



# Automating Infrastructure

IaC & Ansible

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# Agenda

IaC

Infrastructure as Code

Ansible

Ansible open source automation

YAML & Playbooks

Ansible Playbooks in action



## Infrastructure as Code (IaC)

Process of managing and provisioning computer data centers through machine-readable definition files

Chef

Puppet

Ansible

SaltStack

Terraform

# Infrastructure as Code (IaC)



## Imperative Approach

Tells “How to do”

Step-by-Step

## Declarative Approach

Tells “What to do”

Configuration & State Abstraction

## Further Reads at:

<https://blogs.cisco.com/tag/infrastructure-as-code>



\*Ansible was written by Michael DeHaan and acquired by Red Hat in 2015



## Agent-less

No agent / daemon needed on clients

## Written in Python

Python modules tasks

## YAML Playbooks

Playbooks are written in YAML



```
---
```

```
- name: First Playbook to get stats
  hosts: hosts_linux:children
  tasks:
    - name: get stats
      shell: uname -a > /home/ashok/Desktop/stats.txt
    - name: print user
      shell: whoami >> /home/ashok/Desktop/stats.txt
```

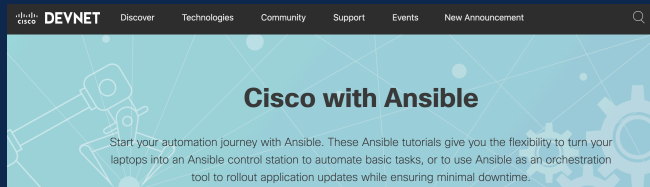
# Important References

Start your automation journey with Ansible

## Cisco with Ansible

These Ansible tutorials give you the flexibility to turn your laptops into an Ansible control station

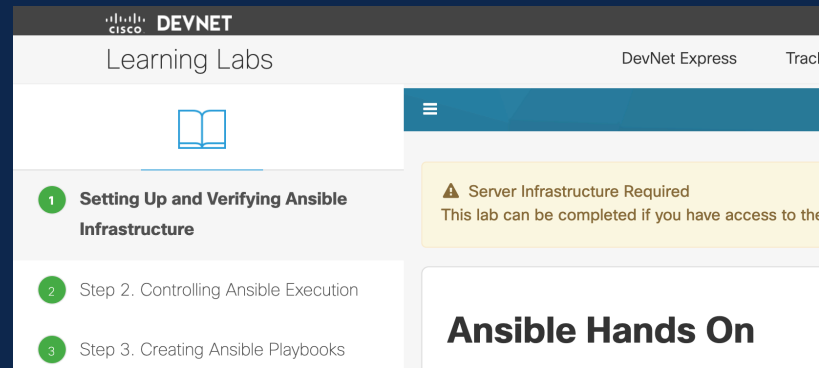
<https://developer.cisco.com/automation-ansible/>



## Getting Hands On with Ansible

In this learning Lab, you will get hands-on experience using Ansible to automate tasks

[https://developer.cisco.com/learning/lab/ansible-03\\_ansible-hands-on/step/1](https://developer.cisco.com/learning/lab/ansible-03_ansible-hands-on/step/1)





# Questions?

Open to floor...



