

Multicast over SPRING @hackathon

Relevant specifications:

- <https://tools.ietf.org/html/draft-ietf-6man-segment-routing-header-06>
- <https://tools.ietf.org/html/rfc7450>

Project Champions:

- Jake Holland
- John Brzozowski

AMT+mcproxy Implementation Update

Plusses:

- IPv6 support added (gateway and relay)
- Gateway+mcproxy on openwrt
- several bugs fixed

Minuses:

- broke bsd build, if it worked before

<https://github.com/GrumpyOldTroll/amt>

<https://github.com/GrumpyOldTroll/amt-openwrt>

<https://github.com/GrumpyOldTroll/mcproxy>

<https://github.com/GrumpyOldTroll/mcproxy-openwrt>

Hackathon

Requirement:

- native multicast over CMTS without PIM upstream
 - insert reasons from John here

Solution:

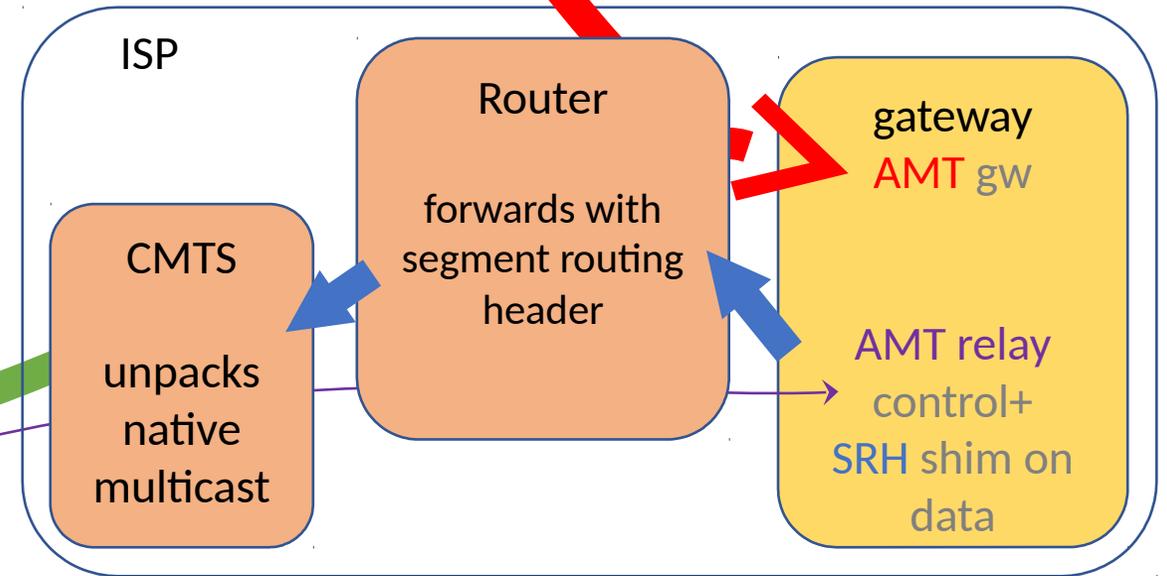
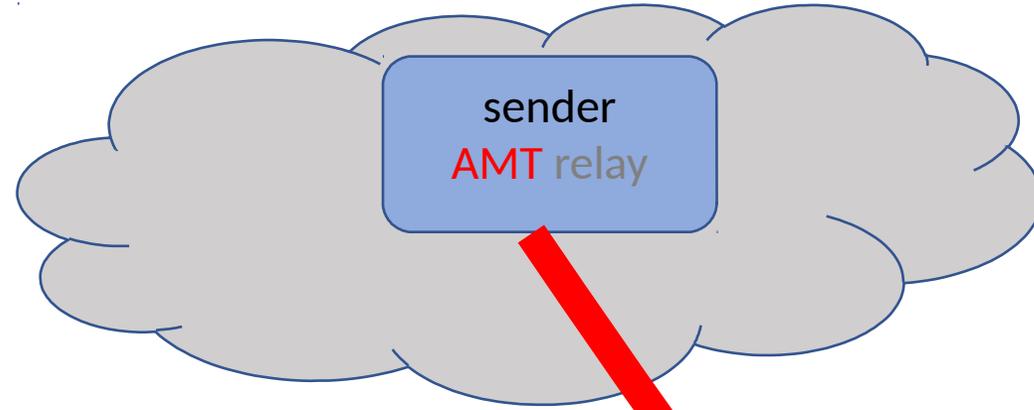
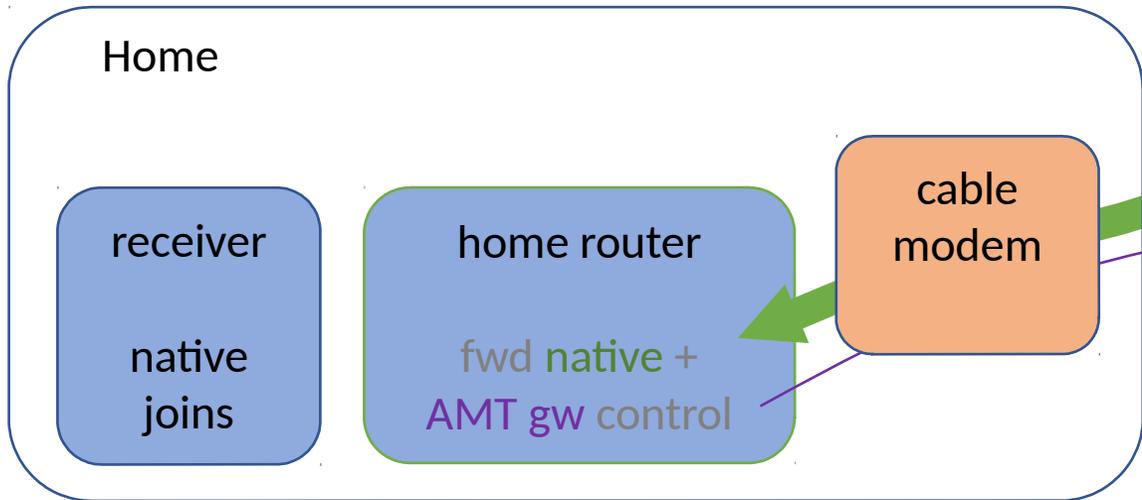
- dump data packets from relay raw with a shim (instead of forwarding AMT-encapsulated)
 - IP lookup for configured SRH shim
 - send once per SRH (shared across gateways)

Topology

 =John's

 =Jake's

 =main hacking target
- linux host
- lives in John's network
- forwards traffic



AMT project: useful next steps

- Conformance test suite (packetdrill, fuzzing)
- Gateway source-filtering (+ permit multiple gw instances)
- pimd support (report from /proc/net/mcfilter[6] or ioctl)
- Automated CI
- High-performance forwarding path
- Package for distros
- Deployable containers

Progress as time permits

Volunteers very welcome ^{^^}