AMT / Multicast
(RFC 7450, Automatic Multicast Tunneling)

Extending AMT’s reference implementation toward deployment

https://github.com/GrumpyOldTroll/amt
Jake Holland, Akamai
Source Pool 1:
1 ipv4 and 1 ipv6 multicast source
multicast source addresses:
- x.y.z.1
- 2600:a:b:c::1
AMT relays embedded in senders (geographically distributed)

Source Pool 2:
1 ipv4 and 1 ipv6 multicast source
multicast source addresses:
- x.y.z.2
- 2600:a:b:c::2
AMT relays embedded in senders (geographically distributed)

AMT discovery (anycast)
- distribute relay tunnels intelligently
- Source pool chosen by Discovery IP

AMT relays embedded in senders (geographically distributed)

Discovery servers

AMT gateway
ISP1
AMT gateway
ISP2
AMT gateway
ISP3

Options:
1. CSR1000v
2. Open-source VM

AMT relay
Cisco
Juniper
Open-source VM
Wifi vendors?

Native multicast

Clients
SSM join to (S,G): x.y.z.1 => 232.k.j.l

Planned Deployment Overview
This weekend:

• Ported amtrelayd to OpenWRT
• Bugfixes, cleanup
• Testbed setup documented
• Experiments running video
  • native multicast
  • AMT-encapsulated
Acknowledgements

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• Codarren Velvindron, Orange (remotely contributing)
  • installing AMT on his home OpenWRT

Prior work:
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  • Previous work on initial AMT project
• Bill Atwood, Concordia University
  • Previous work on VLC integration, testing