AaaS

Automation as a Service

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What we’ll discuss today

▸ Why AaaS?
▸ Requirements
▸ Turning AAP into AaaS
▸ Learnings
Why AaaS?

Why yet another XaaS?
Why AaaS?

Automation Evolution

Automation as team strategy

One Team

== one AAP / AWX(*) installation

Automation as enterprise strategy

One team responsible for platform

N teams using the platform ("customers")

(*) we’ll talk only about AAP/controller/hub in this presentation, but you know what we mean

Source:
Wikimedia Commons
Side-by-side comparison

Team-internal Automation

- AAP admins are organization admins
- Admins know (even write) automation content
- Credentials in Automation Controller
- Automation Controller used as interface
- Only one AD role

Centralized Automation

- “Provider” users bring their own content
- “Consumer” users only run automation
- External credential sources
- Often service portal in front of Controller API
- Many AD roles need to be mapped

Why AaaS?

Source: Wikimedia Commons
Requirements

What do the AAP consumers want?

What are the requirements that arise from the change in our customers approach?

Source:
https://www.etsy.com/listing/1219466916/we-want-beer-vintage-prohibition-march
What the platform owner needs to know

- Who are my customers? Are they all providers and consumers at the same time?
- Who pays for this?
- What are organization-wide requirements?
- What level of automation is possible within the organization?
Service Definition

AaaS requirements

▸ Automated on-boarding of new customers
▸ Higher availability of the platform
▸ All-or-nothing backup & restore (only for DR)
  • No restore of individual objects for consumers
▸ Staging concept for:
  • Platform itself
  • Automation workload
▸ EE as central offering or “bring-your-own”
What turns AAP into AaaS?

Source:
https://www.azothalchemy.org/azoth_ritual.htm
What turns AAP into AaaS?

Onboarding process

Documentation is key!

- One landing page
  - step-by-step guide or map
- Use request/ticket system instead of emails
- Automate as much as possible
What turns AAP into AaaS?

Infrastructure as Code for AAP

push-button organization creation

- users provide
  - organization name
  - admin team LDAP/AD group
  - additional team names and matching LDAP group
- ...either per service request or pull request (one can dream)
- Automation controller-config playbook is triggered

Note: SAML should work as well
**Infrastructure as Code for AAP**

**Technical Details**

1. Request "organization" service
2. Trigger job template
3. Create org and admins team + dedicated job templates
4. Call "team" job template (directly)
5. Add team-group mapping

Rinse & repeat for user B…
What could possibly go wrong?

What complications to expect on top of the “usual suspects” when introducing AaaS?
Some Pitfalls

...or Learnings

▸ Automation Platform owners need to be ready to
  ・ use Git for staging
  ・ invest time in AAP automation
  ・ work with automation providers and consumers

▸ Enterprises need to be ready to
  ・ re-evaluate their processes
  ・ re-think their security policies

▸ High-Availability remains a challenge
Next Steps

- CustA org admins see teams from custB and can give them access rights to their objects, for increased collaboration
- Configuration as Code
  - AAP admins provide configuration “framework”
  - AAP customers use it to configure their tenant/organization
- Automation Community of Practice
  - Recommended practices and jointly managed collections become part of the service
- Private Automation Hub (PAH) and/or (external) container registry
Thank you

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