Centralized RBAC for Networks with Ansible Tower

Multi-Vendor Environments

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AnsibleFest

Why Ansible for Network Automation?

Efficiency and Consistency

- Single toolset to manage a vast number of vendor device types
- Consistent automation language across vendors - YAML
- Centralized security, credential management, and orchestration with Ansible Tower
- High Availability
- Process Consistency
- Single source of truth (Git)
- Automated backups
- Active documentation
- Surveys for dynamic and flexible playbook execution


Predictable and Consistent
Network Management
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Predictable and Consistent Network Management

- Network as Code - Declarative network configurations
- Revision control and visibility
- Centralized access control for multi-vendor network devices
- Centralized audit and change management
- Standardized templates
- Separation of duties
    - Network Operations
    - Security Operations
    - Helpdesk Administrators
    - Business Units


Turn the Tide of Network Management
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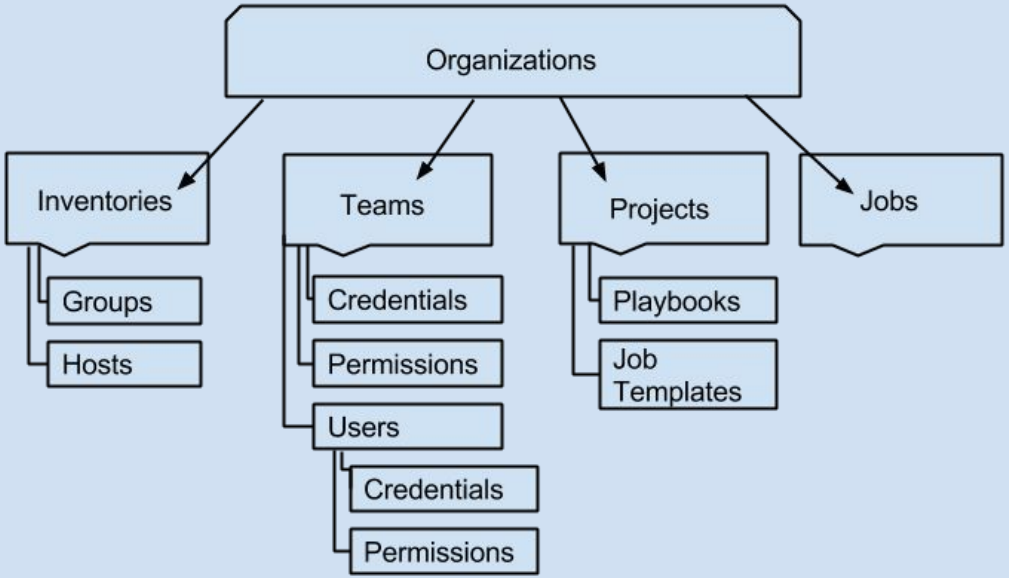
Turn the Tide

Old vs. New

Then (Old Way)	Now (New Way)
Ad-hoc device management, distributed credential management	Unified toolset (Ansible Tower), centralized credential and device management
Stale credentials across devices for full admins - difficult to rotate	Ansible Tower credentials store, single location to roll passwords especially when automated
SSH to device to make changes and execute (MOP) commands, applied to devices individually	Git workflow with approval structure, revision control, and automated config changes (Network as Code)
Multiple management tools, disparate configs/commands	Single toolset to manage multi-vendor environments

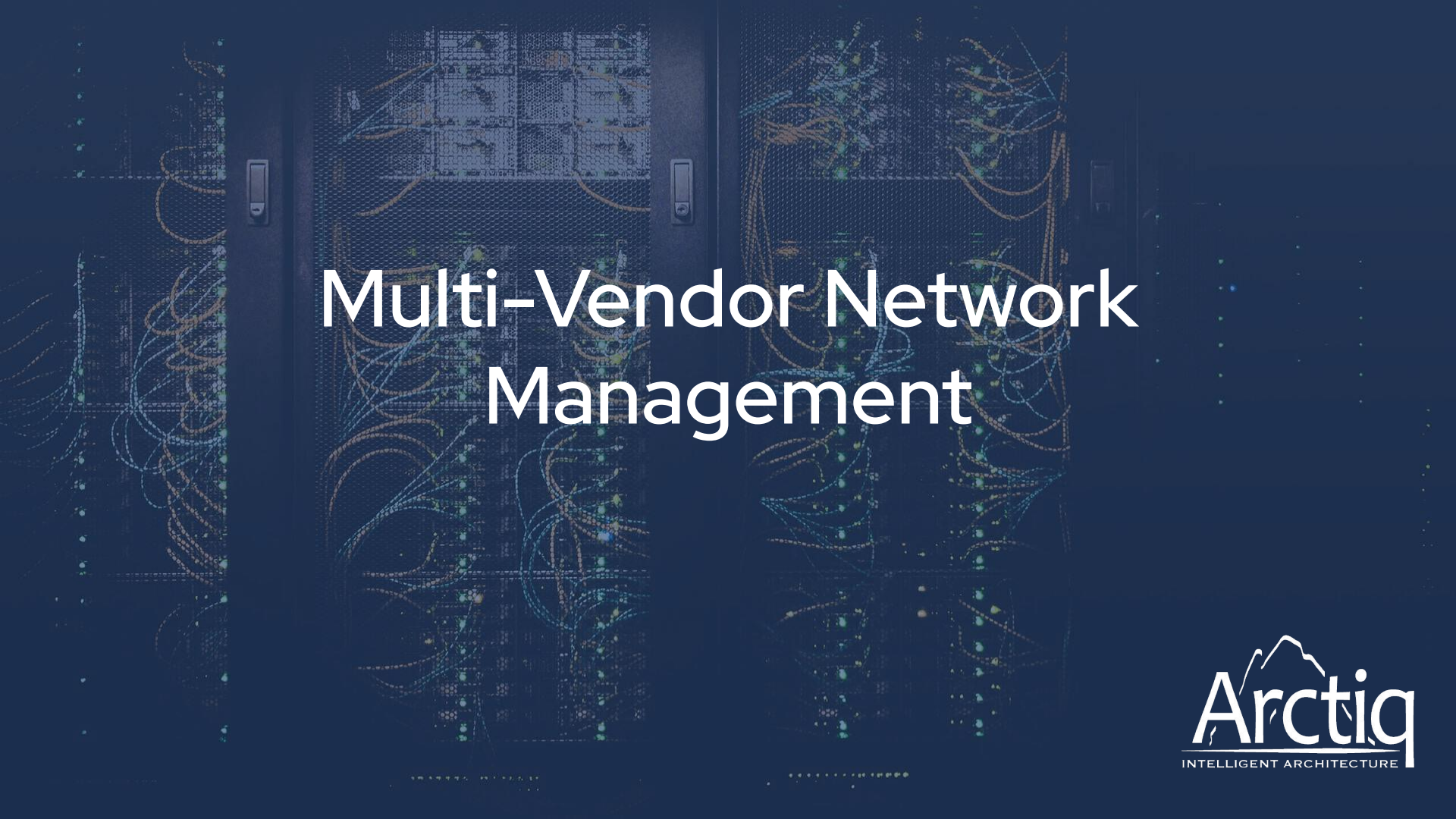
Ansible Tower RBAC Hierarchy

Roles and Teams



Demo:
Ansible Tower RBAC:
Levels of Access

Map existing users and groups to Ansible Tower roles and teams for centralized access control across the network landscape.


Multi-Vendor Network
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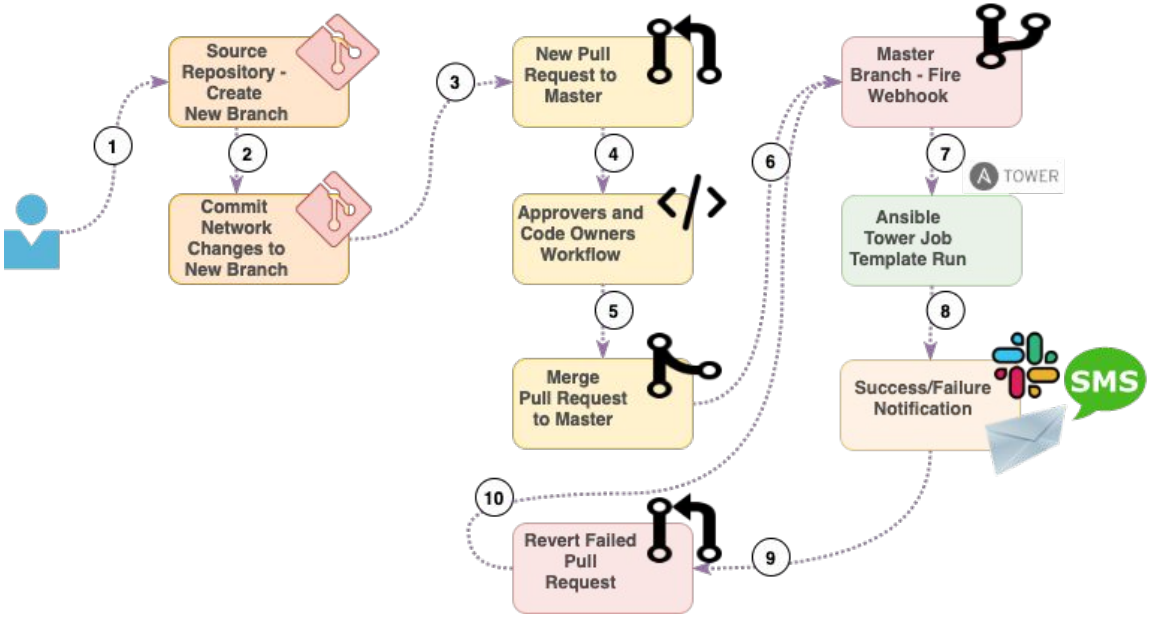
Multi-Vendor Device Management with Git Workflows

Network Configuration as Code - The end of configuration files!

- Centralized configuration repositories across device types and teams
- Centralized and scheduled configuration backups
- Git workflow audit trail
- Active documentation
- No more creative configuration file extensions!
- MOP's as code
- Ansible configuration management for multi-vendor devices across single job templates/playbooks

Network Feature and Configuration Update Workflow

Network as Code



Demo: Network Configuration as Code with Git Workflows

Long gone are the days of network device .conf files. Out with the old, in with the new - declarative network configuration with Git workflows.

Centralized Network Secrets

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Demo: Centralized Network Device Secrets

No longer store and rotate secrets across different vendor devices. Manage access to critical network devices centrally and securely with Ansible Tower.

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Thank you

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