Enabling Self-Service Automation with ServiceNow and the Ansible Automation Platform

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Why Integrate with ServiceNow?

ServiceNow is an industry leader in...

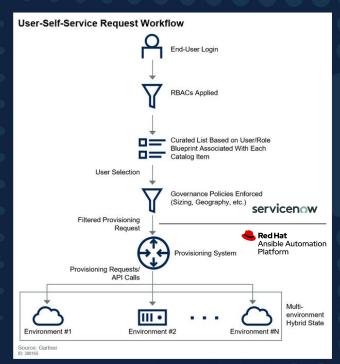
- Self Service
- ITSM

Ansible Automation is an industry leader in...

- Infrastructure Automation
- Configuration Management

"an average of eight tools [used] throughout the [orchestrated] toolchain" -Gartner





Why Ansible: Infrastructure as Code

Peer-Reviewed Infrastructure as Code managed with Source Control

```
- name: "Create GCP Firewall for {{ gcp_prefix }}-vpc"
  gcp_compute_firewall:
    name: "{{ gcp_prefix }}-firewall"
    network: "{{ gcp_vpc }}"
    allowed:
    - ip_protocol: icmp
    - ip_protocol: tcp
      ports:
      - '22'
      - '80'
      - '443'
      - '8200'
      - '3306'
    target_tags:

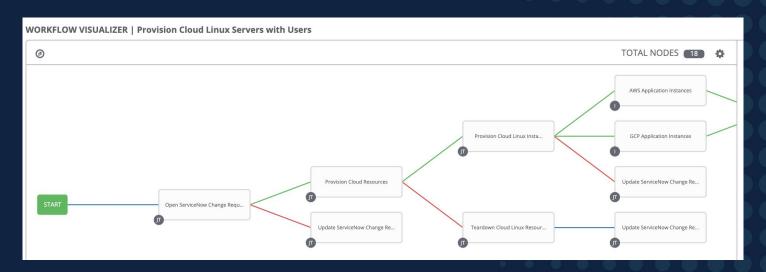
    appdeployment

    - "{{ application }}"
    state: present
  register: gcp_firewall
```



Why Ansible: Infrastructure Workflows

Workflows allow for individual playbooks to work together for whole services





Why Ansible: Common Infrastructure API

Common API for...

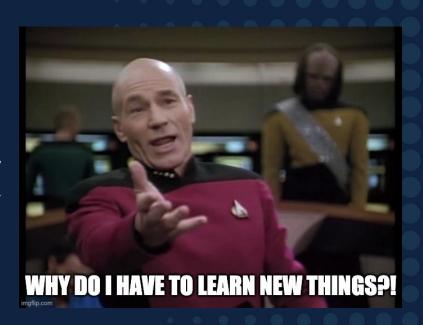
- Server Automation
- Network Automation
- Application Automation
- Security Automation
- Cloud Automation

```
A TOWER REST API
                                                                           REST API / Version 2
Version 29
                                                                                                    OPTIONS
                                                                                                                GET -
 GET /api/v2/
 HTTP 200 OK
 Allow: GET, HEAD, OPTIONS
 Content-Type: application/json
 Vary: Accept
 X-API-Node: localhost
 X-API-Time: 0.019s
     "ping": "/api/v2/ping/",
     "instances": "/api/v2/instances/",
     "instance_groups": "/api/v2/instance_groups/",
     "config": "/api/v2/config/",
     "settings": "/api/v2/settings/",
     "me": "/api/v2/me/",
     "dashboard": "/api/v2/dashboard/".
     "organizations": "/api/v2/organizations/",
     "users": "/api/v2/users/",
     "projects": "/api/v2/projects/",
     "project_updates": "/api/v2/project_updates/",
     "teams": "/api/v2/teams/",
     "credentials": "/api/v2/credentials/",
```



The Challenge with Product Adoption

- Biggest barrier to adoption is learning something new
- End Users tend to stick with things (in this case, interfaces) they already know
- Familiar-looking services foster greater adoption





Self Service Catalog

Use Cases

- Hybrid-Cloud Provisioning
- Automated Patching
- Server Reboots

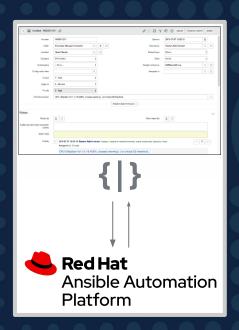




Automated ITSM

Use Cases

- Open/Close Incident
- Update Change Request
- Create CMDB CI

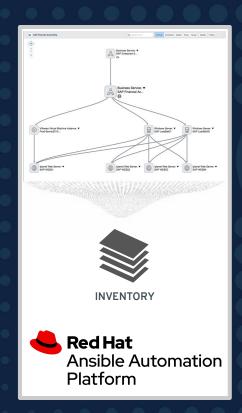




Dynamic Inventory

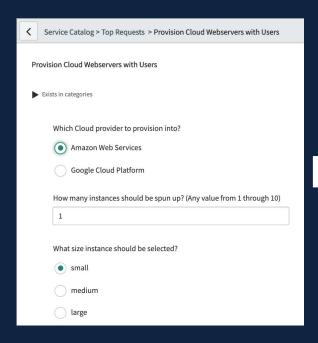
Use Cases

- Inventory Groups for Patching
- Ansible Variables from ServiceNow Discovery
- Relationships to Business Services

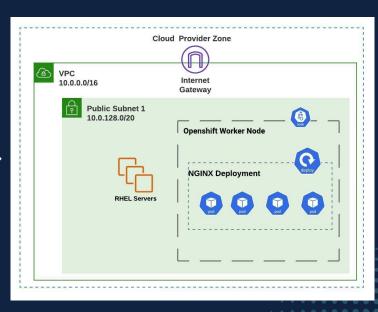




Self-Service IT Use Case: Repeatable Cloud Workload







Demonstration



Resources

- ServiceNow Ansible Galaxy Collection
 - o <a href="https://galaxy.ansible.com/servicenow/servic
 - ServiceNow modules and inventory plugin
- Repeatable Cloud Workload Github Repository
 - https://github.com/michaelford85/cloud-deploy
 - If you have an AWS and/or GCP account, you can fork this repository and try this yourself



Thank you

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