**CI/CD Installation/Configuration and Deployment**

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| Tool | Activity | Instruction Document / Procedure | Comments |
| Google cloud | Creating VM |  | Create a google cloud account and create a new instance.  Ex: **Jenkins and Ansible instance** |
| Java, Jenkins, Tomcat, Git, Maven | Tool installation |  | **Instructions provided to install Java, Jenkins, Tomcat, Git, Maven**. Just open the document and select all and copy paste it in your VM and it will install all the required tools.  **Java is the pre-requisite for the Jenkins installation** |
| Ansible | Install the Ansible |  |  |
| Tomcat and Jenkins setup | Tomcat configuration and Jenkins setup |  | **Jenkins war file is installed under Tomcat directory and Tomcat will install the Jenkins and do the further setup.** |
| Nexus | Nexus installation and setup procedure |  | Using Nexus artifacts , we are storing our builds. |
| Docker | Docker installation in Redhat 7 |  |  |
| Jenkins | Jenkins standalone installation |  |  |

**Deployment procedures**

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| Tool | Activity | Instruction Document / Procedure | Comments |
| Git, Maven, Tomcat | Git, Maven, Tomcat – Code Deployment |  |  |

**Configuration and troubleshooting**

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| Tool | Activity | Instruction Document / Procedure | Comments |
| Tomcat | Troubleshooting document for Tomcat |  | There is a bug in Tomcat 8.5 and getting 403 access error. Please follow the troubleshoot document and rectify it. |
| Jenkins | Jenkins configuration |  | **Once you installed the Jenkins we need to configure the tools in global section**:  Configure the Git ,Maven, Java installation path in Jenkins. |
| Tomcat, Nexus | Firewall setup access |  | **Ex**: Allow access for port 8080 and 8081 |

**POC details**

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| Password based authentication | Ex: Create a SSH connection between Ansible and Jenkins VM |  | **Detail ssh connection document provided to establish the connection of two servers.** |
| Jenkins Pipeline setup | Pipeline setup for code, build and deployment. |  |  |