

# EdgeGallery System Demonstration

## Evergreen Release (v1.2)

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# Introduction

Industry transformation – virtualization (VNF) & container (CNF)

- ✓ To meet the agility of new user requirements
- ✓ To meet the agility of user service enhancements
- ✓ To reduce the Time to market feature
- ✓ To meet the timely need of scaling
- ✓ To meet the high availability
- ✓ To reduce the running and capital cost
- ✓ To improve the interoperability by adopting the standards

Standardization of transformation - ETSI MANO & ETSI MEC

Realization - Everything revolves around OpenStack (Cloud) & kubernetes(Edge)

- ✓ Customization for user needs based on region, operators , security measure etc
- ✓ Multiple development technologies – very complex
- ✓ Heterogeneous hardware architecture
- ✓ workload placement - Support telco specialized hardware selection
- ✓ Verification and certification on given standards, scenario, etc
- ✓ Collaborating across different parties vendors, operators, providers, etc

Virtualize the Telco network function & connection-pipe  
using *edge* and *cloud* computing  
as **manageable MEC application**

**Need a platform where transformation happens thru collaboration !**

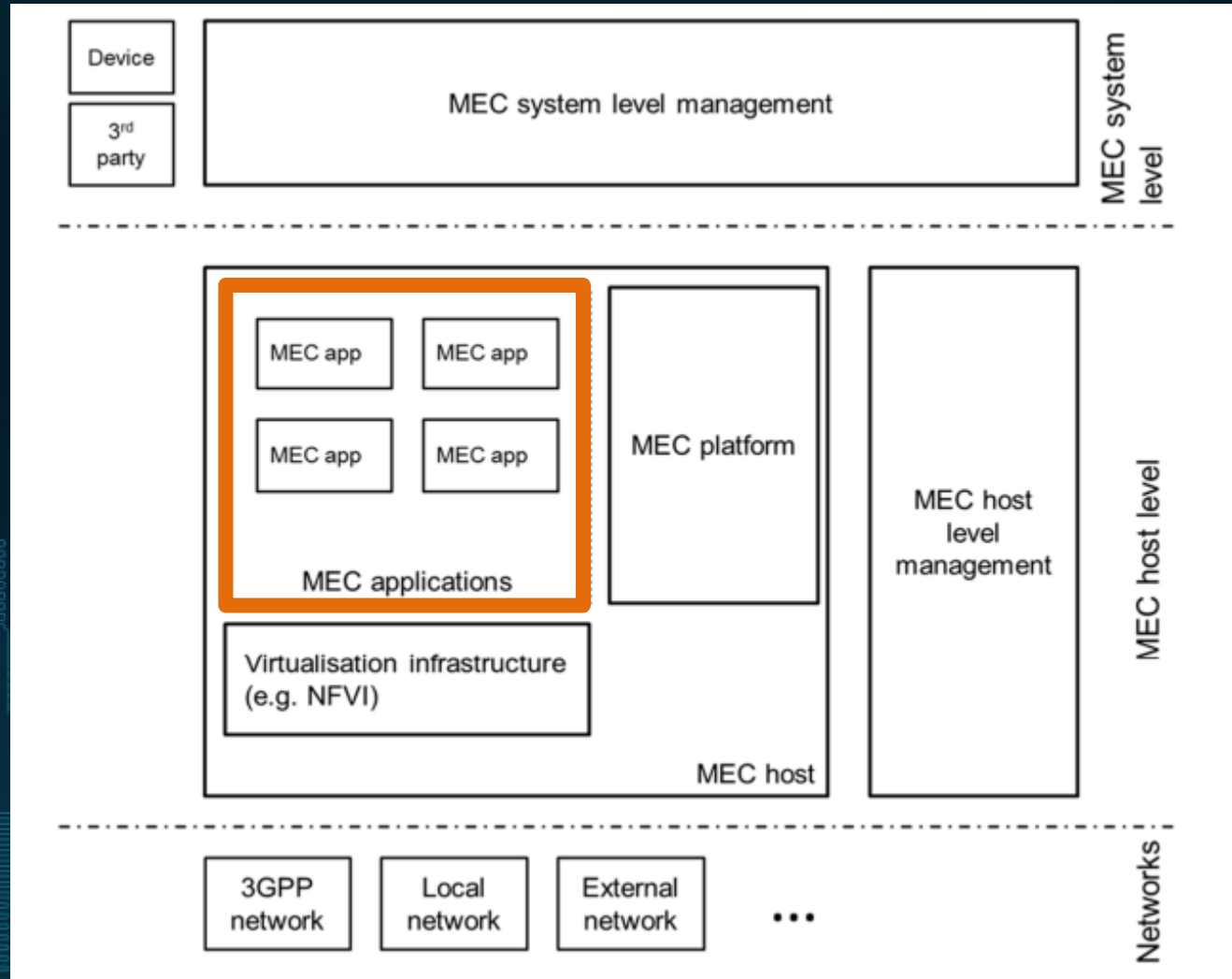
{Vendors} + {Standard Defining Org }+ {Operators} <-> {Open source Developer community}



- DEVELOP
- TEST
- CERTIFY
- RUN & MANAGE

## 5 Multi-access Edge Computing framework

Multi-access Edge Computing enables the implementation of MEC applications as software-only entities that run on top of a virtualization infrastructure, which is located in or close to the network edge. The Multi-access Edge Computing framework shows the general entities involved. These can be grouped into system level, host level and network level entities.



# Edge APP – Need of the hour ...

**MEC App =** App images + (deploy Topology) + {service conf} + <dev/ops guide(s)> + [Traffic + DNS Rules]

## As an edge app **developer**:

- ✓ IDE to develop my app
  - ✓ to generate app package, which can be on-boarded
  - ✓ to integrate with required edge capabilities and test it asap
  - ✓ to manage my app test cases
  - ✓ to test the app in sandbox environment
  - ✓ to test the app in real environment
  - ✓ to deliver additional abilities into the platform, which can be used/leveraged by other app
- [as an edge service **partner**]

## As an edge app **vendor**:

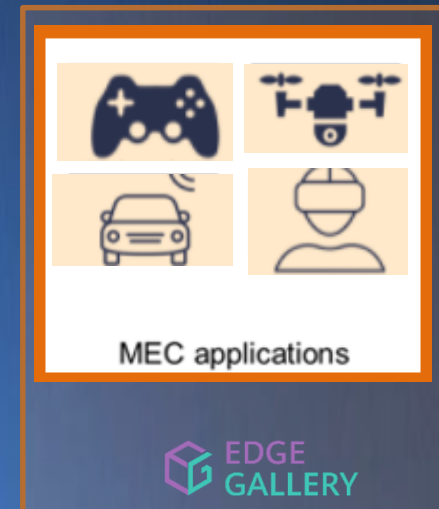
- ✓ to manage my app artifacts
- ✓ to manage my app test cases
- ✓ to verify my app schematics, securities and life cycle
- ✓ to get certified my app as edge gallery compliant
- ✓ to market it
- ✓ to share my app with my parties (community, operator, partners) involved in my B2B

## As an edge **operator**:

- ✓ to download and manage the edge app
- ✓ to deploy the given app on appropriate edge nodes
- ✓ to monitor the deploy app in different edge nodes
- ✓ to configure rules and/or upgrade my app
- ✓ to scale my app on-need on-the-fly
- ✓ to terminate the running app

## As an edge app **tester**:

- ✓ to manage the test cases
- ✓ to organize test cases
- ✓ to execute test cases
- ✓ to analyze test reports
- ✓ to test the app in sandbox environment
- ✓ to test the app in real environment



# EdgeGallery Components

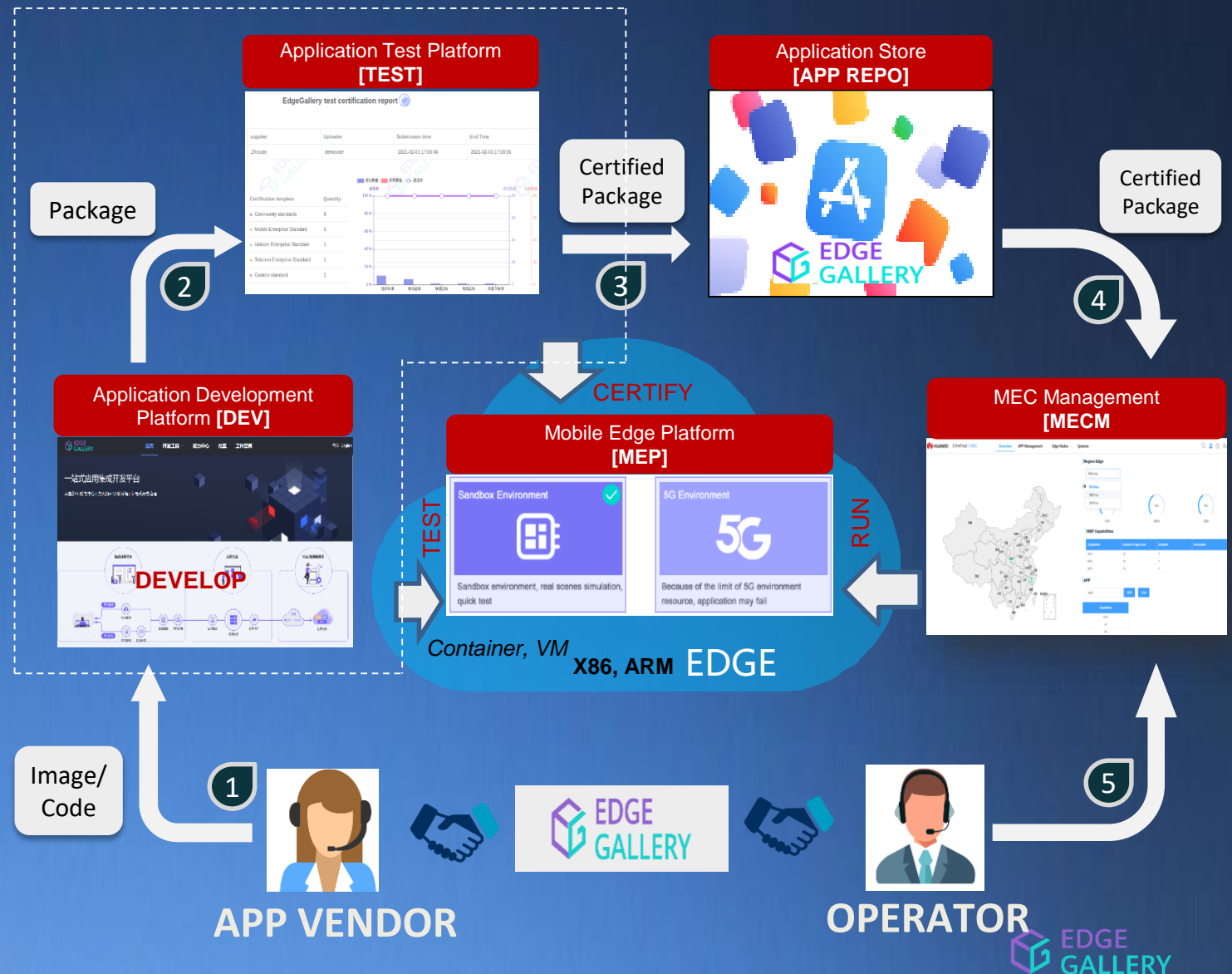
**MEP:** Autonomous, Rich in Platform & network capabilities, Support heterogeneous architecture

**MEC Developer Platform:** Provides Tool Chain, SDKs, APIs & Sandbox features for application development, packaging and testing.

**Application Test Platform:** Automated Application Certification, Test case management and customization, Visualized test reports

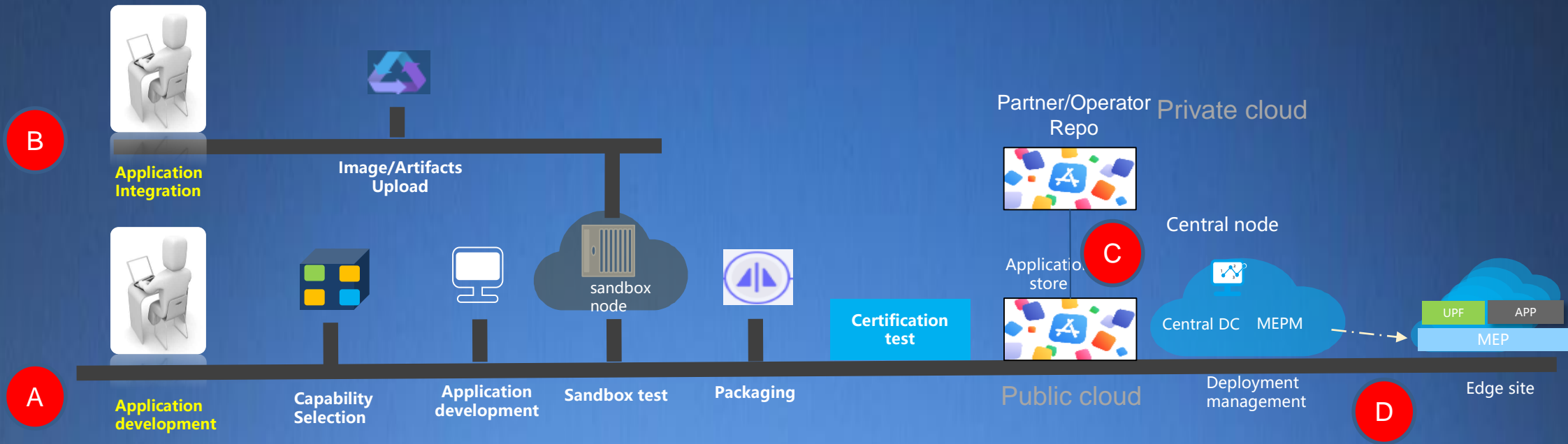
**MEC App Repository:** Unified App Package Format, Standardized API Between Operator App Store and MECM

**MECM:** Application orchestration, Application LCM, FCAPS, Policy driven closed Loop



# Demo

- A. Edge app Development
- B. Edge App Integration
- C. Edge App Federation
- D. Edge App Instantiation & Termination





Version 1.2   Version 1.1   Version 1.0

X86			ARM		
<b>V1.2 Evergreen</b> Release Date: July 7, 2021			<b>V1.2 Evergreen</b> Release Date: July 7, 2021		
All	Edge	Controller	All	Edge	Controller
<a href="#">Download (4.7GB)</a>	<a href="#">Download (2.2GB)</a>	<a href="#">Download (3.7GB)</a>	<a href="#">Download (4.4GB)</a>	<a href="#">Download (2.2GB)</a>	<a href="#">Download (3.3GB)</a>

Note: all—installation package includes center side and edge side installation package; edge—only includes edge side installation package (edge side installation package includes mepm, mep module); controller—only includes center side installation package (center side installation package) Including appstore, developer, mecm, atp modules)

<https://www.edgegallery.org/en/software-download-2/>

# Thank you.

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