

## **CU I&E Submission: OIT's Jamf Pro Expansion** <sup>[1]</sup>

### **Team Information**

Brad Reno, [bradley.reno@colorado.edu](mailto:bradley.reno@colorado.edu) <sup>[2]</sup>,  
Craig Heiden, IT Professional  
Jeff Green, Associate Director Endpoint Services  
Jonathan Tarr, Senior Project Manager  
Keven Wyld, Sr Unix Sys Engr & Tech Lead  
Karen Arp, Sr. Database Engineer  
Aaron M Botello, Sr. Network Engineer

### **What**

Jamf Pro provides management capabilities to Apple macOS, iOS, iPadOS, & tvOS clients. Multiple UCB units rely on OIT's Jamf Pro instance, including Dedicated Desktop Support, OIT Managed Computer Labs, LASP, Housing, Management, and Athletics as well as potential new customers evaluating the service and developing their workflows. Working with other departments in OIT and my own team, I was able to develop a process that allows us (EMS) to programmatically manage the Jamf Pro service through Ansible, while relying on SE and NEO to use their own internal automation tools to provide us with stable networking and host operating systems. What was once an esoteric and precise process has been reduced to an Ansible playbook that produces reliable, repeatable results. Since implementing this change, we have experienced far fewer issues during upgrades and those few we have encountered were rapidly isolated and triaged thanks to the automation. The end result is a more reliable service for our customers.

### **Why**

Previously, all changes to the Jamf Pro infrastructure were made on an ad hoc basis. Individual files were manually back up and restored, risking the commission of vendor updates in the configuration files. Since all commands were individually executed at the command line, human error was a regular risk. Misconfiguration of the server could degrade or break client server connections, states we must avoid. In addition to the process improvements, this project scaled the infrastructure to provide an improved customer experience, enhanced security, and new capabilities, primarily support for off site devices.

### **When**

Late 2018 through Summer 2019.

expansion

**Links**

[1] <https://www.cu.edu/controller/i-e-awards/past-submissions/cu-ie-submission-oits-jamf-pro-expansion>

[2] <mailto:bradley.reno@colorado.edu>