



VCF

TechCon

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Deep Dive into VCF Operations

- Robin Plomp



Robin Plomp



Robin Plomp (1974) werkt sinds 2019 bij PQR als Technical Architect SDDC.

Blog: <https://robinplomp.com>

X: @vplompr

Technical Architect



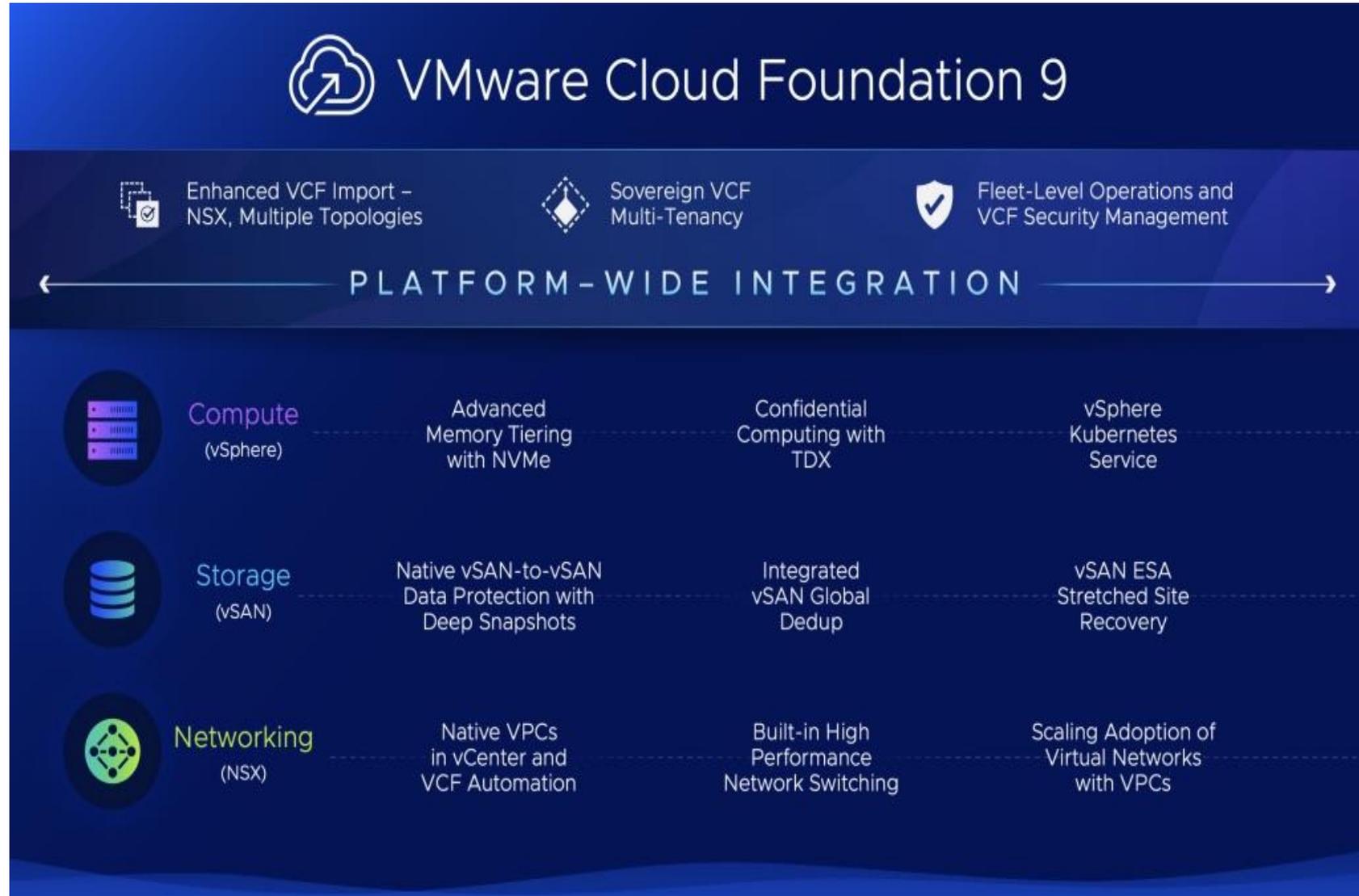
Hobbies: Tijd met het gezin, Hardlopen, Film/Series kijken, Muziek

Agenda

- Architectuur;
- Implementatie;
- Operaties;
- Monitoring;
- Optimalisatie.

DISCLAIMER

VCF 9.0 – What Changed



What is VCF Operations?



- Operations layer for VCF



- Provides monitoring, analytics, troubleshooting



- Integrated with SDDC Manager

Fleet Management



- Centralized oversight of all VCF components



- Unified monitoring across workload domains



- Consistent lifecycle management and compliance



- Standardized policy, configuration, and health controls



- End-to-end visibility for the entire infrastructure fleet

Name evolution over the years

Years	Product Name
2011-2014	vCenter Operations Manager (vC Ops)
2014-2022	VMware vRealize Operations Manager (vROps)
2022-2023	VMware Aria Operations
2023-*	VCF Operations





Key Capabilities & Features



Fleet Management & Lifecycle



License, Certificate, Identity, Password Management



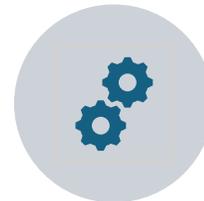
Health, Diagnostics & Monitoring



Cost Management & Chargeback



Migration & Workload Mobility



Extensibility & Customization

Operational Workflows



Cluster upgrade and patching



Health and incident investigation



Cost monitoring and chargeback



Migration planning across domains

Architecture Overview



- Management Nodes



- Analytics Engine



- Data Collectors



- Integrations (vCenter, NSX, vSAN, SDDC Manager)

Data Collection

- Adapters

- Telemetry & metrics

- Events & logs

Health & Compliance

- Cluster health checks

- Compliance baselines

- Automated alerting

Don't worry, I've sent an e-mail about it.

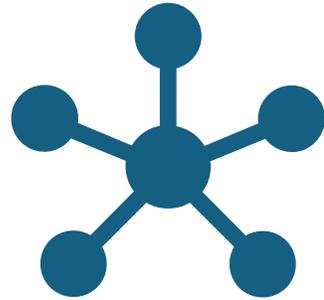


WeKnowMemes

Policies & Dashboards



NSX & vSAN Integration



- NSX topology & traffic



- vSAN performance & health

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Terraform → Infrastructure Provisioning with VCF

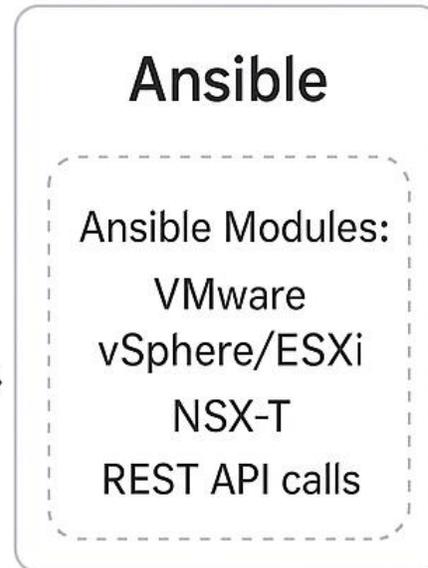
What infrastructure should exist?



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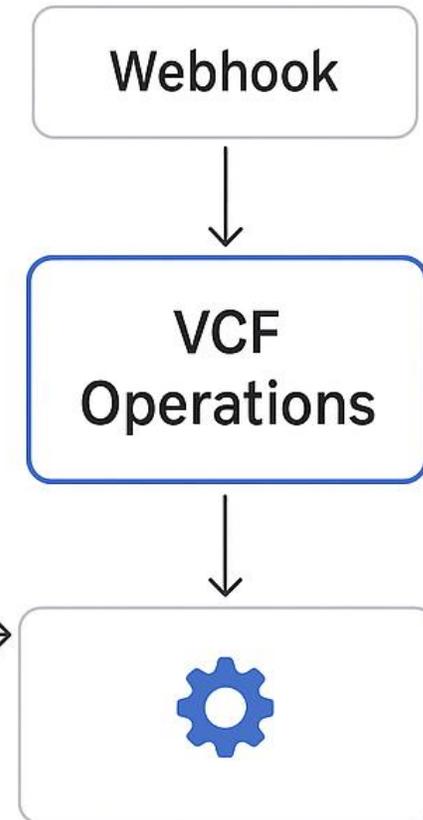
Ansible → Configuration & Operational Automation

How should the infrastructure be configured and maintained?



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Terraform + Ansible + VCF Operations → Full Lifecycle Automation



Workload Domains

- Mgmt WLD visibility
- VI WLD visibility
- Cross-domain analytics

New WLD: Inventory > select VCF Instance > Add Workload Domains

Where Do I Perform Tasks?

Do I need to
manage hosts?
→ VCFO

Do I manage
clusters? →
vCenter + VCFO

Lifecycle
upgrades? →
VCFO

NSX
configuration?
→ NSX Manager

Certificates /
DNS / NTP? →
VCFO

Tasks VCF Operations

Monitoring VCF Components Health

Lifecycle Management (LCM)

Workload Domains Deploy and Manage

vSphere Hosts onboarden or decomissioning

Manage NSX configuration

Tasks VCF Operations

Manage Backup and Recovery Processes

Alerts and Incident Management

User and Role Management

Deploy Automation and API Intergration

Netwerk- en infrastructuurvalidaties uitvoeren

Vragen?



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VMware Cloud Foundation 9.0

Modern Infrastructure Operations

Thanks