

Enter Product Name

Performance Test Plan

Version 1.0

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# Introduction

The objective of this document is to present the plan for the performance testing across product lines in the organization. This document will be prepared upon receipt of the detailed requirement for the performance test to be conducted. This document will be prepared by the performance tester of the team before starting the testing process and once finalized has to be signed off by the product stakeholders.

## 1.1 Purpose of the Project

<High Level Description of the Project or Product >

## 1.2 Purpose of the Test Plan Document

< The objective of the Performance testing and track the performance testing activities>

# Project Scope

## Items In scope

< All the Use Case or Scenario or Marketable feature in Detail covered as part of performance testing>

## Items Out of scope

<All the features which are not part of performance testing, other dependent product or application>

# Performance Test Approach

Write the high level approach for performance-testing the Application and Infrastructure. Document the Performance Test Approach by covering five key areas:

1. Review the System Design Document (SDD) if available, or collect project background information on the application and infrastructure.
2. Leverage a Production Load Model to determine what regression load should also be considered for execution during the performance tests, if available.
3. Determine what load test types should be executed.
4. What key performance metric areas will be important to monitor or define the pass criteria? The Performance Requirements are strongly recommended to drive the pass/fail criteria, but previous results comparisons can also be considered in the pass/fail decision process.
5. Based on the Application capabilities or Infrastructure changes, what scope will be performance tested?
6. Define the test approach for applications supporting multi-tenancy and also hosted in Cloud.

# Test Environment Details

### Test Environment

<This section will give the environment details that is used for performance testing, include the multi-tenant environment if applicable along with the Cloud Infrastructure>

|  |  |  |
| --- | --- | --- |
| **Server Details** | **Performance Environment (Server Configuration)** | |
| Web/App Server Configuration | DB Server Configuration |
| Application Server |  |  |
| DB Server |  |  |
| Operation System |  |  |
| Database size |  |  |
| CPU Core(s) |  |  |
| Logical Processor(s) |  |  |
| Memory (GB) |  |  |
| Host Name |  |  |
| Disk Space |  |  |

### Test Data

<Test data used for Performance testing. Please include the Test Data to be used in case application is on SaaS and also in case of application supporting Multi-tenancy >

|  |  |  |
| --- | --- | --- |
| **Source of Test Data** | **Size of Test Data** | **Comments** |
|  |  |  |

### 

### Acceptance Criteria

|  |  |
| --- | --- |
| Response time SLA for each transaction Records |  |
| Memory Usage Threshold % (single tenant and Multi-tenant) |  |
| CPU Usage Threshold % (single tenant and Multi-tenant) |  |
| Total number of tenant and expected SLA for each of them |  |
| Total Transactions need to Achieved/ Expected Throughput |  |
| Total Number of Use Cases |  |

### Workload model

<List down the most critical Business Processes / Marketable Features that needs to be considered at any given time. Does the application support multi-tenancy and if yes then how many to be considered for performance testing. In case of any issues these business process / Marketable Features will have a direct impact on the product line>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl No.** | **Use case name/Marketable Feature** | **User Count** | **Tenant Distribution** | **Iterations to be achieved per hour** |
| 1 | Create sales order | 5 |  | 100 |
| 2 | Create purchase order | 5 |  | 100 |
| 3 | Search for open orders | 10 |  | 200 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

### Workflow for Business Processes

<Step-by-Step description of each Scenario >

### Test Scenarios in scope

<Mention the type of performance agreed upon >

|  |  |  |
| --- | --- | --- |
| Performance Test Type | In Scope | Comments |
| Load Test |  |  |
| Stress Test |  |  |
| Endurance Test |  |  |
| Scalability Test |  |  |
| Spike Test |  |  |  |

### Testing Tools

|  |  |
| --- | --- |
| Performance Testing Tools | Purpose |
| JMeter/Loadrunner/Others | Performance Script Creation & Test Executions |
| Protocol Used | Web Http/HTML or Any Other Protocols |

### Risks and Mitigation Plan

<Risks should be documented concerning the available release software, test environment, dependencies, tools, and test schedule associated with the performance test>

| Risk | Impact | Action/Mitigation | Assigned To |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### Test Asset Repository – Bugs

<Mention the path and system where performance are reported>

| Bug Tracking System | Path |
| --- | --- |
|  |  |

### Timelines

<Estimate of the performance test cycle duration. The start date is dependent on the availability of application>

|  |  |  |  |
| --- | --- | --- | --- |
| Activities | Start Date | End Date | Comments |
| Environment Setup/Validation |  |  |  |
| Scripting |  |  |  |
| Data Setup/Scenario Creation |  |  |  |
| Execution and Analysis |  |  |  |
| Reporting |  |  |  |

### Change Request

<List down the change request if any that needs to be considered and will have a direct impact on the key business processes>

| Task ID | Description | Business Process Affected |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

# Test Deliverables

### 

### Test Organization

<Test plan to be reviewed and signed off from required product coordinators>.

|  |  |  |  |
| --- | --- | --- | --- |
| Project Coordinator Name | Role | Sign off (Yes/No) | Comments |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### Results and Observations

Following test deliverables will be shared once the testing is completed.

1. **Test Report:** Execution Reports
2. **Test Scripts:** Scripts are associated with test cases in DevOps
3. **Bugs:** Issues found are reported in Azure DevOPS
4. Resource utilizations of Servers
5. Transaction Response times

Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version | Author | Description |
| 02/09/2022 | Draft1.0 | Performance team | Performance Testing Plan Template |