



Demystified

OPEN **SOURCE**

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IP SHOWCASE THEATRE AT IBC – SEPT. 14-18, 2018



Agenda

- Context
- SRT Protocol Fundamentals
 - Protocol Flow
 - Packet Structure
 - Security / Encryption
 - Overhead & Latency
- Real-Life Implementations & Lessons Learned
- Q&A

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Context & Requirements

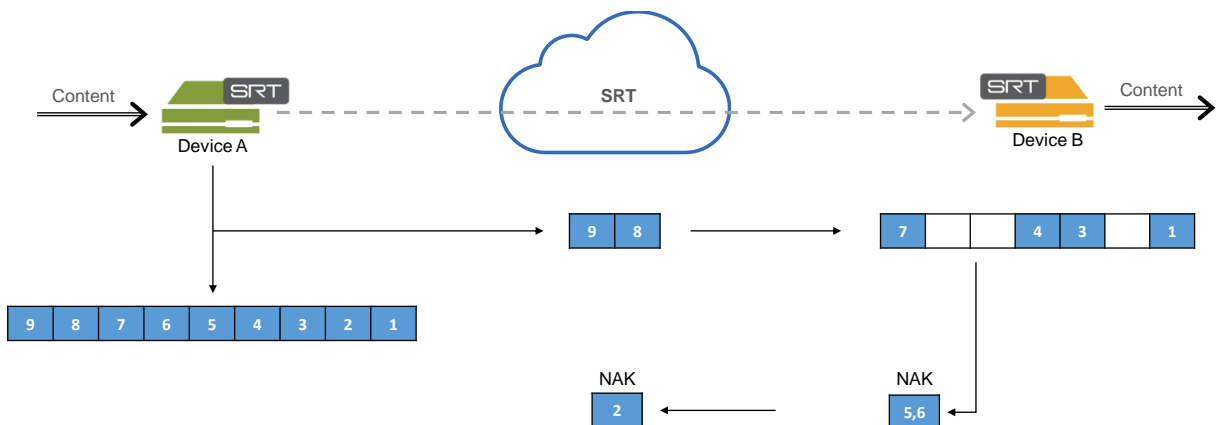
- Content agnostic
- Latency "cautious"
- Stream integrity
- Content protection
- IT friendly

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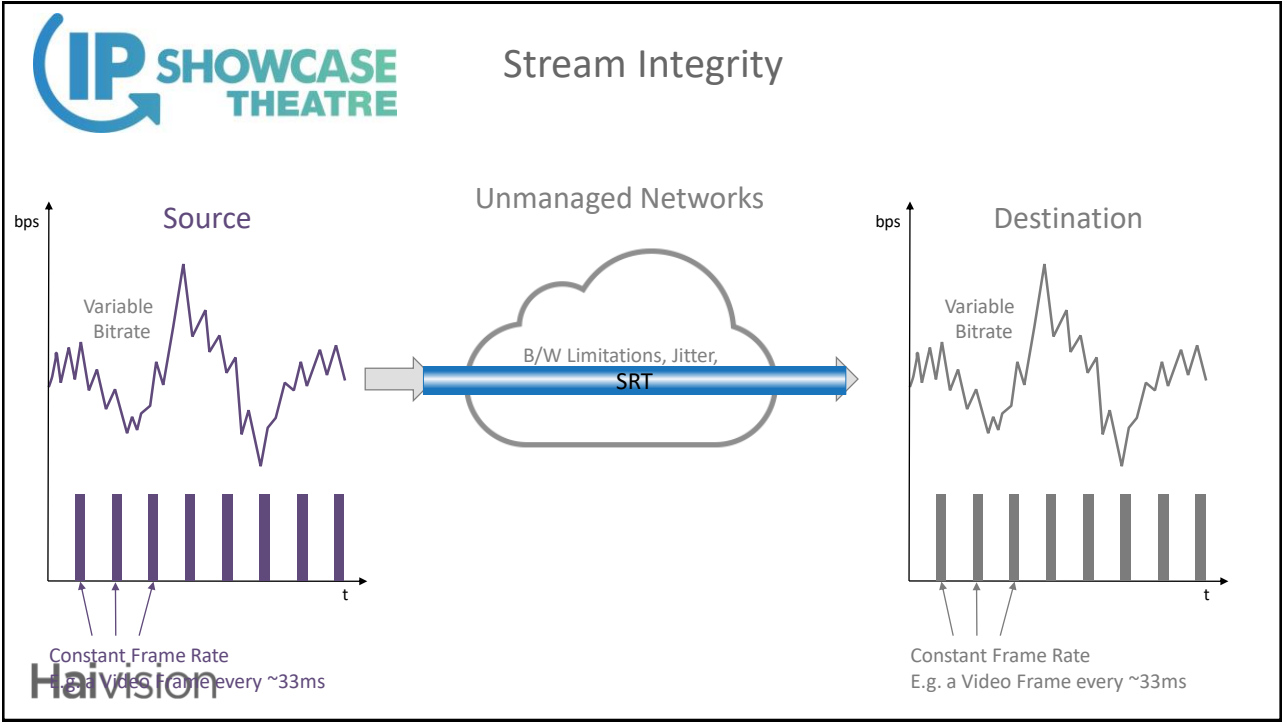
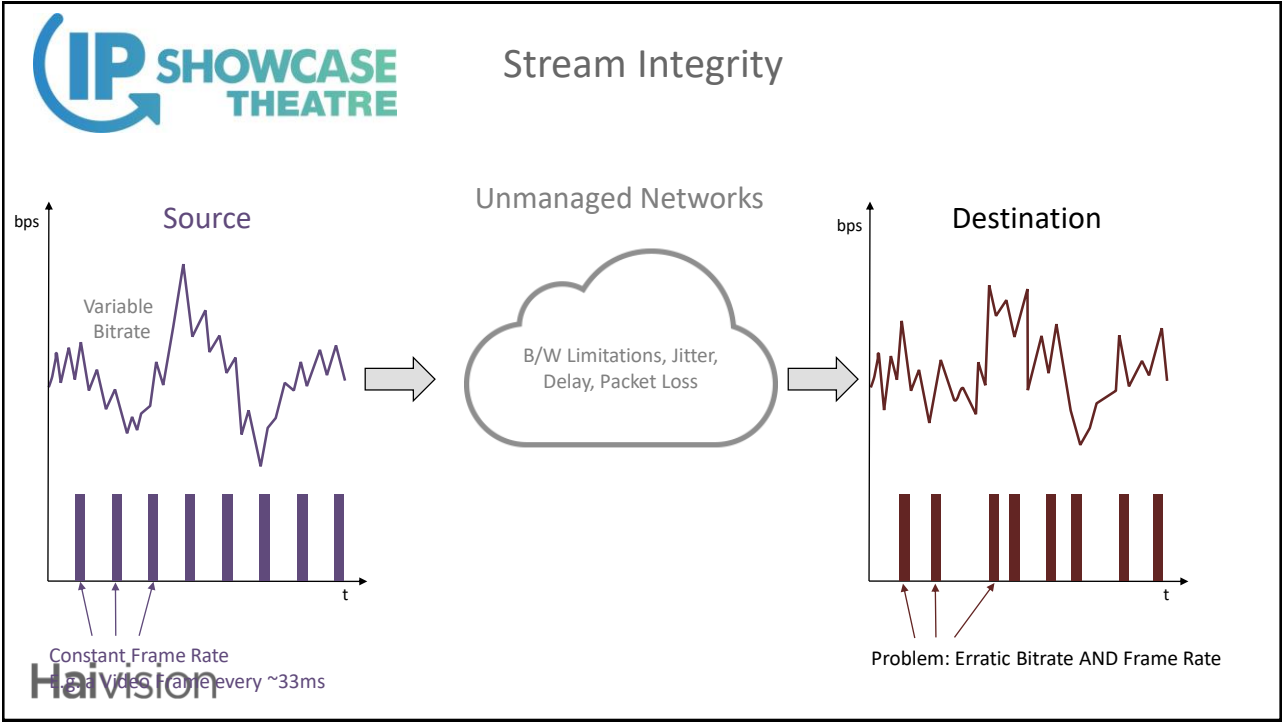
3



Latency / Buffer

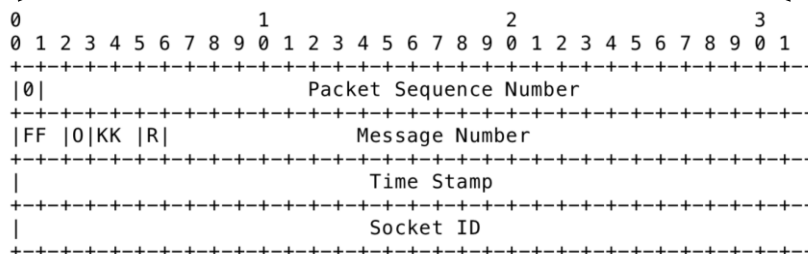


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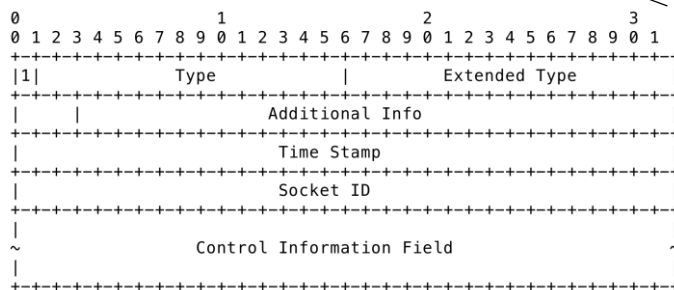
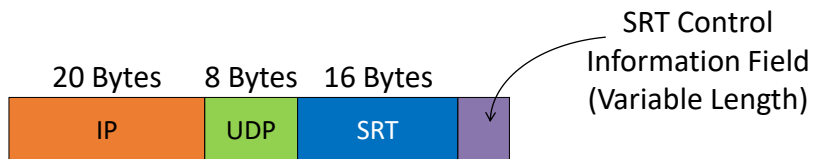
Content Packet Structure



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Control Packet Structure



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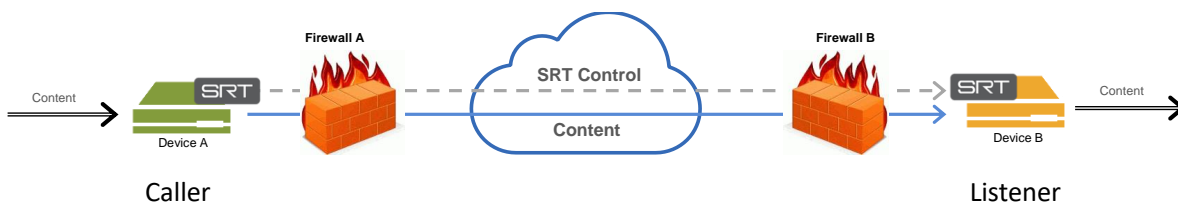
Security & Encryption

- DDOS Attack prevention
- AES 128/192/256-Bit Encrypted
- Payload encrypted with cipher in AES-CTR mode
- Secret / pass-phrase is not part of the protocol (application layer)

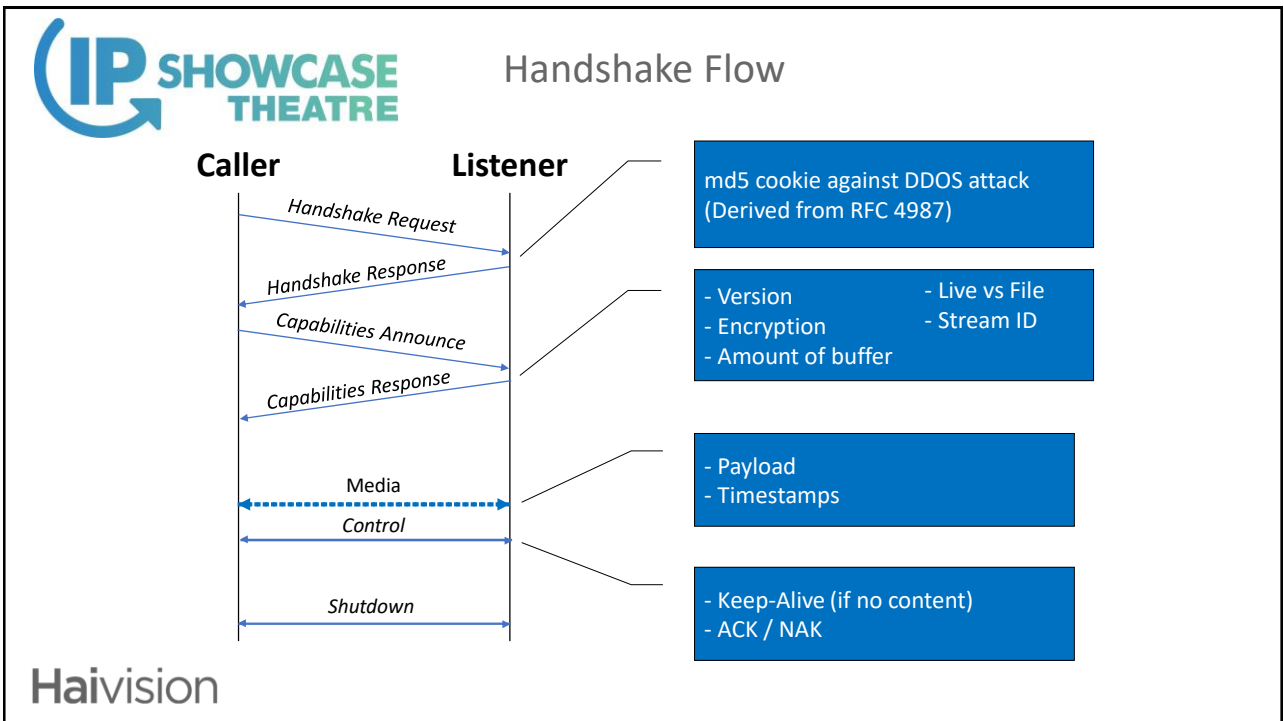
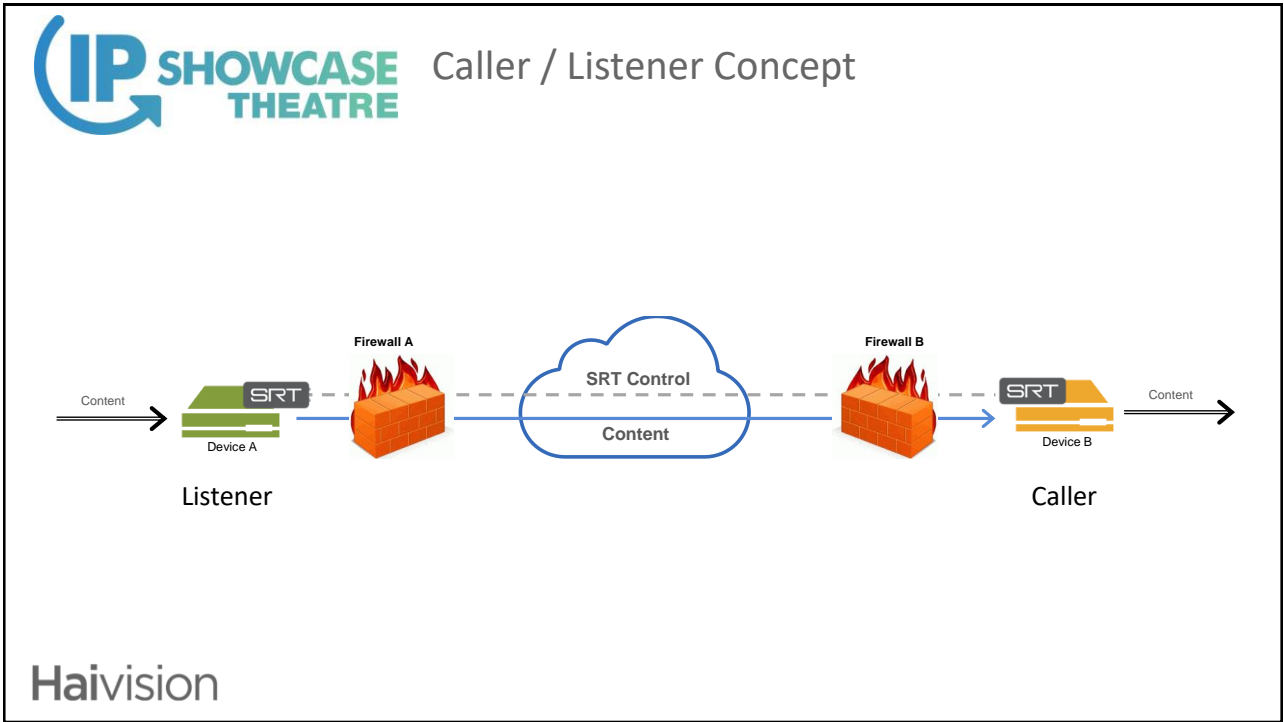
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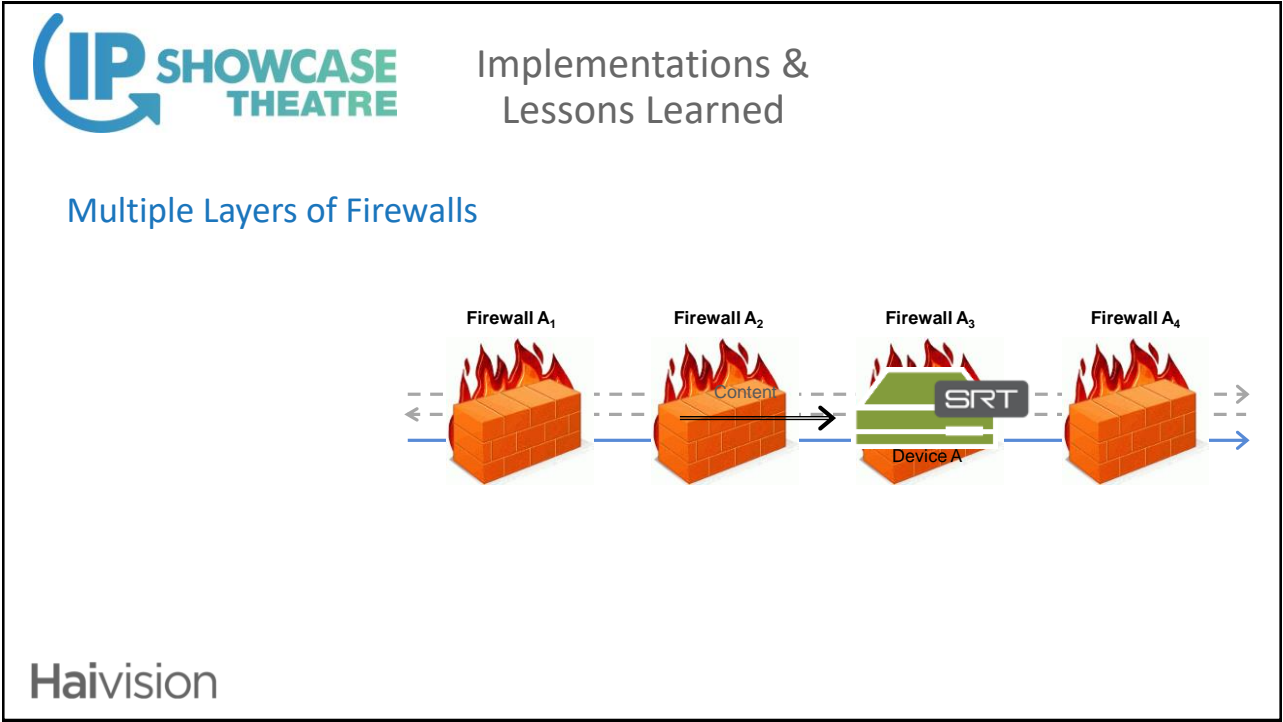
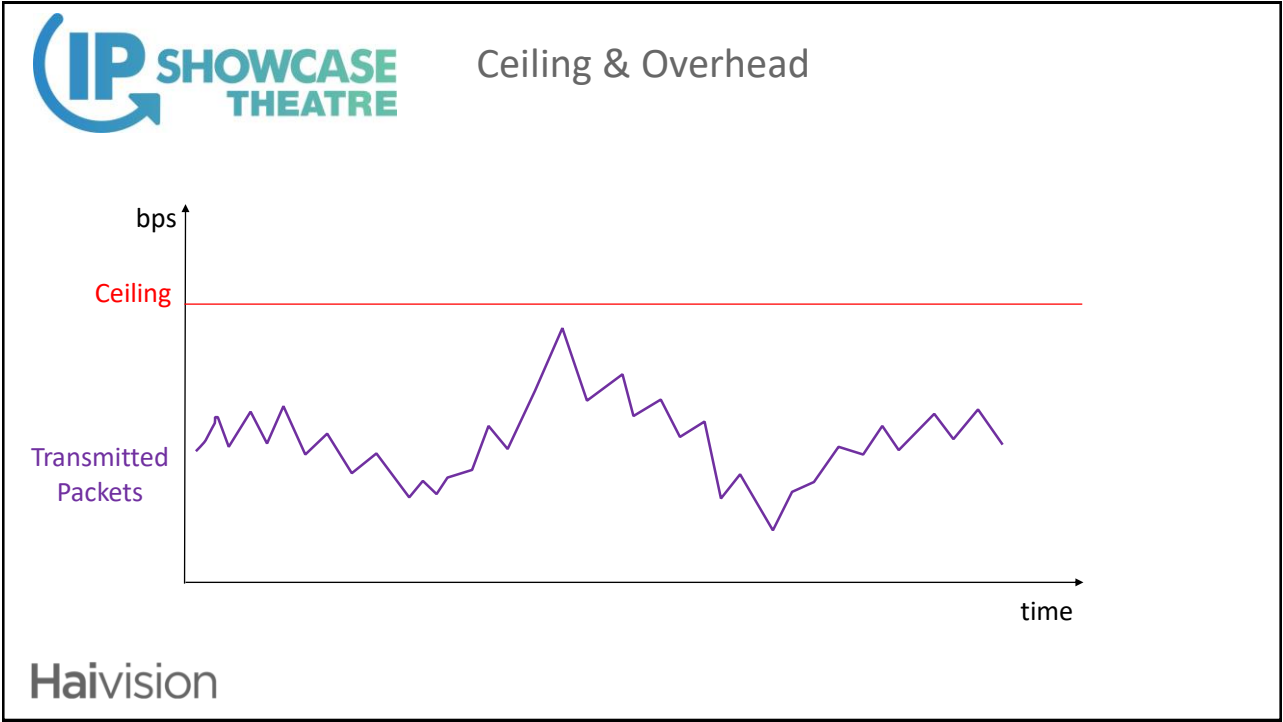


Caller / Listener Concept



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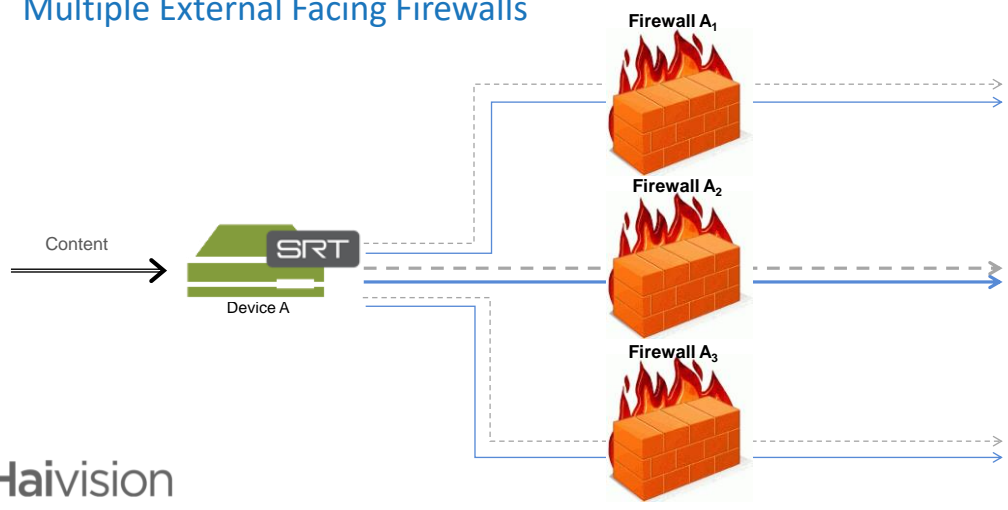






Implementations & Lessons Learned

Multiple External Facing Firewalls

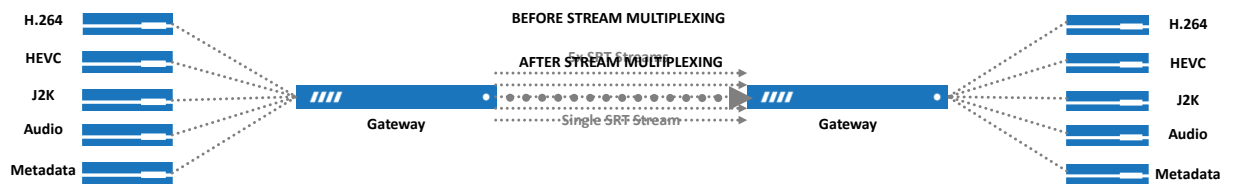


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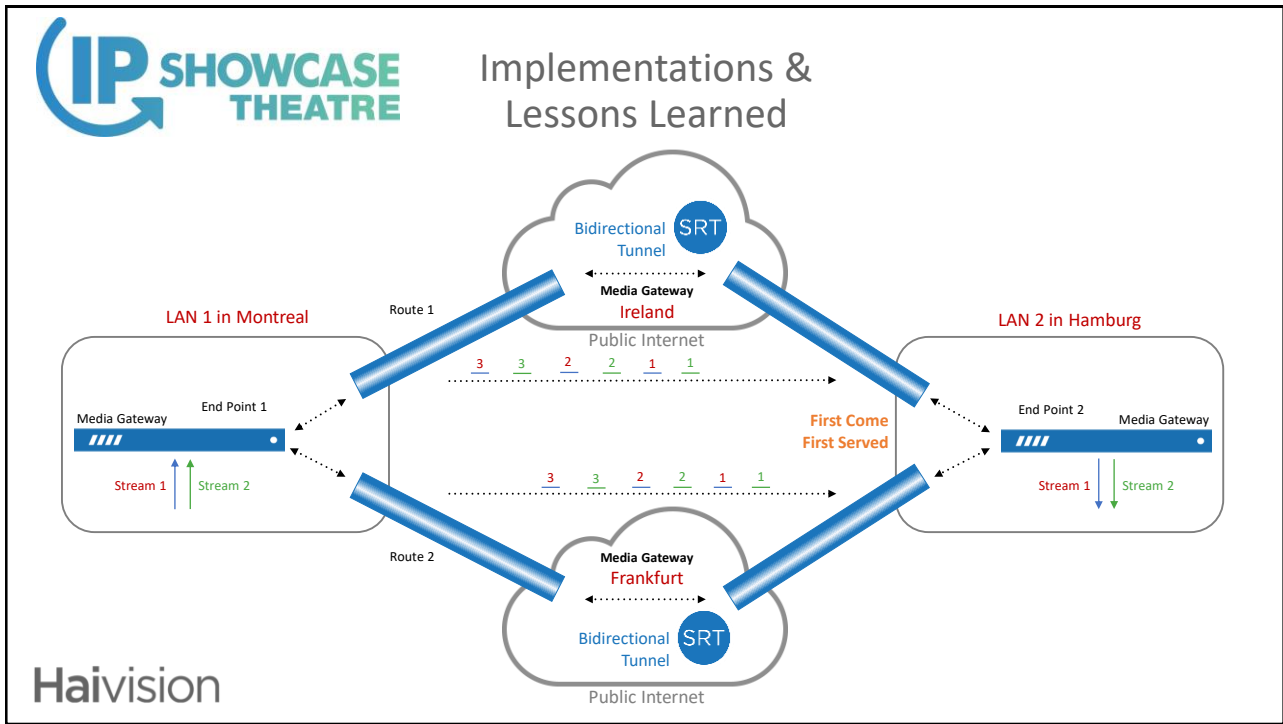


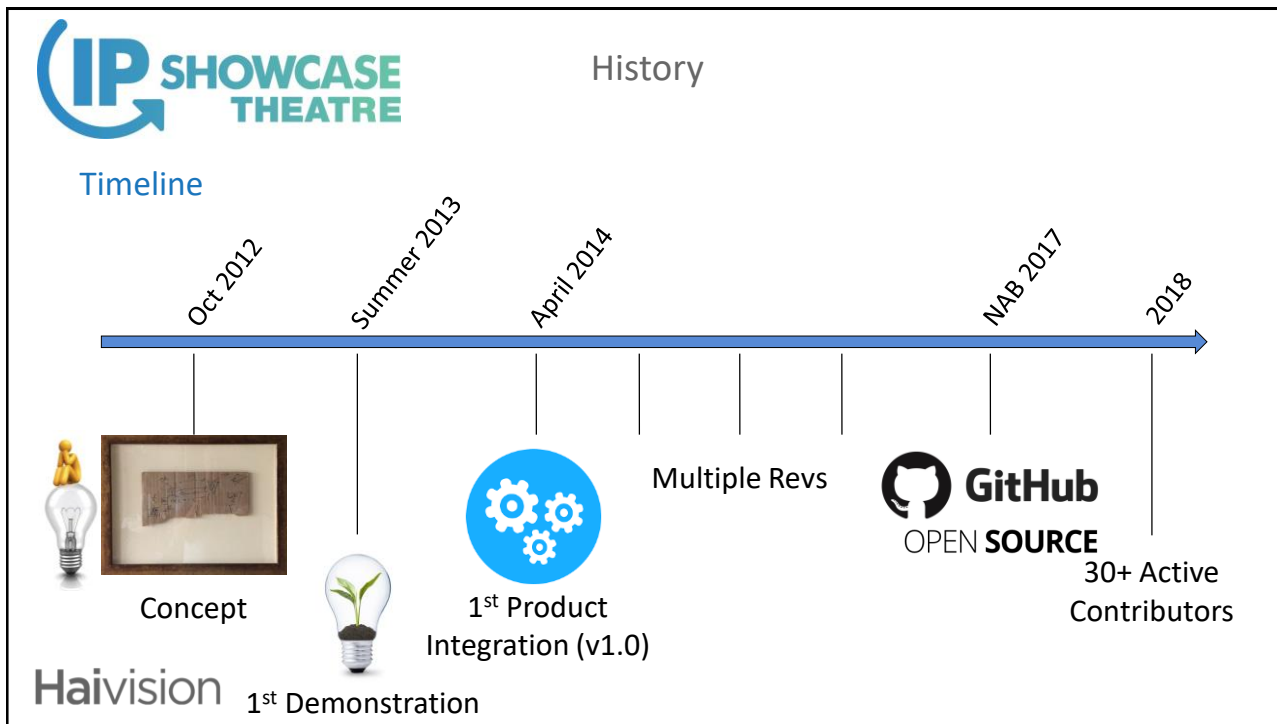
Implementations & Lessons Learned

Stream Multiplexing



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IP SHOWCASE THEATRE

CURATED BY **VSF**
VIDEO SERVICES FORUM

Thank You

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Detailed description: A 'Thank You' slide. It features the IP Showcase Theatre logo at the top left and the Video Services Forum (VSF) logo at the top right. The main text is centered, reading 'Thank You' in a large font, followed by 'Ghislain Collette, Haivision' and contact information 'gcollette@haivision.com +1.514.334.5445'. The Haivision logo is at the bottom left, and the event name 'IP SHOWCASE THEATRE AT IBC – SEPT. 14-18, 2018' is at the bottom right.