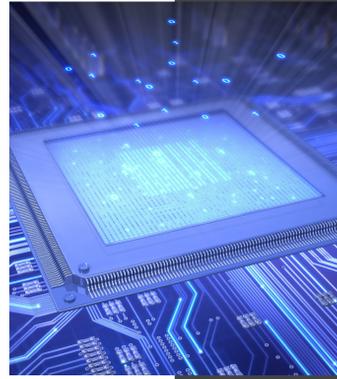**DELL**Technologies

Accelerating Open RAN performance

There are big hopes for Open RAN. It will allow communication service providers (CSPs) mix and match best-of-breed components, help free them from vendor lock-in, and bring more agility and innovation into telecommunications. However, Open RAN must be able to meet or exceed the price to performance levels of today's RAN solution, which has been a challenge so far.

To help solve this challenge, Dell recently introduced the **Dell Open RAN Accelerator Card**. Developed in partnership with Marvell Technology, the card is a simple, practical solution to this problem and is helping to prepare the way for fresh telecom innovation.

Benefits of Open RAN for Communications Service Providers (CSPs)

Accelerate innovation and revenue opportunities

- Accelerate innovation and development cycles thanks to more flexibility and agility and the move to software-based networking.
- Trial, roll-out and monetize new services faster.
- Leverage private network trend to create architectures customized to solve the specific needs of different industry verticals.

Eliminate vendor lock-in

- Disaggregation of hardware, software and opening of API interfaces eliminates vendor lock-in and allows CSPs to create new solutions in new verticals, meaning new revenue opportunities for CSPs.
- Deploy best-of-breed Open RAN technology.
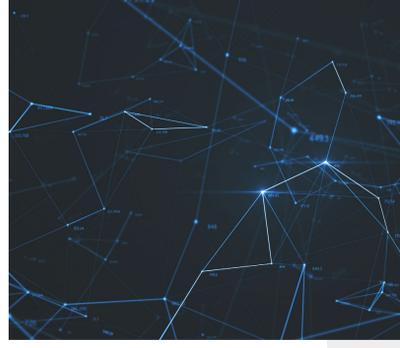- Customize Open RAN solution to meet customer needs.

More efficient networks & better use of resources

- Take advantage of economies of scale offered by the cloud.
- Deliver a consistent, reliable service via network automation, real time RAN optimization and application QoS – all enabled by Open RAN.
- Deploy AI and ML to ensure network requirements are met efficiently, at scale.

Network slicing

- Will be a critical part of 5G and allow CSPs to dynamically partition capacity on a network; a cost-effective approach to supporting multiple use cases on a shared infrastructure.
- The disaggregated nature of Open RAN and the resource management capabilities of the RAN Intelligent Controller (RIC) will support network slicing to provide enterprises will their own slice of the network for services and applications.

Increasing Open RAN efficiency and performance

At Dell Technologies, we partner with CSPs to overcome challenges, unlock new revenue streams, and capitalize on Open RAN.

The **Dell Open RAN Accelerator Card** is an in-line layer 1 card that increases the efficiency and overall performance of the vDU, closing the performance gap and making Open RAN a reality today.

Performance

- Increases vDU and overall RAN performance, freeing up the server CPU for layer 2 workloads.
- Uses Marvell's OCTEON Fusion CNF95xx chipset; the same used in today's RAN solutions.
- Simplifies vDU deployments by removing the need for additional fronthaul NIC, GNSS timing, and FEC offload accelerator cards.
- Integrated Dell Remote Access Controller (iDRAC) helps administrators deploy, update, and monitor Dell PowerEdge servers anywhere, anytime.
- Allows CSPs to expand the number of in-line layer 1 cards used in a server to expand the overall capacity of the server, making full use of the available cores.

Power consumption

- **Fewer** server CPU cores needed.
- **Less** overall power consumption.
- **More** capacity to support **more** workload at layer 2.
- **Levels the playing field** for new players operating in regions with limited power supplies.

Price

- Helps to eliminate the current price/ performance disparity between Open RAN and today's RAN deployments.
- Arrival of multiple specialist ecosystem players allows new innovation and competitively-priced solutions.
- Reduces the number of server CPU cores needed, reducing the cost of COTS hardware needed for Open RAN implementation.
- **Eliminates the need** for additional hardware such as fronthaul NIC and timing cards.

End-to-end support

Dell Technologies is helping CSPs accelerate their journey to open networks.

Creating an ecosystem of Open RAN partners

Simplifying the upfront requirements for deployment

Streamlining the journey to Open RAN

Creating and validating solutions

By providing the tools and the partnerships, we're helping CSPs leverage Open RAN to generate new revenue streams by deploying new services.

Find out how the **Dell Open RAN Accelerator Card** is making Open RAN viable for CSPs, allowing them to do more with less, faster, easier and better than before.

[Find Out More]