# Ansible Workbook 3

A diagram of a basic automation lab

AI-generated content may be incorrect.

# Scenario

Your manager has requested that you provide basic IPv4 addressing on all the routers interfaces in preparation for further advanced configurations.

## Task

Create or reuse an Ansible host for with all the routers.  
Write a playbook that will configure the loopback addresses on R1, R2, R3 and R4 with the schema 100.100.100.x/32 where x is the router number.  
Create a playbook to verify your configurations.   
Build an interface YAML file that contains the physical interface IP addresses and loopbacks for the named routers, you can add the edge loopbacks later.  
Create a playbook that will iterate your interface file and apply the IP addresses and bring the interfaces into the up state.  
Verify your configurations.

## Task Solution

**Host File**

[routers]

London ansible\_host=192.168.47.194

Manchester ansible\_host=192.168.47.132

Asia ansible\_host=192.168.47.226

America ansible\_host=192.168.47.217

[routers:vars]

ansible\_user=YouTube

ansible\_ssh\_pass=YouTube1

ansible\_port=22

ansible\_connection=network\_cli

ansible\_network\_os=cisco.ios.ios

[edge]

R1 ansible\_host=192.168.47.21

R2 ansible\_host=192.168.47.22

R3 ansible\_host=192.168.47.23

R4 ansible\_host=192.168.47.24

[edge:vars]

ansible\_user=YouTube

ansible\_ssh\_pass=YouTube1

ansible\_port=22

ansible\_connection=network\_cli

ansible\_network\_os=cisco.ios.ios

**Playbooks edge routers**

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- name: configure loopbacks

hosts: edge

gather\_facts: no

connection: network\_cli

tasks:

- name: add loopback addresses 100.100.100.x/32

cisco.ios.ios\_config:

lines:

- interface loopback 0

- ip address 100.100.100.{{ inventory\_hostname[1:] }} 255.255.255.255

- description edge loopback

- no shutdown

tasks:

- name: remove loopback interfaces

cisco.ios.ios\_config:

lines:

- no interface loopback 0

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- name: show interfaces

hosts: R1,R2,R3,R4

gather\_facts: no

connection: network\_cli

tasks:

- name: confirm interfaces

cisco.ios.ios\_command:

commands:

- show interfaces description

- show ip interface brief | inc up

register: output

- name: display output of commands

debug:

msg: "{{ output.stdout\_lines }}"

**Playbooks edge named routers**  
  
- name: Configure Interfaces and IP Addresses

hosts: Manchester

gather\_facts: no

connection: network\_cli

vars\_files:

- Router\_Interfaces.yml

tasks:

- name: Configure interface descriptions and no shutdown

cisco.ios.ios\_config:

lines:

- interface {{ item.intf }}

- description {{ item.desc }}

- no shutdown

loop: "{{ interfaces[inventory\_hostname] | default([]) }}"

- name: Configure IP addresses

cisco.ios.ios\_config:

lines:

- interface {{ item.intf }}

- ip address {{ item.ip }} {{ item.mask }}

loop: "{{ interfaces[inventory\_hostname] | default([]) }}"

when:

- item.ip is defined

- item.mask is defined