Great to be with you!

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- Build cloud testing infrastructure
- Live and breathe testing @ mabl
Quality engineering plays a critical role in key industry trends:

- Agile Development
- Cloud
- SaaS
- Shift Left
- PaaS
- DevOps
- Continuous Deployment
- Continuous Delivery
- Continuous Integration
We want high velocity, high throughput
We want high velocity, high throughput, and high quality.
Test automation instills confidence

% High or very high performance sentiment

Level of testing & deployment automation

- Low: 24%
- Medium: 48%
- High: 74%

2020 State of DevOps Report, Presented by Puppet and CircleCI
We have work to do

12%

Teams that claim to have full test automation

Source: 2020 GitLab Survey
Risk: QA becomes the bottleneck
While test automation is not new, past automation approaches have not helped app dev teams keep up with increased demands of modern delivery.

The Forrester WaveTM for Continuous Functional Test Automation Suites, Q2 2020
Testing in DevOps
Deliver better quality software faster faster.

- Testing Coverage: 3x Faster test creation
- Test Maintenance: 70% Reduction in maintenance effort
- Velocity: 50% Reduction in deployment time
Let’s build quality across the pipeline
E2E test automation in the code phase

Primary goals

- Working changes
- **Core** end-to-end test coverage
- Plan
Validate changes against local builds

Run local tests and see results from your friendly command line

Test count: 22
Passed: 3
  - PTD_002 - Sign up and verify a new account (54.869s)
  - PTD_011 - Dashboard should have correct content (69.159s)
  - PTD_018 - Cookies validation (21.142s)
Skipped: 2
  - Check the dropdowns
  - Manual plan run
Failed: 17
  - Applications empty state and create first app (186.062s)
  - Check auto-heal datatron (44.518s)
  - M-016 View Insights (133.706s)
  - PTD-512 Delete a just-duplicated test (125.263s)
  - PTD_001 - Log in using native authentication (71.81s)
Pair on E2E tests in the code phase

Work-in-progress feature branch
Identify existing coverage, create a plan

Locate all relevant tests
E2E testing in the (pivotal) pull request phase

Primary Goal(s)
- Don’t merge something that’s going to stop the pipeline
- **Effective** end-to-end test coverage
- Set us up for long-term success
Collaborate on test review

Logic

Automation

- Selectors
- Timing
- JavaScript
- Parallelization
- Reuse
- Setup
- Teardown

VERIFY MORE ACTIONS DROPODOWN ON AN INSIGHT

24. Assert presence of a button

25. Click on the first button that meets the selected criteria

26. Assert "innerText" of the <span> element with text "View insight details" equals "View insight details"

27. Assert "innerText" of the <span> element with text "View application" equals "View application"

28. Assert "innerText" of the <span> element with text "View environment" equals "View environment"

29. Assert "innerText" of the <span> element with text "View plan" equals "View plan"

VIEW INSIGHT DETAILS

31. Click on the <span> element with text "View insight details"
Run regression tests against preview environments

Deep links to detailed results
Low-code testing in the deployment phase

Goals

- No defects in production
- **Comprehensive** end-to-end test coverage
- Broad understanding of quality
Take the back-and-forth out of defect reporting.
Develop a shared view into issues and trends
Use data-driven testing to cover more scenarios

<table>
<thead>
<tr>
<th>Scenario name</th>
<th>company</th>
<th>firstName</th>
<th>lastName</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy path</td>
<td>acme</td>
<td>Bab</td>
<td>Jensen</td>
</tr>
<tr>
<td>Internationalized</td>
<td>e-on</td>
<td>Hans</td>
<td>Gäber</td>
</tr>
<tr>
<td>Cyrillic</td>
<td>rusgas</td>
<td>Владимир</td>
<td>Смирнов</td>
</tr>
</tbody>
</table>
Use realistic generated data to add more variation

Simple email submission form

- Email Address
  - Austen28@yahoo.com
- Email Subject
  - overriding the pixel won't do anything, we need to navigate the hapti
Add responsive test coverage in a couple clicks
Periodic testing in production continues

Goals

- Ensure users experiencing what you intended
- Monitor for new user journeys
Test early.
Test often.
Test everywhere.
Intelligent test automation for Agile teams

Increase Test Coverage: Create and manage tests for the entire user journey in a single platform.

Build Reliable Tests: As your application evolves, tests auto-heal along with it.

Test at the Speed of Development: Anyone can build and maintain tests in minutes, not days.

Integrated into Your Workflow: Integrate testing natively with popular CI/CD, issue tracking, and collaboration platforms.

Learn more at mabl.com
Questions?