


## Case Study : DevOps

<b>Client</b> <i>University of Edinburgh</i>	<b>Industry</b> <i>Education</i>	<b>Customer Environment</b> <i>Linux</i>	 THE UNIVERSITY of EDINBURGH
---	-------------------------------------	---	--

**Challenges**

- *Multiple teams in silos using different Puppet systems*
- *Inconsistent processes causing inefficiencies with IT estate management*
- *Duplication of effort with no cross-team collaboration*
- *Each team having its own deployment mechanism and tooling*

**Results**

- *Reduced complexity; a shared Puppet platform available to all teams in the University*
- *Reduction in silos and increased Puppet knowledge sharing*
- *Fully reproducible and built with automation*
- *Increase reliability & scalability; highly resilient to failure with automated failover*
- *Consolidation of deployment strategies onto a single shared platform*
- *Strengthened cross-departmental collaboration and visibility*
- *Increased automation and standardization across the University.*

**The University of Edinburgh** is a public university located in Scotland.

The University had a number of **Puppet** deployments (multiple versions) used and maintained by different, siloed departments throughout the University. The University IT team wanted to consolidate and standardise their Puppet deployments in order to reduce complexity and allow all teams to work together on a common platform.

### WM Promus: a partner for building Puppet environments

The University chose to partner with WM Promus, a London-based software services company who deliver DevOps, RPA and ITSM/ITOM services. In collaboration with the University's engineers, WM Promus designed and delivered a Puppet environment and solution:

- Fully reproducible through automation: Terraform is used to provision the servers in VMWare with Ansible used to bootstrap the Puppet cluster which is then self-managing
- Highly resilient: Consul provides service discovery for services with Patroni used to orchestrate failover of the PuppetDB between PostgreSQL instances
- Remote Orchestration: Choria provides a means of RPC and automation
- Incorporating a customized team-specific workflow; using multiple Gitlab backed Puppet control repositories along with R10K and Gitlab DevOps to orchestrate deployments.
- Knowledge transfer & support - a combination of formal training courses and informal workshops with ongoing second-line support provided by WM Promus

As a result of this collaboration, WM Promus helped University of Edinburgh achieve gains in efficiency by moving from the complexity of 4 individual Puppet platforms to 1 highly-resilient platform for use by all departments. WM Promus have strengthened cross-departmental collaboration and visibility and increased automation and standardization across the University.