**Phase-5: Implementation**

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| **Phases** | **Targeted Implementations** | **Tools Required** | **Number of instances** | **Status/duration** | **Supporting Documents** |
| **Phase-5.1** | Selenium Grid Installation | Java, Selenium JAR | Local Windows | Completed in one day | Jenkins+Maven+Selenium-OnLocalWindows.doc |
| **Phase-5.2** | Selenium + Maven + Jenkins with sample code web application automatic testing. | Java, Maven, Jenkins | Local Windows | Completed in one day | Refer the same above doc |
| **Phase-5.3** | AWS-Jenkins-Slaves-Linux-And-Windows-Configuration | Java | 2RHEL, 1 Windows - AWS | Completed in one day | AWS-Jenkins-Slaves-Linux-And-Windows-Configuration.doc |
| **Phase-5.4** | Selenium Grid Installation on AWS windows | Java, Selenium jar | 1 Windows | Completed in one day | Jenkins+Maven+Selenium-OnAWS.doc |
| **Phase-5.5** | Selenium + Maven + Jenkins on AWS Linux, Ubuntu, Windows instances | Java, Jenkins, Maven, Selenium Grid | 2RHEL,  1Windows | Completed in one day | Refer the same above doc |
| **Phase-5.6** | Documentation of Phase-5 tasks | Google Docs/sheets | - | Completed in one day | **DevOps-Setup-Phase5-Docs-v0.3.zip** |

Example work-flow:

Original Code check-in for web app 🡪 Prepare Selenium script to test the web pages in different browsers 🡪 Trigger a local maven build OR trigger a Jenkins job as to Build the original code 🡪 deploy the package to Tomcat server 🡪 build the Selenium job to run the automated test cases to check the web pages in different browsers.

Required Tools & servers:

|  |  |  |  |
| --- | --- | --- | --- |
| **Server/Type** | Server1(RHEL) | Server2 (RHEL) | Server3(Windows) |
| **Server Activity** | Jenkins master | Slave node to Jenkins master | Slave node to Jenkins master |
| **Tools** need to be installed | Java  Tomcat  Maven  Git  Jenkins | Java  Git  Maven  Tomcat | Java  Git  Maven  Selenium Grid  All required browsers |

Communication between servers:

|  |
| --- |
| Server2(Linux) |
| Slave node to Jenkins master |
| Always available |

|  |
| --- |
| Server1(Linux) |
| Jenkins master |
| Checkout the code & Build the original code. |
| Deploy the package to Tomcat server. |
| Run the Selenium job on Jenkins widows slave as to run the automated test cases to check the web pages in different browsers. |

Build the Original Code

|  |
| --- |
| Server3(Windows) |
| Slave node to Jenkins master |
| Only available to Selenium job. |

Run the Selenium script  
  
on windows