Howard & Associates

Consulting Firm Focused on IP Video Communications

- Video Streaming
- Video Conferencing
- Video Call Centers
- Unified Communications

Advisor/Investor for startups

Strategy/marketing advice to vendors

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Agenda

• Microsoft Stream
  • History
  • Demo
  • Detailed Feature review
  • Recommendations

• Microsoft Teams

• Skype for Business
Microsoft Stream

- Microsoft’s primary tool for sharing enterprise video
Microsoft Teams

Microsoft’s primary client for intelligent communications in Office 365
Skype for Business

• Microsoft’s primary real-time communications tool for several years
Microsoft Stream Timeline

- Office 365 Video
  - Announced – Nov. 2014
  - Required Office 365
  - Typical first release issues
  - Limited uptake

- Microsoft Stream
  - Announced – July 2016
  - Office 365 not required but included in certain plans
  - Took Office 365 video learnings and rearchitected
  - Limited uptake since only a preview
  - Lots of interest from clients – is it a viable long term solution?

- Microsoft Stream General
  - Availability – June 2017
  - Relatively full featured first release
  - Lots of interest from clients, but no action
  - Limitations for large scale deployment (see following slides)
  - Promising future
Microsoft Stream Architecture

Uploader

Viewers

CDN

Microsoft Stream / O365 Video

Azure / SPO

Content Storage

Metadata

Azure Media Services

Transcoding

Thumbnail

AES Secure Delivery
Network Traffic Optimization & Caching

**Partnering with SDN Providers** (Software Define Network)

- **Ramp** - AltitudeCDN OmniCache: video distribution cache proxy without proprietary hardware
  - Status: Works today

- **Hive** - Enterprise Video Distribution & Insights: software video distribution, installed on end-user computers, generates user playback stats, peering data, & QoS reports
  - Status: Finishing integration in O365 Video & beta testing

- **Kollective** - Software Defined ECDN: software video distribution, installed on end-user computers
  - Status: Under development, to be integrated into O365 Video soon
# Microsoft Stream – Pros and Cons

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>• Leverages Azure Media Services to transcode and deliver media – (Extremely scalable - Azure has streamed Olympics, Super Bowl, and other large streaming events)</td>
<td>• All video delivered from the cloud</td>
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<td>• Requires Enterprise CDN for high volume organizations</td>
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<td>• No multicast support for live video</td>
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<td>• Tightly integrated with Office 365</td>
<td>• Only internal users for now (external users on roadmap)</td>
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<td>• Leverages Office 365 groups to limit content to users/groups</td>
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<td>• Videos can easily be published to Microsoft Teams, Yammer, SharePoint, OneNote, Sway</td>
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<td>• Free for Office 365 <strong>Enterprise</strong> customers</td>
<td>• Certain features are limited to E5 customers (Deep search, Transcript mode, Face detection)</td>
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<td>• Not included with Office 365 <strong>Business</strong> Customers (organizations with &lt;250 users)</td>
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# Microsoft Stream – Pros and Cons

<table>
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<tr>
<th>Pros</th>
<th>Cons</th>
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<tr>
<td>• Support for live video only through Skype for Meetings Broadcast (more on this later)</td>
<td>• No live video built into the system</td>
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<tr>
<td>• Advanced Features</td>
<td>• Skype for Meetings Broadcast is a limited solution – definitely requires an Enterprise CDN even for smaller customers</td>
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<td>• Built in speech to text and Closed Captioning functionality</td>
<td>• No multicast</td>
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<tr>
<td>• Automatically transcribe the text of the video and make it available for “deep search”.</td>
<td>• Advanced features only included with E5 accounts.</td>
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<tr>
<td>• Facial recognition</td>
<td>• Other Enterprise accounts or non Office 365 accounts, $5/user/month</td>
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<td>Pros</td>
<td>Cons</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>• Extremely mobile friendly (without an app required)</td>
<td>• No ability to limit where the content is stored</td>
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<td>• No approval process</td>
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<td>• Limited administrative controls.</td>
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<td>• Typical first release Microsoft characteristics (lack of features, crash prone, and difficult to use)</td>
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<tr>
<td></td>
<td>• No ability to have content stored locally – all content must reside in Microsoft Azure cloud. Important for security for extremely high value content</td>
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<tr>
<td></td>
<td>• Analytics are pretty basic</td>
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<td></td>
<td>• No player customization.</td>
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<tr>
<td></td>
<td>• Portal customization is pretty basic</td>
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<td>• No playlist functionality (videos can be chaptered)</td>
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**Microsoft Stream Viewing**

**Trending Videos:**
These are the most popular videos that your colleagues are watching, liking or comment on.

**My Watchlist:**
This section only shows if you have videos in your watchlist. Watchlist is a convenient way for you to bookmark videos that you want to come back to.

**Followed Channels:**
Channels are a great way to organize content. To stay in touch with new videos added to a channel or to bookmark it you can easily follow a channel. If you are following a channel, this part of the Home Page let’s you see the new videos added to a channel and/or find the channel you follow easily. If you are no longer interested in a channel, it’s easy to unfollow it by clicking “Following”.

Microsoft Stream Content Restrictions

Overall workflow:
- Content is organized by Channels.
- Channels can be public channels or Channels that are limited to certain groups.
- Groups are based on Office 365 Groups.
- People are individuals within the organization’s Active Directory.

To limit content, the user can select an existing group or choose a new group.
Microsoft Stream Viewing - Groups

Create a Group:

When you create a group in Stream, you set if the group is companywide or not. This determines who has access to see content inside the group.

Private Groups:

setting that controls if members are contributors to the group or they are viewers only. This is controlled by the "Allow members to contribute" check box on the group.
Microsoft Stream Viewing - Channels

Create a Channel:
Channels can be companywide or Group Channels

Groups Channels:
Groups channels are great for adding further organization of videos within a group and when you want to determine who can see and who can upload videos to a channel.

Characteristics of group channels:
- Inherits the permissions from the group they are contained in
- All contributors to a group can create channels, add videos to them, remove videos from them, and edit settings about the channel
Microsoft Stream Content Restrictions

When publishing a video, the publisher can choose to share it with the following:

- Groups
- Channels
- People

You can also choose whether to make the user or group just a viewer of the content (Display) or an Owner of the content (so they can edit it, etc.).
Microsoft Stream Licensing

Microsoft Stream add-on for Office 365

Get all the advanced features of Microsoft Stream Plan 2 with this add-on for existing Office 365 subscribers. Pricing varies based on your Office 365 plan, so visit the Office 365 admin center to add advanced capabilities to your Microsoft Stream plan.

Search automatically generated transcripts

In-video face detection

Timeline view of where faces appear

FAQ

Which Office 365 plans include Microsoft Stream?
These plans include Microsoft Stream:

- Office 365 Education
- Office 365 Education Plus
- Office 365 Enterprise E1
- Office 365 Enterprise E3
- Office 365 Enterprise E5

*Office 365 plan features vary by license. See licensing details to learn more.

Is Microsoft Stream available as a standalone plan?
Yes, you can purchase Microsoft Stream Plan 1 or Microsoft Stream Plan 2. Refer to the pricing details above or visit the pricing documentation page for additional information.

Not an Office 365 customer? Get started using Microsoft Stream with a free trial today.

Microsoft Stream Plan 1

- $3 per user per month

- Organize your company’s video content in a single destination.
- Securely upload and share your videos across the company.
- View and search videos across devices.
- Embed videos across your favorite applications.
- Manage with tools for IT administrators.

Microsoft Stream Plan 2

- $5 per user per month

- Everything in Plan 1, plus:
  - Find more videos using deep search based on in-content signals like speech to text.
  - Interact with video content in richer ways using face detection and audio transcripts.

# Microsoft Stream Vision

## Enterprise Video | The vision and roadmap

### My Hub
- Video portal
- Upload and manage videos
- Change permissions and see basic statistics
- Get embed codes; share videos
- Like, comment and collaborate with others on videos
- Converge O365 Video & Stream into single platform

### Search & Discovery
- Categorize videos into channels
- Search using text, hashtags, users, etc.
- Cache with SDN Providers (Hive & Kollective)
- Organize with sub-channels / categories
- Classify with custom metadata
- Make videos public

### Live Streaming in Portal
- Setup Live streams with a few clicks
- Integrated with Skype Meeting Broadcast
- Access all your org's VOD & Live streams on the portal
- Do webinars & other external events

### Analytics & Intelligence
- Deep search that uses transcribed audio, faces, emotions, OCR etc.
- Usage stats for consumption patterns in the org
- Keep things current with retention policies
- Find videos with eDiscovery
- Set approval & scheduling workflows with Flows

### Ecosystem
- ISVs apps that get access to user base as well as content
- API access for integrating Apps and Services
- Integrate with PowerApps and Dynamics
- Partner offerings for content creation and distribution

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<th>Now</th>
<th>Future</th>
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How important is Teams to Microsoft?

- “A new vision for intelligent communications in Office 365”

- “Teams will evolve as the primary client for intelligent communications in Office 365, replacing the current Skype for Business client over time”

Ignite 2017 (Microsoft IT Professional and Developer Conference)
Who will win?

- Room for multiple players (think Outlook vs. Gmail)
- Slack has a head start
- Microsoft and Cisco have brand loyalty
- Key Microsoft Advantage – Integration with Office 365
Skype for Business

• Microsoft’s primary real-time communications tool for several years
Skype for Business

- Many iterations
Skype for Business Strategy – Own the Desktop (Again)

- Start with Presence and Chat (Integration with Microsoft Exchange)
- Add screen sharing (WebEx killer)
- Add video
- Add telephony features (Next Generation PBX)
- Integrate all of these with Persistent Chat in Microsoft Teams (Slack and Cisco Spark killer)
Skype Meeting Broadcast is a feature of Skype for Business Online that enables you to schedule, produce, and broadcast meetings or events to online audiences up to 10,000 attendees.

This is the current method for how to deliver live video in the Microsoft environment (although it cannot be viewed in Microsoft Stream)

Overview video

https://www.youtube.com/watch?v=wLWpAEH2cyl
Skype for Meetings Broadcast

Challenges:

• **Video Quality** – Challenging to integrate existing production tools into the Skype for Meetings Broadcast environment. Quality will not be as good as a professional dedicated encoder.

• **Cloud only** – Originating stream will always be sent out to and delivered by the Azure CDN. Requires eCDN for internal delivery for substantial audience sizes. No multicast

• **Features** – Not as feature rich as other webcasting platforms. For example, third party solutions are required to add audience polling, formal Q&A, and other functionality.

• **No redundancy on the source** - If the device running the Skype client that is hosting the Skype Meeting Broadcast goes down, then the entire event goes down.
Key Takeaways

• Get to know Microsoft Teams

• Keep an eye on Microsoft Stream
  • Great solution today for SMBs that are Office 365 customers
  • Large enterprises – consider key requirements and determine when available

• Skype for Business
  • Interface will go away, but functionality will remain in Teams
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