

# REDCOM SIGMA<sup>®</sup> 4.1 FEATURE LIST

Command & Control software from REDCOM

Features new to REDCOM Sigma 4.1 from version 4.0 are highlighted in yellow. Features marked with an asterisk (\*) may require a feature license. Please contact your REDCOM sales representative for more details.

## UNIFIED COMMUNICATIONS

- SIP (Trunking & Lineside)
- AS-SIP (Trunking & Lineside)
- Chat: XMPP with Presence
  - ◆ IRC Gateway
  - ◆ Archive messages
  - ◆ Federation with 3rd party servers
  - ◆ File transfer
  - ◆ Share rosters across federated networks
- Channels
- Conference
- FXO trunks (requires REDCOM FXO Adapter with XRI-400, SVG-1200, or XRI-M4K)
- Generic RTP radio lines (unicast)
- Unified contact management
- Voice Mail\*
  - ◆ Voice Mail to email
  - ◆ Sub-mailboxes
  - ◆ Message management
- Video (P2P)

## SYSTEM FEATURES

- Announcements
  - ◆ Pre-recorded
  - ◆ Customer recordable
  - ◆ Localization
  - ◆ Per user
- Asynchronous DNS Lookup
- Auto Attendant/Direct Inward System Access (DISA)
- Automatic Failover
- Bandwidth Budgeting
- Broadcast Ringing Group
- Call Detail Records Configuration (SMDR/CDR/LAMA)
- Call Queuing
- Comfort Noise Generation
- Direct Inward Dial (DID)

- Direct Outward Dial (DOD)
- E.164 compliance
- Echo Cancellation
- In-band PTT functionality
- IPv4/IPv6 Dual-Stack
- Language app
- Network Tandem operation
- Silence Suppression
- SIP/SDP message manipulation
- Toll Restriction
- TSM™ Talk Group support\*

## CALL FEATURES

- ANI Call Rejection
- Call Forwarding
- Call History
- Call Hold
- Call Jump (Seamless Cell Phone Transfer)
- Call Waiting
- Call Transfer
- Caller ID Blocking
- Calling Name Delivery (CNAM)
- Do Not Disturb (DND)
- Find Me (Single Number Services)
- Hunt Groups (Percentage Trunking)
- Incoming Caller ID
- Message Waiting Indicator
- MLPP support on non-AS-SIP Lines
- Music on Hold
- Pegged connections
- Selective Call Acceptance
- Selective Call Rejection
- Simultaneous Ringing
- Speed Dialing
- Time and date feature control
- Transcoding
  - ◆ RFC 2833 / DTMF
  - ◆ Codecs

- Transrating
- Trunk registration and authentication
- Integrated support for REDCOM Secure Client

## CUSTOMIZABLE CALL ROUTING

- Alternate routing
- Dialed number parsing
- Full URI analyzer for routing
- Incoming number parsing
- International Numbering Plans
- North American Numbering Plan compliance
- Private network numbering plans
- Routing by time and day
- Virtual Directory Number

## C2 CONSOLE\*

- Provides an operator with visibility of all connections & patches on a single screen
- Drag and drop connections together
- Listen & talk to patches & connections
- Monitor (output patches & connections to listen-only devices)
- In-app operator audio

## CONFERENCING

- Conference Bridges\*
- Conference Modes
  - ◆ Meet-me
  - ◆ Pre-set
  - ◆ Blast Dial
  - ◆ Time of Day
- Talker Priorities
- Conference Manager app\*
  - ◆ Monitor and manage multiple conferences across several sites
  - ◆ Detailed attendee visibility & control
  - ◆ Conference video switching



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- Security level announcements and reverse caller ID
- Robust access control by user ID, ANI, PIN code, or clearance level

## PROVISIONING

- Centralized phone software updates
- Custom phone provisioning
- Device firmware management
- Provisioning for TEO, Grandstream, Polycom, Cisco, Snom, and Yealink phones
- Remote device management
- Setup Secure Client with QR codes

## SIGMA XRI SUPPORT

- XRI radio support throughout the system and REST API
- Radio Port status app
- Radio net call control
- Radio net monitoring
- Donor radio detection on XRI ports
- Support for XRI-M4K module in a Klas Voyager system

## OPERATION & ADMINISTRATION

- Software updates via ISO image, API, or from another Sigma install
- CSV upload and download
- DHCP Server
- External LDAP database support for user management
- LUA scripts for Media Server customization
- Network Diagnostics App
- Real-Time System Status Application
- REST API
- Security Logging
- SNMP support for alarms and system monitoring
- Syslog

## REPORTING

- On-demand or scheduled
- Archived and/or distributed via email
- Reports can be exported to various file types, including PDF and Microsoft® Word

## CODEC SUPPORT

- AMR
- G.711a 10/20/30/40ms
- G.711μ 10/20/30/40ms
- G.722 (HD) 10/20/30/40ms
- G.722.1 (HD) 24/32kbps 20/40ms
- G.723.1 6.3kbps send@30ms  
5.3/6.3 receive@30ms
- G.726 16/24/32/40kbps at 10/20/30/40ms
- G.729ab 10/20/30/40ms
- iLBC 20/30ms
- MELP
- Opus
- Speex

## SECURITY & ENCRYPTION

- ANI Lockdown
- FIPS 140-2 Certification
- HTTPS
- IPsec
- PKI (Public Key Infrastructure)
- SRTP
- **OpenSSL 3.x**
- Suite B
- **TLS 1.3**
- Password protection
- Private Certificate Authority (CA)
  - ◆ Create local CA within Sigma
  - ◆ Issuance; renewal and rekey; revocation services
- Remote authentication of users (i.e. RADIUS & LDAP)
- Single sign-on with browser certificates
- Subscriber PIN Access
- Online Certificate Status Protocol (OCSP)

## SYSTEM

- Minimum system requirements
  - ◆ Intel® 64 Architecture
  - ◆ 2GB RAM
  - ◆ 40GB Disk Space
- Installation options
  - ◆ Bare Metal
  - ◆ Virtualized (i.e. VMware®, Hyper-V®, KVM, etc.)
- **Included OS: Free BSD 14.x**

## SUPPORTED SIP-RELATED RFCS

- RFC 2833 – RTP Payload for DTMF
- RFC 3261 – SIP
- RFC 2976 – SIP INFO method (i.e. for SIP-Q)
- RFC 3262 – PRACK method, 100rel
- RFC 3263 – Server location
- RFC 3264 – Offer-answer model for SDP
- RFC 3265 – SUBSCRIBE/NOTIFY method, Events
- RFC 3311 – UPDATE method
- RFC 3323 – Privacy mechanism for SIP
- RFC 3326 – Reason header field – call complete elsewhere
- RFC 3515 – SIP REFER method
- RFC 3608 – SIP Extension header field
- RFC 3891 – Replaces header field
- RFC 3892 – Referred-by header field
- RFC 3903 – PUBLISH method
- RFC 4028 – SIP session timers
- RFC 4092 – ANAT in SIP
- RFC 5630 – SIP-SIPS
- RFC 5806 – Diversion Header
- RFC 5954 – Essential correction for IPv6 ABNF and URI comparison rules
- RFC 6140 – Registration for multiple phone numbers

## SUPPORTED SDP-RELATED RFCS

- RFC 2327 – SDP
- RFC 3266 – Support for IPv6
- RFC 3605 – RTCP attribute in SDP
- RFC 4091 – Alternative Network Address Types (ANAT)
- RFC 4566 – SDP-new
- RFC 4568 – Security

## SUPPORTED EVENT-PACKAGE RFCS

- RFC 3842 – Message waiting indication
- RFC 3856 – SIP extension for presence
- RFC 4235 – INVITE-initiated dialog

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