Droidcon MEC Hackathon 2020

Torino, 25-26 november 2020

NEWS: now organized as fully REMOTE event!!

https://it.droidcon.com/2020/hackathon/

On November 25th-26th the ICT ITS Piemonte will become the edge computing lab (remotely accessible) of this edition of the MEC Hackathon! During the hackathon you will learn - and exploit - the ETSI MEC APIs, running on MEC hosts during the whole competition, to develop applications at the edge of the network.

- CISCO will offer high performing servers to host MEC Applications and the workloads developed by the Teams.
- Intel will offer the OpenNESS platform to enable developers to easily onboard their applications on Intel-based servers provided for hackathon.
- LINKS will offer the ETSI compliant MEC Location API, and related guidelines for developers on how to use it.
- Equinix Metal will offer edge PoPs for the remote participation to the hackathon.

Among the **prizes** for the winning teams:

- the venue host Synesthesia will provide the winners free passes for a future Droidcon conference (2021). Synesthesia will also present a customized Hackathon Winners trophy to proudly display in their office. Moreover, **the City of Turin will offer the possibility to the Hackathon winner to propose their solution in the framework of the Smart Road Project**. Last but not the least: Intel will offer to the winners of the MEC Hackathon the possibility to be part of Intel Software Innovator program, and their project will be eligible to be featured as an Intel Early Innovation Project. Special prizes will be offered by the organizing committee in correspondence to particular achievements of the developers teams, for some of the following (optional) challenges: usage of OpenVINO toolkit, or DPC++ framework.

Full event programme

Two options are possible for attending:

- Track 1 only (MEC Webinars, free access)
- Track 1+2, as full Hackathon participation (link here)

25-26 November – Droidcon MEC Hackathon 2020

Detailed programme for Day1 - morning:

<table>
<tr><td>10:30</td><td colspan="2">Registration, Welcome and presentation by the host, Francesco Brocero (Synesthesia)</td></tr>
<tr><td>10:45</td><td colspan="2">Guidelines for the MEC Hackathon. Dario Sabella (Intel)</td></tr>
<tr><td></td><td>Track 1 – Technical MEC tutorials and masterclass
WEBEX EVENT with chat and Q&A
https://cisco.webex.com/cisco/onstage/g.php?MTID=eddc29ca0b0d3bd69824b9708af55b8ac
Event password: HMrf6pMxT45</td><td>Track 2 - MEC Hackathon
WEBEX Teams for the developers and the HOC.
(Link provided to Hackathon participants)</td></tr>
<tr><td>11:00</td><td>ETSI MEC Architecture and APIs (Michele Carignani, ETSI CTI)
This presentation will provide a high-level overview of the MEC standard, including the ETSI activities on OpenAPI representations (published at https://forge.etsi.org/), as a useful reference for both developers at the Hackathon and also all attendees at the event.</td><td rowspan="2">Developers teams can start their implementation work, getting support from local people belonging to the Organizing Committee.
Dedicated Wifi network will be deployed for the MEC Hackathon application developments.
CISCO will provide also a chat (WEBEX Teams) for information sharing.</td></tr>
<tr><td>11:30</td><td>Overview of the MEC Hackathon setup for application developers (Anish Rawat, Xavier Simonart, Intel)
This tutorial is providing an overview of the overall setup offered to Hackathon participants, with MEC servers available and remotely accessible from developers. Registered users will be able to try the OpenNESS and understand how to develop MEC applications.</td></tr>
<tr><td>12:30</td><td colspan="2">Lunch Break</td></tr>
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Detailed programme for Day1 - afternoon:

14:00	**Deepdive on OpenNESS (Aniket De, Wipro, Xavier Simonart, Intel) – online tutorial** The platform enables easy data ingestion on the MEC by abstracting underlying network complexity with open APIs. It has features such support for Cloud Connectors (e.g. AWS Greengrass), and container and VM-based orchestration of the MEC platform.	MEC Hackathon: Continuation of the application development. Preparation of use cases, mobile apps and related presentation (developers will be given a brochure with all information needed). Intermediate Delivery: by 17.00 (exceptional deadline extension is subjected to a decision of the Hackathon Organizing Committee)
15:00	**Hands-on session with oneAPI (Adonay Berhe and Benjamin J Odom, Intel)** Registered users will be able to try the oneAPI and understand how to use it as support to develop workload accelerations for their MEC applications.	
16:00	**Developers, startups and edge innovators ecosystem in the 5G era (Martin Olczyk, Techstars) – online keynote** Inspirational presentation related to business aspects for innovators. Insights/considerations on market status, with opportunities and challenges for startups and developers.	
16:30	Coffee Break	
17:00		**Elevator pitch** from Developers Teams (only for Jury Members) (**intermediate delivery** and presentation of the project idea from each Team) ***ONE SPEAKER per TEAM (Max 3 mins each)***
18:00	end of Day1	

Detailed programme for Day2 - morning:

10:30	Welcome from the host, Francesco Brocero (Synesthesia)	
	Track 1 – Technical MEC tutorials and keynotes **WEBEX EVENT** with chat and Q&A https://cisco.webex.com/cisco/onstage/g.php?MTID=e76ad89a1d9e375651fcbe761a3944fc6 Event password: BKuVbM5nj62	**Track 2 - MEC Hackathon** **WEBEX Teams** for the developers and the HOC. (Link provided to Hackathon participants)
10:45	**Edge computing view (Alessandro Breccia, CISCO) – keynote** Overview of edge computing infrastructure, use cases and monetization	
11:15	**ETSI MEC Location API (Maurizio Florida, LINKS) – online tutorial** This technical presentation will provide an overview of the MEC Location API developed by LINKS and offered to developers. The simulation environment and also the integration with OpenNESS will allow developers to use these functionalities for their edge applications.	
11:45	**MEC federation: standards overview (Masaki Suzuki, KDDI) – online keynote** This presentation will provide a technical overview of standardization activities in ETSI MEC on Inter-MEC system communication, in alignment with the work in 5GAA on automotive use cases and in GSMA OPG on the MEC federation.	

12:30	Lunch Break

Detailed programme for Day2 - afternoon:

	Track 1 – Keynotes and ecosystem panel	**Track 2 - MEC Hackathon**
14:00	**Edge Cloud and innovation on automotive: the Smart Road project in Torino City Lab (Nicola Farronato, City of Turin) – keynote** *The speaker will present the Smart Road project: a consortium of partners, from car makers, network operators, universities and the City of Turin, with the aim of develop, implement and test advanced solutions in the urban environment of Turin.*	MEC Hackathon: Continuation of the application development. Preparation of use cases, mobile apps and finalization of the presentation (videoclip) Final Delivery: by 17.00 (exceptional deadline extension is subjected to a decision of the Hackathon Organizing Committee)
14:30	**Edge Computing Implementation – The Telco Viewpoint (Andrea Laganà, TIM) – keynote** Presentation of the point of view of the mobile operator on edge computing, with special focus on implementation aspects.	
15:00	**Operator Platform (Faisal Zia, GSMA) – keynote** This presentation will provide an overview of the Operator Platform Group in GSMA, defining the requirements for the definition of a edge federation infrastructure.	
15:30	**MEC4AUTO: edge computing for automotive (Leonardo Gomes, 5GAA WG1 Vice Chair) – online keynote** This presentation will provide a technical overview of the activities in 5GAA related to the MEC4AUTO work item.	
16:00	**Telco Edge Cloud task force (Juan Carlos Garcia Lopez, Telefonica) – keynote** This presentation will provide an overview of the Telco Edge TF, including the trials deployed with many operators and partners. The speech will also explain how these initiatives are important for edge application developers in the ecosystem.	
16:30	**MEC federation solutions (Himanshu Singh, Altran) – keynote** This presentation will provide an overview of the technical solution to implement a MEC federation in a multi-MNO environment.	
17:00	**Panel Discussion**, *Business opportunities offered by Edge Cloud for the automotive and other industry segments.* Panel moderated by Dario Sabella (Intel) Confirmed Panelists: • Nicola Farronato, City of Turin • Edoardo Bonetto, LINKS Foundation • Juan Carlos Garcia Lopez, Telefonica • Farid Singh, Tech3innovate • Faisal Zia, Future Networks, GSMA • Leonardo Gomes, Intel, 5GAA WG1 Vice Chair • Shamik Mishra, Altran, OPG Dy. Chair Moderator: Dario Sabella	
18:00	Wrap-Up & Closing by the moderator, Dario Sabella (Intel) and event host Francesco Brocero (Synesthesia)	

27 November at 17.40 CET – Droidcon MEC Hackathon AWARDS

Celebration of the AWARDS at the main Droidcon conference

https://it.droidcon.com/2020/agenda/