

# VISA Workshop Kubernetes Demo



## Visa deployment

### Elaborated on Helm Chart development

- For Visa
- For external cloud providers
  - For Openstack
  - Rapid prototyping for a public cloud provider
- Dependencies
  - PostgreSQL
  - Redis
    - scaled the API deployment
- Leverage cluster services
  - Cert Manager
  - Flux
  - Sealed Secrets
  - NGINX Ingress (replacing reverse proxy from upstream deployment)
- Automated End-to-end tests with Playwright

## Visa development

Updated image to ubuntu 22, latest Guacamole

- Following latest dev branch, Clients stopped polling and use web sockets meanwhile.
- Leveraging the Quarkus Framework:
  - Dev-ui
  - hot reload aka live coding feature
  - debug logs from instance running in target environment
- Started looking into the code
  - because larger RSA Keys wouldn't fit into Openstack's Metadata.
  - And Java version of the main release at this point (Java 14) not ready to support ED25519.
  - Found that Visa allows not to manage the public key at all.  
But.. this option not used upstream, just one first example of a small but relevant deployment particularity.

```
[eu.ill.vis.bus.ser.SignatureService] (Quarkus Main Thread) VISA not configured to send VISA  
PAM public key to instances
```

- not yet adapted some services that came up after PaNOSC, pending with growing to-do list:
  - VISA print, VISA FS, VISA Patch, VISA Security Groups