Ansible in a **Devcontainer**

Entire arista.avd ecosystem in a sealed bottle

Petr Ankudinov Patrick Mathy

2023



\$ whoami

- Petr Ankudinov github.com/ankudinov
 - Advanced Services Engineer at Arista Networks
 - Over 20 years of experience in IT with a bit of everything
 - ACE: L5, CCIE 37521
 - Passionate DC and network automation engineer
 - Daily (and nightly) user of Ansible, VSCode and more
- Patrick Mathy
 - Arista Systems Engineering at Arista Networks
 - Networking around since 2016
 - ACE: L5, CCIE 57751
 - R&S, DC, Python, Ansible, Terraform, DevNet

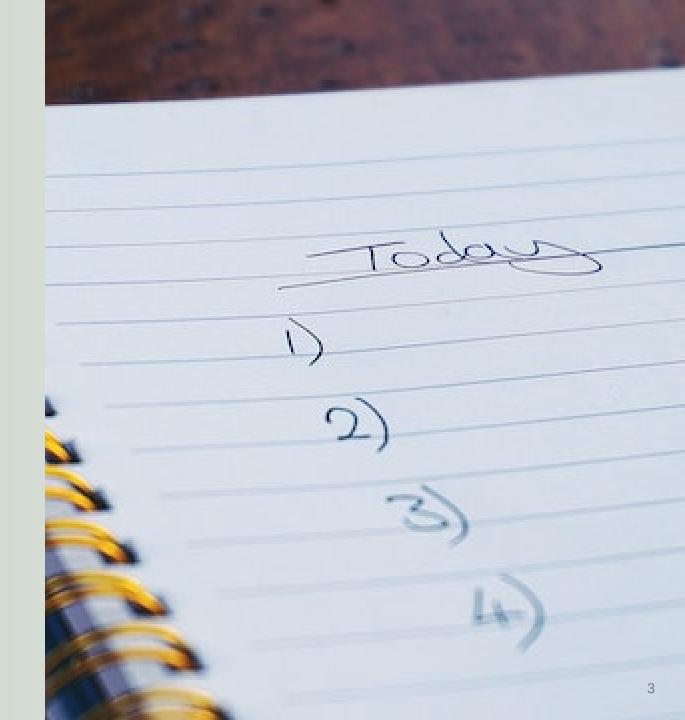






Agenda

- Ansible AVD collection overview
- Common challenges when building Ansible environment for network automation
- Why devcontainers?
- Pre-building a devcontainer with arista.avd, docker-in-docker and Containerlab using Github devcontainers/ci@v0.3 action.
- How to run the container on any machine (with docker run or as devcontainer) or Github Codespaces





Credits and References

This repository is based on many awesome open source repositories and some free/commercial Github features:

- VS Code
- DevContainers
- Marp
- Excalidraw VS Code Plugin
- Github Actions
- Github Pages
- Github Codespaces
- Carbon
- And many more...

All photos are taken from Pexels and Unsplash. Excellent free stock photos resources. It's not possible to reference every author individually, but their work is highly appreciated.



What is Ansible AVD?

- AVD stands for Arista Validated Design
- Documentation is available at avd.arista.com
- Historically it is based on the EVPN Deployment Guide, but now it's much more advanced and developing fast.
- Ansible AVD repository is available here: github.com/aristanetworks/ansible-avd
- The Ansible AVD collection is relying on:
 - EOS foundational modules maintained by RedHat: ansible-galaxy collection install arista.eos
 - Ansible CVP modules to interact with CloudVision Portal when required

