Your Team today

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Before We Start

panagenda
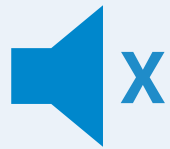
All attendee lines are muted

This is to prevent interruptions during the presentation.

Please submit questions via the Chat or Q&A panel

Your questions will be addressed directly during the webinar or in the Q&A section after the presentation.

The webinar is being recorded

After the webinar, we will send you a mail to give access to the recording and presentation slides.

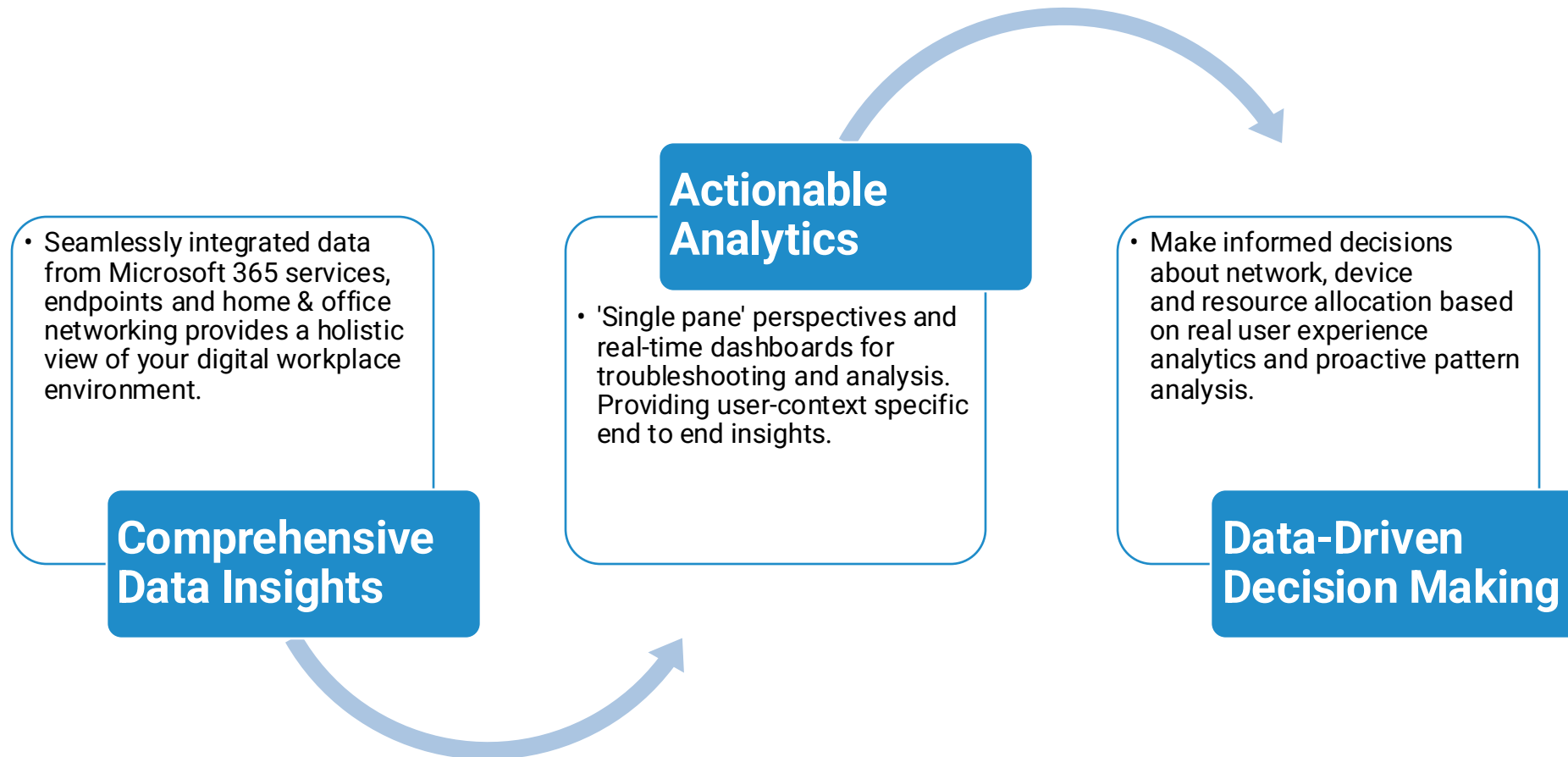**Share your feedback with us**

Please let us know what we can do better.

Agenda

1. What is OfficeExpert TrueDEM?

2. **Recently released** - June

3. **Deep Dive & Customer Cases:** "Insights" applied

4. Q & A

OfficeExpert TrueDEM

Advanced Microsoft Teams Call Quality Analytics
&
End to End User Experience Monitoring for Microsoft 365

Actionable Analytics

Comprehensive Data Insights

Data-Driven Decision Making

- Seamlessly integrated data from Microsoft 365 services, endpoints and home & office networking provides a holistic view of your digital workplace environment.

- 'Single pane' perspectives and real-time dashboards for troubleshooting and analysis. Providing user-context specific end to end insights.

- Make informed decisions about network, device and resource allocation based on real user experience analytics and proactive pattern analysis.

Recently Released

Upgrade Your Time
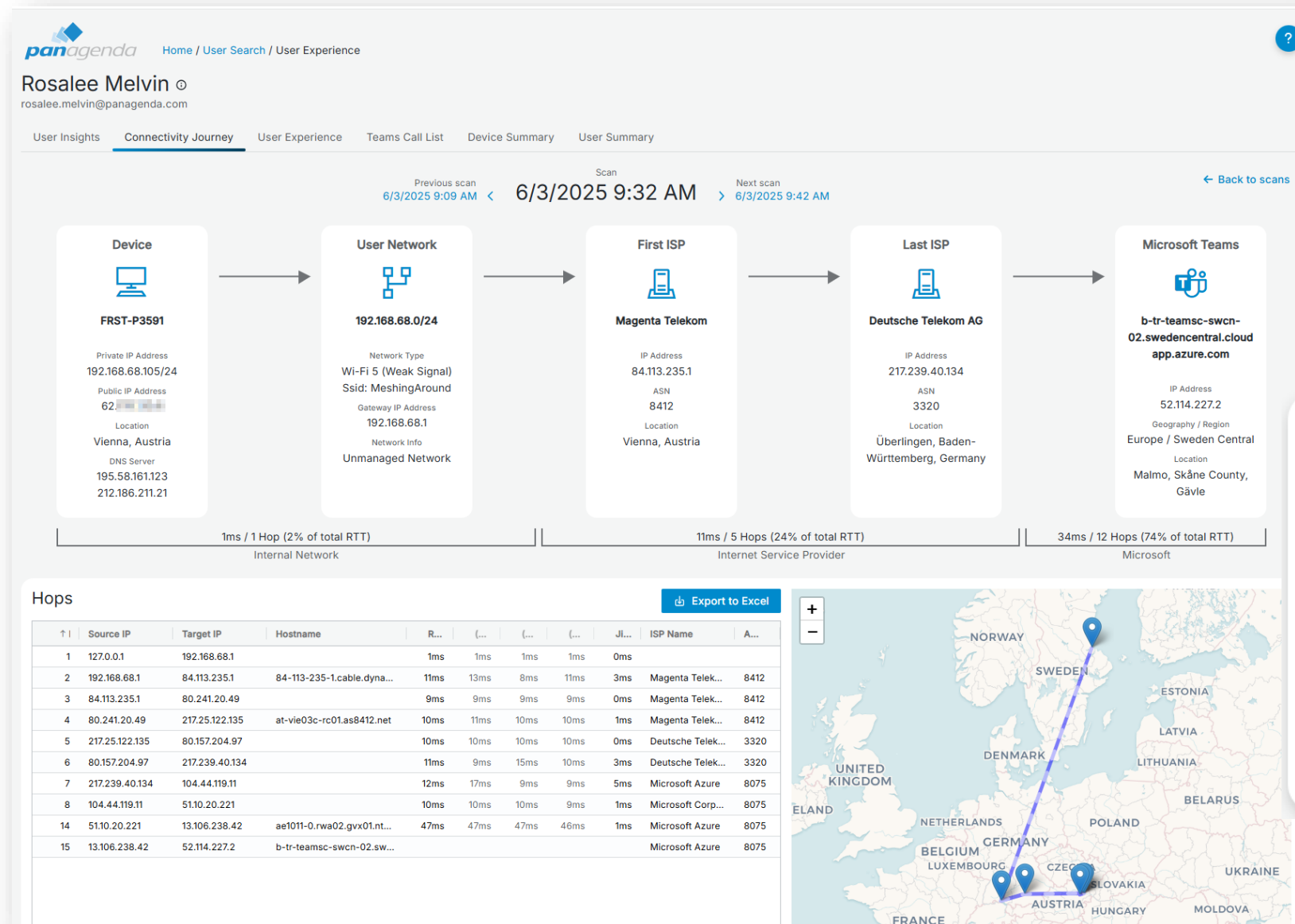
Recently Released - May

Agent
- V1.25 (preview on insider ring)
- Location & Privacy Settings

Portal
- Connectivity Journey & Routing
- Live Calls overview
- New Call Insights

https://www.panagenda.com/kbase/pages/viewpage.action?pageId=64620653

Connectivity Journey & Routing

New Call Insights

Data Source: All Call Data is Available   Call Status: Completed

Teams Meeting/Event	Start 05/28/2025, 10:53:15 AM	End 05/28/2025, 02:45:17 PM	Attendees 8	Attendee and Relay

Insights for Call

279e44c3-f3d4-485f-8c07-27160c96bffd

5 Insight(s) detected	3 User(s) Affected	0 User(s) on Wired	9 User(s) on Wi-Fi	0 User(s) switching Device/Platform

Attendees ⓘ

Worst S... ↓	Bot?	Participant
🔴 Degraded		Teresa Holland
🔴 Degraded		Mercy Law
🔴 Degraded		Leo Fritz
🔴 Degraded		Aliah Pitts
✓ Optimal		Rhys Hawkins
✓ Optimal		Leo Gill
✓ Optimal		Destin Poole
✓ Optimal		Dorian Cordova

Insights ⓘ

Group 2 ↑	CallerDisplayName 1 ↑	ManagedShortNetworkNa...	ManagedNetworkId	Teams NetworkType
＞ AV1 codec detected in VBSS stream (3)				
＞ More than 5 BSSIDs were used (1)				
⌄ Potential Firewall Port Exhaustion Detected (2)				
	Mercy Law	Unmanaged	Unmanaged	Wi-Fi
	Teresa Holland	Unmanaged	Unmanaged	Wi-Fi
⌄ User transmitted streams with the potential to impact older devices (1)				
	Teresa Holland	Unmanaged	Unmanaged	Wi-Fi
＞ Video codec changes detected (2)				

Entries: 9

10

Live Calls overview
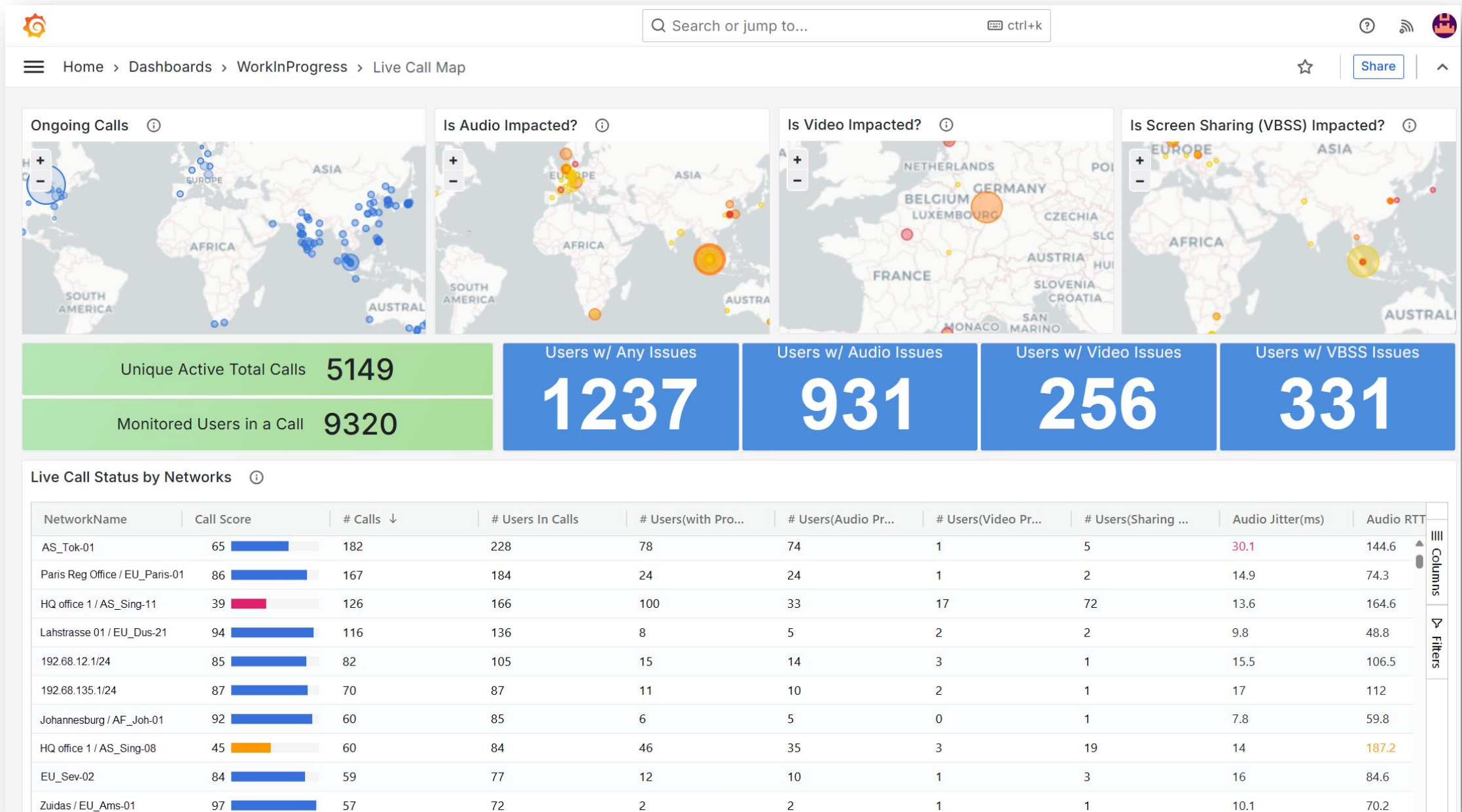
Deep Dive:
additional Call Insights

https://www.panagenda.com/kbase/x/E4QeBw

Upgrade Your Time

Insights – Spatial Audio Detected
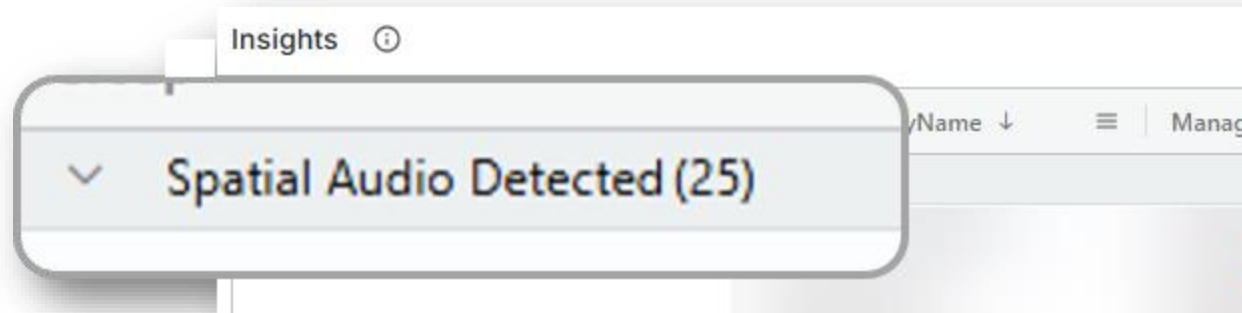
Spatial mode needs **200kbps** per Stream compared to SATIN which needs just **36kbps** for each direction. Using Spatial Audio can impact on Audio Quality.

TrueDEM can differentiate if Spatial Audio has been received and/or transmitted. Typically, the Audio Codec **x-multichannel2** is one of the indication.
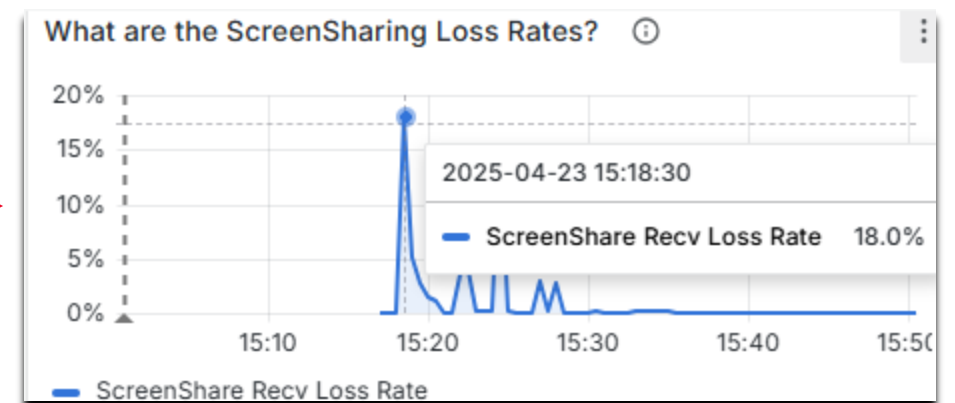
Note: Immersive Space(s) typically use Spatial Audio

Insights – AV1 codec detected in VBSS

Insights ⓘ

DisplayName ↓
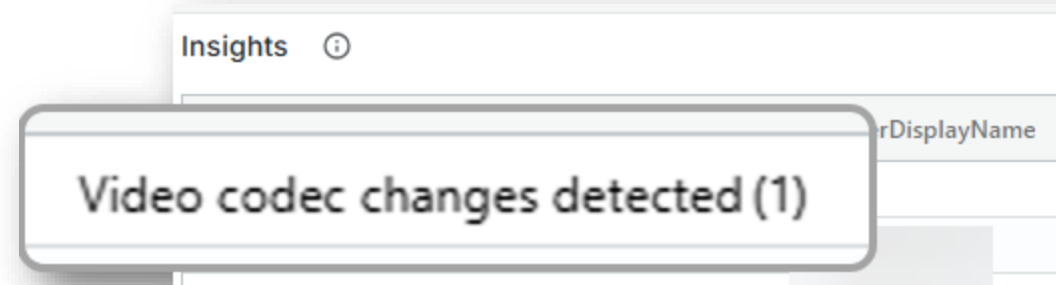
˅ AV1 codec detected in VBSS stream (4)
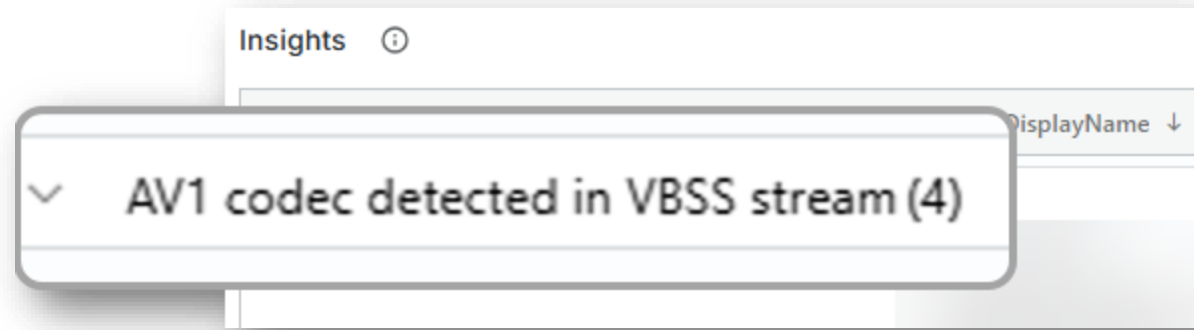
ScreenSharing codec changes during Call (HW or SW / AV1 or H264).
Teams Client decides based on certain conditions which codec is used and failover to h264 hw, sw.
These changes usually impacts the end user experience (loss rate, ...)

StartTime	ScreenShare_RecvCodec
4/23/2025 3:16:30 PM	
4/23/2025 3:17:00 PM	av1 sw
4/23/2025 3:17:30 PM	av1 sw
4/23/2025 3:18:00 PM	av1 sw
4/23/2025 3:18:30 PM	av1 sw
4/23/2025 3:19:00 PM	h264 hw
4/23/2025 3:19:30 PM	h264 hw
4/23/2025 3:20:00 PM	h264 hw
4/23/2025 3:20:30 PM	h264 hw
4/23/2025 3:21:00 PM	h264 hw

What are the ScreenSharing Loss Rates? ⓘ

2025-04-23 15:18:30
— ScreenShare Recv Loss Rate 18.0%

— ScreenShare Recv Loss Rate

Insights – Video codec changes detected

Video codec changes during Call. HW or SW, H264.
Teams Client and Operating System decides based on certain conditions which codec is used and failover to h264 hw, sw.These changes usually impacts the end user experience (loss rate, ...)

Customer UseCases

Upgrade Your Time

Case 1 – AV1 software codec used

Situation

- User uses powerful computer with Intel Arc Graphic card
- Card supports hardware encoding **and** decoding
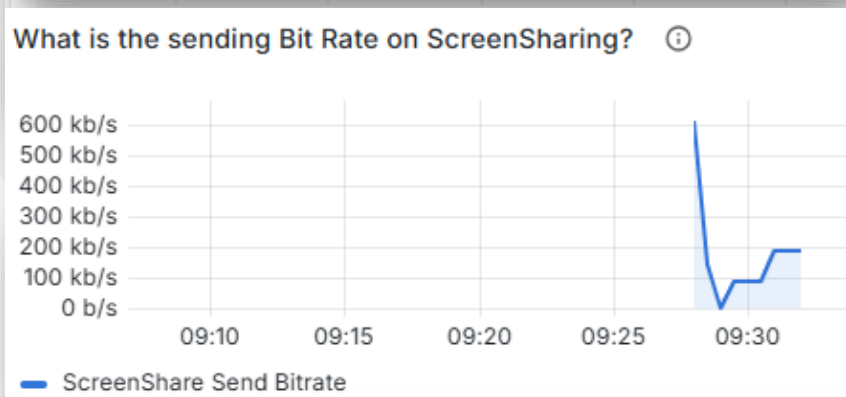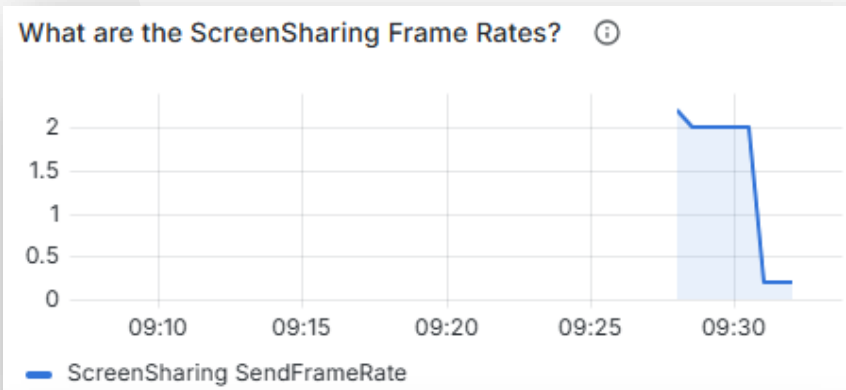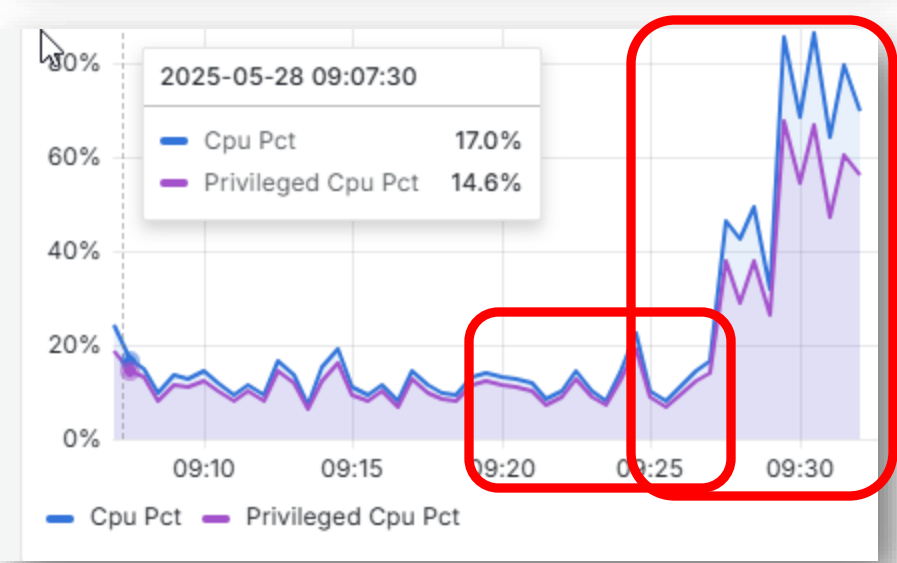- However software encoding/decoding were utilized

Feature	Intel Arc Graphics (64 EUs)
GPU Frequency	Up to 1.9 GHz
Shader Units	512
AV1 Support	Decode + Encode
Graphics Performance	~1.95 TFLOPS

Case 1 – Result (AVI software codec used)
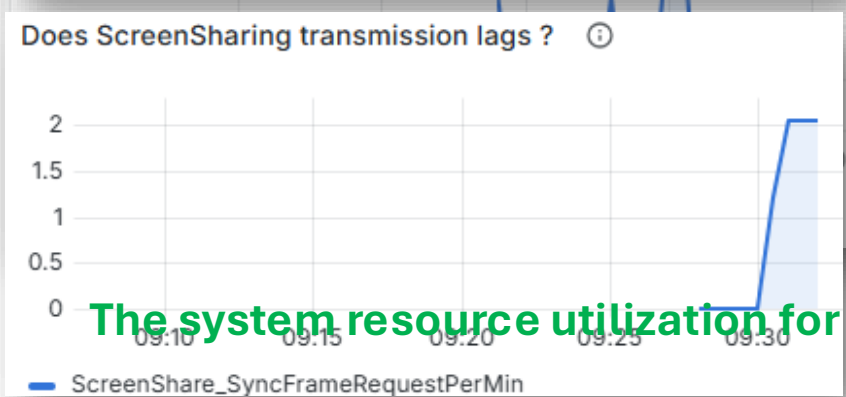
Case 2 – What was the User doing ?

Situation

- User joined Teams Meeting
- Media across all streams had poor quality
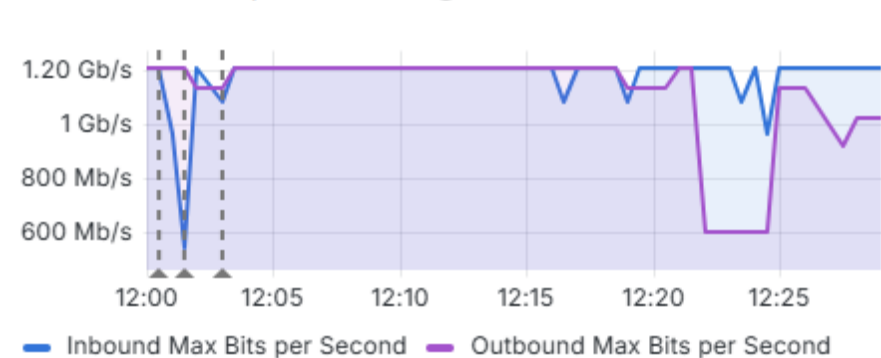- User reported „good" Network Connection
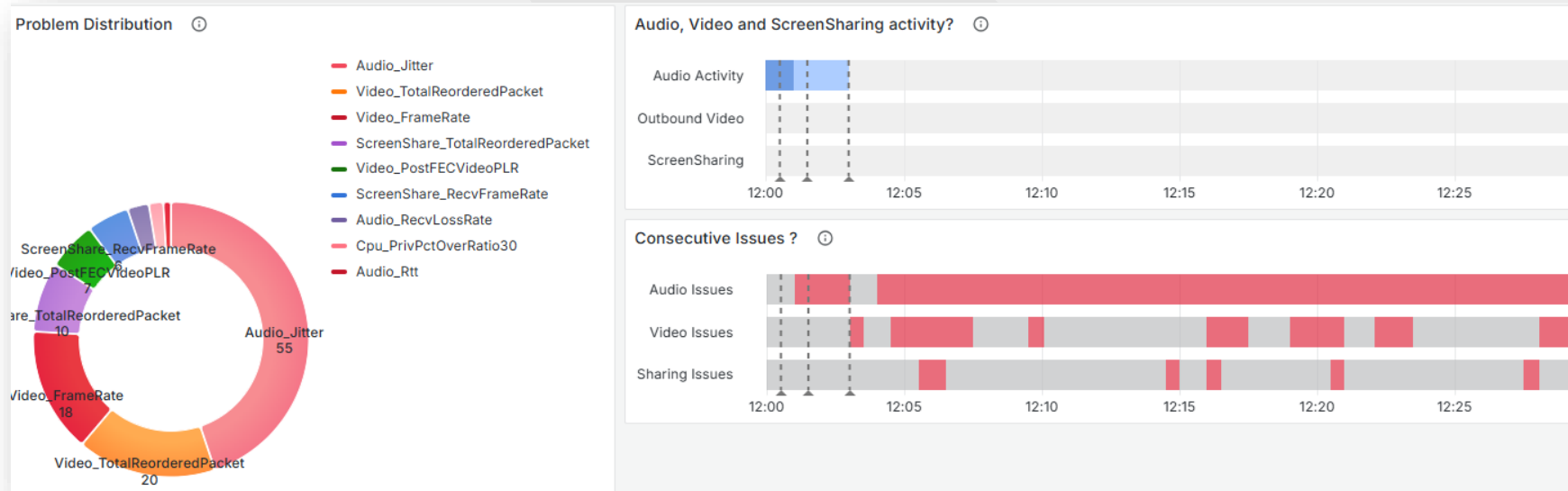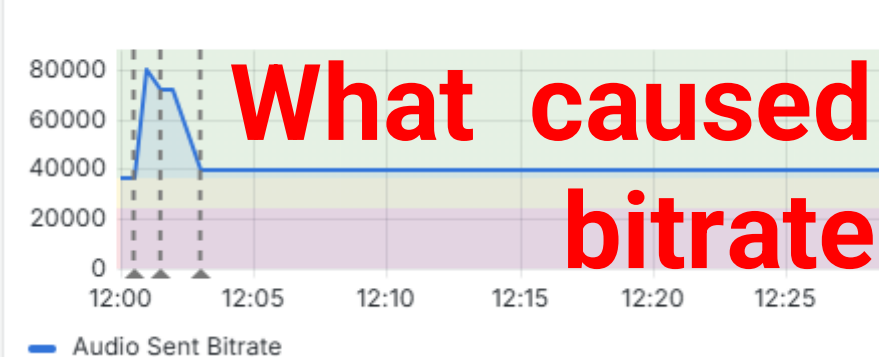
Case 2 – Result (What was the User doing ?)

- 3 Insights detected
- Network was a bit volatile
- But Audio Bitrate even increased!

Insights ⓘ

Insight 1 ↑
Audio codec changes detected
Audio stream was transferred between mobile and desktop versions of Teams
AV1 codec detected in VBSS stream

Wireless Inbound/Outbound ⓘ

1.20 Gb/s
1 Gb/s
800 Mb/s
600 Mb/s

12:00   12:05   12:10   12:15   12:20   12:25

— Inbound Max Bits per Second   — Outbound Max Bits per Second

Audio Sent Bitrate ⓘ

80000
60000
40000
20000
0

12:00   12:05   12:10   12:15   12:20   12:25

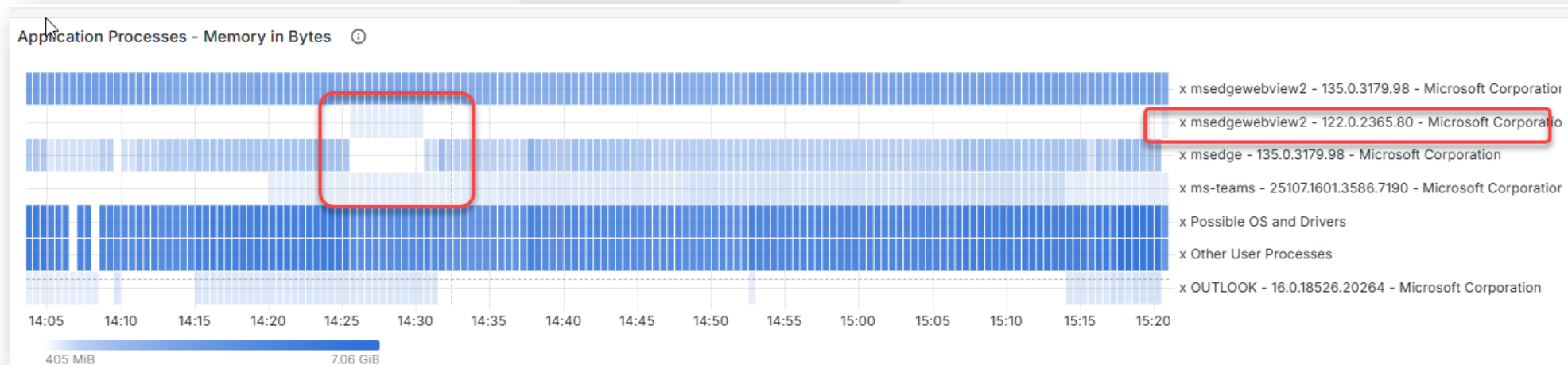— Audio Sent Bitrate

What caused the high bitrate ?

Was music involved ? High Fidelity Mode ? Spatial Audio? Or something else ?

Case 3 – Webview2 Runtime

Situation

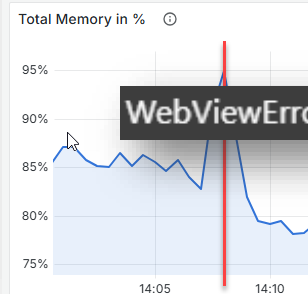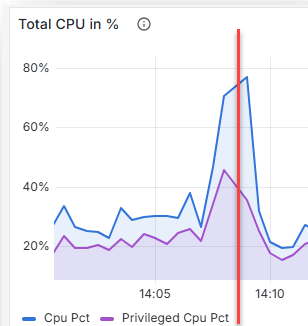- User reported Video related quality problems

Different Webview2 Runtime versions can potentially compete for GPU resources!

Final Case – Teams Client blows up

Situation

- Early Access Teams Client Version was used
- Device: 16GB memory
- Meeting with Externals – External was sharing Screen

- Teams Client crashed and restarted two times
- All Users experience poor VBSS quality

Final Case – Teams Client blows up

Total CPU in %

80%
60%
40%
20%

14:05   14:10

— Cpu Pct   — Privileged Cpu Pct

Total Memory in %

95%
90%
85%
80%
75%

14:05   14:10

Is the User impacted by ScreenSharing Quality

2.5
2

— ScreenShare Recv Frame Rate

```
.354688+02:00 0x00002358 <ERR>   PieOwnerWebView: Reset PIE bridge due to process error.
.365278+02:00 0x00002358 <INFO> WebViewErrorHandler: Restarting app due to webview process failure
.365278+02:00 0x00002358 <ERR>   WebViewErrorHandler: Renderer crash detected, restarting app
```

```
WebViewErrorHandler: shell_process_failed failureKind: RENDER_PROCESS_EXITED, reason: OUT_OF_MEMORY, description: , update restart in progress:
```

What is the received Bit Rate on ScreenSharing?

What is the received Bit Rate on ScreenSharing?

800 kb/s
600 kb/s
400 kb/s
200 kb/s
0 b/s

13:55   14:00   14:05   14:10   14:15   14:20

— ScreenShare Recv Bitrate

panagenda
WEBINAR

Join Us Next Time On:

September 3rd 2025

THANK YOU!