



What is Ansible?

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Freelancer

Ansible – NetApp Automatisierung, 21.08.2025

About me

- René Koch
- Self employed consultant for:
 - Red Hat Ansible (Automation Platform)
 - Red Hat Enterprise Linux
 - Red Hat Satellite
 - Red Hat Identity Management (IPA)



About me

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What is Ansible?



Automation happens when
one person meets a problem
they never want to solve again

Source: https://github.com/ansible/workshops/blob/devel/decks/ansible_rhel.pdf



What is Ansible?

- Automation of provisioning, application deployment and configuration management
- No agent is required on the target machine
- Use of SSH, WinRM and APIs
- Parallel execution of tasks on multiple machines
- Easy (to read) automation language (YAML)



What is Ansible?

Automate the deployment and management of automation

Your entire IT footprint

Do this...

Orchestrate

Manage configurations

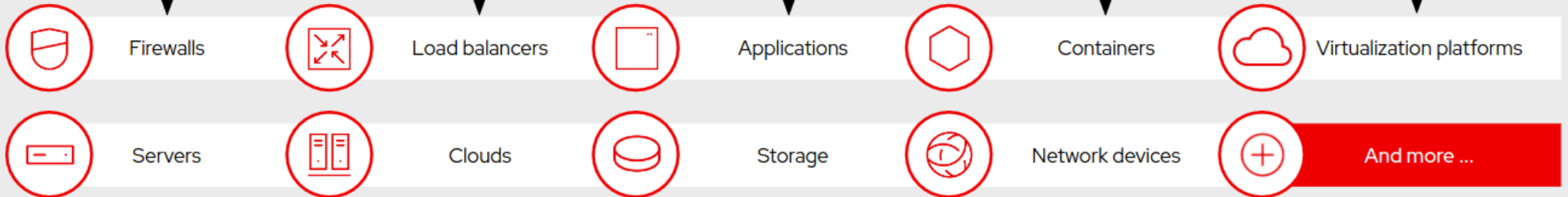
Deploy applications

Provision / deprovision

Deliver continuously

Secure and comply

On these...



Source: https://github.com/ansible/workshops/blob/devel/decks/ansible_rhel.pdf



What is Ansible?

- Competitors:

CFEngine



What is Ansible?

Defining community (or free) Ansible, AWX, and Red Hat Ansible Automation Platform



Community Ansible

Free, unsupported open source command line tool for automation.



AWX

Free, unsupported open source software. A GUI and API tool for wrapping around community Ansible.



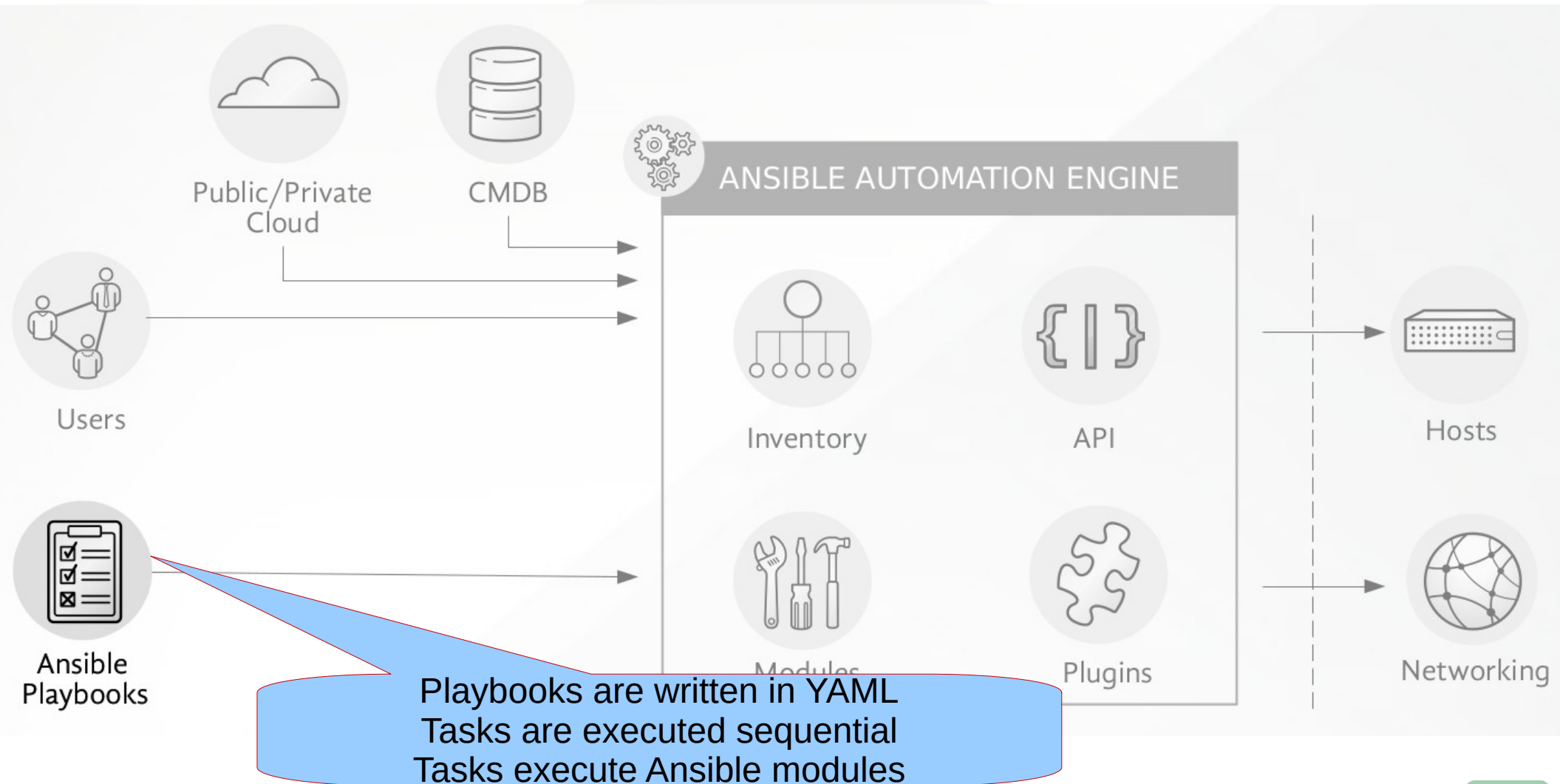
Red Hat Ansible Automation Platform

Subscription enterprise product. Combines 20+ community projects into a fully supported automation platform for your enterprise.

Source: <https://www.redhat.com/en/technologies/management/ansible/compare-awx-vs-ansible-automation-platform?hsLang=en-us>



The Ansible basics



Playbooks

- name: Configure nginx webserver
hosts: webserver
become: true

tasks:
 - name: Install nginx
ansible.builtin.dnf:
 name: nginx
 state: present
 - name: Copy static.html
ansible.builtin.copy:
 src: files/static.html
 dest: /usr/share/nginx/html/static.html



Playbooks

```
$ ansible-playbook web-notls.yml
```

```
PLAY [Configure nginx webserver] *****
```

```
TASK [setup] *****
ok: [web-01]
```

```
TASK [Install nginx] *****
changed: [web-01]
```

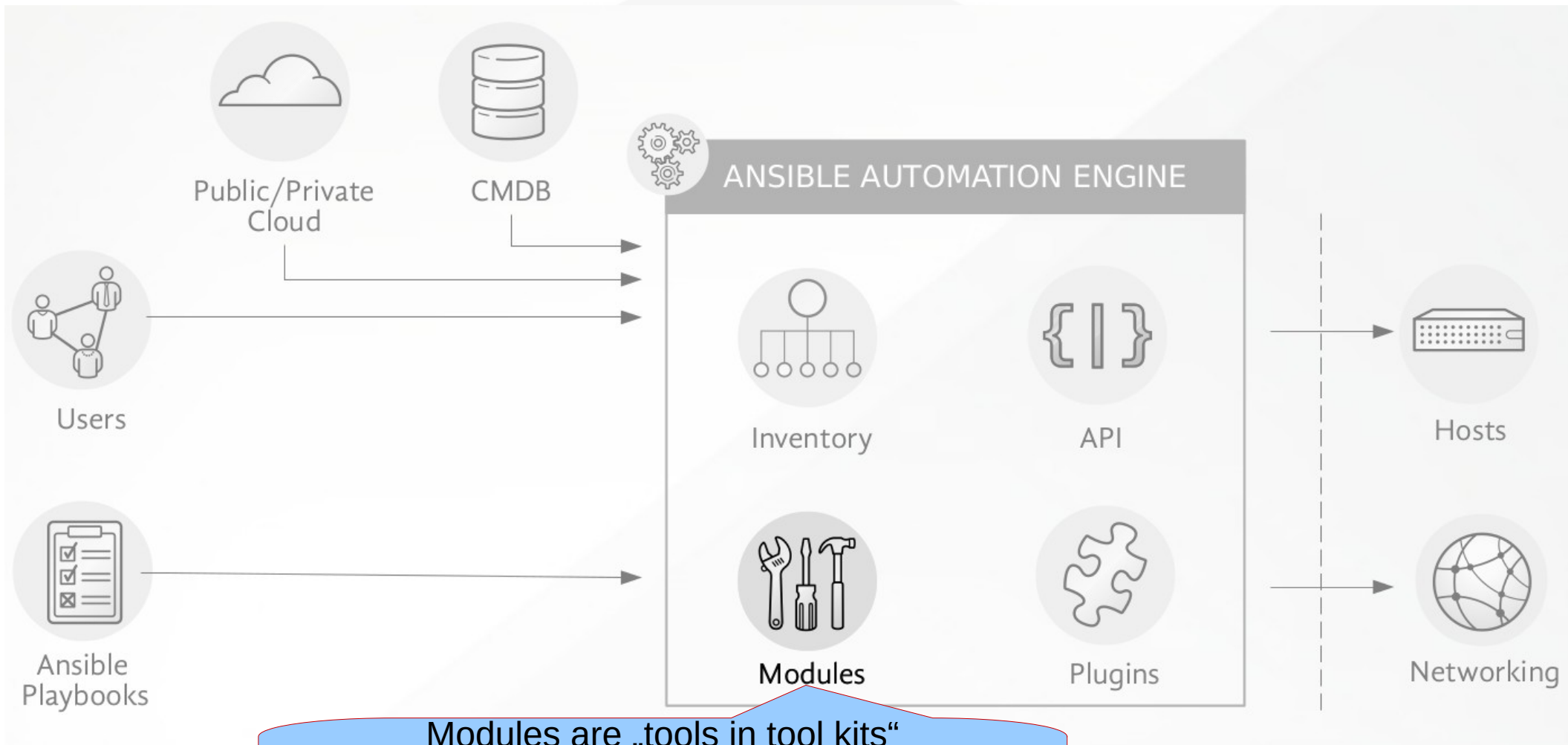
```
TASK [Copy index.html] *****
changed: [web-01]
```

```
TASK [Start and enable nginx] *****
changed: [web-01]
```

```
PLAY RECAP *****
web-01                : ok=4    changed=3    unreachable=0    failed=0
```



The Ansible basics

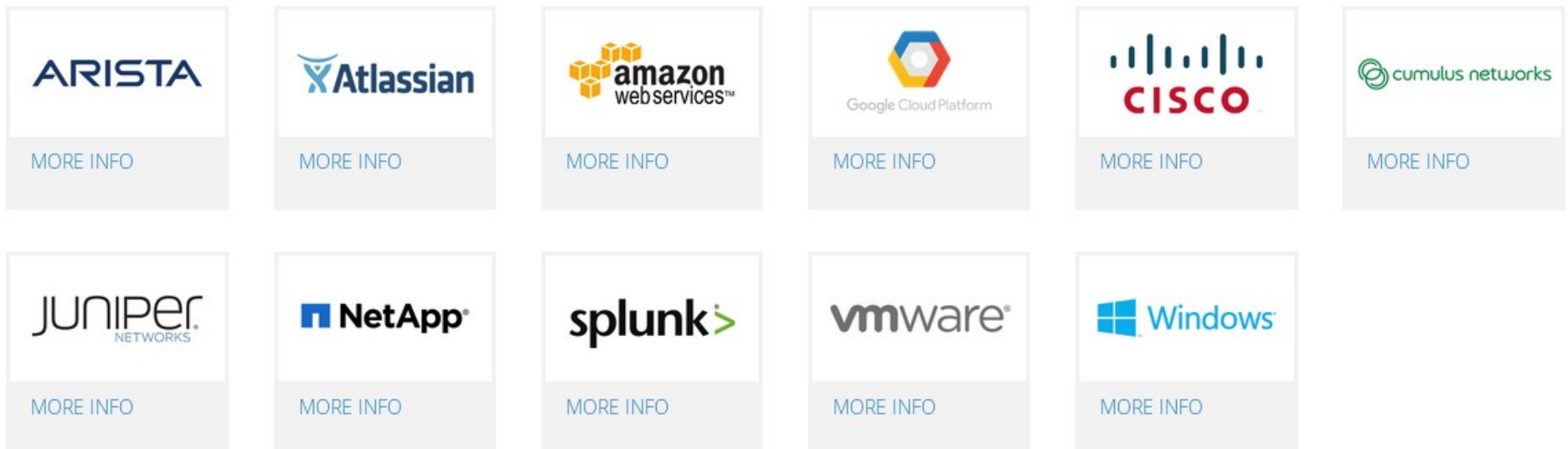


Modules are „tools in tool kits“
Python, Powershell or any other language
Increase easy deployment of Ansible code

Modules

https://docs.ansible.com/ansible/latest/collections/index_module.html

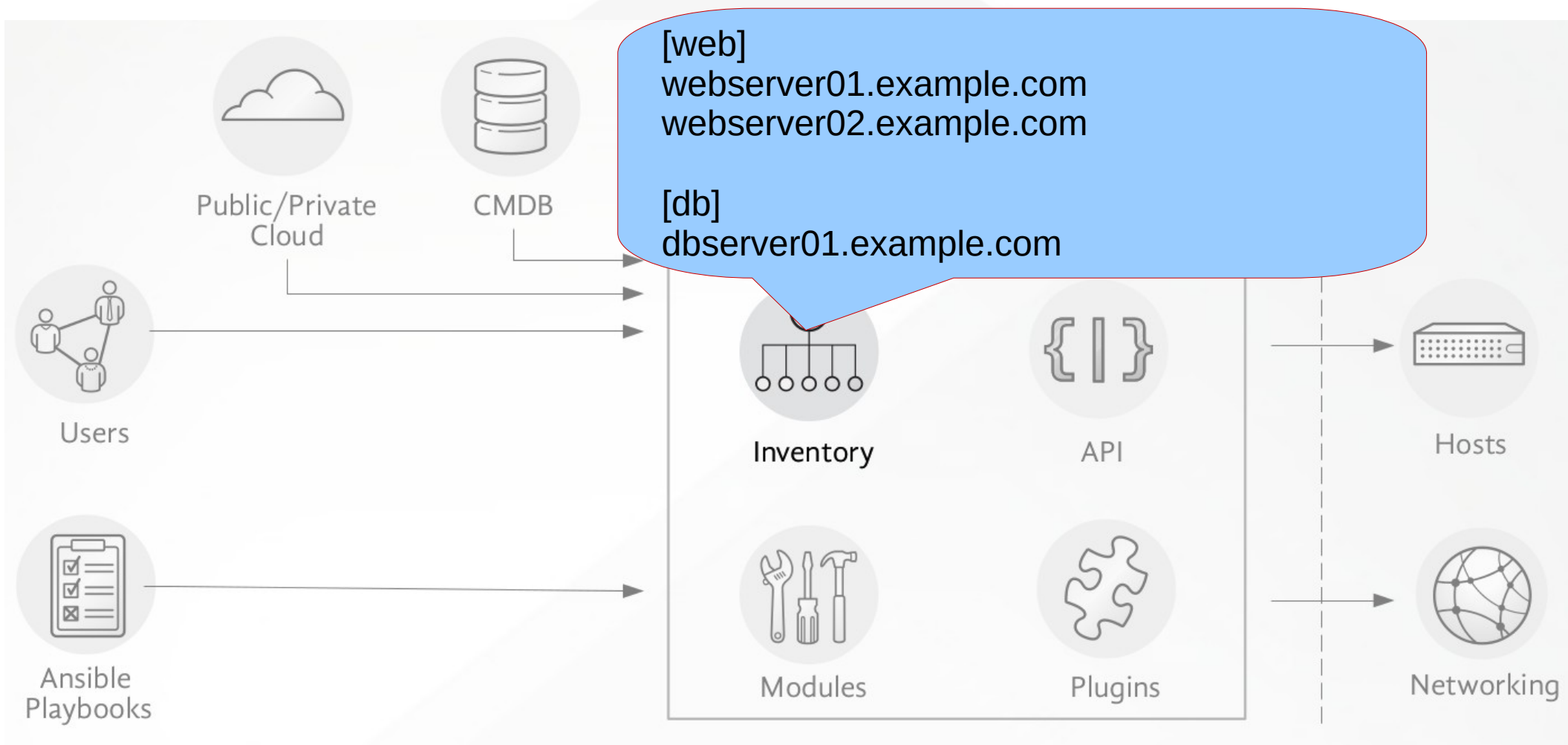
- dnf/apt/zypper/...
- service
- template
- user
- file
- copy



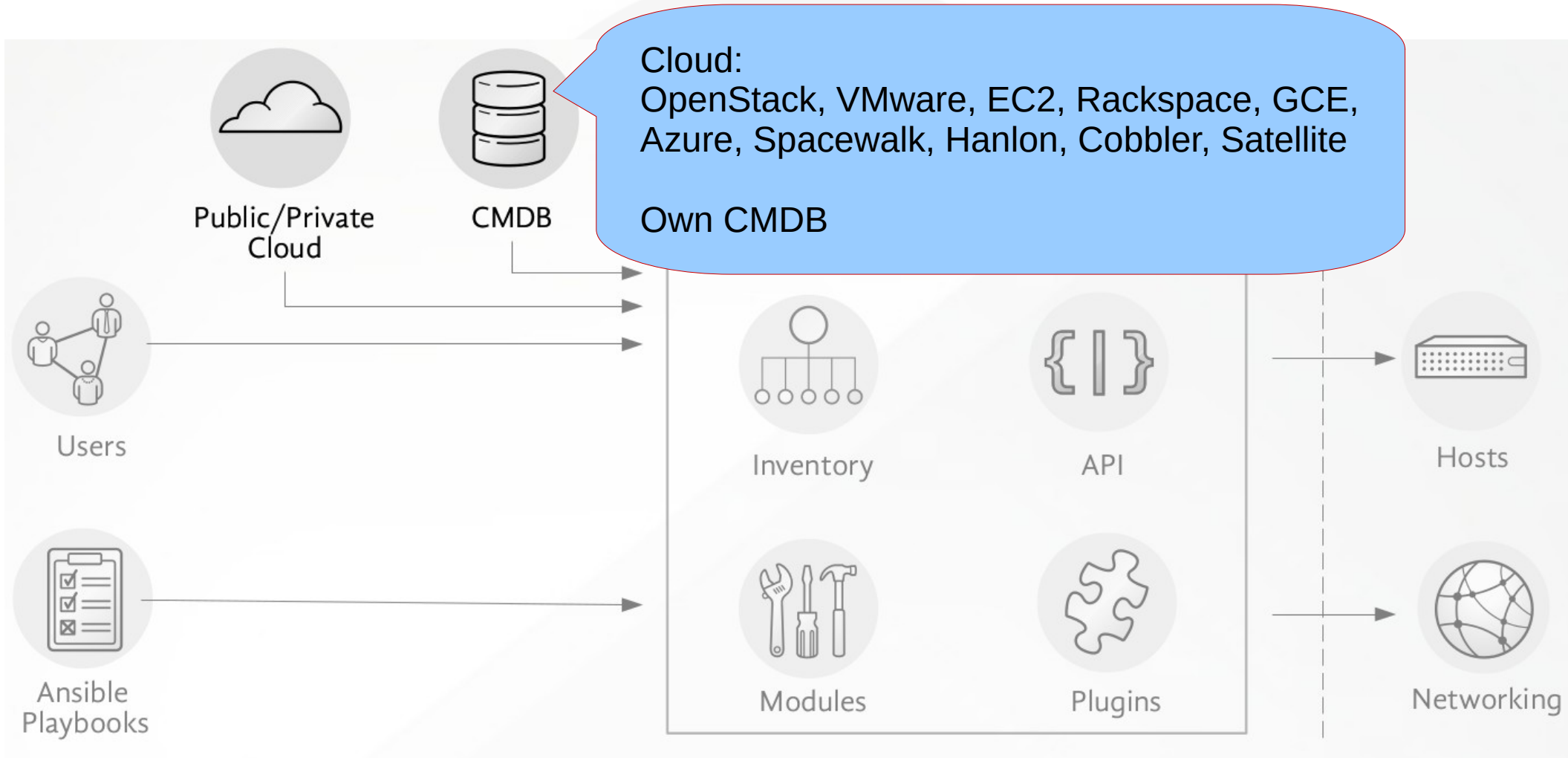
Quelle: <https://www.ansible.com/how-ansible-works>



The Ansible basics

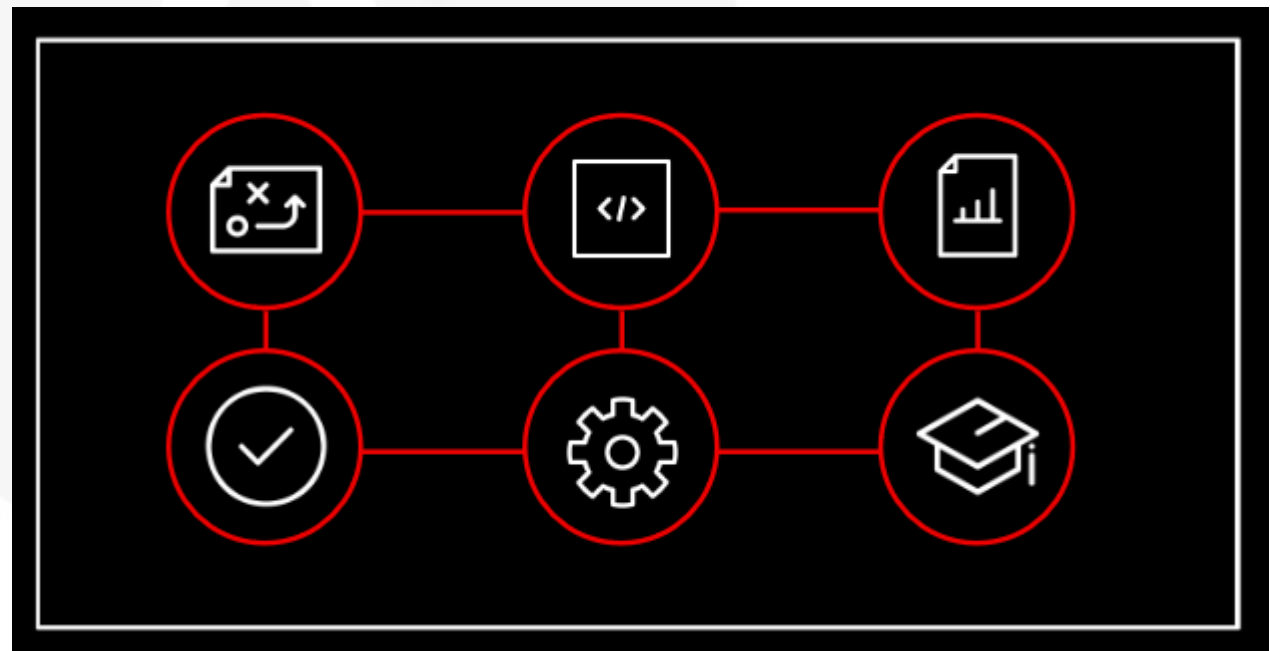


The Ansible basics



Collections

- Simplified and consistent content delivery
- Collections contains:
 - Modules
 - Playbooks
 - Roles
 - Plugins
 - Docs
 - Tests



Source: https://github.com/ansible/workshops/blob/devel/decks/ansible_rhel.pdf



Use Collections in Playbooks

```
- name: Configure nginx webserver
  hosts: webserver
  become: true

  tasks:
    - name: Install nginx
      ansible.builtin.dnf:
        name: nginx
        state: present

    - name: Copy static.html
      ansible.builtin.copy:
        src: files/static.html
        dest: /usr/share/nginx/html/static.html
```



Collections

90+
certified platforms



Infrastructure



Cloud



Network



Security



ARISTA



Check Point
SOFTWARE TECHNOLOGIES LTD



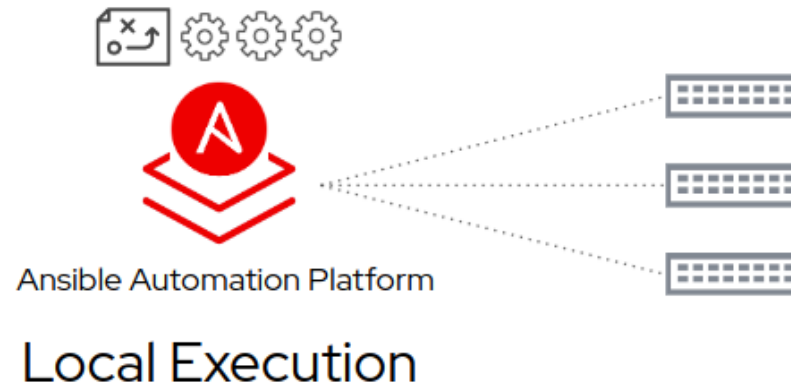
FORTINET

Source: https://github.com/ansible/workshops/blob/devel/decks/ansible_rhel.pdf



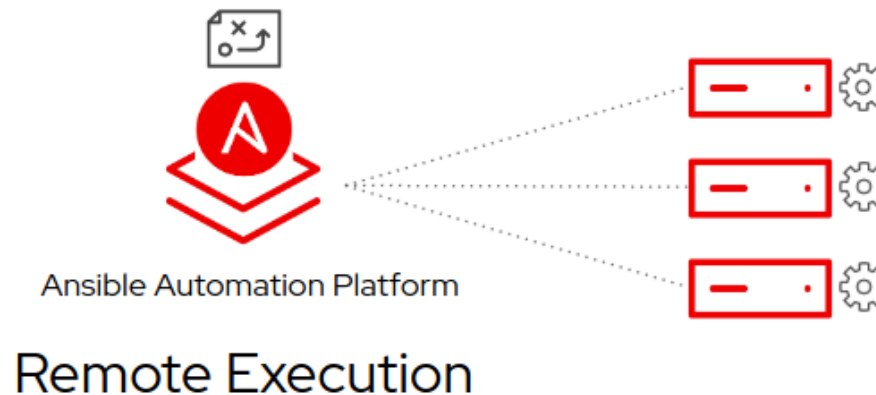
How Ansible Works

Module code is executed locally on the control node



Network Devices /
API Endpoints

Module code is copied to the managed node, executed, then removed



Linux / Windows
Hosts



Summary

- Automation of provisioning, application deployment and configuration management
- No agent is required on the target machine
- Automate Windows, Linux, storage, network, cloud, applications
- Collections created by hardware/software manufacturers
- Community supported Ansible and Red Hat supported Ansible Automation Platform





**Thanks a lot for
your attention**

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