

Performance and Security testing

- Performance testing
- Security Testing

Performance testing

Performance Testing checks if the application response is within the range defined by the team in the non-functional requirements. Hence, ensure response parameters are included in the non-functional requirements.

Performance testing should capture metrics on an application to ensure that it works within acceptable parameters, including:

- 1) speed
- 2) response times
- 3) latencies
- 4) resource usage
- 5) reliability

When conducting performance testing, testers can use various performance testing tools to help design test cases, execute tests, and analyze test results. Common performance testing tools include but not limited to:

- 1) Apidog: is suitable for more comprehensive teams and businesses to perform comprehensive performance testing.
- 2) Apache JMeter: is suitable for agile teams to perform simple and quick performance testing.
- 3) LoadRunner: is suitable for large enterprise-level application performance testing and advanced load testing.

Security Testing

When considering testing for any Projects or Changes, Test Managers / Test Leads / Team Leaders also need to take into consideration any technical security implications the Project / Change will introduce.

Where activities are undertaken within GoR institution critical systems and sensitive data, it is mandatory to undertake technical security reviews and assessments. Security Review(s) and Assessment(s) are required to ensure all vulnerabilities are detected prior, during and on a periodic basis. A request should be made to undertake a Technical Security Review as part of the overall plan of testing.

Note: Security Testing is required to be conducted separately and by an independent party not involved in the implementation.

If such a test is required, a Security Review and Assessment form needs to be completed and submitted thereon. The assessment form should be addressed to the tester indicating reason for security testing, which type of security testing is going to be done, on which module, schedules, tools to be used, way of reporting defects and communication, agree on confidentiality of data and respect terms and conditions that are applied.