Sigma[®] Core

Military-Grade Unified Communications software from REDCOM

The REDCOM Sigma[®] product family is a complete software-based Unified Communications (UC) solution with features and capabilities particularly useful for government and military users. Listed on the DISA APL, Sigma Core is a powerful Virtual Local Session Controller (LSC), Virtual PBX, and Class 4/5 End Office. Sigma Core is based on open standards with a focus on interoperability, reliability, and security.



Deployment scenarios

Sigma Core is scalable from small tactical teams up to strategic levels. It brings Unified Communications capabilities to existing switch networks from REDCOM and third party vendors. With a comprehensive suite of UC and Class 4/5 features, Sigma Core is well positioned to fulfill a variety of applications:

- Local Session Controller
 - Tactical Field Operations
 - Base Central Office
- Hosted PBX
- Command & Control (C2)
- Unified Communications Adjunct

Unified Communications

Sigma Core offers a comprehensive set of UC functions for government applications:

- Voice over IP (VoIP)
- Video (P2P)
- Chat/XMPP with Presence
- Voice Conferencing
- Unified Messaging
- Voice Mail to Email
- Full MLPP Support



Conferencing

Sigma Core supports fully customizable conferencing entirely in software without the need for peripherals and add-on boxes. Conference types include meet-me (scheduled) and preset (Blast Dial) with announcement and password options that are easily configured through a web interface.



Military-Grade software

There is no truth in "software is just software." REDCOM leveraged decades of experience to build the Sigma product family to meet the demanding requirements of today's users. Sigma Core is designed for serious use and reliability—hallmarks of REDCOM's reputation. Military-grade elements include:

- Trunking and alternate routing
- Commercial Cost Avoidance
- MLPP
- Auto attendant
- PBX-style SMDR and BellCore AMA
- Configurable report generation
- Integrated Firewall
- DISA security templates
- End instrument provisioning
- SDP manipulation

Security & Encryption

IP networks bring a new set of challenges for secure voice communication. Sigma Core includes measures to meet these challenges:

- SRTP payload encryption
- TLS encryption for call set-up
- Mutual authentication
- FIPS 140-2
- Suite B
- Certificate Revocation List
- Online Certificate Status Protocol (OCSP)
- Secure administration via HTTPS
- IPSec
- RADIUS authentication

REDCOM

Essential Communications

Flexible translator

REDCOM systems have long been used for special applications in government and military networks due to their highly flexible translation capabilities. With Sigma Core, REDCOM engineers continued this tradition by creating our most powerful translator yet. Sigma Core's world-class translator supports numerous call translating trigger points for embedded Lua scripts and it can translate on both numeric and URI addressing. This powerful combination enables customers to tailor Sigma Core's functionality to meet their special needs.



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Intuitive web interface

Developed from the ground up, the software is designed to appeal to digital natives. Admins, technicians, and end users all share a common and customizable web interface. This reduces training ramp-up for both provisioning and end user access.



Standards-based interoperability

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



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, Sigma Core 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 20GB hard drive space. The small software footprint allows you to maximize your investment in a virtual infrastructure by leaving more resources for other services.



Reporting

Sigma Core offers an integrated reporting engine:

- On-demand reports
- Scheduled reports
- Exportable data (.pdf, .doc, etc.)
- Resource utilization reporting
- Precedence and preemption reporting
- Traffic usage details



For more information on how to deploy Sigma, please contact REDCOM at 585.924.6500 or sales@redcom.com

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