Broadband Forum releases OB-BAA 4.0 offers operators greater flexibility and reduced costs for building their broadband networks

New functionalities will benefit service providers, operators, and the overall customer experience

Fremont, California, 27 October 2020: Broadband Forum has today published Release 4.0 of its Open Broadband – Broadband Access Abstraction (OB-BAA) open-source project, that will provide operators worldwide with greater networking flexibility for how they plan and build their networks and enable the delivery of faster services to their customers.

Building on previous releases, Release 4.0 offers enhanced functionalities to disaggregate the management of the Optical Network Unit (ONU) into the cloud using virtualized OMCI message capabilities. Thereby de-coupling ONU management from the software upgrades and release cycles of the OLT, where traditionally it has been embedded. This reduces operators’ costs for on-boarding and upgrading new features in an ONU as well as eases the deployment of new ONU brands and models. The additional flexibility addresses the big engineering and operations problem of having embedded functions in both ONUs and OLTS.

“As network automation continues to emerge at an accelerated pace, operators will need to think about how they make upgrades compatible with their currently deployed architecture to avoid the costly and disruptive practice of starting from scratch,” said Tim Carey, OB-BAA Project Lead at Broadband Forum. “That’s where OB-BAA Release 4.0 will help, by creating a network which delivers on the promise of next-generation broadband, while reducing service providers’ costs and protecting their investments.”

Release 4.0 also brings another notable benefit as it disaggregates the control plane functions and moves them into the cloud, therefore unlocking the control plane from the data plane of the OLT. This enables the ability for SDN Management and Control elements to dynamically steer traffic which is needed to deploy new services in an accelerated timeframe and dynamically optimize them. The relay of user and control plane packets can be done via standard and/or vendor proprietary control adapters.

“Release 4.0 offers enhanced management of ONUs using virtualized OMCI and reduced repeated work for operators, as well as the key to unlock greater interoperability and programmability in broadband networks,” said Dechao Zhang, Principal Researcher, China Mobile. “Our collaborative efforts mark a major milestone for the broadband industry as we continue to address the problems operators globally face with evolving and updating their current multi-vendor OLT and ONU fiber broadband architectures to be software-defined and cloud-driven.”

Using features that existed in previous releases along with its virtualized ONU management and control relay capabilities, a key accomplishment of the latest release of OB-BAA is the full support of OLT capabilities for white box solutions in the OB-BAA framework. This builds upon the ability of these devices to natively support standard interfaces. In turn this allows OB-BAA to seamlessly connect to any standard compliant Access Node design via the portfolio of standard device adapters available in the public distribution which are key to an operator’s coexistence and migration strategy for their access networks.

“Broadband Forum has a goal of developing industry-wide standardized solutions, and Open Source and Open Standards are the new pillars to support our community and this is a fundamental paradigm shift in the way Broadband Forum is delivering value to its stakeholders.” said Mauro Tilocca (TIM), OB-BAA Story Team Lead at Broadband Forum.
“Virtualized OMCI complements existing functions such as performance and configuration management, operators can now easily introduce white box solutions, and this subsequently offers a path from those that are vendor-aligned to a mixed vendor and white box evolution.”

Broadband Forum members directly involved in developing Release 4.0 included Nokia, China Mobile, TIM, BT, Altice Labs, Altran, DZS and Broadcom.

Release 4.0 of OB-BAA can be downloaded directly from Broadband Forum’s website and can be found here: https://obbaa.broadband-forum.org/.

For more information about Broadband Forum and its work on OB-BAA, please visit: https://www.broadband-forum.org/open-broadband/open-broadband-software/open-broadband-broadband-access-abstraction-ob-baa.

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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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