LESSON 8

site.yml

```
{% for host in groups['web'] %}
server {{ host }}
{% endfor %}
```

YAML

Jinja2 Templates

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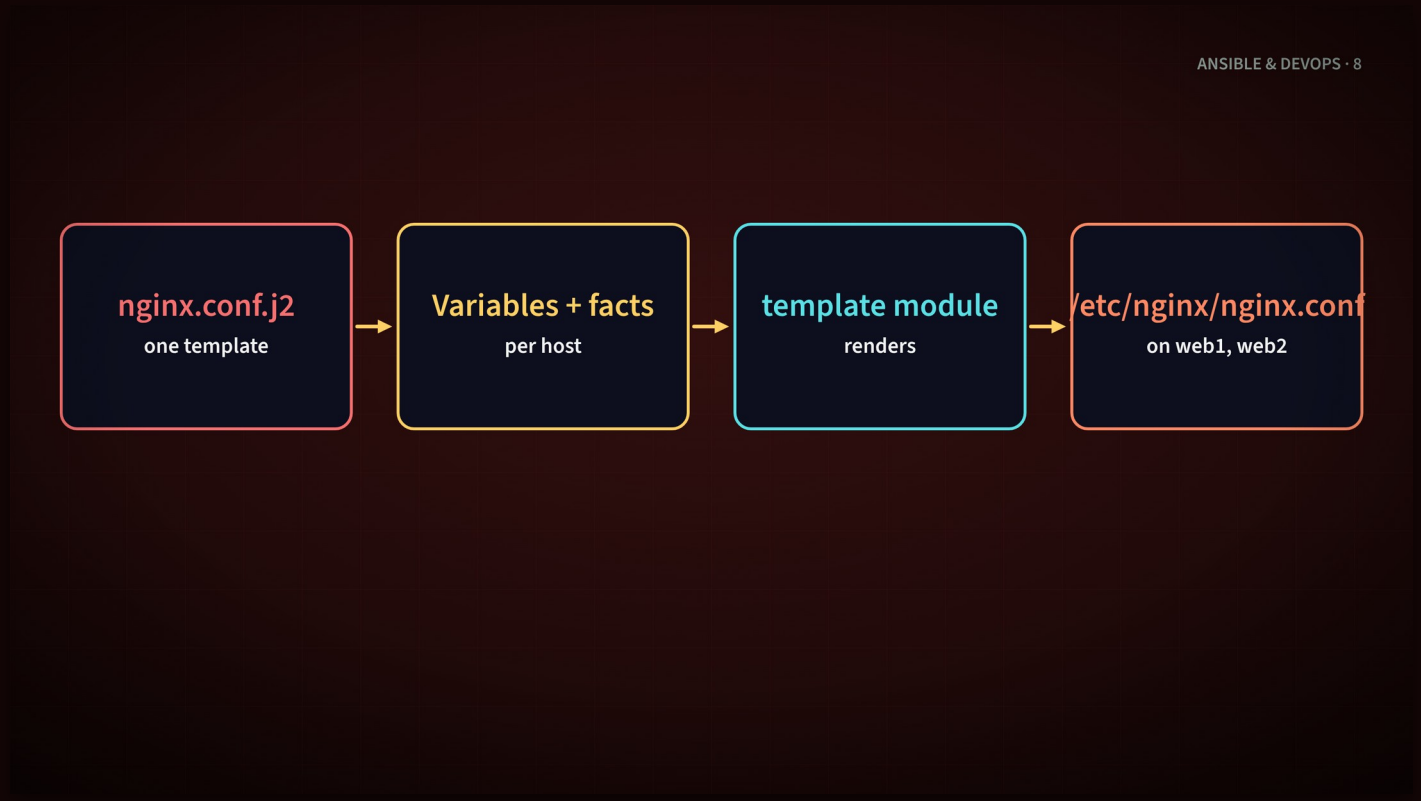
ANSIBLE & DEVOPS

LESSON 8

Jinja2 Templates

The template module, variables, loops and conditions in templates, whitespace and valida

Why Templates?



- nginx.conf.j2 — one template
- Variables + facts — per host
- template module — renders

01

Variables in Templates

templates/site.conf.j2

```
# {{ ansible_managed }}
server {
    listen {{ http_port }};
    server_name {{ inventory_hostname }}.school.edu;
    root /var/www/{{ app_name }};
    worker_connections {{ ansible_processor_vcpus * 1024 }};
}
```

- Inside a template, double curly braces print values, from variables or facts. Add a header …
- The template module copies the rendered result with owner and mode, and reports changed …

02

Loops and Conditions

templates/haproxy.cfg.j2

```
backend web_servers
    balance roundrobin
{% for host in groups['web'] %}
    server {{ host }} {{ hostvars[host]['ansible_default_ipv4']['address'] }}:{{ http_port }} check
{% endfor %}
{% if enable_stats | default(false) %}
listen stats
    bind *:8404
{% endif %}
```

- Statements use curly brace and percent: for loops repeat lines, and if blocks include lines …
- Here one template builds a load balancer list from every host in the web group.

03

The template Task

lb.yml

```yaml
- name: Configure HAProxy
  ansible.builtin.template:
    src: haproxy.cfg.j2
    dest: /etc/haproxy/haproxy.cfg
    owner: root
    mode: "0644"
    validate: haproxy -c -f %s
    backup: true
  notify: Reload haproxy
```

- The task names the source template and destination file. validate tests the new file before …
- backup yes keeps a timestamped copy of the previous file.

04

Whitespace and Testing

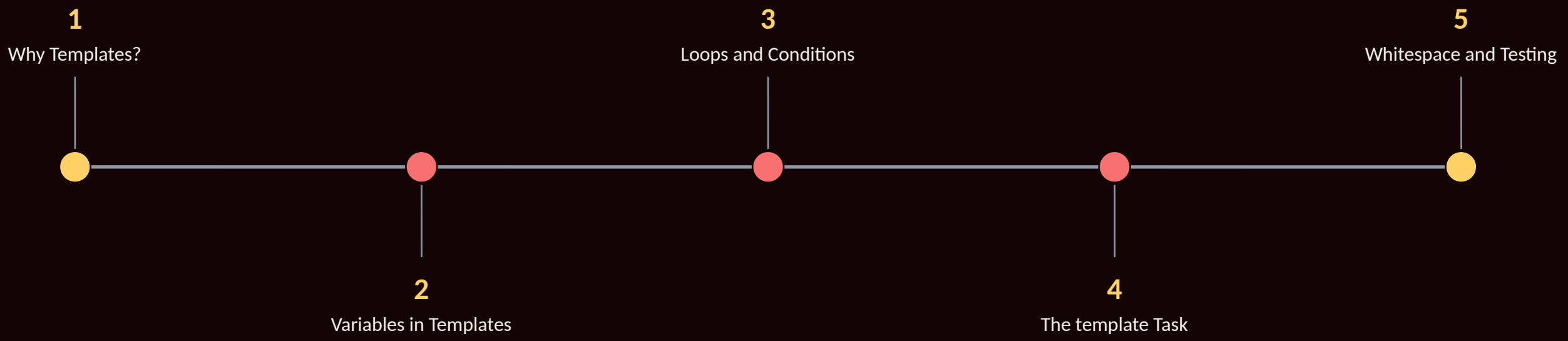
terminal

```
$ ansible-playbook lb.yml --check --diff
--- before: /etc/haproxy/haproxy.cfg
+++ after: haproxy.cfg.j2
@@ -4,3 +4,4 @@
     server web1 192.168.56.11:80 check
+    server web2 192.168.56.12:80 check
```

- Jinja2 statements can leave blank lines. A dash inside the tag, like curly percent dash, …
- Run with check and diff to see exactly how the rendered file will differ before applying it.

05

Lesson Map


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Whitespace and Testing

Sources and Further Reading





Thank you for watching

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