

**OpenInfra Day
Budapest
03.06.2024**

ECLIPSE[®]
FOUNDATION

 **Eclipse Xpanse**

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Contents

- > What is OSC?
- > How Eclipse xpanse implements OSC?
- > Demo
- > Current features
- > SCS with Eclipse xpanse
- > Eclipse xpanse tech stack

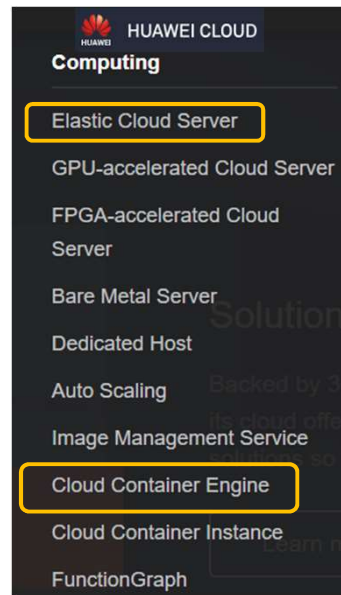
Enterprises Fear Lock-in

Multi-Cloud Goes To The Least Common Denominator



Compute

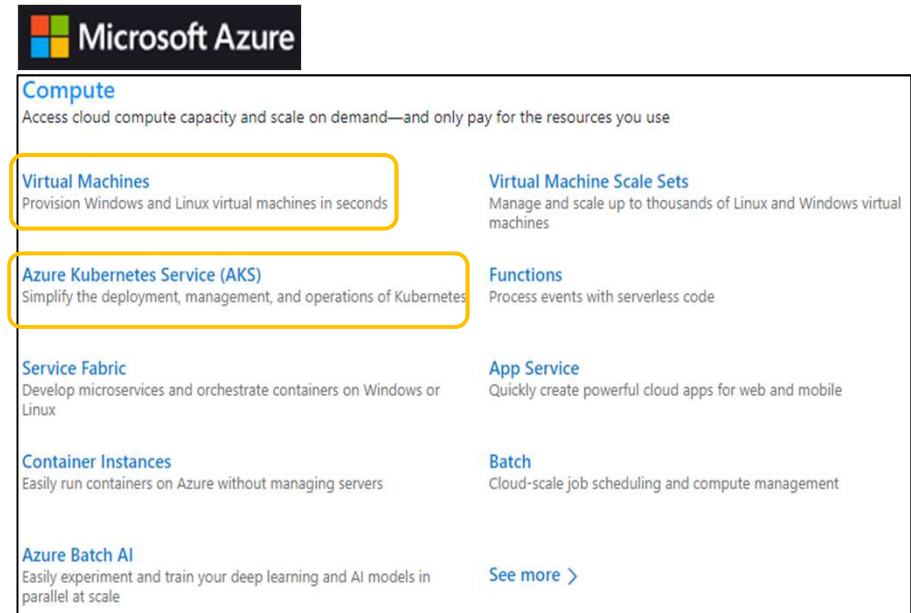
- Amazon EC2**
Virtual servers in the cloud
- Amazon EC2 Auto Scaling**
Scale compute capacity to meet demand
- Amazon EC2 Container Registry**
Store and retrieve docker images
- Amazon Elastic Container Service**
Run and manage docker containers
- Amazon Elastic Container Service for Kubernetes**
Run managed Kubernetes on AWS
- Amazon Lightsail**
Launch and manage virtual private servers
- AWS Batch**
Run batch jobs at any scale
- AWS Elastic Beanstalk**
Run and manage web apps
- AWS Fargate**
Run containers without managing servers or clusters
- AWS Lambda**
Run code without thinking about servers



HUAWEI CLOUD

Computing

- Elastic Cloud Server**
- GPU-accelerated Cloud Server**
- FPGA-accelerated Cloud Server**
- Bare Metal Server**
- Dedicated Host**
- Auto Scaling**
- Image Management Service**
- Cloud Container Engine**
- Cloud Container Instance**
- FunctionGraph**



Microsoft Azure

Compute
Access cloud compute capacity and scale on demand—and only pay for the resources you use

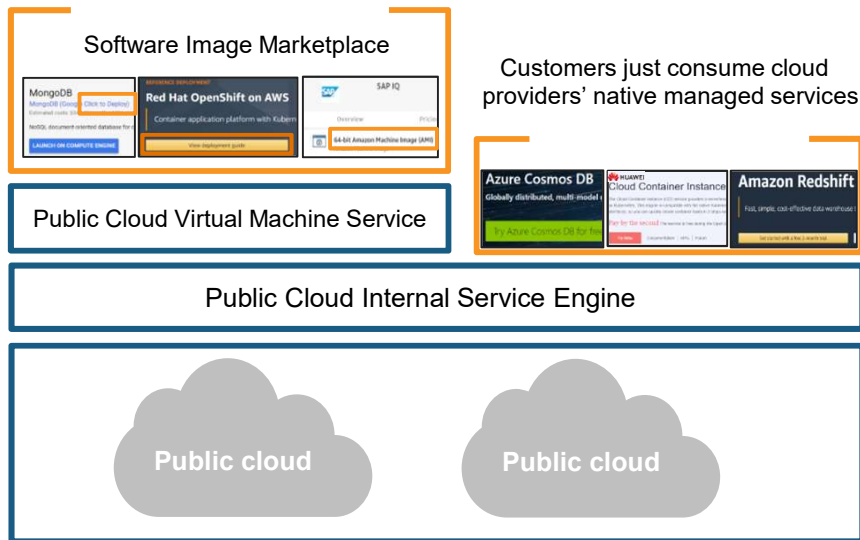
- Virtual Machines**
Provision Windows and Linux virtual machines in seconds
- Virtual Machine Scale Sets**
Manage and scale up to thousands of Linux and Windows virtual machines
- Azure Kubernetes Service (AKS)**
Simplify the deployment, management, and operations of Kubernetes
- Functions**
Process events with serverless code
- Service Fabric**
Develop microservices and orchestrate containers on Windows or Linux
- App Service**
Quickly create powerful cloud apps for web and mobile
- Container Instances**
Easily run containers on Azure without managing servers
- Batch**
Cloud-scale job scheduling and compute management
- Azure Batch AI**
Easily experiment and train your deep learning and AI models in parallel at scale

[See more >](#)

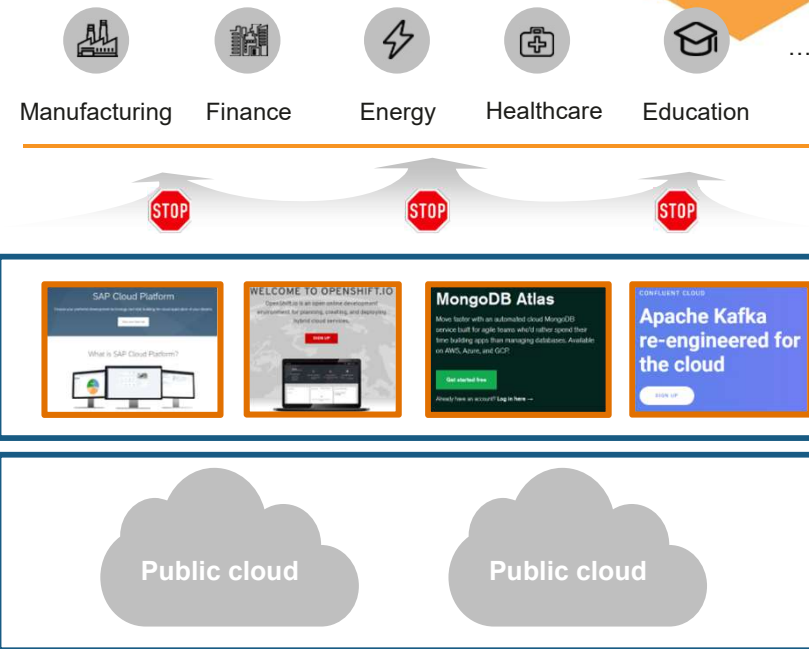
There is no service portability between different clouds!

The Ecosystem Is Being Locked Out Of Public Clouds

Ecosystem creates marketplace images



- The ecosystem is being Locked Out of public clouds because they cannot create native managed services.
- No access to internal management APIs



- Lockout Effect:
Hard to integrate 3rd party SaaS islands

Solution Proposed By OSC

Software Vendor

- Provide managed service on every cloud
- Develop once, deploy many (Public, Private, Hybrid clouds)

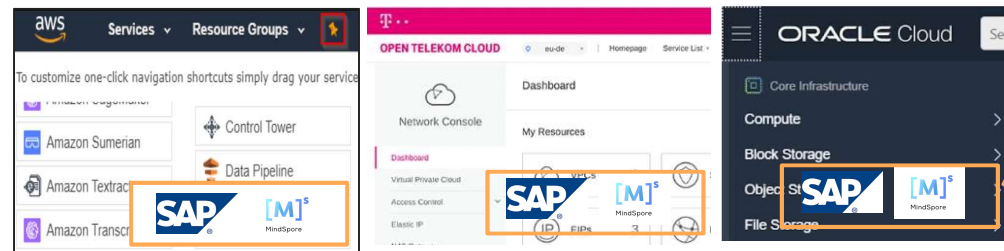
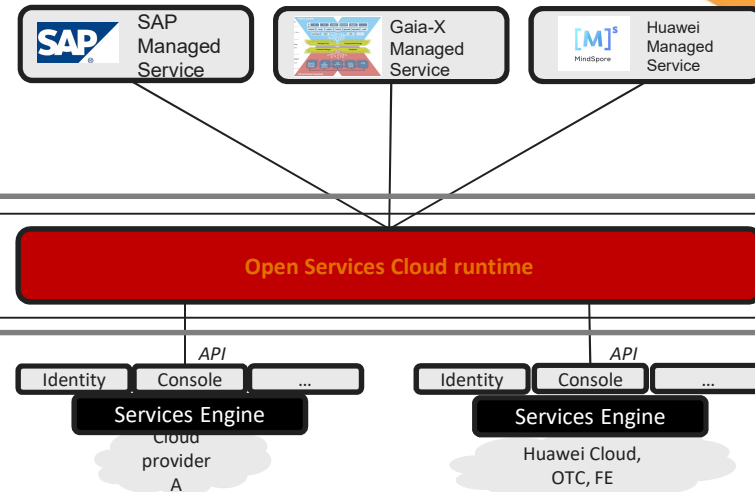
Open Services Cloud runtime & orchestrator

Cloud Service Provider

- Revenue sharing with software vendors
- One stop shop for customers

Customer

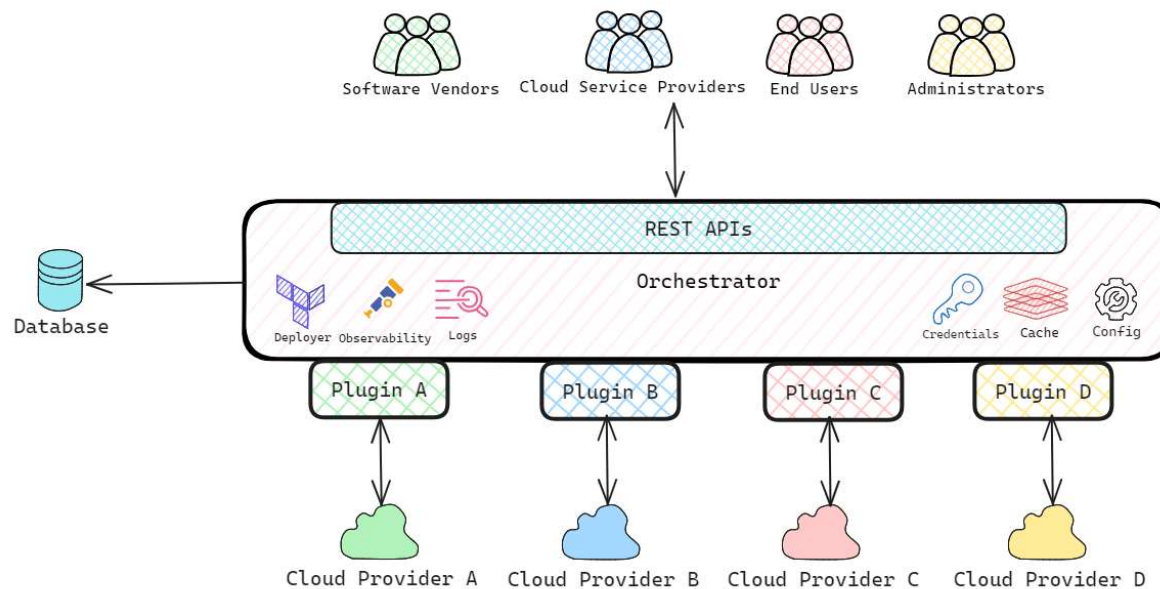
- Get everything as managed service
- Seamless integration in cloud of his choice
- Seamless portability within clouds
- Unified (Single) Billing, IAM, Logging and CloudOps



Eclipse Xpanse – An OSC Project



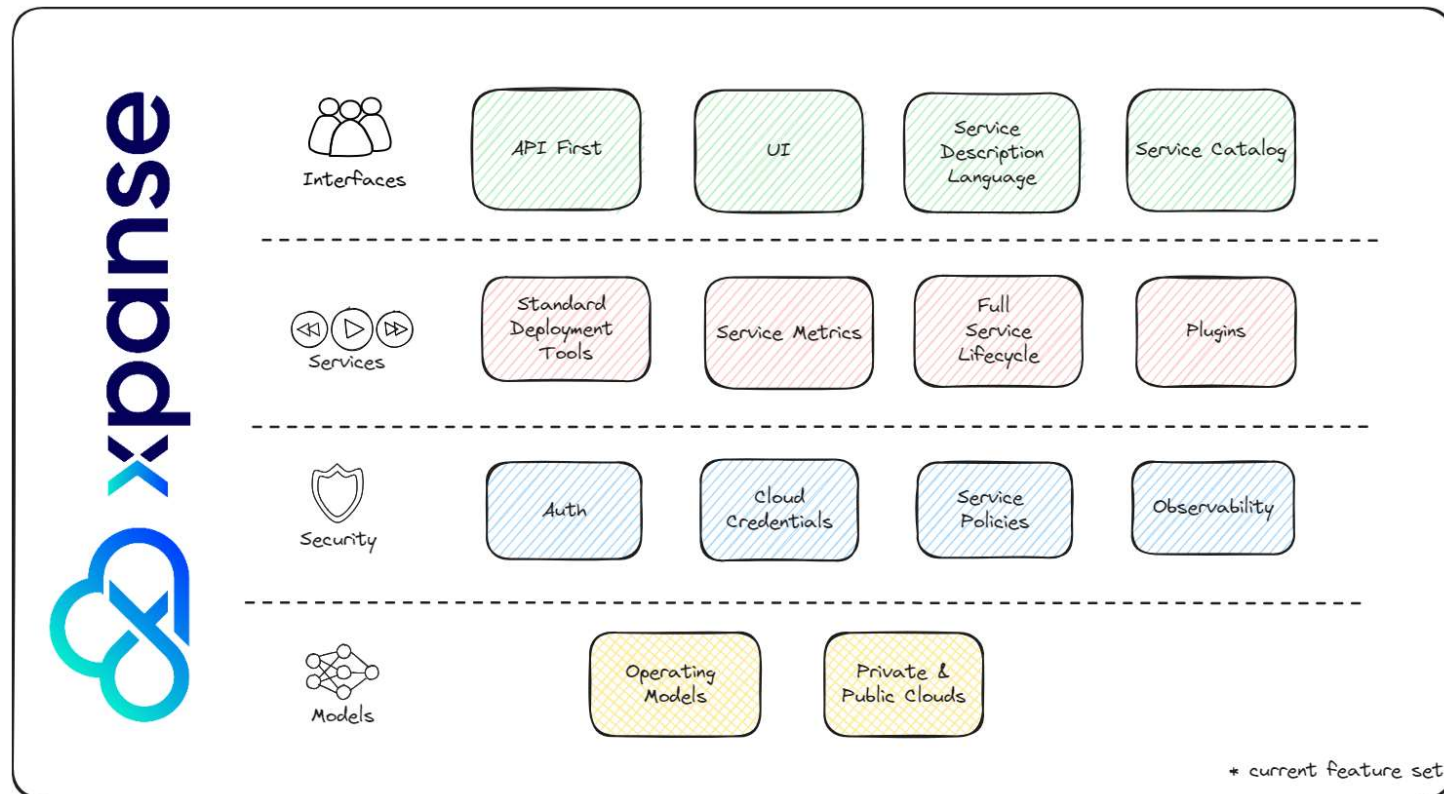
Xpanse is an Eclipse Foundation incubated project under OSC working group which aims to build a framework to offer and consume native managed cloud services in a unified and fully portable way.



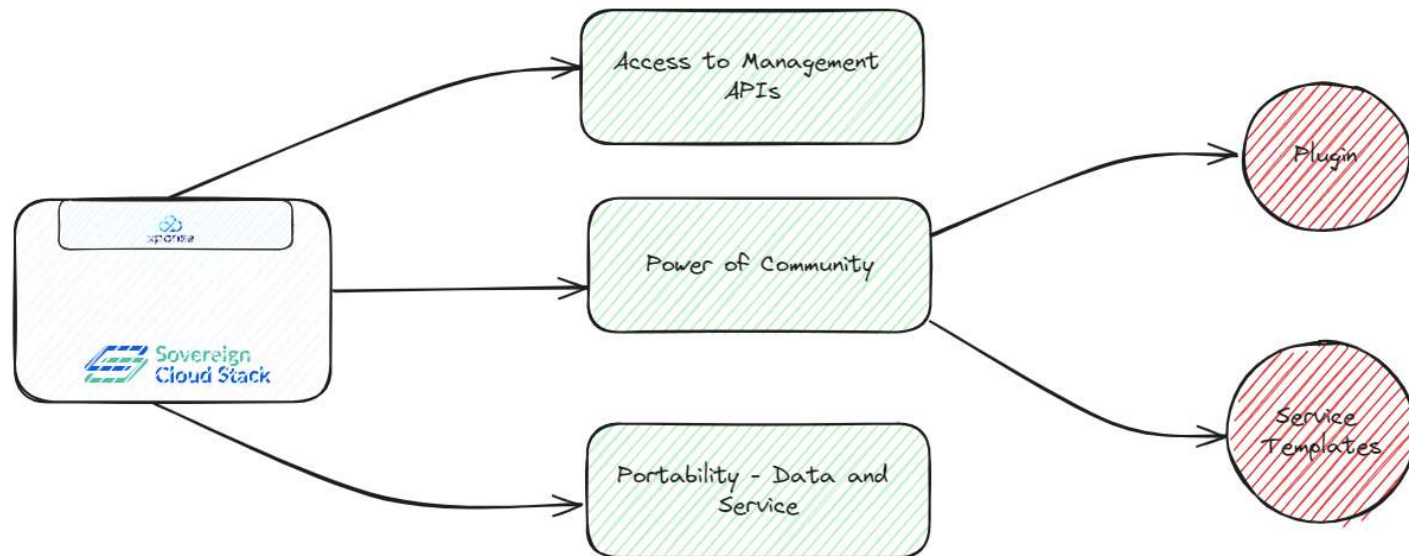


Live Demo

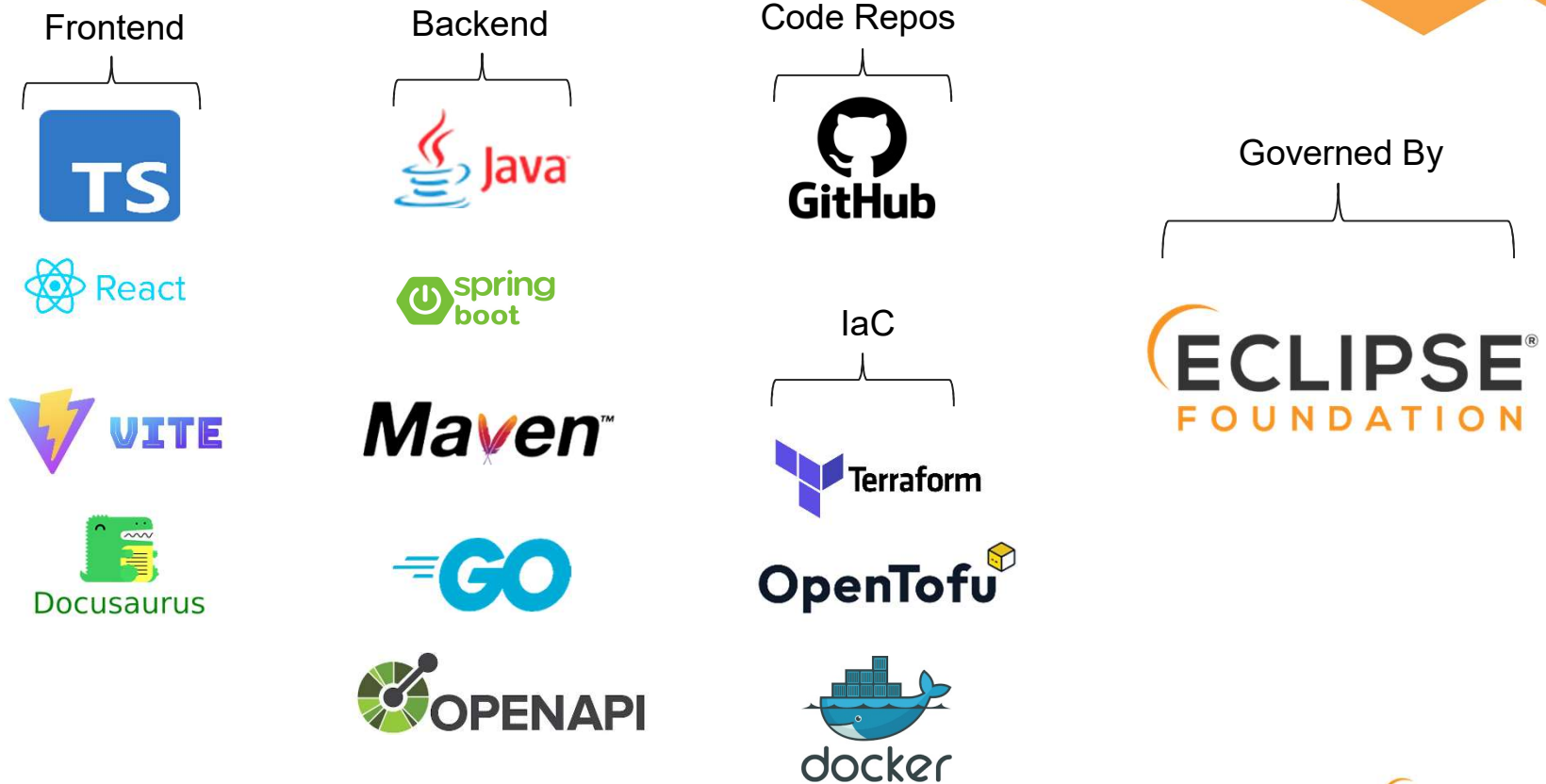
Eclipse Xpanse Current Features



Eclipse xpanse on SCS



Eclipse Xpanse – Tech Stack



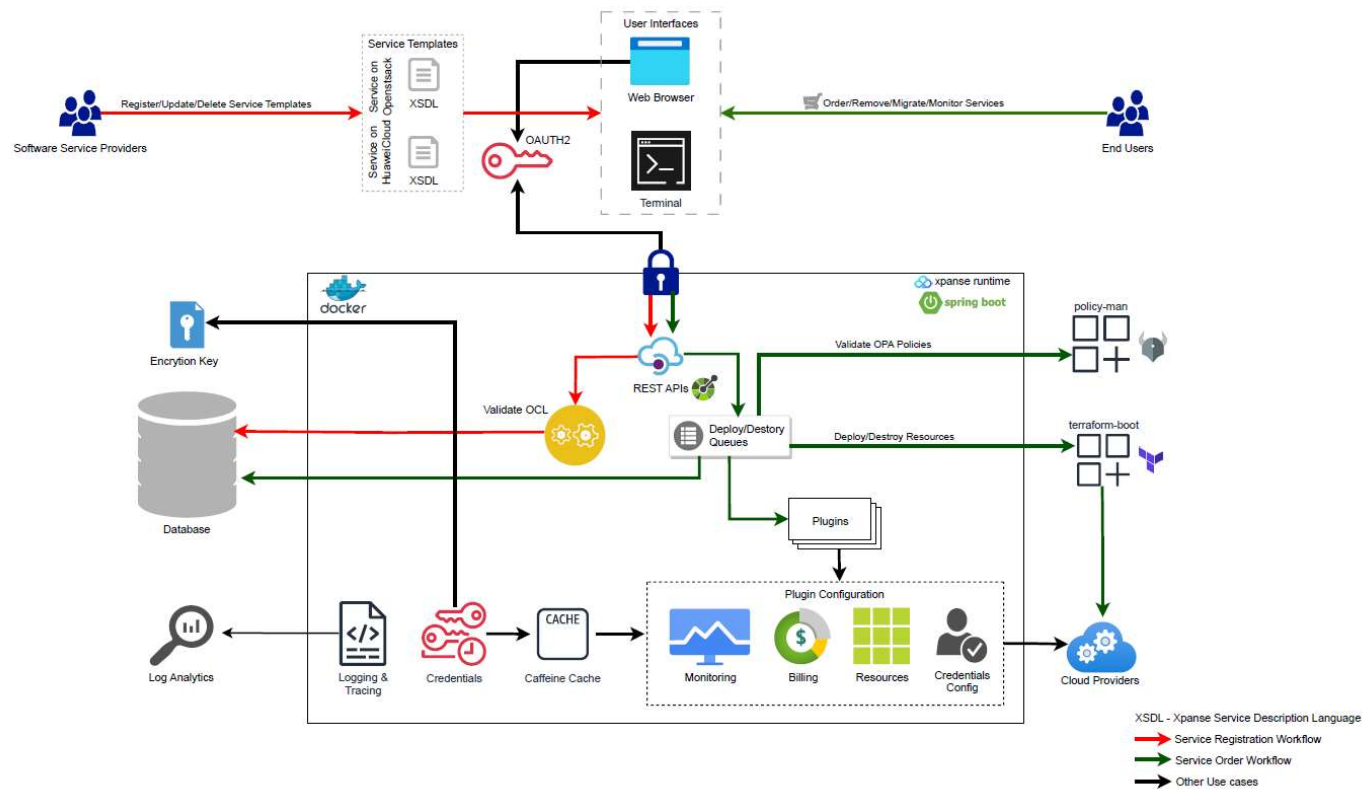


Thank You



Annex – Backup Slides

Eclipse Xpanse - Architecture





Eclipse Xpanse Community Expansion

We wish to expand the Xpanse community and partners in all possible ways.

- > Developers to contribute to our development tasks – we have a strong and interesting product backlog.
- > Add plugins to more cloud service providers.
- > Partners who wish to use Xpanse, test and provide feedback.
- > Partners who can also support in bringing in their ideas, defining backlog and requirements.



Features Extensibility

- > All functionalities can be switched
 - OAUTH – Zitadel can be replaced with any other provider.
 - DB – MySql can be replaced with any other provider
 - Plugins can be enabled, disabled, added as required.
 - Service deployers can be added as required.
 - Terraform-boot can be enabled/disabled.