Discount Tire Taps Chef to Accelerate Application Delivery and Automate Hybrid Infrastructure Management with Policy as Code Approach

CASE STUDY

Challenge

The Discount Tire team, a tenured group of IT professionals known for innovating, wanted to evolve its IT infrastructure in a way that would ease the consumption of new technologies to create better customer experiences. This started with migrating the Discount Tire website to AWS. As part of this transition, Discount Tire started experimenting with other flavors of Linux, which meant Satellite was no longer an option to manage its IT infrastructure. Further, this transition presented challenges related to spinning up infrastructure and automating AWS configurations, as well as the process for deploying and managing applications.

Discount Tire’s various networks, subnets and locations would also require assigning a programmatic identity and the need to ensure that untested patches did not make it into the production environment. With no patching process in place, it sought a solution that could help the company unify Cloud and on-prem environments, automate the patching process and take advantage of new technologies, while taking a true Policy as Code approach.

Solution

The Discount Tire team chose to move forward with products in the Chef Enterprise Automation Stack, a suite of enterprise infrastructure, application and DevSecOps automation technologies for delivering change quickly, repeatedly and securely. A key driver to choosing Chef was that it supported the Discount Tire team’s code-first approach and desire to consistently improve experiences by integrating best practices into code.

Once the decision was made, Discount Tire deployed Chef Infra for policy-based configuration management, Chef InSpec for policy-based compliance automation and Chef Test Kitchen, an integration testing tool that runs tests against any combination of platforms.

Embracing Chef’s Policy as Code approach and delivering on the Discount Tire team’s commitment to powering their pipeline through documentation, the team copied everything that was related to its configuration (which includes more than 600 Linux servers), and then produced the working set of cookbooks the team could use for its Chef environment. Discount Tire also set up a kitchen YAML that allows it to run a test kitchen locally. It runs cookbooks once through the test kitchen and if it passes, the cookbook is published to the supermarket, and it pushes that
“With Chef, not only are we able to benefit from policy-based configuration management and compliance automation, but with Chef’s Policy as Code approach, we are able to document and embed best practices into our application delivery process, resulting in consistently better outcomes for our team and ultimately Discount Tire customers.”

Dan Carrington, Senior Systems Engineer, Discount Tire

policy up into Chef and assigns it to the dev policy group. The Chef client then runs every 30 minutes to provide continuously updated compliance data.

Chef has also enabled Discount Tire to standardize on CIS benchmarks via a tagging procedure that allows new servers to be added without the need for custom profiles, and it is able to benefit from automated Linux patching, which will ultimately extend to Windows patching as well.

Results

By integrating Chef Infra, InSpec and Test Kitchen, Discount Tire has been able to unify the management of its cloud and on-prem infrastructure, while accelerating application delivery. The team has also been able to benefit from fully automated and thorough testing that has served as the building block to doing everything better. Further, by taking a Policy as Code approach and building on a technology agnostic platform, Discount Tire has been able to reduce complexity, accelerate application delivery and significantly improve customer experiences.

Based on Discount Tire’s success with Chef, the company is going to move the rest of its AWS instances into the Chef landscape to get the benefits of Chef patching, while further consolidating its code base. After that, the Discount Tire team plans to utilize Chef Habitat for application definition, packaging and delivery automation to improve future application deployments.

About Discount Tire

Discount Tire has been in business for over 60 years and has built relationships with all of the top tire and wheel manufacturers. The company takes pride in offering the lowest prices, the most choices and the best customer service in the industry. Discount Tire is the industry’s #1 resource for Tires and Wheels. Learn more at: Tires and Wheels for Sale Online | Discount Tire Direct. Or at https://www.discounttire.com.

Learn how taking a Policy as Code approach accelerates application delivery and eases hybrid infrastructure management.