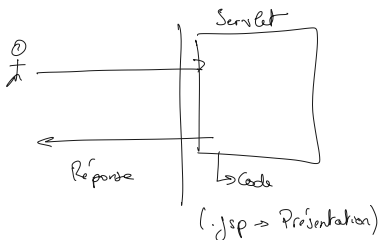
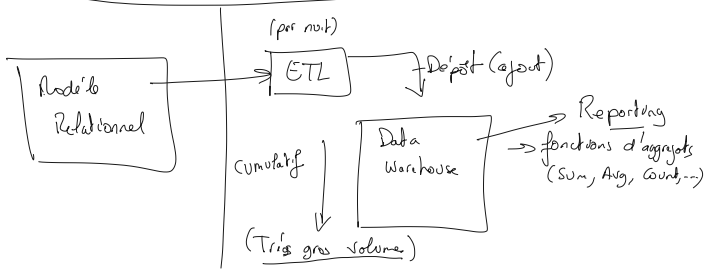
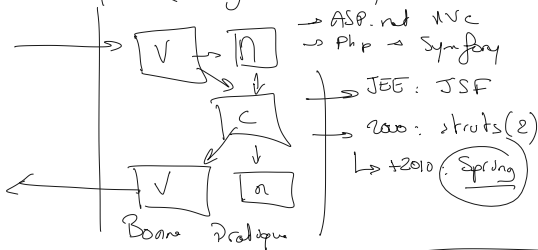


Bonjour tout le monde



MVC (design Pattern)



Row Store

INSERT

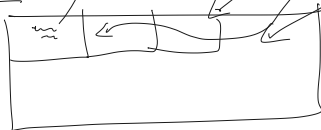
fichiers →

1	10	Tonnes	2	2	15
Poissons		2			

Bloc/page $\approx 1, 2, 4, 8, 16$ Ko

Process du Serveur de BDD

RAN,



DWH: SELECT SUM(CA) FROM
factSales where year = 2020
group by Country

Column Store: → Nouveau type de stockage

INSERT (DWH)

PK, Prix, Nom, FK

fichier Colonne 1

1	2

Prix Col 2

10	15

Col 3

Tomates	Pourchoux

→ Ecriture = mauvaise perf

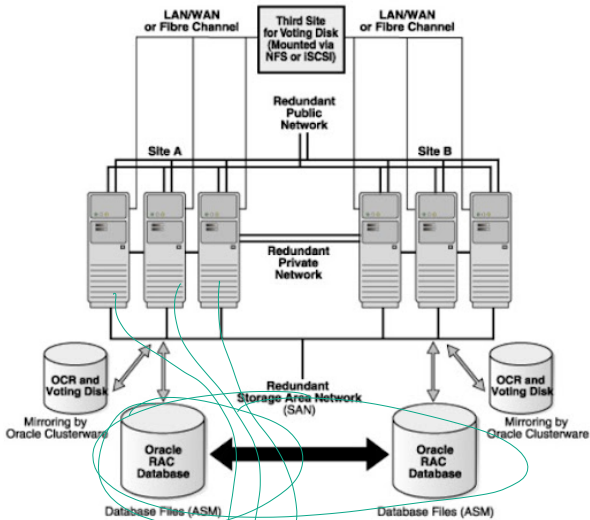
→ Lecture: Select SUM(CA) From Pdlts

Column Store $\approx 10x + perf$

+ Compression RLE = $\approx 10x + Perf$

Théorie = $100x + perf$ que RowStore

Prologue $\approx 30x + Perf$.



Desktop

Crystal Reports

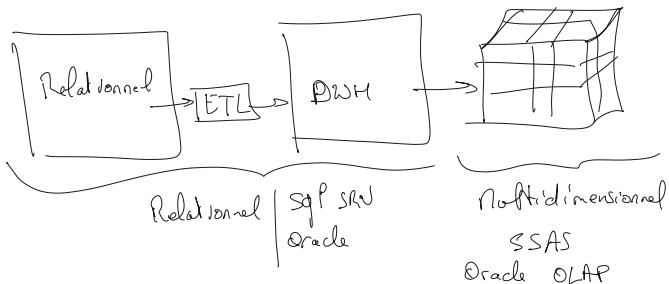


Servers

→ Tools to data

BO
Crystal
SSRS





ESS Base ↔ BO

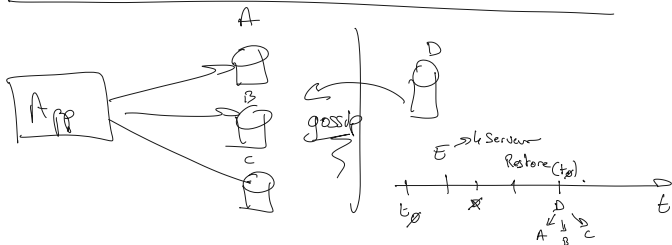
Multiple Version Concurrency Check

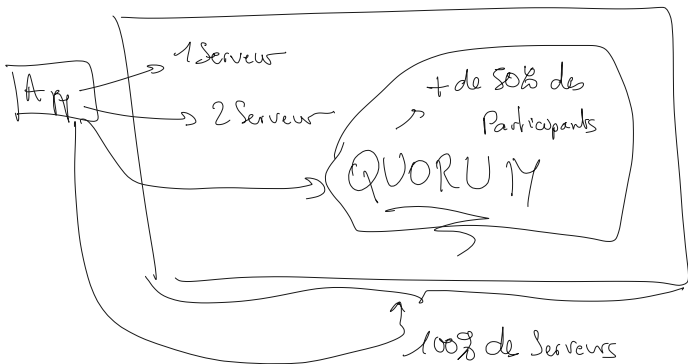
PK physique

PK	Version	Colonnes
1	1	10
1	2	12

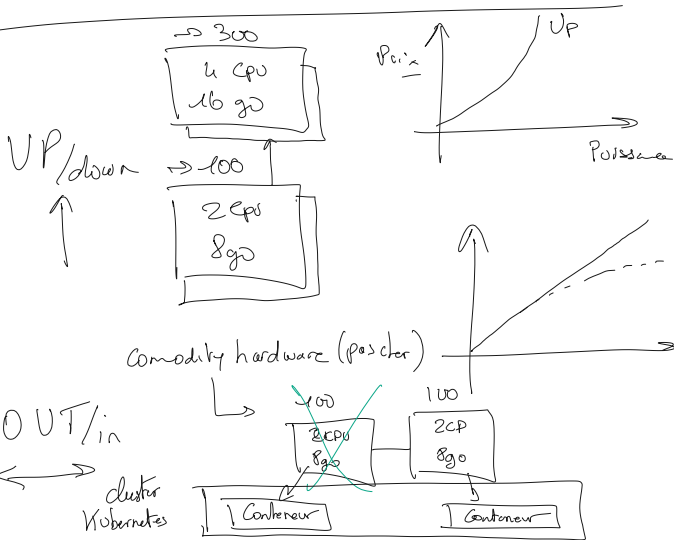
↓
date heure d'écriture

) ⇒ Souvent utiliser maintenant





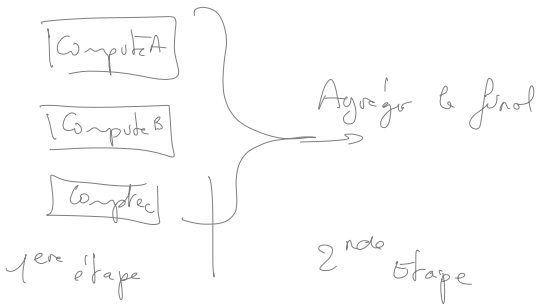
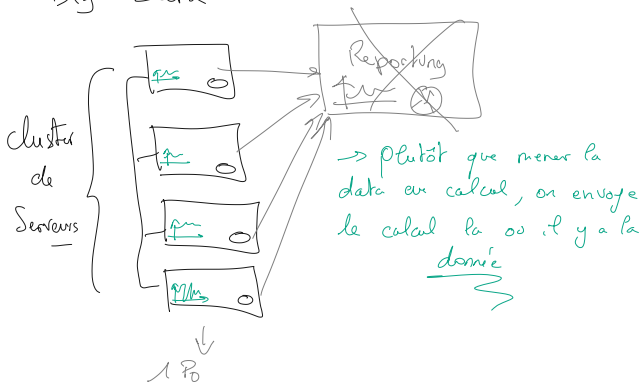
Split Brain $\Rightarrow$

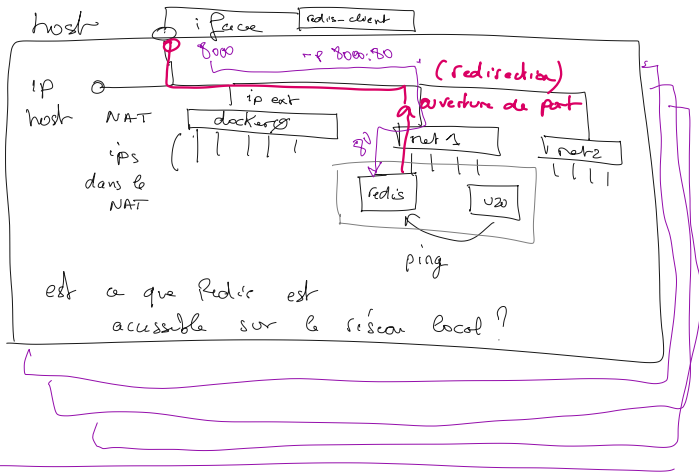


Type - HPC (High Performance Computing)

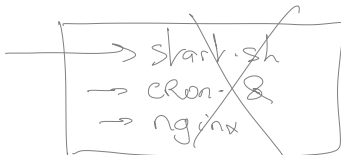
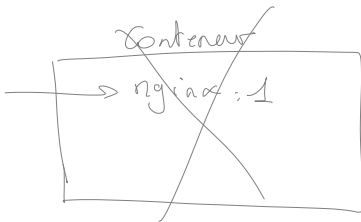
- Grid

Big Data





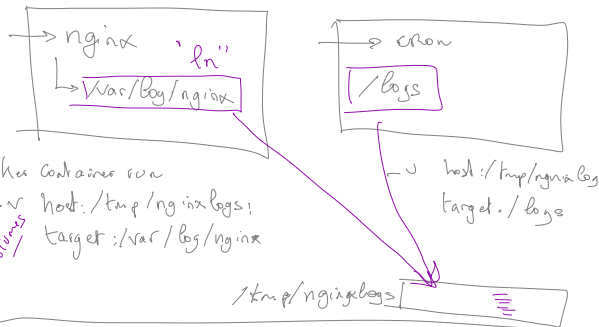
PlanProcess:



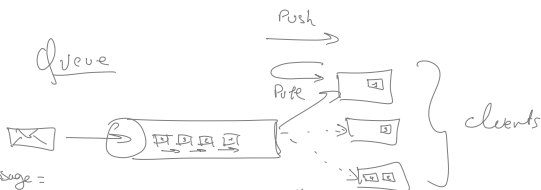
Nouveaux
Pratique

host

→ bonne pratique:



Queue

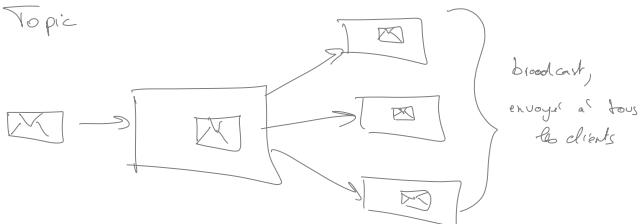


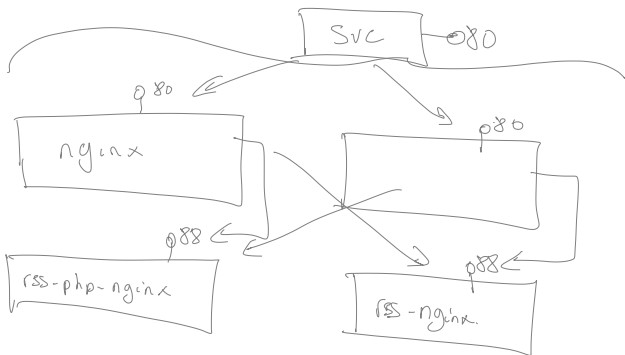
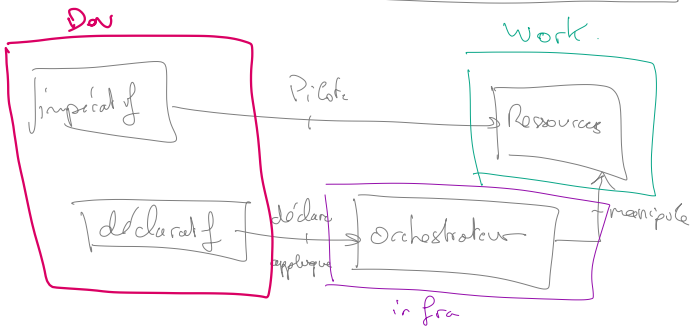
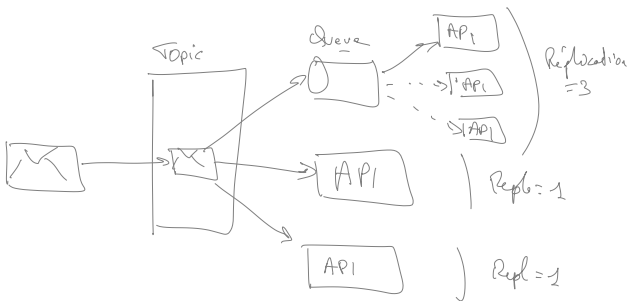
message =

Synchrone = appel fonction + paramètres

asynchrone = message RQ

Topic





→ Prod

Script ?

Dev

Compose ?

Script ?

Prod

K8s ?

J'ai K8s

J'ai Compose bonne pratique pour test d'archi en local

RedHat Open Shift.

IaaS.

VMS:

BDD

PaaS.

Open Shift

- Faciliter le Dev
- Fournir une UI très pratique
- Permettre le CI/CD - DevOps
- Faciliter les archi. en microservices etc... etc...

Pilote

Cluster Kubernetes

Pilote

host

host

host

host

CR

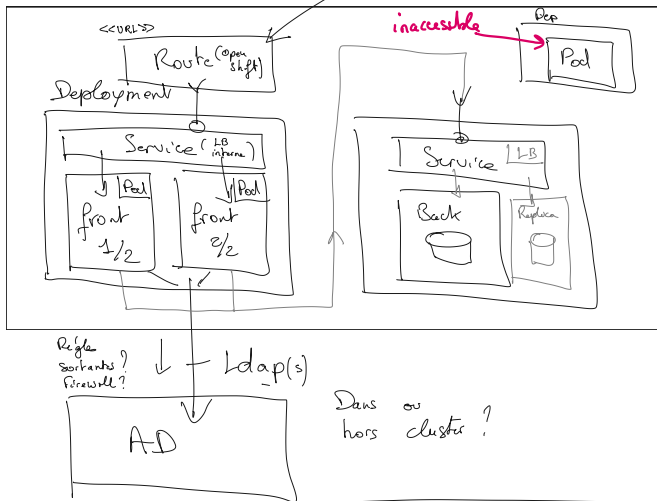
CR

CR

CR

Container Runtime (docker, containerd, CRIO)

cluster openshift

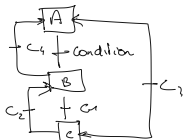


Pipeline vs Workflow

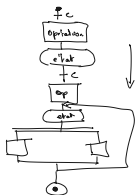
Workflow

- machine à'état
- workflow

machine à'état

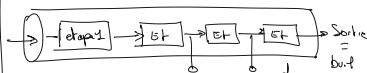


WF



Pipeline

→ WF sans retour arrière possible

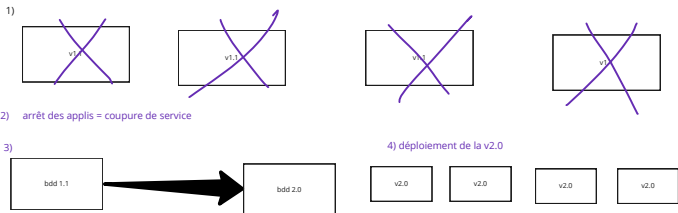
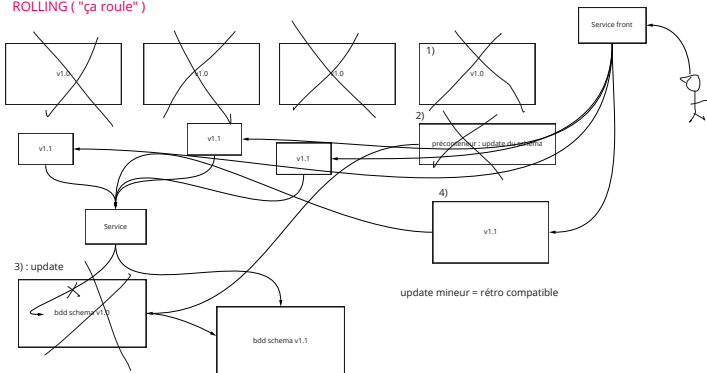


Sortie erreur = Arrêt du pipe.

= PAS de Condition

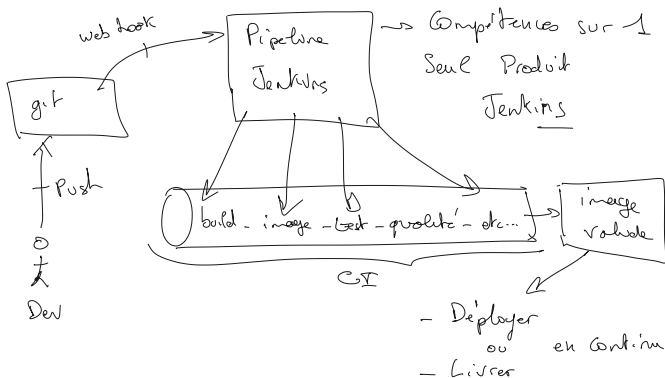
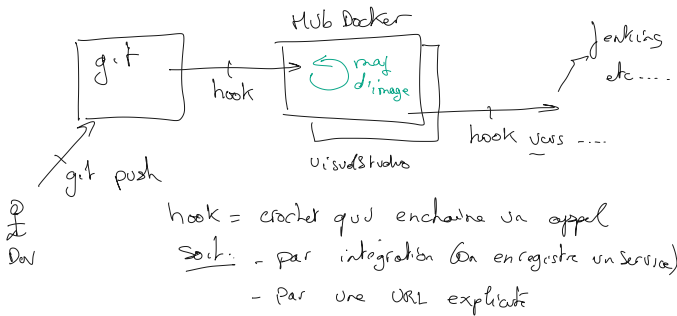
essentiellement

ROLLING ("ça roule")



AVEC COUPURE DE SERVICE : RECREATE ou ROLLOUT

Workflow CI/CD décentralisé:



Référentiels de sécurité :

- National Vulnerability Database : <https://nvd.nist.gov/>
- CVEs : <https://cve.mitre.org/>
- Web : OWASP
- Tous langages : SANS TOP25

Create

Read → Detail

Update

Delete

Query → Liste

→ parcourir toute une liste,
choisir un élément, travailler avec -

Detail

Read

(tous les champs)

Page API de Base

http://myapi/v1
:/v1/clients

Liste d'objets -

ex : clients
commandes
produits.
etc...
→ liens vers la liste

Query:
champ
+ titre

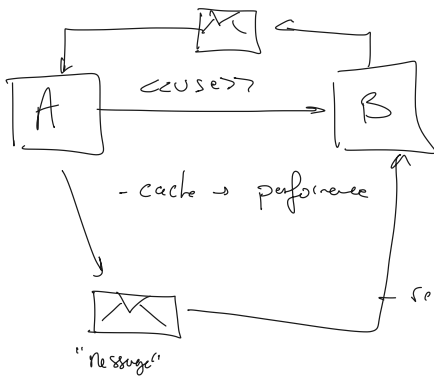
clients

Produits

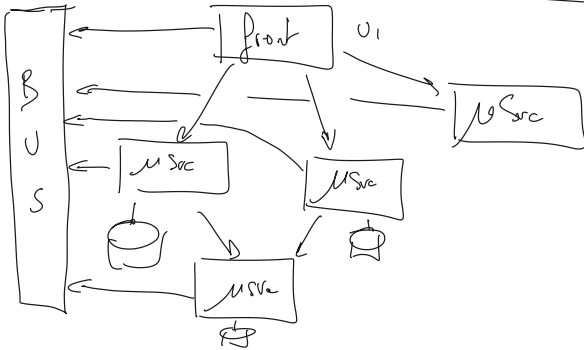
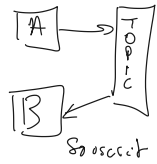
client n°1 2 3

Produit 1 2 3

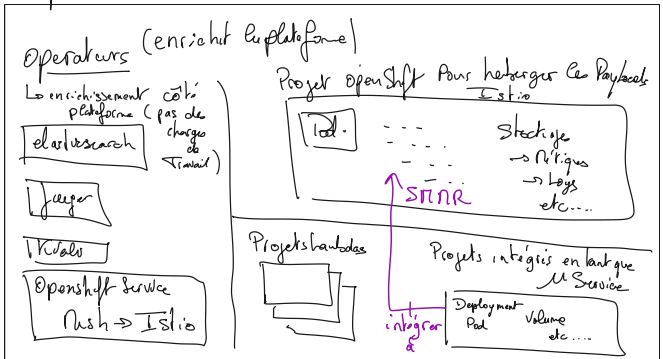
C, U, D



Pub/Sub



OpenShift



Istio → Framework open source pour implémenter une infra de M Services sur Kubernetes –
– Sous OpenShift : "Service Mesh" est une implémentation de Istio sous Redhat

Service Mesh Member Red
→ intégration dans le Service Mesh

Tuto OpenShift Service Mesh :

https://docs.openshift.com/container-platform/4.1/service_mesh/service_mesh_day_two/ossm-example-bookinfo.html