Swisscom standardizes and automates tasks across heterogeneous environments to cut down overall operations costs using Puppet

CASE STUDY

Industry: Technology - Telecommunications Services

Customer Environment: A mixed environment of Solaris, AIX and Oracle Linux hosts.

Challenges
- Hybrid infrastructure had different configuration setups, making updates across servers difficult
- Separate scripts for each environment, rather than a unified configuration management solution
- Engrained mindset across operations with IT teams focused on manual processes

Results
- More efficient roll out of changes across infrastructure with greater consistency
- Ability to roll out a new package or manage a service with one hiera entry, Puppet’s built-in key/value data lookup system enables separate site-specific configuration data from code itself (to promote re-use).
- Decrease in operations costs and number of manual touch points
“If you do tasks manually, there will always be mistakes somewhere. If you automate, you eliminate the mistakes of human error.”

Roman Frei, System Engineer at Swisscom

Choosing Puppet Enterprise to standardize and automate operations processes

Swisscom is a major telecommunications service provider headquartered out of Switzerland dedicated to driving digitalization and networking for partners and customers globally. However, with on-premise environments, all with different configuration setups, the company did not have a consistent way to roll out changes across servers in a simple or efficient manner. Instead, operations teams were bogged down in manual updating, spending hundreds of hours on just maintenance alone.

“Before we had a skeleton script for these rollouts and every time we had to modify it with the new package name and dependencies,” said Roman Frei, System Engineer at Swisscom. “Puppet enables us to act a lot faster when we encounter changes that we need to roll out across our whole infrastructure.”

Now, with the move to Puppet Enterprise, and specifically Puppet Tasks, Swisscom has transformed its operations team by adopting a consistent, repeatable way to configure and manage infrastructure, all while decreasing the manual time needed to roll out changes across servers.

Adopting infrastructure automation at scale with Puppet

Before partnering with Puppet, however, the Swisscom operations team allocated manpower and resources to maintain host servers, an expenditure that began to quickly add up. With the directive to cut down on the number of human, error-prone, touch points and reduce operations costs, Swisscom adopted the automation tools and methods provided by Puppet.

With Puppet Enterprise, the company was able to do away with the manual tasks that had been so ingrained in their system and began to change the internal mindset to leverage the power of automation to drive internal efficiency and decrease costs.

“If you do tasks manually, or by hand, there will always be mistakes somewhere. If you automate, you eliminate the mistakes of human error,” said Frei.

“Before we had a skeleton script for these rollouts and every time we had to modify it with the new package name and dependencies. Puppet enables us to act a lot faster when we encounter changes that we need to roll out across our whole infrastructure.”

Roman Frei, System Engineer at Swisscom
“The package management was one of the biggest improvements we’ve seen. For example, if we need to roll out new packages system-wide, like Solaris System 10, it’s now a lot easier. We just need to create one heira entry and it’s done in less than 2 hours.”

Roman Frei, System Engineer at Swisscom

Deploying configuration management tools

Prior to Puppet, Swisscom was using individual scripts for each environment to ensure certain system configurations, such as security and performance optimization, as opposed to using a dedicated configuration management setup. This resulted in multiple human touchpoints and lack of consistency across environments. When scheduling tasks through a previous provider, Swisscom realized the solution was not only more expensive than others on the market but also more time consuming and less efficient overall.

With Puppet Enterprise’s master infrastructure, Swisscom was able to easily build another configuration set up.

“The package management was one of the biggest improvements we’ve seen. For example, if we need to roll out new packages, like Solaris System 10, it’s now a lot easier. We just need to create one heira entry and it’s done in less than 2 hours,” said Frei.

Top outcomes from using Puppet

- More efficient roll-out of updates across the entire infrastructure
- Reduced costs across the operations team
- Cut down time on system-wide package rollout from over a week to 2 hours