

# EdgeGallery – Opensource MEC Platform

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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 !**

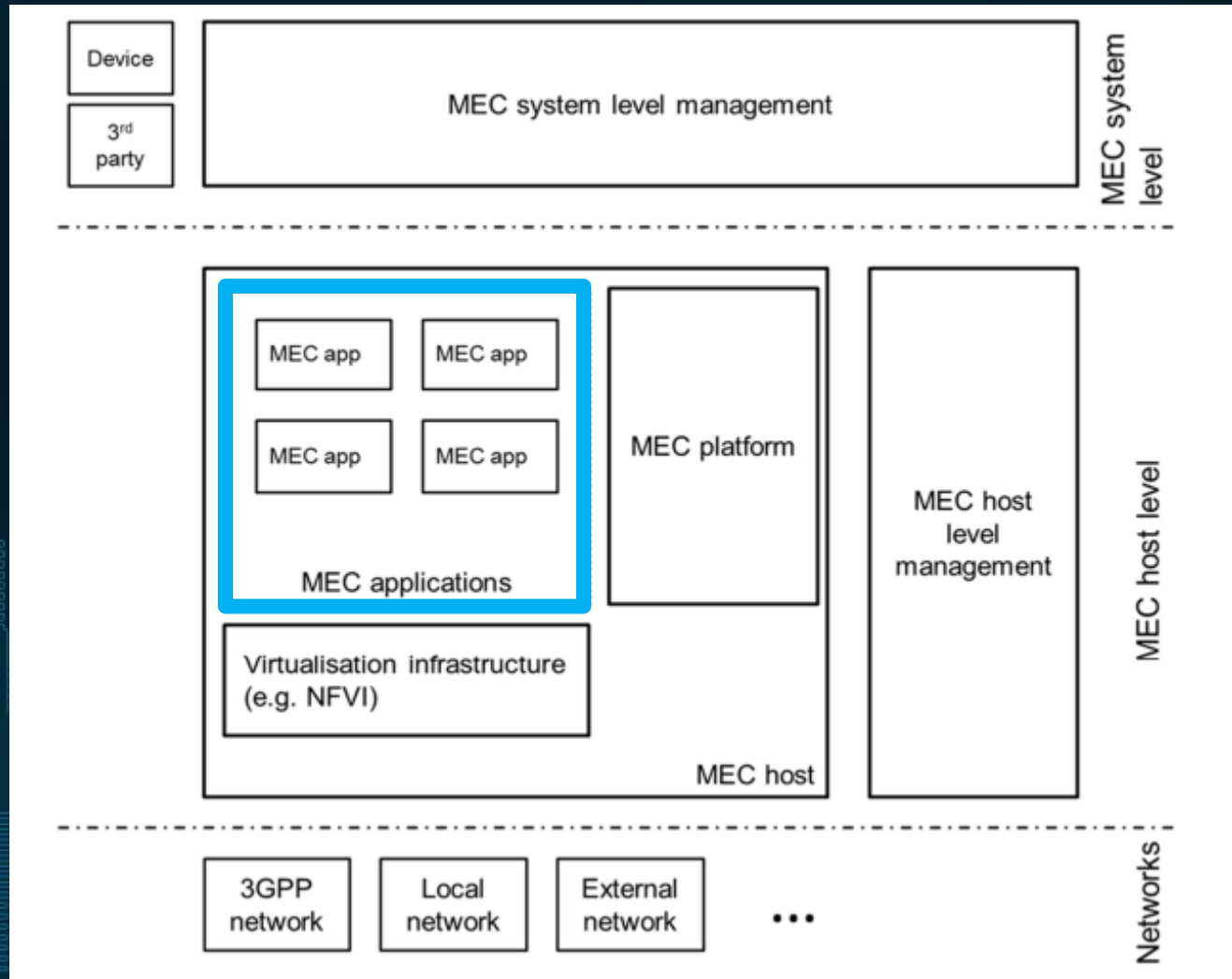
{Vendors} + {Standard Defining Org} + {Operators} <-> {Open source Developer community}



- DEVELOP
- TEST
- CERTIFY
- RUN & MANAGE

## 5 Multi-access Edge Computing framework

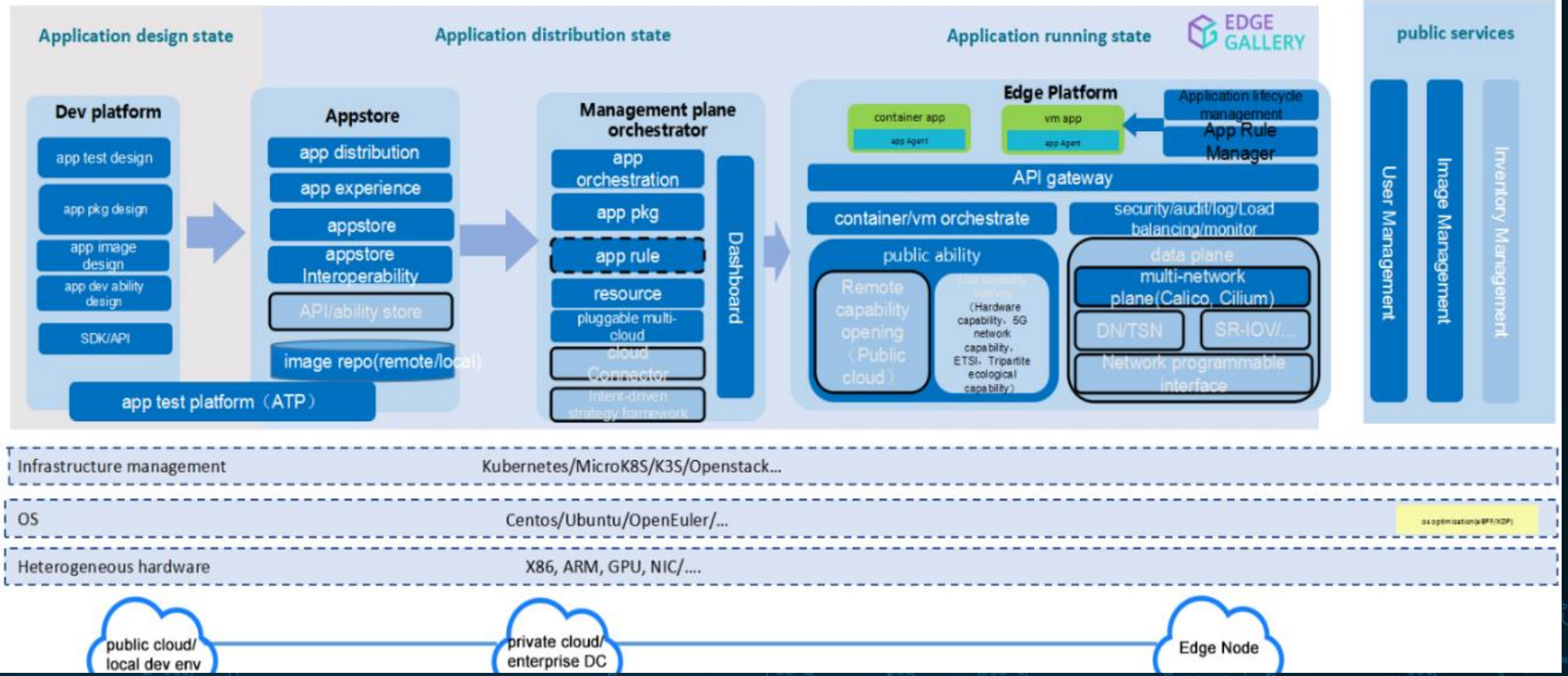
Multi-access Edge Computing enables the implementation of MEC applications as software-only entities that run on top of a virtualization infrastructure, which is located in or close to the network edge. The Multi-access Edge Computing framework shows the general entities involved. These can be grouped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



# EdgeGallery

5G MEC open source community

Make 5G capabilities within reach at the edge



# Edge APP – Requirements from different personas

**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**:

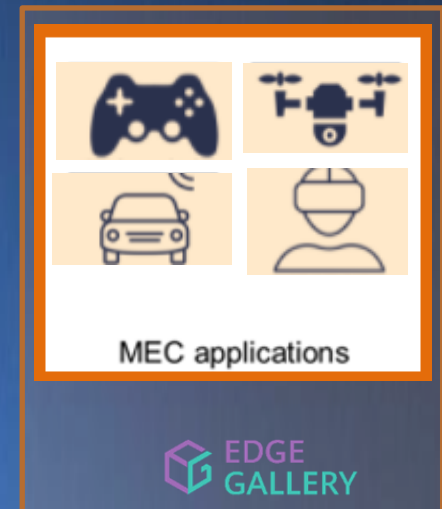
- ✓ to manage my app artifacts
- ✓ to manage my app test cases
- ✓ to verify my app schematics, securities and life cycle
- ✓ to get certified my app as edge gallery compliant
- ✓ to market it
- ✓ to share my app with my parties (community, operator, partners) involved in my B2B

## 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

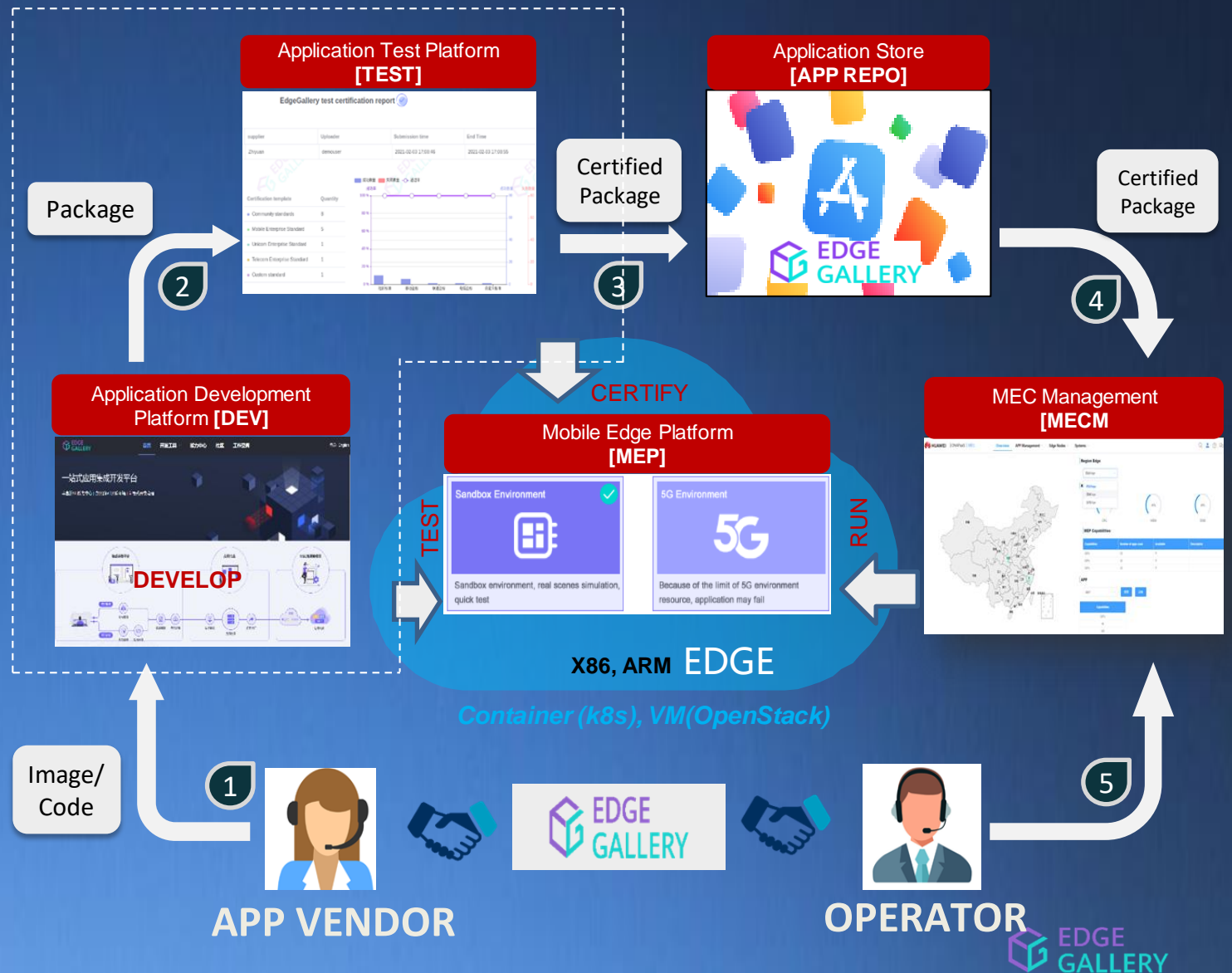
**MEP:** Autonomous, Rich in Platform & network capabilities, Support heterogeneous architecture

**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



The website header includes the EdgeGallery logo and a navigation menu with items: Home, Project Introduction, Software Download, Developer, News, Security, and About Us. A search bar with a magnifying glass icon and a language dropdown set to 'English' is also present.

The main content area features a large illustration of two people standing next to large 3D letters spelling 'EDGE GALLERY'. Below this, the text reads 'EdgeGallery 5G MEC open source community' and 'Make 5G capabilities within reach at the edge'.

Three featured cards are displayed: 'EdgeGallery Overview' (Learn about 5G MEC open source projects), 'Software Download' (EdgeGallery installation and deployment), and 'Project Cases' (View 5G MEC application practice cases).

The sidebar for the documentation site is titled 'EdgeGallery Documentation'. It features the EdgeGallery logo and a 'latest' version indicator. A search bar labeled 'Search docs' is provided. Below the search bar, a list of navigation links is shown: EdgeGallery Home, GETTING STARTED (with sub-link 'Getting Started'), RELEASE NOTES (with sub-link 'Release Details'), and ARCHITECTURE.

The main content area of the documentation site shows the breadcrumb 'Docs » Welcome to EdgeGallery documentation!' and a 'View page source' link. A 'Next' button with a right arrow is located at the top right.

The main heading is 'Welcome to EdgeGallery documentation!'. The introductory text states: 'The EdgeGallery community focuses on the MEC platform framework of the carrier network's edge. It builds the basic framework of MEC edge resources, applications, security and management, and de facto standards of network openness services through open source collaboration, and implements interconnection with the public cloud. A unified MEC application ecosystem is constructed based on compatibility with heterogeneous edge infrastructures'.

Two main sections are listed with bullet points: 'EdgeGallery Home' and 'Getting Started'.

A 'Release Notes' section is also visible at the bottom of the page.

The YouTube channel page for 'EdgeGallery' (10 subscribers) features a 'SUBSCRIBE' button and navigation tabs for HOME, VIDEOS, PLAYLISTS, CHANNELS, and ABOUT. A search icon is also present.

The 'Uploads' section is active, showing a 'PLAY ALL' button. Six video thumbnails are displayed with their titles and view counts:

- Edgegallery provided Public lighting profile based on LF...** (4:04, 6 views · 11 days ago)
- EdgeGallery provided Power Grid Profile based on...** (6:39, 10 views · 13 days ago)
- EdgeGallery: EgConnect push to call/video webRTC...** (4:51, 10 views · 2 weeks ago)
- EdgeGallery: Application Development Introduction &...** (12:16, 45 views · 1 month ago)
- Edgegallery v1.5 Configuration** (6:29, 22 views · 1 month ago)
- 5G MEC Open Source Platform and Practice Dem...** (33:22, 12 views · 1 month ago)

# Thank you.

Join Us

<https://gitee.com/edgegallery/community>

