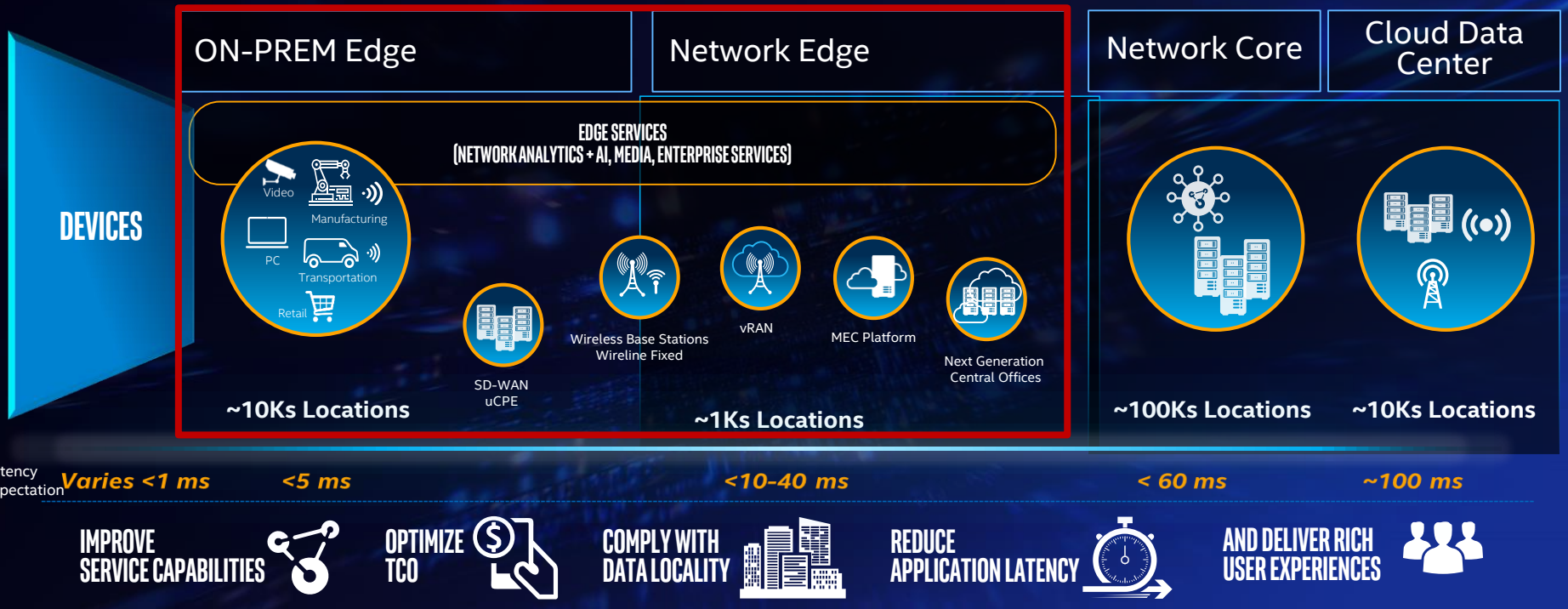
INTRODUCTION TO OPEN NETWORK EDGE SERVICES SOFTWARE (OPENNESS)

Prakash Kartha, Segment Director, Edge Services

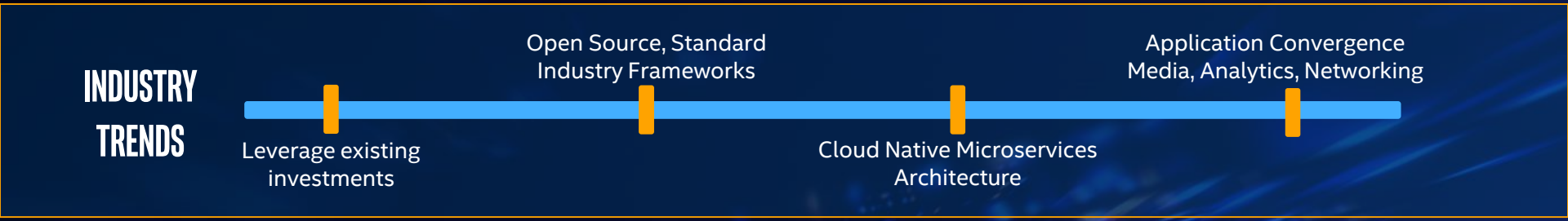
Intel Corporation

RISE OF THE INTELLIGENT EDGE

Edge computing: Placement of Data Center-grade network, compute & storage closer to the endpoint devices



SERVICES AT THE EDGE: INDUSTRY DYNAMICS



COMMON CHALLENGES

- CapEx/OpEx savings, increased efficiency, lower TCO
- Deploy LTE & 5G for latency and bandwidth
- Support diverse workloads across Media, Network & Analytics
- Identify new revenue opportunities

ON-PREMISES EDGE (ENTERPRISES)

- Leverage existing OT infrastructure, diverse Multi-Cloud IT infrastructure
- Convergence of IT, OT & Network for increased business value

NETWORK EDGE (CoSPs)

- How to leverage NFV and legacy infrastructure to expand at the Edge
- Move at Cloud speed (Tech & TTM)

SERVICES AT THE EDGE: THE CHALLENGE STATEMENT

Access Network	App Framework	Data Plane	Controller	Orchestrator	VIM	Cloud	Platform
							
LTE CUPS, LTE SGI, 5G CUPS, S1	OpenVINO™, Open Visual Cloud	Data Plane Development Kit (DPDK), VPP, Open vSwtich-DPK, SR-IOV, or Kernel stack	OVN, ODL, SD-WAN	ONAP, OSM	OpenStack, K8, Docker	AWS, Baidu, Azure	uCPE, vRAN, CO, MEC

Write your Edge Service once, run with any....

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OpenNESS

An open source software toolkit to enable easy orchestration & management of edge services across diverse network platform and access technologies in multi-cloud environments

OpenNESS
OPEN NETWORK EDGE SERVICES SOFTWARE

OPEN NETWORK EDGE SERVICES SOFTWARE (OPENNESS)

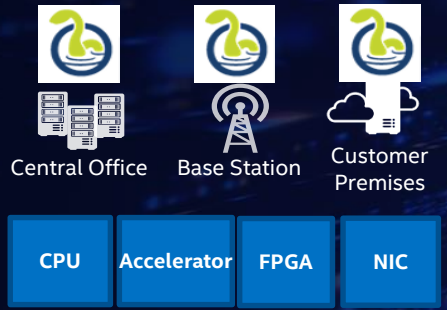
An open source software toolkit to enable easy orchestration & management of edge services across diverse network platform and access technologies in multi-cloud environments

ABSTRACT NW & PLATFORM COMPLEXITY

IOT Devices

ONBOARD/ORCHESTRATE APPS & SERVICES

OPENNESS Edge Node SW



OPENNESS Edge Controller SW

Microservices APIs

- Application Agent
- Dataplane agent
- Lifecycle agent
- Virtualization agent
- Core NW Config Agent
- Controller API
- Edge auth agent

ACCELERATE SERVICES INNOVATION

App Ecosystem

OpenVINO

Open Visual Cloud

3rd Party Apps

Industry Frameworks

openstack

kubernetes

ONAP

Multi-cloud Support

AWS

Baidu

Azure

End to End Services Infrastructure

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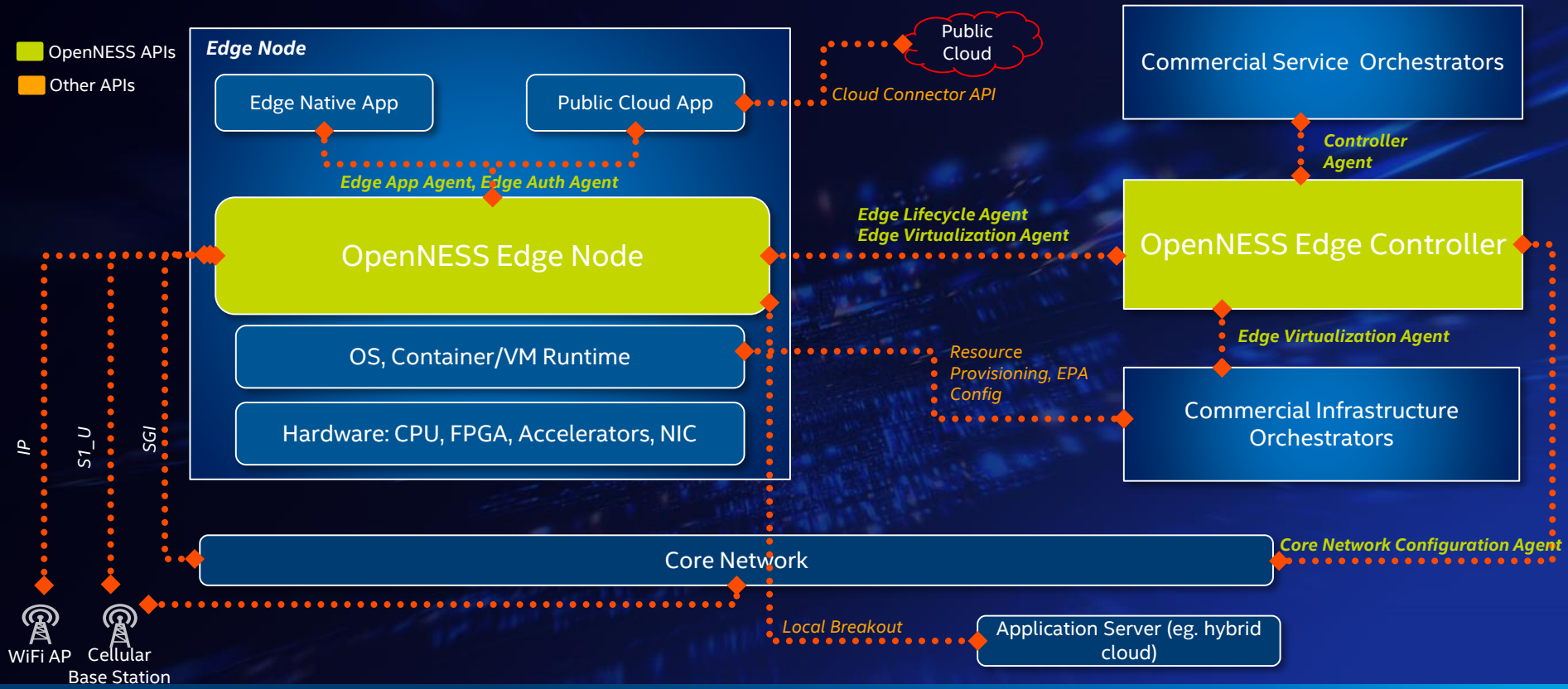
OpenNESS: Microservices Based Architecture



OpenNESS: Value Prop to Service Providers

Open Source

- Faster TTM
- Rapid prototyping & trial
- Optimized for Edge Services Management
- Broad industry innovation
- Invest in differentiation only

Flexible

- Leverage your existing infrastructure
- Modular architecture; adopt what you need
- Support for major industry frameworks

Rich Ecosystem

- Rich ecosystem options of OS, Orchestrators, Apps, …
- Pre-integrated with major commercial offerings

OpenNESS: VALUE PROP TO THE DEVELOPERS

Application Developer

- Transport apps from Cloud to Edge
- Write once – deploy anywhere on the Edge
- Match make platform and apps

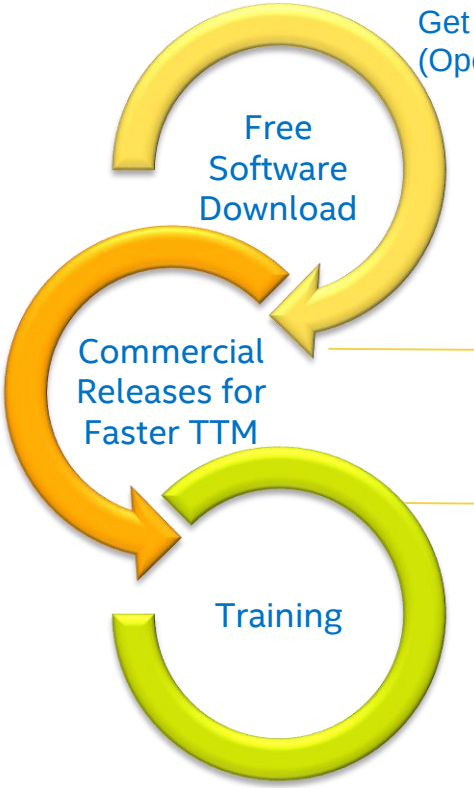
Facilitates extending apps from cloud to Edge - abstract complexity

Platform Developer

- Orchestrate Edge Services at scale
- Access to real-time telemetry
- Application service chaining
- Commercial versions in the making
- Flexibility of microservices architecture

Makes network platforms Edge Services aware

HOW TO GET STARTED



Get access to Open Network Edge Services Software (OpenNESS) at OpenNESS.org

Documentations:

- Architecture Overview
- User Guides
- OpenNESS White Paper
- OpenNESS Overview Webinar/Video
- Other Developer Resources here

- Available for Enterprises
- Commercial versions in the making

- Intel® Network Builder University Training
- Partner Webinars in the making

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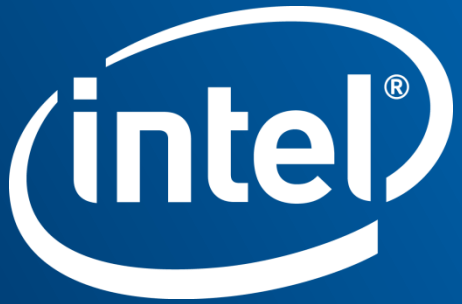
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