



Taking broadband to the edge will deliver better user experience

TR-466 is the latest release from Broadband Forum and brings the next stage of cloud computing innovation

Fremont, California, 6 December 2021 – A new breakthrough which will bring edge computing to cloud-based broadband networks will enable service providers to improve their customers' Quality of Experience (QoE) while increasing their revenue streams.

Broadband Forum's [TR-466 'Metro Compute Networking: Use Cases and High Level Requirements'](#) is a framework defining a new metro-compute networking architecture, ensuring a greater user experience by moving applications or content towards the lower edge tiers in the network hierarchy.

The metro-compute networking architecture will include in-depth integration of computing and network on top of the cloud-based broadband network with the purpose of connecting isolated edge sites – such as Broadband Forum's [CloudCO](#) – as one cloud to serve edge computing services.

“The latest release of TR-466 represents a big step for the industry as the standard will help cloud providers and operators overcome the routing and scalability challenges at the edge. Furthermore, it enables virtualization and disaggregation of edge elements and nodes to run applications in proximity to the customer where latency is important. This is particularly important for enterprise networks and will provide a shareable infrastructure for customers that can be seamlessly managed with reduced complexity,” said Broadband Forum SDN/NFV Work Area Co-Director George Dobrowski.

“Our work enables faster and more efficient provisioning of low-latency and high-bandwidth edge computing services. TR-466 perfectly complements the Forum's in-progress work on WT-474 subscriber session steering, which can deliver flexible on-demand bandwidth that detects traffic changes and automatically scales to preserve the user experience. This is achieved by utilizing compute-aware routing and dynamic session steering, as demonstrated at Broadband World Forum. These specifications enable operators to unlock new revenue-generating services.”

Edge computing represents a unique opportunity for operators as they already own a large number of edge sites. The approach, however, inherently enables co-existence with existing legacy edge investments. This will enable them to transform into an ICT service provider and adapt their business offering from bandwidth to network connection, computing and storage



to deliver service information and content, not just bandwidth. For Over-The-Top (OTT) streaming, gaming, or Virtual Reality services, providers will be able to save asset investment and Operation and Maintenance (O&M) costs through edge sharing.

Metro-Compute Networking benefits have been recognized by some of the largest and innovative operators in the world with lab and additional field trials including significant activity within China including, China Mobile, China Telecom and China Unicom. In addition, IRTF is preparing a new research group, RISE, following a similar direction in Q4 2021 after the release of TR-466. These proponents consider TR-466 as a key step in helping them move towards the required ICT transformation.

“Until now, no industry standards organization has considered the possible impact on multi-service broadband networks under the trend of edge computing or addressing the unique challenges that this has presented,” said Broadband Forum SDN/NFV Work Area Co-Director Bruno Cornaglia. “This latest Broadband Forum work will see us play a critical role in edge computing and utilize the virtualized network infrastructure to enable carriers to increase revenue via edge cloud services.”

For more information about Broadband Forum, please see: <https://www.broadband-forum.org/>.

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About the Broadband Forum

Broadband Forum is the communications industry’s leading open standards development organization focused on accelerating broadband innovation, standards, and ecosystem development. Our members’ passion – delivering on the promise of broadband by enabling smarter and faster broadband networks and a thriving broadband ecosystem.

Broadband Forum is an open, non-profit industry organization composed of the industry’s leading broadband operators, vendors, thought leaders who are shaping the future of broadband, and observers who closely track our progress. Its work to date has been the foundation for broadband’s global proliferation and innovation. For example, the Forum’s flagship TR-069 CPE WAN Management Protocol has nearly 1 billion installations worldwide.

Broadband Forum’s projects span across 5G, Connected Home, Cloud, and Access. Its working groups collaborate to define best practices for global networks, enable new revenue-generating service and content delivery, establish technology migration strategies, and engineer critical device, service & development management tools in the home and business IP networking infrastructure. We develop multi-service broadband packet networking specifications addressing architecture, device and service management, software data models, interoperability and certification in the broadband market.

Our free technical reports and white papers can be found at <https://www.broadband-forum.org/>.

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