



W11

Test Automation

Wednesday, October 23rd, 2019 1:30 PM

Enabling Enterprise Quality

Presented by:

Mike Cullen

Wawanesa Insurance

Brought to you by:



888-268-8770 · 904-278-0524 - info@techwell.com - <http://www.starcanada.techwell.com/>

Mike Cullen

Mike has been in a QA role for eighteen years, with the last twelve focused on QA leadership. While developing quality assurance skills and methods as part of a small and growing financial planning company, his strategy evolved from reacting to client issues found in production to establishing quality processes, building a team of highly analytical and technical resources, and focusing on proactive solutioning. In his six years at Wawanesa, he has led a number of teams through significant change. Currently, as part of the Centre for Enablement, Mike leads a team that provides enterprise solutions for testing—manual, automated, and performance—through establishment of best practices, building relationships across enterprise teams, and being champions of change as we learn from industry leaders.



Wawanesa
Insurance

Enabling Enterprise Quality

Star Canada – October 23, 2019

Introduction



MIKE CULLEN

Supervisor, Wawanesa
Quality Center for Enablement

18 Years in Quality Assurance

At Wawanesa for 6 Years

Elementary School Educator
Background

Go Jets Go!

Agenda

OUR CHALLENGES

PLANNING MAJOR CHANGE

STRATEGIC PILLARS

CROSS TEAM ADOPTION

NEXT STEPS

QUESTIONS

Challenges

**INCREASED SPEED
TO MARKET**

**INCREASED
OVERALL
COMPLEXITY**

**INCREASED
PRODUCTION
ISSUES**

**CHANGING
WORKFORCE
DISTRIBUTION &
ROLES**

Planning Major Change

OPTION A

Continue having a centralized team that provides quality services to delivery teams

OPTION B

Reorg and distribute the QAs into new roles that promote quality among the delivery teams

THE PLAN

- Create the Quality Center for Enablement
- Retrain & redistribute QAs

**Pillars of
Quality**

AUTOMATION FIRST

ACCELERATE DELIVERY

WHOLE TEAM TO QUALITY

MEASURABLE OUTCOME

EMPOWERED WORKFORCE

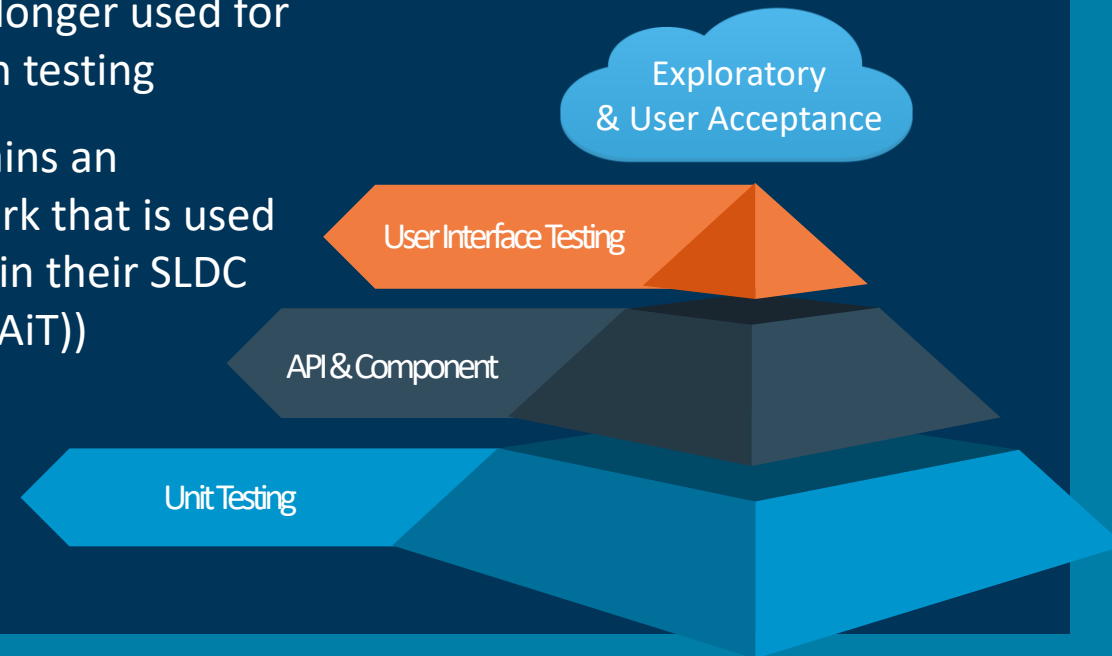
STANDARD PROCESSES

AUTOMATION FIRST

Target

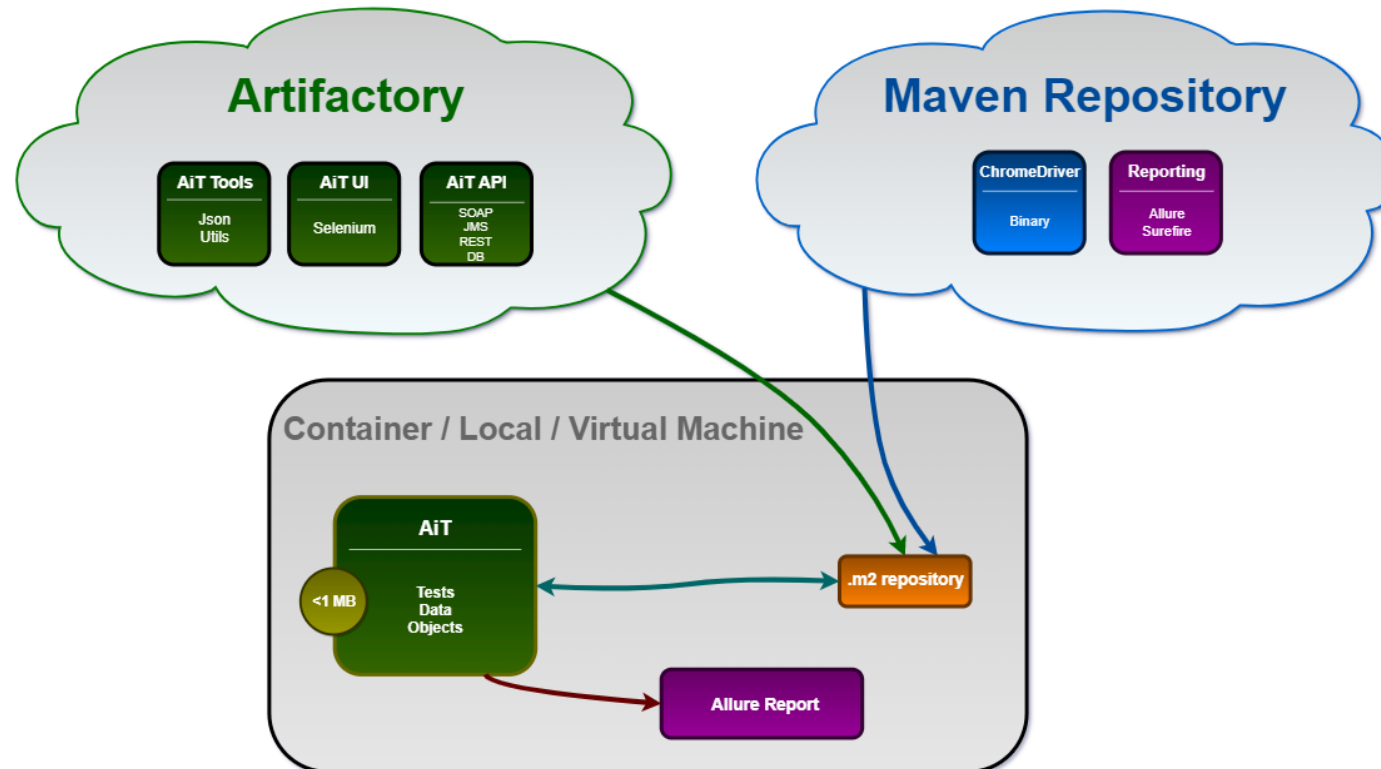
Bulk of testing must be automated using new tools and techniques

- Delivery teams are leveraging unit, API, and automation tests to validate code quality
- Manual testing is no longer used for the bulk of regression testing
- C4E creates & maintains an automation framework that is used by all delivery teams in their SLDC (Automation in Test (AiT))

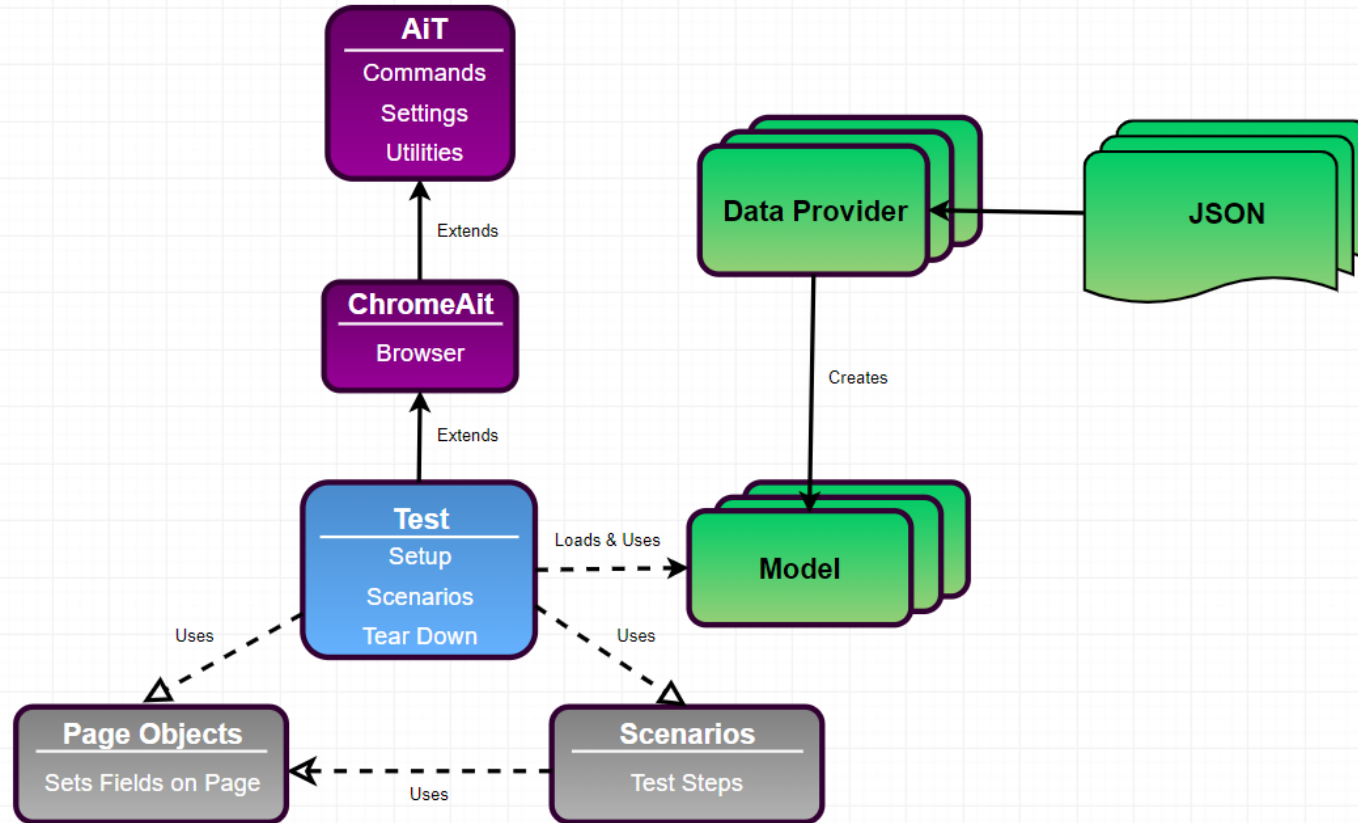


AiT ARCHITECTURE

UI Test



Test Structure

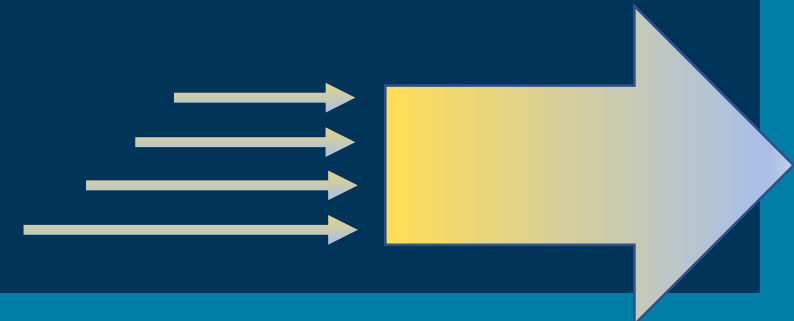


ACCELERATE DELIVERY

Target

Increase our ability to prepare software releases faster with significant reduction in cycle time

- Pipeline deployments include automated test validation
- Regression suites are developed for all existing applications
- Delivery pipelines are created for all existing applications



WHOLE TEAM to QUALITY

Target

Everyone is dedicated to quality and the significance it plays in the value it adds has within the organization

- UI Test automation has shifted from centralized Quality Assurance to distributed across delivery teams
- Solutions Analysts are developing tests and identifying at what level of the pyramid they should be executed early in the development cycle
- Developer-owned automated tests are captured in unit, API and AiT levels



MEASURABLE OUTCOME

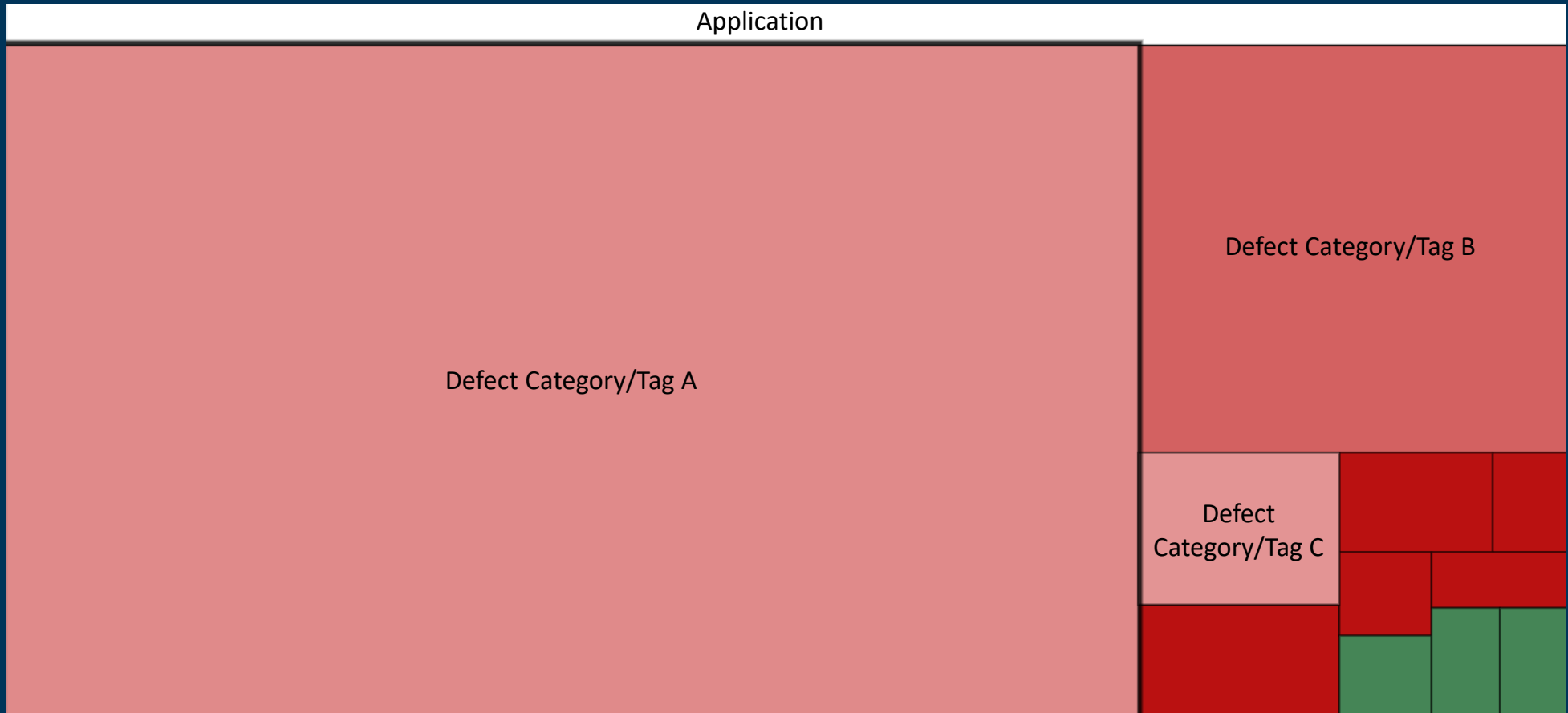
Target

*Metrics available and consumable denoting quality statements
for every release*

- Automated UI test execution captured in a central repository that is accessible to all levels of stakeholders
- Enterprise quality metrics are established and a uniform method of gathering and reporting is in place
 - Defect Density
 - Defect Leakage
 - Test Case Coverage
 - Automated v. Manual Tests



DEFECT HEAT MAP



EMPOWERED WORKFORCE

Target

*Growth of skills and knowledge across all roles within
Application Delivery*

- QA & Analyst Workforce is transformed through:
 - Formal education
 - Internal education
 - Peer mentorship
- Development resources are trained in test methodologies, tools, and creation
- Delivery teams own all facets of application delivery through planning, execution, and monitoring of success



STANDARD PROCESS

Target

*Continued growth, cultivation and execution of processes across
Application Delivery via Quality Centre for Enablement*

- Automated testing has been standardized across delivery teams through tool & process establishment
- Processes are continually reviewed and improved
- Cross team communications are encouraged and bolstered to share success and prevent repetition of mistakes



Cross-Team Adoption



OWNED & INTEGRATED AiT IN THEIR SDLC



ENGAGED WITH CONTINUOUS IMPROVEMENTS



TRANSPARENT RESULTS & METRICS REPORTING



CONTINUE TO LEVERAGE HEAVY MANUAL TESTING



HIGH DEPENDENCE & LACK OF ENGAGEMENT



NO TRANSPARENCY IN METRICS

Next Steps

**TEST
MANAGEMENT
TOOL**

**EXPAND
WHOLE TEAM
QUALITY
METRICS**

**CHAMPION
SUCCESS TO
RESISTENT TEAMS**

**CONTINUOUSLY
IMPROVE**