



Automating Virtual Machines with Ansible

Constantine Beniaris

Nov. 2025

AGENDA

Why we're here today

1

Configuring the Virtualization Environment

2

Creating a Template Virtual Machine

3

Configuring Encrypted Passwords

4

Automating the Deployment of Virtual Machines

5

Questions and Answers

Configuring the Virtual Environment

[1] Selecting a Platform

For this presentation, I've chosen Proxmox Virtual Environment

[2] Configure an API User

For use in leveraging Ansible's Proxmox community collection

[3] Verify API User Permissions

Ensure file system access for VM creation.

Creating a Template VM

[1] Select an Operating System

Red Hat Enterprise Linux 10.1 has been selected as it has been newly released

[2] Provision the Template VM

Install and provision a default user for the machine

[3] Clean and Shutdown Template VM

Ensure clean and minimal installation for variety of use cases

Configure Ansible Variables

[1] Verify Virtualization Host and Template

Verify the virtualization host and template for deployment

[2] Configure Playbook Variables

Specify number of VMs and associated specs (cores, threads, ram, etc)

[3] Encrypt Passwords

To ensure the security of the passwords across the network

Running the Playbook

[1] Clone the VMs

Ansible will direct the virtualization host to clone the VMs

[2] Modify Ansible Inventory

Inventory file will be dynamically updated with new hosts

[3] Post Configuration for Customization

Ensuring software and services for the desired application

Thank You

Constantine Beniaris
cbeniaris@gmail.com