AaaS

Automation as a Service

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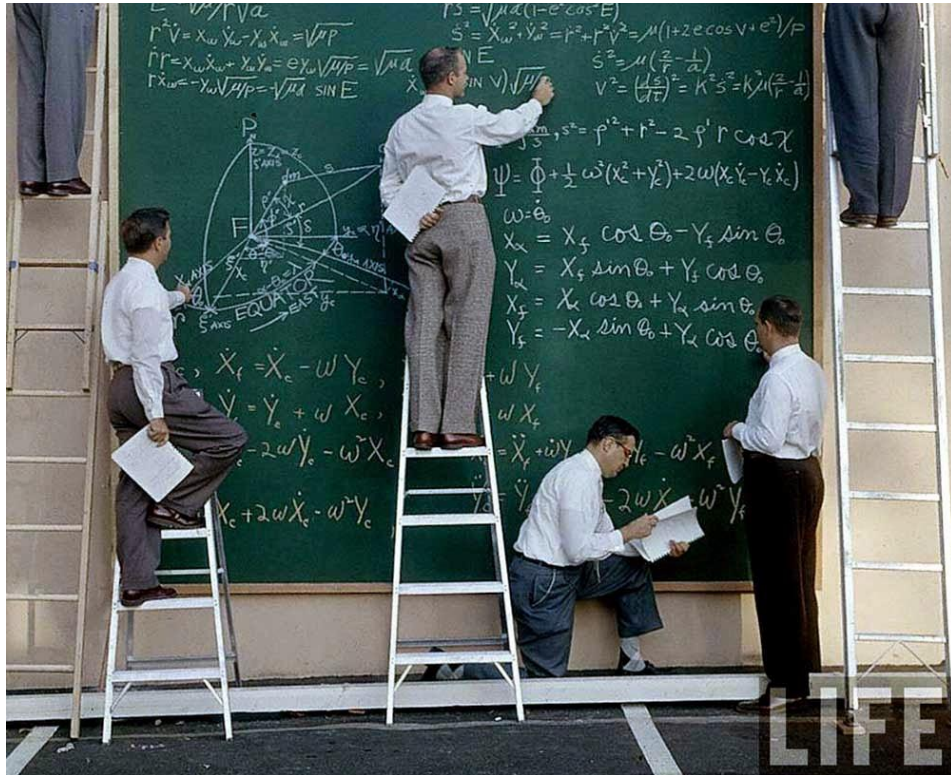Automation CoP manager

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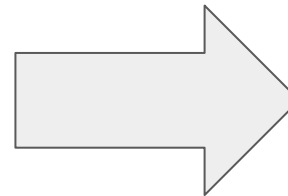
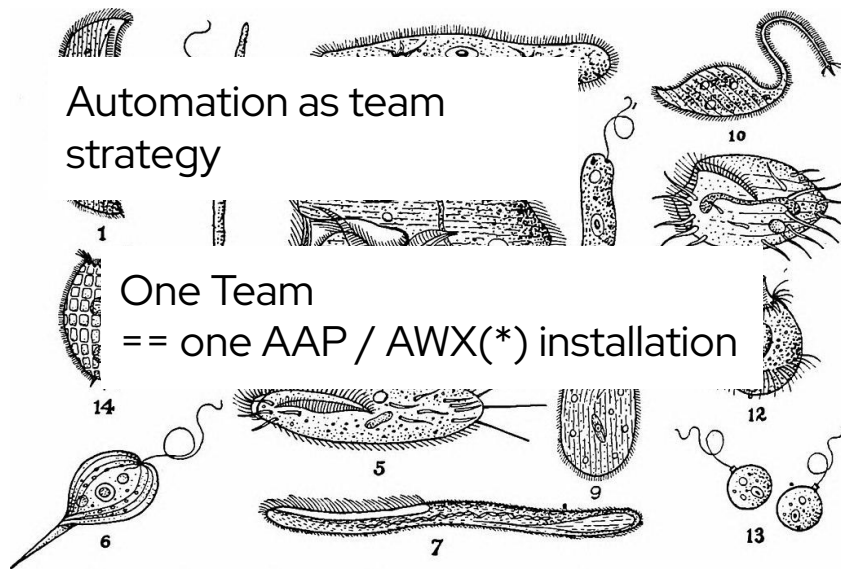Automation CoP manager

What we'll discuss today

▶ Why AaaS?

▶ Requirements

▶ Turning AAP into AaaS

▶ Learnings

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Why AaaS?

Why yet another XaaS?

Source:
https://rarehistoricalphotos.com/nasa-scientists-board-calculations-1957/

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
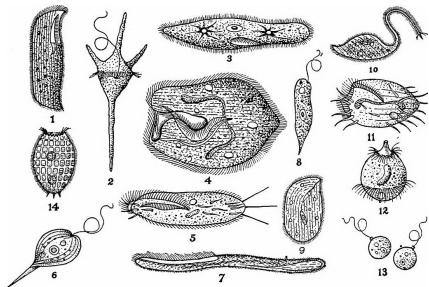
Pl.234. *Morelle tubéreuse (Pomme de terre).*
Solanum tuberosum L.

Source:
Wikimedia Commons

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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

Pl.234. Morelle tubéreuse (Pomme de terre).
Solanum tuberosum L.

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

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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"
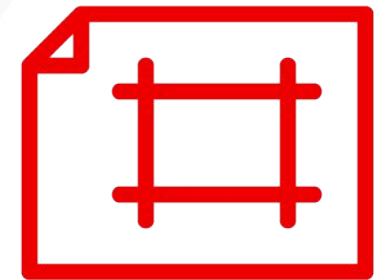
What turns AAP into AaaS?

How do we set up Ansible Automation Platform to provide Automation as a Service?

Source:

https://www.azothalchemy.org/azoth_ritual.htm

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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

Infrastructure as Code for AAP
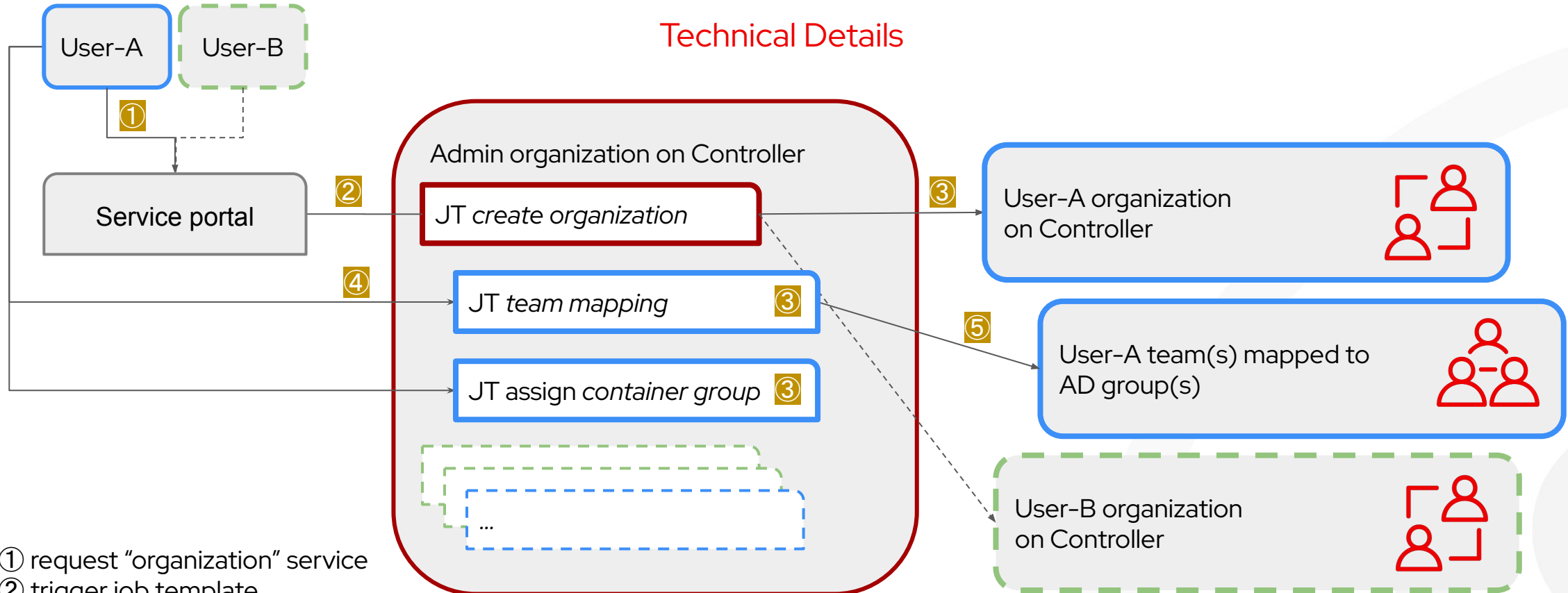
push-button organization creation

- ▶ 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

Source:
Wikimedia Commons

Infrastructure as Code for AAP

Technical Details

User-A | User-B

①

Service portal

②

Admin organization on Controller

JT *create organization*

JT *team mapping* ③

JT assign *container group* ③

④

...

③ User-A organization on Controller

⑤ User-A team(s) mapped to AD group(s)

User-B organization on Controller

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...

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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

AaaS+

- 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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