

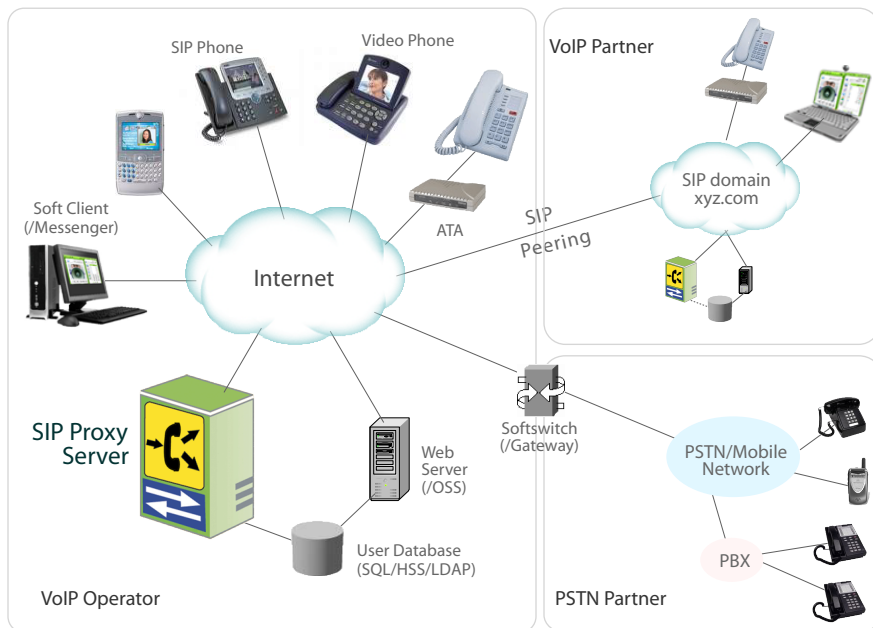


# SIP Proxy Server

Feature-rich SIP server for rapid service development and carrier-grade deployments.

## Overview

Eyeball SIP Proxy is a standards compliant SIP server providing a comprehensive feature-set for rapid development and deployment of VoIP and video telephony applications and services.



*Eyeball SIP Proxy Server provides a reliable and scalable VoIP solution to operators and service providers*

## Standards-Compliant SIP Proxy

Eyeball SIP Proxy is fully compliant to RFC 3261 and many other related RFCs and Internet drafts. It has been tested with many 3rd party clients and servers including soft-clients, proxy servers, IP phones, PSTN gateways, soft-switches and unified messaging systems.

## High Performance Clustering for Scalability and Fault Tolerance

The SIP Proxy Server is built with a modular and scalable design for carrier-class deployments. Eyeball SIP Proxy supports 2 server tiers - edge servers and state servers - for maximum scalability and fault tolerance. End-points connect to edge-servers, edge-servers connect to state-servers and state-servers connect to the persistent storage, such as MySQL database. The system dynamically works around any single-point of failure. Load-balancing among edge-servers is achieved using round-robin DNS SRV.

## NAT, Proxy & Firewall Traversal

Eyeball SIP Proxy Server supports connections from behind NATs, proxies and firewalls. The server supports rport parameter from end-points for NAT traversal, and STUN keep-alive messages to keep UDP connections between end-points and the server active.

## Features

### Advanced SIP Server

- ▶ SIP registrar, proxy server and location server
- ▶ Full compliance with SIP 2.0 (RFC 3261 and related RFCs)
- ▶ HTTP digest authentication (WWW and Proxy authentication)
- ▶ UDP, TCP or TLS transport for SIP signaling
- ▶ Interoperability with 3rd party end-points, IP phones, PSTN gateways, soft-switches and unified messaging systems.
- ▶ Dynamic call routing using DNS SRV lookup
- ▶ Rule based message forwarding to & from foreign domains
- ▶ Loop detection
- ▶ Record route

### Web-based Tools

- ▶ User sign-up
- ▶ Password recovery
- ▶ Search other users
- ▶ User account management
- ▶ Service management
- ▶ Usage statistics
- ▶ Billing information
- ▶ Service monitoring

# SIP Proxy Server

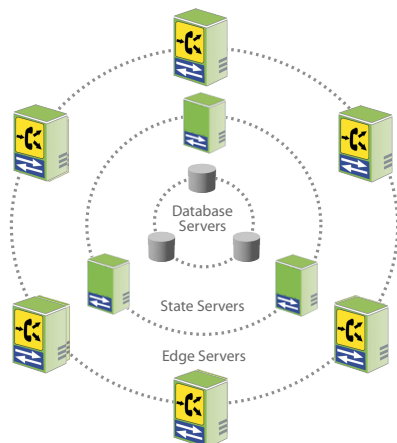
## Simple Administration and Monitoring

Web-based tools are available for server administration such as monitoring service load, usage statistics, and management of account settings and privileges. Additional features include:

- ▶ Access & error logging with multiple verbosity levels
- ▶ Text based server configuration file
- ▶ Command line interface for administration
- ▶ MySQL database back-end

## One-Stop VoIP Solution for Rapid Service Deployment

Eyeball provides a one-stop solution that combines client and server software for rapid development and deployment of VoIP services. This includes soft-client or soft-phone (Messenger or custom applications), IM server, SIP Proxy Server and AnyFirewall Server (for STUN and TURN) complete with web-tools for customer portal and service administration. Eyeball solutions have been field-proven since 2003 with over 19 million subscribers and 10 billion VoIP call minutes.



*Server clustering for scalability and fault tolerance.*

SIP Proxy Server		Web Tools	
SIP Registrar	Proxy Service	Provisioning	Billing
Location Service	Authentication	Profile Management	Stats and Reports
DNS SRV	STUN	FAQ	Monitoring
TLS	Clustering	Technical Support	Alarms
Admin CLI	Database		

*SIP Proxy Server features and architecture.*

## Specifications

### System Requirements

- ▶ Red Hat Enterprise Linux 4, Fedora Core 4 or higher
- ▶ 500 MHz Pentium III or higher
- ▶ 128 MB RAM
- ▶ 120 MB disk space
- ▶ MySQL 5.0.x
- ▶ Apache 2.0.x
- ▶ PHP 4.x
- ▶ 128 Kbps TCP/IP network connection or higher

### Standards & Protocols

The Eyeball SIP Proxy Server is standards compliant by design. A subset of supported standards and protocols follow:

- ▶ RFC 3261 (SIP: Session Initiation Protocol)
- ▶ RFC 2617 (HTTP Authentication: Basic and Digest Access Authentication)
- ▶ RFC 2246 (The TLS Protocol Version 1.0)
- ▶ RFC 2782 (DNS SRV)
- ▶ RFC 3263 (Locating SIP Servers)
- ▶ RFC 3265 (SIP-Specific Event Notification, SUBSCRIBE/NOTIFY)
- ▶ RFC 3428 (MESSAGE method)
- ▶ RFC 3515 (REFER method)
- ▶ RFC 3581 ("rport" for symmetric response routing)
- ▶ RFC 3489: STUN - Simple Traversal of User Datagram Protocol (UDP) Through Network Address Translators (NATs)

## About Eyeball Networks

Eyeball Networks is a pioneer and world leader in VoIP, video telephony, instant messaging and NAT-traversal software enabling service providers, application developers, and device makers to deliver carrier-grade communications solutions in a cost-effective and timely manner. Today, over 19 million users and over 100 service providers and device makers benefit from Eyeball's innovations, including its patented AnyBandwidth™, AnyFirewall™, and AntiSPIT™ technologies guaranteeing the best possible VoIP and video experience – over any Internet connection, across any NAT or firewall, and on any device. For more information, please visit [www.eyeball.com](http://www.eyeball.com) or email [sales@eyeball.com](mailto:sales@eyeball.com).

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