PERFORMANCE TEST PLAN

MyTCoE
MALAYSIAN PUBLIC SECTOR
TESTING CENTRE OF EXCELLENCE

Template and Guideline for Performance Test Project

CONTENTS

MyTCOE
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TESTING CENTRE OF EXCELLENCE

DOCUMENT CONTROL

1. Document Approval
   a) Prepared by, Reviewed by, Verified by, Approved by
   b) From both parties (PT Team, Project Team)
2. Distribution list
3. Revision History
4. Abbreviations

INTRODUCTION

1. Purpose

   Purpose of the documents

2. Objective

   Objective of performance test

3. Project Description

   Briefly describe about the system/project

OBJECTIVE

Explain the objective of performance test

To measure the performance of SPLaSK project under predefined transaction volumes from end-user perspective and test the system for responsiveness and reliability.

PROJECT DESCRIPTION

Briefly describe about the project

Sistem Pemantauan Laman Web dan Perkhidmatan Dalam Talian Kerajaan (SPLaSK) merupakan satu platform pemantauan ke atas pematuhan kriteria-kriteria bagi laman web dan perkhidmatan dalam talian Kerajaan.

Objektif Projek

❑*Menyediakan sistem aplikasi bagi kemudahan pemantauan laman web dan perkhidmatan dalam talian Kerajaan.*

❑*Menyediakan kemudahan mengukur tahap pematuhan kriteria berdasarkan tujuh(7) dimensi yang telah ditetapkan.*

❑*Menyediakan kemudahan mengukur tahap kepuasan pengguna perkhidmatan dalam talian kerajaan.*

❑*Menyediakan kemudahan secara elektronik untuk pengemaskinian maklumat profil laman web dan perkhidmatan dalam talian Kerajaan.*

TESTING SCOPE

1. Concurrent User and Response Time
   a) Number of concurrent user
   b) Response time
2. Load Test
   a) How many cycle
   b) How many iteration
3. Stress Test (Optional)
4. Monitoring
   Resource utilization monitoring
5. Business Transaction
   What business transaction ?

TESTING CONTROLS

1. Entrance Criteria
   - Pass smoke test

2. Exit Criteria
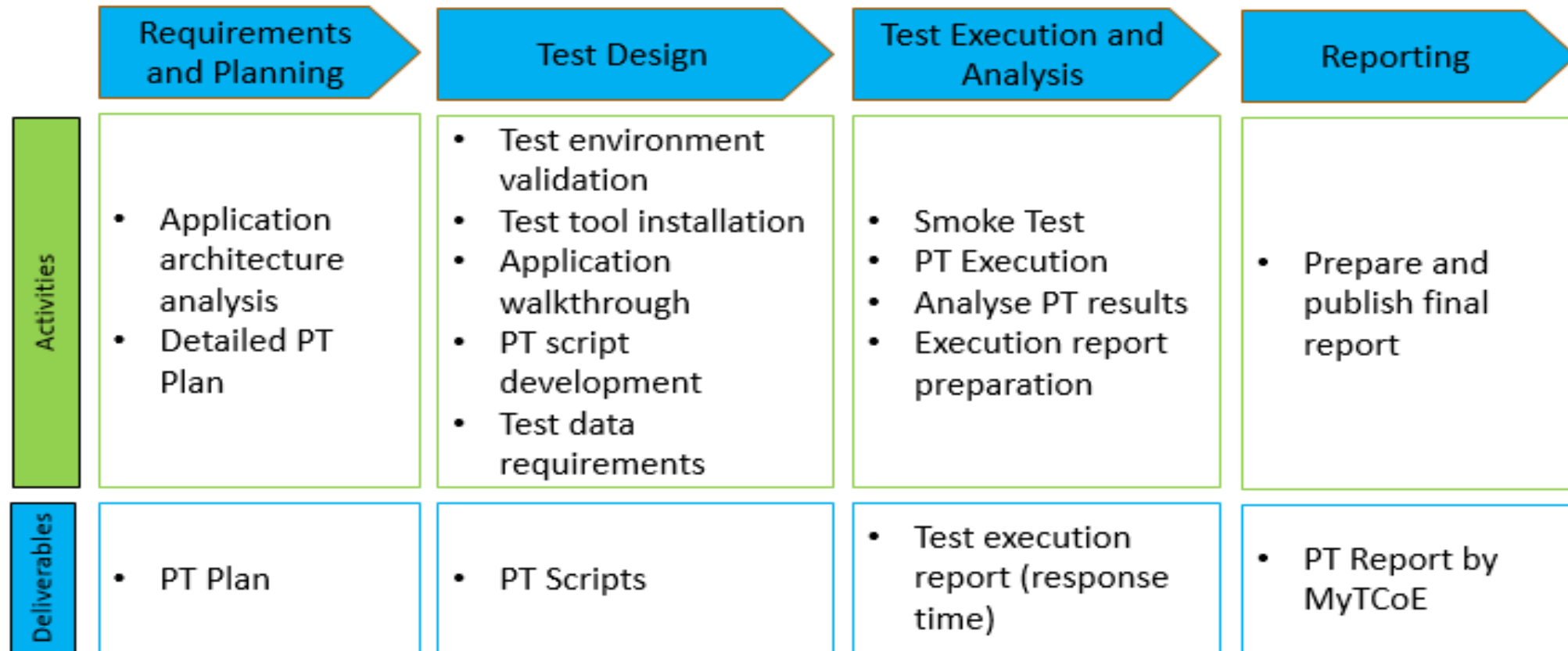   - Not more than 5% errors
   - Successful run test

PRE-REQUISITE

1. Completion of functional testing (code freeze)
2. Completion of security and penetration test
3. Login credential for xxx user
4. Production environment readiness
5. Test data readiness
6. Database backup and restore
7. Access to system for scripting purposes

TESTING METHODOLOGY

	Requirements and Planning	Test Design	Test Execution and Analysis	Reporting
Activities	• Application architecture analysis • Detailed PT Plan	• Test environment validation • Test tool installation • Application walkthrough • PT script development • Test data requirements	• Smoke Test • PT Execution • Analyse PT results • Execution report preparation	• Prepare and publish final report
Deliverables	• PT Plan	• PT Scripts	• Test execution report (response time)	• PT Report by MyTCoE

TESTING REQUIREMENTS

1. Test Data
   - Login data/ User ID
   - Transactional data
2. Hardware Requirements
3. Firewall Requirements
4. IP Address

TESTING TOOLS

1. What tools will be used
2. Performance monitoring tools (if any)
3. Hardware

TESTING ENVIRONMENT

Available Test Environment Setup

Required Test Environment Setup

1. Production Environment
2. Staging Environment
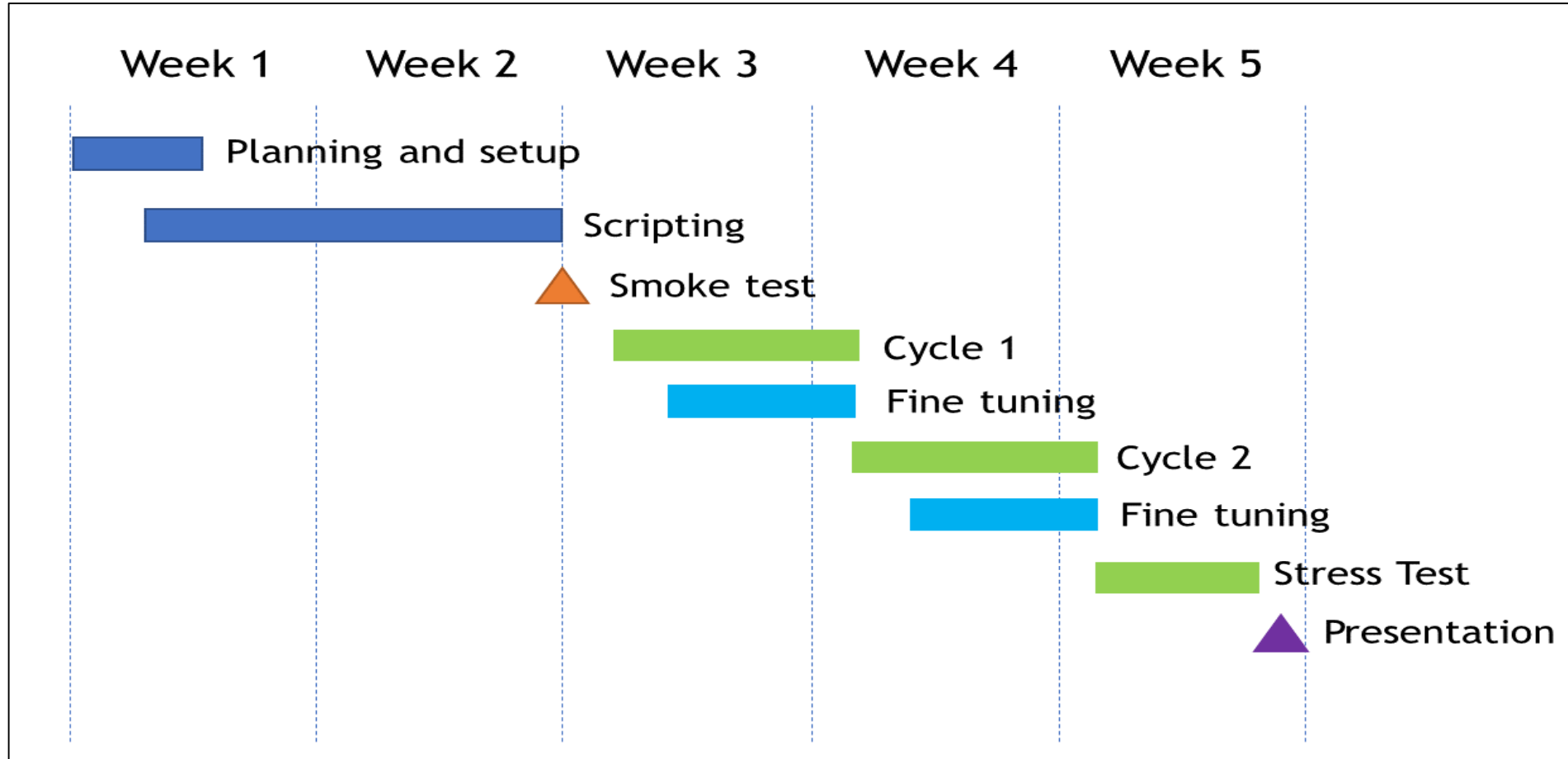3. Testing Environment

TESTING EVALUATION CRITERIA

1. Transaction Response Time
2. Failure Rate
3. Systems Performances
4. Errors and Exceptions

ROLES AND RESPONSIBILITIES

1. Performance Testing Team
   - Scripting, execute, monitoring, reporting

2. Project Team
   - Identify business transaction
   - Prepare the environment
   - Resources monitoring
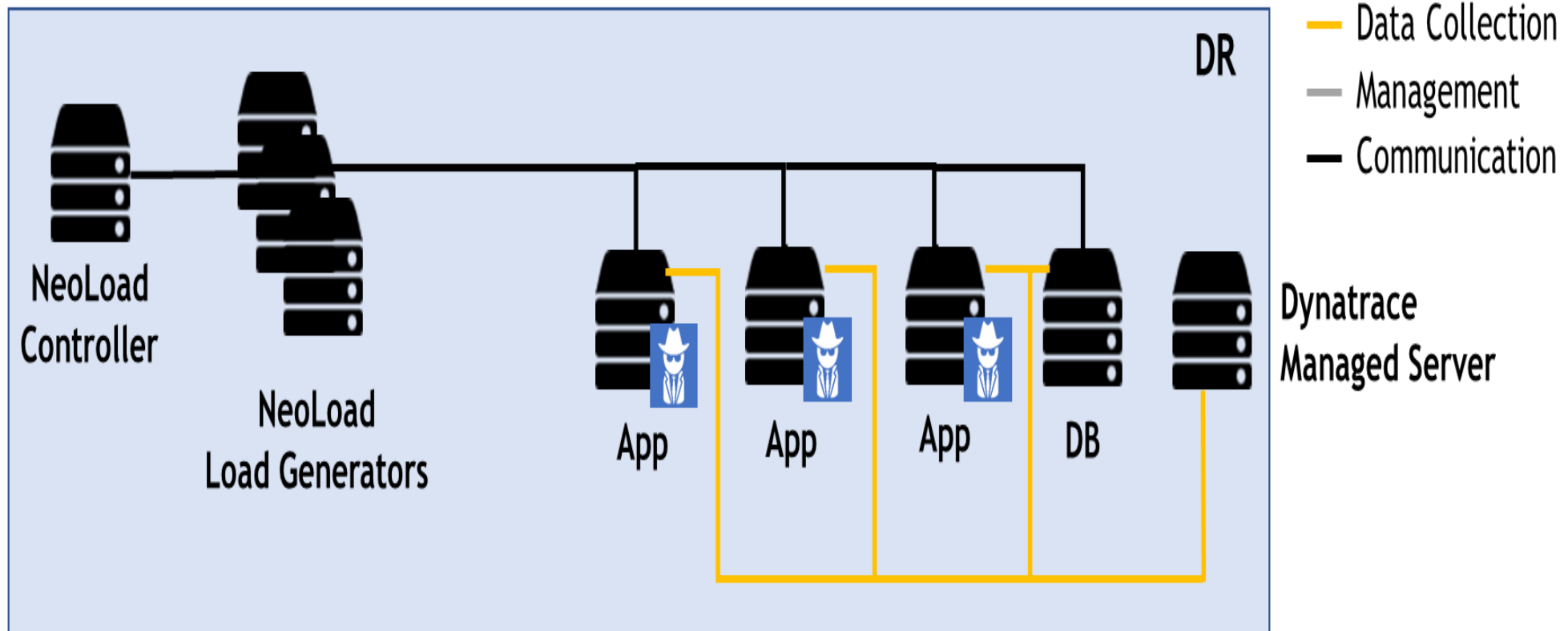
PROPOSED PROJECT TIMELINE

TESTING ACTIVITIES

No.	Activity	Description	Duration (Day)
1.	Identify Performance Requirements	Identify the performance requirements with SPLASK team	0.5
2.	Review Test Scenarios	Review, prioritize and finalize test scenarios for execution with SPLASK team	0.5
3.	Verify Pre-requisite Items	Verify the availability of all pre-requisite items	0.5
4.	Prepare Test Plan	Prepare detailed performance test plan (including detailed scenarios, workloads, timeline, environment info and etc.)	2
5.	Prepare Test Script	Prepare test script based on test scenarios	2
6.	Conduct Smoke Test	Verified that system is fit for testing before actual performance testing starts	0.5

TESTING ACTIVITIES

No.	Activity	Description	Duration (Day)
7.	Execute Test	Run and monitor tests. Validate test data and results collection.	1
8.	Capture Defects	Defects, if any, are capture in Test Management Tool	0.5
9.	Analyze Result and Generate Report	Consolidate and share results	3
10.	Submission of Full Report	Full report	3

PROPOSED DEPLOYMENT ARCHITECTURE

APPENDICES

1. System/project Architecture

2. Server/Hardware Listing

REPORTING

A) Interim reports :

- Response time of each transaction

- Transactional error rate

- Hardware performance and utilization

B) Final reports

THANK YOU

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