Ho o hri e in he gro ing broadband marke

Flexibility is needed to thrive in today's broadband market. Demand at the network edge is growing, driven by remote work, new applications, streaming video, and everything moving to the cloud. Network operators are deploying f ber to meet today's demand while also logn 0 5b sthtbemti o thr cardbar.3r c)0v)10e)4.3m)bs45.1 ()3e0C20 Tf0.3d

plugged into an Ethernet port in a host switch or router, turns that port into an OLT on a port-by-port basis. Operators can now deploy PON anywhere in the access network (outdoor cabinet, remote pole, or in a controlled environment) with port-level granularity, all without the need for a dedicated OLT chassis. Ciena's robust family of routers and switches includes everything from weatherized outdoor remote routers to a full suite of access and aggregation routers. Operators can deploy remote PON to the far reaches of their network while also converging other services (Ethernet, IP, TDM, PON, and so on) as they pull in traffic from the access portion of the network, enabling numerous revenue opportunities. Operators can use existing infrastructure and cost-effectively deploy 10G PON surgically or at scale in greenfield, brownfield, or mixed networks (see Figure 1).

In addition to deployment flexibility, granular scaling is a highlight of Ciena's broadband solution. Granular scaling begins in increments as small as one port/one uOLT and scales up based on traffic demand by adding more uOLTs into available ports in the same router or into available ports in other routers for true pay-as-you-grow economics. Ciena's broadband solution with the XGS-PON uOLT offers one of the best

XGS-PON port densities per rack unit (RU) with the lowest power consumption for typical deployments.[1] Operators can deploy and efficiently scale capacity and deliver service only *where* it is needed, *when* needed, and in the increment *in which* it is needed.

The key to the uOLT and higher-speed PON (25GS-PON and CPON) is ASIC development. Ciena owns, develops, and controls the ASIC technology, which is an industry-leading innovatwes«   e   y
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Ciena Services: Support for new and existing network operators

Operators can also benef t from Ciena's expertise in several areas, including network planning, design, deployment, management, maintenance, optimization, evolution, and support. Ciena can also address skill gaps by training operator technical staf .

Access to Ciena's technology is a great start. But considering the diverse range of broadband providers, from losdb e   R   reb   n   lutai   ng   al aaf s   aM   roIM

Go-to-market support, including learning services and the Marketing as a Service (MaaS) program (detailed in the next paragraph)

'Day 2' support, including managed services