

REDCOM® Sigma®

Military-Grade call & session control software

REDCOM Sigma® is a software-based call and session controller with features and capabilities particularly useful for government and military users including VoIP, Video (P2P), Chat/XMPP with Presence, Voice Conferencing, Unified Messaging, and full MLPP support. Listed on the DISA APL, REDCOM Sigma is based on open standards with a focus on security, reliability, and interoperability.



Deployment scenarios

REDCOM Sigma is scalable from small tactical teams up to strategic levels. It brings call and session control capabilities to existing switched networks from REDCOM and third party vendors. The software is well positioned to fulfill a variety of applications including:

- Local Session Controller
 - ◆ Tactical field operations
 - ◆ Base central office
- Hosted PBX
- Command & Control (C2)
- Unified Communications adjunct
- Secure conferencing engine



Security & encryption

IP networks bring a new set of challenges for secure voice communication. REDCOM Sigma 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)
- Private Certificate Authority
- Secure administration via HTTPS
- IPSec
- RADIUS authentication



Easy end device provisioning

REDCOM Sigma provides administrators with an intuitive user interface for setting up end instruments.

- Built-in provisioning templates for the most popular devices
- Users can create their own provisioning templates
- Provision multiple lines on a remote or ATA



Military-Grade software

REDCOM leveraged decades of experience to build the Sigma platform to meet the demanding requirements of today's warfighters. The software is designed for serious use and reliability—hallmarks of REDCOM's reputation. Military-grade elements include:

- Low SWaP
- Quick setup
- MLPP
- DISA security templates
- PBX-style SMDR and BellCore AMA
- Configurable report generation
- Integrated firewall
- End instrument provisioning
- SDP manipulation



Powerful conferencing

REDCOM Sigma supports fully customizable conferencing entirely in software without the need for peripherals or add-on boxes. Features include:

- Endpoint agnostic: works with any device, including desk phones, smartphones, and radios
- Robust access control by user ID, ANI, PIN code, or clearance level
- Security level knockdown: plays an optional announcement when an attendee with a lower clearance level enters the conference

The built-in Conference Manager app allows for real-time management of audio conferences via a web interface. The app gives the conference 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 with the click of a button add/remove/mute users.



Flexible media engine

REDCOM systems have long been used for special applications in government and military networks due to their highly flexible translation capabilities. With REDCOM Sigma, our engineers continued this tradition by creating our most powerful translator yet. The software'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 the software's functionality to meet their special needs.



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, Sigma Core can also operate in bare-metal installations without the need for a hypervisor.

REDCOM Sigma can run on a single processor core with as little as 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.



Intuitive web interface

REDCOM Sigma was developed from the ground up as a modern, web-based platform for call and session control. 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.



Reporting

REDCOM Sigma offers an integrated reporting engine:

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



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.



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