



2st Open call – Technical details - Webinar

Grant agreement: 688467

Open virtual neighbourhood network to connect
intelligent buildings and smart objects

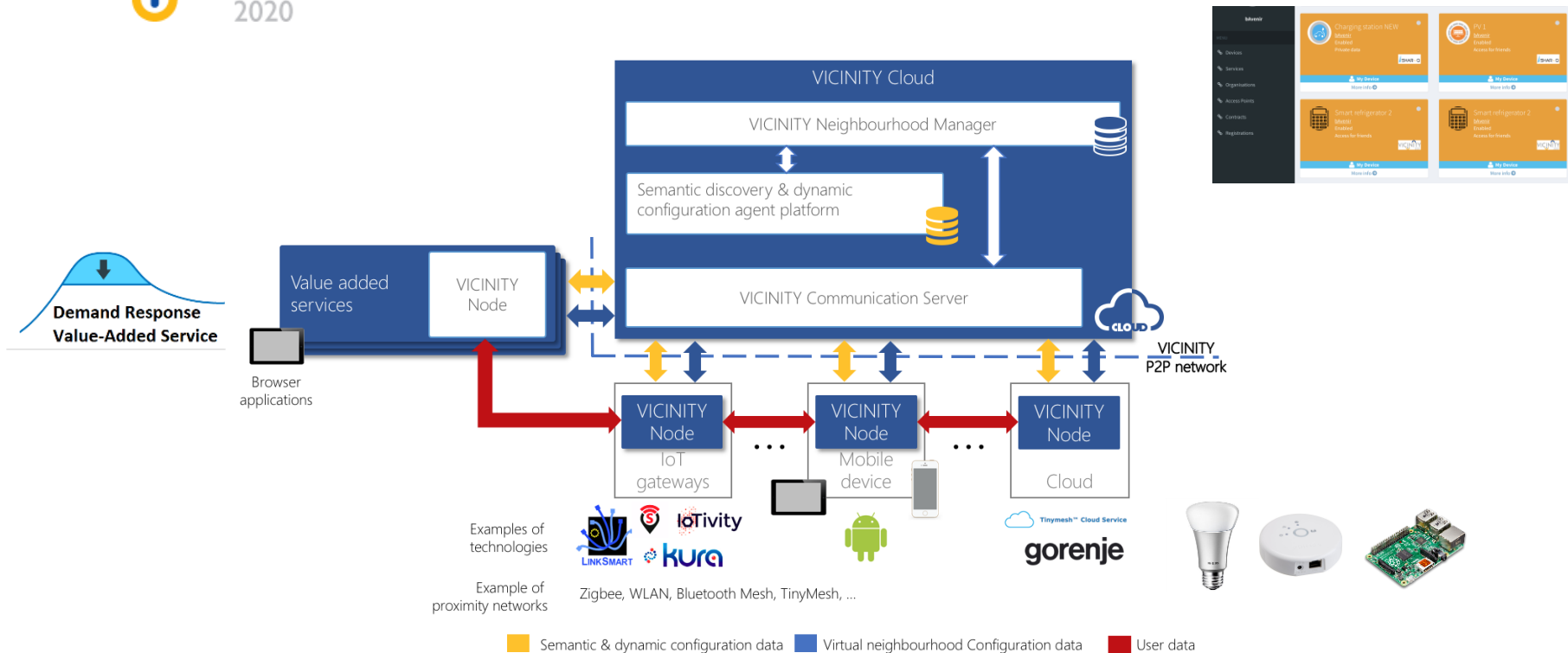


Value - added services over distributed ecosystems

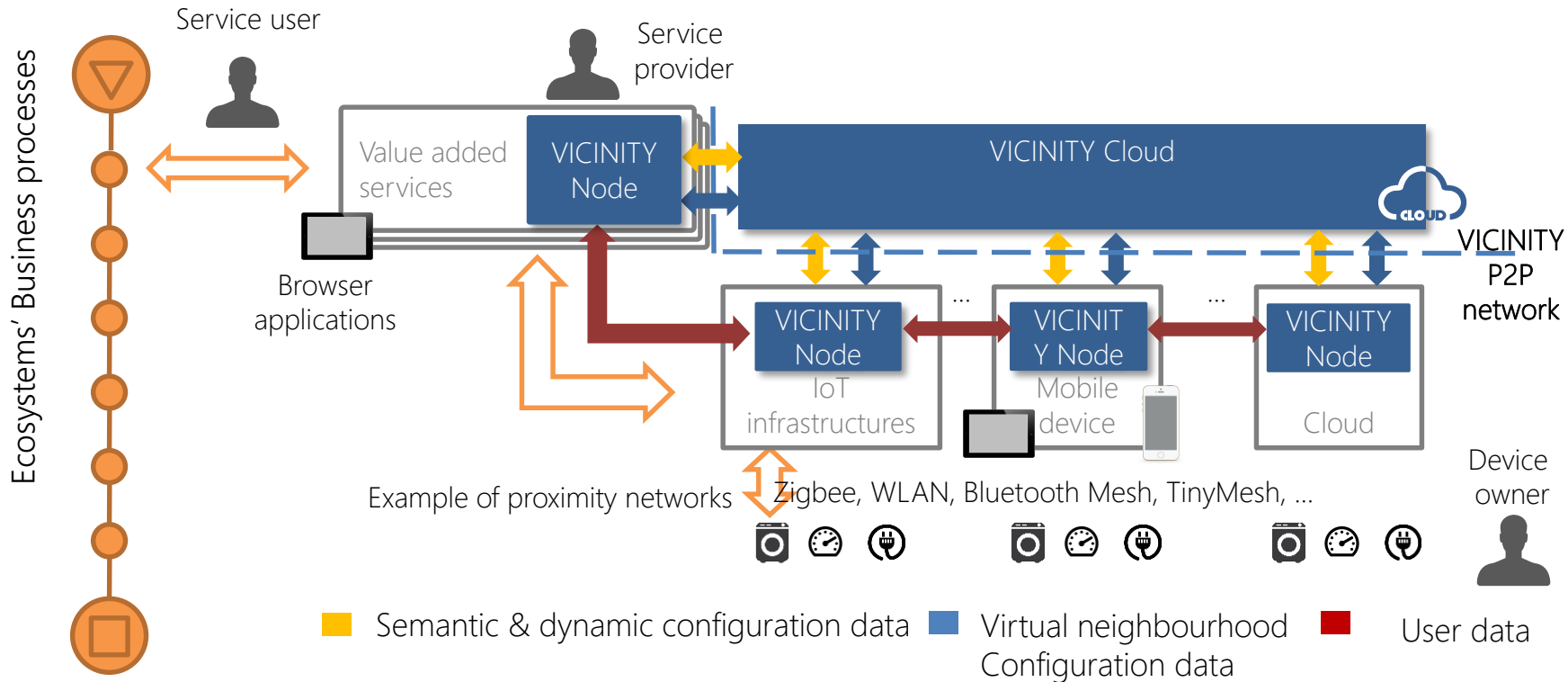


2nd VICINITY Open call for integration of new Value-added services in the VICINITY

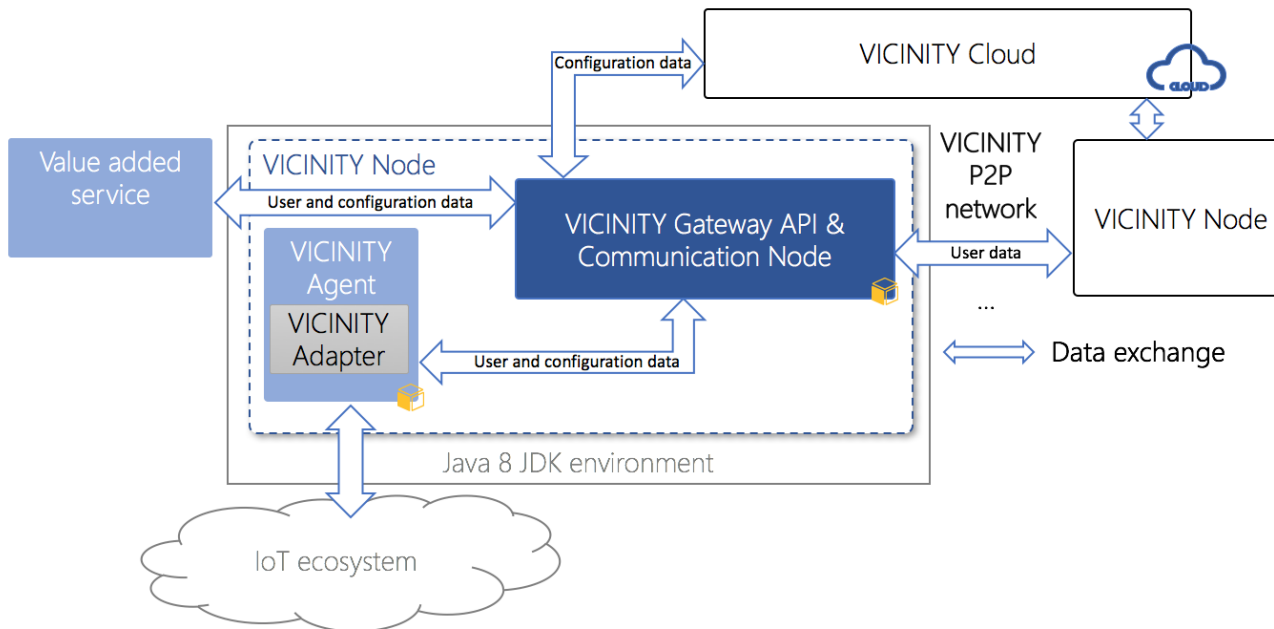
VICINITY Architecture overview




Value-added service logic is implemented outside of the VICINITY Code components.



VICINITY is integrated through VICINITY Node into Value-added service ecosystem

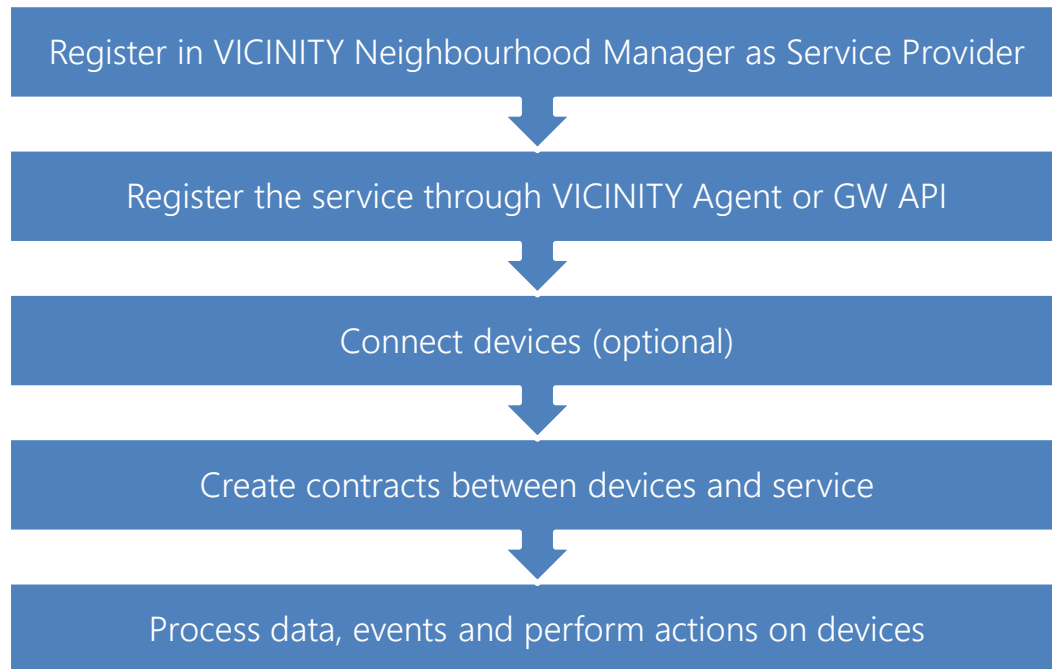


 Zigbee, WLAN, Bluetooth Mesh, TinyMesh, ...

Implement VICINITY Adapter using GW API and VICINITY Agent

- VICINITY Get started documentation:
 - <https://vicinity-get-started.readthedocs.io/>
 - <https://github.com/vicinityh2020/vicinity-neighbourhood-manager>
 - <https://github.com/vicinityh2020/vicinity-agent>
- VICINITY set of APIs:
 - <https://vicinityh2020.github.io/vicinity-gateway-api>
 - <https://vicinityh2020.github.io/vicinity-neighbourhood-manager-api>
 - <https://app.swaggerhub.com/apis/intersoft.sk/vicinity-adapter/1.0.0>

How to connect Value-added service into VICINITY Platform



Support from consortium



VICINITY 2020 Partners



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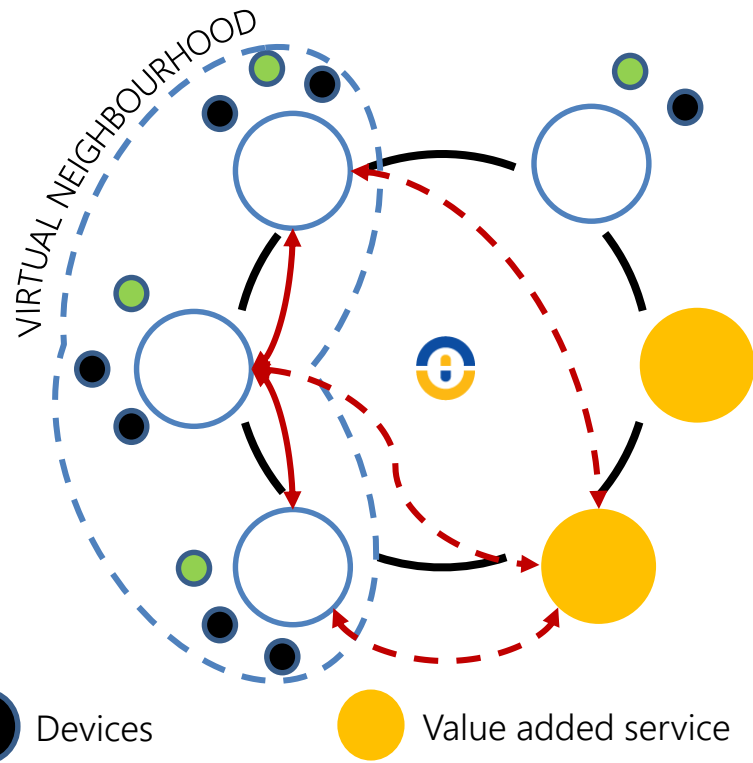
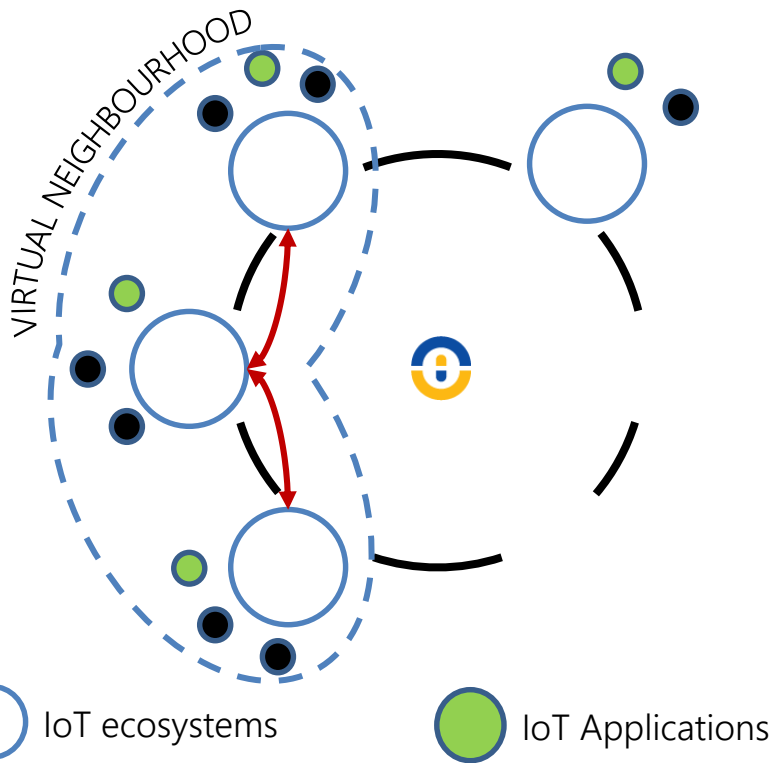


Tinymesh

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Virtual neighbourhoods and interaction with services and devices



IoT ecosystems

IoT Applications

Devices

Value added service

1. to specify the **service business logic**
2. to specify **service description** (service requirements from the VICINITY);
3. (Optional) to specify device description
4. to **implement and integrate the VICINITY Adapter** of the integrated Value-Added Service which will translate ecosystem communication into common VICINITY communication format
5. connect **real Value-Added Service** and (optional) devices
6. to **demonstrate** usage of **Value-Added Services** or **Microservices**

Service description with data requirements from the virtual neighbourhood and interactions

- JSON file describe the name of the service and version:

```
"name": "Example Auto Service",
"oid": "service-oid",
"type": "Service",
"version": "0.0.1",
```

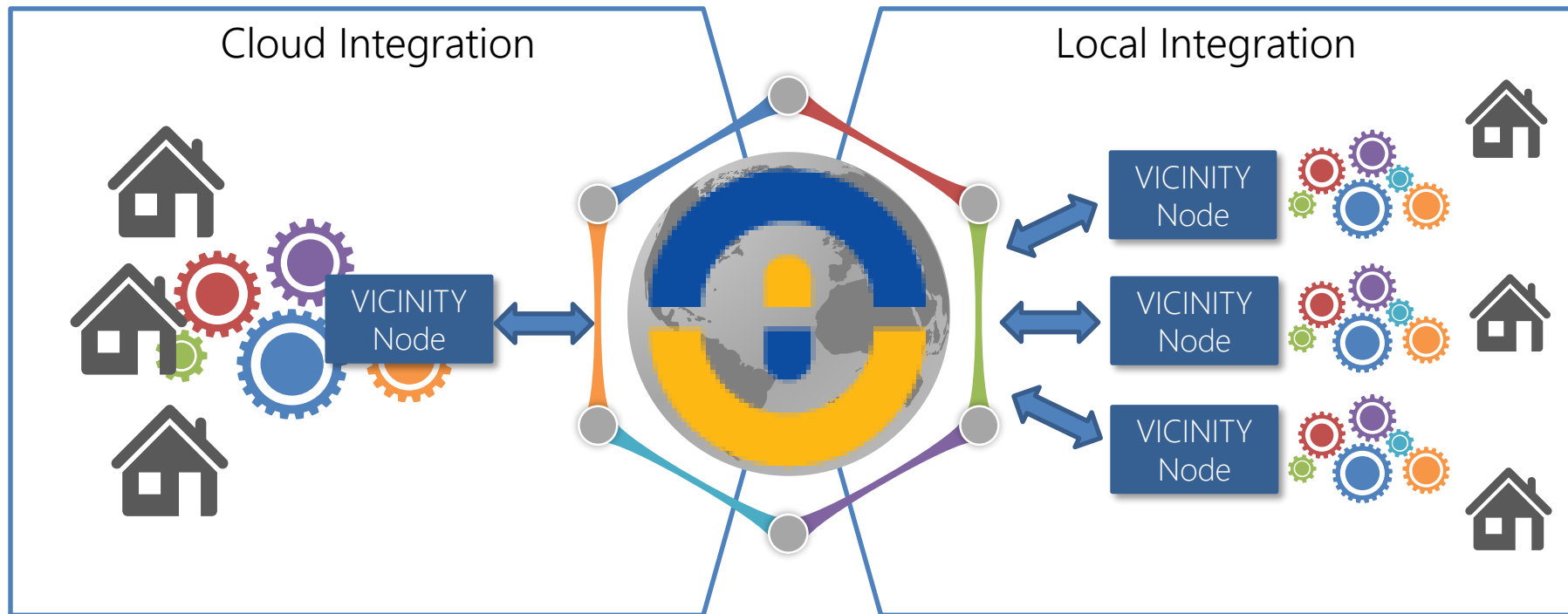
- Data requirements in neighbourhood:

```
"events": [
  {
    "monitors": "EnergySurplus",
    "output": {
      "datatype": "integer",
      "units": "Adimensional"
    }
  }
]

"properties": [
  {
    "monitors": "EnergyConsumption",
    "output": {
      "datatype": "float",
      "units": "m3"
    },
    "optional": true,
  },
]
```

- Service description file should be provided to VICINITY Agent or VICINITY Gateway API up registration of the service.

How to connect IoT infrastructure to VICINITY?



VICINITY System architecture

