# Increase Test Automation In Cloud Application Development

Factsheet

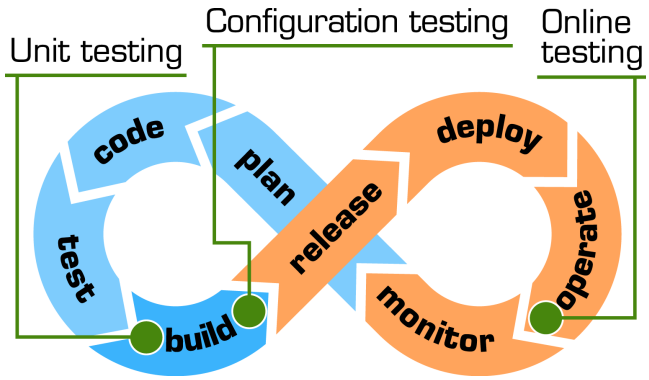
Leveraging advanced research in automatic test generation, STAMP aims at pushing automation in DevOps one step further through innovative methods of test amplification.

Re-using existing assets (test cases, API descriptions, dependency models) STAMP can generate more test cases and test configurations each time the application is updated.

STAMP techniques aim at reducing the number and cost of regression bugs at unit level, configuration level and production stage.

STAMP raises confidence and fosters adoption of DevOps by the European IT industry. This industry-near research addresses concrete, business-oriented objectives.

All results are open source and developed as micro-services to facilitate exploitation.




- Detect more regression bugs in the continuous integration phase
- Reduce configuration and scalability bugs before application deployment
- Identify more operation bugs in edge cases thanks to semantic logging

## Five Use Cases

**ProActive** Workflows and Scheduling experiments configuration testing and runtime tests amplification.

**ATOS FIWARE** Smart City Ecosystem provides accurate testing support to FIWARE Generic Enablers.

**TelluCloud** e-health uses STAMP tools and methodologies to augment existing IoT/cloud test suites.

**XWiki** SAS hybrid Open Source business/project is using test amplification within its continuous integration server.

**OW2** Software Quality Platform is applying STAMP three axis test amplification on a selection of open source software.

STAMP is developed by a consortium of nine partners bringing together excellence for research, innovation, education and industrial partnerships.

**STAMP Project Partners:**

ActiveEon, Atos, Engineering, INRIA, OW2, Sintef, TU Delft, Tell.U, XWiki

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