



Fispace Cloud Infrastructure and Experimental Enviroment





Cloud Infrastructure

- Cloud Infrastructure

- IBM Pureflex

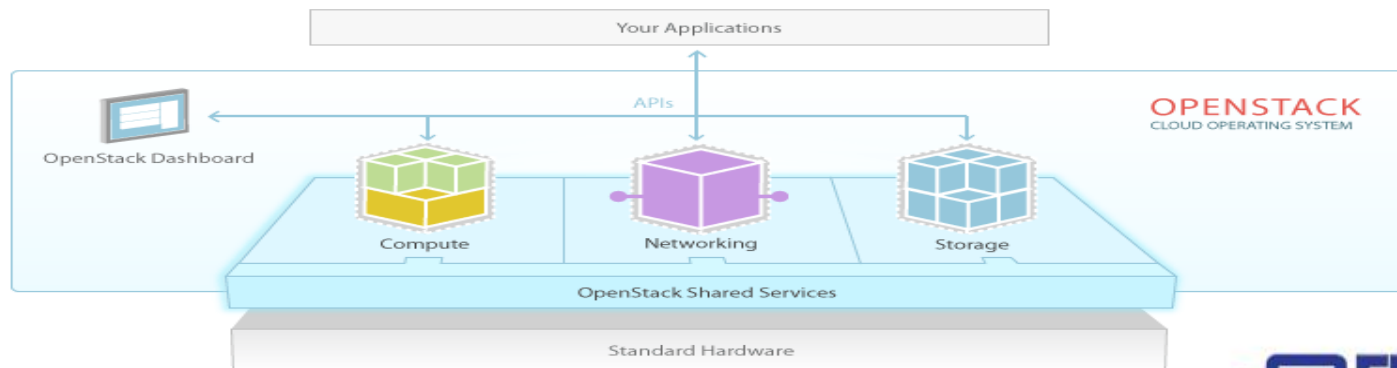
- 8 servers
 - Additional servers will be added

- Cloud Software

- Openstack for Cloud

- KVM, Citrix, Vmware

- Openstack and KVM will be used to be aligned with FI-WARE – XIFI project





Network Security

Network Infrastructure

- Network Segment
 - Public : 37.131.251.0 /24
 - Private : 172.32.101.0 /24
 - It is extendable

Security Infrastructure

- Firewall with IPS
 - Next Gen Firewall with IPS blade
- SSL VPN
 - SSL VPN for secure access
 - Developers should provide the necessary informatin



Secure Access Connection



Welcome to the
FIspace Secure Access Page

Username

Please sign in to begin your secure session.

Password

Login : <https://vmvpn.kocsistem.com.tr/fispace>

After Successful login, Login to 'FIspace Cloud Portal'

Welcome to the FIspace Secure Access Service, Özgür Sönmezer.

Web Bookmarks

- FIspace Cloud Portal

Terminal Sessions

Remote Desktop Session to Hostname or IP (eg: test.device.net or 192.168.2.3)

- front-end
- T270 Server
- app-advice

Client Application Sessions

- Network Connect



What is the EE?

- Experimentation Environment (EE) in Flspace aims at providing a structure so that different stakeholders will be able to explore, test, and interact with Flspace services.
- Flspace experimentation environment will provide a controlled environment in which people can test new collaborative scenarios before these processes are implemented in practice, can gain some confidence in understanding how to use Flspace, and very importantly can start to see the benefits of using it.



Introduction

- Currently, greenhouse advice experiment scenario is supported.
- EE-core components participating:
 - ExecutionManagerService
 - Executor
 - ScriptExecutionEngine
 - BackendSimulator
 - ExecutionLogManager
 - ExperimentCRUD
 - Experiment Search
 - Report Manager
 - KPI Manager



Functionality of components

- ExecutionManagerService
 - Starts a new execution for an experiment
 - stores it's info
 - provides access to all executions done.
- Executor
 - Executes an experiment's step and logs its result
- ScriptExecutionEngine
 - Executes a step's REST call or jar.
- BackendSimulator
 - Listens to CSB queue for sensor values and saves them. Also feeds sensor values to an expert system in order to produce advice.



Functionality of components(2)

- ExecutionLogManager
 - Logs a step's result and saves it to persistent storage. Also retrieves logs for a specific execution
- ExperimentCRUD
 - Create an experiment to persistent storage, retrieve it ,update it
- Experiment Search
 - Search by name functionality.
- Report Manager
 - Create report , get report by execution or experiment and search report by name,description
- KPI Manager
 - Sample functionality for reading kpi's and creating a report using them



Functionality of components(3)

