ANSIBLE AUTOMATES

Data Driven Automation

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Introduction

● Define Data Driven Automation
● Define Infrastructure as Code (IaC)
● Common Areas and Use Cases
● Demo!
Data Driven Automation
What is Data Driven Automation?
Defining Data Documents
Getting to know JSON

- **JavaScript Object Notation**
- Lightweight format for storing data
- Common web format
- Is built on two structures:
  - Name/Value pairs
  - Ordered lists
About JSON Schemas

- Allows you to annotate JSON documents
- Describes existing data formats
- Allows you to validate data
- Ensures quality of submitted data
But Ansible Uses YAML

- YAML Ain’t Markup Language
- YAML is a superset of JSON
- Top 3 YAML focuses
  - Human readability
  - Portability between programs
  - Native data structure of agile
- Ansible Playbooks and Roles are YAML data documents
- Ansible is Data Driven Automation

```yaml
- hosts: all
  gather_facts: False
  tasks:
    - name: Register machine to Red Hat Network
      redhat_subscription:
        state: present
        username: "{{ rhn_user }}"
        password: "{{ rhn_pass }}"
        auto_attach: true
    - name: Add RHN Pool ID
      redhat_subscription:
        state: present
        username: "{{ rhn_user }}"
        password: "{{ rhn_pass }}"
        pool_ids:
          - pool_id1
```
Assembling the Document

Ansible Playbook and Roles

Service Orchestration

JSON  Data Documents  JSON Schema
Infrastructure as Code
Infrastructure as Code (IaC) is the process of managing and provisioning computer data-centers through machine-readable definition files.
Red Hat Services Journeys
Enabling customer success

Consulting
Experience building and integrating networking platforms with both open source and proprietary technology
Most advanced skills delivering solutions using Red Hat products and open standards
Uniquely positioned to align teams, streamline processes, and make systems and applications work together
Hands-on mentoring builds skills and drives independence

Training
- Speed technology adoption and maximize return on investment
- Fuel innovation by addressing organizational skills gaps
- Improve productivity by increasing the performance of teams and individuals
- Reduce risk of individuals not following established uses and practices

Support
- Customer Portal
- Curated product documentation, tools, and technical expertise
- Technical expertise and guidance available 24x7, by phone or chat
- Available Enhanced Support
  - Accelerated response
  - Service restoration SLAs
  - Technical account manager (TAM)
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THANK YOU
Use Cases

- Infrastructure and virtual deployments
- Application deployments
- Container deployment and orchestration
- CMDB Implementations