AT&T Completes Access Network Field Trials to Offer Multi-Gigabit Internet Speeds

AT&T recently trialed a 10 Gbps XGS-PON virtualized network using Open Source Access Manager Hardware Abstraction (OSAM-HA) software in Atlanta and Dallas. OSAM-HA was formerly Virtual Optical Line Termination Hardware Abstraction (VOLTHA). This is another way we can provide lightning-fast internet speeds for homes and businesses.

XGS-PON is a fixed-wavelength symmetrical 10 Gbps passive optic network technology. It's part of our plan to virtualize access functions within the last-mile network.

In these field trials, the XGS-PON system tested multi-gigabit high-speed internet traffic and provided a seamless AT&T DIRECTV NOW video experience to trial participants. We used a virtualized Broadband Network Gateway (BNG) function to manage subscribers.

"Our network is constantly evolving. We'll continue to execute our software-based network strategy to technologies like 5G, virtualized RAN, and G.FAST over time. Ultimately, instead of deploying islands of technology that have SDN control, we want to orchestrate the entire end-to-end network through ONAP," said Eddy Barker, Assistant Vice President, Access Architecture and Design, AT&T.

For this technology to work within existing GPON networks, we used a coexistence element. In these trials, we found GPON and XGS wavelengths could both exist across a single fiber interface.

ONAP stands for Open Network Automation Platform. It's our virtual access project within The Linux Foundation and will use the first iteration of OSAM-HA technology.

OSAM is a vendor agnostic operational suite for managing consumer and business broadband access network elements and capabilities, separate from vendor-specific Access Element Management Systems (EMS).

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