Day Two:
Automation of Openshift with Advanced Cluster Management and Ansible Automation Platform

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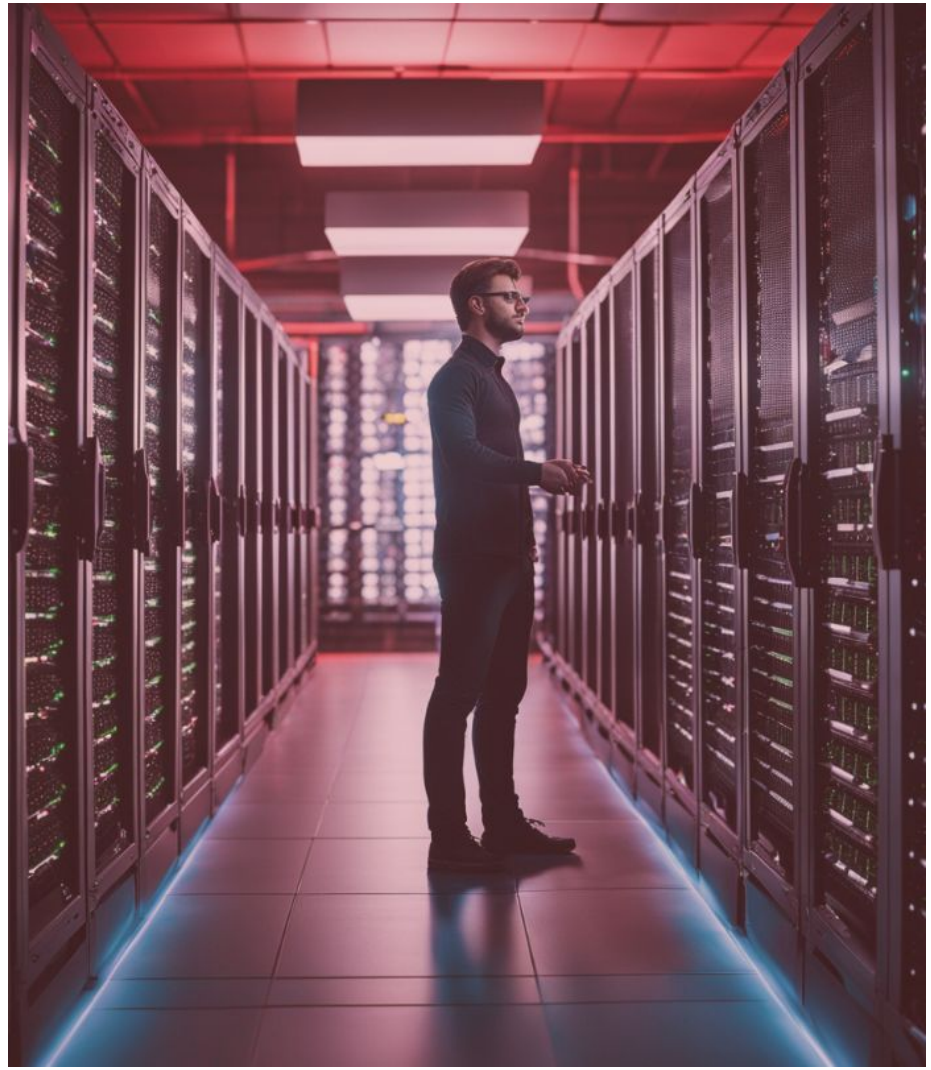
AGENDA

- Objectives - Why do you care ?
- How - Make it all happen !
- Demo - Show n Tell ...

Why ?

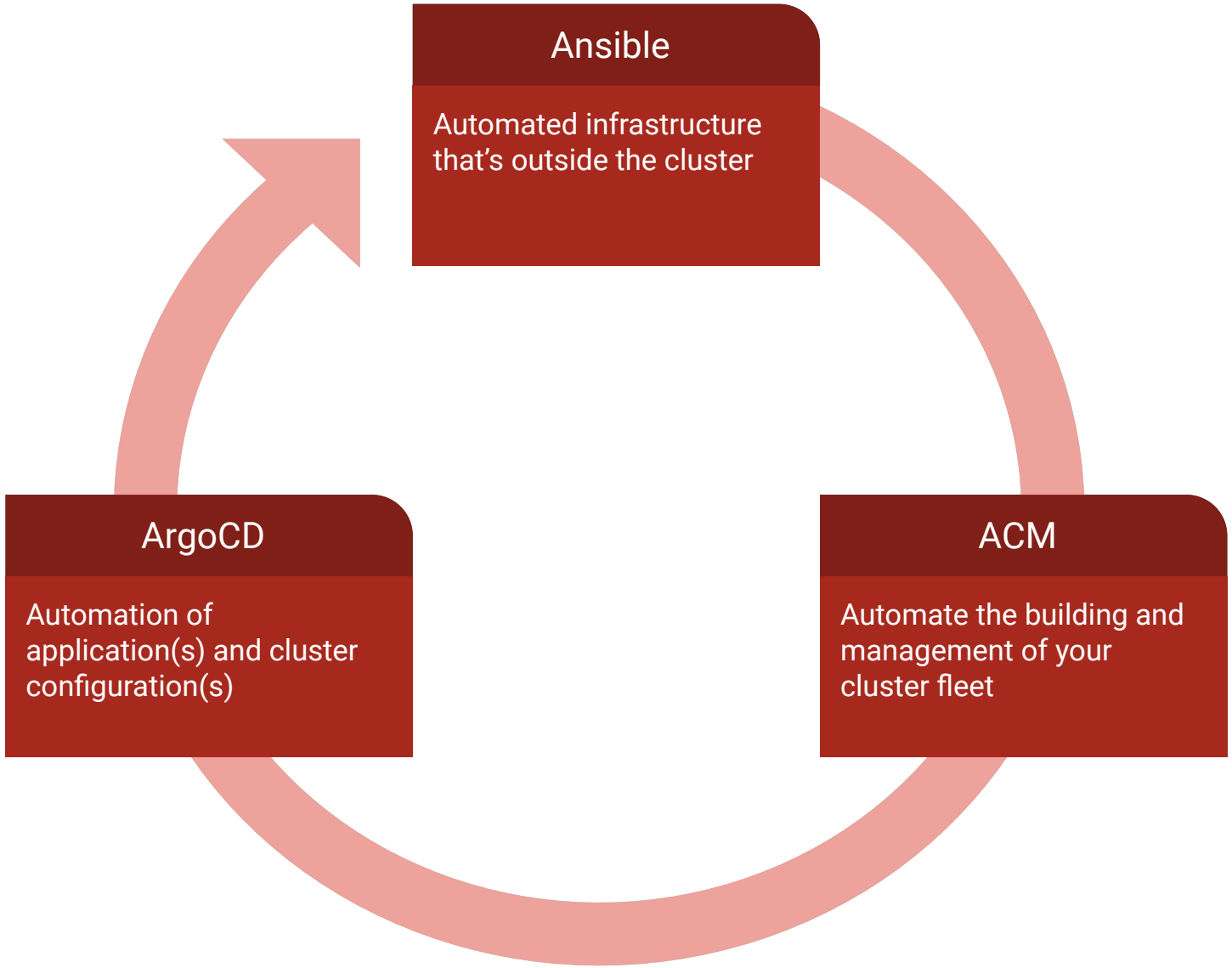
Objectives

- **Time Savings**
  - Automation reduces the time required to build Openshift clusters by eliminating manual steps and streamlining the process.
- **Effort Savings**
  - Automation eliminates the need for repetitive and mundane tasks, allowing DevOps engineers to focus on more strategic and value-added activities.
- **Consistency**
  - Automation ensures that every step of the cluster building process is executed consistently, reducing the risk of human error and ensuring reliable deployments.
- **Scalability**
  - Automation enables the rapid and efficient scaling of Openshift clusters, allowing organizations to meet growing demands without significant manual intervention.
- **Standardization**
  - Automation enforces standardized practices and configurations, promoting best practices and ensuring consistency across different clusters and environments.
- **Flexibility**
  - Automation provides the flexibility to customize and adapt the cluster building process to meet specific requirements and integrate with existing systems and tools.
- **Traceability**
  - Automation provides detailed logs and audit trails, allowing for easy tracking and troubleshooting of cluster building activities.

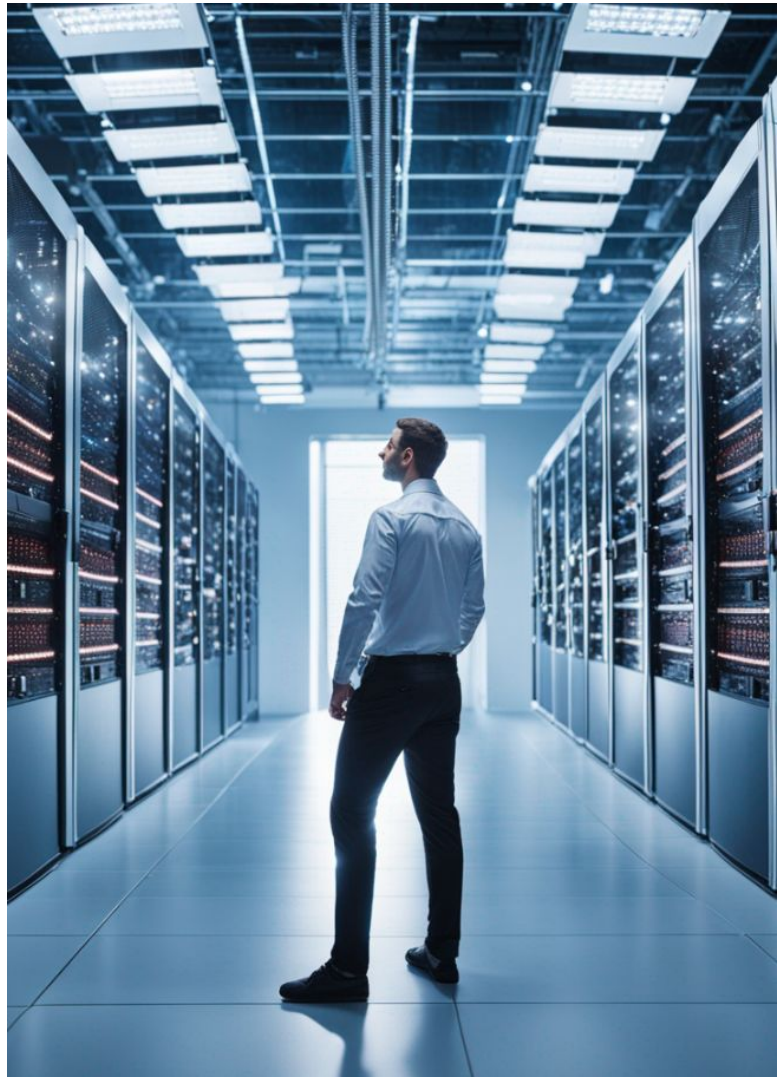


How !

When to use what ?



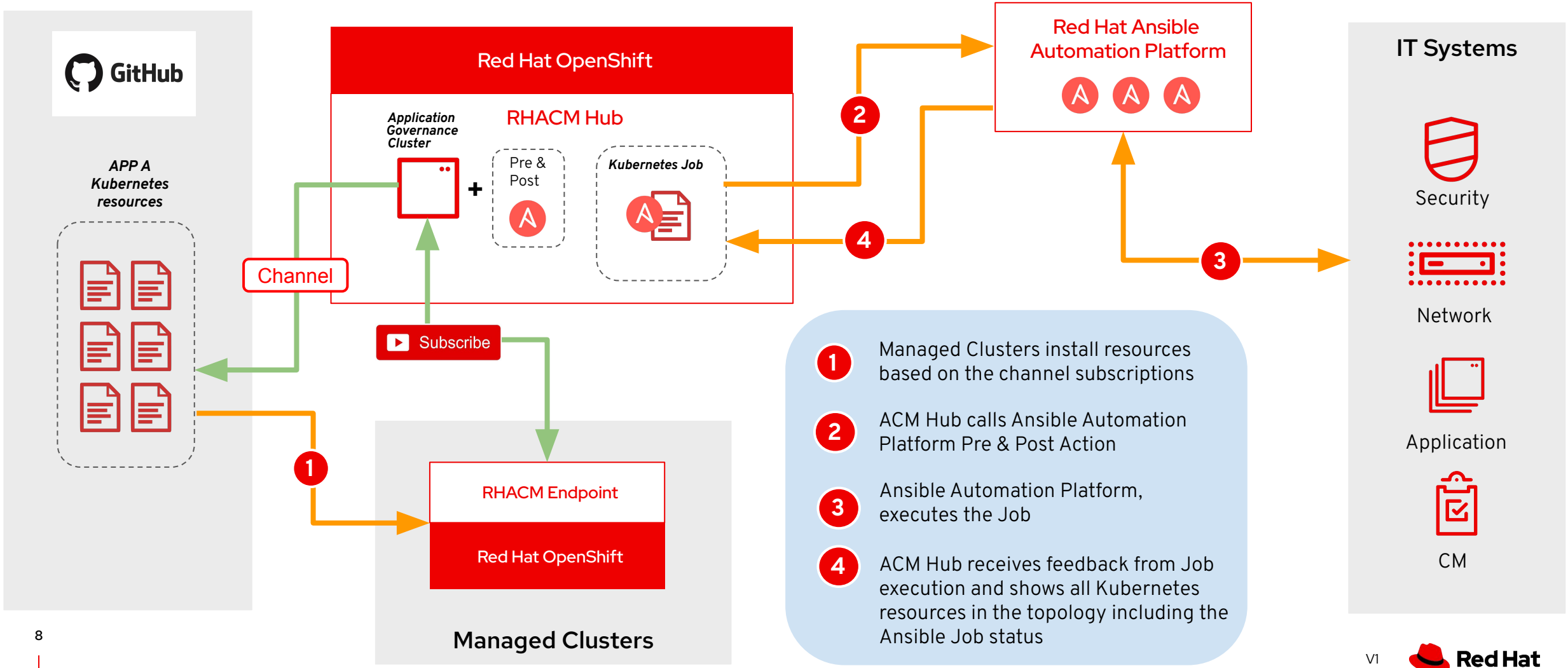
Better Together: OCP, RHAAP, and RHACM



Leverage Ansible Automation at critical points in each RHACM Lifecycle:

- Cluster Lifecycle
  - Post and Pre Cluster Creation
- Application Lifecycle
  - Configurations of non-k8s Dependencies during Application Lifecycle (create, update, migration, delete)
- Policy remediation
  - Gather logs
  - Quarantine
  - Open Tickets
- Observability and SRE
  - Incident remediation

Architecture Overview



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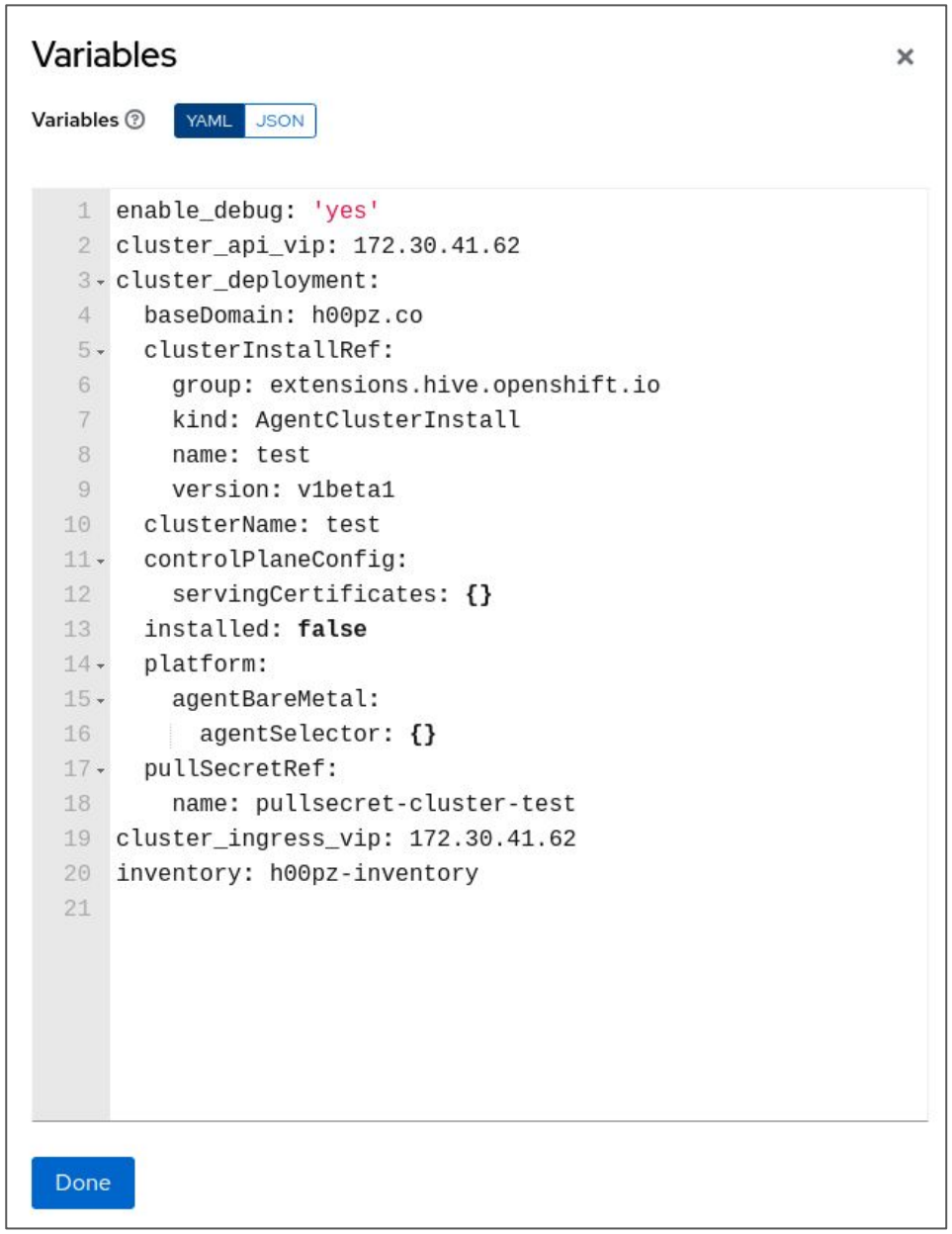
The Playbooks - Need to Know Before you start

- **ACM Injects extravars into your playbook(s) execution**
  - You will need to run a failed cluster at least once to get them all
  - Pre and post playbooks get injected extravars
- **Determine what you need automated BEFORE you start your cluster build**
  - DNS (internal and external)
  - Certificates
  - FW Rules
- **Figure out what you want to automate AFTER your cluster is built**
  - Installation of certs
  - MCO configuration(s)
  - Adding cluster(s) to ArgoCD



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Demo

Thank you

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