I will divide assessment into tree section.

1. Deploying to Linux
2. Deploying to Windows
3. Migrating from Windows to Linux
4. **Deploying to Linux**

CI/CD Process

1. Install project dependencies.
2. Build a Docker image.
3. Push the image to Docker Hub.
4. Provide a one-click Kubernetes deployment.

We need a GitHub,DockerHub and Semaphore account and also install git and kubectl for remote deployment

<https://github.com/masterismet/nordea/tree/semaphore-setup>

1. **Deploying to Windows**

For deploying python codes to windows server we will run commends over ssh on server

We need OpenSSH ,git,nssm tools

ssh USERNAME@REMOTE\_IP C:/nordea/windowservice.bat SERVICE\_NAME RUNNING\_PATH

<https://winscp.net/eng/docs/guide_windows_openssh_server>

1. Checkout source code.
2. Stop service
3. Update Code
4. Run nssm service.

<https://github.com/masterismet/nordea_assesment>

1. **MIGRATION between Windows To Linux**

Science we use docker-kubernates it is easy to deploying them to containers, just we need to create a Docker and deploy-k8s file for each migration.

Notes:

\*For managing config files we can set branch permissions on repositories and give permissions to only DevOps engineers

\* For packages version management we can use Sonatype Nexus Product

\* It’s possible to make this process on Bamboo or Jenkins.

\* There are tools for team management Like Jira it will also help us to manage SDLC