

# List of Features

## System Application Services

All the sipXcom application services are allocated to specific [server roles](#). Using the centralized cluster management system each role can be instantiated on a dedicated server or several (all) roles can be run on a single server. Configuration of all services and participating servers is fully automatic and Web UI based.

- SIP Session Router, optionally geo-redundant and load sharing
- Media server for unified messaging and IVR (auto-attendant) services
- Conferencing server based on FreeSWITCH
- XMPP Instant Messaging (IM) and presence server (based on Openfire)
- Contact center (ACD) server
- Call park / Music on Hold (MoH) server
- Presence server (Broadsoft and IETF compliant resource list server for BLF)
- Shared Appearance Agent server to support shared lines (BLA)
- Group paging server
- SIP trunking server (media anchoring and B2BUA for SIP trunking & remote worker support)
- Call Detail Record (CDR) collection & processing server
- Third party call control (3PCC) server using REST interfaces
- Management and configuration server
- Process management server for centralized cluster management

## SOA Architecture / Business Process Integration using Web Services

- Web Services SOAP interface for key administrative functions
- Web Services REST interface for user portal functions and third party call control
- All components centrally managed using XML RPC
- Google Web Toolkit (GWT)

## Core Calling Features (Telephony Features)

- Transfer (consultative & blind)
- Call coverage
- Call hold / retrieve
- Consultation hold
- Music on Hold for IETF standards compliant phones
- User-specific MoH files
- MoH music from an external streaming source
- Admin or user configurable Busy Lamp Field (BLF) presence and softkeys
- New: Shared lines (BLA) for boss - secretary applications (Polycom only)
- Uploadable music file
- 3-way / 5-way video and voice conference on the phone
- Call pickup (global and directed call pickup)
- Call park & retrieve
- Hunt groups
- Intercom with auto-answer (bi-directional)
- SIP URI dialing
- CLID (Calling Line Identification)
- CNIP (Calling party Name Identification Presentation)
- CLIP (Call Line Identification Presentation)
- CLIR (Call Line Identification Restriction)
- Per gateway CLIP manipulation
- Call waiting / retrieve
- Do not Disturb (DnD)
- Forward on busy, no answer, do not disturb
- Multiple line appearances
- Multiple calls per line
- Multiple station appearance
- Outbound call blocking - Calls from phones to PSTN numbers, or classes of numbers, can be blocked based on:
  - The destination of the call; for example, when a user or device cannot initiate an international long distance call.
  - The source of the call; for example, when a lobby phone can only initiate calls to internal numbers.
- Click-to-call
- Redial
- Call history (dialed, received, missed)
- Auto off-hook / ring down
- Incoming only
- Configuration of individual Speed Dial softkeys
- Auto-generation of directory information

## E911 Emergency Response

- Internal notification using email and SMS

## Remote Branch office support

- Centralized deployment: Branch only provides phones and optionally PSTN gateway for failover, reduced WAN BW consumption or E911 calls
- Distributed deployment: Branch provides full call server with SIP site-to-site dialing between offices
- Branch office locations can be defined in the mgmt UI with a postal address
- Users, phones, gateways, SBC, and servers can be assigned to a branch location
- A PSTN gateway can be available for calls that originate in a specific branch only or for general use
- Source routing allows call routing based on location (branch local calls are routed through local gateway preferably)
- Branch postal address automatically proliferates to user's office address
- Survivable branch configuration possible with Audiocodes gateways SAS functionality (auto-configured)
- Certain sipXcom services can be deployed in the branch as part of the cluster (e.g. conferencing)

## Enterprise Instant Messaging (IM) and Presence

- XMPP based [IM and presence](#) server based on [Openfire](#)
- Supports XMPP standards based clients
- Auto-configuration of user's IM accounts
- Auto-configuration of IM user groups
- Personal group chat room for every user auto-configured
- Federation of phone presence with IM presence
- Customizable "on the phone" presence status message
- Dynamic call routing based on user's presence status
- Message archiving and search for compliance (pending)
- Server-to-server XMPP federation
- Optional secure client connections
- Client-to-client file transfer
- Group chat rooms
- XMPP search
- Integration of user profile information and avatar (pending)

## Personal Assistant IM Bot

- My Buddy [Personal Assistant](#) feature
- Dynamic call control using IM
- Dynamic conference management using IM
- Unified messaging management using IM
- Call history / missed calls
- Call initiation using corporate dialplan
- Corporate directory look-ups

## Presence and IM Federation

- Server side federation with other public XMPP IM systems
- Allows group chat sessions across systems
- Allows message archiving (if enabled) across systems
- User self-administration of credentials for other IM systems

## Fixed Mobile Convergence (FMC) Application

- 3rd Party FMC application with the following functionality:
  - Enterprise number dialing
  - System call-back saves on wireless toll charges
  - Corporate directory look-ups
  - Call history
  - Presence sharing
  - IM

## Web Conferencing & Collaboration

- Commercial options available through eZuce's [viewme](#) and [viewme](#) Cloud products

## User Self-Control (User Web Configuration Portal)

- Every user on the system gets access to a personal Web user portal for self-management and control
- Management of unified messaging (voicemail)
- Configuration of unified messaging preferences
- Time based find-me / follow-me
- Flexible configuration of call forwarding
- Management of personal profile data including avatar
- Personal call history

- Personal phone book, speed dial and presence management
- Click-to-call
- Individual phone management
- Personal auto-attendant
- Management of personal IM account
- Personal MoH music upload and preferences

## Superior Voice Quality

- Peer-to-peer media routing for best quality (media not routed through the sipXcom server)
- Unmatched voice quality with lowest delay and jitter
- Support for any codec supported by the phone or gateway (including video)
- Support for HD Voice (Polycom and other phones)
- Codec negotiation (no transcoding required)
- Conferencing, auto-attendant and voicemail support HD voice w/ transcoding if necessary

## User Management

- Create a user, provision a phone and assign a line in only three clicks - easy!
- Numeric or alpha-numeric User ID
- User PIN management (UI or TUI)
- Aliasing facility (numeric and alpha-numeric aliases)
- Extension and alias uniqueness assurance
- Management or auto-assignment of user's IM ID and display name
- Automatic IM buddy list creation based on user groups
- Granular per user permissions
- Call permissions:
  - 900 Dialing
  - International Dialing
  - Long Distance Dialing
  - Mobile Dialing
  - Local Dialing
  - Toll Free Dialing
- System permissions:
  - User has voicemail inbox
  - User listed in auto-attendant directory
  - User can record system prompts
  - User has superuser access
  - User allowed to change PIN from TUI
  - User can use Microsoft Exchange VM
  - User has a personal auto-attendant
- Custom permissions as defined by the admin
- Supervisor permission for groups (e.g. Call Center supervisor)
- Management of user contact record (user profile)
- Comprehensive profile data
- Work and home address
- In-building location information
- Assistant information
- Support for avatar including support for gravatar
- SIP password management for security
- User groups with group properties
- Per user call forwarding (follow me)
  - To local extension, PSTN number, or SIP address
  - Based on user or admin defined time schedules
  - Parallel or serial ring
  - Allows definition of ring time before trying next number
  - Allows several forwarding destinations
  - Follow-me configuration using user portal
- Extension pool with automatic assignment
- Per user Caller ID (CLID) assignment

## Dial Plan

- Easy to use GUI based dial plan manipulation
- Time-based dialing rules with different admin defined schedules
- Rules based least cost routing
- Dynamic call routing based on user's IM presence status
- Directly route to voicemail on IM status DND
- Dynamically add forwarding destination based on phone number in custom presence status
- Automatic gateway redundancy and fail-over
- Specific E911 routing
- Permission based rules
- Prefix manipulation
- Dialplan templating for international dial plans
- Built-in support for U.S., German, Swiss, and Polish local dial plans (Any other local dial plan can be added as a plugin)

- Specify internal extension length
- Specific rule for site-to-site call routing between SIP systems
- Redirector plugins - any imaginable dial rule can be added as a plugin

## Internet Calling

- Ability to configure SIP URI based call routing to other domains
- Specific SBC selection for call routing
- Configuration of native NAT traversal w/ optionally redundant media anchoring if necessary
- Media anchoring supports voice and video for any codec

## Directory, Softkeys, Speed Dial

- Automated generation of directory information per user or per user group
- Support for complete contact information and user profile, including avatar
- Creation and Management of many different directories (per user, per user group, per location, etc.)
- Upload of contacts from GMail and Outlook
- User management of directory information
- Automated provisioning of directory information into user's phones
- Allows adding contacts to the directory from a .csv file (Excel)
- User configurable speed dial (internal / external numbers, SIP URIs)
- Speed dial generated server side and backed up
- Auto-provisioning of speed dial to phones
- User configuration of Busy Lamp Field (BLF) to monitor presence of other users or phones (e.g. attendant console)

## PSTN Trunking

- Unlimited number of PSTN gateways and trunk lines
- Supports most SIP compliant gateways (e.g. Audiocodes, Mediatix, Sangoma, Patton, etc.)
- Gateways can be in any location
- Gateway selection per dialing rule
- Source routing of calls so that calls can be routed through a local gateway to save WAN bandwidth
- DID
- Local DID per gateway
- DNIS
- CLIP Management
  - User CLIP
  - Gateway default CLIP
  - Prefix stripping / appending
- Per gateway CLIR
- Automatic Route Selection (ARS)
  - Implemented with XML-formatted mapping rules.
  - Mapping values re-write SIP URLs to specify the next hop or destination for a SIP message that has been received by the Communications Server component.
  - Direct messages to different SIP/PSTN trunk gateways, either on premise or at a remote premise location, based on any portion of SIP URL or E.164 number.
  - Route messages to commercial SIP/PSTN service providers, which reduces or eliminates the need for on-premise trunk gateways.
- Least-cost routing (LCR)
- Automatic failover if unavailable
- Automatic failover if busy
- Inbound FAX support
- Mixing of PSTN and SIP trunks with least cost routing

## SIP Trunking

- Basic SIP trunking gateway w/ NAT traversal
- Remote worker support w/ near-end and far-end NAT traversal and auto-detection
- ITSP templates for simplified configuration
- Interop (not certified) with the following ITSPs:
  - BT (UK)
  - AT&T
  - Bandwidth.com
  - CBeyond
  - Bandtel
  - CallWithUs
  - Eutelia (Italy)
  - LES.NET
  - SIPcall (Switzerland)
  - Vitality
  - VOIPUser (UK)
  - VOIP.MS
  - Appia
- Easy configuration templates exist for the above ITSPs

- Many other ITSPs are compatible, see ITSP interop in Wiki
- SIP interop with Nortel CS1000 R6
- SIP call origination & termination
- Branch office routing
- Proxy to proxy interconnect using ACLs
- Least-cost-routing (LCR)
- Mixing of PSTN trunks with SIP trunks
- TLS support for secure signaling
- Route header for flexible call routing through an SBC
- Flexible rules for SBC selection (route selection)
- Support for Skype for Business SIP trunking

## Integration with Microsoft Active Directory and Exchange

- Synchronization with Microsoft Active Directory
  - Using LDAP interface
  - On demand or automatically based on a schedule
  - Graphical query design combines ease of use with flexibility
  - Allows preview of records to be imported
- Dialplan integration with Microsoft Exchange voicemail server
  - Allows mixed environment with groups of users on Exchange or the sipXcom VM server
  - Permission based selection of VM server per user or user group
  - Automatic dialplan routing to Exchange VM
- Enables all speech based Exchange capabilities

## Supported Softclients

- Combined SIP / XMPP clients:
  - Counterpath Bria professional
  - Jitsi
- Provisioning server for automated mass deployment
- Automated SIP and XMPP account setup
- Call recording
- Supports BLF (workgroups)
- Scheduled to support BLA
- Automatic user profile and directory management
- XMPP clients:
  - Pidgin
  - Google Talk
  - Trillium
  - Spark
- SIP clients:
  - 3CX softphone

## Analog Lines (FXS)

- Supports any SIP compliant FXS gateway
- FAX support
- Analog cordless phone support
- Supports analog Polycom speakerphones
- Plug & play management of FXS gateways from Audiocodes and Grandstream

## Performance

- Unlimited number of simultaneous calls (voice, HD voice, video) - only depends on LAN/WAN bandwidth
- 54,000 BHCC, 120,000 BHCC two-way redundant (depends on server HW)
- Up to three-way redundant configuration using cluster mgmt Web GUI
- Up to 10,000 users per dual-server HA system
- Tested up to 10,000 IM users
- 450 simultaneous calls through the SIP trunking gateway require < 20% CPU on dual core system
- Up to 500 simultaneous conferencing ports per server
- Up to 300 media server ports for unified messaging (supports 15,000 users)
- Automatic time distribution of re-registration and subscription events

## High Availability

- Optionally fully redundant call control system
- Geo-redundant SIP session manager
- Based in DNS SRV (no cluster required)
- Load balance under normal operating conditions

- Geographic dispersion of redundant systems
- Real-time synchronization of state information
- Automatic recovery after server failure
- Reports on load distribution

## Call Detail Records collection and reporting

- Call State Events (CSE) collected for all signaling activity
- Processing of CSEs into CDRs
- All data stored in a database at all times
- Flexible report generation using Jasper Reports, built-in
- Supports redundant call control
- Determines and records call type information
- Internal / external calls
- Calls to specific sipXcom services
- Collates call legs
- Historic Call Detail Record reporting in real-time
- Additional reports using call type info
- Monitoring of currently active (on-going) calls
- Export of active and historic CDRs to Excel (.csv file)
- Direct database access for reporting application (e.g. Crystal Reports, Jasper Reports)
- SOAP Web Services access to CDR data
- Individual call history per user in the user portal

## Security

- All outbound calls authenticated
- Secure user password management
- DoS attack prevention
- HTTPS secure Web access
- TLS based signaling for SIP trunks
- HTTPS secures non-SIP communication between sipX components.
- HTTPS secures communications between sipX components and admin and user consoles.
- Secure channel for retrieving messages from voicemail repository.
- HTTP digest authentication for SIP signaling, as specified in RFC 2617, is used for authentication challenges between SIP endpoints and sipX components.
- HTTP digest implementation supports MD5.

## System Administration Features

- Browser based configuration and management
- Several admin accounts
- Notification when new version or patches are available
- GUI based software upgrade
- GUI based certificate management
- LDAP integration
- Integration with Microsoft Exchange 2007 for voicemail and Active Directory
- SOAP Web Services interface
- CSV import and export of user and device data
- Administration of Instant Messaging (IM) and Presence settings
- Integrated backup & restore
- Scheduled backups
- Diagnostics
  - Display active registrations
  - Display job status
  - Status of services
  - Snapshot logs for debugging
  - Logging (customizable log levels, message log per service)
  - Display active calls
- Domain Aliasing
- Support for DNS SRV
- Support for DNS NAPTR based call routing
- Automatic restart after power failure
  - Single sipXcom application can start all other application processes associated with starting up sipXcom, including dependent processes that must be started in particular order.
  - Configured from browser interface
- Login history report (successful and unsuccessful)
- Automated testing of network services (DHCP, DNS, NTP, TFTP, FTP, HTTP) for proper configuration

## Plug & Play Device Management

- Auto-discovery of phones & gateways on the LAN
- Auto-registration of Polycom phones simplifies installation
- Plug & play management of phones

- Plug & play management of PSTN gateways
- Auto-generation of phone / gateway config profile
- Auto-pickup of profile by phone / gateway
- Centralized management of all the parameters
- Centralized backup and restore of all the configs
- Auto-generation of lines by assigning users to devices
- Device group management & properties
- Firmware upgrade management

## Unified Messaging (Voicemail)

- Integrated unified messaging system
- Localized per user by installing language packs
- Number of voicemail boxes only limited by disk size (tested up to 10,000)
- Performance tested up to 300 simultaneous calls (ports) on dual core server
- IMAP back-end connection
- Acts as an IMAP client into MSFT Exchange and other compatible email systems
- User manageable credentials for IMAP federation
- Properly controls MWI on the phone when message is "read" using the email client
- Browser based user portal for unified messaging management
- RSS feed for new messages
- Message Waiting Indication (MWI)
- User configurable distribution lists
- Group and system distribution lists
- Unified Messaging:
  - Email notification of new voicemail messages
  - Forwarding of message as .wav file
  - Supports several parallel notifications
  - IMAP client into Exchange
  - Per user selectable templates for email format used when forwarding voicemail
  - Manage folders: Folders for message organization
  - Manage greetings: Multiple customizable greetings
  - Operator escape from anywhere
  - Remote voicemail access using a phone
  - SOA Web Services (REST) access to messages and greetings
  - Unlimited number of inboxes
  - Auto-removal of deleted messages

## Personal Auto Attendant

- User configurable personal auto-attendant for every user on the system
- Up to 10 individual forwarding choices (keys 0 through 9)
- User can record greeting that corresponds with key configuration
- Individual zero-out to a personal assistant or receptionist
- Individual selection of language based on installed language packs
- Personal greeting

## Auto Attendant Features

- Unlimited number of auto-attendants
- Dial by extension and name
- Night and holiday service
- Special auto-attendant
- Transfer on invalid response
- Nested auto-attendants (multi-level)
- Fully customizable actions:
  - Operator
  - Dial by Name
  - Repeat Prompt
  - Voicemail login
  - Disconnect
  - Auto-Attendant
  - Goto Extension
  - Deposit Voicemail
- Uploadable custom prompts
- Configurable DTMF handling

## Presence Server Features

- Compatible with Broadsoft or IETF implementations
- Centralized management of resource lists for dialog events
- Busy Lamp Field (BLF) feature based on presence
- Used to support shared lines (BLA)
- Presence federated with IM presence to show "on the phone" status

- Support for 3rd party Attendant Consoles (such as Voice Operator Panel)

## Hunt Groups

- Unlimited number of hunt groups
- Serial and parallel forking (rings sequentially or at the same time)
- Configurable ring time per attempt
- Enable / disable user call forwarding rules while hunting
- Flexible configuration of destination if no answer

## Call Park Server

- Unlimited number of park orbits
- Visual indication on the phone of the state of the park orbit using the presence server (BLF)
- Music on park
- Uploadable music file
- Configurable call retrieve code
- Configurable call retrieve timeout
- Automatic park timeout with configurable time
- Configurable park escape key
- Allow multiple calls on one orbit

## Group Paging Server

- Integrated group paging server
- Unlimited number of paging groups
- Supports regular SIP phones using auto-answer
- Supports dedicated in-ceiling devices (SIP)
- Configurable paging prefix

## Conferencing Server

- Voice conferencing server that can run on the same sipXcom server or on dedicated hardware
- Support for voice conferencing
- Each user on the sipXcom system can have a personal conference bridge
- [Recording of conference calls](#)
- Dynamic conference controls from the user's Web portal (user portal)
- Dynamic conference control using IM
- Participant entry / exit messages
- Roll call
- Mute, isolate, disconnect, invite
- Association of personal conference bridge with personal group chat room
- Automatic migration of group chat to a voice conference using the @conf directive
- Support for HD Audio and transcoding if necessary
- Support for up to 500 ports of conferencing, dependent on hardware
- Configurable DTMF keys for conference controls using the TUI
- A sipXcom IP PBX system can have more than one conference server if more capacity is needed
- All conferencing servers and services centrally managed and configured
- Conferencing based on [FreeSWITCH](#)

## Call Queueing (ACD)

- ACD server collocated or on a different server hardware
- Several (unlimited) queues per server
- Several lines per queue
- Support trunk lines (many calls per line) or single call per line
- Dedicated overflow queues or overflow to hunt group or voicemail
- Configurable call routing scheme per queue:
  - Ring all
  - Circular
  - Linear
  - Longest idle
- Agent presence monitor using presence server
- Separate welcome and queue audio
- Call termination tone or audio
- Configurable answer mode
- Agent wrap-up time
- Auto sign-out of agents if calls are not answered
- Configurable maximum ring delay
- Configurable maximum queue length
- Configurable maximum wait time until overflow condition
- Unlimited number of agents per queue

## sipXcom Managed Devices

Almost any SIP compatible phone works with sipXcom if configured manually (i.e. by logging into the phone's Web interface to configure it one phone at a time). The following devices are plug & play managed automatically and centrally by sipXcom:

- Polycom SoundPoint all models (IP 301, 320, 330, 430, 450, 501, 550, 560, 601, 650, 670)
- Polycom SoundStation IP 4000, 6000, 7000 SIP
- Polycom VVX phones (300/310, 400/410, 500, 600, 1500)
- Audiocodes gateways MP112, MP114, MP118, MP124 FXS
- Audiocodes gateways FXO and PRI/BRI
- Counterpath Bria Professional

## sipXcom Managed Devices (Community supported)

Community supported means that the phone plugin for plug & play management is provided as is. These phone plugins are provided and maintained by community members. Some system functionality might not be implemented or supported.

- Aastra 53i, 55i, 57i
- Snom 300, 320, 360, 370 up to firmware 7.x
- Grandstream BudgeTone, HandyTone
- Grandstream GXP2000, GXP1200, GXP2010, GXP2020
- Grandstream GXV3000 Video Phone
- Hitachi IP3000 and IP5000 WiFi phones
- Cisco ATA 186/188
- Cisco 7960, 7940, 7912, 7905
- Cisco 7911, 7941, 7945, 7961, 7965, 7970, 7975
- ClearOne MaxIP Conference Phone
- LG-Nortel LG 6804, 6812, 6830
- Nortel video phone 1535
- Linksys ATA 2102, ATA 3102
- Linksys SPA8000
- Linksys SPA901, SPA921, SPA922, SPA941, SPA942, SPA962
- Nortel 1120 / 1140 SIP
- G-Tec AQ10x, HL20x, VT20x

## Required Hardware

- Intel / AMD x86 compatible server
- Min RAM 4 GB or more
- Linux operating system (RHEL, CentOS)
- 64 bit versions available
- No special HW required, sipXcom uses external gateways

## Installation and Upgrades

- Automated installation from CD ISO for OS and sipXcom IP PBX application
- Graphical configuration wizard for system configuration after installation
- Self-signed Certificate generation (allows installing a signed certificate if desired)
- GUI based upgrade management from the admin Web interface
- Standard Linux package management (e.g. up2date and yum)
- Optional auto-configuration of DNS, DHCP, NTP, FTP, TFTP, HTTP servers
- Designed so that no Linux admin skills are required for installation and configuration

## Centrally Managed sipXcom Distributed System (cluster)

- Automated installation and configuration of a distributed system with specific server roles
- Automated and central configuration of a high-availability redundant sipXcom system
- Allows for dedicated server hardware for conferencing, voicemail, ACD Call Center, and Call Control
- All configuration for remote servers is centrally generated and distributed securely

## SIP Implementation

This is probably quite an incomplete list. In any case, sipXcom IP PBX is fully SIP standards compliant.

- RFC 3261 Session Initiation Protocol using both UDP and TCP transports
- Advanced call control using RFCs
  - RFC 3515 Refer Method
  - RFC 3891 Referred-By header
  - RFC 3892 Replaces header
- Provide for consultative and blind transfer and third party call controls
  - Blind transfer (Unannounced) to a different phone without speaking to the other phone prior to transfer.
  - Consultative transfer (announced) to a different phone without speaking to the other phone prior to transfer.

- Consultative transfer (announced) to a different phone after speaking to the other phone prior to completing the transfer. (Consultative transfers require a SIP phone that supports this feature)
- RFC 3263 Locating SIP Servers - use of DNS SRV records for call routing control and server redundancy.
- RFC 3581 Symmetric Response Routing (rport)
- RFC 3265 SIP Event Notification - for phone configuration and
- RFC 3842 Voice mail message waiting indication (MWI)
- RFC 3262 Reliable Provisional Responses
- RFC 2833 Out-of-band DTMF tones
- RFC 3264 Offer/Answer model for SDP for Codec Negotiation
- RFC 2617 HTTP Authentication: Basic and Digest Access Authentication
- RFC 3327 Path header
- RFC 3325 P-Asserted identity
- RFC 4235 An INVITE-Initiated Dialog Event Package for the Session Initiation Protocol (SIP)
- RFC 4662 A Session Initiation Protocol (SIP) Event Notification Extension for Resource Lists
- RFC 2327 SDP: Session Description Protocol
- RFC 3326 The Reason Header Field for the Session Initiation Protocol (SIP)
- Early media (SDP in 180/183)
- Delayed SDP (SDP in ACK)
- Re-INVITE: Codec change, hold, off-hold
- Route/Record-Route header fields
- Configurable RTP/RTCP ports
- Configurable SIP ports
- BLA support
- RFC 3680: A Session Initiation Protocol (SIP) Event Package for Registrations
- RFC 3265: Session Initiation Protocol (SIP)-Specific Event Notification
- draft-ietf-sipping-dialog-package-06
- draft-anil-sipping-bla-02

## XMPP Compliance

- RFC 3920: XMPP Core
- RFC 3921: XMPP IM
- XEP-0030: Service Discovery
- XEP-0077: In-Band Registration
- XEP-0078: Non-SASL Authentication
- XEP-0086: Error Condition Mappings
- XEP-0073: Basic IM Protocol Suite
- XEP-0004: Data Forms
- XEP-0045: Multi-User Chat
- XEP-0047: In-Band Bytestreams
- XEP-0065: SOCKS5 Bytestreams
- XEP-0071: XHTML-IM
- XEP-0096: File Transfer
- XEP-0115: Entity Capabilities
- XEP-0004: Data Forms
- XEP-0012: Last Activity
- XEP-0013: Flexible Offline Message Retrieval
- XEP-0030: Service Discovery
- XEP-0033: Extended Stanza Addressing
- XEP-0045: Multi-User Chat
- XEP-0049: Private XML Storage
- XEP-0050: Ad-Hoc Commands
- XEP-0054: vcard-temp
- XEP-0055: Jabber Search
- XEP-0059: Result Set Management
- XEP-0060: Publish-Subscribe
- XEP-0065: SOCKS5 Bytestreams
- XEP-0077: In-Band Registration
- XEP-0078: Non-SASL Authentication
- XEP-0082: Jabber Date and Time Profiles
- XEP-0086: Error Condition Mappings
- XEP-0090: Entity Time
- XEP-0091: Delayed Delivery
- XEP-0092: Software Version
- XEP-0096: File Transfer
- XEP-0106: JID Escaping
- XEP-0114: Jabber Component Protocol
- XEP-0115: Entity Capabilities
- XEP-0124: HTTP Binding
- XEP-0128: Service Discovery Extensions
- XEP-0138: Stream Compression
- XEP-0163: Personal Eventing via Pubsub
- XEP-0175: Best Practices for Use of SASL ANONYMOUS