RUNNING FLEXIBLE VIRTUALIZED NETWORK SERVICES AND APPLICATIONS

Background

Driven by the ever-increasing number of IoT devices and the surge in data flow that applications require today, network operators have evolved from legacy distributed networks to the adoption of Virtualized Radio Access Networks (vRAN). While virtualizing the baseband units (BBUs) and utilizing commercial off-the-shelf (COTS) equipment has allowed for increased performance and lowered costs, network operators still need to identify the right equipment to support and fully reap the benefits of flexibility, scalability and dynamism that vRAN provides.

Business Challenges

Networks need to run services segmented by geography or parts of the network, as well as applications to support different types of networks and groups. This can be a challenge particularly on the network edge where locations are remote – in traditional distributed RAN where BBUs are located onsite with the Remote Radio Units (RRUs), deployment and maintenance to remote areas is particularly challenging. In addition, replacing legacy infrastructure is difficult and a prohibitively expensive venture – the right type of hardware is needed to run software supporting vRAN and other distributed applications.

Solution

HarshPro™ Servers are powerful servers built on the processing power of server class Intel® Xeon® processors with multiple memory configurations and high capacity, high speed NVMe SSDs. Optimized for cloud-native, localized cloud functionality and application containerization, they provide for the orchestration of network functions and distributed applications required by vRAN networks. HarshPro Servers also allow for hybrid and generic COTS BBUs that can run multiple applications unlike legacy BBUs. Being IP-rated, the rugged servers offer high availability even in harsh IP66 conditions at the edge, with Power over Ethernet (PoE) capability to manage intermittent or abnormal power, allowing for easy management and deployment in remote locations.

Benefits

With expandable memory, HarshPro Servers allow network operators to deploy and run multiple services and applications while maintaining high performance. The rugged hybrid BBU infrastructure and flexible power options allow the servers to run in any environment, and furthermore, with full remote management and deployment, skilled resources do not have to be available on site.

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HarshPro™ Servers