# Defining QM4A User Profiles & Flows











# What are we going to talk about?

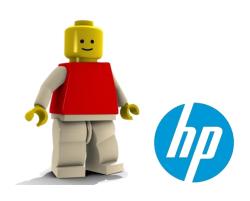
Into agile testing – QA in agile & challenges

The role and tasks of the QA manager

**Flows** 

Concept

Q&A



# **QA in Agile**

- Getting potential shippable product every Build
- Part of the Delivery team
- Estimate the tasks together with the R&D
- Gaining full visibility on the build & product
- QA is a part of the definition of done





# **QA in Agile**

- Overall responsibility on Quality of the product.
- Overall testing: regression tests, exploratory sessions, performance testing, usability testing and support of different environments.
- Smart testing automate as much as possible
- Test health QA is required to react to constant changes and broken tests



# Challenges

De-centralized Test Management

No tractability between Test & Requirements

Fragmented testing frameworks and tools

Cumbersome or missing tools

Manual testing for agile



More quality, less time

Constant change, user stories and code refactors

**Measuring Quality** 

**Defining Quality** 



# QA manager











## User profile QA Manager

**User Type** 



#### **Role Description**

Quality management - Quality plan and execution

Quality standard compliance (Functional and non functional)

Automated testing development

Development field operations supporting user acceptance testing.

Release Management and alignment with production management.

Responsibility on "Test health"

#### **User Traits**

BS in Computer Science or equivalent degree

1+ years of software testing experience

Experience building computers,

swapping hardware, and installing

Windows

Experience with test automation and QA

tools

Knowledge of Java, C++, SQL, UNIX,

RESTful web services



## Responsibilities QA manager

- •Writes test plans which enforce the acceptance criteria of features
- •Keeps all test plans and cases updated to changing requirements
- •Continually integrates the code base with automated builds and functional-level regression tests
- •Notifies when production is blocked due to errors in development
- Measuring Quality
- Defining Quality
- Improving Quality
- •Enforces QA Best Practices
- Provides visibility into end-to-end product quality
- •Owns QA Health status of releases/projects in SM dashboard
- •Test fast and efficient





## Main tasks QA manager

Monitor Done requirements

Task	Description	
Manage all product tests	Maintain? Create? Review? Disable a test?	
Monitor the quality of tests	Check / Locate for problematic tests	
Maintain the product's high quality status	Monitor the product's quality status 24/7	
Monitor the builds status	Review if the build status reflects the product quality?	
Manage test sets	Maintain? Create? Review? Define?	
Manage tests on a specific build	The ability to set which tests will cover the specific build.	
Monitor the product quality in the sprint	The ability to spot improvements comparing to the previous sprint.	
Monitor the product quality in the Release	The ability to spot improvements comparing to the previous Release.	
Monitor team's performance	Make sure the team's deliveries improves over time.	
Monitor Release quality / Ready to production.	See that the quality criteria match release	

Make sure the Done's were covered.

## Flow types

### QA manager tasks

### **Application Health Assessment**

#### Defining Quality

Configure product tree

Define Sprint/Release quality goals

Apply best practices

Define build break criteria

#### Measuring Quality

Measure the product's current quality status

Measure the product's quality in the Sprint

Measure the product's quality in the Release

#### **Test Health Assessment**

Monitor the quality of tests

Check / Locate for problematic tests

Check the proportion between test types (Unit vs. integration vs. UI).

Compare test converge with production data

### **Operations**

Identifying and resolving problems;

Manage build breakers

Keep up to date on overall activities of the teams

Identify issues early and take constructive corrective actions

### **Agile Test planning & optimization**

Define and manage test policies

**Smart testing - Automation** 

### **Agile Manual testing**

Smart manual testing

Manage and plan exploratory sessions

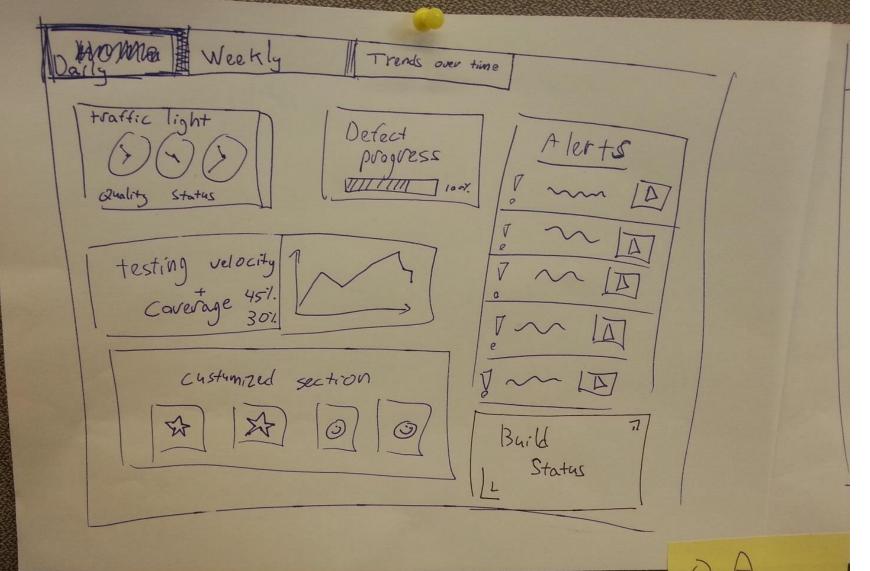
## Main flows QA manager

·As a QA manager I would like to get a daily overview, so I can understand the current Quality status and my team's progress.

### **Daily routine dashboard:**

- Quality traffic light (Quality status + current build status) KPI'S
- Testing velocity + coverage
- Defects Progress
- Alert area (urgent issues that were detected and need my attention)
- Followed entities/metrics section ( A metric/entity that I want to follow up).







Manager



## Main flows QA manager

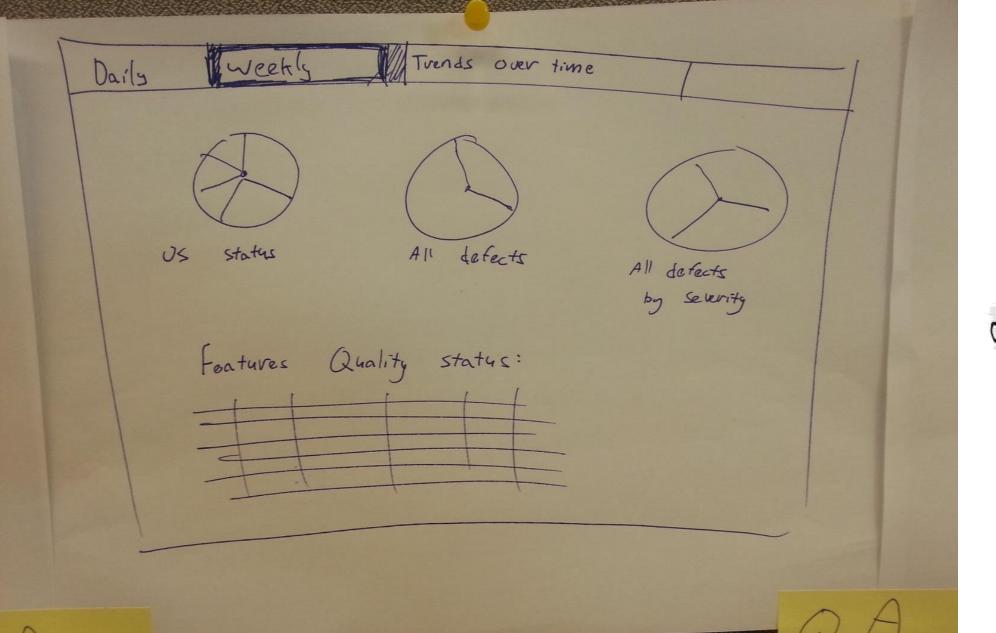
•As a QA manager I would like to measure the product's sprint quality state, so I can provide my PMO and R&D manager the sprint status report.

### **Sprint routine dashboard:**

- US status New, In testing, In progress, Done
- Defects (new / Done) + Defects Severity New, Done. Medium, Critical, High...
- Test that were added/modified during the sprint











Q H Manager

## Main flows QA manager

•As a QA manager I would like to measure quality trends from previous sprints, so I can look for improvements/ dis improvements.

#### **Release dashboard:**

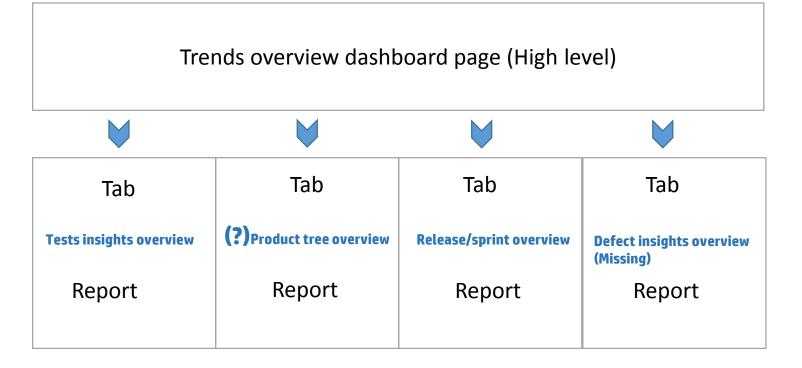
- Tests insights overview Problematic tests, traceability
- (Missing) Defect insights overview how quickly is the team resolving and closing bugs? Bug trend rate, active bugs by priority, bug progress (active, resolved, closed)
- Release/sprint overview test creation velocity and quality are aligned? Are we executing the relevant tests for the features? Are we properly investing in tests which cover the features?
- (?) Product tree overview How many defects and failing test we have on different areas of the product over time? Which areas are covered properly?



## Main flows QA manager

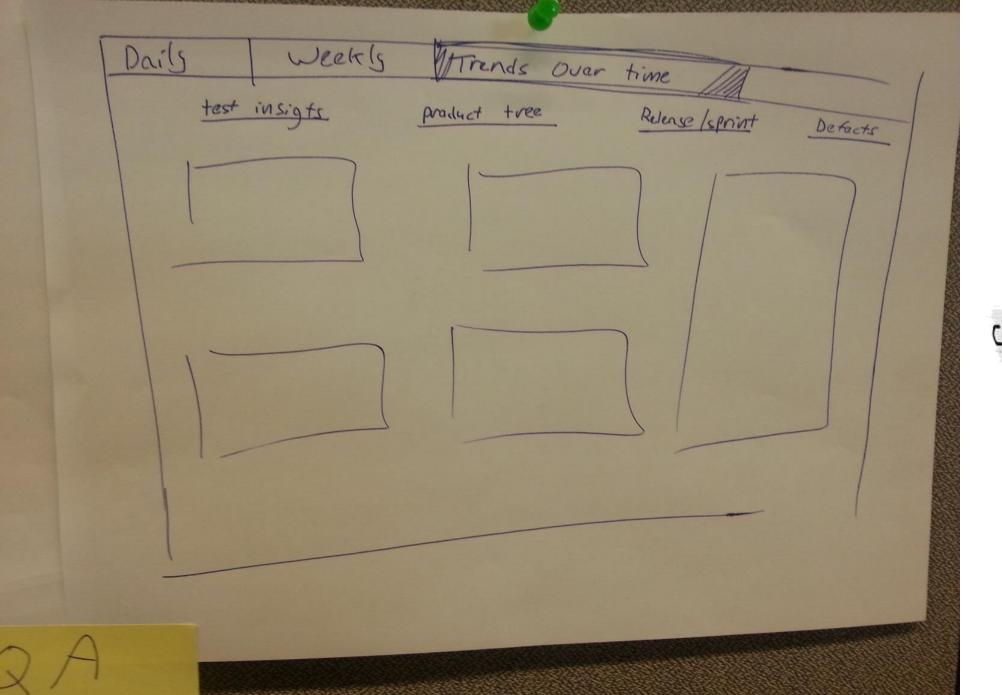
•As a QA manager I would like to measure trends from previous sprints, so I can look for improvements/ dis improvements in the quality measuring.

#### Trends (over time insights) module





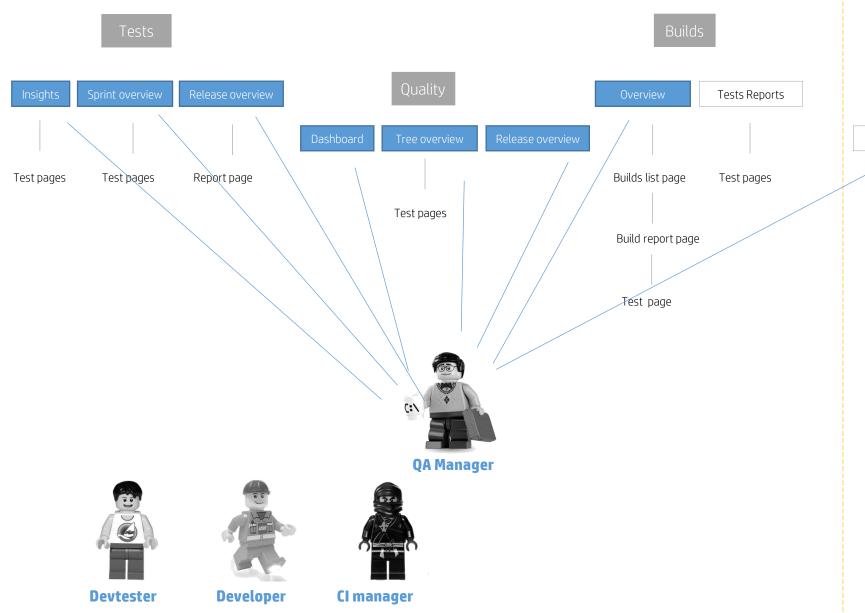


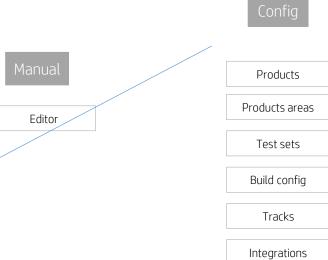






### Home / Welcome page





## User profile Devtester

#### User Type



#### **Role Description**

Execute manual and automatic tests.

Define appropriate test cases.

Incorporate developer feedback into test plans.

Set up appropriate test environments.

Perform integration, functionality, system, regression, load and acceptance test using manual or automation methods and testing tools.

Record tests results and document problems and system errors.

Provide feedback on the product's state for general release.

Troubleshooting-software behavior analysis Recording defects, verifying fixed defects

Consolidating, reporting and sharing tests results.

Writing test result reports using Quality Center graphs.

#### **User Traits**

- BS in Computer Science or equivalent degree
- 1+ years of software testing experience
- Experience building computers,
  swapping hardware, and installing
  Windows
- Experience with test automation and QA tools
- Knowledge of Java, C++, SQL, UNIX, RESTful web services



### Main tasks Devtester

Task

Description

Coding automated tests

Refactoring existing tests

Define product tree manfully

Opening defects

Validating fixed defects

Define the sync with AGM / requirements system

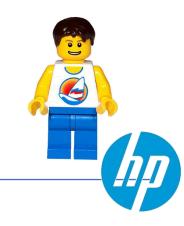
Connect the tests with the US's

Update the agents

Monitor defects

Write tests

Participate in exploratory testing



## Flows types

#### Devtester tasks



### **Application Health Assessment**

#### Configuration

Define product tree manfully

Define the sync with AGM

Connect the test with the US

Update the agents

#### Measuring Quality

Build status check up

Tests overview (what failed / passed)

Measure testing coverage

Measure and track test results

### Agile test management

Open defects

**Execute tests** 

Write manual tests

Execute manual tests

Coding automatic tests



### Main flows Dev tester

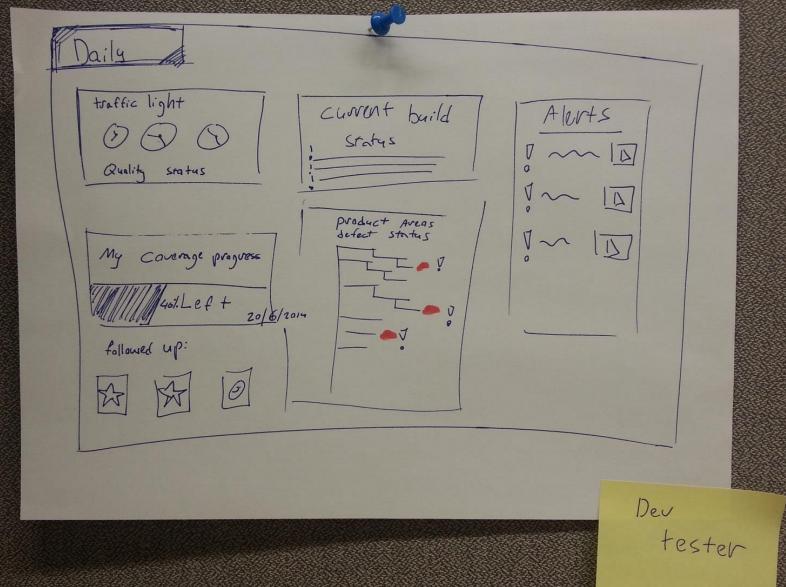
•As a Dev tester I would like get a daily overview so I can understand the current Quality status, and get updated regarding my recent assignments.

### Daily routine dashboard:

- Quality traffic light (Quality status + current build status)
- Testing coverage
- What I tested what II haven't and the relevant defects.
- Product area tree with indications of defects per area
- Alert area (urgent issues that were detected and need my attention)
- Followed entities/metrics section ( A metric/entity that I want to follow up).



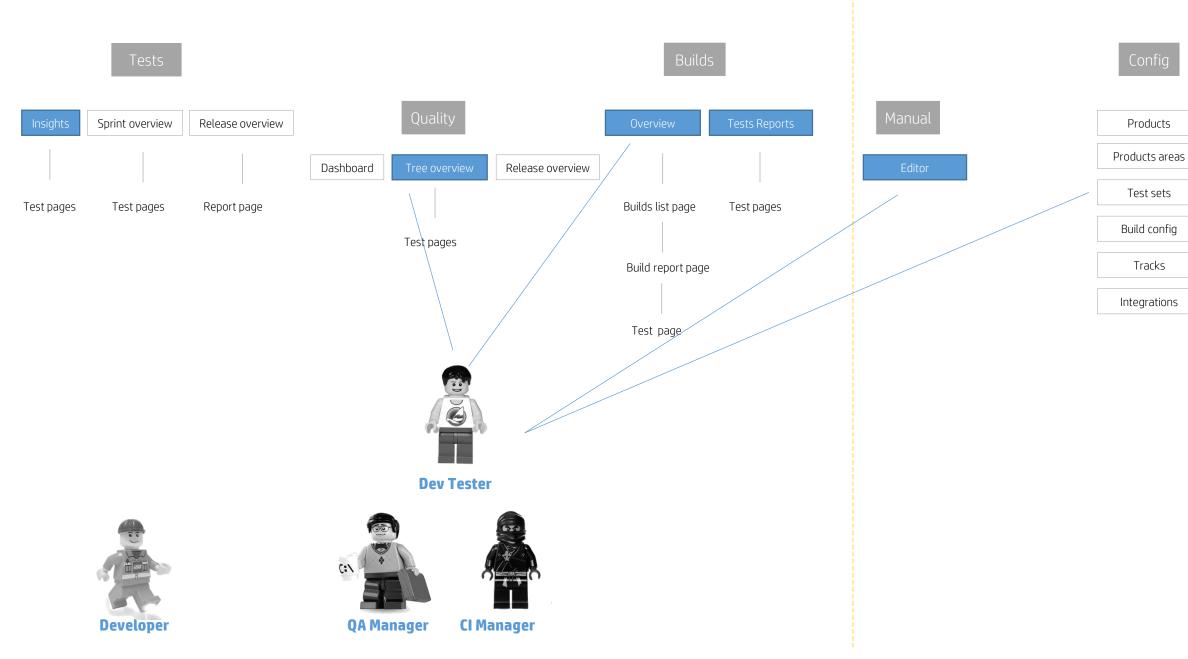








### Home / Welcome page



## Responsibilities CI manager

Configure and maintaining CI build system, in collaboration with build engineering team members



Work with software developers and QA and Operating's team to ensure build requirements are met and that build configurations are written in a reusable and scalable way.

Configure build agents to keep up with latest relevant operating systems and targets



## User profile CI Manager

#### **User Type**



#### **Role Description**

Deliver and maintain continuous integration.

Manage the deploy builds into appropriate environments.

Responsible for the processes and tools required to generate deployable software artifacts.

Design, debug and maintain installs for enterprise software products.

Define and automate software builds for products with the Dev team.

Ensure that the continuous integration environments meet the needs of the developers.

Implement continuous integration/test/deploy systems

Establishes the final release configuration (e.g. knowledge, information, hardware, software and

infrastructure)

#### **User Traits**

Software Development experience.

Experience with automated builds.

Java, Unix Shell, ANT, Linux, Oracle.

Familiarity deploying to EC2/S3 or similar cloud infrastructure



TBD

## Main tasks CI Manager

Task	Description	Frequency	Required Proficiency
Configure build agents			
Configure build system			
Maintain build system			





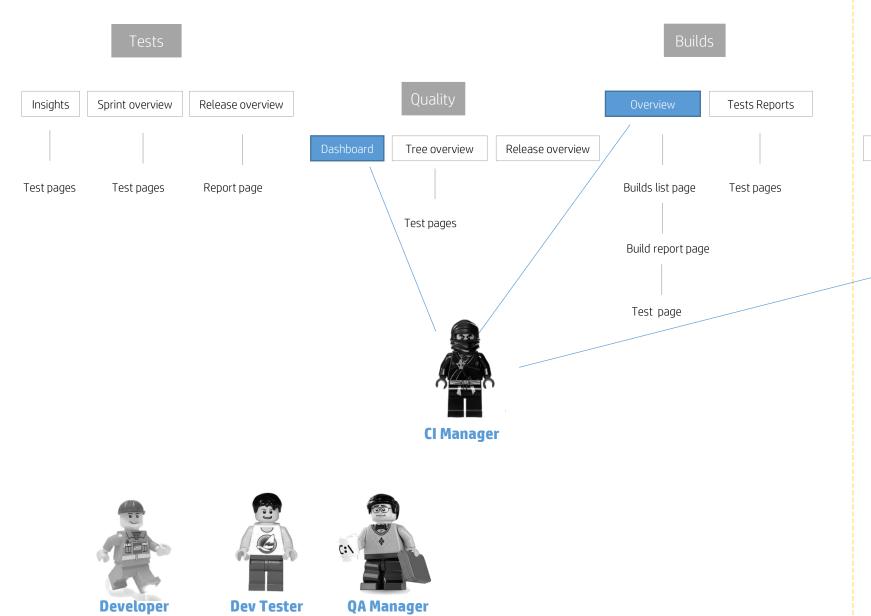
## Main flows CI Manager

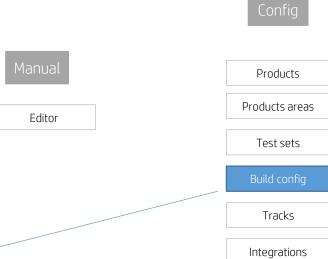
As a CI Manager, I would like to \_\_\_\_\_\_ so I can \_\_\_\_\_





### Home / Welcome page





## **Responsibilities** Release Manager



Architect: the release manager helps to identify, create, and implement processes or products to efficiently manage the release of code.

Gatekeeper :a release manager "holds the keys" to production systems and takes responsibility for their quality and availability.

Facilitator: a release manager serves as a liaison between varying business units and users to guarantee smooth and timely delivery of software products or updates.

Release Management is the discipline of building, packaging, and deploying software for consumption.



## User profile Release Manager

#### User Type



#### **Role Description**

Manage all aspects of the end to end release process

Ensures coordination of build and test environments teams and release teams

Service release and deployment policy and planning

Deals with release package design, build and configuration

Deals with release package acceptance including business sign off

Deals with service roll out planning including method of deployment

Deals with release package testing to predefined acceptance criteria

Signs off the release package for implementation

Audits hardware and software before and after the implementation of release package changes

Deals with storage and traceability/auditability of controlled software in both centralized and distributed

**Systems** 

Deals with release, distribution and the installation of packaged software

#### **User Traits**

Software Development experience.

Experience with automated builds.

Java, Unix Shell, ANT, Linux, Oracle.

Familiarity deploying to EC2/S3 or similar cloud infrastructure



# What's next?



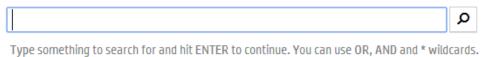
# Concept: Role & Agile flavored dashboard



### Daily

### Sprint

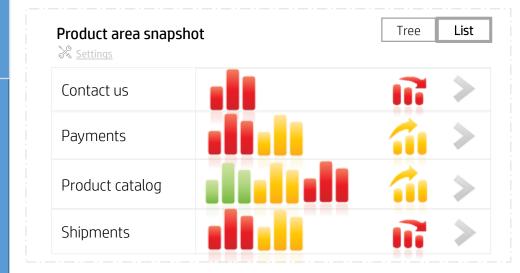
Release



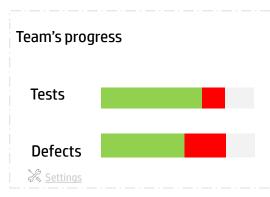
Create a new test set

Create policy

Add a product area

















### Daily

## Sprint

### Release

My KPI's

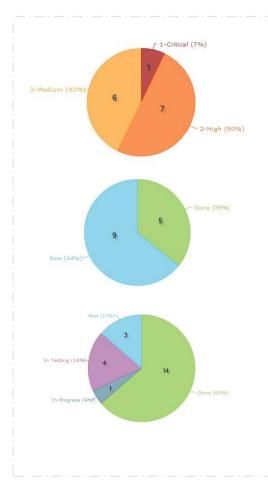


Type something to search for and hit ENTER to continue. You can use OR, AND and \* wildcards.

Requirement	Status	Tests
US 12998 - Search monitor in test	In progress	Integration Acceptance End2End
US 12998 - Search monitor in test	In testing	End2End Integration
US 12998 - Search monitor in test	In progress	Acceptance Integration
US 12998 - Search monitor in test	In testing	Integration Acceptance
US 12998 - Search monitor in test	In progress	End2End Acceptance
US 12998 - Search monitor in test	In progress	End2End Integration



Q



# Thanks.



## User profile Release Manager

User Type

Role Description

**User Traits** 



















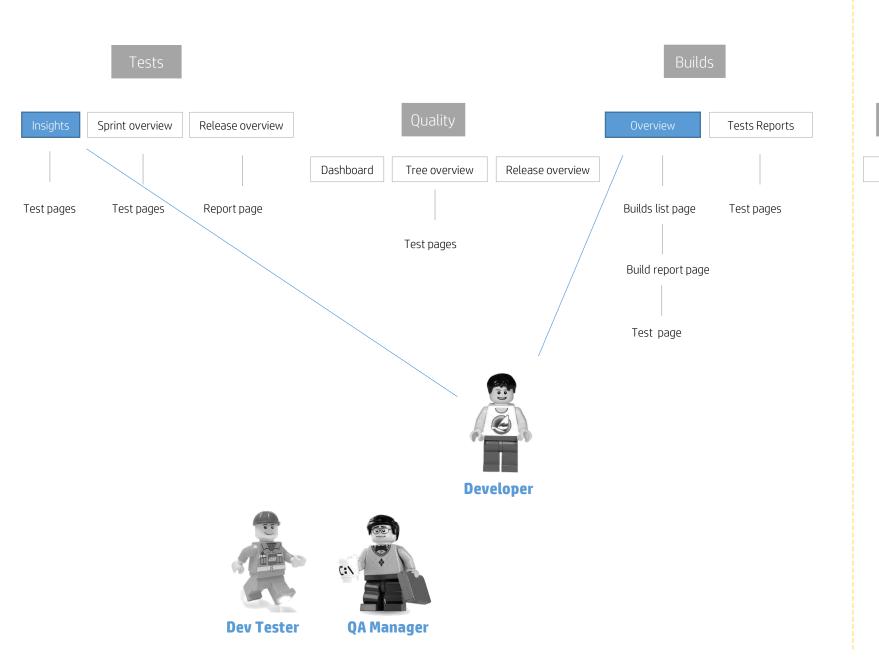








### Home / Welcome page



Confic

1anual

Editor

Products

Products areas

Test sets

Build config

Tracks

Integrations

