WiFi at IndiaFOSS 6.0

Powered by FOSS

Team members:

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Open Source Tools Used



freeRADIUS





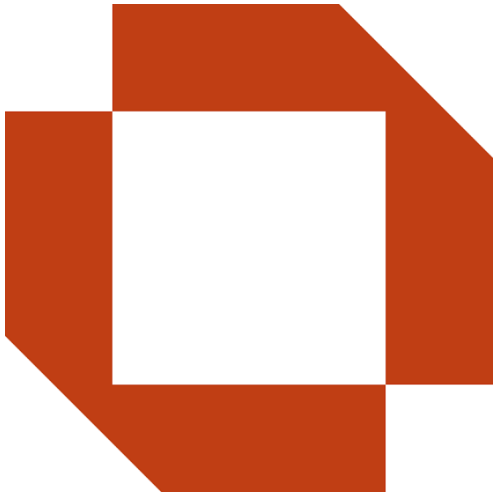


Unbound



kea







MariaDB

Scale of the Deployment

2 days

~2,000 attendees, 3 Halls, 3 Rooms, and 75 booths

1 Gbps

ACT line

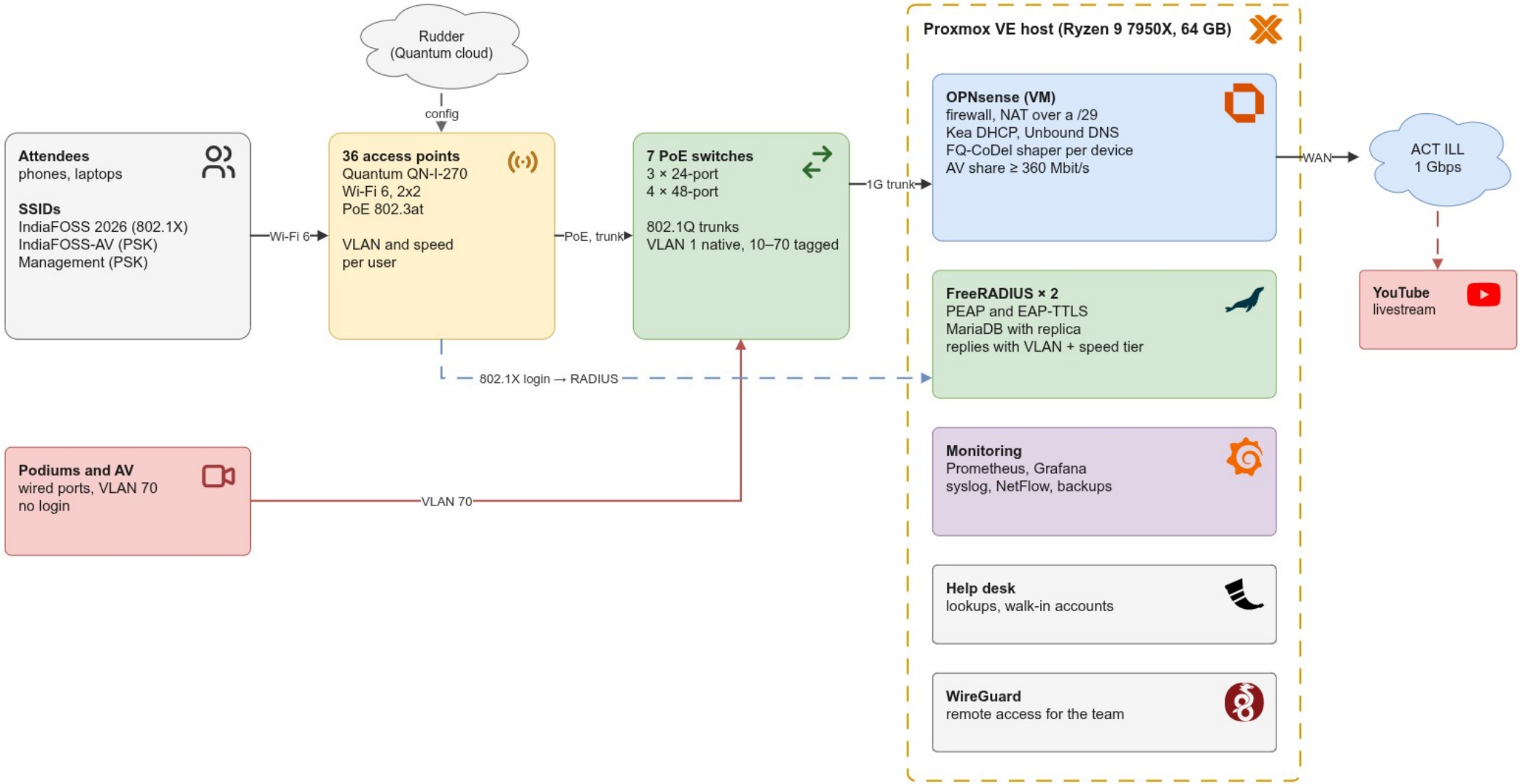
36 APs and 7 Switches

Wi-Fi 6, taped under seats and on walls

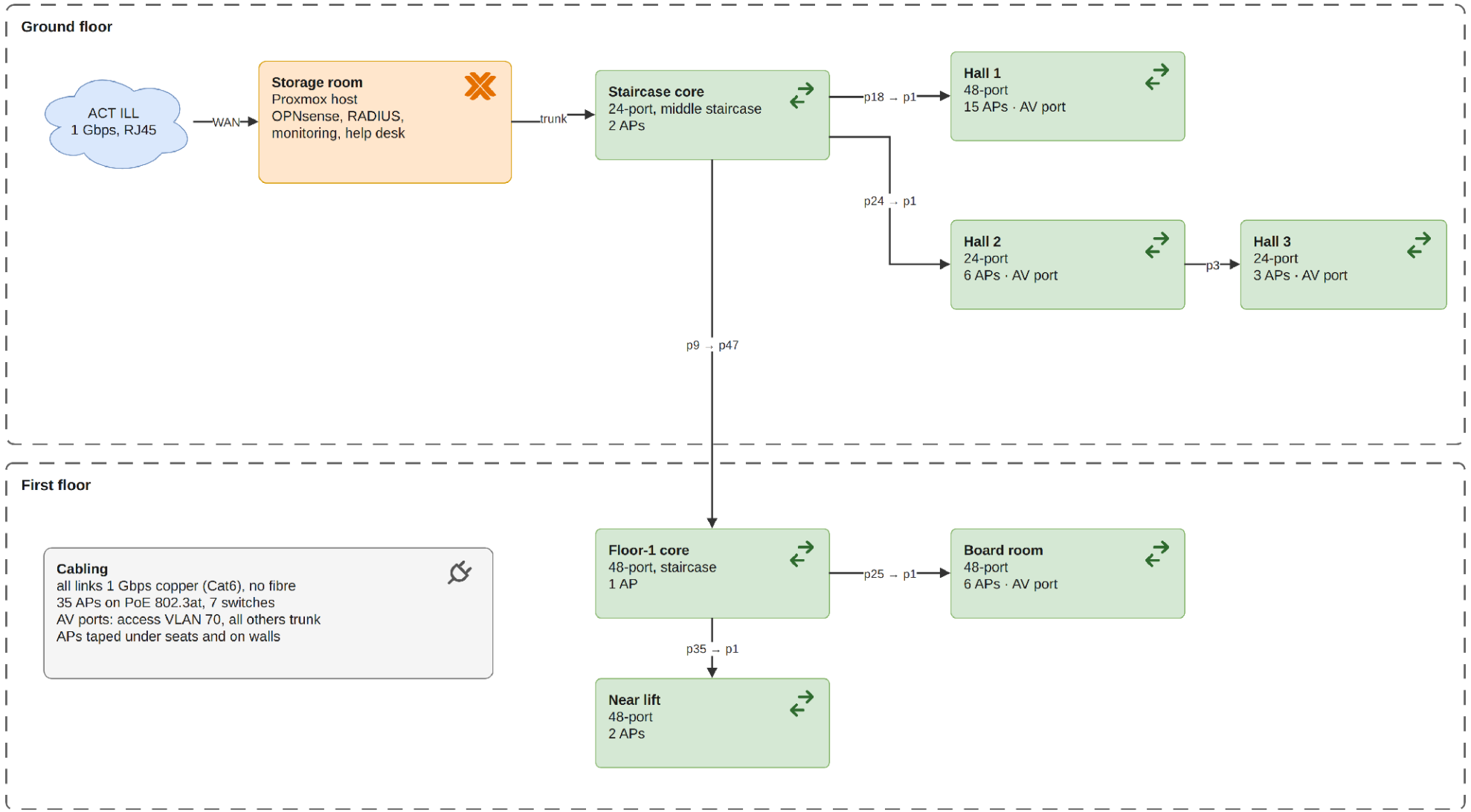
1 Server

running every service on Proxmox

Network Architecture



Physical Architecture



Two days in numbers

26 Sep 06:00 to 27 Sep 13:00 IST

671
people connected

986
devices

245 GB
downloaded over Wi-Fi

67 GB
uploaded over Wi-Fi

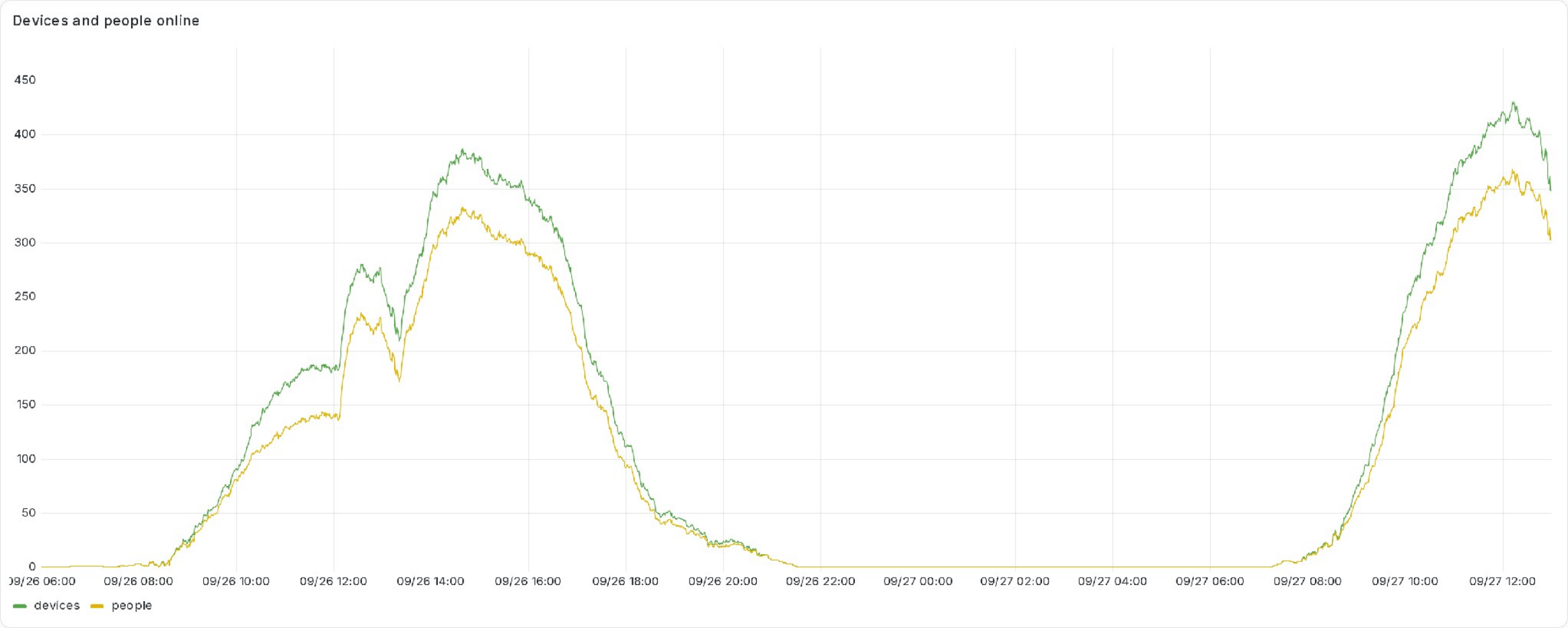
431
devices online at peak

308 Mbit/s
peak on the 1 Gbps line

223 GB
livestream uploaded

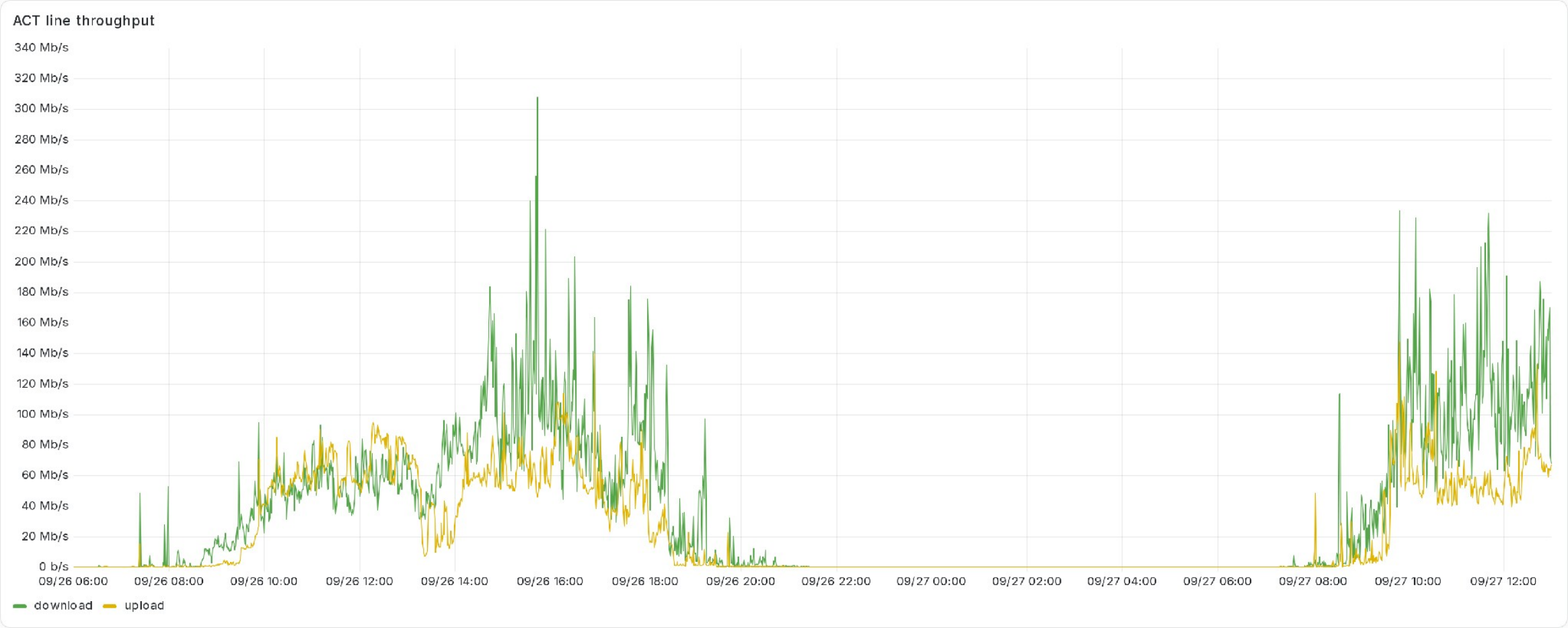
0.8 ms
to ACT, no downtime

People and devices online



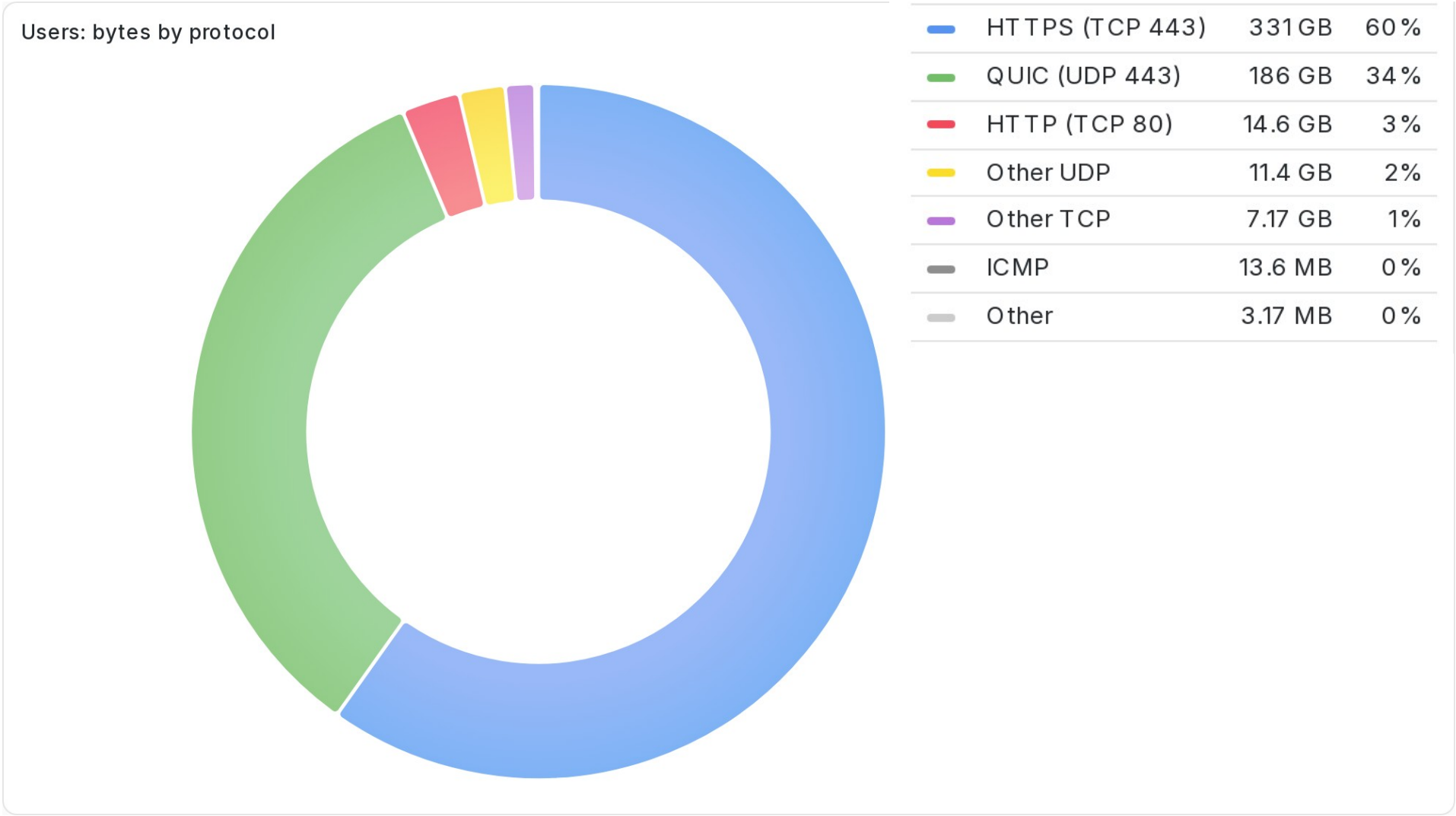
Peak Day 1 **387 devices at 14:39** Peak Day 2 **431 devices at 12:12** Devices per person **1.47**

Bandwidth Consumption

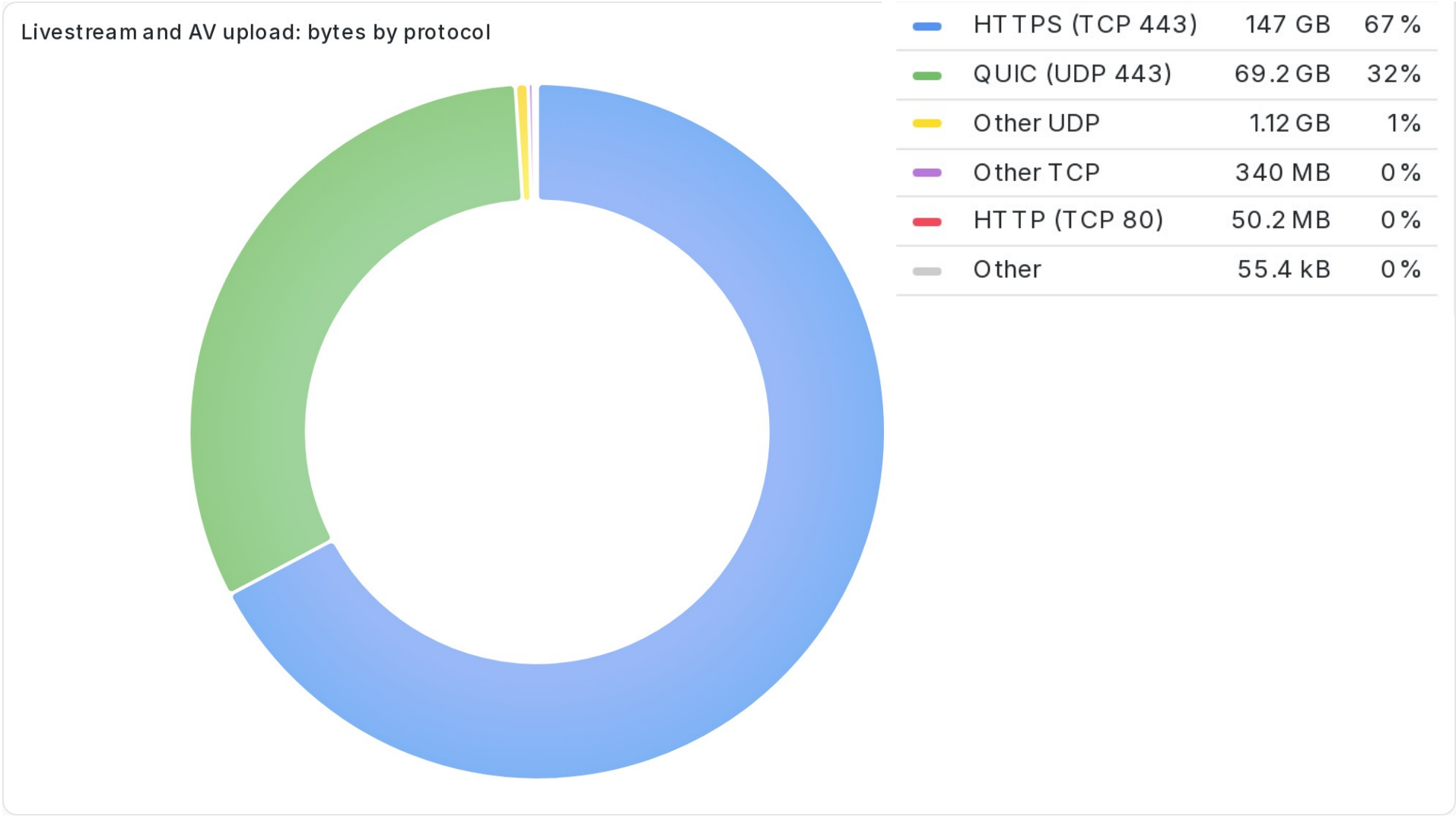


Through ACT **504 GB down, 329 GB up** Livestream **223 GB up** Firewall CPU **under 4%**

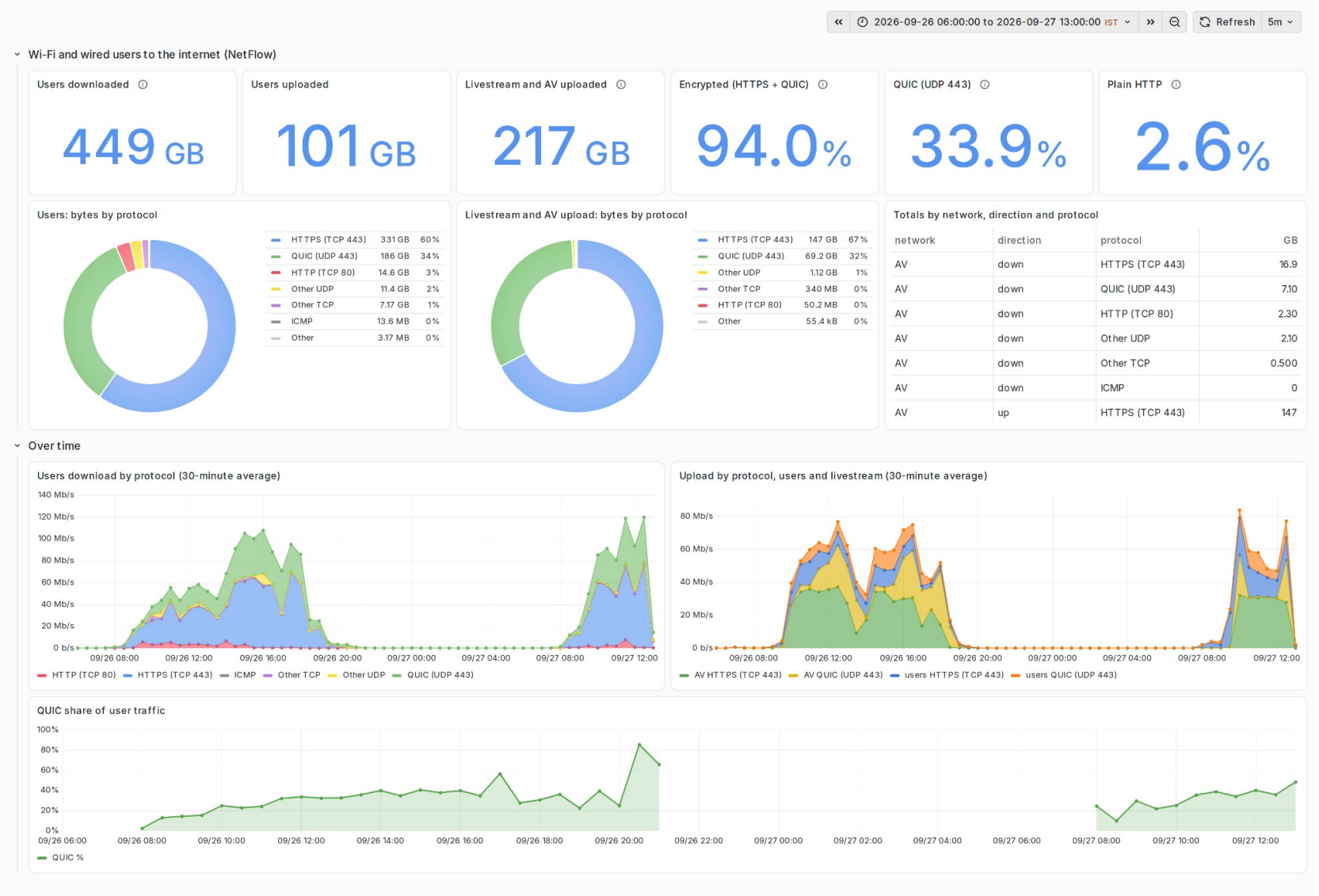
User Traffic Distribution



AV Traffic Distribution



The dashboard



Thank you



Access Points, Switches and the Rudder controller

Shree Kumar, for the server that ran every service for two days

Every volunteer who pulled cable, taped access points and answered Wi-Fi questions





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