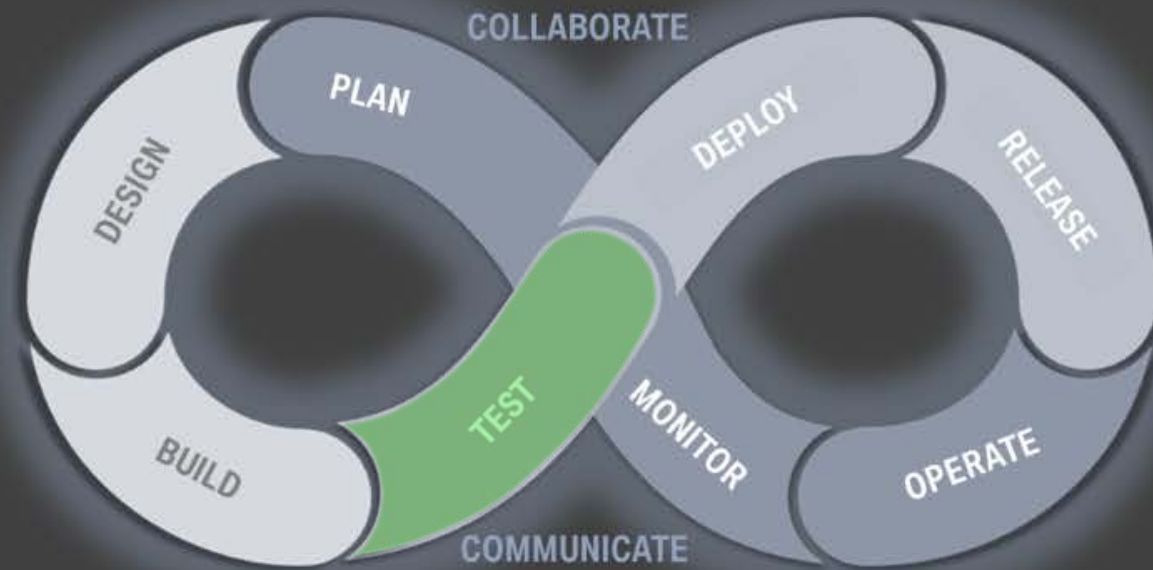
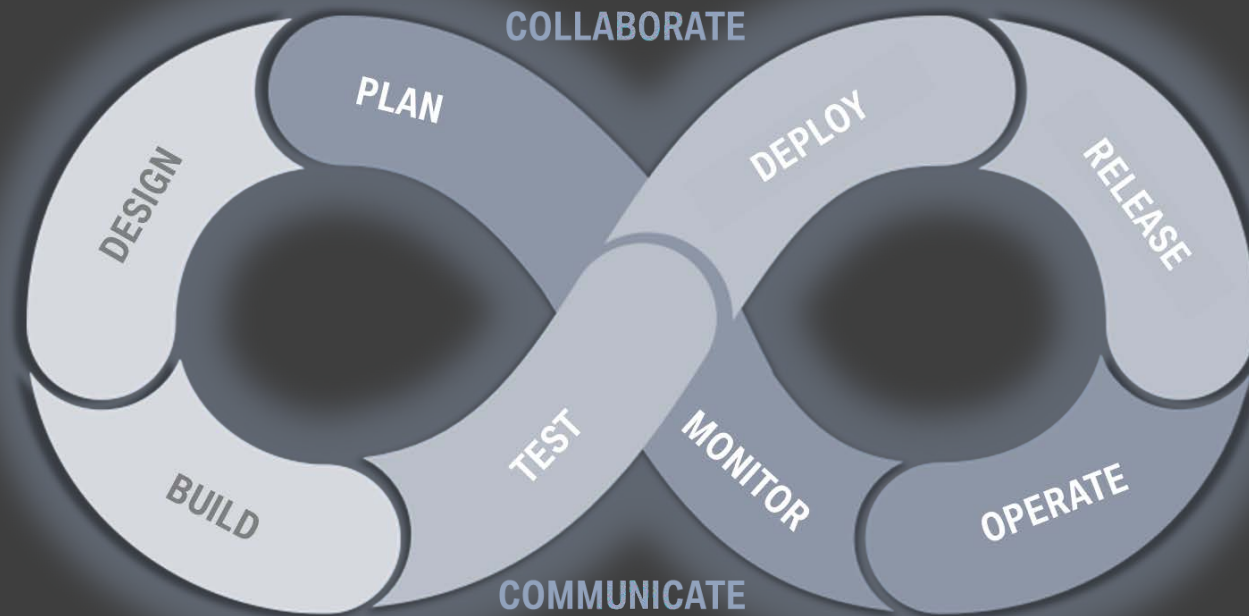


XRAY INTRODUCTION IN THE AGILE TOOL CHAIN. INTEGRATED AND AUTOMATED TESTING.



Matthias Krauß, Jürgen Kock

VISION: AN INTEGRATED TOOLCHAIN, COVERING THE WHOLE DEVOPS LIFECYCLE.



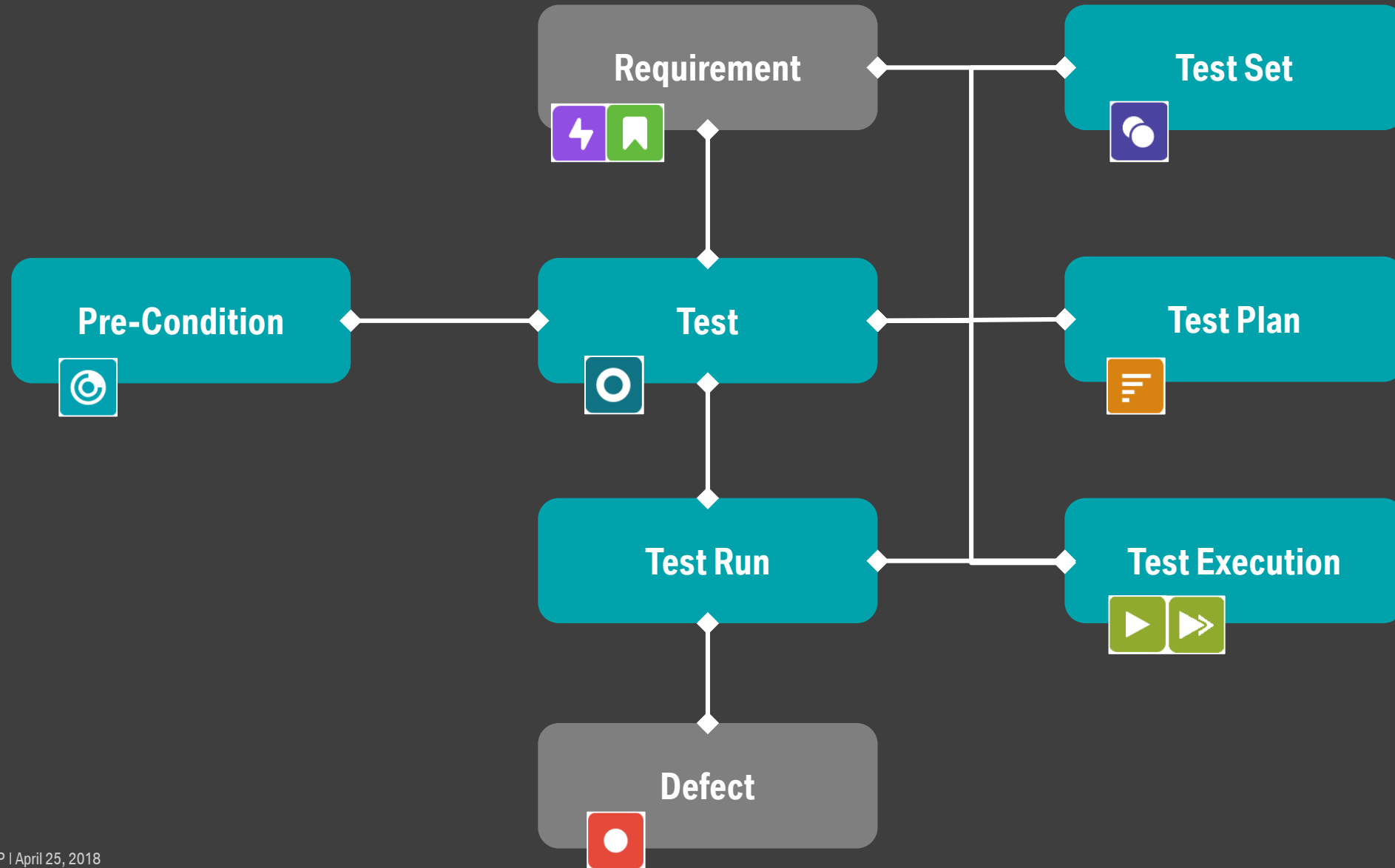
Group-wide service

**Provisioned within
max. 2 working days**

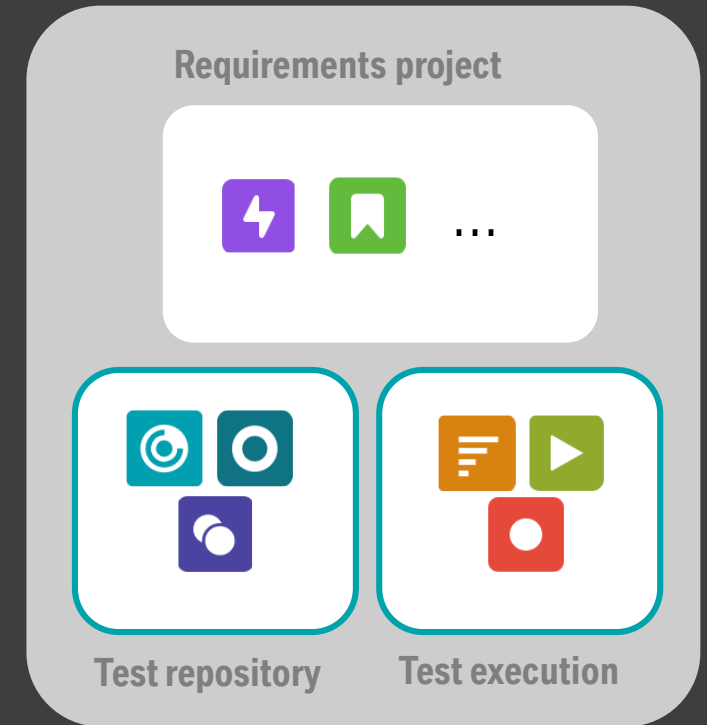
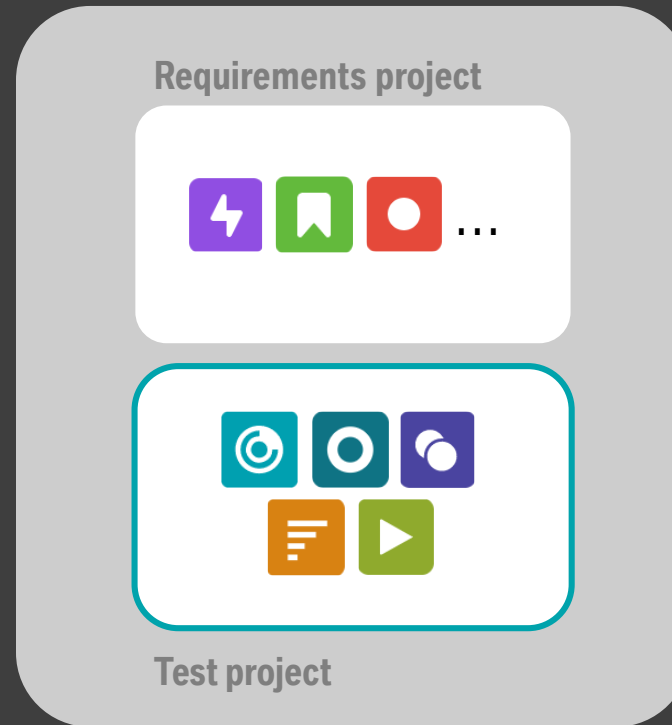
Transparent cost

**Standard
processes**

XRAY ADDS TEST ISSUE TYPES TO THE JIRA STANDARD SET.



XRAY SUPPORTS DIFFERENT PROJECT ARCHITECTURES.



TEST COVERAGE AND RESULTS ARE TRACEABLE THROUGHOUT JIRA.

Xray Test Project / XTPROD-11
Software Update via Internal LAN

Edit Comment Assign More Open In Progress Workflow Admin

Details

Type: Story Status: **OPEN** (View Workflow)
 Priority: High Resolution: Unresolved
 Affects Version/s: Release2-SP1 Fix Version/s: Release2-SP2
 Component/s: Maintenance Panel
 Labels: keep
 Story Points: 20
 Acceptance Criteria: A service notebook can be connected to the local LAN port. A ssh connection can be established. Login requires an admin account and password. A new software version can be transferred and is activated at the next reboot.
 Sprint: Xray Release2-Sprint2
 Epic Link: Maintenance friendly
 Test Status: **Release2-SP2 - NOK**

Description

As a service technician I want to update the ticket machine software via an internal LAN port, so that the installation of software is secure.

Test Coverage

Version: Release2-SP2 All Environments: **NOK**

Create new Test Create new Sub Test Execution

Issue	Status	Test Case	Result
NEW Unresolved XTPROD-132	Open ssh session		PASS
NEW Unresolved XTPROD-199	Test Software Update via Internal LAN		FAIL
NEW Unresolved XTPROD-131	Connect notebook via LAN		PASS

QUICK FILTERS: Only My Issues Recently Updated

To Do In Progress Done

CALC-962 As a user, I can calculate add positive numbers v3.0 - NOTRUN

CALC-1232 regression tests for v3.0

CALC-970 calculator screen anything

CALC-983 As a user, I can calculate the sum

CALC-1178 As a user, I can calculate the sum of 2 numbers v3.0 - OK

CALC-1184

Version: v3.0 All Environments: Filter: Showing 20 of 114 entries

CALC-1163 OPEN v3.0 - UNCOVERED Version: v3.0 As a user, I can calculate the sum of 2 numbers

CALC-1153 OPEN v3.0 - NOK Version: v3.0 As a user, I can calculate the sum of 2 numbers

CALC-1154 NEW Manual Test As a user, I can calculate the sum of 2 numbers v3.0 - PASS

CALC-1160 FAIL Version: v3.0 Finished On: 2017-04-03T11:42:47+01:00 Executed By: admin Tests environments: -

CALC-1162 PASS Version: v3.0

CALC-1161 OPEN calculator crashed

Tests Evolution: Sample Tests Evolution chart

Show as Table

Legend: PASS (Green), TODO (Grey), EXECUTING (Yellow), FAIL (Red), ABORTED (Black), BLOCKED (Blue), PENDING (Orange), SUSPENDED (Pink), TOTAL (Dotted)

Date	PASS	FAIL	PENDING	SUSPENDED	TOTAL
29-10-2017	0	0	0	0	0
31-10-2017	0	0	0	0	0
02-11-2017	1	0	0	0	1
04-11-2017	2	0	0	0	2
06-11-2017	3	0	0	0	3
08-11-2017	4	0	0	0	4
10-11-2017	5	0	0	0	5
12-11-2017	6	0	0	0	6
14-11-2017	7	0	0	0	7
16-11-2017	12	0	0	0	12
18-11-2017	13	0	0	0	13
20-11-2017	13	0	0	0	13
22-11-2017	13	0	0	0	13
24-11-2017	13	0	0	0	13
26-11-2017	13	0	0	0	13
28-11-2017	13	0	0	0	13
30-11-2017	13	0	0	0	13
02-12-2017	14	0	0	0	14
05-12-2017	15	0	0	0	15

MOTIVATION: WHY DO WE NEED A JIRA ADD-ON FOR TEST MANAGEMENT?

JIRA + HP ALM

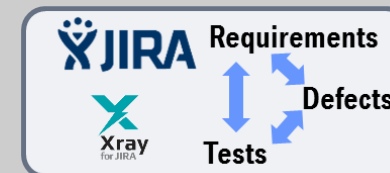
Two tools with synchronization



- ✗ Effort, complexity and maintenance due to the synchronization
- ✗ Requirement traceability in HP ALM often not used

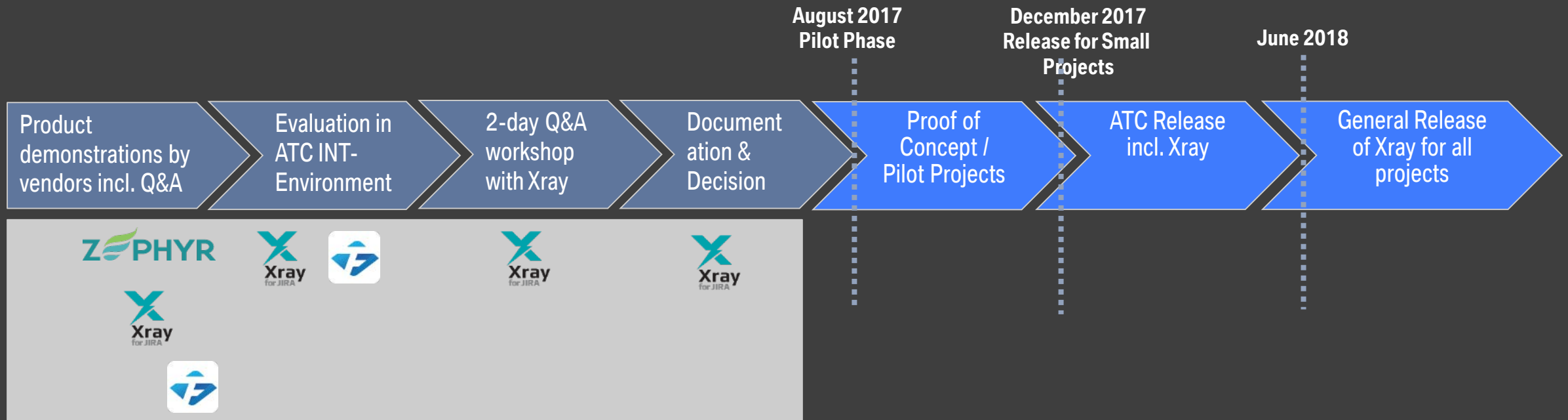
JIRA / Xray

Integrated solution

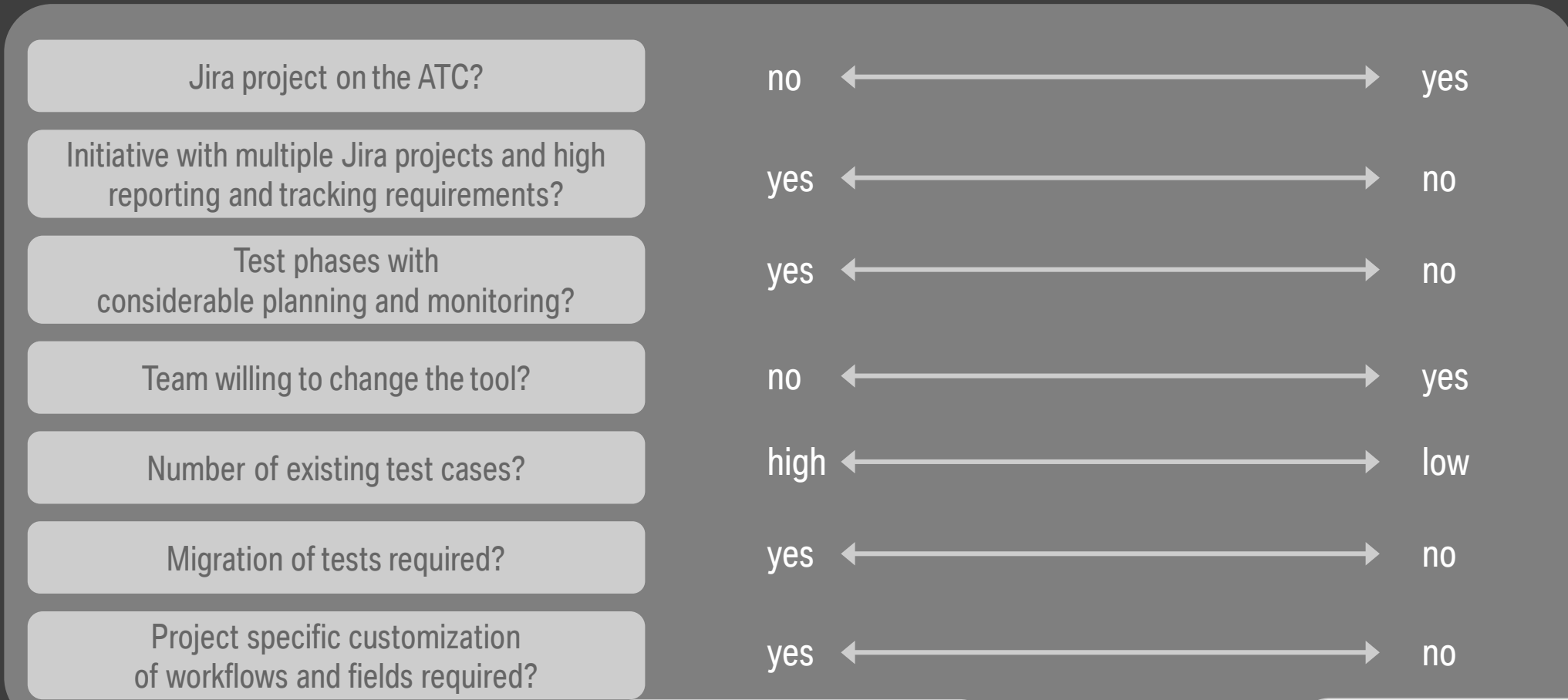


- ✓ Requirements, Tests and Defects in one tool with links between all Jira issue types
- ✓ Xray intuitive for experienced Jira users

XRAY INTRODUCTION WITHIN THE ATC. TIMELINE.



DECISION CRITERIA: WHICH TESTING TOOL SUITS BEST?



TESTING ON THE ATC. WITH THE AGILE TEST AUTOMATION PLATFORM (ATAP).

1

Lightweight alternative to
ALM for performing test
management in JIRA.



REST-assured



Jira Software

TESTING ON THE ATC. WITH THE AGILE TEST AUTOMATION PLATFORM (ATAP).

2

Test framework for automated acceptance tests written in a behavior-driven development (BDD) style. The definition language for the test cases is Gherkin.



REST-assured



Jira Software

4

API test automation framework (XML / JSON).



3

UI test automation framework (WEB).

ATAP APPROACH. AUTOMATED TEST EXECUTION (PLATFORM).

Sprint n

Sprint „n-1“

Sprint „n+1“

Bitbucket

Xray
for JIRA

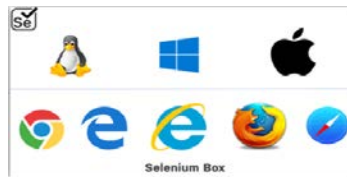
Cucumber

Jenkins

Xray

Application
under Test

Selenium



Jenkins

Test Reports

BRIO-575 **NEW** **PASS**

Test Login API with admin user

PASS

BRIO-618

Version: testautomatisierung

Finished On: 2018-01-15T16:07:25+01:00

Executed By: qqcont1

Tests environments: JENKINS

CHROME

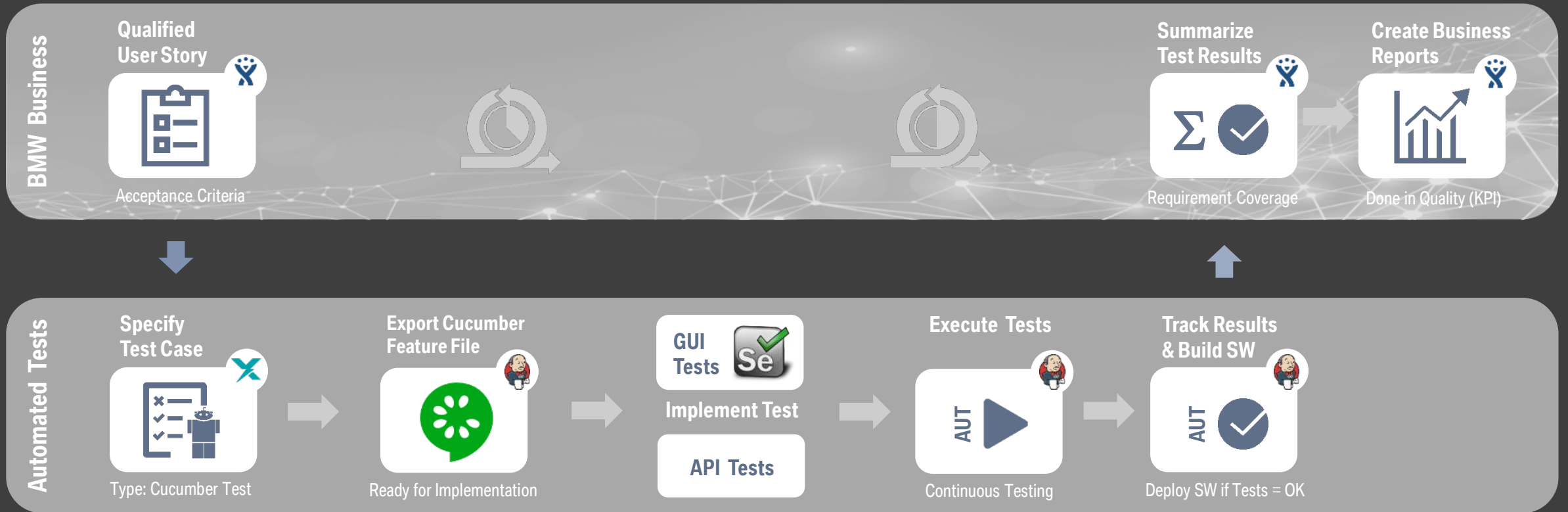
PASS

Features Statistics

The following graphs show passing and fail

Feature	Step		
	Passed	Failed	Skipped
Admin login secured	15	0	0
BRI project management	27	3	0
Backend API	16	0	0
Backend API	15	0	0

USER STORY TESTING WITH AGILE TEST AUTOMATION PLATFORM (ATAP).



AGILE TOOL CHAIN STATISTICS

> 15.000
Jira Users
in > 2.000
Projects

100 %
of Xray Pilot
Projects
recommended
introduction

> 200
Xray
Projects
within
3 months

Large
Projects
adapting lean
approach of
Xray

Pilot Phase
for **Test**
Automation
started