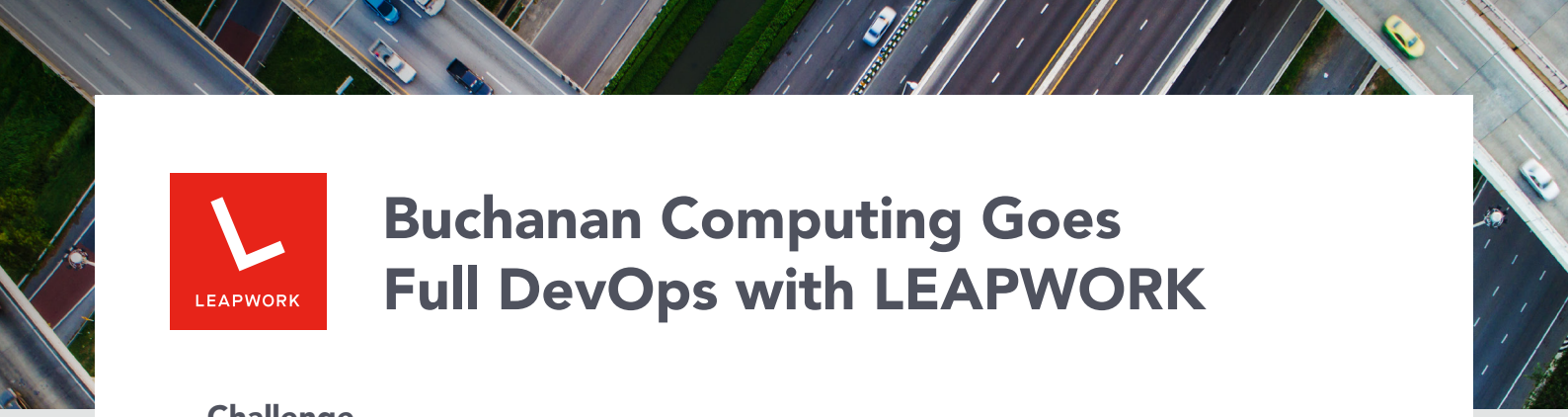


Buchanan Computing Goes Full DevOps with LEAPWORK

Challenge

Buchanan Computing provides most top tier authorities in the UK with software for traffic engineering and highway management. When an extensive rework of key applications resulted in 3 hectic months of manual testing draining critical developer resources, Director Robin Morrison said to himself: I never want to experience this again. With no less than 7 applications and systems to look after and with no full-time testers, the team at Buchanan Computing needed to automate testing. Robin Morrison set a goal: Let's build a DevOps pipeline in less than 12 months.

Results with LEAPWORK

Efficiency gain

1.1x

Increase in developer productivity

Faster testing

80%

Reduction in time spent testing

Better QA

7x

More applications tested with automation

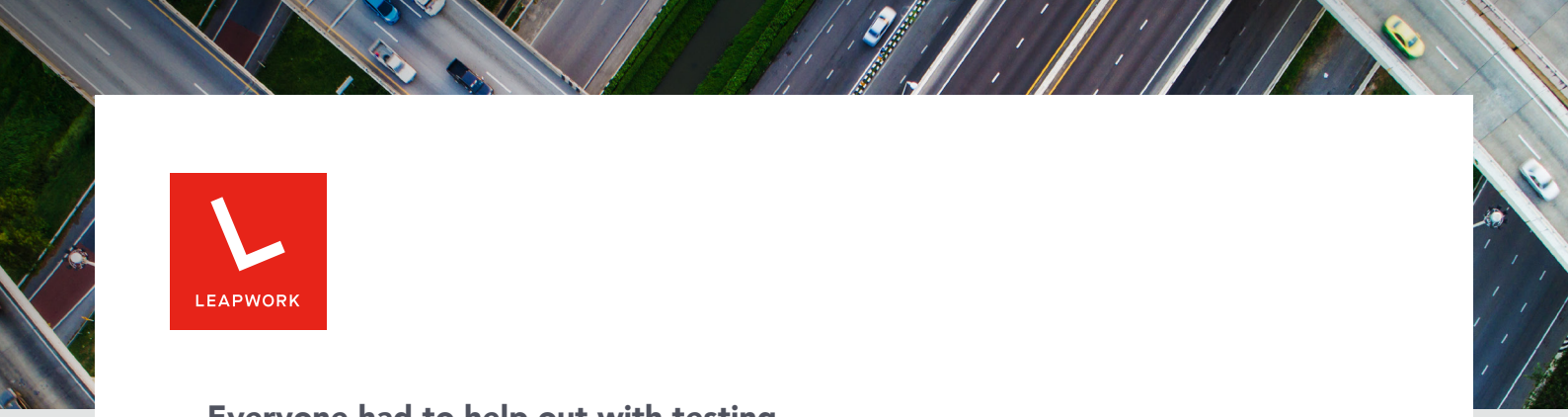
> *LEAPWORK was essential to our DevOps transformation. We are now looking at what further benefits it can bring our organization and customers.*
>
> Robin Morrison, Director, Buchanan Computing

About Buchanan Computing

- The foremost supplier to UK highway authorities of computer mapping.
- > 200 customers use Buchanan Computing's software for traffic engineering, highway management, and web mapping.

Technologies automated

- Geographic Information System (GIS) software



LEAPWORK

Everyone had to help out with testing

Nearly all local authorities in the United Kingdom rely on Buchanan Computing's software for managing things like highway planning and where citizens can park their cars. A team of six developers and two technical support specialists are responsible for developing and maintaining Buchanan Computing's product offerings of four applications as well as three internal systems. With no full-time software testers employed, everyone on the team previously had to help with quality assurance during sprints.

The team used to spend a minimum of four man-hours on regression testing every time they were testing a build before release. With more than 20 builds per year, and multiple revisions of each build, the burden of manual testing were stealing too much time away from the highly specialized team. Manual testing happened at the expense of feature development and it put serious strain on the team. Due to these constraints, testing efforts were cut back and consequently, product quality was compromised.

"Silly things that shouldn't have made it into a release slipped through the cracks," said Robin Morrison, Director at Buchanan Computing.

A DevOps pipeline with LEAPWORK and Jenkins

To save time, to improve product quality, and to release more often to more users, Morrison and the team were looking to improve their entire release model by automating software builds, regression testing, and deployment packaging. In other words, to move to a release pipeline powered by DevOps practices.

The applications developed by Buchanan Computing are based on graphics-heavy technology for digital mapping, so-called geographical information systems (GIS). To automate testing of such applications requires robust image recognition technology. By combining the continuous delivery platform Jenkins with the LEAPWORK Automation Platform, Morrison and the team were able to, within a year, build an automated release pipeline for all their applications.

Now, the team can release new product features when complete, instead of waiting for a major or minor upgrade. By automating their regression tests with LEAPWORK, test runs are completed in just ten minutes for each revision of a build, replacing the more than two hours of manual testing needed previously. The team at Buchanan Computing can test more functionality without additional man hours required. A single build revision can be released without testing being a bottleneck.

Manual testing is still part of the team's software releases, but now accounts for much less overhead to development projects.

The more we build with LEAPWORK, the more time we save.
Our developers spend more time developing, and less time testing.

BUCHANAN COMPUTING