NASA: INCREASING CLOUD EFFICIENCY WITH ANSIBLE AND ANSIBLE TOWER

CUSTOMER | NASA  
---|---  
INDUSTRY | Government  
INTEGRATION | Cloud/AWS  
USE CASES | Configuration Management  
BUSINESS ISSUE | Increase efficiency, cloud migration  
BUSINESS CHALLENGE | NASA needed to move roughly 65 applications from a traditional hardware based data center to a cloud-based environment for better agility and cost savings. The rapid timeline resulted in many applications being migrated ‘as-is’ to a cloud environment. This created an environment spanning multiple virtual private clouds (VPCs) and AWS accounts that could not be easily managed. Even simple things, like ensuring every system administrator had access to every server, or simple patching, were extremely burdensome.  
SOLUTION | Leverage Ansible Tower to manage and schedule the cloud environment  
RESULTS | As a result of implementing Ansible Tower, NASA is better equipped to manage its AWS environment. Tower allowed NASA to provide better operations and security to its clients. It has also increased efficiency as a team. By the numbers:  
• Updating nasa.gov went from over 1 hour to under 5 minutes  
• Patching updates went from a multi-day process to 45 minutes  
• Achieving near real-time RAM and disk monitoring (accomplished without agents)  
• Provisioning OS Accounts across entire environment in under 10 minutes  
• Baselining standard AMIs went from 1 hour of manual configuration to becoming an invisible and seamless background process  
• Application stack set up from 1-2 hours to under 10 minutes per stack  
ABOUT THE CUSTOMER | The National Aeronautics and Space Administration (NASA) is the agency of the United States government that is responsible for the nation’s civilian space program and for aeronautics and aerospace research.  
ABOUT ANSIBLE | Ansible, an open source community project sponsored by Red Hat, is the simplest way to automate IT. Ansible by Red Hat provides enterprise-ready solutions to automate your entire application lifecycle – from servers to clouds to containers and everything in between. Ansible Tower by Red Hat is a commercial offering that helps teams manage complex multi-tier deployments by adding control, knowledge, and delegation to Ansible-powered environments.