

SWITCHED ON
IGNITING THE NEW ERA FOR IT SERVICES

PoC: Test Automation Integrated Solution. **Analysis and Implementation.**

Index

Table of content.



- Introduction.
- Roadmap.
- Scope of the PoC.
- PoC Architecture.
- Automated Test Cases.
- GUI solution.
- XML solution.
- Integration with other tools.
- Next steps.
- Appendix: tools used.
- Q&A.

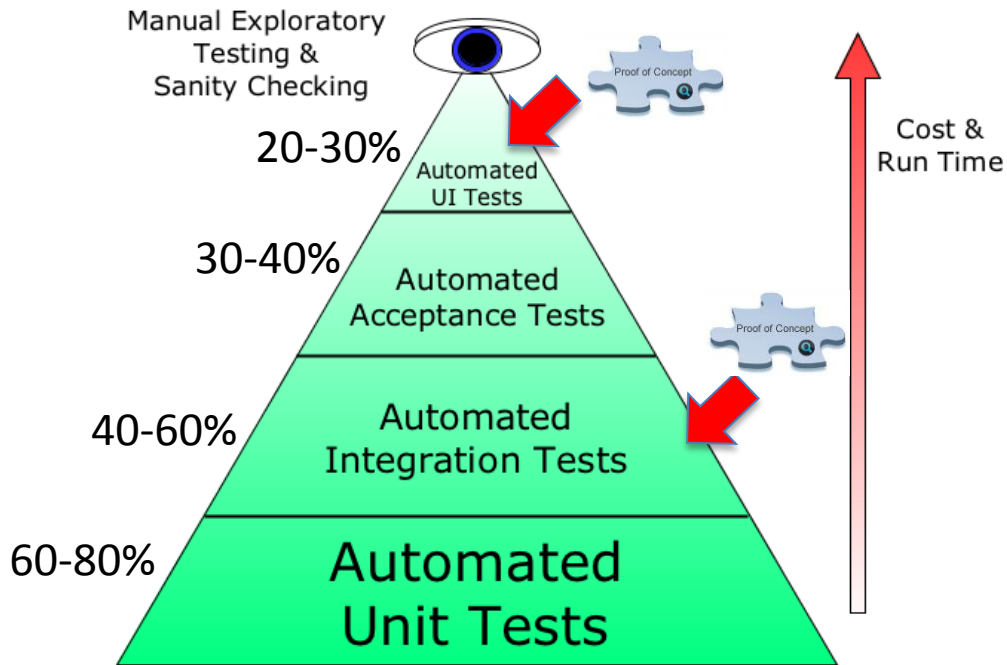


- Time-boxing (1 hour):
 - Presentation (15 minutes).
 - Demo (20 minutes).
 - Q&A (25 minutes).

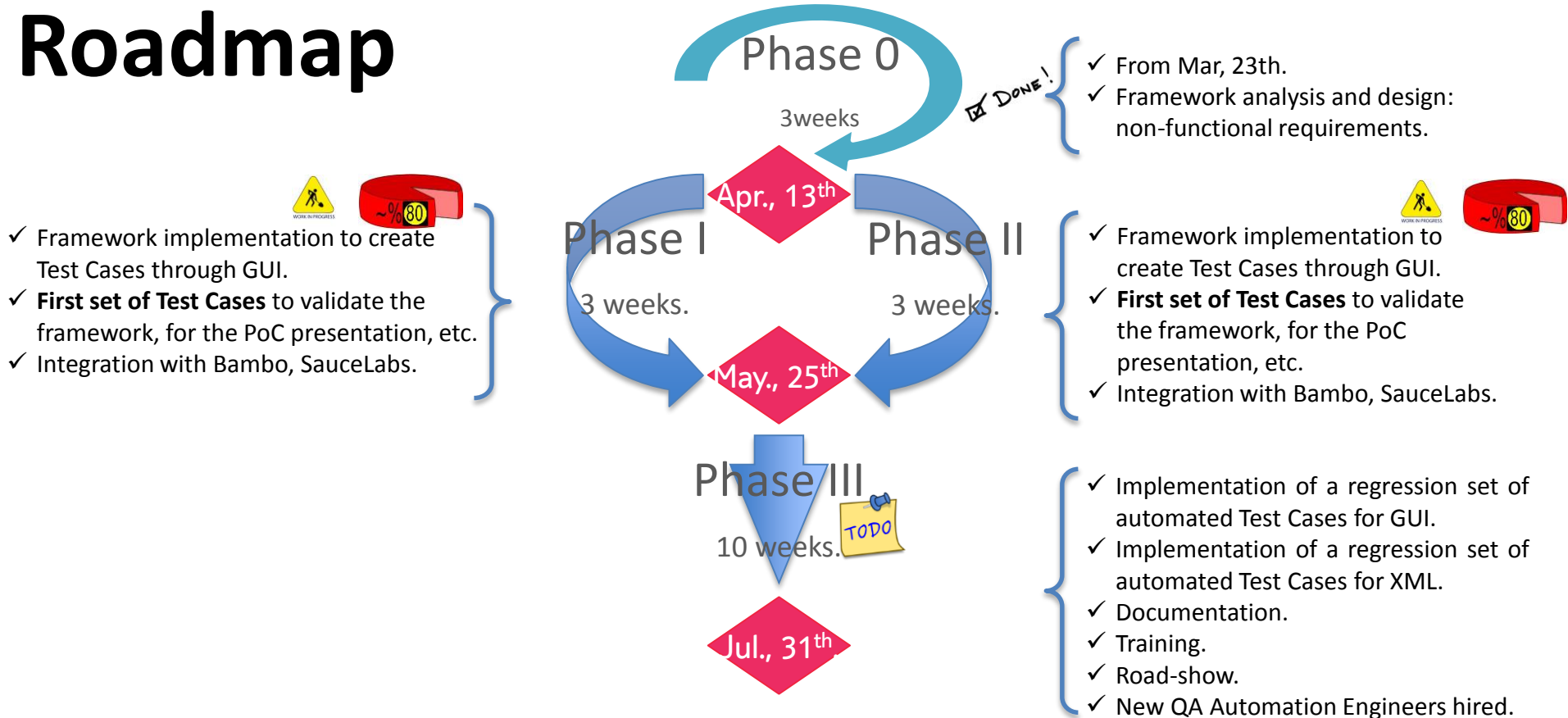
Introduction.

Proposal.

- General Automation Approach.
- XML Automated Testing.
- Functional testing on GUI.
- **Integration with Bamboo** as a CI Server.
- ZAPI for Zephyr
- **Cloud-oriented.**
- Multi-environment (**Project Environments**).
- Multi-browser.
- Multi-operating system.



Roadmap



Scope of the PoC.

Objectives and advantages.

- Functional requirements specified by Facundo Rua.
- Non-functional requirements detailed by Jesús Rupérez.
- **2 flavours:**
 - GUI automated tests.
 - Automated test XML: Core v1 and v2 and Core v3.
- Advantages:
 - **Minimal cost of maintenance (essential!).**
 - **Cloud oriented.**
 - **Tailored to Hotelbeds needs.**
 - **Reports oriented to non-technical stakeholders.**
- Different ways of execution: crontab, triggered by other job, ad-hoc, etc.

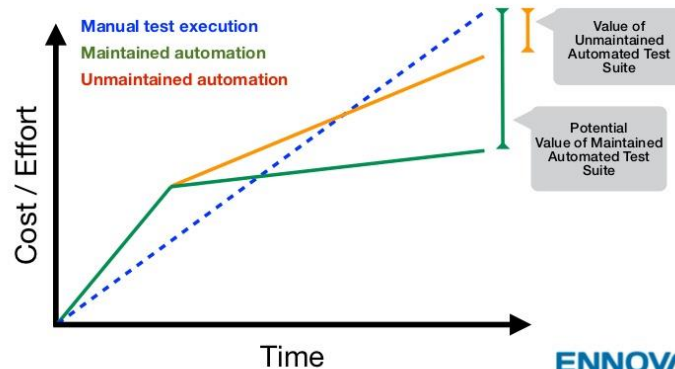
maven



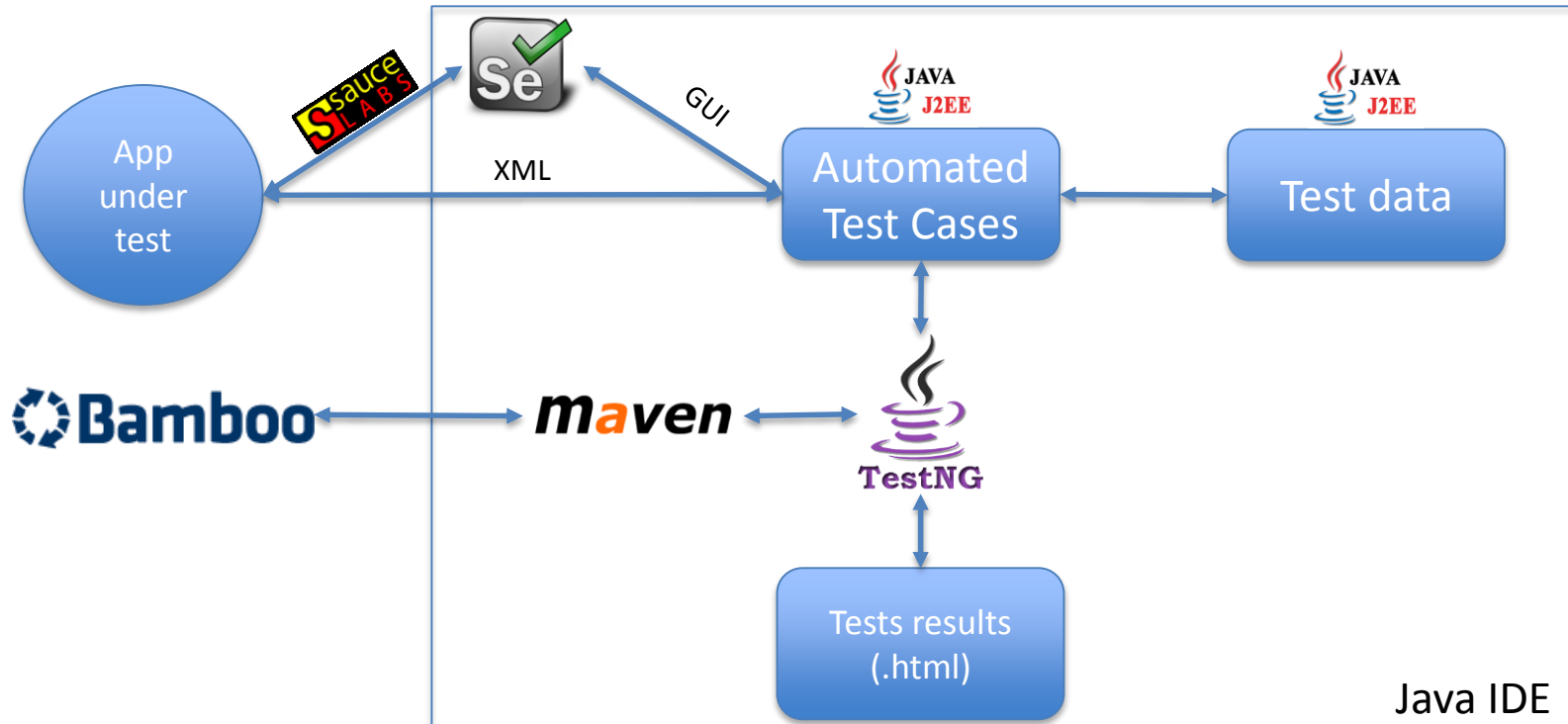
Bamboo



Importance of maintenance



PoC Architecture.



Automated Test Cases.

Already implemented.

- **Parallelization and parameterization (native).**
- Execution by groups easily:
 - by brand.
 - by product.
 - by time of execution.
 - ad-hoc.
- **Execution time:**
 - 16 TCs for GUI: 9 minutes, 8 threads.
 - 25 TCs for XML: 7minutes, 8 threads (Core v2).
- Test Cases specification done in [Wiki](#) (WIP).

regression tests.
smoke tests.
whole set of TCs.
etc.



- **Multi-browser** using SauceLabs (on-cloud solution).
- **Screenshots** of execution.
- **Videos** of execution.
- Build history.



GUI solution.

Why this approach?

- **TestNG + Maven + Java:** the most developed testing tools for Automated Testing.
- **In-house Java Knowledge.**
- Parallel Testing and smart concurrency.
- Parametrized Tests, Groups of Tests and dependencies between tests.
- Use of Annotations to simplify development and test-related actions.
- Inherent Dependency Management.
- Usage of the in-house Nexus.
- **Listeners and Reporters Prepare for CI servers.**



XML solution.

Why this approach?

- **Migrated** from pure Java to TestNG + Maven.
- Automated XML Functional testing.
- We migrated 25 Testcases from the current test suite developed on native Java.
- We have integrated the testsuite in a Bamboo Job.
- **7 minutes execution** time in average.

Integration with other tools: SauceLabs.

SauceLabs: a dedicated cloud-based testing infrastructure.



- Cloud based testing infrastructure.
- **500 Available native platforms.**
- Screenshots from executed steps.
- Video Recording from the executions.
- Test exactly the code we release.
- Bamboo supported plugin.
- **Affordable pricing.**



Plan features	Medium Team	Larger Team
Annual Commit (monthly)	449\$	749\$
Monthly	599\$	949\$
Number of VMs	8	10
Hours	90	150
Manual Testing	Unlimited	Unlimited
Users	15	20

RECOMMENDED!

Integration with other tools: Zapi.

API for Automated Test Management Using JIRA.

- **Integrate with our test automation tools.**
- **Integrate with our continuous integration tools.**
- Create extensive custom reports for testing.
- Integrate with our business intelligence tools.
- Use the testing data for analysis purposes.
- Get information about users, projects, releases, tests, execution cycles and monitor KPIs.
- Create new tests and test execution cycles from the existing ones.
- Update tests, test execution status.
- Add attachments to existing execution cycles.
- **Affordable price:** 250\$ for 25 users (yearly).

Next steps.

From the PoC validation on.

- Core v3 (**Rosetta**): PoC to be started.
- **Improve test coverage.**
- Integration with other tools.
- Integrate with our continuous integration tools.
- Create extensive custom reports for testing.
- Integrate with our business intelligence tools.
- Use the testing data for analysis purposes.
- **Update tests, test execution status.**
- Add attachments to future Test Cycles.
- **Road show** (between every team in IT).
- **Training:**
 - IT
 - Business.
 - Development.
 - QA
- **Documentation** (in WIKI).
- Etc.



PoC Automations.

Q&A.

