The Acano Solution

Acano unites previously incompatible audio, video and web technologies in coSpaces — virtual meeting rooms, only radically better. With coSpaces, people work wherever their ideas and creativity thrive.
What it can do

INTRODUCING COSPACES
coSpaces are the heart of the Acano Solution. A coSpace is a virtual meeting room that anyone can easily join no matter what technology they are using. coSpaces are always available; no reservations are required. coSpaces are unlimited so a coSpace can be created for every project and team. And just like in a war room or huddle room, a team can see notes and an agenda at any time.

DEVICES WELCOME
Everyone is able to use their preferred device: smartphone, tablet, laptop, video endpoint or Lync client. Each person can have as many devices as they like and move seamlessly between them. Multiple devices can be used at the same time.

ONE USER EXPERIENCE
Phone calls, video calls and content sharing are the same on any device.

EVERYONE’S INVITED
coSaces are about people exchanging ideas, whether they are from the same organization or many different ones. Anyone can be invited just by sending them a link, opening up opportunities for B-to-B and B-to-C services.

MASSIVE DEPLOYMENTS
Voice, video, and web for all -- by the person, not the port. Acano software is optimized for an X86-based Intel platform and reliably supports thousands of users per server. (Coming in 1Q2014) The Acano Server will offer:

- Further scaling and resilience provided by native clustering.
- Automatic failover with no single point of failure.
- Call distribution and bandwidth management across servers in different geographical locations.

SECURE
Designed from the beginning with government compliance standards in mind, for example FIPS, JITC and Common Criteria. Acano uses “clean slate” technology and a secure development lifecycle.

INTEGRATED
Support for all major video standards. Seamless and automatic mixing of transcoding and switched/layered video provides an optimal experience for each user while efficiently utilizing available resources.

Support for tens of thousands of audio ports, integrated IVR and a broad range of codecs.

Support for sharing desktops, content and data including sharing from Lync clients.
How it’s deployed

Acana is a software-based solution that can be deployed on the optimized Acana Server and on standard servers in a virtualized environment. People access audio, video and web at any time through clients on their PCs, Macs, tablets and mobile phones.

**Acano software**
Acana software has two components: Acano Core and Acano Edge:

**Acano Core**
- Handles management, conferencing and media.
- Provides interoperability with external systems including Avaya, Cisco and Microsoft.

**Acano Edge**
- Handles web services and the WebRTC client.
- Manages XMPP.
- Provides ICE, TURN and STUN for secure NAT traversal.

**Clients**
Acana clients are available for:
- Windows
- iPad and iPhone
- Mac (coming in 2013)

WebRTC clients are available for:
- Chrome
- Firefox (coming in 2013)
- Android devices (coming in 2014)

Flash clients are available for:
- IE
- Firefox
Platform agnostic

Acano software can be implemented on the platform that best meets the strategic IT needs of the organization.

**ACANO SERVER**
The Acano Server is the best choice for scale and performance.

**Energy efficient.** The Server is built on an Intel X86 platform and at just 2U high packs a lot of power even as it conserves it. The Acano Server is energy efficient, offering five times (5X) the performance-per-Watt of other solutions.

**Audio, video and web for all employees.** A single deployment can provide audio, video and web for 2500 employees. This “per person, not per port” approach focuses on meeting each employee’s needs, not on making complex port calculations.

**Unprecedented capacity.** “Per person, not per port” is still a new way of thinking about an organization’s collaboration needs. In terms of capacity, a single Acano Server deployment supports more than:

- 250 HD calls
- 500 480p calls
- 600 Lync video calls
- 1,500 web calls (audio and content)
- 12,000 audio calls

**ACANO VIRTUALIZED**
Acano Core and Edge software can also run in a virtualized environment on standard servers. The Acano virtualized solution provides flexibility and rapid deployment. (coming in 2013)

**ACANO IN THE CLOUD**
Acano software can also be deployed on a cloud compute service such as Amazon Elastic Cloud (EC2) for resizable capacity. (coming in 2013)

**CONNECTING CISCO AND MICROSOFT**
- Existing investments in Microsoft Lync, Cisco Telepresence, Cisco Call Manager and Cisco VCS are maintained.
- Native functionalities work together, including voice, video and chat.
- Technology is transparent to users.
Specifications

VIDEO STANDARDS
• H.263(+, ++)
• H.264 AVC (Baseline and High Profile)
• H.264 SVC
• H.265
• WebM
• Microsoft RTV
• Bandwidth up to 6000bps
• Frame rates and resolution up to 1080p 60fps
• HTML5/WebRTC/Flash

AUDIO STANDARDS
• AAC-LD
• Speex
• Opus
• G.722, G.722.1, G.722.1c, G.728, G.729a, G.711a/u

COSPACES
• Persistent meeting rooms
• Create coSpaces, invite members
• Supporting video, voice and web
• Persistent chat
• Presence for coSpaces
• List active participants
• IM to coSpace message boards

CALLS
• Point-to-point and multipoint calls
• Scheduled, coSpace and ad hoc calls
• Scheduling with email invitation (WebRTC)
• Call escalation
• Participant lists
• Call summary
• Call quality information
• Audio, video and content sharing up to 1080p resolution
• Dynamic layouts
• Contacts, directory entries and favorites

SHARING
Share desktops, content and data including sharing from Lync clients, with support for RDP, BFCP
Specifications

MANAGEMENT
- Server management
- LDAP driven scripting language for configuration
- REST API for assets, monitoring, diagnostics
- CDR streaming for auditing
- Syslog for diagnostics
- Multi-tenancy support
- SNMP
- Backup/restore

INTEGRATION
- Management API
- Active Directory / LDAP integration for phone directory and user management
- LDAP
- Microsoft Exchange and Outlook integration
- NAT / Firewall traversal
- SIP trunking
- Interoperability with Lync Edge servers

THIRD PARTY INTEGRATION
- Lync 2010 and 2013 Server and Lync clients on PC & Mac
  - Firewall traversal using Lync Edge
  - Content for Lync clients:
    - To - in main video
    - From - native Lync with RDP
- Cisco Call Manager
- Avaya SIP PBX (coming soon)
- Cisco VCS
- Standards-compliant SIP endpoints including those from Cisco, Polycom & LifeSize
- Acme Packet Net-Net Session Border Controller

DEVICES SUPPORTED WITH ACANO CLIENTS
- Windows XP, v7, v8
- iOS 6 – iPad2 and newer, iPhone 4 and newer
- Devices with WebRTC-compatible or Flash-compatible
- Browsers including Chrome, IE and Firefox

SECURITY
- IP media (video and audio) is AES encrypted (industry standard SRTP)
- All control data is authenticated/encrypted (industry standard TLS/SSL)
- Domain Name System Security Extensions (DNSSEC)
- IPv6 support
- Designed with FIPS, JITC and Common Criteria in mind
- A security code/pin option for coSpaces
- On-screen visual indication of audio-only participants and encryption status
- Windows Acano Secure Development
- Lifecycle: secure by design, implementation and support in the field
- Field industry-standard strong cryptography protection of communications
- Encrypted storage with secure erase for total data ownership

QUESTIONS?
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