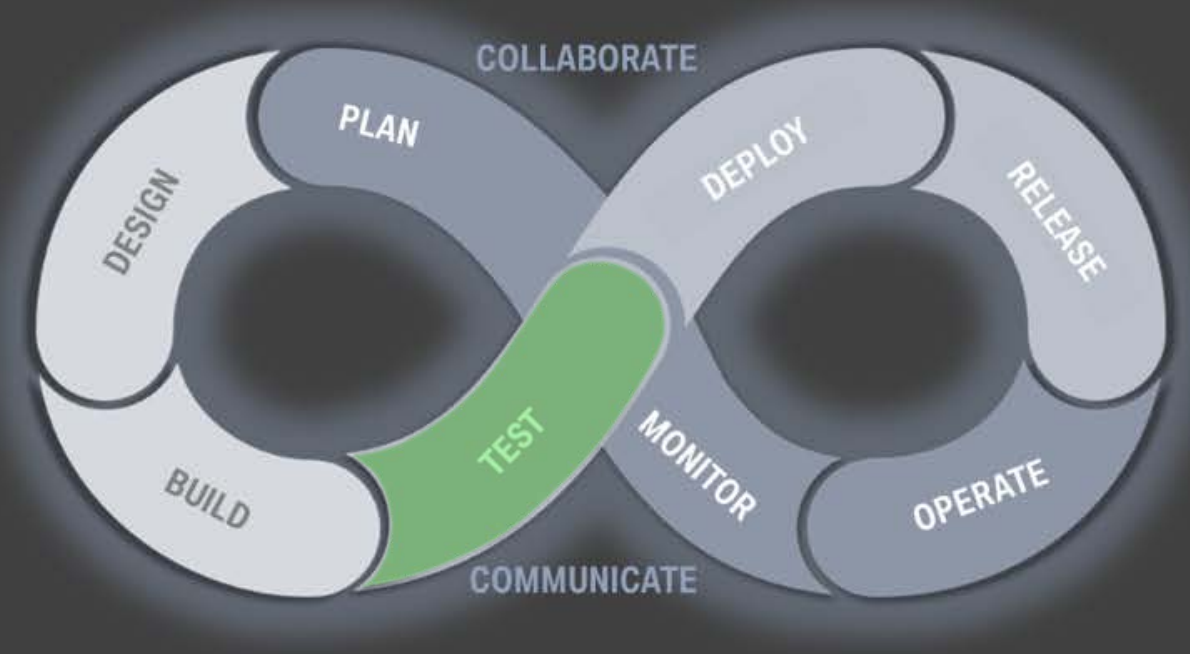
XRAY INTRODUCTION IN THE AGILE TOOL CHAIN. INTEGRATED AND AUTOMATED TESTING.

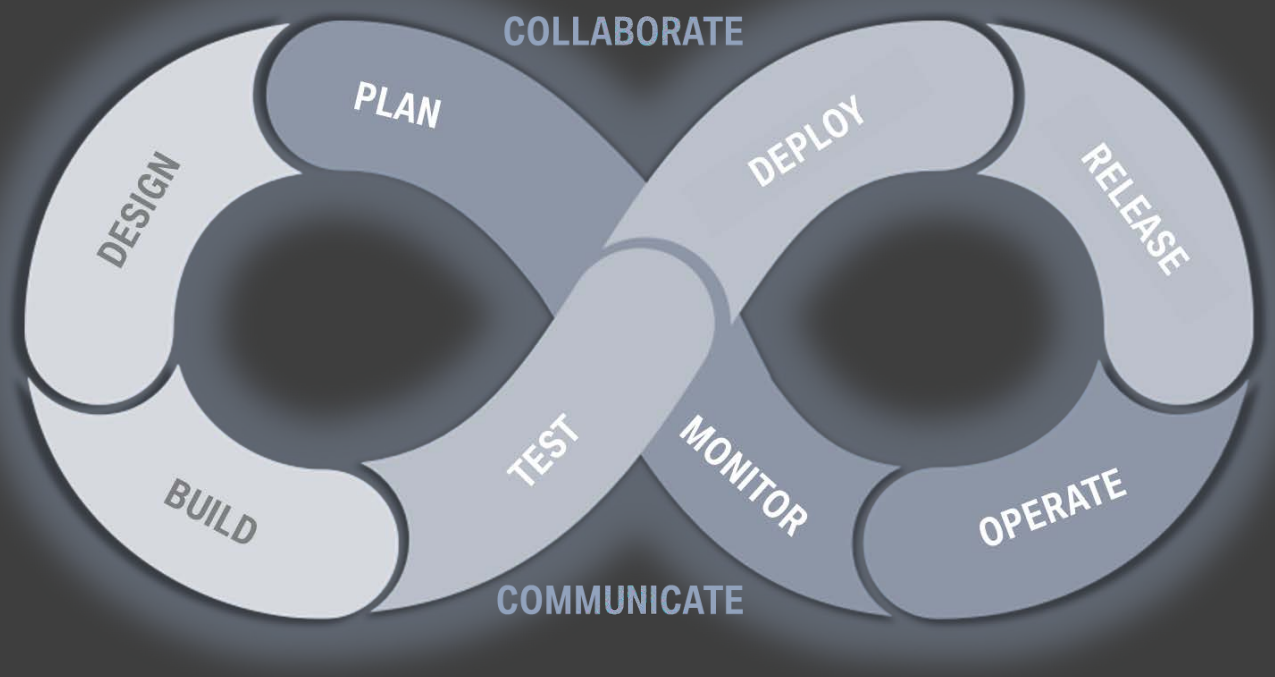


Matthias Krauß, Jürgen Kock

BMW GROUP THE NEXT 100 YEARS

Rolls-Royce Motor Cars Limited

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



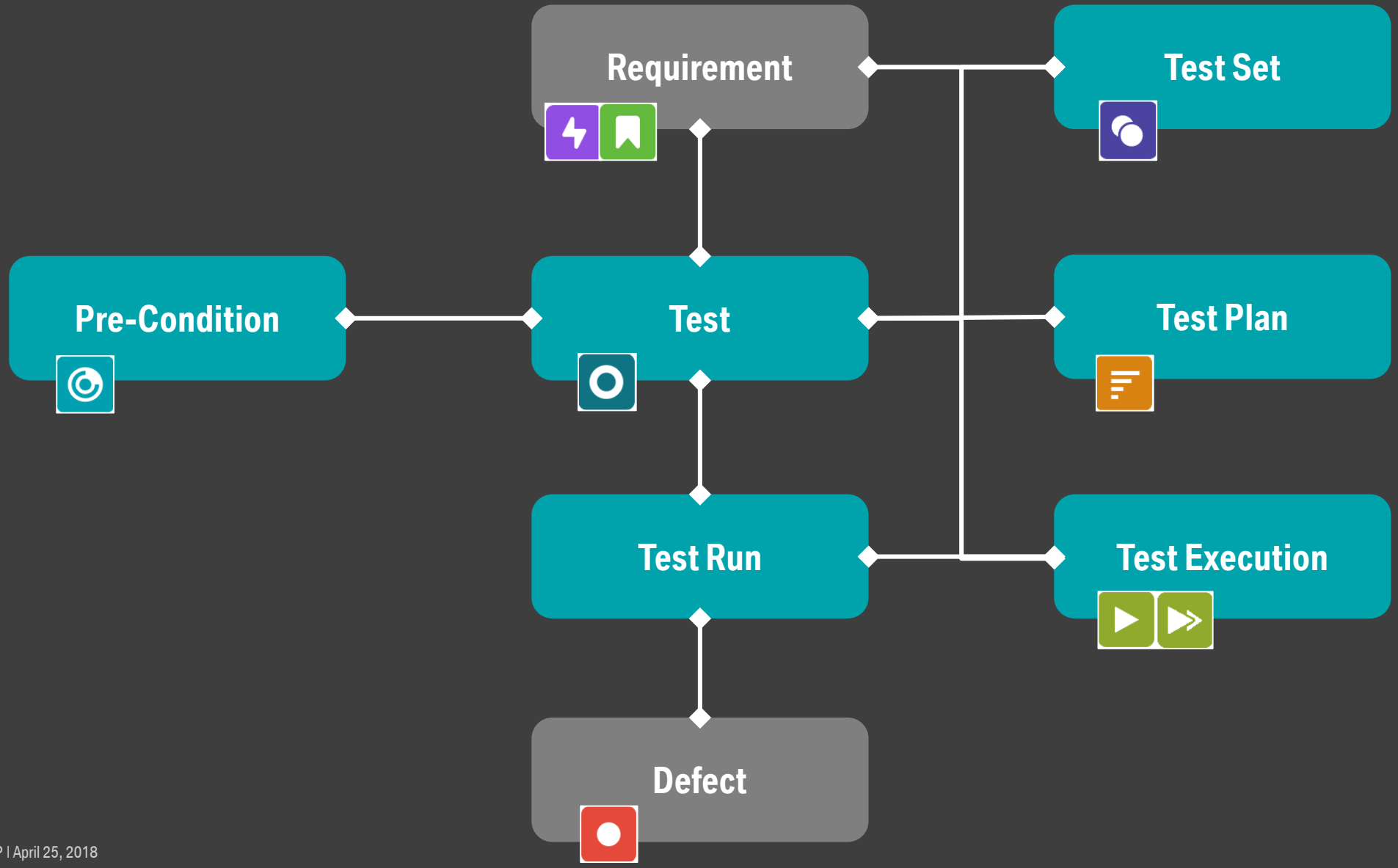
Group-wide service

Provisioned within max. 2 working days

Transparent cost

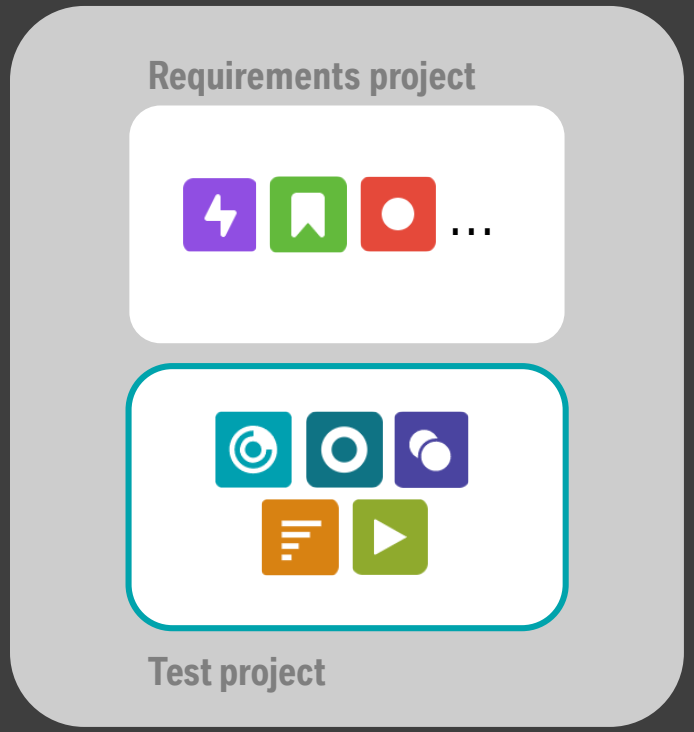
Standard processes

XRAY ADDS TEST ISSUE TYPES TO THE JIRA STANDARD SET.

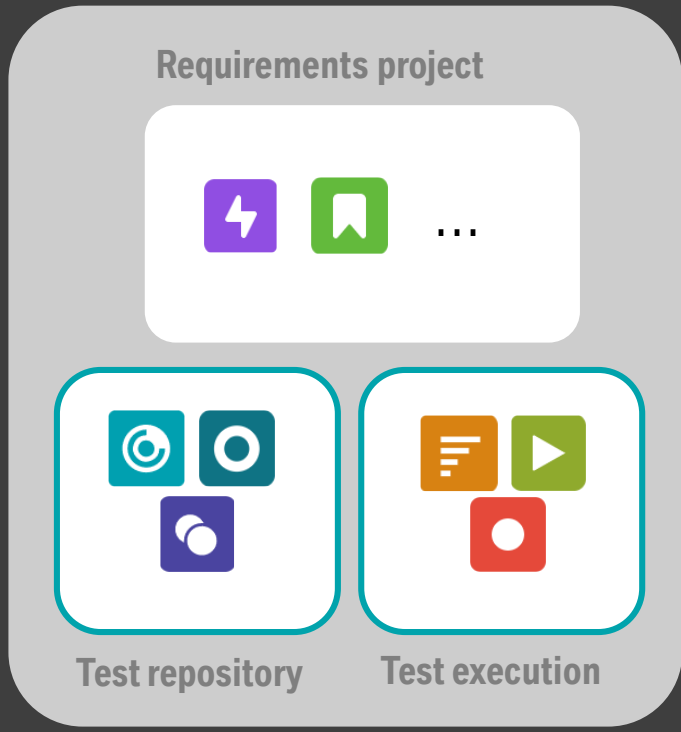


XRAY SUPPORTS DIFFERENT PROJECT ARCHITECTURES.

“One for all, and all for one”

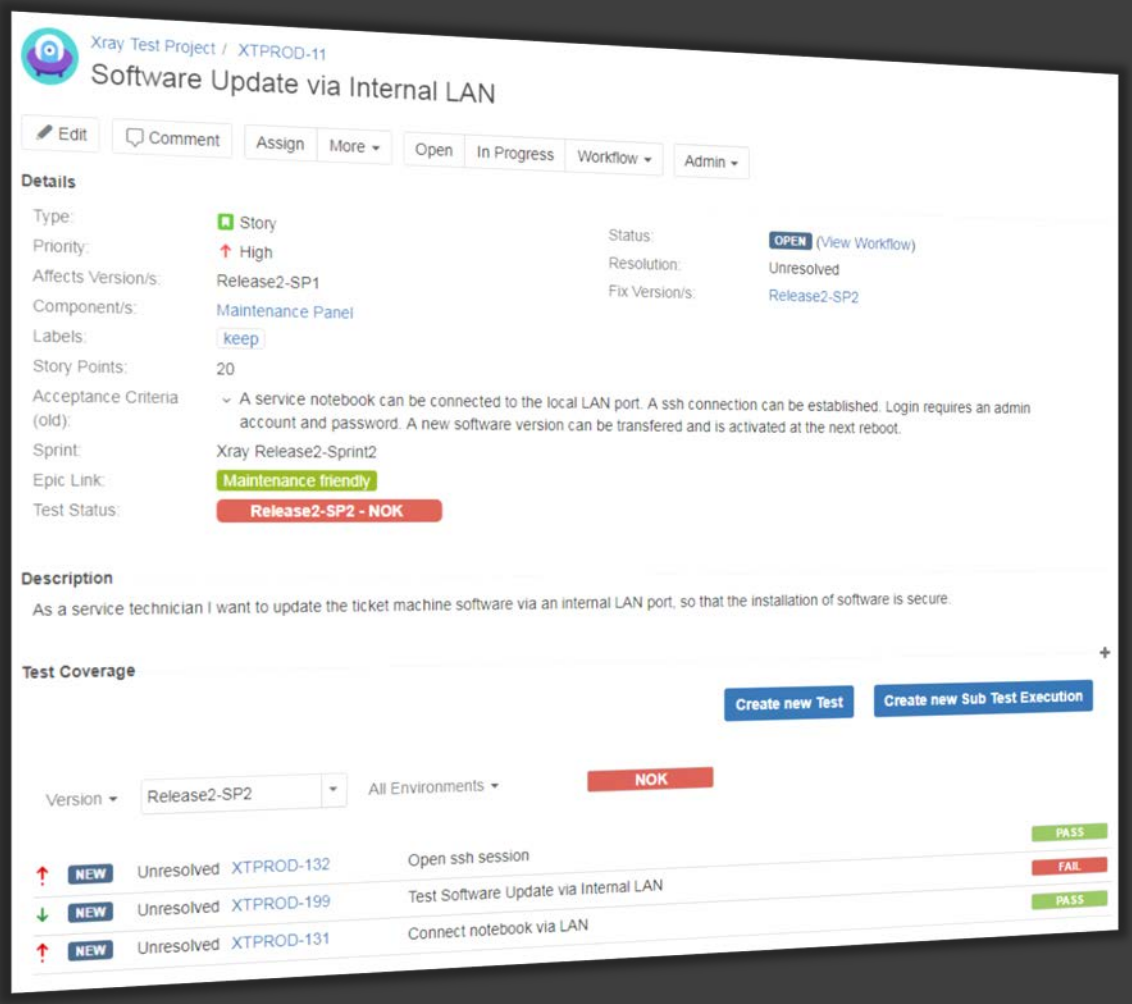


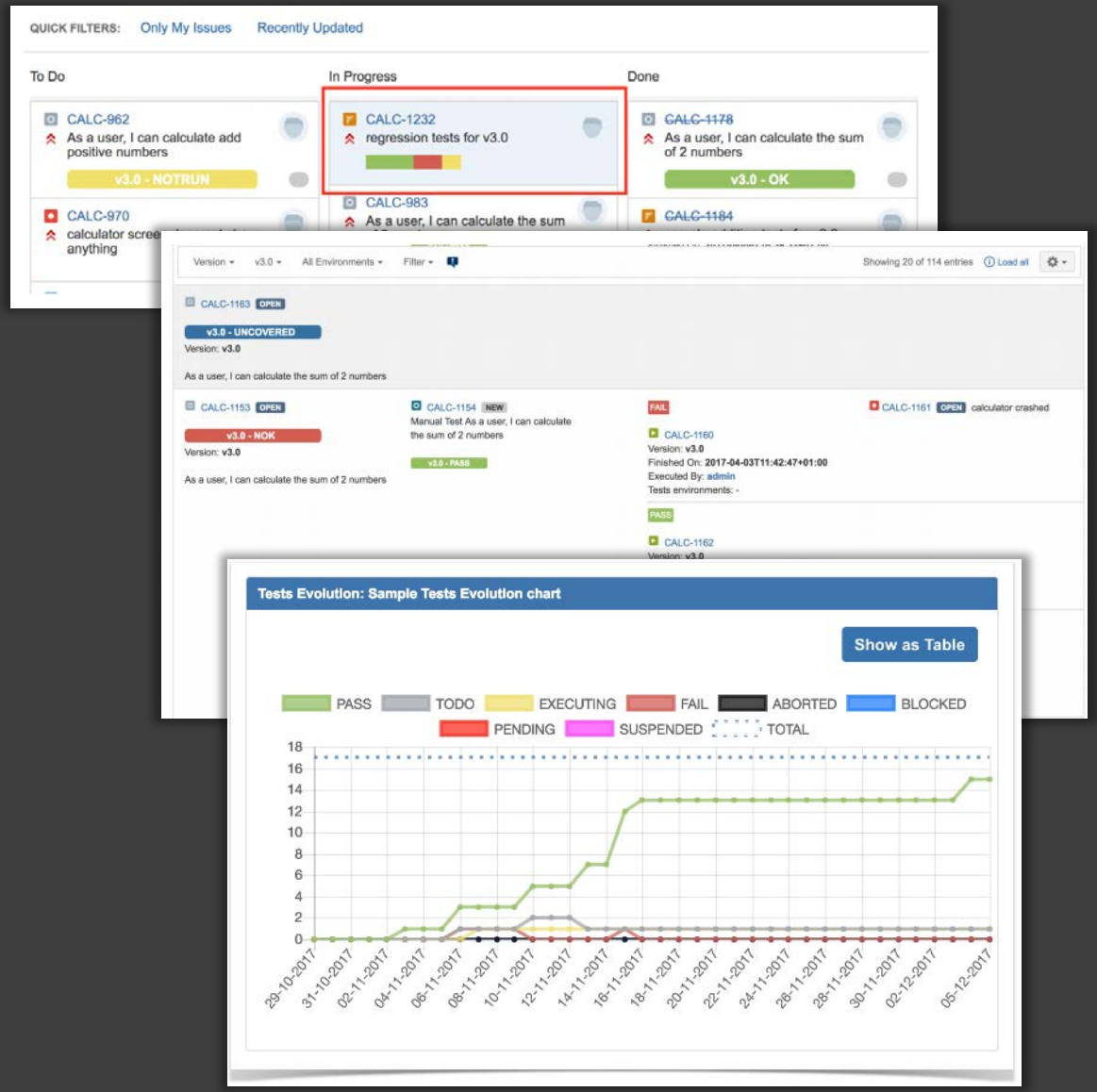
Separate test project



Test repository & execution project

TEST COVERAGE AND RESULTS ARE TRACEABLE THROUGHOUT JIRA.





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

JIRA + HP ALM

Two tools with synchronization

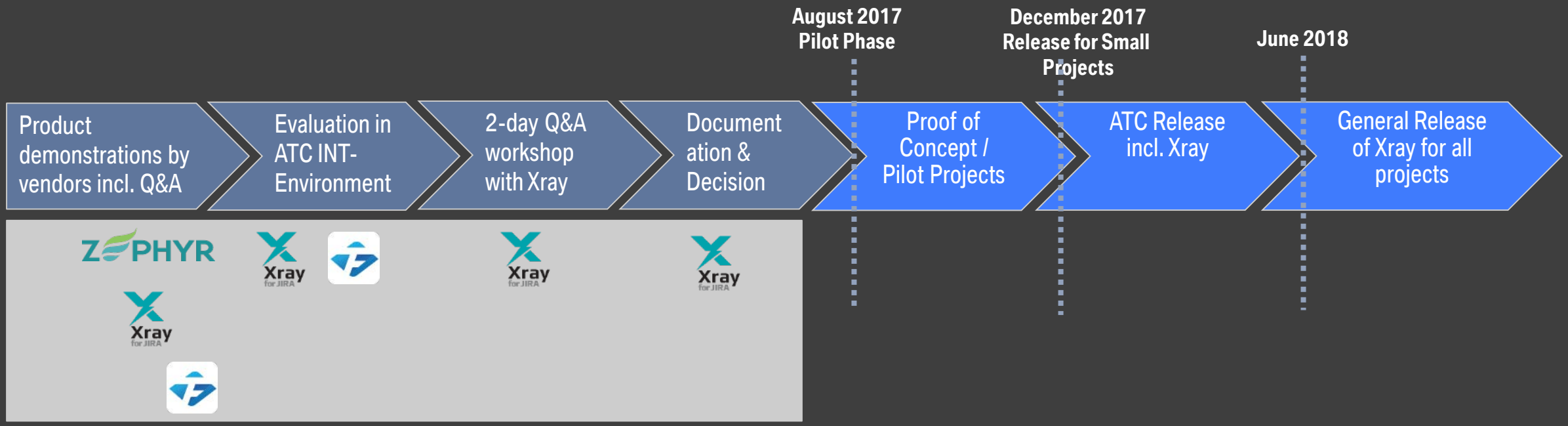
- ✗ Effort, complexity and maintenance due to the synchronization
- ✗ Requirement traceability in HP ALM often not used

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.



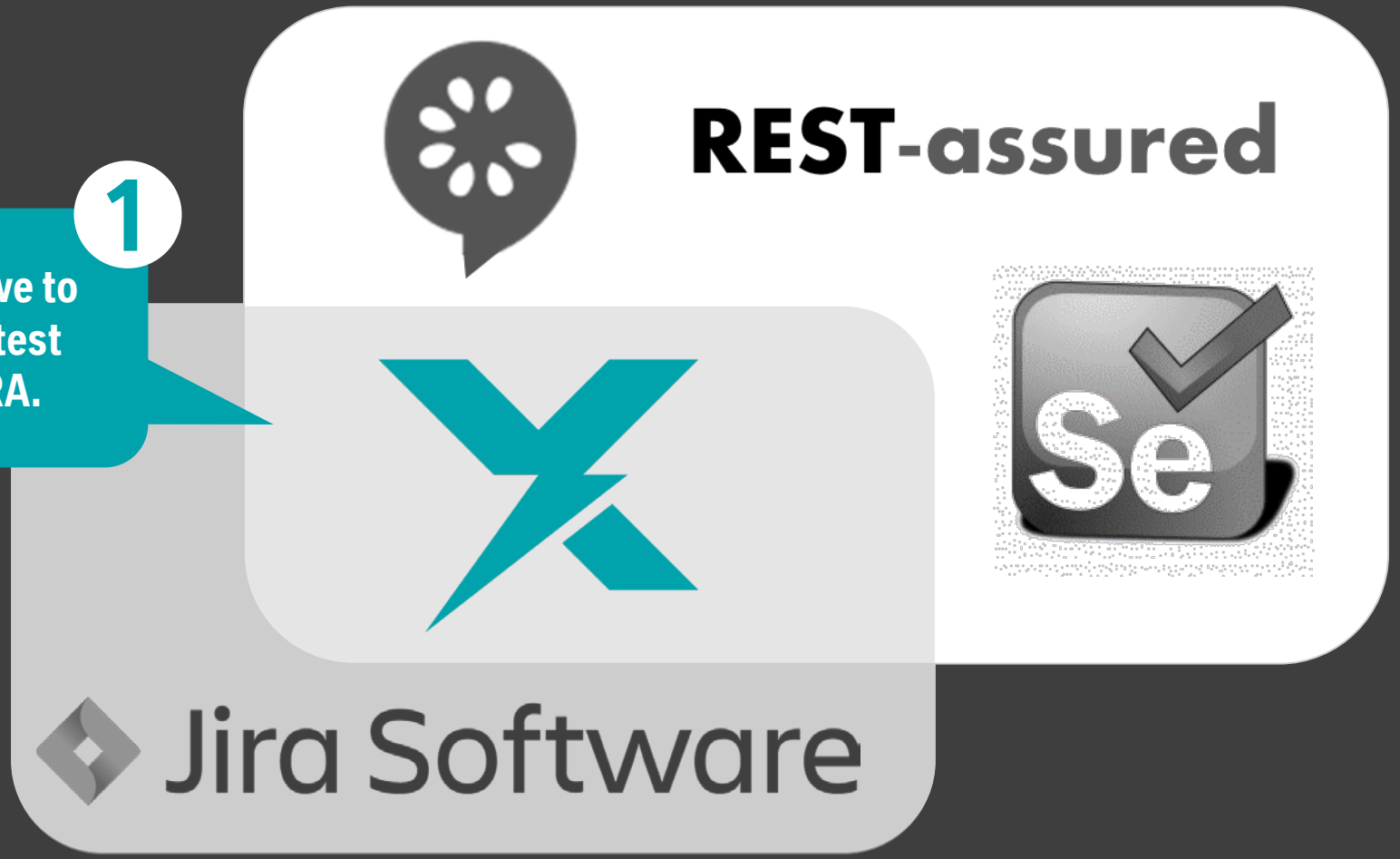
DECISION CRITERIA: WHICH TESTING TOOL SUITS BEST?

Jira project on the ATC?	no	yes
Initiative with multiple Jira projects and high reporting and tracking requirements?	yes	no
Test phases with considerable planning and monitoring?	yes	no
Team willing to change the tool?	no	yes
Number of existing test cases?	high	low
Migration of tests required?	yes	no
Project specific customization of workflows and fields required?	yes	no

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

1

Lightweight alternative to ALM for performing test management in JIRA.



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

4

API test automation framework (XML / JSON).

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

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

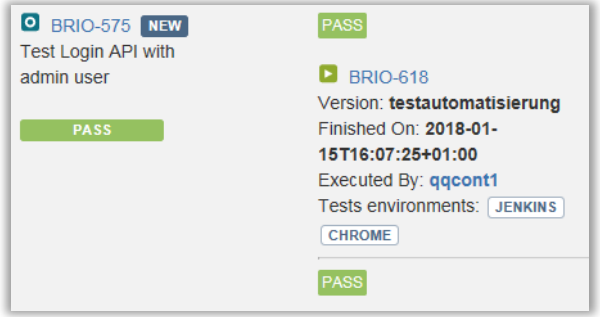
Jenkins

Application under Test

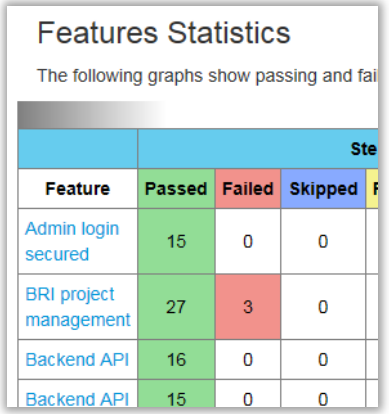
Selenium

Xray

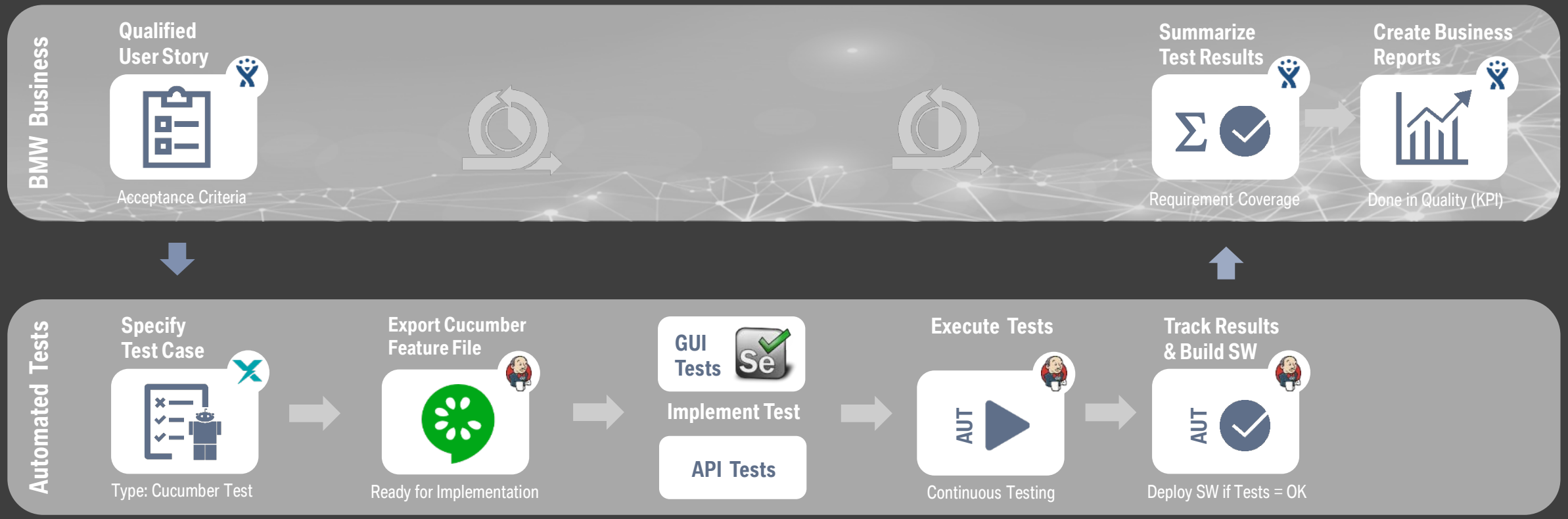
Test Reports



Jenkins



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