



OPEN EDGE COMPUTING INITIATIVE SPRING ONLINE **WORKSHOP**

18 AND 19 MAY 2021

- DAY 1 -

INVITEE PROFILE

Cloud Service Providers

AWS
Google
Microsoft

Communication Technology

Facebook
JMA
NOKIA

Consulting Services

Altran/CapGemini
STL Partners

Edge Applications

Akka
BMW
EdgeGap
GE
Megh
Niantic
Polaris Group
Unmanned Life

Edge Infrastructure

Atrius Industries
Edgeinfra Group
Vapor IO

Edge Technology

Alef Mobile Technology
Ampere Computing
Cirrus360
MobileedgeX
Nodeweaver
Stackpath
VMware

Research, Development, Innovation

CableLabs
CMU
InterDigital

Silicon Technology

ARM
Intel
Qualcomm
Seagate

Standardization and Open Source

ETSI
GSMA
NGMN
OpenStack Foundation
Small Cell Forum

Telecom Operators

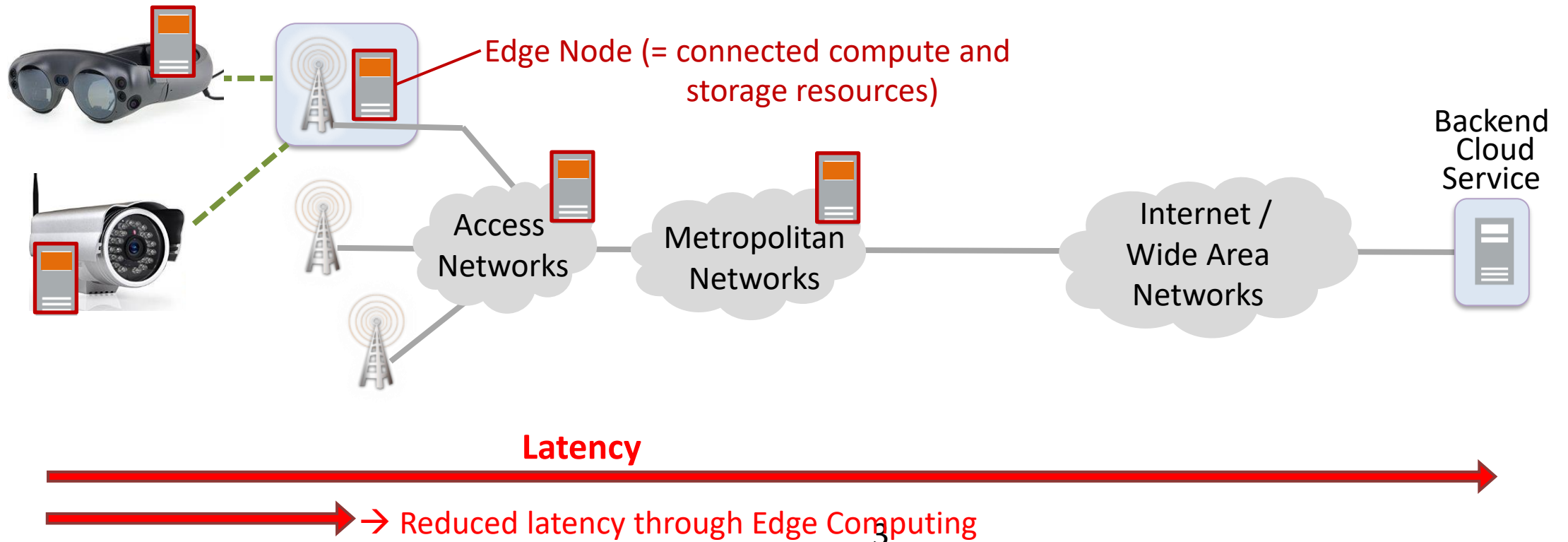
AT&T
Bell Canada
BT
Comcast
Crown Castle
Deutsche Telekom
Jio
Proximus
Telefonica
Verizon
Vodafone

WHAT IS EDGE COMPUTING?

➡ Edge Computing: small data centres at the network edge that offer connected compute and storage resources right next to the user

Example Use Cases:

- Augmented reality application connected with head mounted display
- Analyzing large volumes of data right at the edge (Edge Analytics)



CURRENT MARKET SITUATION AND DEVELOPMENT:

➡ **EDGE COMPUTING IS DEVELOPING RAPIDLY EVERYWHERE!**

Established Edge Application Areas

- Edge-based AR
- Edge Gaming
- Drone Control
- Automotive Edge

Relatively New Edge Application Areas

- Manufacturing Edge
- Medical Edge
- Home Edge / Building Automation Edge
- Smart City Edge

Edge Technology

- IT & Network Infrastructure
- Accelerators (GPU, FPGA, TPU)
- Security
- Orchestration

Edge Service Offering

- Telecom Operator Edge Services
- Cloud Service Provider Edge Services
- Enterprise Edge Services (IoT, Medical etc.)

➡ **It is still important to drive globally standardized mechanisms to use the edge!**

OPEN EDGE COMPUTING INITIATIVE: KEY ACTIVITY AREAS

OEC Mission: ...is a collective effort for driving the business opportunities and technologies surrounding edge computing.

- **Drive Cross-Operator Edge Alignment**
→ Agree and establish a edge technology that enables a globally uniform mechanism to use edge services (Edge Interconnect, Telco vs Cloud Edge, Edge Federation etc.)
- **Drive Edge Adoption**
→ Develop attractive edge applications and drive engagement with edge application developers
- **Tackle Key Technology Challenges**
→ Deliver prototype solutions for key technical edge challenges (hand-off, edge orchestration etc.). Release solutions as open-source
- **Engagement and Alignment**
→ Cooperation with other edge related activities and initiatives (ETSI MEC, NGMN, GSMA, Linux Foundation Edge, OpenStack etc.)
- **Living Edge Lab**
→ Provide and utilize an E2E testbed for edge applications with a broad set of latest edge technologies



For further information

Twitter: @openedgecomput1, Web: www.openedgecomputing.org

OPEN EDGE COMPUTING INITIATIVE - CURRENT PARTNERS

(AS OF MAY 2021)

Industry Partners

- Arm
- CableLabs
- Crown Castle
- Deutsche Telekom
- Facebook Connectivity
- Intel
- InterDigital
- Microsoft
- MobilEdgeX
- Seagate
- Verizon
- VMware
- Vodafone

Academic Partner

- Carnegie Mellon University



FACEBOOK
CONNECTIVITY



SEAGATE

CableLabs®



verizon✓



interdigital™

vmware®



Microsoft



vodafone



<MobileEdgeX>™

OEC SPRING ONLINE WORKSHOP 2020 – OVERVIEW TARGETS

General Workshop Target

- Update on Edge Computing
- Voice of the customer – Look at attractive edge applications
- OEC partner edge activities – Share insight / success stories
- Look at the latest edge research from CMU
- Connecting edge enthusiasts globally
- (OEC workstreams – Review existing / initiate new workstreams)

Special focus this workshop:

- Update on the opportunities and requirements of selected edge applications (edge gaming, manufacturing, drones)
- Bring together the Telco Edge and the Cloud Edge
- Look at latest development in the edge technology space
- Further the dialog and cooperation to make Edge Computing a global success

Networking between Participants

- 1-to-1 Private Chat (at any time)
- 1-to-1 Voice / Video (break and after workshop)
→ tell Jim Blakley via chat whom would like to meet (2 or more participants)
- → Jim will create a breakout room for you and move you there
- You may return to the main meeting by pressing “leave room”

AGENDA DAY 1

DAY 1 - 18 May 2021

EDT

11:15 Web-Conference Set-up and Test with all Participants

11:30 **Introduction**

Welcome and Introductions (Satya & Rolf)
Workshop Overview (Rolf)

11:50 **Edge Applications and Services**

Global Edge-Native Games - Opportunities and Requirements

Foad Shahbazi, Niantic
The BMW Group Edge Platform -
On Demand Functionality for Manufacturing
Dr. Veit Hammerstingl, BMW Group
Edge-Computing and AI for Drones
Kim Clement, Unmanned Life

Networking Break

13:20 **Cloud Edge and Telco Edge**

Edge Cloud Products and Use Cases |
Robin Harwani, AWS
Edge Computing Services @ Vodafone
Marco Dias Silva, Vodafone Group
Cloud-native Abstractions for Network Programmability
Landon Cox, Microsoft Azure

14:20 **Summary Workshop Session Day 1**

Summary Day 1 and Outlook Day 2 (Satya & Rolf)

14:30 **End of Workshop Day 1**

AGENDA DAY 2

DAY 2 - 19 May 2021

EDT

- 11:15 Web-Conference Set-up and Test with all Participants
- 11:30 **Welcome**
Overview Workshop Day 2 (Satya & Rolf)
- 11:35 **Update on Edge Work at OEC & CMU**
OEC - Progress and Outlook (Jim)
V-Light: Edge-Native Mobile Augmented Reality Gaming
Bob Gazda, InterDigital and Tom Eizler, CMU
- 12:10 **Edge Technology**
A Telco Core Designed for the Far Edge – or Crypto Miners?
Brian Barritt, Connectivity @ Facebook
GSMA - Update on the Telco Edge Operator Platform
Shamik Mishra, GSMA and Altran
Edge and 5G Technology
Todd Landry, JMA

Networking Break

- 13:30 **Future of Edge**
Convergence at CableLabs
David Debrecht, CableLabs
ETSI MEC - Edge Sandbox Service
Bob Gazda, Michel Roy, InterDigital
Delivering Value to the Edge – 5G and Beyond
Javan Erfanian, NGMN and Bell Canada
- 14:20 **Workshop Summary**
Summary of Workshop and Action Items (Satya & Rolf)
- 14:30 **End of Workshop**

SESSION: EDGE APPLICATIONS AND SERVICES

GLOBAL EDGE-NATIVE GAMES - OPPORTUNITIES AND REQUIREMENTS

FOAD SHAHBAZI, NIAN TIC

THE BMW GROUP EDGE PLATFORM - ON DEMAND FUNCTIONALITY FOR MANUFACTURING

DR. VEIT HAMMERSTINGL, BMW GROUP

EDGE-COMPUTING AND AI FOR DRONES

KIM CLEMENT, UNMANNED LIFE

SESSION: CLOUD EDGE AND TELCO EDGE

EDGE CLOUD PRODUCTS AND USE CASES

ROBIN HARWANI, AWS

EDGE COMPUTING SERVICES @ VODAFONE

MARCO DIAS SILVA, VODAFONE GROUP

CLOUD-NATIVE ABSTRACTIONS FOR NETWORK PROGRAMMABILITY

LANDON COX, MICROSOFT AZURE

WORKSHOP SUMMARY – DAY 1

Session: “Edge Applications and Services”

- Edge-native Gaming: Insight into business opportunities and requirements
- Excellent insight into the world of edge-based manufacturing
- Edge-based drone applications: opportunities and requirements

Session: “Cloud Edge and Telco Edge”

- Edge activities and use cases at AWS
- Update on latest edge activities at Vodafone
- Network - Edge API concepts from Azure for Operators



AGENDA DAY 2 → TOMORROW

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Please contact: Dr. Rolf Schuster, Director Open Edge Computing Initiative
Rolf.Schuster@openedgecomputing.org, www.openedgecomputing.org, Twitter: [openedgecomput1](https://twitter.com/openedgecomput1)



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SESSION: UPDATE ON EDGE WORK AT OEC & CMU

OEC - PROGRESS AND OUTLOOK

JIM BLAKLEY

V-LIGHT: EDGE-NATIVE MOBILE AUGMENTED REALITY GAMING

BOB GAZDA, INTERDIGITAL AND TOM EIZLER, CMU

SESSION: EDGE TECHNOLOGY

A TELCO CORE DESIGNED FOR THE FAR EDGE — OR CRYPTO MINERS?

BRIAN BARRITT, CONNECTIVITY @ FACEBOOK

GSMA - UPDATE ON THE TELCO EDGE OPERATOR PLATFORM

SHAMIK MISHRA, GSMA AND ALTRAN

EDGE AND 5G TECHNOLOGY

TODD LANDRY, JMA

SESSION: FUTURE OF EDGE

CONVERGENCE AT CABLELABS

DAVID DEBRECHT, CABLELABS

ETSI MEC - EDGE SANDBOX SERVICE

BOB GAZDA, MICHEL ROY, INTERDIGITAL

DELIVERING VALUE TO THE EDGE – 5G AND BEYOND

JAVAN ERFANIAN, NGMN AND BELL CANADA

WORKSHOP SUMMARY – DAY 1 + DAY 2



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Day 2

Session: “Edge Work at OEC & CMU”

- OEC progress and new workstreams
- InterDigital-CMU work on edge-native gaming

Session: “Edge Technology”

- 5G and Edge solutions at Facebook Connectivity
- Update on GSMA Operator Platform & Overview Ensconce edge platform
- Insight into 5G & Edge Technology at JMA

Session: “Future of Edge”

- Insight into convergence work at CableLabs
- Overview and demo ETSI MEC Sandbox
- Edge Computing and 6G vision from NGMN



Please contact: Dr. Rolf Schuster, Director Open Edge Computing Initiative
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