

# Intel DPDK Support Services

## Overview

Telecom operators are increasingly looking at Network Functions Virtualization (NFV) to reduce CAPEX and OPEX while accelerating the ability to develop and deploy new, revenue generating services. Intel DPDK allows network functions to be implemented in a single, scalable multi-core architecture with up to 10x improvement in data plane performance.

Intel platforms allow application, control and packet processing to be consolidated on COTS hardware, and the ability to scale infrastructure as-you-grow providing tremendous flexibility in network design and implementation to Service Providers.

## ALLEN Calsoft Labs' Intel DPDK Support Services

Equipment manufacturers and telecom operators are often challenged to re-architect and port device software to use Intel DPDK libraries for high-speed packet processing, and development of an efficient orchestration infrastructure to deploy and manage Virtual Network Functions (VNFs) in a Telco environment.

ALLEN Calsoft Labs offers professional services to network equipment manufacturers (NEMs) and Service Providers to leverage Intel® DPDK to design, develop and deploy network functions optimized to multi-core x86 processors. ALLEN Calsoft Labs offers the most comprehensive support for Intel DPDK migration including architecture and design consultation, product engineering, VNF orchestration, systems integration, VNF deployment and operations support services.

## Intel DPDK Evaluation

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|--|---|
| <p style="text-align: center;"><b>Intel DPDK Training</b></p> <ul style="list-style-type: none"> <li>◉ Conduct technical sessions about Intel® DPDK and how it can be used to optimize network functions</li> <li>◉ Highly experienced trainers</li> <li>◉ Fixed cost per day + travel cost (in case of onsite training)</li> </ul>  | <p style="text-align: center;"><b>Design Consultation</b></p> <ul style="list-style-type: none"> <li>◉ Study customer's product roadmap</li> <li>◉ Provide software architecture and design consulting to re-engineer products based on Intel DPDK</li> <li>◉ Conduct workshop to present design considerations</li> <li>◉ Time-and-Materials based on hourly rates+ travel cost (if applicable)</li> </ul> |
| <p style="text-align: center;"><b>Proof of Concept/Demo(s)</b></p> <ul style="list-style-type: none"> <li>◉ Assessment of customer products and benefits from Intel DPDK optimization</li> <li>◉ Port core product functionality to Intel DPDK to demonstrate feasibility</li> <li>◉ Provide DPDK porting and integration roadmap</li> <li>◉ Time-and-Materials based on hourly rates</li> </ul> | <p style="text-align: center;"><b>Dev/Test Environment Creation</b></p> <ul style="list-style-type: none"> <li>◉ Study customer's product roadmap</li> <li>◉ Set up Development and Test Environment for the product</li> <li>◉ Provide ongoing support on request e.g. develop Test Automation framework for the product</li> <li>◉ Time-and-Materials based on hourly rates</li> </ul>                    |

## Intel DPDK based Virtual Network Function (VNF) Implementation

| VNF Implementation   |
|--|
| <ul style="list-style-type: none"> <li>Product re-engineering, porting and integration</li> <li>Deliver a functional VNF optimized using Intel DPDK</li> <li>Fixed cost/Time-and-Materials based on statement of work</li> </ul> |

| VNF Orchestration   |
|---|
| <ul style="list-style-type: none"> <li>Understand VNF deployment scenario and use cases</li> <li>Develop a VNF orchestration framework</li> <li>Time-and-Materials based on hourly rates + travel cost (if applicable)</li> </ul> |

| VNF Testing   |
|---|
| <ul style="list-style-type: none"> <li>Scenario-based testing of a customer product that uses DPDK libraries</li> <li>Test Automation development</li> <li>Bug fixing and release management, if requested</li> <li>Fixed cost / Time-and-Materials based on SOW</li> </ul> |

| VNF Maintenance   |
|---|
| <ul style="list-style-type: none"> <li>Maintenance and sustenance engineering of a customer product</li> <li>Bug fixing, patch and release management</li> <li>Upgrade to latest version of DPDK</li> <li>Fixed cost / Time-and-Materials based on SOW/SLA</li> </ul> |

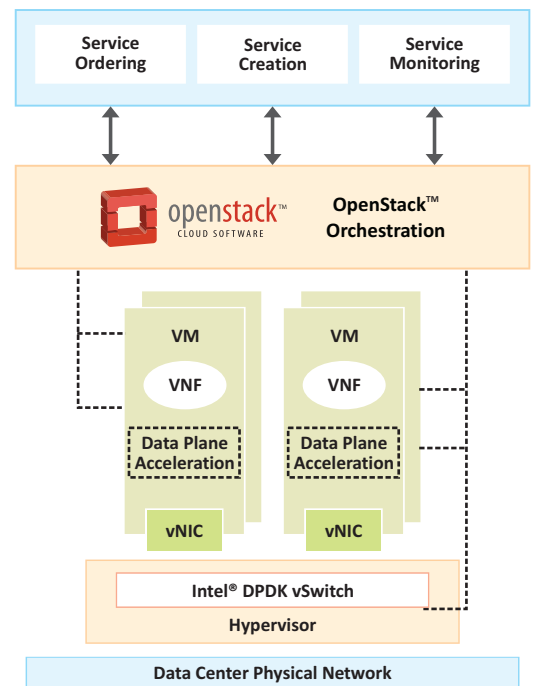
## Intel DPDK based Virtual Network Function (VNF) Deployment

ALTEN Calsoft Labs helps customers in VNF deployment and systems integration with Telco service delivery infrastructure. We address the needs of NEMs and Service Providers from Evaluation/PoC stage to Service Roll-out and L2/L3 Technical support, all under one roof.

### NFV Systems Integration

- Staging VNFs in Telco environment
- OpenStack plug-in development
- OpenStack Heat integration
- NFV system integration with Telco service delivery platform (SDP)
- End-to-End Service Validation and Rollout management

With 15+ years of rich experience in networking product development and deployment across access, metro and core networks; ALTEN Calsoft Labs brings a deep understanding of the domain, appreciation of deployment challenges, and an expert engineering team that has worked on some of the industry's first commercial NFV deployments.



### Partners



#### ABOUT ALTEN CALSOFT LABS

ALTEN Calsoft Labs is a next gen digital transformation, enterprise IT and product engineering services provider. The company enables clients innovate, integrate, and transform their business by leveraging disruptive technologies like mobility, big data, analytics, cloud, IoT and software-defined networking (SDN/NFV). ALTEN Calsoft Labs provides concept to market offerings for industry verticals like education, healthcare, networking & telecom, hi-tech, ISV and retail. Headquartered in Bangalore, India, the company has offices in US, Europe and Singapore. ALTEN Calsoft Labs is a part of ALTEN group, a leader in technology consulting and engineering services.

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