



Shared IT Services for Higher Education & Research

Conference 2017



Videoconferencing Shared Service

Information Session

HD Video Conferencing Service Committee
(Working Group)

Agenda

- History
- Proposal
 - Requirements
 - Service description
 - Support model
 - Cost model
- Platform overview
- Next steps
- Q&A

HD Videoconferencing Service Committee

Members:

- Anthony Knezevic (Chair, University of British Columbia)
- Henrik Agerskov (Simon Fraser University)
- Rafael Mayor-Mora (Simon Fraser University)
- Jane Kovach (University of Victoria)
- Flemming Sorvin (University of Victoria)
- Scott Thorpe (University of Victoria)
- Kevin Walters (North Island College)
- Mike Valmorbida (North Island College)
- Kevin Saltel (University of British Columbia)

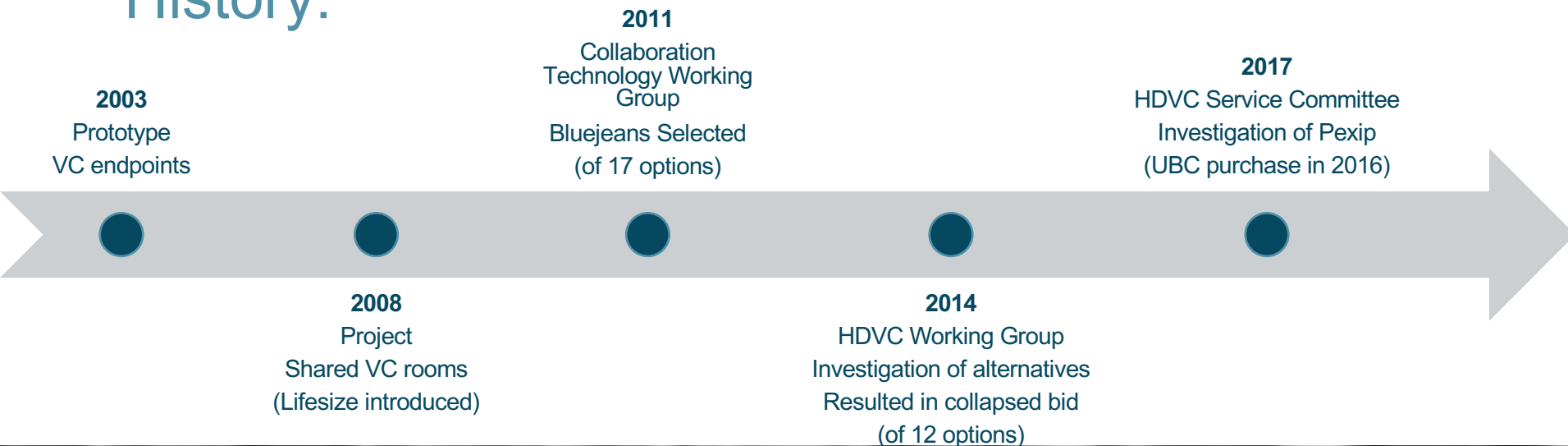
History

HD Videoconferencing Service Committee

Purpose:

- Assess cost-effective alternatives for videoconferencing for BCNET members
- Near term: Investigate Pexip as shared service alternative

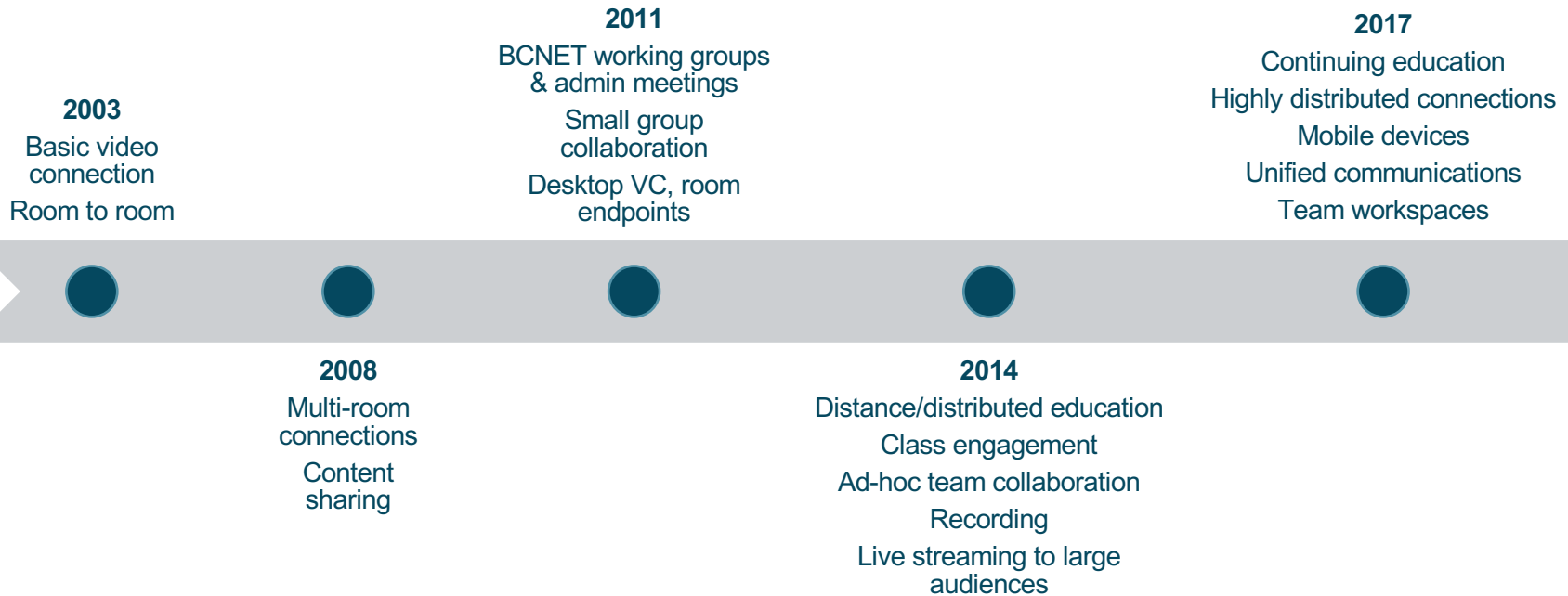
History:



BCNET evolution of need

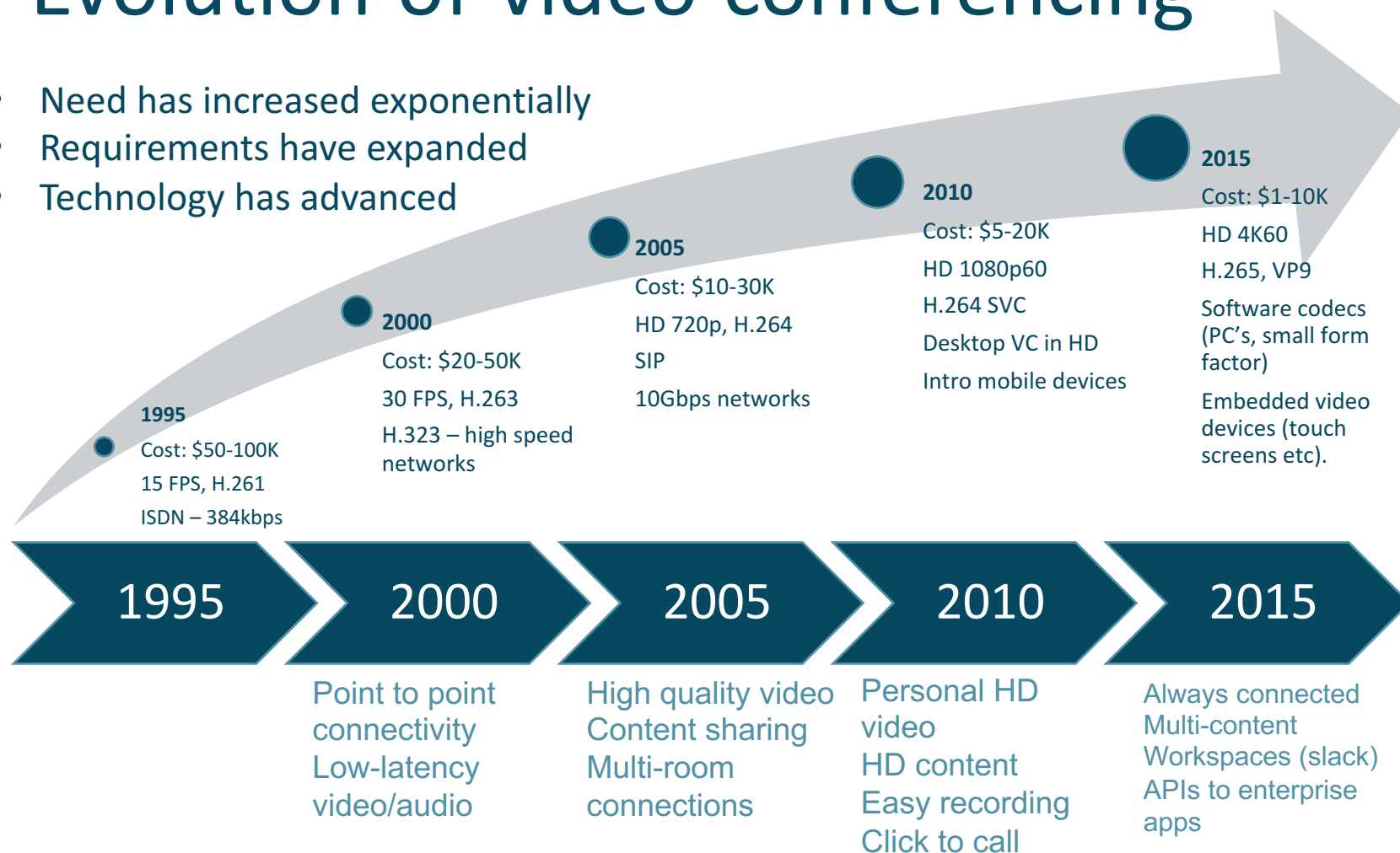
Since 2010...

- Need for remote collaboration has increased exponentially
- Requirements have expanded significantly
- Technology has advanced and enabled new modalities



Evolution of video conferencing

- Need has increased exponentially
- Requirements have expanded
- Technology has advanced



Landscape today

Service offerings to PSEs:

- Compute Canada (WestGrid) – Vidyo
- BCNET – Bluejeans, Kaltura
- BCCampus – Adobe Connect

Other service offerings:

- Zoom
- Webex
- Goto Meeting
- Skype for Biz (O365 / on-prem)
- Cisco Telepresence
- Polycom Realpresence
- Lifesize / Cloud
- Blackboard Collaborate
- Mediasite
- Slack
- Cisco Spark

Requirements defined in 2017

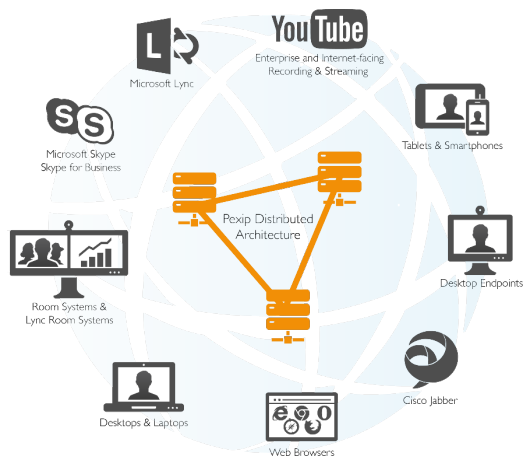
- Meet FIPPA requirements
- On-net (peered or on BCNET network)
- Meetings up to 50 participants
- Ability to create and manage breakout rooms**
- Access via web browser, desktop client, mobile client, skype for business, video endpoints, telephone.
- Content sharing in high resolution to all connecting endpoints
- Group chat to all desktop clients
- Registration of endpoints (security)
- Gateway functionality to allow different networks/platforms to interoperate
- Recording ability, control to start and stop
- Live stream meetings
- Controls for managing meetings – Host, Operator, Administrator
- Controls for administering conference schedule and meeting rooms
- Outlook integration – create meetings and send invitations
- Analytics for managing usage and capacity

Member perspective

University of Victoria

Platform Overview

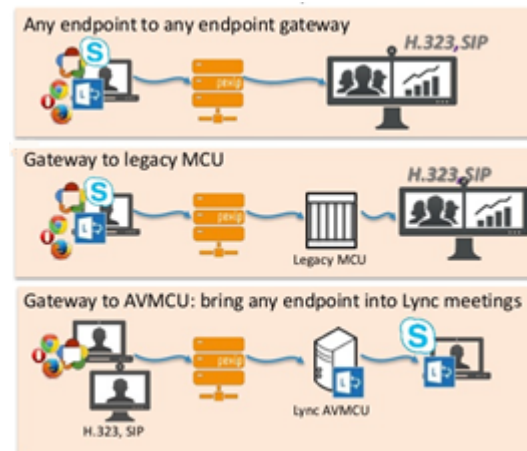
Platform overview



Multiple Connection Methods

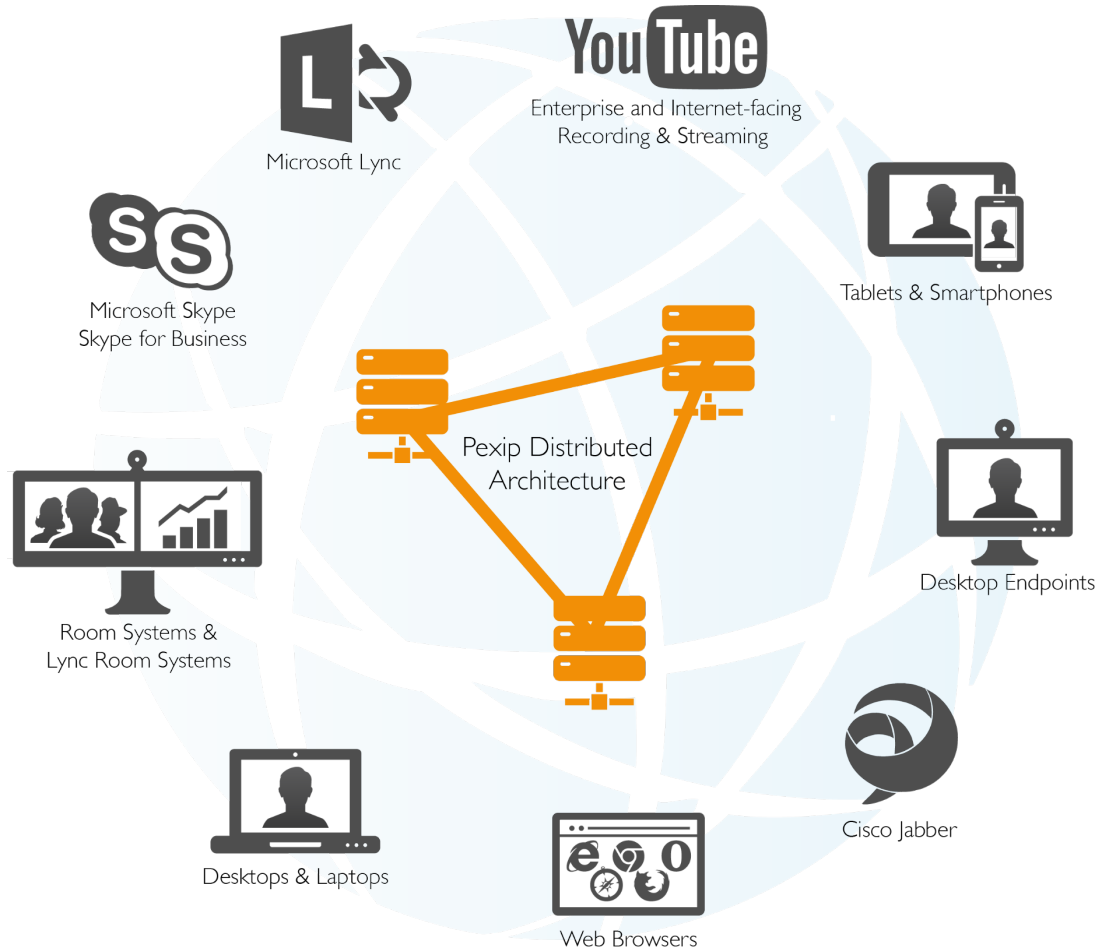


Scalable/Distributed Architecture



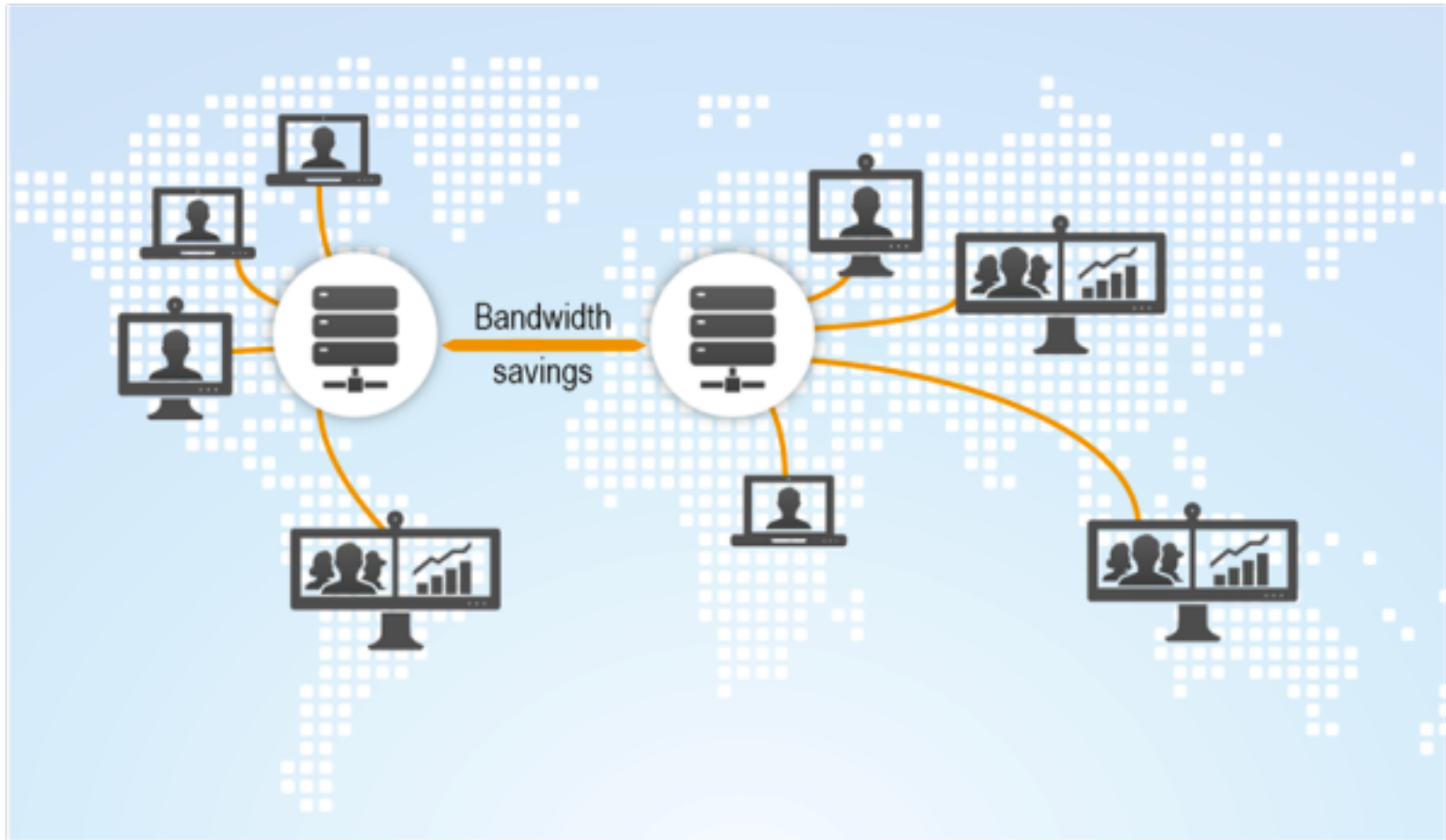
Distributed Gateway

Platform - endpoint support



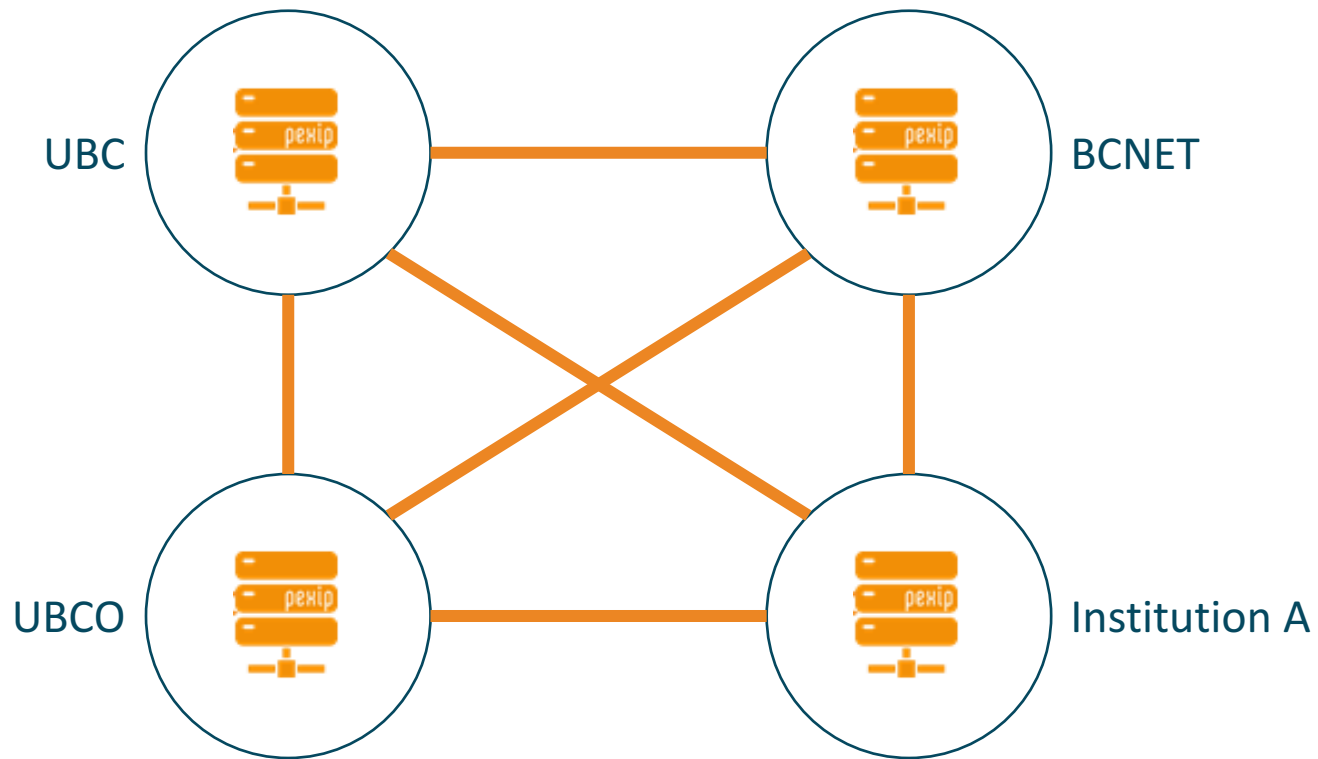
Multiple Connection Methods

Platform - Scalable architecture

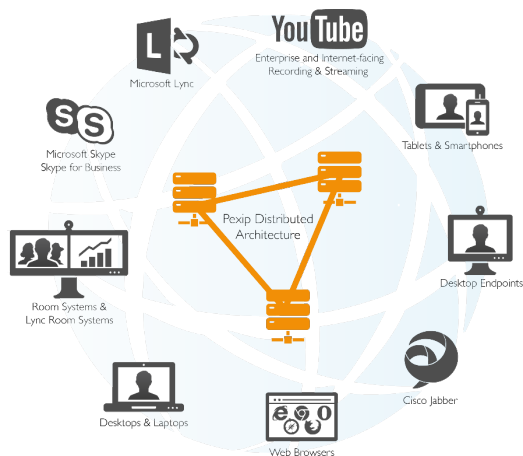


Scalable/Distributed Architecture

Platform - Scalable architecture



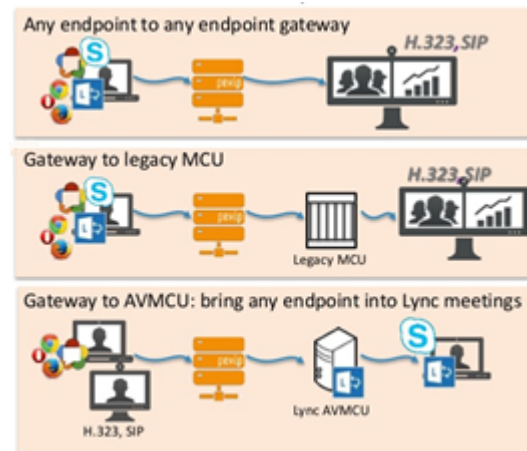
Platform overview



Multiple Connection Methods



Scalable/Distributed Architecture

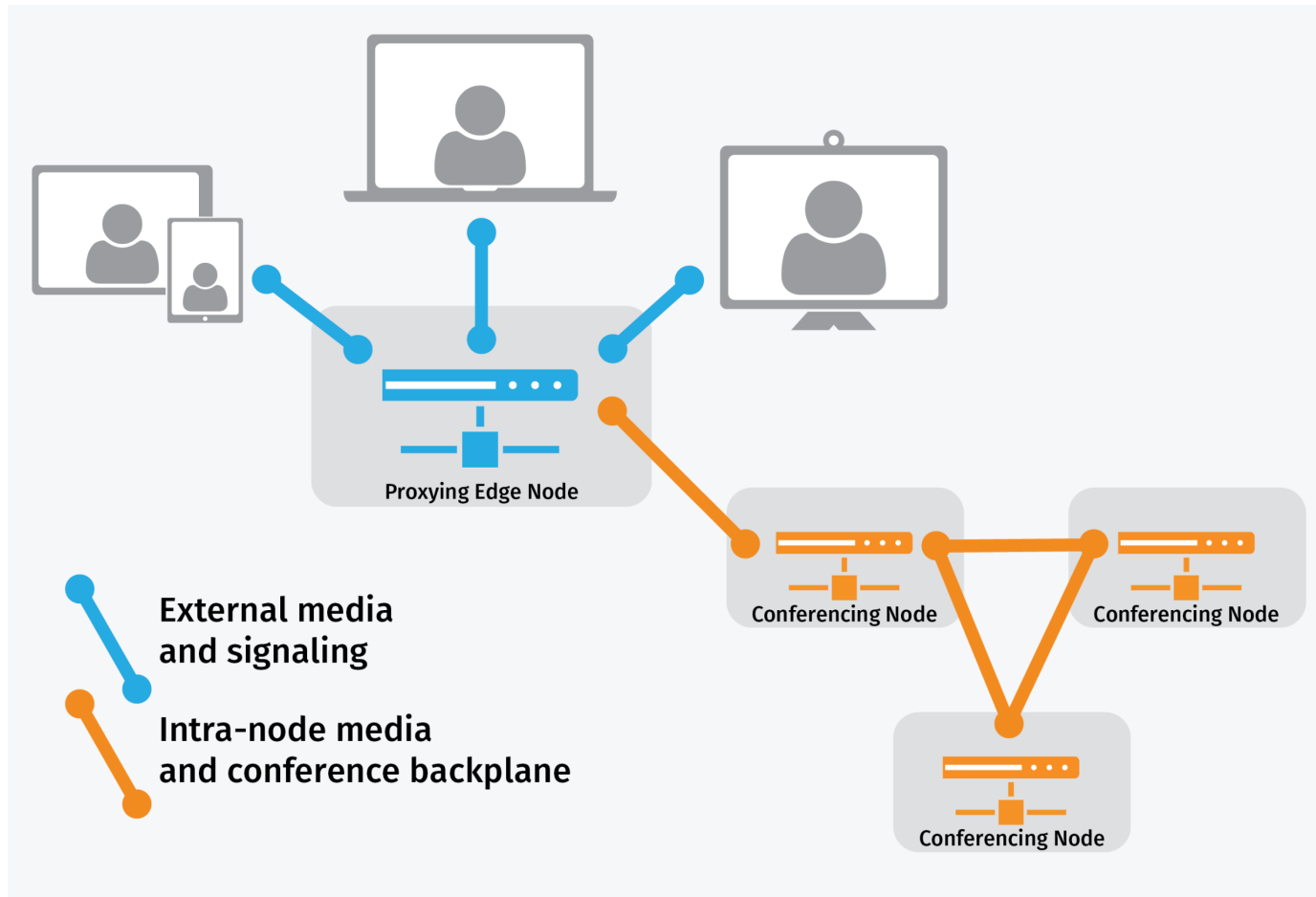


Distributed Gateway



3rd Party tools and Open API

Platform - Distributed edge



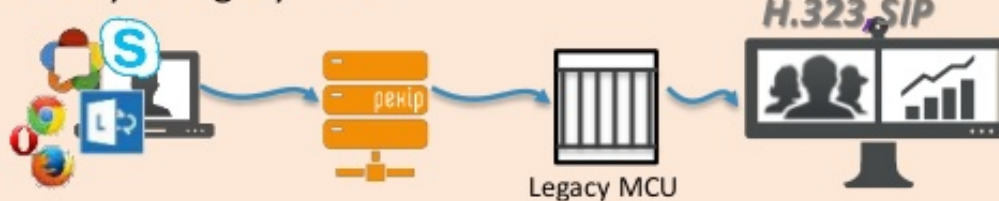
Distributed edge architecture

Platform - Gateway

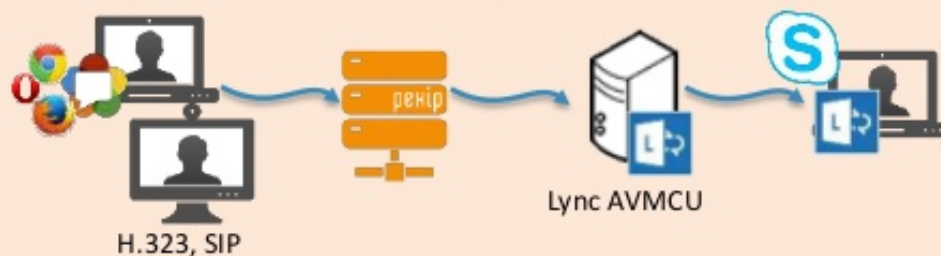
Any endpoint to any endpoint gateway



Gateway to legacy MCU



Gateway to AVMCU: bring any endpoint into Lync meetings

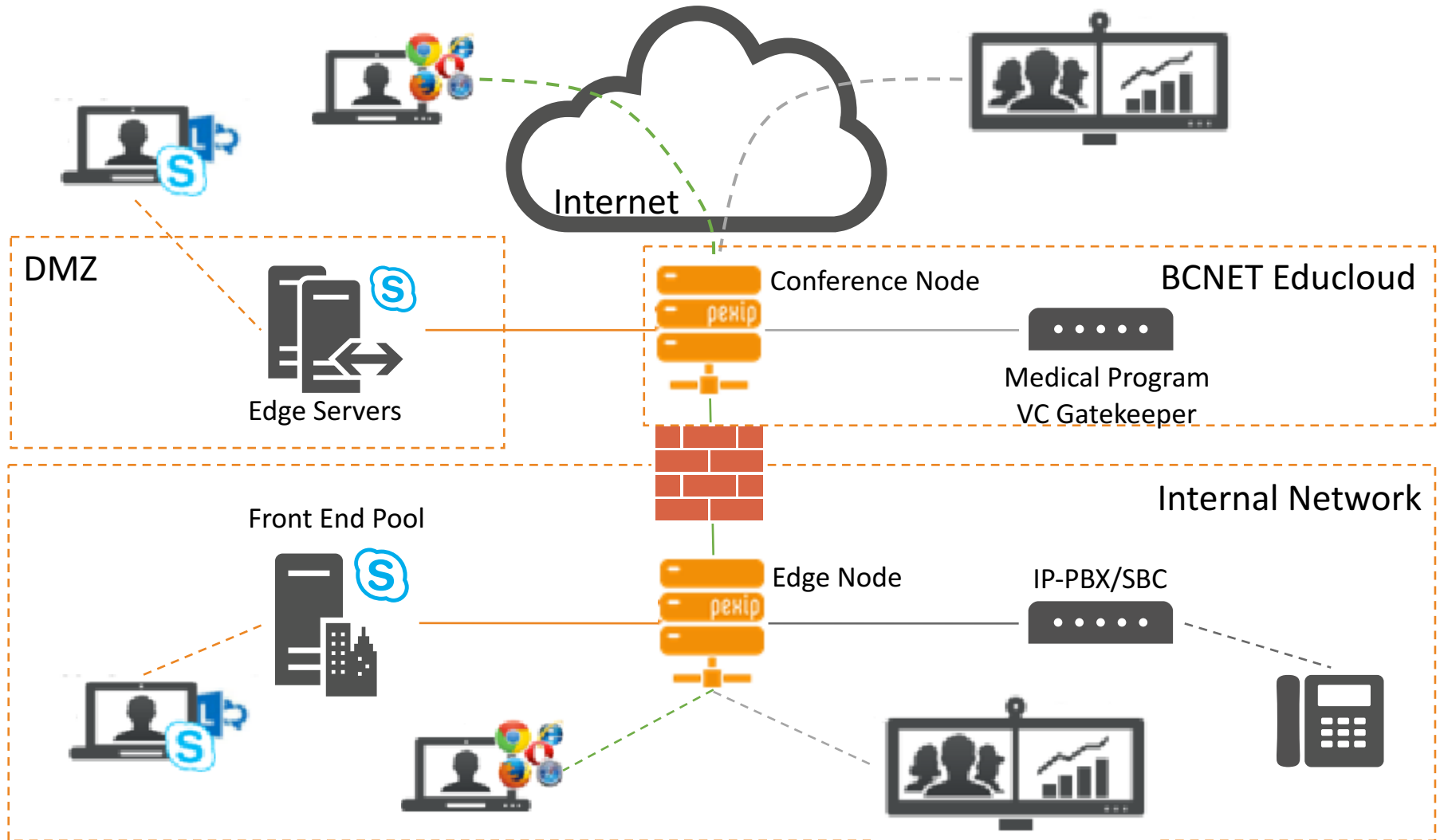


Gateway / Call Control / Endpoint Registrar

Platform - Open API



Platform Architecture



Proposal

(Draft)

Service Description

Meeting Size	<ul style="list-style-type: none">• 25-50 participants	
Connection Mode	<ul style="list-style-type: none">• Web Browser• Desktop VC app• Mobile App	<ul style="list-style-type: none">• Video Endpoint• Skype for Business• Telephone
Host controls (in call)	<ul style="list-style-type: none">• Add, remove, control (mute, guest/host) participants• Lock conference (security)• Start/stop recording and/or live stream• Share content, choose who shares content	

Service Description

Administration

- Ability to schedule meetings / send confirmations
- Create meeting rooms
- Administer meeting rooms (PIN, name, default settings)
- Control meetings in progress
 - Add/remove participants
 - Mute participants
 - Change layout, settings
 - Access call statistics on call connections
- Analyze call records and usage statistics

Service Description

Recording	<ul style="list-style-type: none">• Option** to use own service (if owned)• Via 3rd party service in Canada (rec.vc)• Host start/stop video• Host video management• Other features under review
Live streaming	<ul style="list-style-type: none">• Option to stream via RTMP compatible platform (Wowza, Adobe Media Server, Red5, public CDN)• Via 3rd party service in Canada (rec.vc)• Other features under review

Service Description

Gateway Services	<ul style="list-style-type: none">• Registration of video endpoints• On-prem edge (<i>registrations, bandwidth optimization</i>)• Dial plan and call handling (<i>Alias dialing, IVR</i>)• Skype for business client to video endpoints• Option** Video endpoint ability to join Skype for business hosted meetings
Branding	<ul style="list-style-type: none">• Option to brand with institutional theme• Customized IVR, splash screens, etc
Outlook integration	<ul style="list-style-type: none">• Option** to integrate into exchange and outlook client - automate creation of meetings

Support Model

Tier 1:

Local institution AV/IT
unit

- Orientation and training for end users
- Provisioning rooms / Scheduling Calls
- Tier 1 support for calls and usage
- Tier 1 support workflows and process
- Support for:
 - Own classrooms and video endpoints
 - Remote participants (if desired)
 - Own peripheral platforms (recording, streaming skype for business, etc)
- Platform usage management

Support Model

Tier 2: Platform administrator	<ul style="list-style-type: none">• Training for institution AV/IT groups• Platform management• Feature release management• Escalated issues not resolved at Tier 1• Knowledge base / documentation curation• Consulting on niche needs & feature requests
Tier 3: Vendor	<ul style="list-style-type: none">• Vendor support, escalated by platform administrator

Support Model

Training and support

- Onboarding package
- Periodic training on changes and new features
- Ad-hoc feature training on request

Change management

- Forum for planning updates, changes, outages and expansion

Service committee

- Service direction
- Performance management
- Feature planning
- Cost modelling

Cost Model (draft)

*** Cost model omitted until finalized ***

Feature comparison Pexip vs. Bluejeans

Feature	Bluejeans	Pexip
FIPPA Compliant	✗	✓
On-Net / Peering	✗	✓
Meetings - 50 participants	✓	✓
Breakout rooms**	⚠️ 🔧	🔧
Browser, app, mobile, S4B, endpoint, phone access	✓	✓
Content sharing	✓	✓
Group chat	✓	✓

Feature comparison Pexip vs. Bluejeans

Feature	Bluejeans	Pexip
Endpoint registration	✗	✓
Gateway – network / platform interop	⚠	✓
Recording + host controls	✓	🔧 🛒
Live stream + host controls	✓	✓ 🛒
Controls in meeting	✓	✓
Concierge / Operator controls	⚠	🔧
Outlook integration	✓	✓
Analytics	✓	🛒

Member Perspective

Simon Fraser University

Next Steps

Next steps

April/May 2017

- Finalize proposal
- Socialize proposal

Aug-Oct 2017

- Migrate interested groups

June/July 2017

- Approval Processes
- Trials for BCNET members

Q&A

Feedback