

# Case Study | DevOps



## Puppet Enterprise Solution for Leading Communication Provider

### About Client

Client is a leading technology enabled communication provider in Canada and United States for more than 20+ years. Healthcare practice within the customer wants to enable multi-channel communication within stakeholders.

### Technology Used

- Puppet enterprise 3.7.1
- OS: Red Hat Enterprise Linux 6.5
- Database: PostgreSQL 9.4
- SOA: WSO2 AS, API manager, ESB, BAM
- Load Balancing: Apache, F5, Nginx
- Continuous Integration: Jenkins
- Version Control: SVN
- Cloud and Virtual platform: AWS, VMWARE

### Business Benefits

- Ensure reliable and predictable deployments
- Reproduce environments with ease
- Avoid/reduce configuration issues, delays and unexpected behaviors
- Automate synchronization of Development, QA, Staging and Production environments and audit changes to production environments
- Enable collaborative culture between technical (dispersed) teams (Development, Operations, QA, etc.)
- Helps align goals and enforce future state strategies
- Improve overall efficiency and quality of code shipped

### Business Challenges

- The Client reached out to manage a large dynamically changing infrastructure by creating an automated solution – to provision, install, patch, deploy and maintain their cloud-based server infrastructure with minimal operational expenses and simplified administration
- The current environment runs with non-clustered WSO2 products and requires lot of configuration files and database level changes to invoke/deploy additional WSO2 resources in the existing environment. Also, there is no testing/quality assurance mechanism to validate configuration changes made manually with all WSO2-based product installation and clustered setup
- Client was looking for an automated solution, to provision server instances with WSO2-based products in a clustered setup and integrated with a versioning system. In addition to that, the newly provisioned server instance needed to undergo certain infrastructure quality audits before being deployed into respective cloud workspaces – separate instances needed to be managed for Development, QA, and Production

### Solution Provided

Sensiple implemented the Puppet Enterprise solution to completely automate build, patch and support processes for the client infrastructure. An open source server configuration testing solution (Serverspec) was also deployed and integrated for checking that all server instances were configured correctly for each environment.

