**ICS CI/CD Pipeline**

At present the pipeline in ICS is Continuous Integration and which build and install artefacts into Nexus.

As we are expecting frequent deployments and auto testing in higher environments, it is better to have industry standard Continuous Deployment pipeline.

To achieve this Ansible is used to configure the application and Jenkins is used to automate our code deployments.

The typical ansible deployment diagram, assumed DB scripts at later stage, hence just shown DB VM as well

nexus

Jenkins

user

Contains- Hosts, and all Config properties

Contains- common ansible code to run across all platforms

Ansible Master Node VM

inventory

playbooks

Ssh trust

DB

WL3

WL2

ciC01-WL1

DB

WL3

WL2

ssiC01-WL1

DB

WL3

WL2

ftC01-WL1

Playbooks : Playbooks along with roles are the re-usable modules. Which will run on managed nodes.

Inventory : This area holds separated the code from environment variables. This folder contains all the application and environment properties ,dynamically fed to the playbooks.

Ansible pushes the configuration onto each managed servers thru ssh. And run the playbooks on target managed nodes.

The idea of the above picture is that how we implement continuous deployment across different environments.

Initially to prove the framework works , this will be driven from Master Node and when things are in place we will wire this to the Jenkins. And Jenkins becomes the heart of CI/CD pipeline.