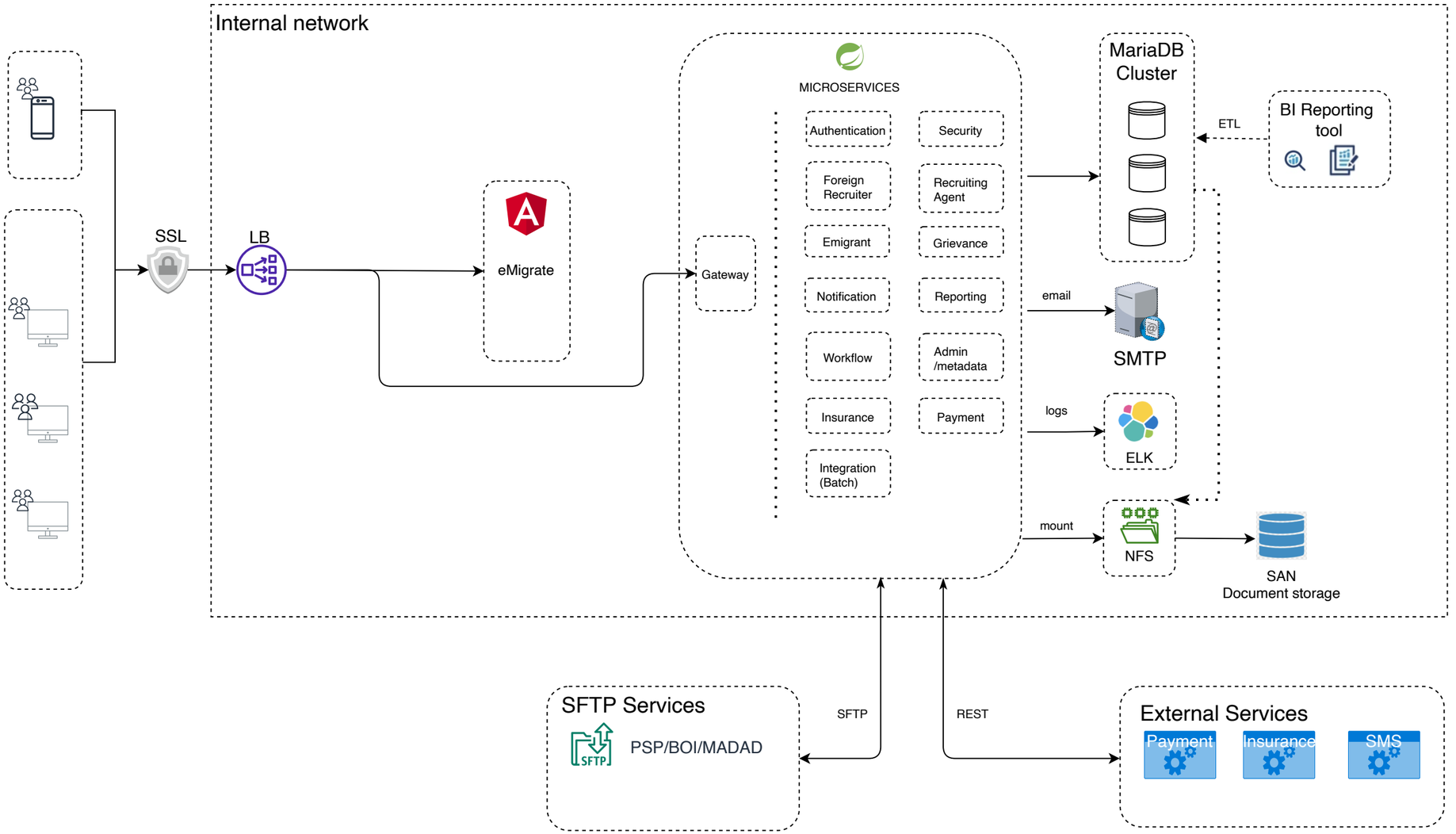
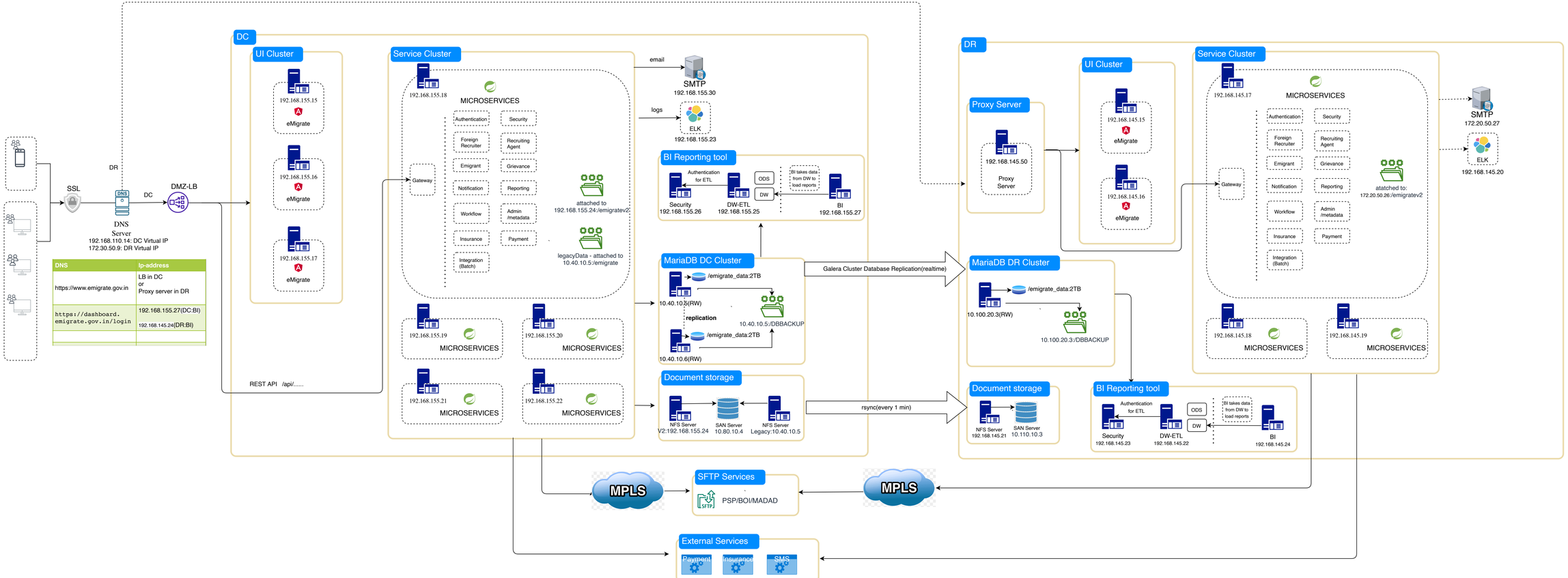
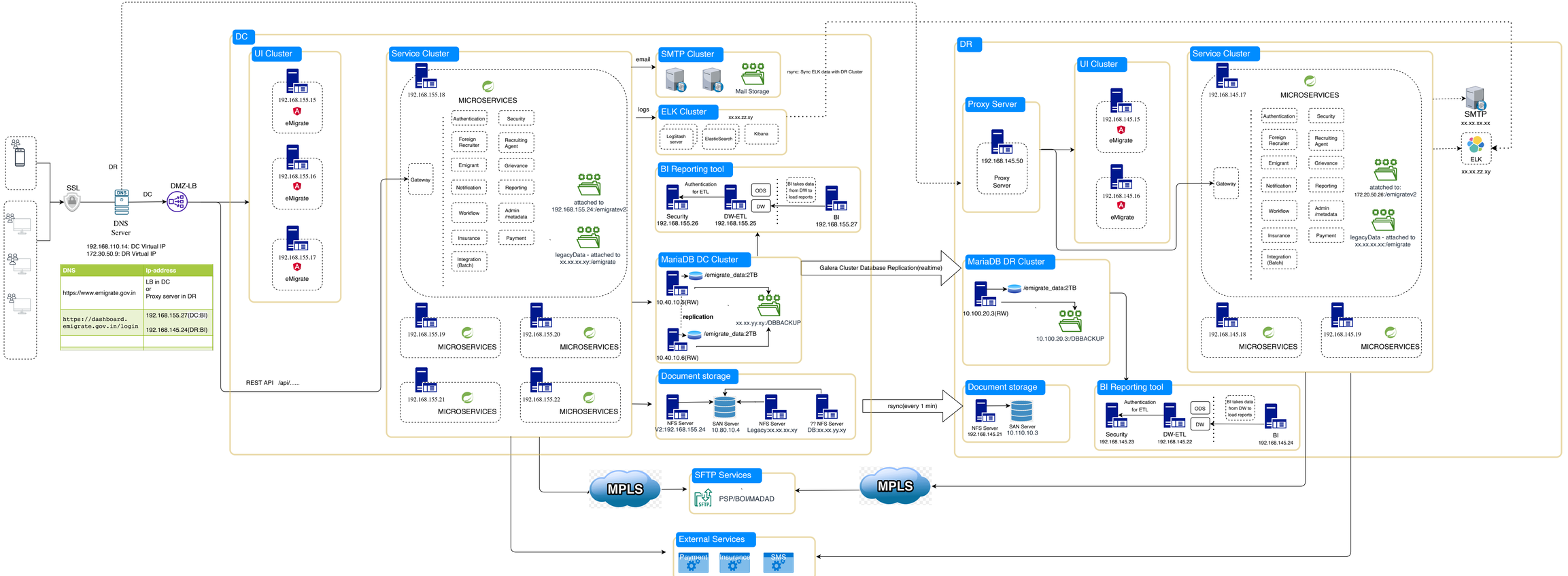
Context diagram



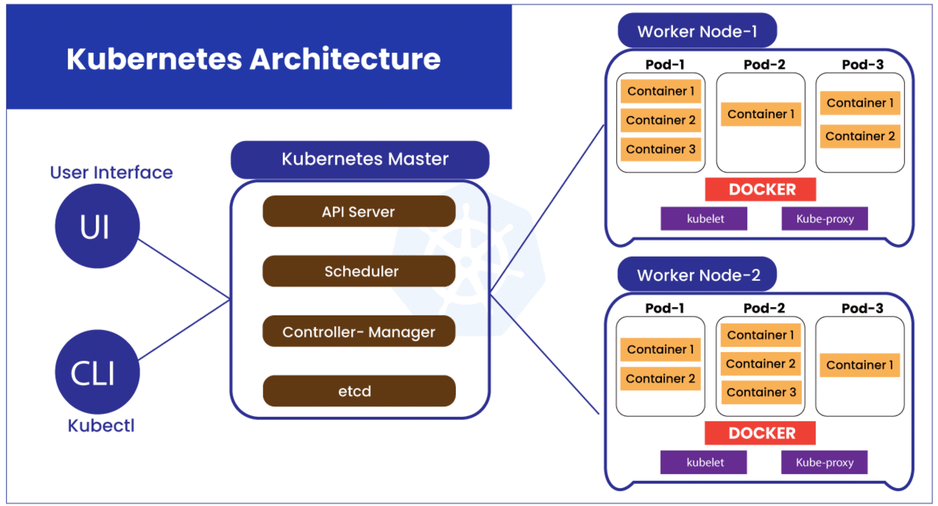
AS-IS-Deployment diagram: V 2.0



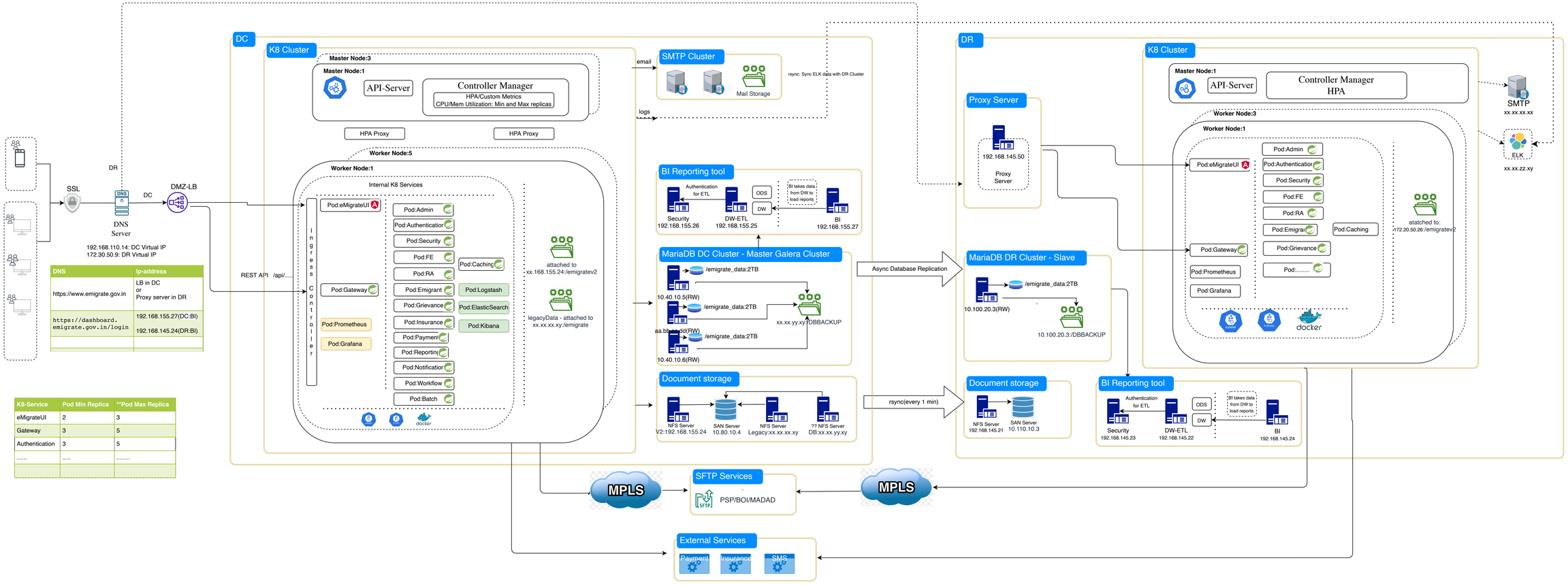
Improvements:Deployment diagram:V 2.1



K8 Architecture



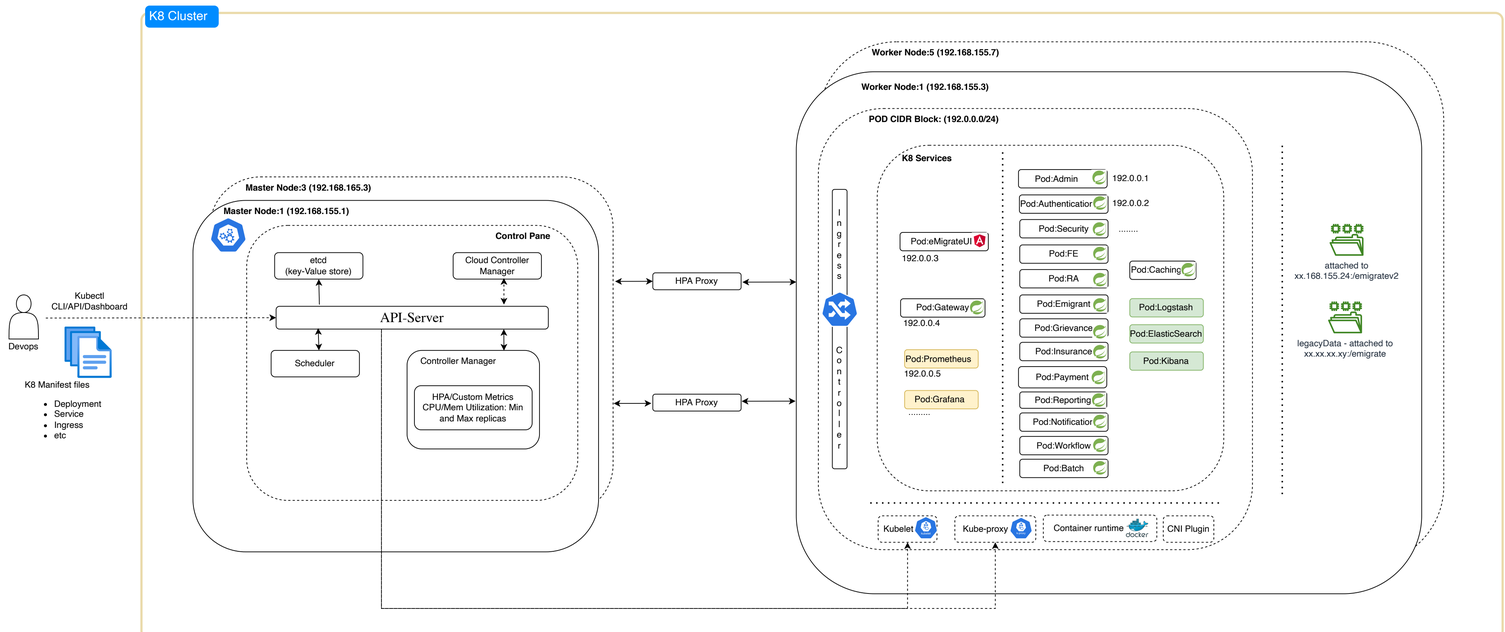
TO-BE:Deployment diagram - V 3.0

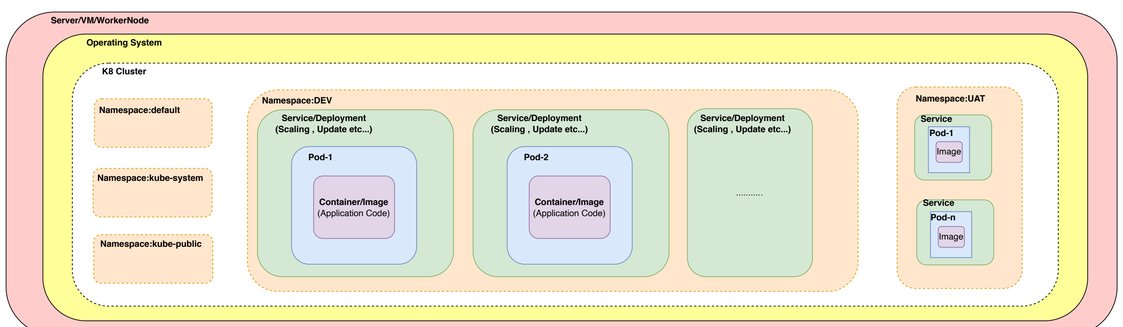


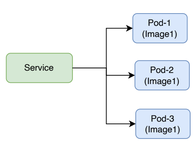
DNS	Ip-address
https://www.emigrate.gov.in	LB in DC or Proxy server in DR
https://dashboard.emigrate.gov.in/login	192.168.155.27(DC:BI) 192.168.145.24(DR:BI)

K8-Service	Pod Min Replica	**Pod Max Replica
eMigrateUI	2	3
Gateway	3	5
Authentication	3	5
.....	.....	.....

TO-BE:Deployment diagram - V 3.0

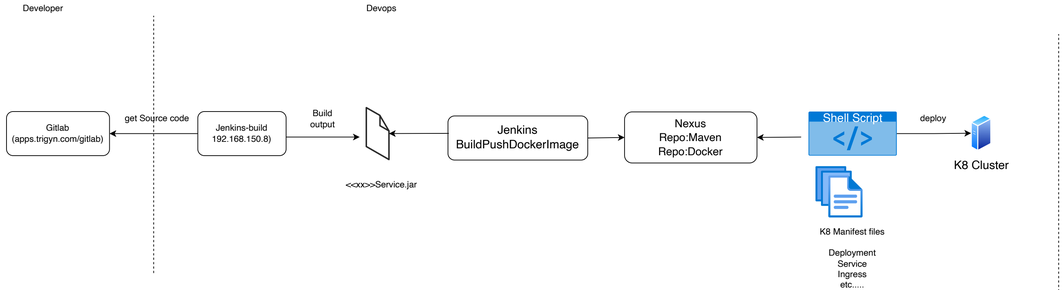






Server Configurations

VM	Configuration	DC/DR Frontend/backend/DB
192.168.155.18 192.168.155.19 192.168.155.20 192.168.155.21 192.168.155.22	RAM: 50G HDD: 200G CPU: 40 Core CPU OS: Red Hat Enterprise Linux 9.2	DC : Backend-server
192.168.155.15 192.168.155.16 192.168.155.17	RAM: 8G HDD: 200G CPU: 40 Core CPU OS: Red Hat Enterprise Linux 9.2	DC : Frontend-server
192.168.145.17 192.168.145.18 192.168.145.19	RAM: 50G HDD: 100G CPU: 40 Core CPU OS: Red Hat Enterprise Linux 9.3	DR : Backend-server
192.168.145.15 192.168.145.16	RAM: 8G HDD: 100G CPU: 40 Core CPU OS: Red Hat Enterprise Linux 9.3	DR : Frontend-server
10.40.10.5	RAM: 256G HDD: 13TB CPU: 24*4 OS: Red Hat Enterprise Linux 9.2	DC : Database - Node1
10.40.10.6	RAM: 256G HDD: 3TB CPU: 24*4 OS: Red Hat Enterprise Linux 9.2	DC : Database - Node2
10.100.20.3	RAM: 256G HDD: 1TB CPU: 24*4 OS: Red Hat Enterprise Linux 9.2	DR : Database


Developer
Devops
Gitlab
(apps.trigyn.com/gitlab)
get Source code
Jenkins-build
192.168.150.8)
Build
output
<<xx>>Service.jar
Jenkins
BuildPushDockerImage
Nexus
Repo:Maven
Repo:Docker
Shell Script
deploy
K8 Cluster
K8 Manifest files
Deployment
Service
Ingress
etc.....