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Summit**

# Kong – Keycloak extension

Keycloak as PDP in a FIWARE platform

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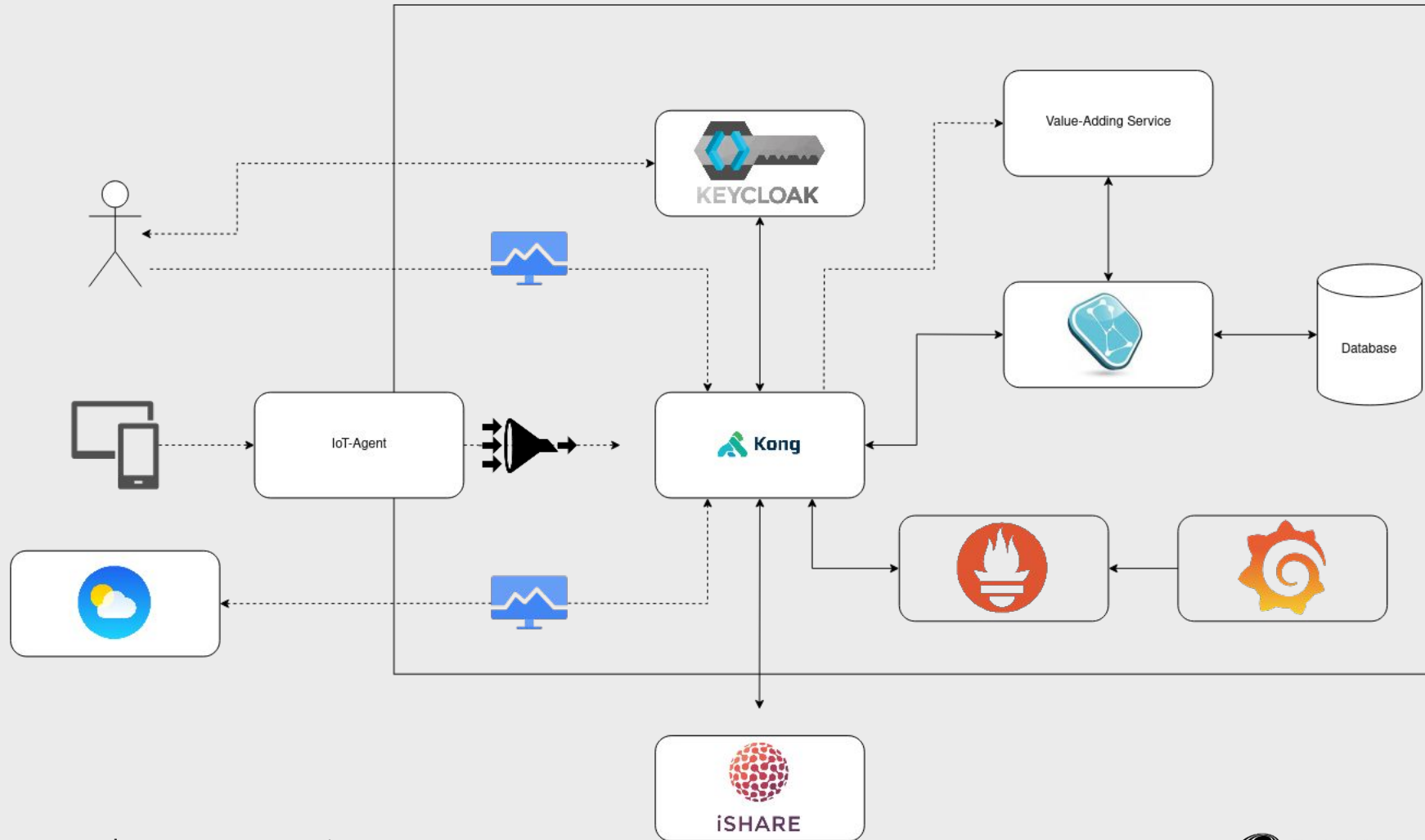
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# A FIWARE platform



# Why?

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- Keycloak is already used in
  - existing FIWARE Systems (see f.e. [fiware-ops/marinera](https://fiware-ops.marinera.io))
  - existing non-FIWARE Systems – potential adopters
- Very active maintenance – frequent security updates
- OAuth2/OIDC support
- Feature [“Authorization-Services”](#) –> already existing solution for PDP
- flexible “Plugin-System” for additional functionality
- well tested and documented, professional support available

# PEP-Plugin to connect Keycloak

- Same plugin: [kong-pep-plugin](#)

```
kong:
  ...
  env:
    ...
    plugins: bundled,pep-plugin,ngsi-ishare-policies
    pluginserver_names: pep-plugin
    pluginserver_pep_plugin_start_cmd: "/go-plugins/pep-plugin"
    pluginserver_pep_plugin_query_cmd: "/go-plugins/pep-plugin -dump"
    ...
  dblessConfig:
    configMap: kong-configmap
```

```
services:
  - host: "fiware-orion-ld"
    name: "orion-keycloak"
    port: 1026
    protocol: http

    routes:
      - name: orion-keycloak
        paths:
          - /keycloak
            strip_path: true

    plugins:
      - name: pep-plugin
        config:
          config:
            authorizationendpointtype: Keycloak
            authorizationendpointaddress: http://keycloak:80
            keycloakrealm: fiware-server
            keycloakclientid: orion-pep
            keycloakclientsecret: my-secret
            keycloakadditionalclaims:
              "http.fiware-servicepath": "fiware-servicepath"
              "http.fiware-service": "fiware-service"
```

# Keycloak deployment and configuration

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- Helm-Chart: [bitnami/keycloak](https://bitnami.com/kubernetes/helm-charts/keycloak)
- Example configuration for policies: [FIWARE-ops/fiware-gitops](https://github.com/FIWARE-ops/fiware-gitops)
- Currently supported:
  - Role-based decisions
  - Path-based decisions
  - header-evaluation

# Demo

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- <https://keycloak.firmware.dev>
- More on Keycloak? -> Presentation today 15.15 - 16.00

The slides: <https://github.com/wistefan/presentations>



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