Introducing Nubis v1.1.0

Security, efficiency, and features

Overview

mozilla

- First release since PHX1 exit
- Closed [370 issues](#)
- Improved security
  - Closed 6 Medium risks
- Lower costs
  - Reduced costs by approximately $5,600 per month
- Additional features
  - Platform versioning
  - Reduced deployment times and complexity

Security enhancements

mozilla

Remediated 6 security risks:

- Implemented Consul service ACLs
- Implemented proxy service
- Enforced use of proxy service through firewall rules
- Enabled GitHub user authentication for CI
- Configured network security monitoring on NAT instances
- Automated banning of IP addresses

Agreed to accept 3 security risks:

- Developed threat model for Nubis/AWS
- Identified indicators for most severe threats
- Collaborating with Infosec to develop monitors

Cost efficiencies

- Default deployments are now single region
  - Reduces existing costs by about $1,400 per account*
- Fewer instances
  - Reduced the number of NAT instances by one third
  - Consolidated NATs and Proxies into a single instance, reducing the number of instances in each region by 9
  - Reduces costs by about $200 per region in each account*
- Deprecating the use of the Nubis Sandbox account
  - Estimated savings of $1,300 per month*
- Greatly reduced deployment times from 40 minutes per region to 5 minutes per account
  - Allows us to delete resources from Nubis Lab account when not in use, saving about $1,100 per month*
  - This will also save engineering time and cost

*Projections based on data from CloudHealth

New features

- Platform versioning
- Deployed gen 1 NATs with Bro on more modern and reliable instance types
- Enabled Consul service discovery ACLs
- More readable and usable environment descriptions through the use of Terraform
- Automated IP address space allocation within the account
- Upgraded to current system packages
- Aligned with updated tagging standard
- Support for CloudHealth
- All Nubis platform components are now proxy-aware
- One-command platform deployments and upgrades

Coming in future releases

- Additional security fixes
    - Temporary credentials for command line users (including MFA)
    - Automated provisioning of system users IAM users and management of SSH keys (dependent on Infosec's IAM project)
    - Enhanced security for Consul ACLs
    - Monitoring and alerting of GitHub user management policy
    - Improved documentation
- Additional cost efficiencies
    - Containerization of the platform
    - Fewer instances
- Monitoring the things that matter
- Improved release planning
- Automated testing and releasing
- Support for additional proxy protocols
- Standalone deployment of security audit role, CloudTrail, and financial monitoring