Daiwa streamlines auditing, upgrades environment management with Puppet Enterprise

Industry: Financial Services

Customer Environment: A mix of Windows and Linux servers

Challenges
Daiwa needed a tool that would integrate with their software to provide automation for a self-service developer request portal. This would allow the infrastructure division to fulfill requests efficiently and accurately for faster production deployment and easier compliance audits.

Solution
Puppet Enterprise with vRealize Automation (vRA) enabled Daiwa to build a self-service portal that:
- Connected developer requests with infrastructure code capabilities
- Integrated with Git, Jenkins, and Chocolatey
- Managed disparate servers from a central location
- Automated central tasks

Results
- Decreased time spent provisioning environments from weeks to 10 minutes per environment
- Increased speed of production deployment
- Reduced risk of error from manual changes and configuration drift
- Improved collaboration between Infrastructure and Development divisions
- Simplified routine audit procedures
“Developers were viewing infrastructure as the roadblock to actualizing environments. We knew we needed to redevelop. Incorporating Puppet into our toolkit helped us improve collaboration between the divisions.”

Andy Thomas  Head, European Infrastructure at Daiwa Capital Markets

**Shifting from manual susceptibility to automated possibility**

Daiwa needed a tool that would increase efficiency and reduce the risk of error from manual changes and configuration drift. They wanted a way to automate builds of standard, repeatable environments for trackable production deployment. For its configuration automation, orchestration, and provisioning features they chose Puppet Enterprise.

While Microsoft System Center Configuration Manager had been in place, the infrastructure team did not see a path for it to enable the level of automation they wanted. It also was not a cross-platform solution.

“The deployment and configuration of servers on the Windows estate was a very manual task involving multiple teams,” said Simon Rowe, Section Head of the IT Dept. Platform Engineering team at Daiwa. “We were experiencing high time loss and the process was susceptible to human error. With vRA and Puppet, these processes are now completely automated.”

Provisioning new environments had been taking Daiwa engineers weeks to complete. With Puppet Enterprise, that was reduced to 10 minutes per environment.

**Removing barriers between environments**

Daiwa implemented Puppet Enterprise with vRA in combination with Chocolatey to build a self-service portal for developers. The idea was to translate developer needs into requests the Infrastructure division could implement using a process they could track.

Using Git for source control, the Infrastructure division was able to manage Windows and Linux servers within the Puppet repository.

“Going in to Puppet Enterprise provided the perfect opportunity to merge management of Windows and Linux environments. We can have separate Windows and Linux branches within the same Puppet repository. It works really well.”

Samir Harrar  Engineer, Infrastructure Platform Engineering
Simplifying audit procedures

With the code tracking in the Git and Puppet Enterprise integration setup, Daiwa infrastructure engineers were able to implement a built-in, standard process to track and send standard build codes for routine audit procedures. This has reduced error and improved regulatory compliance for a simpler auditing process that gives time back to engineers.

Adopting Puppet Enterprise has made it easier for Daiwa engineers to warm to DevOps practices. Initial resistance has given way to interest.

Top outcomes from using Puppet

- Provided desired state configuration
- Ensured server configuration compliance
- Better control over environments with ability to deploy from a central location
- Reduced infrastructure and environment build times

“Team engagement has increased as a result of implementing Puppet Enterprise. Team members are now keen to engage in DevOps practices once they have seen the benefits in real-time situations of the solutions we have put in place, a key factor being the utilization of Puppet Enterprise.”

Andy Thomas Head, European Infrastructure at Daiwa Capital Markets

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