

# Pexip Overview – SaaS/Hybrid, Infinity, PPC

September 5, 2023

# Proven Security and Control Posture



# FedRAMP

Pexip Government  
Cloud  
ATO-Achieved  
FR Moderate



DoDIIN APL  
JITC Certified  
Fully STIGed Application  
RMF control baseline  
PKI/CAC Authorization



**FIPS 140-2 Certified  
FIPS 140-3 In-  
Process  
NIST CMVP #3503**



Standards-based  
Encryption  
AES-256 Media/Signaling  
TLS 1.2

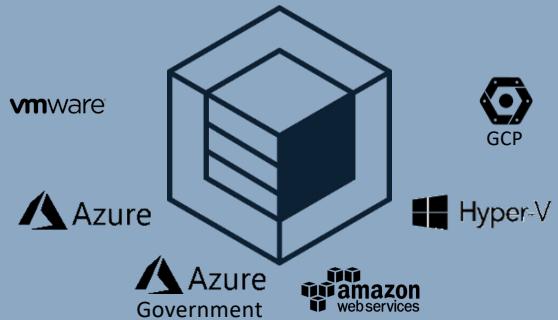


# EU GDPR COMPLIANT

# Pexip as the core technology

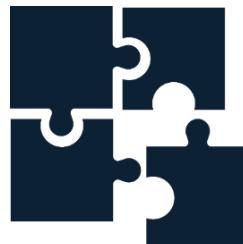
## Virtualized

Entirely virtualized using cloud native APIs including cloud bursting. Runs in private data center (on-premises) or in public clouds such as AWS, Azure and others



## Distributed

Designed following modern IT fundamentals, Infinity is a cloud agnostic distributed system that scales resources according to usage and geography



## Intelligent

Utilizes smart scaling and data routing for efficient data processing and intelligent transcoding of media to allow for the best experience independent of connection, technology and device



## Customizable

Easy configuration, monitoring and troubleshooting provides IT team total control of the network and data. Easily customized to the company's look and API, to be adopted to a business specific workflow



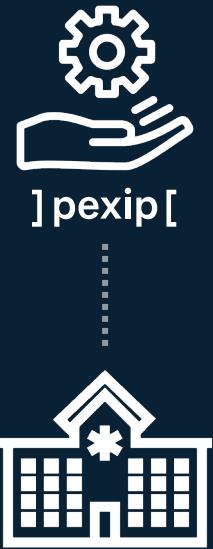
# Pexip | Flexible Deployment Options

## Pexip Service (SaaS)



- Fully Managed Subscription Service
- Multi-tenant
- Pexip Control Center
- 1:1, 1:many, CVI, InterOp
- Can manage SIP/H.323 Endpoints
- Little customization

## Customer-Managed Self-Hosted



- Corporate data center or cloud of choice
- Self-managed capacity
- Can manage SIP/H.323 endpoints
- Can optionally leverage Pexip Smart Scale for burst capacity to Pexip
- Fully customizable
- Supports full API/SDK suite

## Dedicated Private Cloud

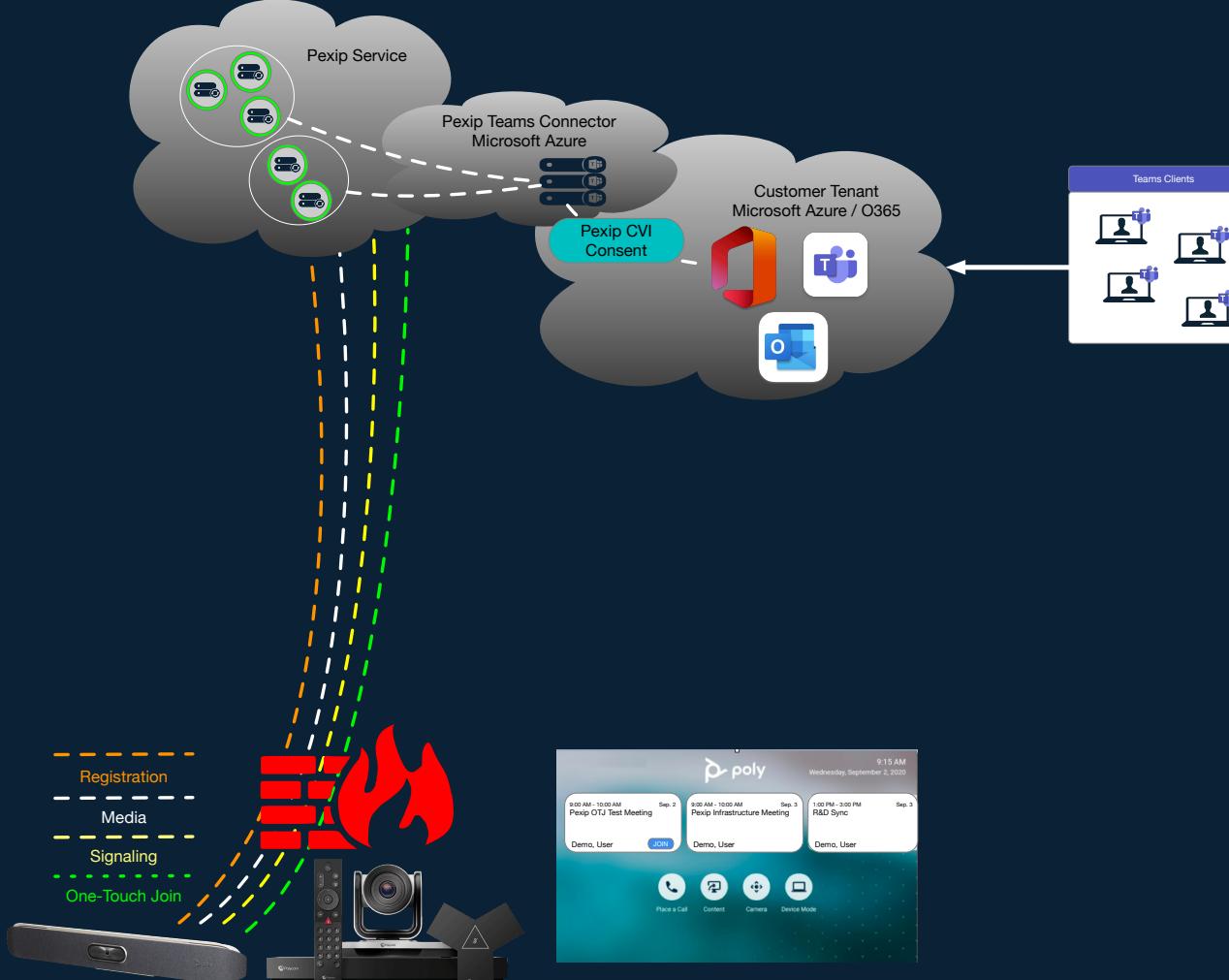


- Single Tenant
- Pexip-Managed, Dynamic Capacity
- Remove compute hosting burden
- Can manage SIP/H.323 endpoints
- Maximizes Security and Scalability While being mindful of cost
- Fully customizable
- Supports full API/SDK suite

# Consumption Model – SaaS and SaaS/Hybrid

# SaaS- Overview MS CVI – Poly Endpoints

- Pexip SaaS Provides:
  - Endpoint Registration
  - Microsoft Teams CVI
  - One-Touch Join
  - Trusted Devices
  - SIP Guest Join
  - Custom Branding
  - Teams Live Events
  - Teams Like Layout
  - More...

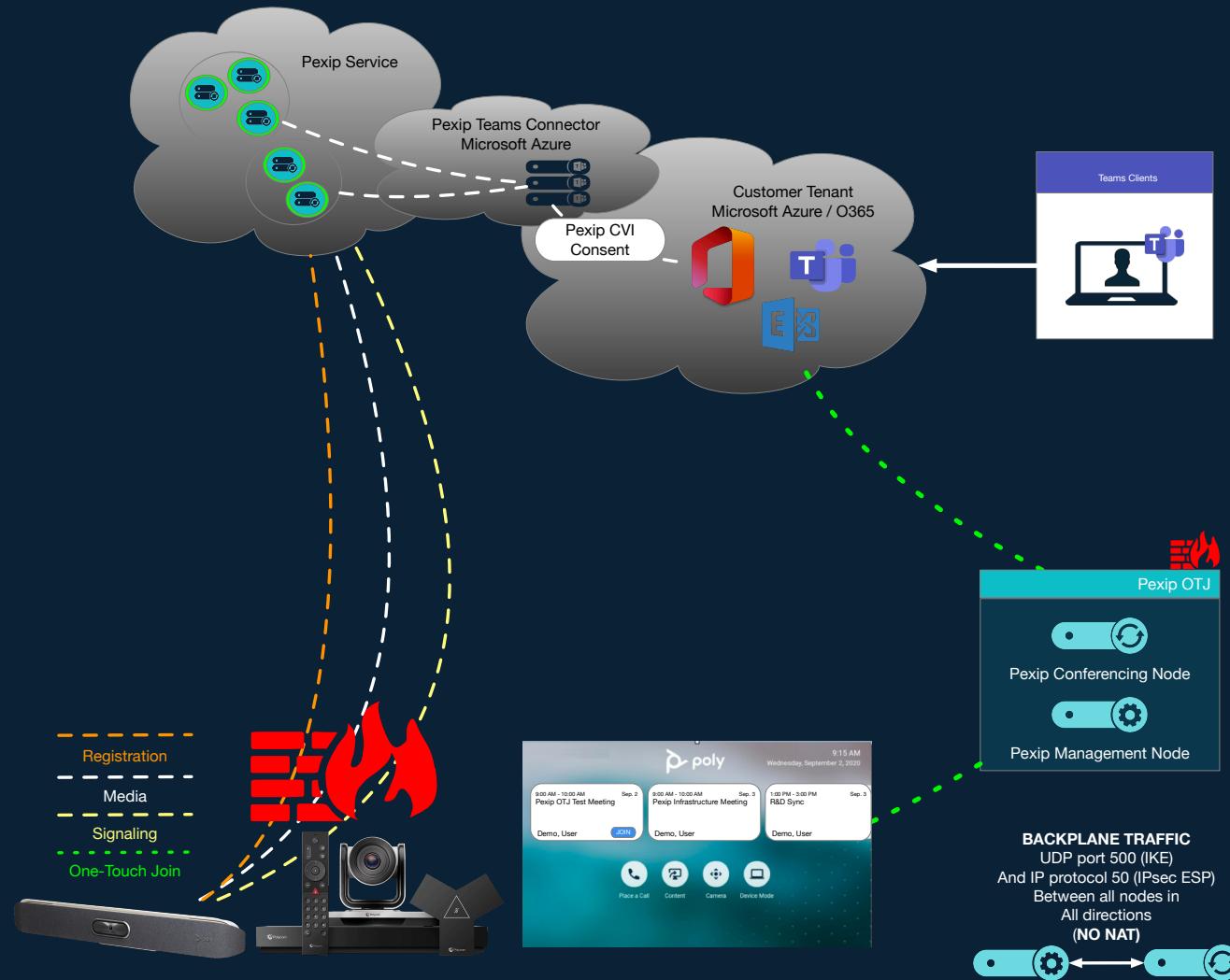


# SaaS- Overview MS CVI – Poly Endpoints / OnPrem OTJ

aka: SaaS Hybrid

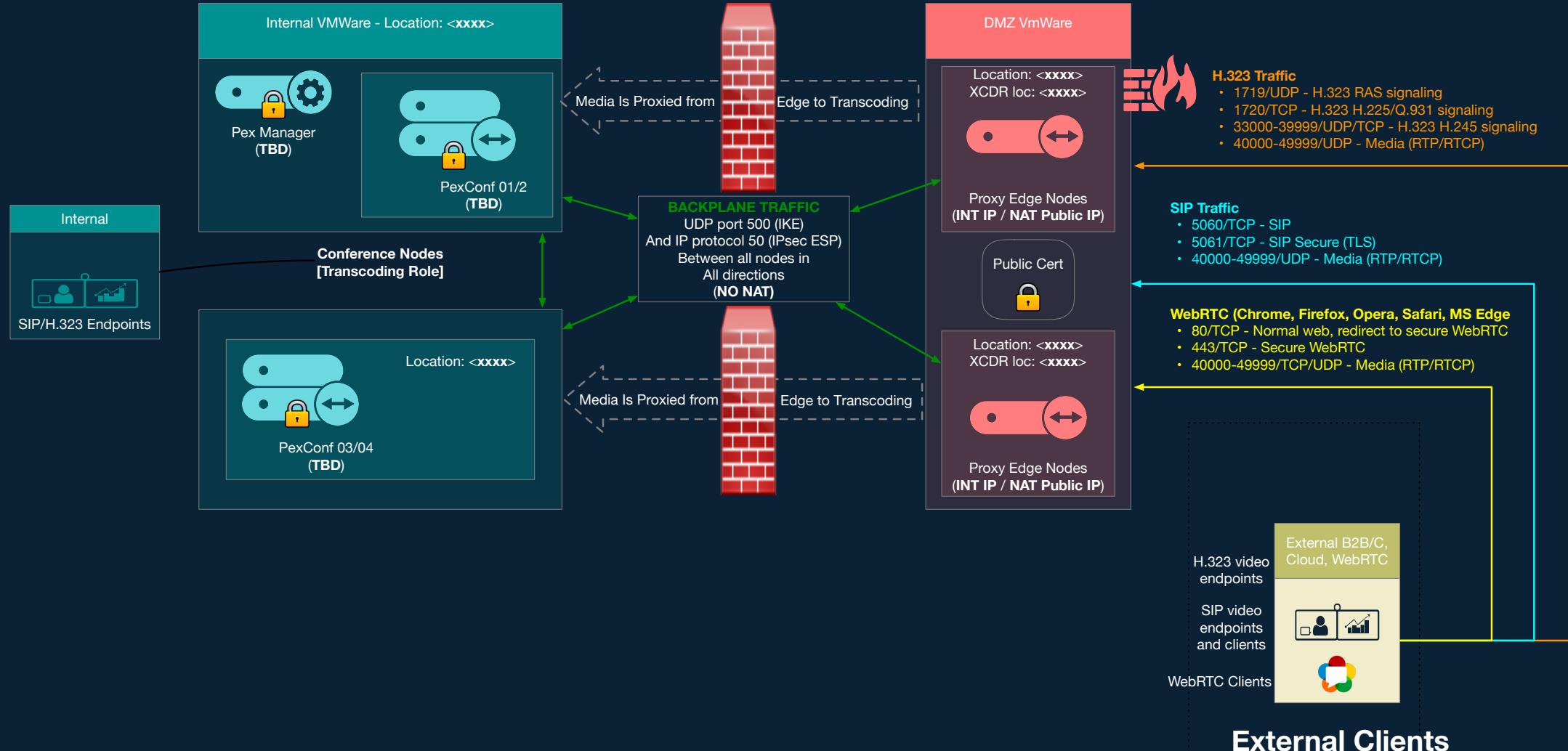
- Pexip SaaS Provides:

- Endpoint Registration
- Microsoft Teams CVI
- One-Touch Join provided by OnPremise
- Trusted Devices
- SIP Guest Join
- Custom Branding
- Teams Live Events
- Teams Like Layout
- More...

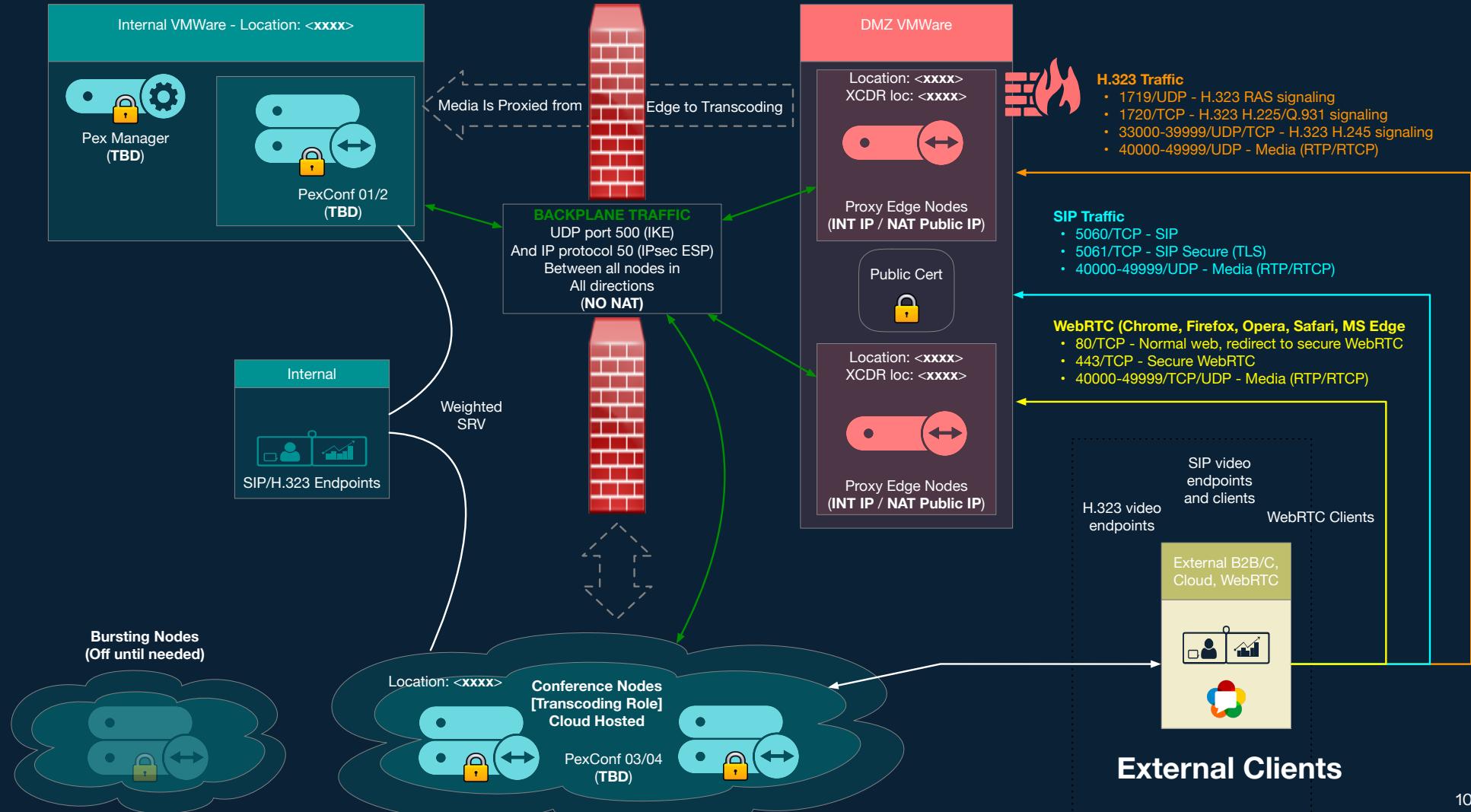


# Consumption Model – Self Hosted

# High Level Overview of Pexip Infrastructure

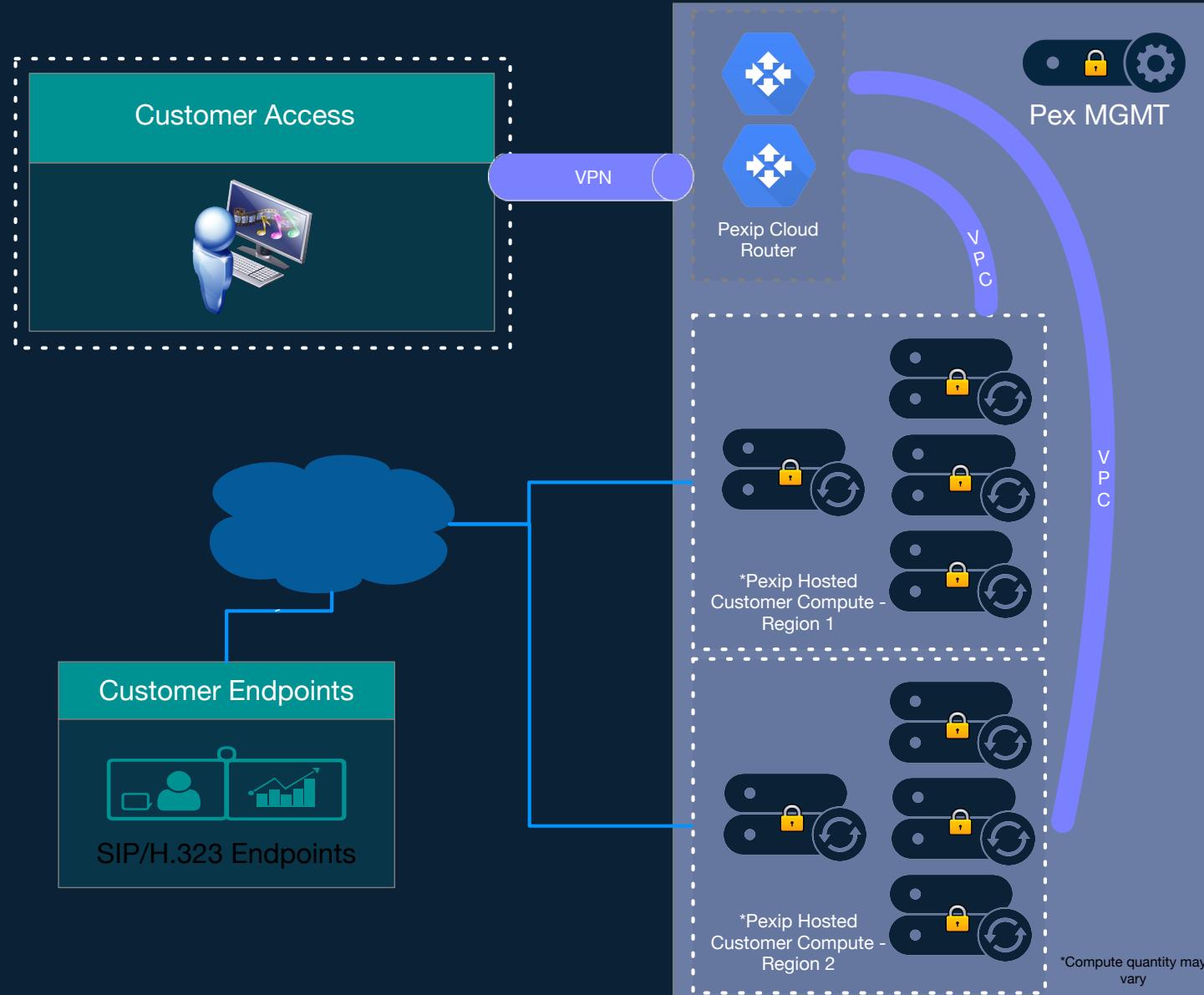
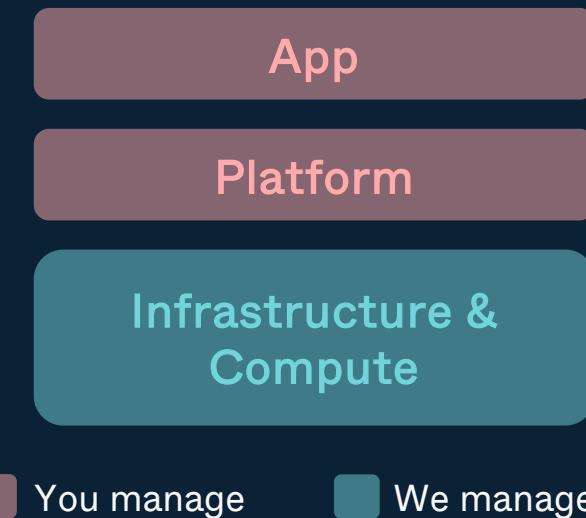


# High Level Overview of Pexip Hybrid Infrastructure



# Pexip Private Cloud – Pexip Hosted

- Single Tenant Infrastructure
- Customer Managed and Maintained
- Highly available infrastructure



# Pexip Infrastructure Solution Components (All OnPrem Example)

## Core Components



Management Node



Conference Node



Edge Node

vmware®

NUTANIX



ORACLE

Example of 3<sup>rd</sup>-party Instances that are commonly integrated with Infinity



External Policy



Event Sink



SIP Call Control



Proprietary Scheduler



RP / TURN



SysLog / Analytics



h.323 Gatekeeper



VDI



SSO / Auth



Chat / IM / P



Custom Application UI



Contact Center

## Teams Connector\*\*



- Solution co-developed with Microsoft. (Infinity Required)
- Made up of Azure components (so Azure required)
- Allows for SIP/h.323 devices to interop with MS Teams (in supported tenants)

# Let's Breakdown the Infrastructure

# Management Node



- Hosts admin web UI
- Configure and create conferencing nodes
- Configure services
- Configure platform-wide and location specific policies
- Monitor live calls / conferences
- Aggregate conferencing node log data
- Hosts management API
- One Instance Only

# Conference Node(s) – aka Transcoding Node



Management  
Node



Conference  
Node



Edge Node

- Minimum of One, but can scale to 150+
- Grouped in logical locations
- Runs H323/SIP/WebRTC
- Does all platform "heavy lifting"
- Video and audio processing  
(Individual transcoding & trans-rating)
- CPU-Heavy VM



# Edge Node(s) – aka Proxy Node



Management  
Node



Conference  
Node

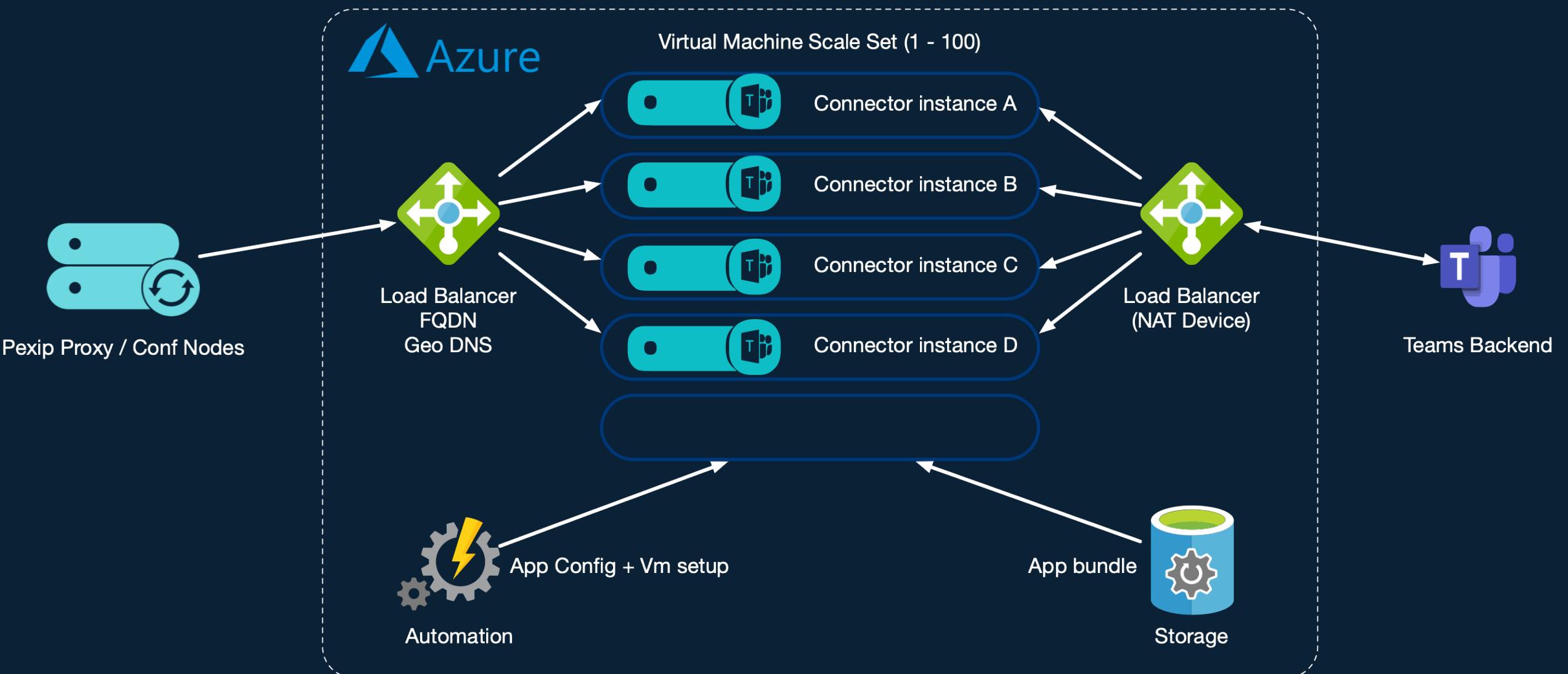


Edge Node

- Not a hard requirement for Pexip to work
- Serves as Pexip's FW Traversal Device
- Identical software to conference nodes; but no transcoding
- Handles Signaling and Smart Load Balancing
- Proxies media to Conference nodes
- If present in architecture, it will often have Single NIC with a Static NAT or Dual NIC.



# Teams Connector (Optional) for Self-Hosted Deployments



# Customization at the core

# Infinity | Customizing The Video Experience



## Native Apps and Self-Service Branding

### Pexip Application Suite

- Available, fully supported, and free for use including iOS, Desktop, and web utilities.
- Enable many basic video workflows for 1-to-1 and group visits
- Can be used with any implementation of Pexip Infinity
- Web app supports code-free custom branding through the Pexip Branding Portal



## Extending with Plugins

### Level 1 Customization

- Pexip Web Apps are fully open source and can be customized using modular, lightweight plugins
- Sample application customizations include ad-hoc SMS / email invitations (e.g.Twilio), pre-defined dial-out to interpreter services, automated dialing to SIP endpoints, and many more
- Pexip developer support can be purchased as an add-on
- Web app supports code-free custom branding through the Pexip Branding Portal



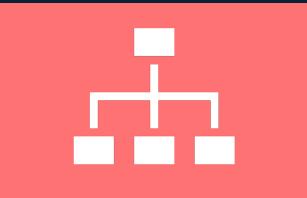
## Pexip APIs

### Level 2 Customization

- Fully supported APIs allow your organization to manage nearly every aspect of the video visit experience
- Pexip video can be embedded in numerous workflows, including:
  - Web Pages
  - Bots
  - Scheduling platforms
  - Contact Centers
- Ideal for organizations with in-house or established development relationships who wish to implement advanced workflows



# The Pexip API Suite (almost over-simplified)



## MANAGEMENT API

- Everything you can do from the management node UI
- Use for Non-Time-Critical Monitoring and Static Configuration



## CLIENT API

- Build your own client or app
- Use for interactive control or monitoring of conferences
- Create different custom experiences for hosts vs guests



## EXTERNAL POLICY API\*\*

- Actively control conference access
- Time Critical service configuration
- Can be integrated with other systems to allow for cross-platform event triggers



## EVENT SINK API\*\*

- Monitor what is happening. JSON events sent over HTTP when conferences start/stop/change and participants join/leave/change
- Use for live participant or conference monitoring.
- Replaces polling status API (Push, not a Pull)

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