



# Compute Acceleration on Network Edge: Project Adrenaline

Driving the Next Generation of Communications Infrastructure

Time sensitive applications require very high speed computing capabilities, as any delay introduced will contribute to the overall latency. Edge computing allows applications to be hosted closer to devices or consumers and can deliver low-latency, real-time services to end users.

As a result, edge computing functions require hardware accelerators like FPGAs or GPUs to support fast operations like localized low-latency decisions, security & retaining data, power and energy optimization. In addition, edge computing running on providers' networks is also expected to host VNFs and containerized NFs for wireless, fixed and cable networks.

That said, what frameworks are available to help application developers to create performance-optimized code for accelerators, which can be deployed using standard cloud-native orchestrators like Kubernetes? Only one: Project Adrenaline, an open-sourced framework developed through collaboration between Altran and CableLabs.

**Accelerated  
Edge services**

**Middleware Platform  
for any Whitebox**

**Leveraging CPU,  
GPU, FPGA**

**Delivering 10G Fixed  
Wireless Access today**

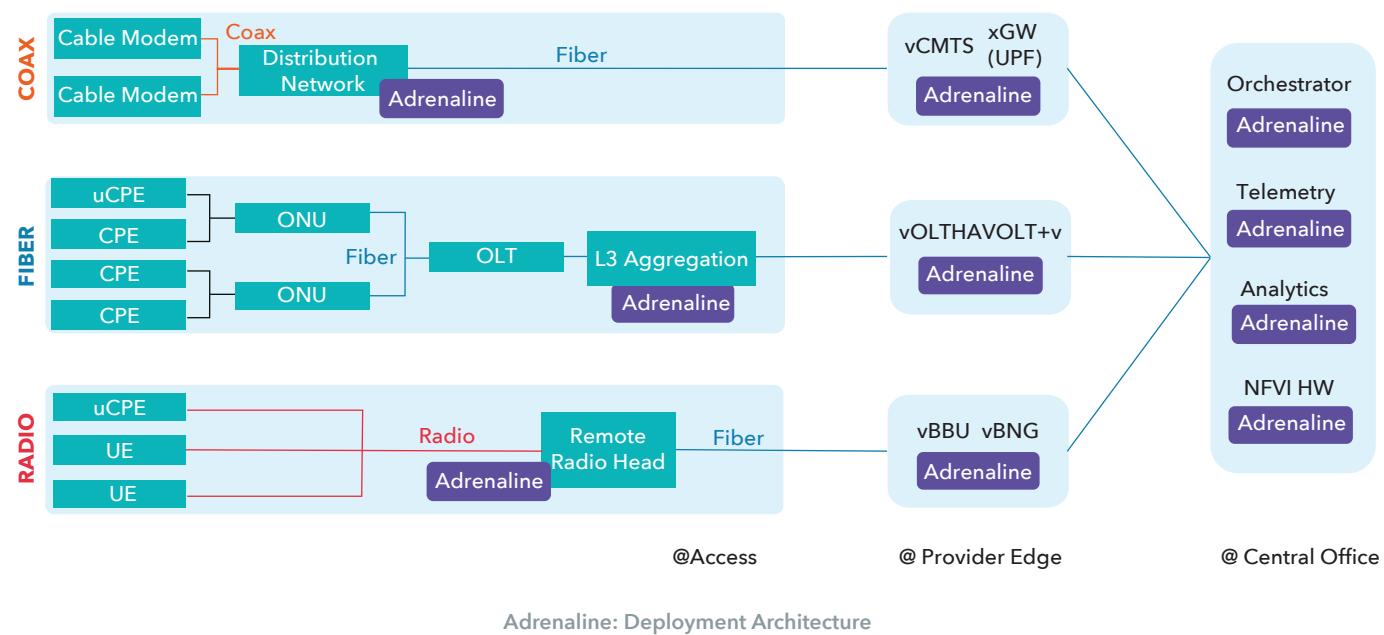
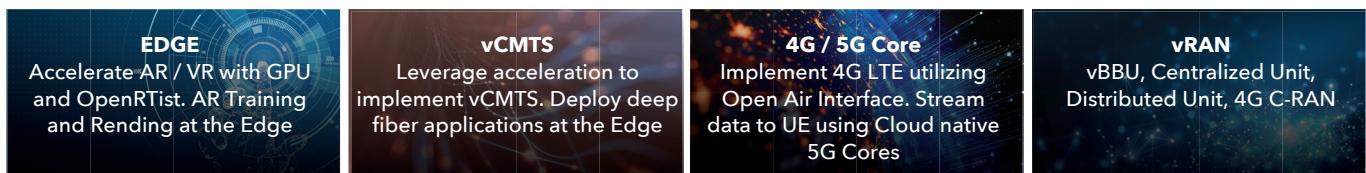
**TCO reduction  
by 40%**

**Ready for Field Trials  
for your Use Cases**

## NEXT GENERATION VIRTUALIZATION SOLUTION

Project Adrenaline is available on open source and offers a unique set of development tools for programmers to easily and quickly expand acceleration at the edge.

- Reconfigurable and Scalable Software for CPUs, GPUs, FPGAs and DSPs
- Fundamental Improvements in TCO and Operational Flexibility
- Price / Performance Optimization using Whitebox Hardware & Virtualized Software
- Service Agility and New Services enablement
- Native support for Containers and Kubernetes orchestration



## WHO ARE WE?

Altran is the undisputed world leader in engineering and R&D services. The Group offers its customers a unique value proposition to meet their transformation and innovation challenges. Altran supports its customers, from concept to industrialization, to develop the products and services of tomorrow. Altran has been working for more than 35 years with major players in many sectors: Automotive, Aeronautics, Space, Defense & Naval, Rail, Infrastructure & Transport, Industry & Consumer Products, Life Sciences, Communications, Semiconductor & Electronics, Software & Internet, Finance & Public Sector. In 2019, Capgemini, and Altran announced a merger project in the context of a friendly tender offer to create a global leader in "Intelligent Industry". Altran generated €3.2 billion in revenue in 2019, with more than 50,000 employees in more than 30 countries.

Get in touch to set up a call or meeting with an Altran expert today: [marketing@altran.com](mailto:marketing@altran.com)

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