

Presentation to MasterCard

May 26, 2023



What is Vivoh?

- ❑ Software to extend online meetings via multicast
- ❑ A Cloud Service: “Zoom DVR”
- ❑ A Proxy-Cache for Vimeo and other streaming services

Zoom Marketplace: <https://marketplace.zoom.us/search?q=vivoh>

Webex App Hub: <https://apphub.webex.com/search?q=vivoh>

Zoom Multicast

- ❖ **Problem: Zoom video crushes enterprise networks**
- ❖ **Goal: Zoom video at massive scale (10x thousands)**
- ❖ **Solution: Multicast Zoom video in a Zoom-like App**

Site: <https://vivoh.com/multicast>

Vivoh App with Poll Everywhere Q&A

The screenshot displays the Vivoh app interface. The main video feed shows a woman with brown hair wearing a white blazer, speaking. The interface includes a top navigation bar with "Responding as Vivoh" and a user profile icon. Below this is a filter section with "New" and "Top" tabs. The main content area shows a poll titled "All caught up!" with two questions: "Hello from Farmington, CT!" and "Welcome to the Company Town Hall", each with a thumbs-up and thumbs-down icon and a "0" vote count. The bottom navigation bar contains icons for Home, History, Registration, Present, and Log in. A "Leave" button is located in the bottom right corner. The bottom status bar includes a Mute icon, a CC icon, and a Q&A icon.

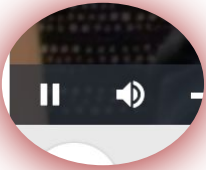


Zoom DVR

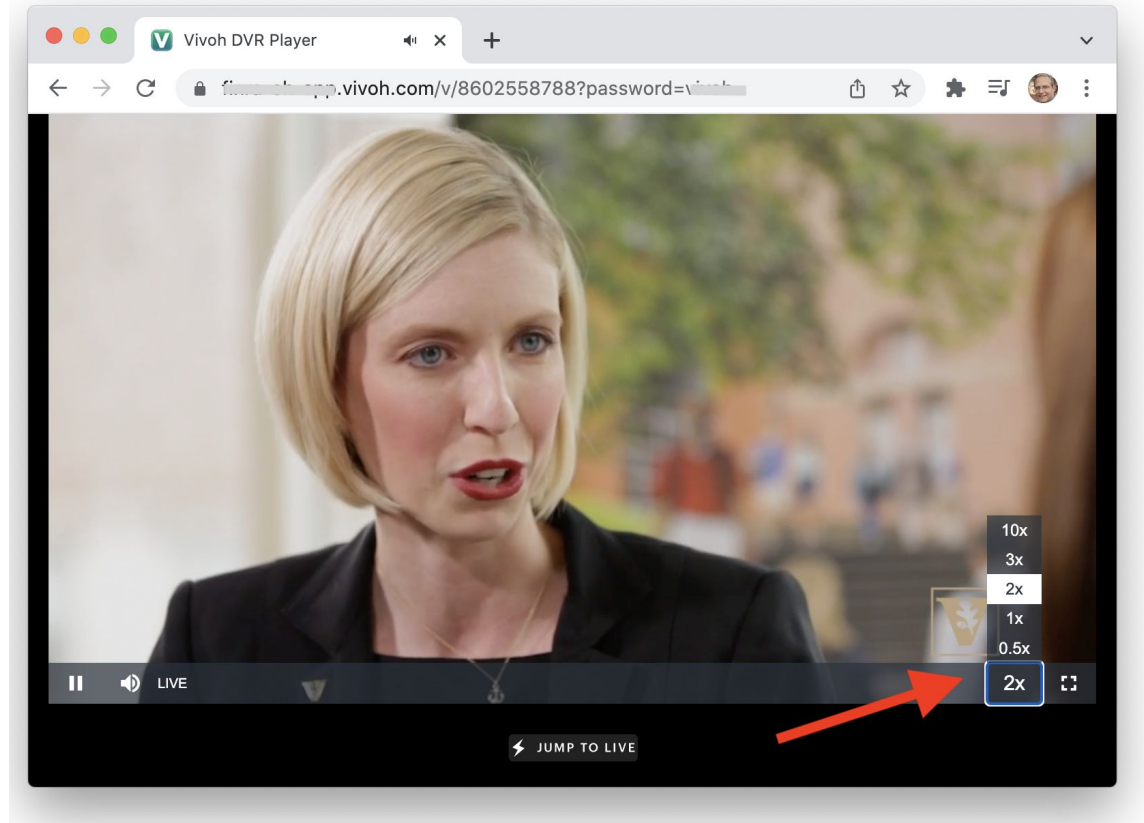
- ❖ Show up late for meetings, pause live meetings, play at 2X
- ❖ Allow half-speed review for hard to understand speech
- ❖ Patent-pending security model keeps DVR data compliant

Site: <https://vivoh.com/ontime>

Pause Feature



Fast Playback Feature ->





Vivoh eCDN

- ❖ Unicast Proxy-Cache with IP-based user request steering
- ❖ Open source core engine based upon Varnish
- ❖ Distributed as an OVA, VM, .DEB, or via Lemark Hardware

Site: <https://vivoh.com/ecdn>



Vivoh eCDN

User Request Management

ecdn.vivoh.io

Vivoh eCDN **NODES** RULES

CREATE NEW NODE

cache1.vivoh.io

- cache efficiency: 17.6%
- CPU usage: 2%
- client bandwidth: 1.56 KiB
- upstream bandwidth: 1.29 KiB

Full Analytics

(c) Vivoh, Inc, 2023

VCache Dashboard

System Metrics

Host: cache-02.demo.vivoh.net

UpTime: 06:23:54:22

Version: 0.3.1

CPU: 34125 CPU @ 2.00GHz

Cores: 4

Memory: 7.6 GB

Disk: 116.32 MB

CPU: 1.8% (Load: 0.16, 0.13, 0.04)

RAM: 17.2% (Used: 1.31 GB)

Disk: 19.0% (Used: 20.59 MB)

Operational Metrics

User Sessions: 2

Bandwidth Saving: 0 bps

User Sessions [max]: 8

Bandwidth Saved [max]: 4.75 Mbps

Data Saved [total]: 2.34 GB

Cache Metrics

Cache Efficiency [data]: 0.0 HT %

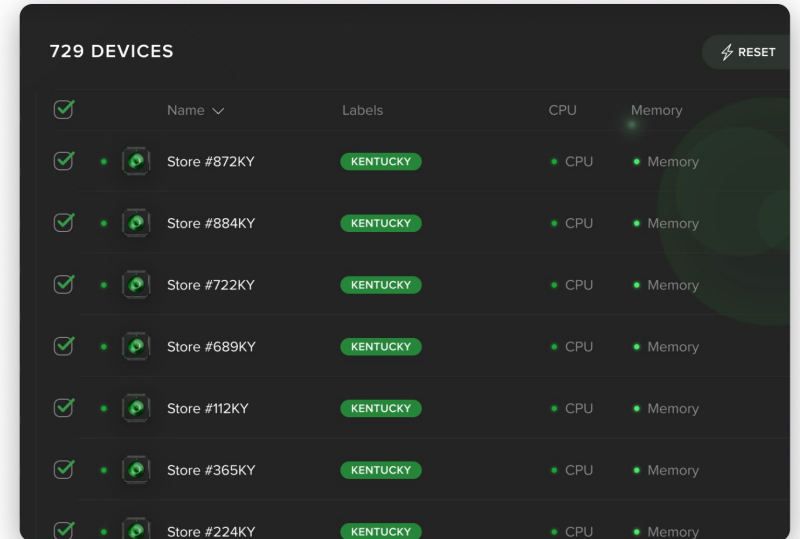
Cache Efficiency [requests]: 0.0 HT %



Vivoh has partnered with Lexmark to provide on premises video delivery infrastructure



- **Vivoh eCDN proxy-cache software**
- **Lexmark-supported hardware**
- **Cloud-based device management**





Customers

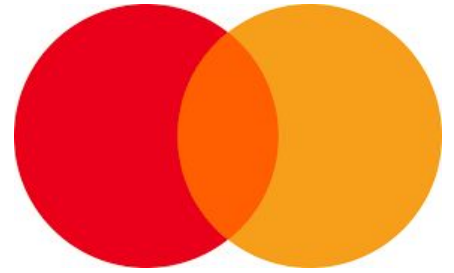
❖ Vivoh Multicast:

➤ FINRA, The Hartford, Highmark Health, NextEra Energy

❖ Vivoh OnTime:

➤ NEC Systems and Integration Corporation

- Purchased two channels of Vivoh OnTime
- Deployed in their [Tokyo Zoom Showcase](#)
- Wants to resell Vivoh to Hitachi and other



Thank You!

Erik Herz
erik@vivoh.com
860-255-8788