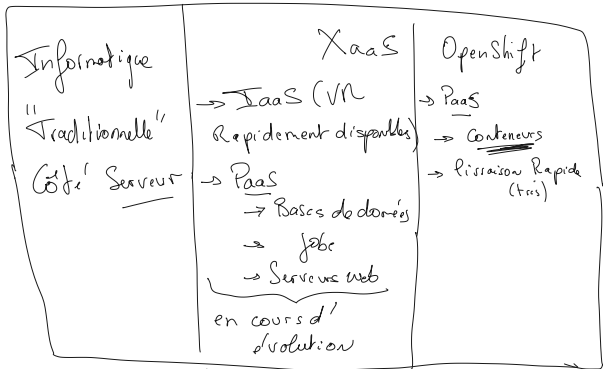
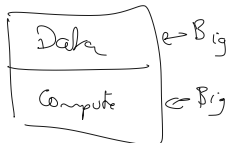
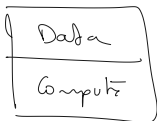
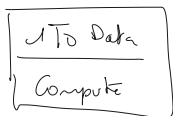
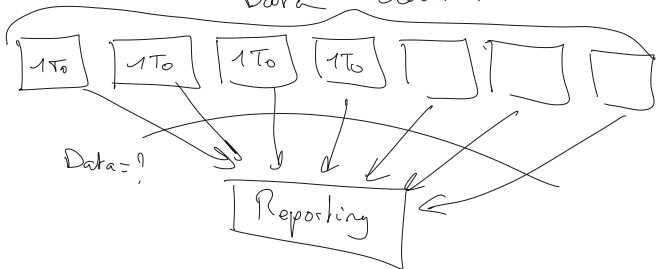


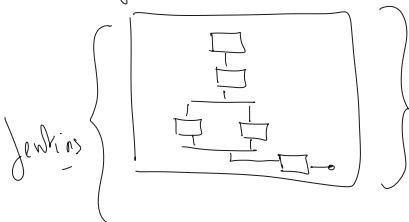
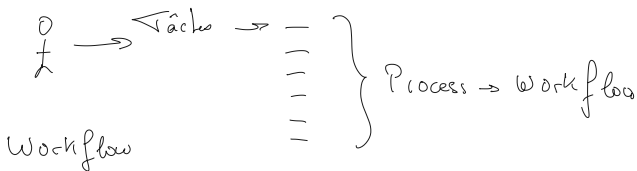
Bonjour tout le monde

Data Center



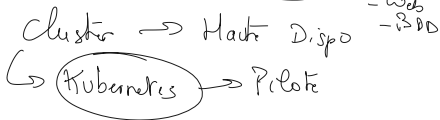
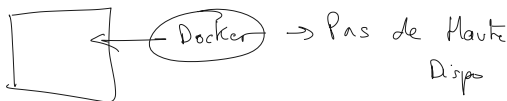
Data Cloud Privé





- Workflow pour
- fabriquer des VM Containers
 - lancer des scripts Tests
 - Supprimer ...

- fabriquer une VM
- Copier un package (fichiers)
- lancer un playbook Ansible



"Conteneuriser une application"

1 Conteneur = 1 seul process

ex: - serveur web - ordonnanceur (cron)
- " mail - serveur MQ
- " detemps (ntp) - " BDD

BDD Oracle → n Process → Conforme aux Conteneurs? Pas toujours

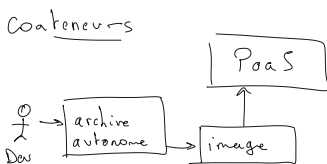
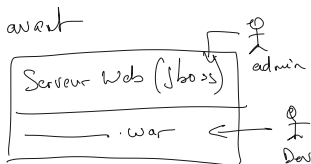
Conteneuriser = Modifier l'architecture de l'application
→ de "simple" à "impossible" en passant par "compliqué"

ex: App Web → JaaS ⇒ PaaS OpenShift
- Serveurs de BDD → moins évident ⇒ Reste en IaaS

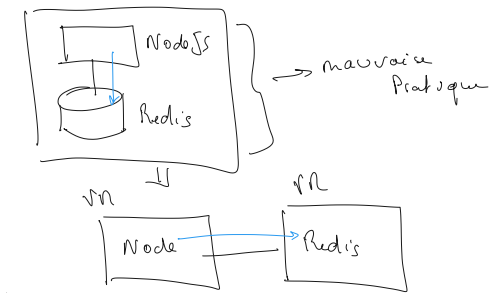
1 Conteneur = 1 application Console -

en IaaS ex Java = WebSphere ou JBoss + .war

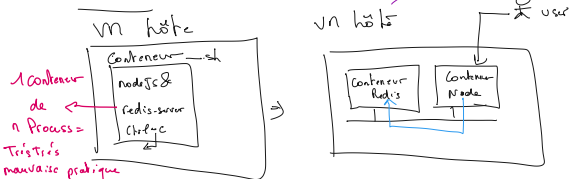
en PaaS Conteneurs " = migration sous Springboot →
Serveur web embarqué en appl Console.



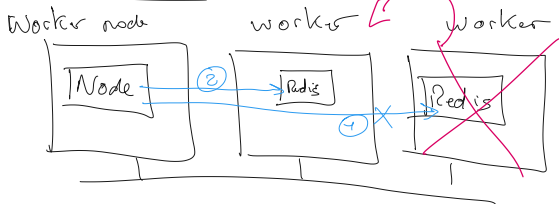
√ N :



Conteneurs

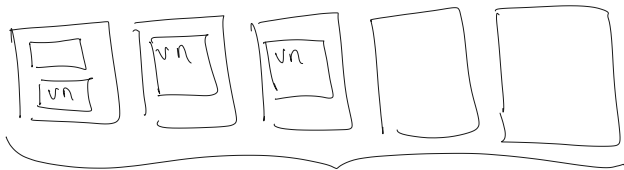


Kubernetes

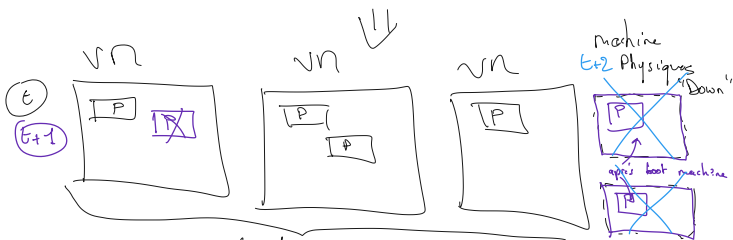


Node = machine (virtuelle)
Conteneur = 1 process isolé
Pod = 1 conteneur sous Kubernetes

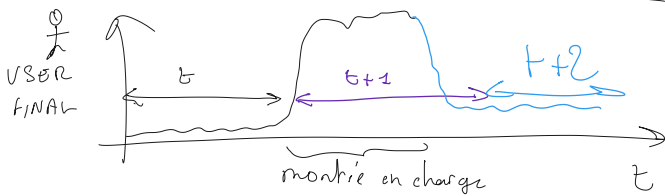
Data Center



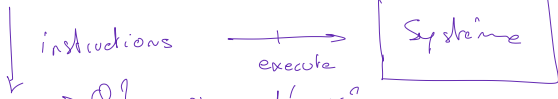
VMWare ESX



OpenShift → Cluster OpenShift
 → "sofisticated" Kubernetes -
 Kubernetes → cluster, solution Technique
 ↑
 Docker → mono machine

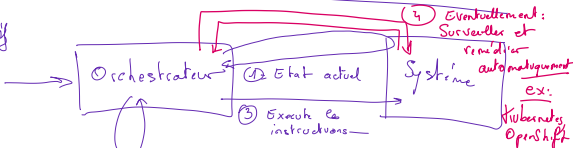


impératif



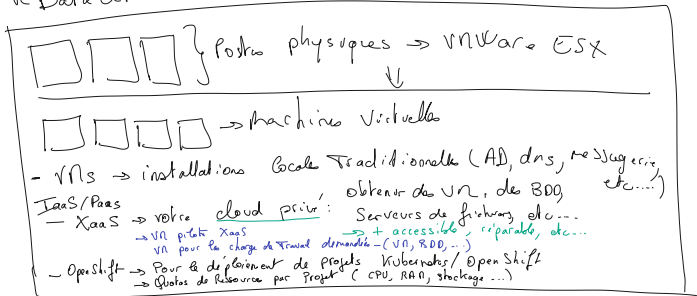
- en cas d'erreurs?
- " " de nouvelle exécution
- " " de modification
- etc - - - -

déclaratif
Etat
Voulu



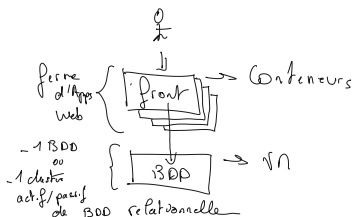
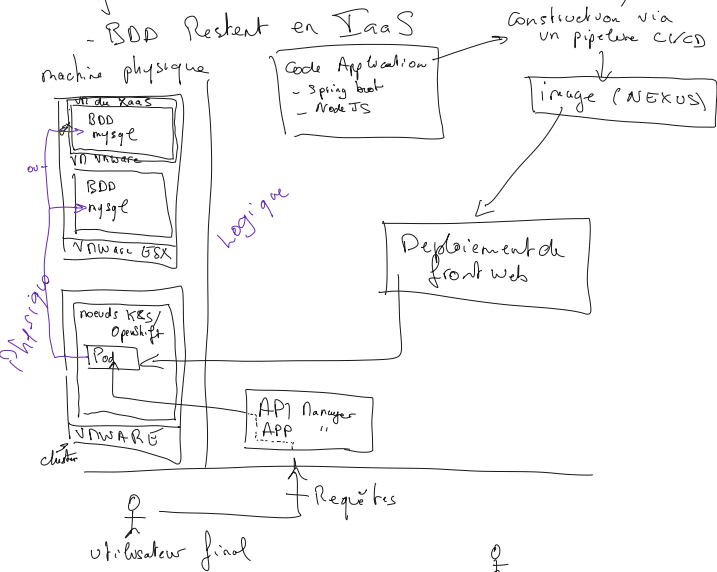
② "Compiler" les instructions pour atteindre l'état demandé → Impératif

Partie de l'architecture actuelle la Poste
à Data Center

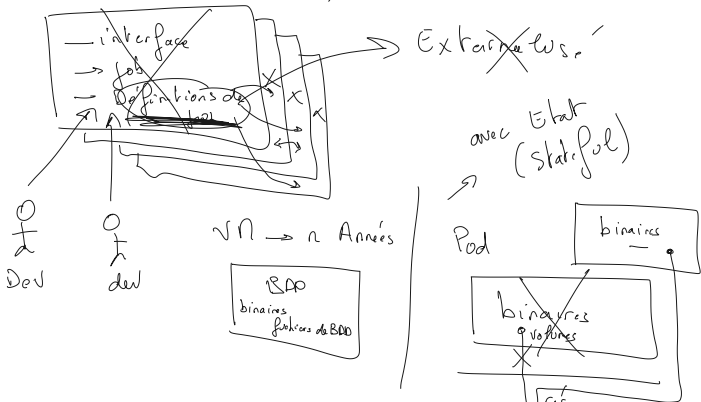


Application Moderne chez vous =

- front web containerisé ("assez facile")
- BDD Restent en IaaS



Pod NIFI (ELT)

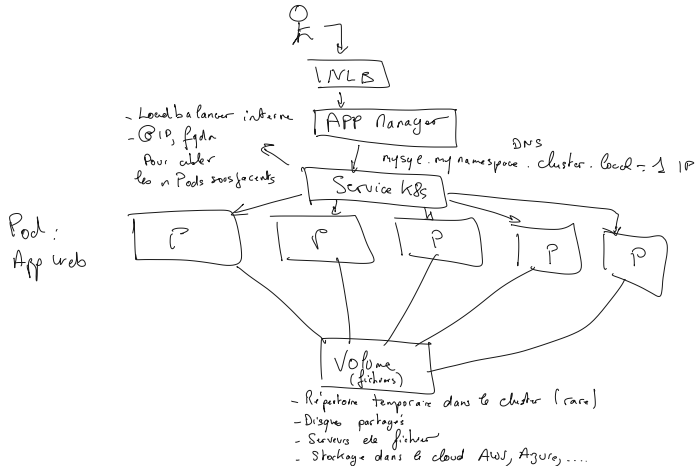


① $\sqrt{n} \rightarrow$ extérieure = Taille (nb CPU, RAM, ...)
- OS de base (Ubuntu, Windows)

② Introduction de la machine

- logiciels installés
- mises à jour
- fichiers de conf. - données
- code

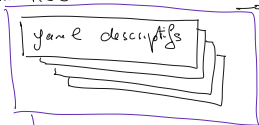
- firewall



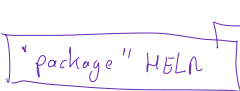
HELM



Deployment K8S



→ kubectl apply -f [yaml]
 " "
 → "package"



description stockée dans un repository helm

outil en ligne de

commande "helm"

helm install wordpress
 helm remove wordpress

Lien vers la démonstration d'implémentation d'arch en micro services
OpenShift Service Mesh : <https://www.youtube.com/watch?v=Uo8LEcUMVxg>