Avaya IX Workplace

One Solution for All of Your Conferencing Requirements

Your organization may have different solutions for all the types of conferencing that you're using because of the specific requirements for those applications.

Boost your productivity and enhance your relationships with face to face HD video, audio, and web collaboration. Bring the experience of a face-to-face meeting to your employees, customers and partners from virtually any location or device. Simplify and converge your audio, video, web collaboration, and webcasting to one platform and app. Save money, admin time, and user training by meeting with just one app.

Avaya IX Meetings / Avaya Equinox® Conferencing

Your organization may have different solutions for all the types of conferencing that you're using because of the specific requirements for those applications. You might have an audio conferencing service for large meetings, a web conferencing application used for webinars with screen and application sharing, you may have a separate infrastructure for video conferencing room systems, and yet another system or service for streaming large scale events. These may be called unified communications, but they're not particularly unified in any way – and all these separate solutions don't necessarily work well together.

Avaya IX Meetings delivers an integrated conferencing solution, an all-in-one platform supporting all the different modes of conferencing. Audio, rich and robust web collaboration, immersive HD video that's multi-vendor room system interoperable, and event streaming to thousands of users in an all-in-one solution.

Easily join with Windows, macOS, iOS, and Android devices

Share documents and applications as if everyone was in one place.

Meet with Any Device

Meet and stay productive with audio, video, and web collaboration from nearly anywhere on your Windows, macOS, ioS, or Android device; dial-in with your phone for audio conferencing as well.

Frictionless Participation

Join directly from your browser without installing an app or plug-in, via WebRTC technology. End-to-end encryption helps make meetings more secure.

Room and Huddle System Connectivity

Use your H.323 or SIP video room system from Avaya, Cisco, Lifesize, Polycom, or any standards-based vendor in full HD for group participation.

Seamless Avaya UC Integration

Enjoy a seamless, integrated experience with Avaya Aura® and Avaya IP Office™ on premise or cloud deployments.

Easy Content Collaboration

Share documents and applications as if everyone was in one place. Get your point across with annotation tools, brainstorm with the interactive whiteboard, and get more done with true application sharing. Latecomers can also bring themselves up-to-speed instantly without disrupting the meeting.

Record your meeting with easy playback, download the MP4 file for a permanent record.

Built-in Webcasting

Host a large meeting with up to 500 fully interactive participants, extend it to thousands of viewers with integrated webcasting.

Recording

Record your meeting with easy playback, download the MP4 file for a permanent record.

Main Conferencing Specifications

Meeting Room

- Connect with Windows, macOS, iOS, and Android devices
- HD video, wideband audio, data collaboration / content sharing
- Join by clicking a link in a calendar invite, clicking a web link, or entering a meeting room number
- Microsoft Outlook calendar integration

Video

- HD up to 1080p
- High network error tolerance with Scalable Video Coding (SVC)
- H.264 High Profile for bandwidth efficiency

Audio

- Wideband audio
- Operator support with *0
- Multiple language audio prompts

Data Collaboration

- Share application, screen, or part of screen
- Remote participant desktop control
- Annotation and text highlighting
- Interactive whiteboard
- “Slider” content review where participants can review previously presented content
- Screen Link wireless presentation with Avaya video room systems

Recording

- MP4 file

Text Chat

- Group / private chat
- Viewable by video room systems

Meeting Moderation

- Mute participants
- Stop cameras

Media Servers can be in a central data center or distributed in multiple locations to optimize network traffic and distribute the resource load.

- Disconnect participants
- Lock meeting
- Terminate meeting
- Request to speak

Lecture Mode

- Participants see presenter and "raise hand" to speak
- Presenter views all participants simultaneously

Video Room System Interoperability

- H.323 / SIP
- H.239 / BFCP content sharing
- On-screen display and meeting control

Security

- AES-128 / 256 encryption
- H.235, SRTP, SIPS security and encryption (room systems)
- Meeting room lock and access PINs
- TLS 1.2

Client Device Requirements

- Operating System: Windows, macOS, iOS, and Android
- Browsers: Firefox and Google Chrome for connectivity on Windows and macOS

Scalability

Avaya IX Meetings can scale down to single server or scale up to a very large distributed deployment. It is a powerful and flexible software only solution with virtualized core elements. Media Servers can be in a central data center or distributed in multiple locations to optimize network traffic and distribute the resource load where they are automatically cascaded to support meetings with a larger capacity than a single Media Server.
The cascading methodology can be configured based on criteria including bandwidth consumption and user experience.

Platform Capacity

- Maximum managed users: 400,000
- Maximum concurrent participants in meetings:
  - Total: 15,000
  - Transcoded audio, video, web collaboration: 10,000
  - Switched audio, video, web collaboration mode: 5,000
- Maximum H.323 endpoints (Gatekeeper): 10,000
- Maximum SIP registrations (Aura SM): 250,000
- Maximum interactive participants per meeting: 500
- Maximum streaming participants per event: 100,000
- Maximum Media Servers / MCUs: 50

Audio conferencing with up to 15,000 participants in meetings

Deployment Models

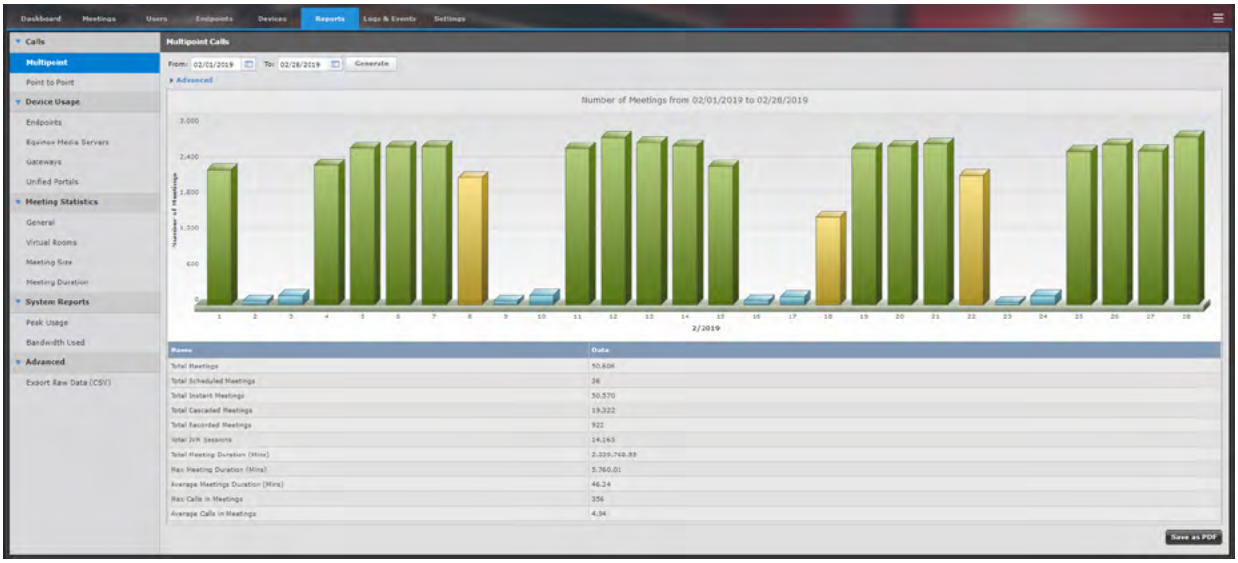
- Virtual meeting room
- Named user model via Avaya Aura Power Suite
- Port model
- Centralized and distributed
- High availability
  - Local and geographic redundancy
  - Active – standby mode with recovery time < 60 seconds
  - Active – active mode
- Multi-tenant
  - Securely share meeting resources between organizations
  - Support for multiple languages and customization per language
- Linux Red Hat 7.3
- Virtual machine OVA installed on:
  - Intel Xeon Processor running VMware ESXi
  - Avaya Common Server running VMware Appliance Virtualization Platform (AVP)
- Avaya Common Server
  - Avaya original manufacturer Dell or HP servers available to accommodate various deployment sizes and scenarios
- Amazon Web Services (AWS)

Resources and bandwidth are dynamically managed, as well as user access. Meeting resources are intelligently virtualized, allowing strategic distribution of conferencing infrastructure throughout the network.

Management

Meetings are facilitated by all-inclusive management capabilities for Avaya and third-party video systems, infrastructure, and call control. Resources and bandwidth are dynamically managed, as well as user access. Meeting resources are intelligently virtualized, allowing strategic distribution of conferencing infrastructure throughout the network. Alarms, events and logs, email alerts, and network status information provide you with real-time monitoring; along with detailed meeting call flows to aid rapid problem resolution. Comprehensive usage reporting and analytics are included for your utilization, trends, and ROI analysis.

- Meeting portal administration
  - Multiple access levels
- Scheduled and on-demand meetings
  - Outlook scheduler plug-in
  - Web scheduler
- Meeting control
- Meeting monitoring and alarming
- User management, licensing, and meeting room provisioning
  - Define user profiles and permissions
- Endpoint management
  - Remotely configure, upgrade, and monitor Avaya and third-party video endpoints
  - Cloud connected Avaya endpoint auto-provisioning
- Infrastructure management
  - Remotely configure, upgrade and monitor conferencing network devices
  - Media Server, Web Collaboration Server, Streaming and Recording, Scopia Elite MCU, Gateway
  - Dynamically distributes resources among meeting participants
- Resource and bandwidth management
- H.323 Gatekeeper
  - Call authorization
  - Controls bandwidth and user capabilities
- SIP Back-to-back user agent (B2BUA)
  - Integration enables use of existing third-party SIP call control
- Unified Communications integration
  - Avaya Aura Power Suite
- IT Back Office integration
  - Connectivity to enterprise directory services and email
  - Microsoft Active Directory
- Reporting and statistics
- Central diagnostics logging



Reporting and meeting statistics

The Media Server is a virtual software media server that provides media processing / transcoding and switching.

Media Server

The Media Server is a virtual software media server that provides media processing / transcoding and switching. Performance and capacity of each Media Server depends on the processing power, RAM, disk space, and the network interfaces allocated to the virtual machine.

- Audio, video, and web collaboration
- Transcoding and video processing
- High scale multi-stream switched video
- Supports mix of video resolutions
- Dynamic port allocation – each connection uses only needed resources
- WebRTC
- Available as OVA for a Virtual Machine with VMware and an Intel Xeon Processor server
- Available as Avaya Common Server appliance
- Video supported: H.265 (switched video in SIP), H.264 High Profile, H.264, H.263, and VP8
- Audio supported: AAC-LC, Opus, Siren14 / G.722.1 Annex C, G.722.1, G.722, G.729, and G.711
- Two modes of operation:
  - Audio, transcoded / processed video, web collaboration per OVA up to users:
    - 10 x H.264 1080p60
    - 20 x H.264 1080p30 / 720p60 / VP8 720p30
    - 40 x H.264 720p30 / VP8 480p30
    - 80 x H.264 480p30

The WebRTC Gateway mode transcodes and converts audio and video from WebRTC standards such as VP8 to SIP standards; while also routing media via STUN / TURN / ICE.

  - High capacity audio, multi-stream switched video, web collaboration per OVA up to users:
    - 2,000 audio only
    - 520 x H.264 720p30 single active speaker video

WebRTC Gateway Mode

The WebRTC Gateway mode transcodes and converts audio and video from WebRTC standards such as VP8 to SIP standards; while also routing media via STUN / TURN / ICE.

- Video up to:
  - 40 x H.264 1080p30
  - 80 x H.264 720p30
  - 160 x H.264 480p30
- Audio up to 160 x Opus narrowband, Opus wideband, G.711, G.722

SBCE

SBCE enables external SIP, WebRTC, and http guest users to join meetings from outside the enterprise network through firewalls.

- STUN / TURN / ICE
- One SBCE VM supports 200 video sessions

H.323 Edge

H.323 Edge enables external H.323 video room systems to join meetings from outside the enterprise network through firewalls.

- Supports multiple instances centralized or distributed deployed as a cluster for high availability and scaling
- Supported load-balancers:
  - Radware AppDirector
  - F5 BIG-IP Load Traffic Manager (LTM)

Streaming and Recording

Streaming and Recording combines the interactive features of video collaboration with powerful streaming and recording.

- Content viewed on Windows, macOS, iOS, and Android devices without specialized software
- Combined video and presentation content gallery layout
- Web-based content portal for easy browsing and on-demand playback
  - Integrated content library
- Recording
  - HD recording up to 1080p30

Streaming and Recording combines the interactive features of video collaboration with powerful streaming and recording.

- Streaming
  - HD live streaming up to 1080p
  - Unicast
  - 1,500 live streams on a single server
  - Scalable up to 100,000 live streaming viewers
  - Private or 3rd-party CDN support including Highwinds
- Delivery options for Streaming and Recording
  - Preinstalled on Avaya Common Server appliance
  - Windows software image (WIM) for customer servers

Conferencing API

The Conferencing API enables third party software to communicate with the system using XML via TCP / IP or HTTPS / TLS. Developers can deploy the solution as a back engine to other applications, customize the user interface and fine tune functionality, along with integrating into existing administration and monitoring applications to create a smooth and tailored deployment. The API enables capabilities including:

- Managing video network devices, including MCUs, media servers, gateways, gatekeepers, endpoints, and virtual meeting rooms
- Scheduling meetings and resources, sending invitations
- Moderating, monitoring, and managing meetings
- Sending XML notifications about newly connected devices and meeting activity
- User portal functionality
- User rights management, authentication, and security
- Customer branding
- MIB files for H.323 Gatekeeper and Media Server

Client Software Development Kit (SDK)

The Client SDK is a set of APIs that enables building innovative and differentiated user experiences with the full scope of Avaya Unified Communications.

- Abstracts complexity of infrastructure
- Provides separation layer between infrastructure and user experience
- Allows for changes to occur in the infrastructure, without affecting the user application
- No specialized telecommunications expertise needed
- Includes sample application source code, Java libraries, and Javadoc Tool

About Avaya

Businesses are built on the experiences they provide and every day millions of those experiences are built by Avaya (NYSE:AVYA). For over one hundred years, we've enabled organizations around the globe to win—by creating intelligent communications experiences for customers and employees. Avaya builds open, converged and innovative solutions to enhance and simplify communications and collaboration—in the cloud, on premise, or a hybrid of both. To grow your business, we're committed to innovation, partnership, and a relentless focus on what's next. We're the technology company you trust to help you deliver Experiences that Matter. Visit us at www.avaya.com.

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