Introducing Nubis v1.4.0

Cost Savings, Efficiency, and Features

Overview

- Federated Prometheus instances deployed
- Release automaton rewrite
- Closed <u>155 issues</u>
- Cost Savings
 - Unlocked nearly \$7k/month of cost savings
 - Adjusted support levels to actual need
 - Minimize size of build instances
 - Tuned EC2 detailed monitoring
 - Cleaned up all old mozilla-infra accounts
- Additional features
 - Terraform and Packer upgrades
 - Akamai converted to Terraform
 - Bugzilla migrated to Terraform
 - Bugzilla moved to EFS from CEPH (generating excitement for failover test)

Cost Savings

Reducing cost by:

- Adjusted support levels to actual need
 - Savings across 14xx accounts \$1896 to \$5053 per month (based on % of spend)
 - https://apps.cloudhealthtech.com/x/dp46o?no_session=1
- CI systems build using spot instances by default
 - Actual build costs are reduced by as much as 50% (spot pricing is variable)
- Reduced default instance size for test builds
 - 57% cost reduction. This is increasingly important as more applications are migrated
- Deprecated duplicate cloud trails saving more than \$200 per month
- Disabled EC2 detailed monitoring saving ~\$50 per account per month (~\$900/mo currently)
- Cleaned up all old mozilla-infra accounts (~\$3500/MO)
 - https://apps.cloudhealthtech.com/x/5l4nk?no_session=1
- Right sized Akamai account EC2 Instances saving ~\$100 per month

New features

- Platform monitoring
 - Federation instances deployed
 - Worked with the MOC to understand current DataDog levels
 - Built all Prometheus monitors for Akamai and Bugzilla
 - Removed DataDog API keys from all Nubis accounts
- Terraform 0.8 Upgrade
 - Unlocks potential to depreciate several custom lambda functions
 - Many additional resources and types supported
- Complete rewrite of release tool chain
 - Added real support for patch/security releases
 - Removed numerous code duplications between scattered scripts
 - Reduced platform build time from > 9 hours to ~ 1.5 hours
- Upgraded to current system packages

Coming in future releases

- Additional security fixes
 - Integration with Mozilla IAM project
 - Monitoring and alerting of GitHub user management policy
- Additional cost efficiencies
 - VPC flattening
 - Reduced API calls
 - Improve account resources utilisation
- Security monitoring dashboard
- Ease of use concerns
- Automation of AWS account creation
- Expanding features to support application migrations
- Continuing improvements to documentation
- Improve AWS IAM and SSH user management