



The Standards People



Insights for Edge Software Developers



Presented by: **Robert Gazda**
Senior Director, InterDigital;
ETSI ISG MEC Delegate;

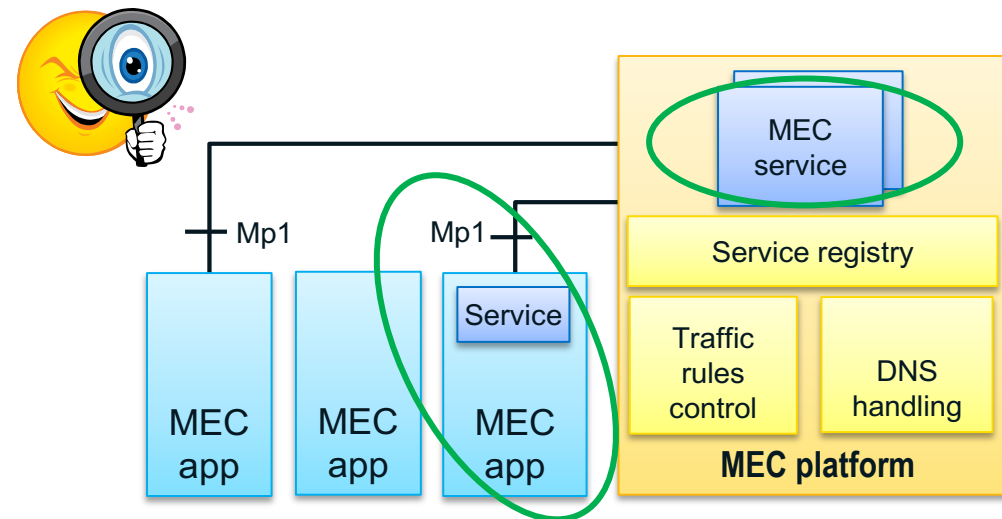
For: **everyone**

***Episode #11 – Creating New MEC Services
& the ETSI MEC Sandbox***

In this episode ...

We will learn:

- How a MEC app can offer New MEC Services within a MEC System
- How a New MEC Service can be exposed to and utilised by other MEC Apps in the MEC System
- Capabilities available in the MEC Sandbox to advertise, discover, and consume New MEC Services

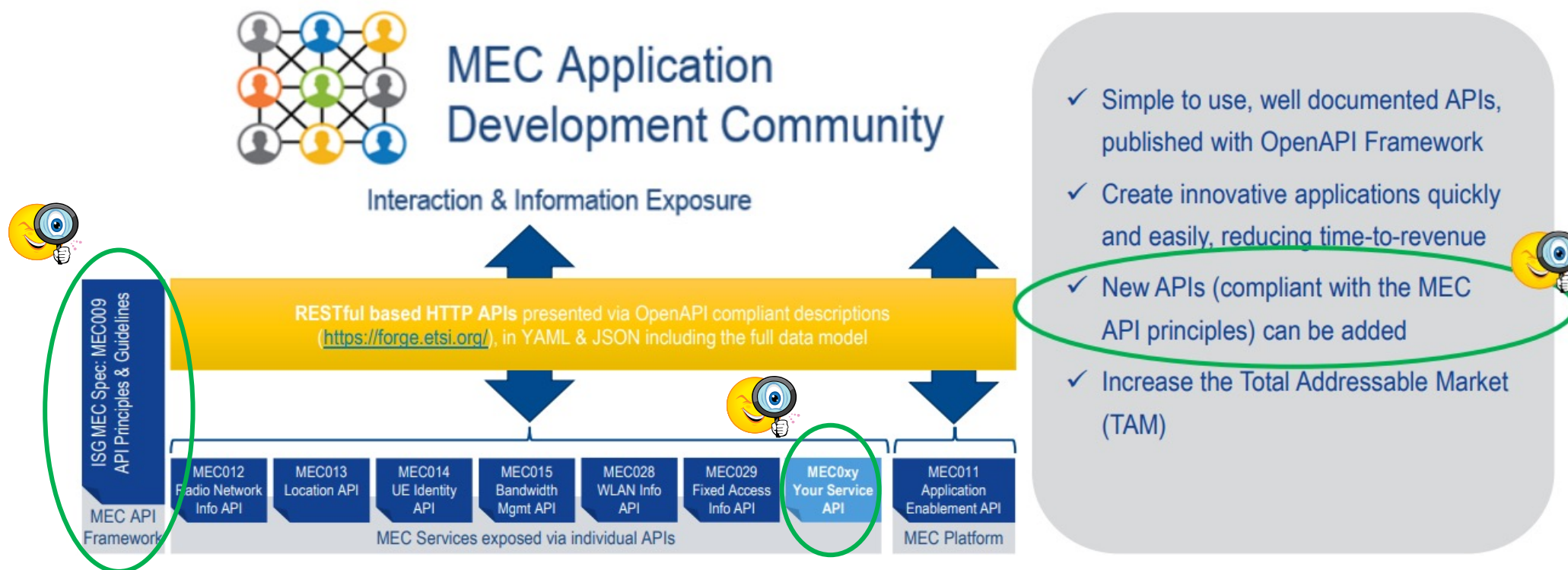


try-mec.etsi.org

1 – Extending MEC with new MEC Service APIs

MEC Services: value-added capabilities to enable MEC applications

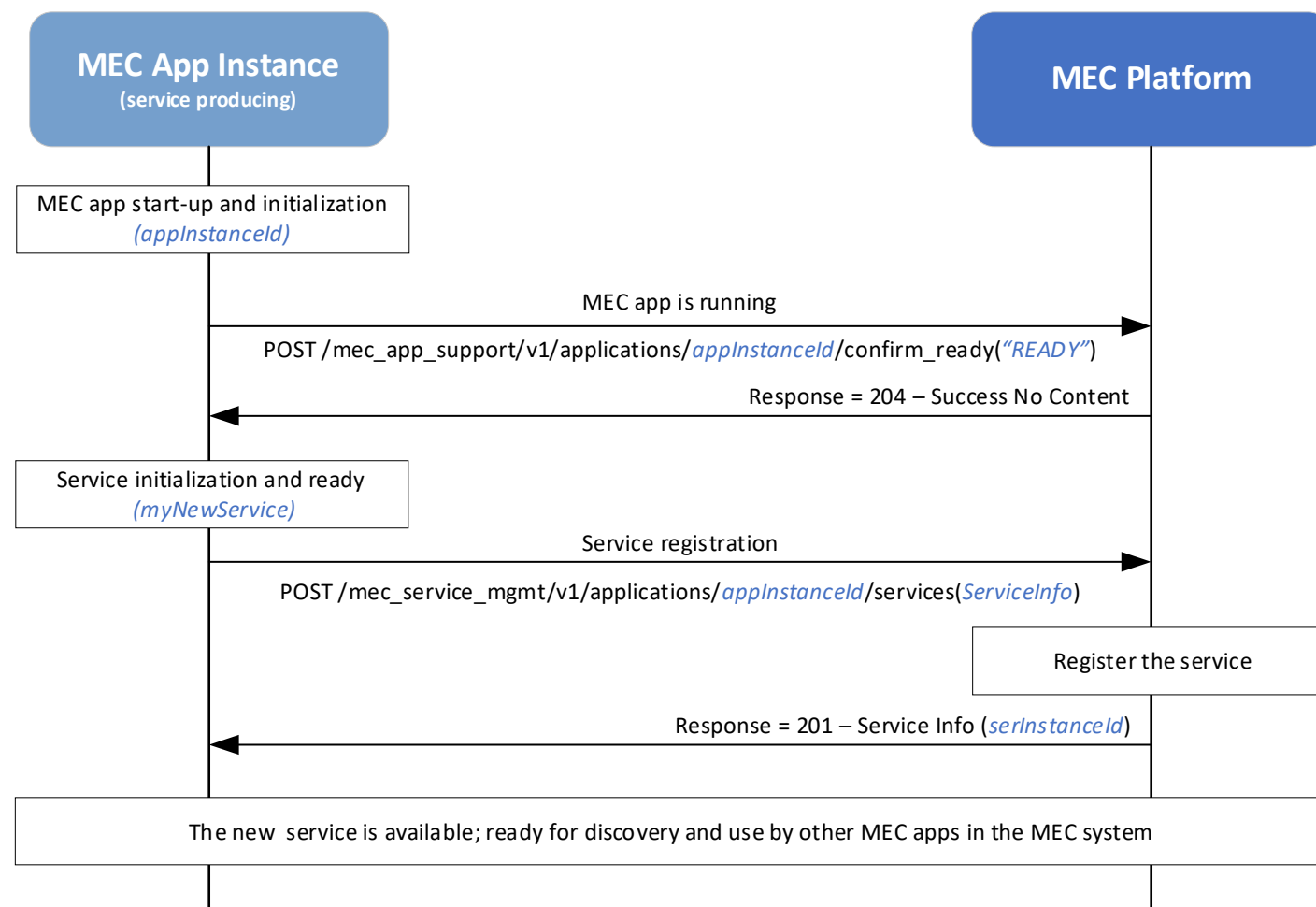
- “Built-in” MEC standardized services provided via the MEC Platform.
- **MEC applications can offer new MEC Services APIs, extending the MEC system**



2 – MEC App exposing a New MEC Service

New Service Registration:

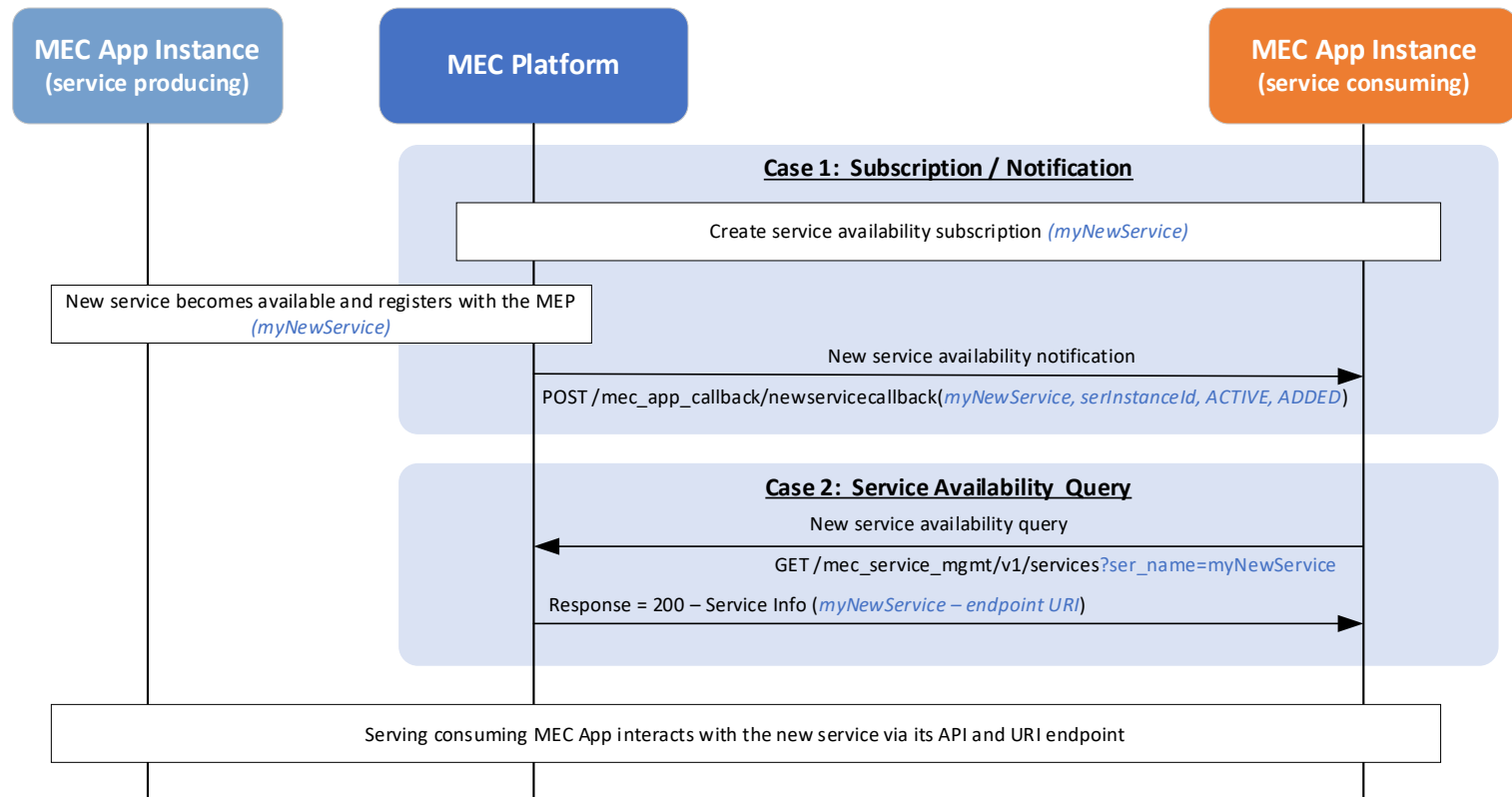
- MEC application initializes and confirms it is ready to the MEC Platform (MEP)
- MEC app prepares its new service API
- MEC app registers the new service with the MEP, providing Service Information
- MEP registers the service and allocates a service instance
- The New MEC Service is now available for other MEC Apps in the MEC system



3 – MEC App discovering a new MEC Service

New MEC Service Discovery:

- Case 1: Subscription / Notification
 - Service consuming MEC App creates a Service Availability Subscription
 - When the new service registers and becomes available, the MEP issues a Service Availability Notification, indicating the New Service is available
- Case 2: Service Availability Query
 - Service consuming MEC App issues a service availability query to the MEP
 - MEP responds with the new service's information, including it's URI endpoint.
- MEC app utilises the New MEC Service via it's API and endpoint



4 – MEC Sandbox: Service Enablement Capability

Step 1. Preparation

- Select a configuration from the Sandbox Simulated Network options
- Create new MEC app instance IDs
- POST “confirm ready” indications

Configuration

Simulated Network
4g-5g-wifi-macro

Pause ☐

Stationary UE 1 / 4

Low Velocity UE 1 / 4

High Velocity UE 1 / 4

MEC App. Instance IDs NEW DELETE

<input type="checkbox"/>	mec015-1 running on mep1 ID: 81c51643-8c6f-4781-ad45-f8a457ca549b
<input type="checkbox"/>	ServiceProducingApp running on mep1 ID: 2ba272f8-7149-45bd-a4af-7a93fbaff7a
<input type="checkbox"/>	ServiceConsumingApp running on mep1 ID: 76798f42-8bdd-41b0-a962-498d7c2c453f



Step 2. Service Registration – Producing MEC App

- POST to /mec_service_mgmt./.../services to register the new service
- Input : App Instance Id, Service Info
- Response code = 201 on success

METHOD	ENDPOINT
POST	/mec_service_mgmt/v1/applications/2ba272f8-7149-45bd-a4af-7a93fbaff7a/services
REQUEST BODY	
<pre>{ "serName": "myNewService", "version": "1.1.1", "state": "ACTIVE", "transportInfo": { "id": "TransId12345", "name": "REST", "description": "REST API", "type": "REST_HTTP", "protocol": "HTTP", "version": "2.0", "endpoint": { "uris": ["https://mynewservice/v2/"] } } }</pre>	

Step 3. Service Query – Consuming MEC App

- Get /mec_service_mgmt./.../services?ser_name=myNewService
- Response code = 200 on success
- Service Info includes the endpoint to access the new service

METHOD	ENDPOINT
GET	/mec_service_mgmt/v1/services?ser_name=myNewService
REQUEST BODY	
RESPONSE BODY	
<pre>[{ "serInstanceId": "51f43a3e-21e3-403c-800e-b207499e40d9", "serName": "myNewService", "version": "1.1.1", "state": "ACTIVE", "transportInfo": { "id": "TransId12345", "name": "REST", "description": "REST API",</pre>	

Conclusions and further resources



What we have learnt:

- What are MEC Services and how MEC apps can offer new MEC Services
- How a MEC app can register or discover a new MEC Service
- How to use the ETSI MEC Sandbox experiment and enable new MEC services

Interested to learn more?



- Visit the MEC Sandbox and give it a try: <https://try-mec.etsi.org/>
- Learn more about the MEC Service Enablement APIs in [Episode 3 - Edge enablement APIs](#)
- Follow for the [next episodes of the MEC TECH Series](#) 😊

Enjoy the



[https://mecwiki.etsi.org/index.php?title=MEC Tech Series](https://mecwiki.etsi.org/index.php?title=MEC_Tech_Series)

