IMAGINE THE POSSIBILITIES...
Leveraging Legacy Video in DAA Networks

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Leveraging Legacy Video in DAA Networks

Architectural Considerations

- Re-use already existing conditional access gear and configurations where available
- Achieve at least the same amount of reliability as the solution we’re replacing
- Leverage as much new, more reliable, technology as possible
- Make DAA Video simple to administer, monitor, and operate
- Ensure the solution is modular, easy to scale, and easy to decommission
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Headend

Broadcast Video

Hub Site

Video On Demand

Internet & Phone
(CCAP)

Legacy Video
Control Signaling
(Downstream)

Legacy Video
Control Signaling
(Upstream)

RF Plant

RF Combining

Analog HFC Node

RF Combining

RF

Customer Home

Modem

Set-top Box
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Data Centre
- Broadcast Video
- Video Aux Core
- Video On Demand
- Internet & Phone (CCAP)

Hub Site
- Legacy Video Control Signaling (Downstream)
- CIN

RF Plant
- Remote-PHY Device

Customer Home
- Modem
- Set-top Box

IP
- RF

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Monitoring Solution

- End-to-end IP transport allows for probe installation at edge
- Single pane of glass for both DAA and Legacy video quality assurance monitoring
- Multicast provides enhanced regional video quality assurance and allows for fewer probes for trapping
Automation

- Automated, single touch configuration and provisioning
- Virtual Topology Manager (VTM) presents a footprint-wide configuration and administration endpoint for all day-to-day video tasks
- Video Activation for DAA RPDs (VADR) provides an automation frontend for video aux core
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Provisioning and Activation workflow

1. Pre-configuration of Hub Site/node in Resource Inventory (RI)
2. Service Director provisioning
3. BEANS provisioning
4. VADR provisioning
5. RPD turn up
6. PTP and GCP handshake
Lessons Learned

- IPv6 Addressing and automation of DAA network
- Regional and multicast considerations and network implications
- High availability and network (CIN) failover (redundancy)
- Edge compute
- Physical and virtual channel interplay (EIA re-alignment across small/medium markets)
- OAMP networking (Management Network) considerations
- DAA Video DEPI distance constraints
- Regionalization against multiple conditional access systems
- Resource inventory considerations
Thank You!

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