REDCOM Sigma 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, REDCOM Sigma 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

REDCOM 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

REDCOM 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. REDCOM Sigma 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 REDCOM Sigma. As access to broadband increases in the service area, customers can be migrated to REDCOM Sigma and the legacy switch decommissioned. Once the full service area is hosted by REDCOM Sigma, the service provider is equipped with a highly scalable carrier-class virtual softswitch.

Cap legacy services



Grow with REDCOM® Sigma®



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



Multi-tenant PBX for businesses

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

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

Featuring UC services such as conferencing, single-number service (Find Me Anywhere), Presence, Voice Mail, and Wi-Fi mobility, REDCOM Sigma 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, REDCOM Sigma 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



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 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



Virtualization and the Cloud

REDCOM Sigma 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. The software 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 software’s 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.



Powerful 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.

The built-in Conference Manager app allows for real-time control of audio conferences via a web interface. The app gives the attendant a dashboard view of all conferences, with the ability to drill down into each conference to see all attendees. The attendant can drag and drop conference members between active conferences or add/remove/mute users with the click of a button.