Test Environment Setup

Test Environment Setup decides the software and hardware conditions under which a work product is tested.

It is one of the critical aspects of the testing process and can be done in parallel with the Test Case Development Phase.

Test team may not be involved in this activity if the development team provides the test environment.

The test team is required to do a readiness check (smoke testing) of the given environment.

Activities in Requirement Phase Testing

- Understand the required architecture, environment set-up and prepare hardware and software requirement list for the Test Environment.
- Setup test Environment and test data
- Perform smoke test on the build

Deliverables of Requirement Phase Testing

- Environment ready with test data set up
- Smoke Test Results.

Test Execution

- **Test Execution Phase** is carried out by the testers in which testing of the software build is done based on test plans and test cases prepared.

- The process consists of test script execution, test script maintenance and bug reporting.

- If bugs are reported then it is reverted back to development team for correction and retesting will be performed.

- **Activities in Requirement Phase Testing**
  - Execute tests as per plan
  - Document test results, and log defects for failed cases
  - Map defects to test cases in RTM
  - Retest the Defect fixes
  - Track the defects to closure

- **Deliverables of Requirement Phase Testing**
  - Completed RTM with the execution status
  - Test cases updated with results
  - Defect reports

Test Cycle Closure

- **Test Cycle Closure** phase is completion of test execution which involves several activities like test completion reporting, collection of test completion matrices and test results.

- Testing team members meet, discuss and analyze testing artifacts to identify strategies that have to be implemented in future, taking lessons from current test cycle.

- The idea is to remove process bottlenecks for future test cycles.

- **Activities in Requirement Phase Testing**
  - Evaluate cycle completion criteria based on Time, Test coverage, Cost,Software, Critical Business Objectives, Quality
  - Prepare test metrics based on the above parameters.
  - Document the learning out of the project
  - Prepare Test closure report

- **Deliverables of Requirement Phase Testing**
  - Test Closure report
  - Test metrics

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