

Model Practices : The Testing Activity Landscape

Deliverable Candidate Front Door

Backlog Management

Pan-Release / Pan Sprint Delivery Identification & Planning

Work in Progress Management

Architectural & Implementation Policy / Constraints / Global Engineering

Pan-Sprint / Pan-Release Integration

Pan-Release Trials

Collaboration

Engineering Sprint

Backlog Prioritisation

Per Engineering E2E Team

Sprint Scoping and Capacity Management

Per Deliverable Item or Item Group

XC Requirements Engineering

Design Engineering

Test Driven Development

Continuous Integrated Build

Continuous Integration Test

Deliverable Feature & Operational Scenario Testing

Stakeholder Acceptance

Inherent test capability within the team:
Test oriented developers.
Test Driven Development
Dev Team Testers in the team
Embedded Core Test Team Testers

Upfront Application of Test Disciplines And Aptitude
Requirements clarity
Requirement expression as tests.
What-if mind-set
How-to support for TDD.

Aligned Core Test Team Resources
Core team resources aligned to each delivery.
Participate throughout.
Establish understanding.
Ensure alignment
Prepare Evaluation to receive delivery.
Interface for issues.

Work In Progress Engineering Artefacts

Work In Progress Software

Unit.
Component/Assembly/
Tier.
Story scoping.
Function scoping.

Enhanced Functional.
Scenario Tests.
Exploratory Testing.
Usability.

Functional.
Scenario.
Usability

Work In Progress Engineering Artefacts

Work In Progress Software

As-Built Models

Fully Accepted Feature Software

As-Built Documentation Updates

Release of end-of-sprint build for evaluation. Essential fixes only until next end-of-sprint build.

Evaluation

Regular Evaluation of End of Sprint Builds

General Operation Testing
Normal Use / Behaviour
Error detection & tolerance
Target platform compatibility
Browser compatibility
Localisation
Alternative operating modes
Start-up / shutdown
Monitoring / audit
Internal failures
Resource depletion
Resource management

Technology Integration Integrity Testing
Interface Protocol
Transport compatibility
Error tolerance
Environment tolerance
Data exchange
State synchronisation
Information synchronisation

Holistic / Rigorous System Testing
Pre-existing Operation
New Operation
Tight Operation Coupling
Loose Operation Coupling
Data Range Resilience
User anomaly handling
Technology anomaly handling
Historic data conversion
Op on representative data
Op on historic data
Short term customer activity lifecycles
Long term customer activity lifecycles
Alternative operating modes

Expected Usage Centric Testing
Prescribed Usage Procedures
Standard Business Operating Processes

Deeper exploratory progression testing
Systematic pre-defined progression testing
Automated/augmented one-shot behaviour testing
Core regression suite execution
New feature device / browser compatibility testing
New feature functional security testing

Extended Evaluation of Candidate Build(s)

Deployment & Upgrade Centric Testing
Deployment process
Pre-activation process
Activation process
Post-activation process
Roll-back
Historic data conversion
In-flight transactions

Reliability / Consistency

Deploy & Upgrade Centric System Testing
System deactivation
Deployment
System reactivation
Historic data conversion
In-flight transactions

Configuration Testing
Alternate target platforms
Alternate transport methods
System configurations
User configuration options

Operational Simulation Testing
Representative mixed high volume operational cycles

Interworking Testing
Supplier systems
Peer systems
Client systems

Automated/augmented multi-shot reliability/consistency behaviour testing
Automated high volume one-shot behaviour testing
Load testing focussed on performance/efficiency
Stress testing
Endurance testing
Load testing focussed on behaviour under load
Interworking with the wider IT estate

Extensive Evaluation of Stable Candidate

Latency Throughput Scalability

IT Operation Process Testing
Compatibility with pre-planned interaction sequences
Compatibility with pre-planned process sequences
Overall solution operation testing

Overall Solution Process Testing
Compatibility with pre-planned interaction sequences
Compatibility with pre-planned process sequences
Overall solution operation testing

Operational process enactment testing
Operational cycle enactment testing
Business process enactment testing
Business cycle enactment testing
Cradle to Grave business activity enactment
Formal interworking certification testing

Major-Component / Assembly / Tier Centric Evaluation

Black-box on targets that are buildable, deployable and that operate to deliver significant testable behaviour as a standalone element.

Interface / Distributed Func Centric Evaluation

System Centric Evaluation

System Application / Usage Centric Evaluation