

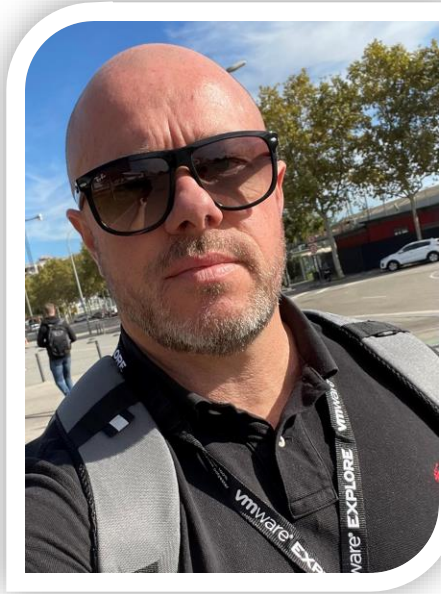


RedHat & VMware

Et automatiseringseventyr

Kenneth Hjelm

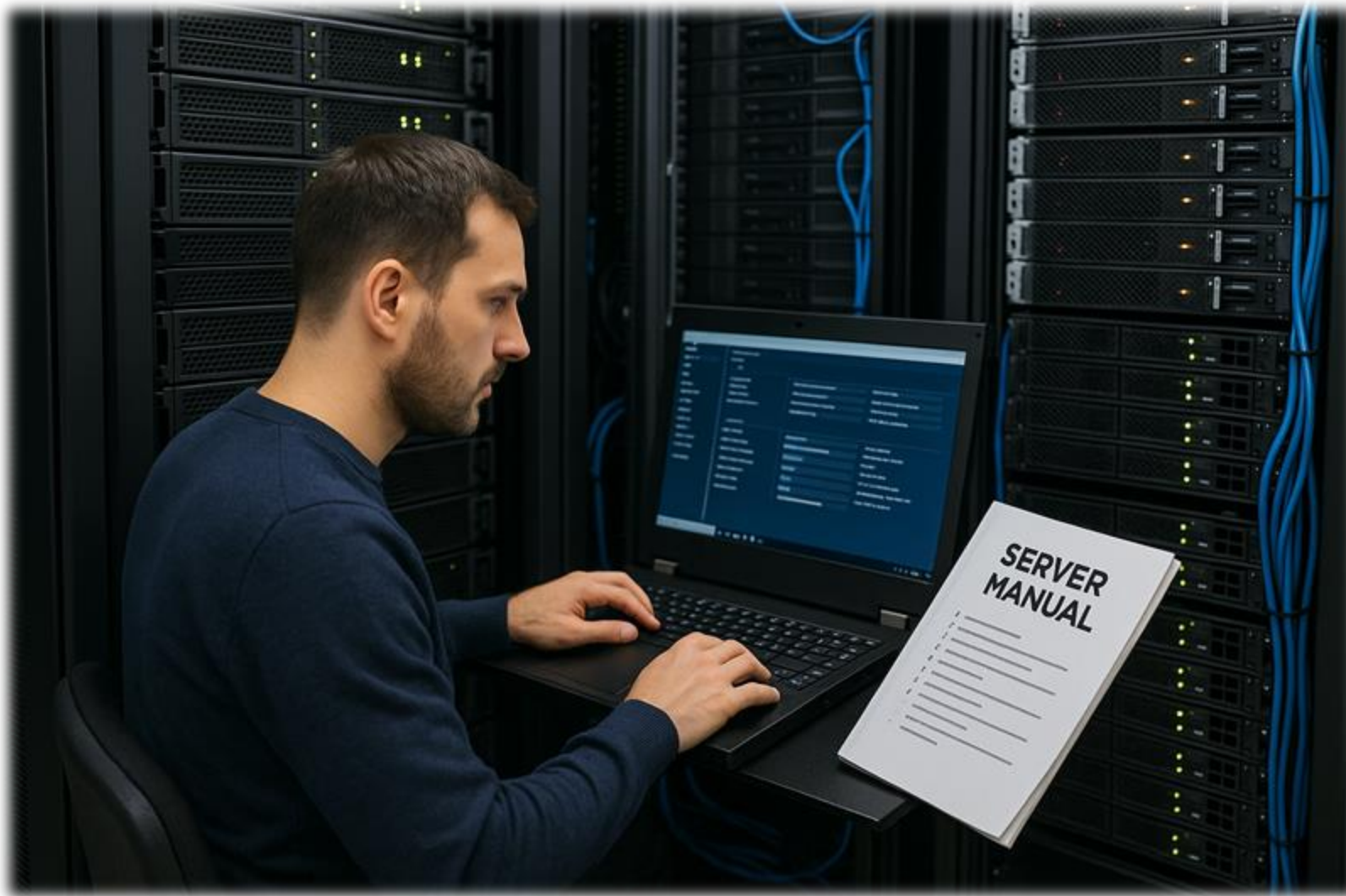
Lead Architect, Datacenter – Atea



Rune Juhl

Open Source Architect - Atea

Der var engang...



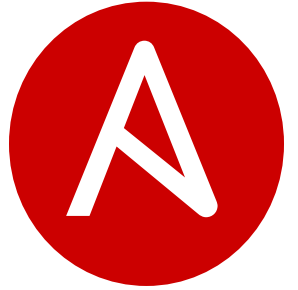
...hvor konfiguration og vedligehold af servere var en kedelig, tidskrævende og manuel opgave



Red Hat Ansible Automation Platform

To the rescue!

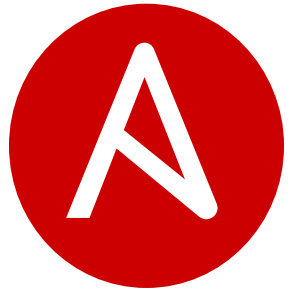
Hvad er Ansible?



- Infrastructure as Code (IaC)
 - Provisioning
 - Configuration management
 - Application deployment
 - Ad-hoc ændringer på flere enheder
- Agent-less
 - Bruger normal SSH eller WinRM
- Virker overalt
 - Servers, switches, APIs
- Helt vildt mange moduler!
 - Red Hat, VMware, Cisco, Fortinet, Juniper...

Hvad er Ansible?

- Skrives i YAML
- Kan udvides moduler i Python
- Fleksibelt
 - Kan integreres med alt!?



Kid #1 tablet

🔗 📊 ⚙️

Name

Kid #1 tablet

Note

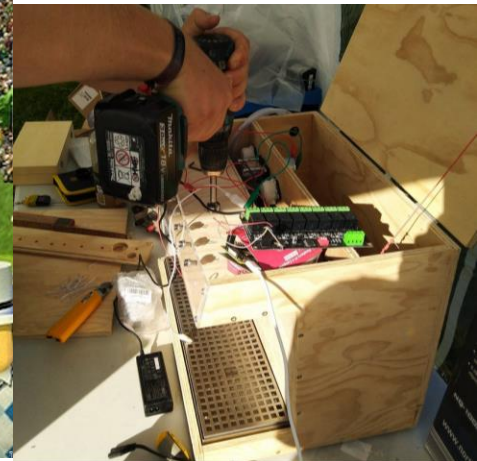
WiFi Speed Limit ⓘ

Tarpit

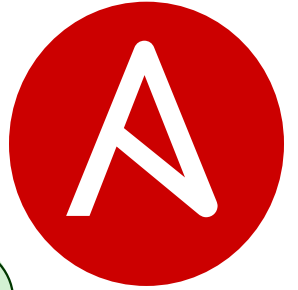
☐ Lock to Access Point ⓘ

Concept

- Pi-Hole has DNS logs
- Roblox talks to domains that match `.*roblox\.com$`
- Logstash can ingest and filter
- Push to MQTT for events
- EDA listens to events, does stuff



Hvad er Ansible?



Collections

Roles

Playbooks

Variables

Plugins

Become

Connection

Filter

Inventory

Vars

Modules

Action plugins

Hvad er Ansible Playbooks?



```
1 ---
2 - name: Update web servers
3   hosts: webserver
4   become: true
5
6   tasks:
7     - name: Ensure apache is at the latest version
8       ansible.builtin.yum:
9         name: httpd
10        state: latest
11     - name: Write the apache config file
12       ansible.builtin.template:
13         src: /srv/httpd.j2
14         dest: /etc/httpd.conf
15         mode: "0644"
16
17 - name: Update db servers
18   hosts: database
19   become: true
20
21   tasks:
22     - name: Ensure postgresql is at the latest version
23       ansible.builtin.yum:
24         name: postgresql
25         state: latest
26     - name: Ensure that postgresql is started
27       ansible.builtin.service:
28         name: postgresql
29         state: started
30
```

kør på webservere

benyt sudo/root

installér nyeste Apache-webserver

lav config-fil fra template

kør på databaseservere

installér nyeste PostgreSQL

start PostgreSQL

Hvad er Ansible Automation Platform?

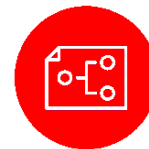


Ansible, plus meget mere:

- RBAC og authentication
 - LDAP, Azure, Keycloak, Github
- Logging og auditing
- Integrationer til inventory
 - Azure, EC2, GCE, VMware
- Event-Driven Ansible
- Execution Environments
- Automation Mesh
 - brug Ansible mod edge devices



Development



Engineering



IT operations



Network operations



Outsourcers



Hvordan afvikles Ansible playbooks?

Python virtualenv

Host limit

Playbook

```
.venv$ ansible-playbook -l tt2025-01.ruju.adc.lan ./playbooks/install-webserver.yaml
```

```
PLAY [all] *****

TASK [Gathering Facts] *****
ok: [tt2025-01.ruju.adc.lan]

TASK [webserver : Install nginx webserver] *****
changed: [tt2025-01.ruju.adc.lan]

TASK [webserver : Copy Atea Tech Tour image] *****
changed: [tt2025-01.ruju.adc.lan]

TASK [webserver : Create index file from Jinja2 template] *****
changed: [tt2025-01.ruju.adc.lan]

PLAY RECAP *****
tt2025-01.ruju.adc.lan      : ok=4    changed=3    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

Hvordan afvikles Ansible playbooks i AAP?

**Red Hat**
Ansible Automation Platform

 admin

Templates > Webserver > Details

Webserver

Launch template

Edit template

Back to Templates

Details

Team Access

User Access

Schedules

Jobs

Survey

Notifications

Name
Webserver

Description
Installerer webserver med statisk website

Job type ⓘ
run

Organization
Default

Inventory ⓘ
VMware

Project ⓘ
grimm-ansible

Execution environment ⓘ
ee-ess-rocky10

Playbook ⓘ
playbooks/install-webserver.yaml

Credentials
SSH: Ansible user

Forks ⓘ
0

Verbosity ⓘ
0 (Normal)

Timeout ⓘ
0

Show changes ⓘ
Off

Job slicing ⓘ
1

Created
21/08/2025, 10.03.26 by admin

Last modified
28/09/2025, 00.12.07 by admin

Hvordan afvikles Ansible playbooks i AAP?

[Jobs](#) > [Webserver](#) > [Output](#)

Webserver

[Relaunch job](#)[Cancel job](#)[Back to Jobs](#)[Output](#)[Details](#)

Webserver Success

Plays **1**

Tasks **4**

Hosts **1**

Elapsed **00:00:17**

■ Changed 100%

Search

Enter search



```
0 Identity added: /runner/artifacts/278/ssh_key_data (Ansible user)
1
2 PLAY [[ 'TechTourDemo_423fd741-a549-b320-2434-6d1e9666200e' ]] ***** 00.26.01
3 [WARNING]: Found variable using reserved name 'name'.
4 Origin: <unknown>
5
6 name
7
8
9 TASK [Gathering Facts] ***** 00.26.01
10 ok: [TechTourDemo_423fd741-a549-b320-2434-6d1e9666200e]
11
12 TASK [webserver : Install nginx webserver] ***** 00.26.02
13 changed: [TechTourDemo_423fd741-a549-b320-2434-6d1e9666200e]
14
15 TASK [webserver : Copy template with index file Apache] ***** 00.26.05
16 changed: [TechTourDemo_423fd741-a549-b320-2434-6d1e9666200e]
17
18 TASK [webserver : Copy Atea Tech Tour image] ***** 00.26.06
19 changed: [TechTourDemo_423fd741-a549-b320-2434-6d1e9666200e]
20
```

Hvordan afvikles Ansible playbooks i AAP via API?

```
1 #!/usr/bin/env bash
2
3 set -euo pipefail
4
5 template_id="${1}"
6 curl -XPOST \
7     -k \
8     --socks5-hostname localhost:8879 \
9     -H 'Accepts: application/json' \
10    -H 'Authorization: Bearer 9xqb2mRkTf0imqYKZ7k5A2ldZdYfXD' \
11    "https://aap01.ruju.adc.lan/api/controller/v2/job_templates/${template_id}/launch/"
```

Hvordan afvikles Ansible playbooks?

AWX rolle som API endpoint

Hvordan afvikles Ansible playbooks?

AWX REST API – eksempler

ServiceNOW / Jira / PostMan / Andet invoke med API request

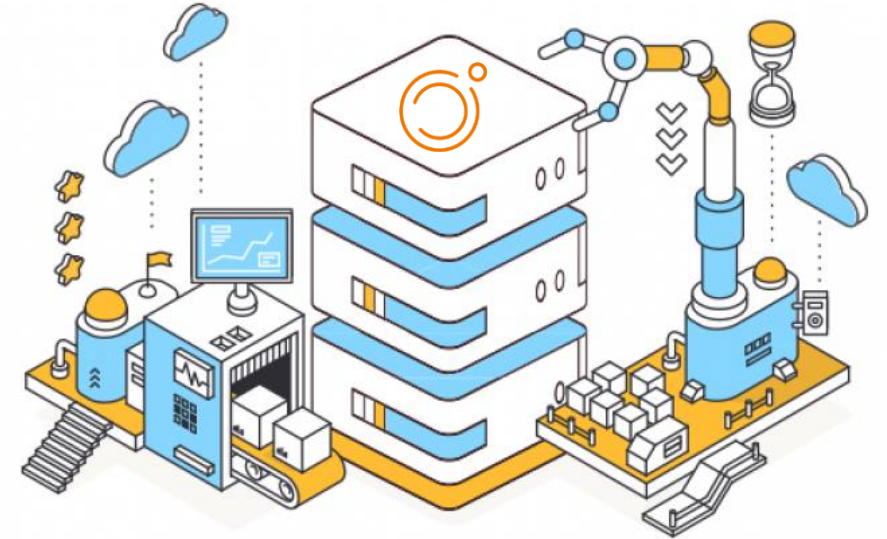
Hvordan integrerer VMware med Ansible?



VMware Aria Automation Orchestrator™ er VMwares workflow automation løsning,
designet til at integrere med eksterne endpoints

Hvad er Aria Automation Orchestrator?

- Inkluderet i alle vSphere licenser fremover
- Appliance installeret i vCenter
- Findes i 2 varianter:
 - Integreret i Aria Automation
 - Stand-Alone
- vCenter UI integration
- Kan integrere med alt der har et RestAPI
- Dynamisk bruger interface (Orchestrator Actions)
- Mere end 500 standard workflows
- Workflows bygget i Javascript (PowerShell Core og Node.js i VCF)
- Bred vifte af integrationer:



Hvad er Aria Automation Orchestrator?

vmware VMware Aria Automation Orchestrator

Cloud Init demo ☆ RUN DEBUG SCHEDULE VALIDATE ALL RUNS DELETE FIND USAGES FIND DEPENDENCIES

Summary Variables **Inputs/Outputs** Schema Input Form Version History Audit

Generic

- Scriptable task
- Decision
- Decision activity
- User interaction
- Waiting timer
- Waiting event
- End workflow
- Throw exception
- Workflow note
- Action element
- Workflow element
- Foreach element
- Asynchronous element
- Schedule workflow
- Nested workflows
- Default error handler
- Switch

Basic

Log

Network

create init-metadata

create-userdata

Create deployment specification

Deploy VM from template

getVmByName

getVmInfo

Check VM status

is VM ready for customization?

Generate request URL

Create Cloud Init configuration

Apply guest customization

Wait 5 sec for customization

Sleep 30 seconds

Power on VM

Cloud Init demo ☆ RUN DEBUG SCHEDULE VALIDATE ALL RUNS

Summary Variables **Inputs/Outputs** Schema Input Form Version History Audit

View, edit, and create inputs and outputs for your workflow. ⓘ

NEW DELETE COPY MOVE TO PASTE AS

☐	Name	Type	Direction
☐	ip	string	Input
☐	cidr	string	Input
☐	gateway	string	Input
☐	hostname	string	Input
☐	servertype	string	Input

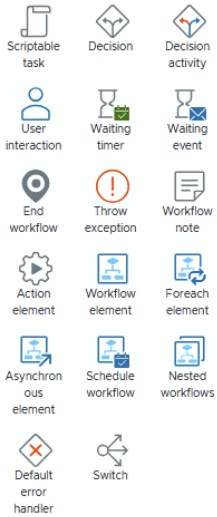
Hvad er Aria Automation Orchestrator?

vmw VMware Aria Automation Orchestrator

Cloud Init demo ☆ RUN DEBUG SCHEDULE VALIDATE ALL RUNS DELETE FIND USAGES FIND DEPENDENCIES

Summary Variables Inputs/Outputs Schema Input Form Version History Audit

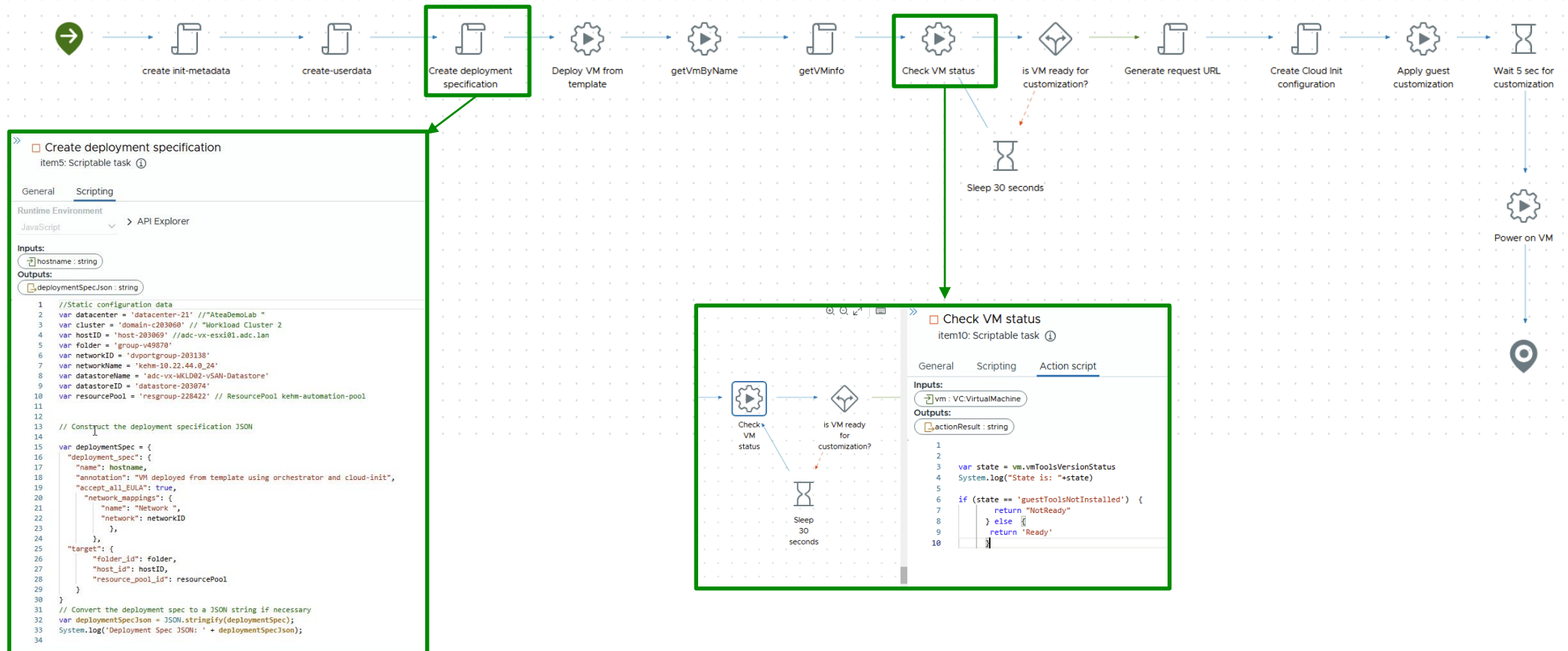
Generic



> Basic

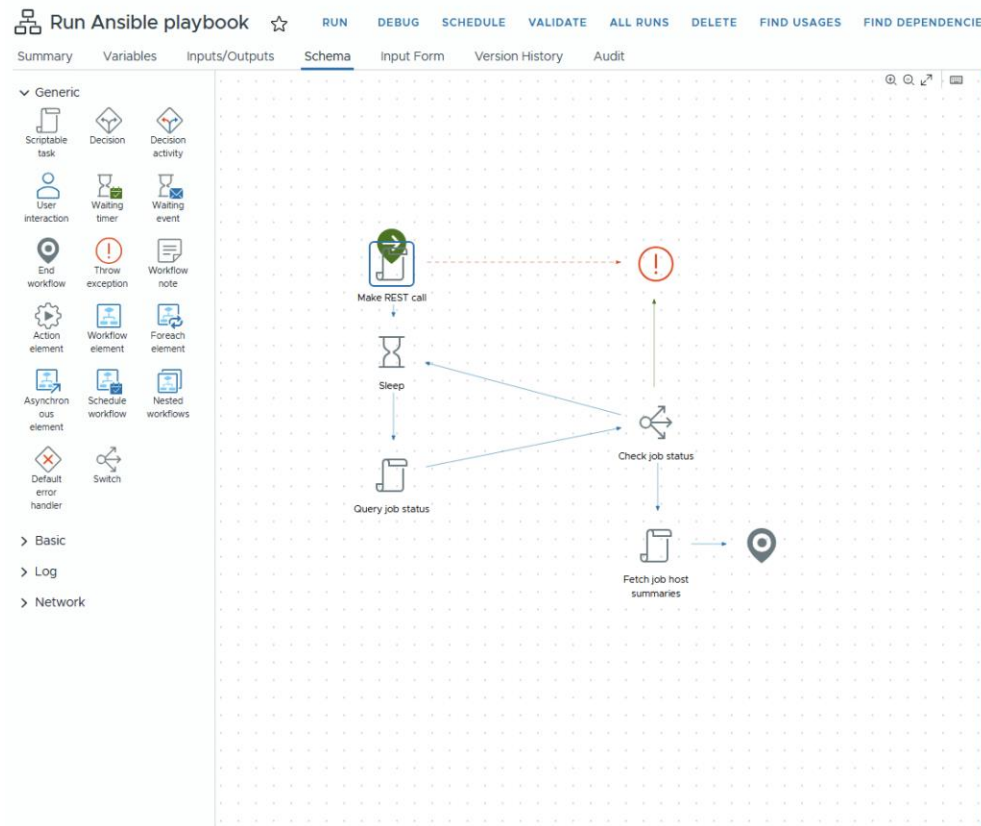
> Log

> Network



Hvordan integrererer Ansible med VMware?

Aria Automation Orchestrator - REST API imod AWX Endpoint



The screenshot shows the 'Run Ansible playbook' form in the VMware Aria Automation Orchestrator. The form includes the following fields and options:

- BACK** button
- Run Ansible playbook** title
- Run Ansible playbook against one or more VMs.** description
- vm** field: A dropdown menu with 'TechTourDemo' selected and highlighted by a green box.
- Template** field: A dropdown menu with 'Webserver' selected and highlighted by a green box.
- templateId** field: A text input field containing the value '9'.
- extraVars** field: A text input field.
- POST** button: A green button with the text 'POST https://ansible-host.adc.lan/api/controller/v2/job_template/9/launch' and a green arrow pointing to the 'templateId' field.
- RUN** and **CANCEL** buttons at the bottom.



Hvordan integrererer Ansible med VMware?

Aria Automation Orchestrator - REST API imod AWX Endpoint

Jobs ⓘ
A job is an instance of automation controller launching an Ansible playbook against an inventory of hosts.

Domains ⓘ Network Backup Security 🔧

□ ▾ 🔍 Search ▾ Enter search ⓘ

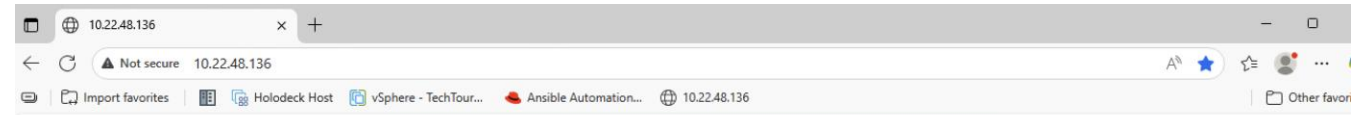
ID ⓘ	Name ⓘ	Status ⓘ	Type ⓘ	Labels
> □ 248	Webserver	Running	Playbook run	

Jobs ⓘ
A job is an instance of automation controller launching an Ansible playbook against an inventory of hosts.

Domains ⓘ Network Backup Security 🔧

□ ▾ 🔍 Search ▾ Enter search ⓘ

ID ⓘ	Name ⓘ	Status ⓘ	Type ⓘ	Labels	Duration
> □ 248	Webserver	Success	Playbook run		29s



Welcome to Atea Tech Tour 2025

This server is running on debian12, a Debian 12.11 server.

Server details found with Ansible facts:

- Facts collected: 27/09/2025 - 12:40:44
- Platform: VMware Virtual Platform
- CPU type: Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz
- Architecture: x86_64
- CPUs: 2
- Memory MB: 7906
- Default IPv4 address: 10.22.48.136
- Default Gateway: 10.22.48.1
- MAC Address: 00:50:56:bfe7:51



Eksempel på integration med Ansible i VMware

Import favorites

Holodeck Host

vSphere - TechTour...

Ansible Automation...

10.22.48.136

There are expired or expiring licenses in your inventory. [MANAGE YOUR LICENSES](#)

vSphere Client

techtour

adminkehrm@adc.lan

explore-init

explore-pacman

explore-vm-demo

k8s-master

k8s-node01

k8s-node02

kehrm-2016-template

KEHM-InfoBlox 8.5.2

kehrm-photon-test

kehrm-sse-2016

kehrm-test-phot

kehrm-test-vm

KEHM-UBUNTU-20.02

KEHM-viDM

KEHM-vLCM

KEHM-vRA

KEHM-WWIOJumphost

owui-test

pacman-demo

phot-test-kehrm2

photon-2

tanzu-haproxy

Tanzu-VM_replica

TanzuVM_replica

TechTourDemo

test-k8s-mstr

test-pacman

TKG-Bootstrap

TKG-VM

ubuntu-init-test

VMUG-DOCKER

VMUG-NGINX

VMUG-PACMAN

kehrm-photon-ova

KEHM-UbuntuTemplate

KEHM-UbuntuTemplate_2

KEHM-UbuntuTemplate_Ny

TechTourDemo

Summary

Monitor

Configure

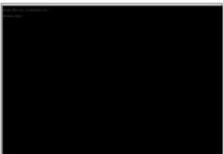
Permissions

Datastores

Networks

Snapshots

Guest OS



LAUNCH REMOTE CONSOLE

LAUNCH WEB CONSOLE

Virtual Machine Details

Power Status

Powered On

Guest OS

Debian GNU/Linux 12 (64-bit)

VMware Tools

Running, version:12352 (Guest Managed)

DNS Name (1)

debian12

IP Addresses (2)

10.22.48.136
fe80::250:56ff:feb7:e751

Encryption

Not encrypted

Usage

Last updated: 9/27/25, 12:46 PM

CPU

23 MHz used

Memory

81 MB used

Storage

15.7 GB used

VM Hardware

CPU

2 CPU(s), 23 MHz used

Memory

8 GB, 0 GB memory active

Hard disk 1

30 GB | Thin Provision
adc-vx-WKLD02-vSAN-Datastore

Network adapter 1

ruju-10.22.48.0_24 (connected) | 00:50:56:bf:e7:51

Compatibility

ESXi 7.0 U2 and later (VM version 19)

PCI Devices

No PCI devices

Related Objects

Cluster

WorkLoad Domain 2

Host

adc-vx-esxi02.adc.lan

Networks

ruju-10.22.48.0_24

Storage

adc-vx-WKLD02-vSAN-Datastore

Tags

No tags assigned

Notes

No notes assigned

Storage Policies

VM Storage Policies

vSAN RAID 5 Storage Policy

VM Storage Policy Compliance

Compliant

Last Checked Date

9/27/2025, 12:46:40 PM

VM Replication Groups

Custom Attributes

CitrixProvisioningSch

emeld

Last Power Off

Last Power On

Last Reconfigured

Last Shutdown

MacAddress

NB_LAST_BACKUP

VDI Machine User

VRM Owner

Snapshots

1

Count

4.38 GB

Disk used

Latest snapshot

CleanVM

4.38 GB

9/27/25, 10:39 AM

Compute Policies

vSphere HA

vSphere HA Protection

Protected

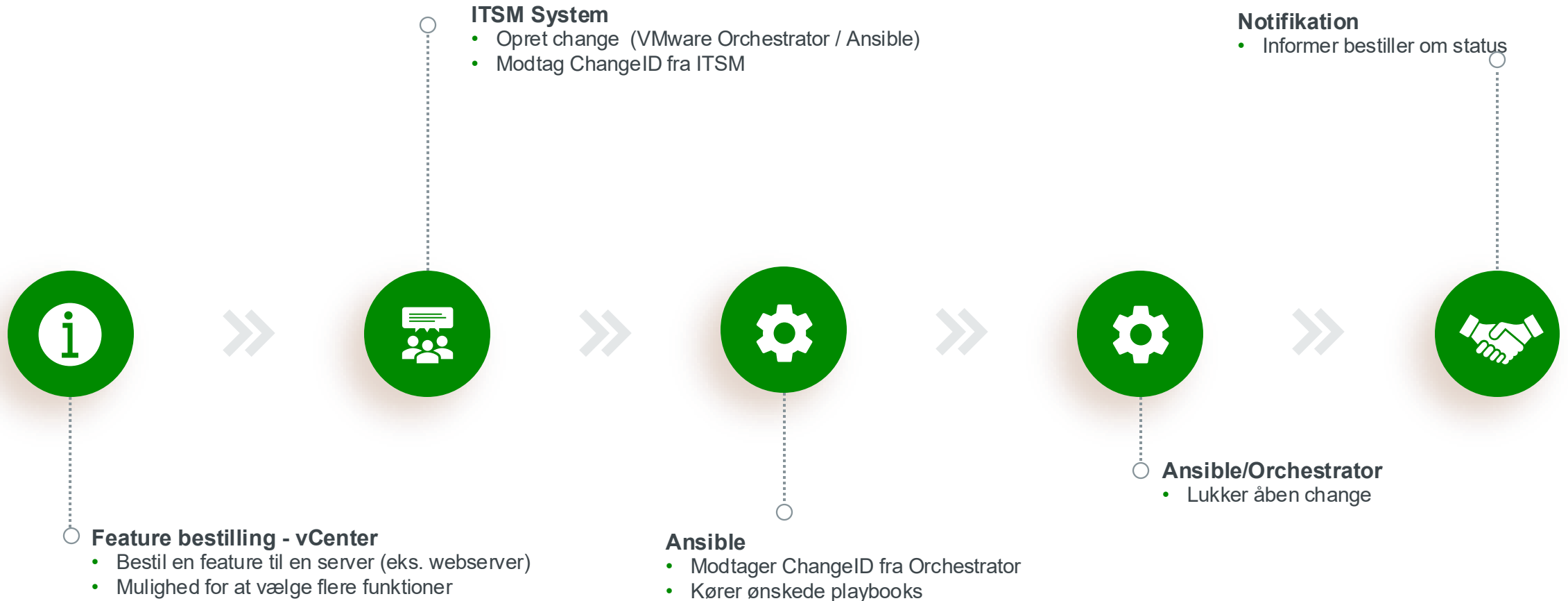
Recent Tasks

Alarms

Activate Windows

Go to Settings to activate Windows.

Eksempel på integration med Ansible i VMware





Plugins

Ansible plugins til VMware

Ansible Community Documentation

Collections in the ServiceNow Namespace

Collections in the Splunk Namespace

Collections in the T_systems_mms Namespace

Collections in the Telekom_mms Namespace

Collections in the Theforeman Namespace

Collections in the Vmware Namespace

Collections in the Vultr Namespace

Collections in the Vyos Namespace

Collections in the Wti Namespace

Indexes of all modules and plugins

Playbook Keywords

Return Values

Ansible Configuration Settings

Controlling how Ansible behaves: precedence rules

YAML Syntax

Python 3 Support

Interpreter Discovery

Releases and maintenance

Testing Strategies

Sanity Tests

Frequently Asked Questions

Glossary

Ansible Reference: Module Utilities

Special Variables

Red Hat Ansible Automation Platform

Ansible Automation Hub

Logging Ansible output

ROADMAPS

Ansible Roadmap

ansible-core Roadmaps

 Red Hat
Ansible Automation
Platform

Extend the power

- `vmware_dvs_host` module – Add or remove a host from distributed virtual switch
- `vmware_dvs_portgroup` module – Create or remove a Distributed vSwitch portgroup.
- `vmware_dvs_portgroup_find` module – Find portgroup(s) in a VMware environment
- `vmware_dvs_portgroup_info` module – Gathers info DVS portgroup configurations
- `vmware_dvswitch` module – Create or remove a Distributed Switch
- `vmware_dvswitch_info` module – Gathers info dvswitch configurations
- `vmware_dvswitch_lacp` module – Manage LACP configuration on a Distributed Switch
- `vmware_dvswitch_nioc` module – Manage distributed switch Network IO Control
- `vmware_dvswitch_pvlans` module – Manage Private VLAN configuration of a Distributed Switch
- `vmware_dvswitch_uplink_pg` module – Manage uplink portgroup configuration of a Distributed Switch
- `vmware_evc_mode` module – Enable/Disable EVC mode on vCenter
- `vmware_export_ovf` module – Exports a VMware virtual machine to an OVF file, device files and a manifest file
- `vmware_first_class_disk` module – Manage VMware vSphere First Class Disks
- `vmware_first_class_disk_info` module – Gather info about VMware vSphere First Class Disks
- `vmware_folder_info` module – Provides information about folders in a datacenter
- `vmware_guest` module – Manages virtual machines in vCenter
- `vmware_guest_boot_info` module – Gather info about boot options for the given virtual machine
- `vmware_guest_boot_manager` module – Manage boot options for the given virtual machine
- `vmware_guest_controller` module – Manage disk or USB controllers related to virtual machine in given vCenter infrastructure
- `vmware_guest_cross_vc_clone` module – Cross-vCenter VM/template clone
- `vmware_guest_custom_attribute_defs` module – Manage custom attributes definitions for virtual machine from VMware
- `vmware_guest_custom_attributes` module – Manage custom attributes from VMware for the given virtual machine
- `vmware_guest_customization_info` module – Gather info about VM customization specifications
- `vmware_guest_disk` module – Manage disks related to virtual machine in given vCenter infrastructure
- `vmware_guest_disk_info` module – Gather info about disks of given virtual machine
- `vmware_guest_file_operation` module – Files operation in a VMware guest operating system without network
- `vmware_guest_find` module – Find the folder path(s) for a virtual machine by name or UUID
- `vmware_guest_info` module – Gather info about a single VM
- `vmware_guest_instant_clone` module – Instant Clone VM
- `vmware_guest_move` module – Moves virtual machines in vCenter
- `vmware_guest_network` module – Manage network adapters of specified virtual machine in given vCenter infrastructure
- `vmware_guest_powerstate` module – Manages power states of virtual machines in vCenter **DEPRECATED**
- `vmware_guest_register_operation` module – VM inventory registration operation
- `vmware_guest_screenshot` module – Create a screenshot of the Virtual Machine console.
- `vmware_guest_sendkey` module – Send USB HID codes to the Virtual Machine's keyboard.
- `vmware_guest_serial_port` module – Manage serial ports on an existing VM
- `vmware_guest_snapshot` module – Manages virtual machines snapshots in vCenter
- `vmware_guest_snapshot_info` module – Gather info about virtual machine's snapshots in vCenter
- `vmware_guest_storage_policy` module – Set VM Home and disk(s) storage policy profiles.
- `vmware_guest_tools_info` module – Gather info about VMware tools installed in VM
- `vmware_guest_tools_upgrade` module – Module to upgrade VMTools
- `vmware_guest_tools_wait` module – Wait for VMware tools to become available
- `vmware_guest_tpm` module – Add or remove vTPM device for specified VM.
- `vmware_guest_vgpu` module – Modify vGPU video card profile of the specified virtual machine in the given vCenter infrastructure
- `vmware_guest_vgpu_info` module – Gather information about vGPU profiles of the specified virtual machine in the given vCenter infrastructure
- `vmware_guest_video` module – Modify video card configurations of specified virtual machine in given vCenter infrastructure
- `vmware_host` module – Add, remove, or move an ESXi host to, from, or within vCenter **DEPRECATED**
- `vmware_host_acceptance` module – Manage the host acceptance level of an ESXi host





Ansible plugins til VMware

Examples

```
- name: change network for 00:50:56:11:22:33 on vm01.domain.fake
community.vmware.vsphere_guest_network:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  datacenter: "{{ datacenter_name }}"
  name: vm01.domain.fake
  mac_address: 00:50:56:11:22:33
  network_name: admin-network
  state: present

- name: add a nic on network with vlan id 2001 for 422d000d-2000-ffff-0000-b00000000000
community.vmware.vsphere_guest_network:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  datacenter: "{{ datacenter_name }}"
  uuid: 422d000d-2000-ffff-0000-b00000000000
  vlan_id: 2001

- name: remove nic with mac 00:50:56:11:22:33 from vm01.domain.fake
community.vmware.vsphere_guest_network:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  datacenter: "{{ datacenter_name }}"
  mac_address: 00:50:56:11:22:33
  name: vm01.domain.fake
  state: absent

- name: add multiple nics to vm01.domain.fake
community.vmware.vsphere_guest_network:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  datacenter: "{{ datacenter_name }}"
  name: vm01.domain.fake
  state: present
  vlan_id: "{{ item.vlan_id | default(omit) }}"
  network_name: "{{ item.network_name | default(omit) }}"
  connected: "{{ item.connected | default(omit) }}"
Loop:
  - vlan_id: 2000
    connected: false
  - network_name: guest-net
    connected: true
```

Return Values

Common return values are documented [here](#), the following are the fields unique to this module:

Key	Description
network_data dictionary	For backwards compatibility, metadata about the virtual machine network adapters Returned: when using gather_network_info parameter Sample: {"network_data": {"0": {"allow_guest_ctl": true, "connected": true, "device_type": "vmxnet3", "label": "Network adapter 2", "mac_addr": "00:50:56:AA:AA:AA", "mac_address": "00:50:56:AA:AA:AA", "name": "admin-net", "network_name": "admin-net", "start_connected": true, "switch": "vSwitch0", "unit_number": 8, "vlan_id": 10, "wake_onlan": false}, "1": {"allow_guest_ctl": true, "connected": true, "device_type": "vmxnet3", "label": "Network adapter 1", "mac_addr": "00:50:56:BB:BB:BB", "mac_address": "00:50:56:BB:BB:BB", "name": "guest-net", "network_name": "guest-net", "start_connected": true, "switch": "vSwitch0", "unit_number": 7, "vlan_id": 10, "wake_onlan": true}}}
network_info list / elements=string	metadata about the virtual machine network adapters Returned: always Sample: [{"network_info": [{"allow_guest_ctl": true, "connected": true, "device_type": "vmxnet3", "label": "Network adapter 2", "mac_address": "00:50:56:AA:AA:AA", "network_name": "admin-net", "start_connected": true, "switch": "vSwitch0", "unit_number": 8, "vlan_id": 10, "wake_onlan": false}, {"allow_guest_ctl": true, "connected": true, "device_type": "vmxnet3", "label": "Network adapter 1", "mac_address": "00:50:56:BB:BB:BB", "network_name": "guest-net", "start_connected": true, "switch": "vSwitch0", "unit_number": 7, "vlan_id": 10, "wake_onlan": true}]}



Ansible plugins til VMware

New in community.vmware 3.2.0

- Synopsis
- Parameters
- Notes
- Examples

Synopsis

- This module can be used to add, remove and update custom attributes for the given vSphere object.

Parameters

Parameter	Comments
<code>custom_attributes</code> <code>list / elements=dictionary / required</code>	A list of name and value of custom attributes that needs to be manage. Value of custom attribute is not required and will be ignored if <code>state=absent</code> .
<code>name</code> <code>string / required</code>	Name of the attribute.
<code>value</code> <code>string</code>	Value of the attribute. Default: ""
<code>hostname</code> <code>string</code>	The hostname or IP address of the vSphere vCenter or ESXi server. If the value is not specified in the task, the value of environment variable <code>VMWARE_HOST</code> will be used instead.
<code>object_name</code> <code>string / required</code>	Name of the vSphere object to work with.
<code>object_type</code>  <code>string / required</code>	Type of the object the custom attribute is associated with. Choices: "Cluster" "Datacenter" "Datastore" "DistributedVirtualPortgroup" "DistributedVirtualSwitch" "Folder" "HostSystem" "ResourcePool" "VirtualMachine"

Examples

```
- name: Add virtual machine custom attributes
community.vmware.vmware_custom_attribute_manager:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  object_name: vm1
  object_type: VirtualMachine
  state: present
  custom_attributes:
    - name: MyAttribute
      value: MyValue
  delegate_to: localhost

- name: Add multiple virtual machine custom attributes
community.vmware.vmware_custom_attribute_manager:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  object_name: vm1
  object_type: VirtualMachine
  state: present
  custom_attributes:
    - name: MyAttribute
      value: MyValue
    - name: MyAttribute2
      value: MyValue2
  delegate_to: localhost

- name: Remove virtual machine Attribute
community.vmware.vmware_custom_attribute_manager:
  hostname: "{{ vcenter_hostname }}"
  username: "{{ vcenter_username }}"
  password: "{{ vcenter_password }}"
  object_name: vm1
  object_type: VirtualMachine
  state: absent
  custom_attributes:
    - name: MyAttribute
  delegate_to: localhost
  register: attributes
```

Use case: Vedligehold server ejer fra CMDB

Opdater Custom Properties I vCenter med serverejer defineret I CMDB

Scheduled task
Hver dag/uge



Hent serverejer I
CMDB

Opret/Overskriv
Server ejer
custom attribute

TechTourDemo | ACTIONS

Summary Monitor Configure Permissions Datastores Networks Snapshots

Guest OS

LAUNCH REMOTE CONSOLE

LAUNCH WEB CONSOLE

Virtual Machine Details

Power Status: Powered On

Guest OS: Debian GNU/Linux 12 (64-bit)

VMware Tools: Running, version:12352 (Guest Managed)

DNS Name (1): techtourdemo

IP Addresses (2): 10.22.48.136, fe80::250:56ff:feb7:e751

Encryption: Not encrypted

Usage

Last updated: 9/28/25, 10:51 AM

CPU: 23 MHz used

Memory: 81 MB used

Storage: 16.46 GB used

VM Hardware

CPU: 2 CPU(s), 23 MHz used

Memory: 8 GB, 0 GB memory active

Hard disk 1: 30 GB | Thin Provision | adc-vx-WKLD02-vSAN-Datastore | ruju-10.22.48.0_24 (connected) | 00:50:56:bfe7:51

Network adapter 1: ESXi 7.0 U2 and later (VM version 19)

PCI Devices

No PCI devices

Related Objects

Cluster: WorkLoadDomain 2

Host: adc-vx-esxi02.adc.lan

Networks: ruju-10.22.48.0_24

Storage: adc-vx-WKLD02-vSAN-Datastore

Tags

No tags assigned

Notes

No notes assigned

Storage Policies

VM Storage Policies: vSAN RAID 5 Storage Policy

VM Storage Policy Compliance: Compliant

Last Checked Date: 9/28/2025, 10:51:10 AM

VM Replication Groups

Custom Attributes

ServerOwner: Rune Juhl

Snapshots

1 Count, 4.38 GB Disk used

Latest snapshot: CleanVM, 4.38 GB, 9/27/25, 10:39 AM

[🏠](#) / [Collection Index](#) / [Collections in the Community Namespace](#) / [Community.Vmware](#) / [community.vmware.vmware_tools](#) connection – Execute tasks inside a VM via VMware Tools

Slides for those who attended AnsibleFest at [Red Hat Summit](#) will be available soon.

This is the **latest** (stable) Ansible community documentation. For Red Hat Ansible Automation Platform subscriptions, see [Life Cycle](#) for version details.

Important: The ansible-core 2.19/Ansible 12 release has made **significant templating changes that might require you to update playbooks and roles**. The templating changes enable reporting of numerous problematic behaviors that went undetected in previous experience. You should validate your content to ensure compatibility with these templating changes before upgrading to ansible-core 2.19 or Ansible 12. See the [porting guide](#) to understand where you may need to update your playbooks and roles.

community.vmware.vmware_tools connection – **Execute tasks inside a VM via VMware Tools**

Note

This connection plugin is part of the [community.vmware collection](#) (version 5.7.2).

You might already have this collection installed if you are using the `ansible` package. It is not included in `ansible-core`. To check whether it is installed, run `ansible-galaxy collection list`.

To install it, use: `ansible-galaxy collection install community.vmware`. You need further requirements to be able to use this connection plugin, see [Requirements](#) for details.

To use it in a playbook, specify: `community.vmware.vmware_tools`.

- [Synopsis](#)
- [Requirements](#)
- [Parameters](#)

Synopsis

- Use VMware tools to run tasks in, or put/fetch files to guest operating systems running in VMware infrastructure.
- In case of Windows VMs, set `ansible_shell_type` to `powershell`.
- Does not work with `become`.

Requirements

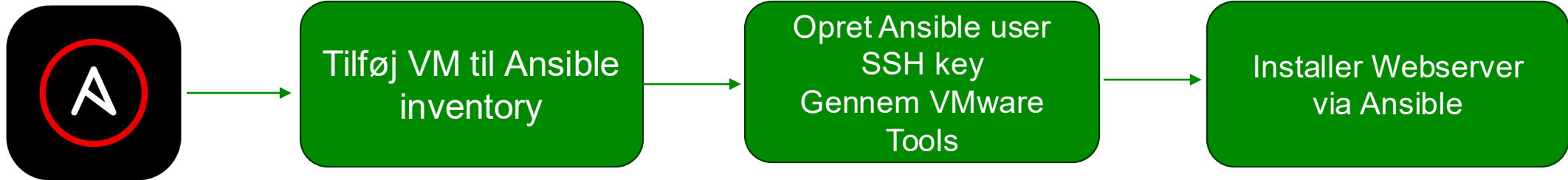
The below requirements are needed on the local controller node that executes this connection.

- requests (Python library)

Parameters

LIVE Demo

Use case: Enroll VM i Ansible Inventory og installer webserver



Not a LIVE Demo

Use case: Enroll VM i Ansible Inventory og installer webserver



Tilføj VM til Ansible
inventory

Opret Ansible user
SSH key
Gennem VMware
Tools

Installer Webserver
via Ansible

QUESTIONS



Næste indlæg:

Når systemerne går ned: Sådan sikrer du hurtig handling og stabil drift