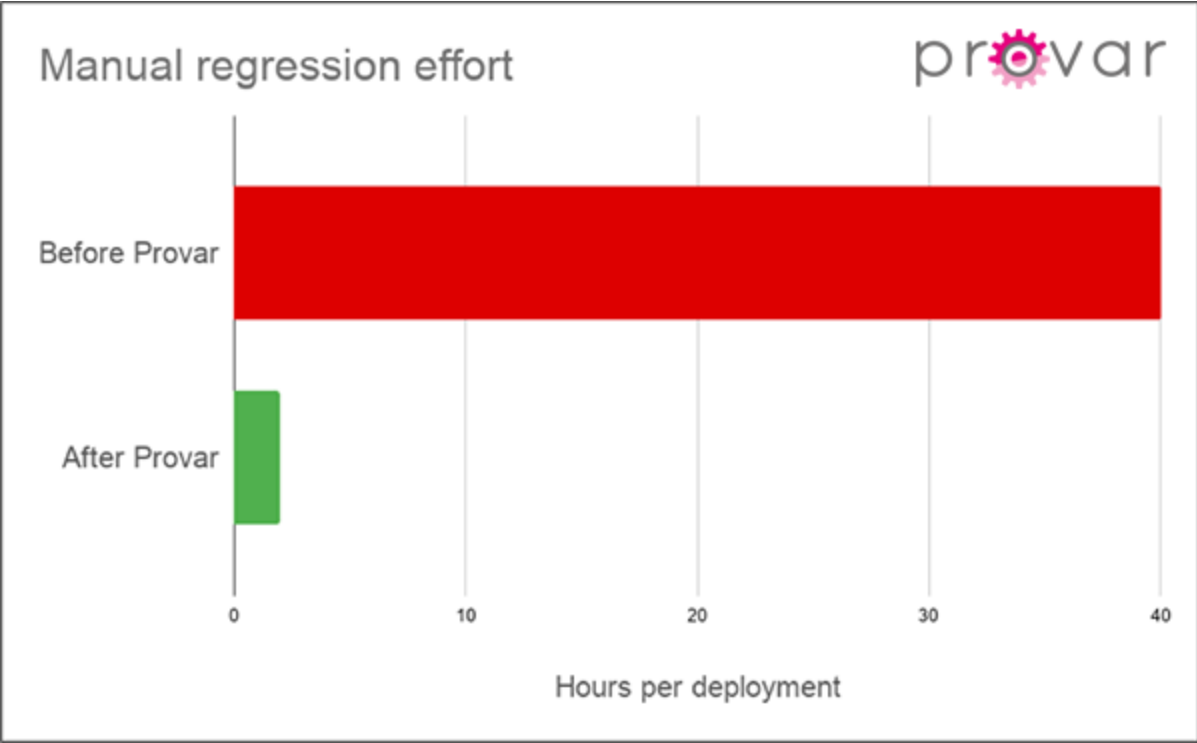# Scaling Salesforce test automation with Canada Drives

February 05, 2020

At Dreamforce 2019 Canada Drives led a very insightful session around their use of Salesforce test automation to support their ambitious delivery cycle.

In this session, Chandra Alahari, QA Automation Engineer at Canada Drives, described his strategy for implementing Provar at Canada Drives and the benefits they achieved. You can watch the full session video recording at the bottom of this page.

What benefits did Canada Drives realize after adopting Provar?

Using Provar's test automation for Salesforce, Canada Drives reduced their manual regression effort by 95%, a saving of 38 hours for every deployment.

Canada Drives also reduced their automation maintenance effort by more than 80% after adopting Provar, a saving of 33 hours every month.

Read on to find out how Canada Drives achieved this fantastic success story with Provar.

About Canada Drives

Canada Drives' presenter at Dreamforce was Chandra Alahari. Chandra is an experienced QA Automation Engineer with more than 13 years of IT experience and 7 years spent in automation engineering.

Canada Drives itself is a Fintech company specializing in auto loans, auto refinancing, mortgages, personal loans, and credit rebuilding loans, operating across Canada, the United States and the United Kingdom. Canada Drives has won several awards including Canada's Best Managed Company in 2019.
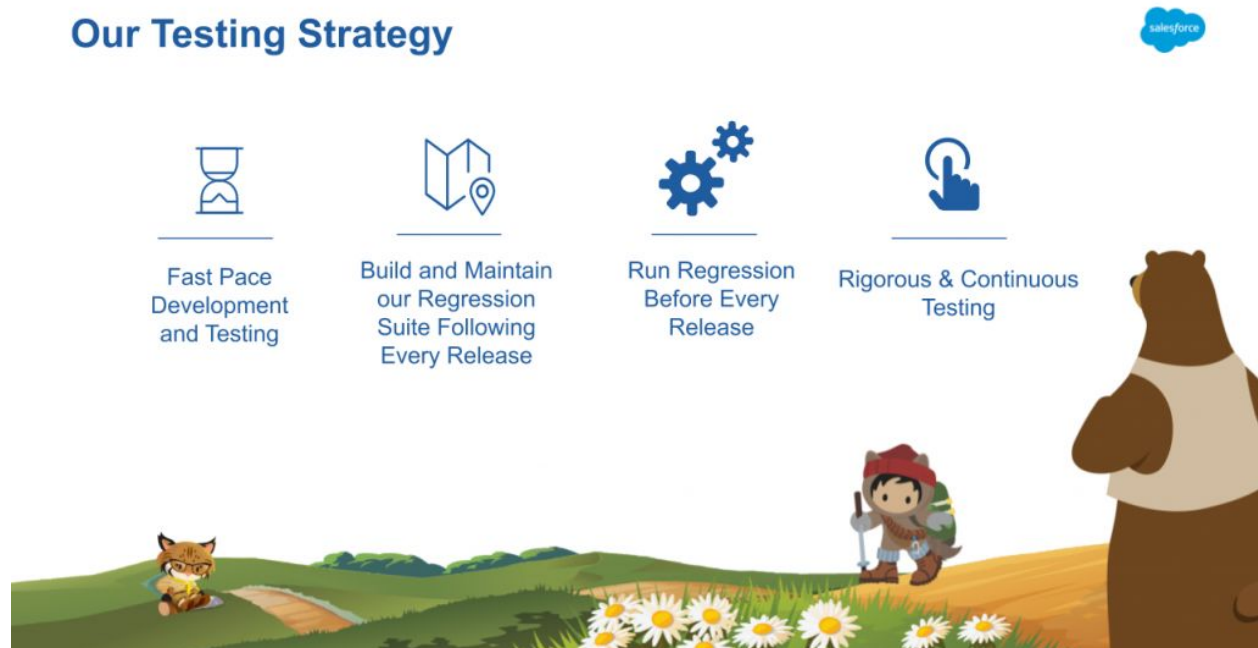
Canada Drives and Salesforce

Chandra began by describing the impact of Canada Drives' growth on its technology stack. As additional products were developed, they also created more websites, integrations, and

processes for their internal teams to manage these customers and loans. [All of this was primarily done in Salesforce.](#)

Testing strategy

Chandra noted that a key tenet of Canada Drives' testing strategy is to preserve quality by testing sooner and often. The testing team starts preparing test cases while development is in progress and begins feature testing as soon as development is complete.

In terms of regression testing, regression test cases are added or updated with each new feature. Once feature testing is complete, they run regression testing on the potentially impacted areas.
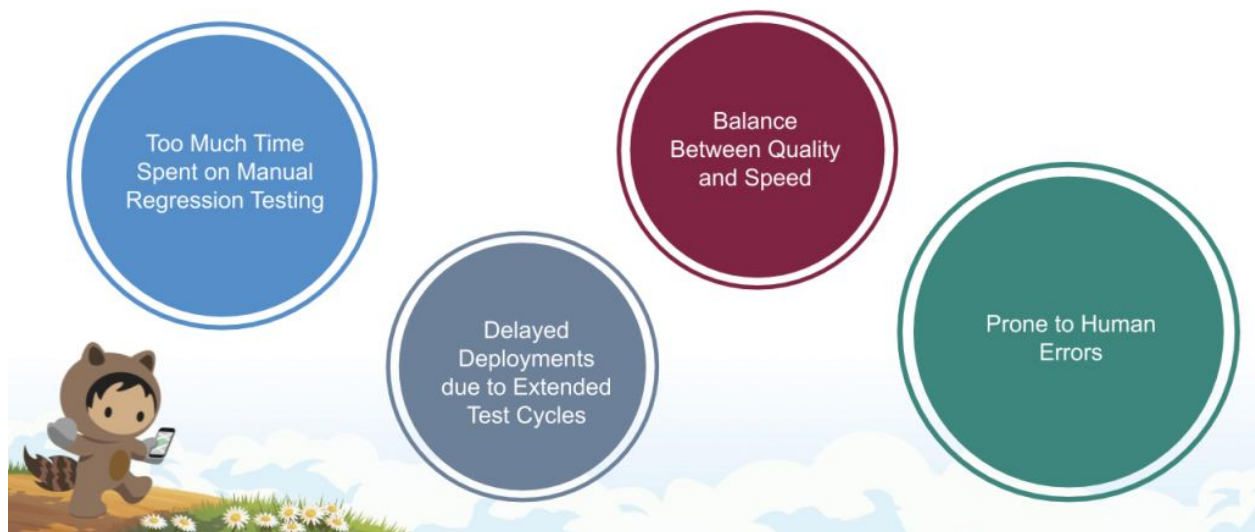
Scalability challenges of manual testing

In Canada Drives' environment of rapid growth, the team began to consider automation after seeing scalability issues with their regression effort.

Chandra said,

"With our test suite size increasing with each new release, we needed to understand how to maintain a high quality of regression while maintaining their rapid delivery pace."

Scalability Challenge
Maintaining high quality in regression as suite size was increasing

Canada Drives noted four key challenges with manual regression testing:

1. Time-consuming: each new feature meant an increase the size of the regression test suite. Manual regression testing was taking progressively more time to complete.
2. Blocker to delivery: the extended time taken to complete manual regression started to bring delays to deployment, which was directly impacting customers.
3. Quality concerns: accelerating regression testing or reducing its scope could result in a drop in quality. It was important to Canada Drives to maintain a good balance between quality and speed.
4. Human error: performing the same tests multiple times could be prone to error if done manually.

Automation challenges

Canada Drives began searching for a test automation solution to help address the challenges of manual regression testing.

They identified the following goals for their test automation solution:

- Keep up with the pace of development
- Test new features in a timely manner
- Minimize manual regression testing
- Run automated regression testing on a nightly basis.

Canada Drives first tried to deliver their Salesforce test automation with traditional automation tools available on the market.

Chandra said of this approach,

"With traditional test automation tools we were able to address most of our pain points, but there were some particular challenges."

Automation Has Its Own Challenges
Pain Points with Traditional Automation Tools

Required Coding Skills and Experience for Functional Testers

Support for Multiple Sandboxes

Support for Multiple User Profiles

Maintain Object Repository (Adding/deleting fields)
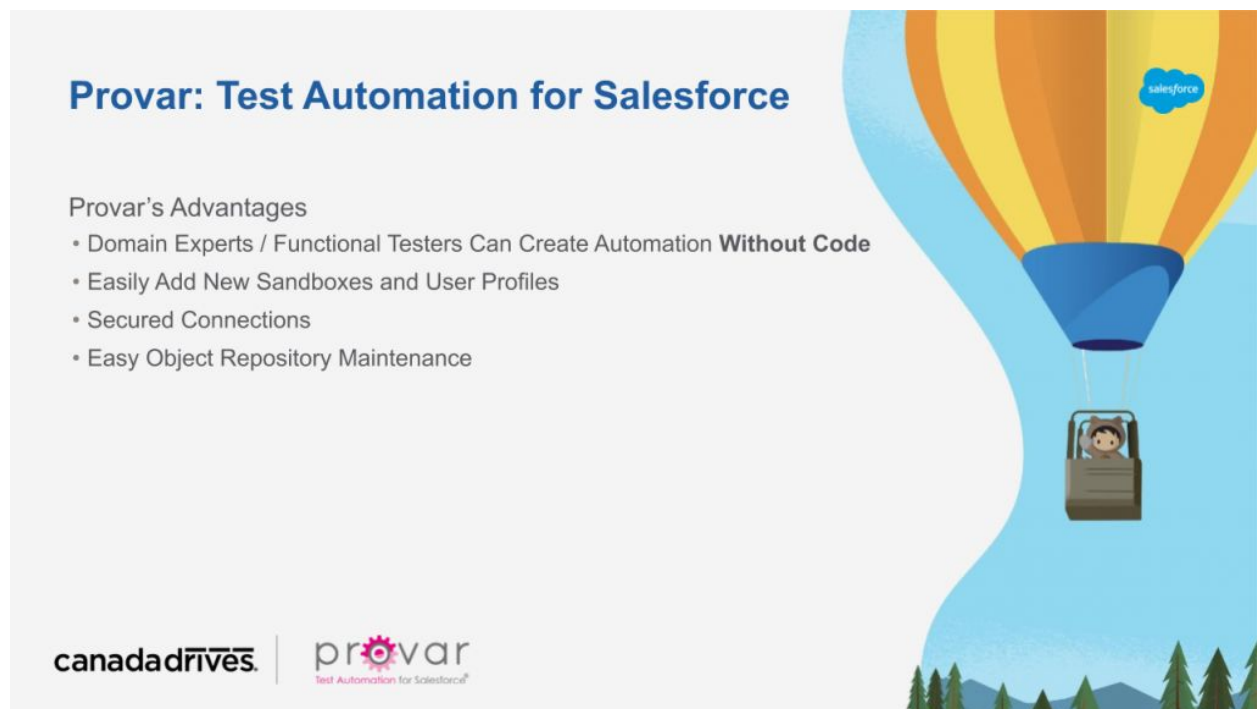
Challenge 1: Technical complexity

"Firstly, we were expecting Manual testers to learn how to program. It was very challenging for them as they had to dedicate time to manual testing as well as ramping up their programming skills.

Challenge 2: Managing environments

"Secondly, adding new sandboxes to the test environment was not straightforward. For every sandbox we had to maintain usernames and passwords for every profile we wanted to perform testing with. This was completely manual and time-consuming."

Challenge 3: Automation maintenance

"Finally, as we had very dynamic and ever-changing requirements, new fields were getting added, modified and removed all the time. We always had to update the automation code based on these changes. Automation code maintenance was taking around 40 hours a month."

Adopting Provar

After identifying these pain points around traditional automation solutions, Canada Drives sought out a better Salesforce test automation solution.

Chandra outlined four key aspects of Provar that were particularly beneficial:

Benefit 1: Code-less automation

Chandra said:

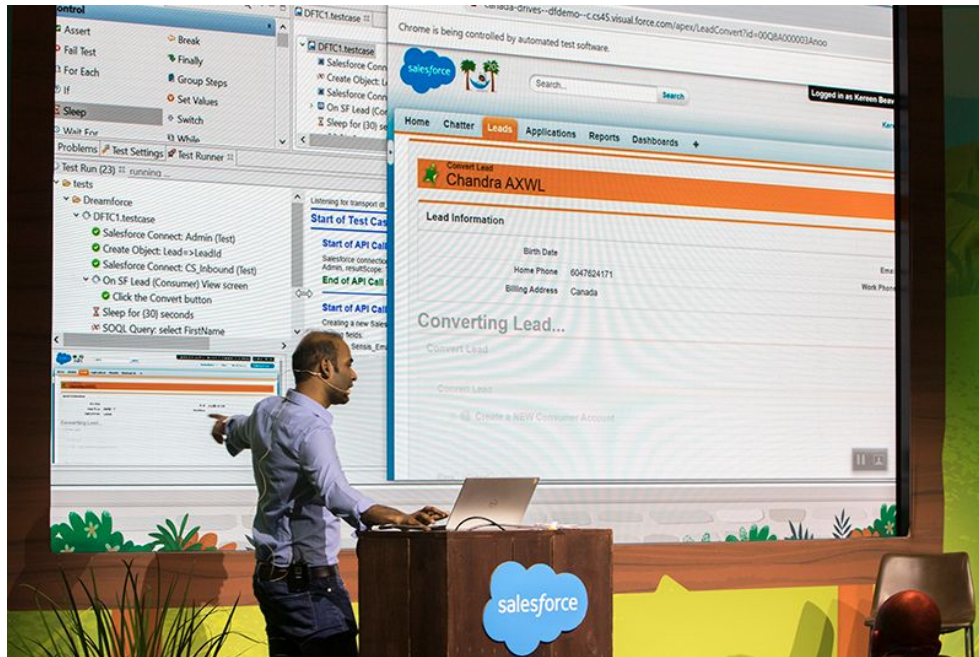"In Provar we can achieve automation without any coding. There is a user-friendly interface for creating tests.

"This is a huge advantage as manual testers can create automated tests in a short time. Today the coverage of our automated tests is high because our tests are created by functional testers."

Benefit 2: Environment management

"Using Provar, new sandboxes can be added in a few clicks. Once you configure and test your connection as a System Admin, you can log in as any user without needing to enter the user's password."

Benefit 3: Secured connections through encryption

"With Provar, all your Salesforce usernames, passwords and security tokens can be encrypted. That way we remain very secure even when we store the automation script on Git or Bitbucket repositories."

Benefit 4: Significantly reduced maintenance effort

"With Provar, once you have made the connection to your Salesforce org, Provar will download the metadata for page layouts, objects, fields and record types. Once these are downloaded, you can add or remove fields from an automated test in just a few clicks.

"Because of this unique metadata integration, the complexity and time needed to maintain our automation has come way down."

Canada Drives' Automation with Provar
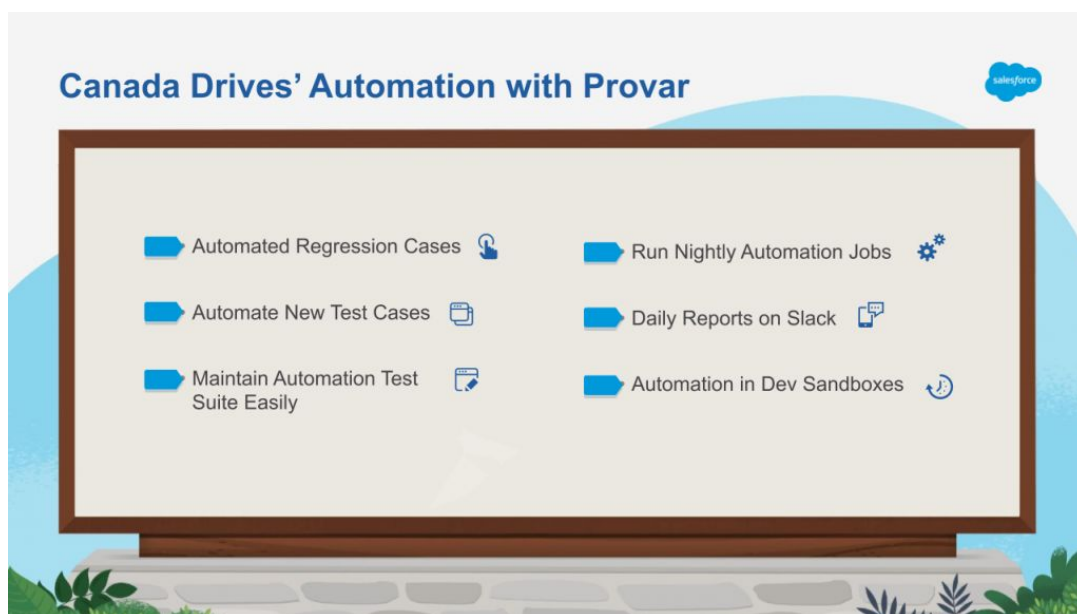
So where is Canada Drives today?

Since adopting Provar, Canada Drives have achieved some very impressive results:

- Automated around 80% of their regression suite, including the majority of the most time-consuming scenarios
- Reduced manual regression effort by 95%, a saving of 38 hours per deployment
- Reduced automation maintenance effort by more than 80%, a saving of 33 hours every month.

Chandra said,

"We have come a long way from where we used to be. Before we implemented Provar's test automation, we used to carry out 1 deployment every 2 weeks. With Provar, we can carry out multiple deployments every week, at least 2 per week."

"Finally, we have also been able to set up daily automation jobs running on Jenkins using Provar's integration capabilities. By integrating Slack into the Jenkins jobs we get all the automation runs reported to a Slack channel, including pass or fail details. This keeps devs, admins and testers informed of progress."

A final benefit Chandra noted was that automation jobs can be easily configured to be run on developer sandboxes.

Chandra said,

"Developers can also run the automation on their own sandboxes to find the defects sooner, meaning an even shorter feedback loop."

Provar and Continuous Integration

Michael Dailey of Provar noted,

"It's great to see the success Canada Drives has seen by integrating Provar with Jenkins and Slack.

In addition to Jenkins, there are a lot of other continuous integration and release management tools that our customers currently use with Provar.

"Provar supports all of the tools highlighted below, and our goal is always to provide integrations for the tools you already have, along with documentation, to make your adoption of Provar as seamless as possible."
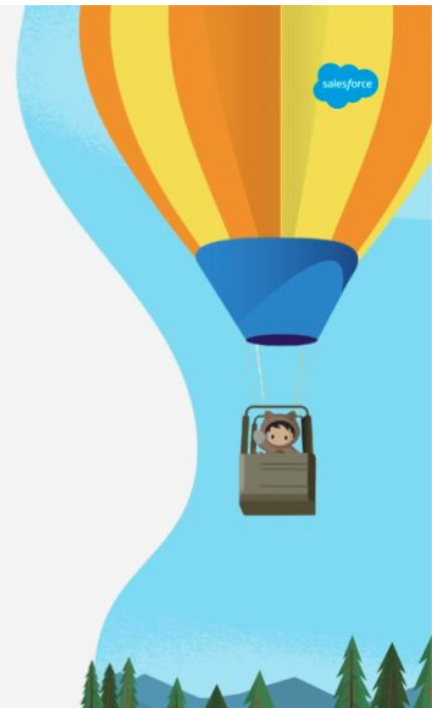
Thank you, Canada Drives!

All in all a fascinating talk from a company that has achieved some amazing results through careful planning and strategic automation engineering. Thank you to Chandra Alahari, QA Automation Engineer at Canada Drives, for his insightful commentary.

Watch the video

Canada Drives: Implement Code-less automation to keep up with a rapid development model

Interested to learn more?

We'd love to discuss how Provar could help your team reduce its manual testing while keeping automation maintenance at a minimum. Book a demo today at a time that suits you.