

VMware vRealize SaltStack Config

... in 20 (ish) minutes

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Nov 30, 2020

Agenda

- Introductions
- What does it do?
- Where does it fit?
- Why SaltStack
- Use Cases

Introductions

Sean Brown (Sales and Commercial)

Dave Fidler (Solution Architect)

What does it do?

SaltStack Config is an event-based, Intelligent Automation Platform

Seamlessly configure, secure and manage your Cloud, Network, Compute,
Storage and Application assets.

What does it do?

“First and foremost, SaltStack is an Event-based, Intelligent Automation Platform/Engine”

- Event Driven Automation
- IT Inventory/Discovery
- Remote Execution
- Imperative Config Management
- Declarative Config Management
- Agent-based/Agentless
- Orchestration (Technical workflow)
- Cloud Provisioning (support 33)
- RBAC
- *Continuous Configuration Compliance*
- *Vulnerability Management*
- Audit User Changes
- Thousands of Integrations
- Extensible (100% Python)
- Scalable (1 million node benchmark)
- 11 Different types of Modules

Where does it fit?

It fits everywhere...

DevOps, Infrastructure, Applications, SecOps, IIoT,....

But...

VMware's vision is that SaltStack will do config management while managed by vRA/vRO

Where does SaltStack fit?

High Level

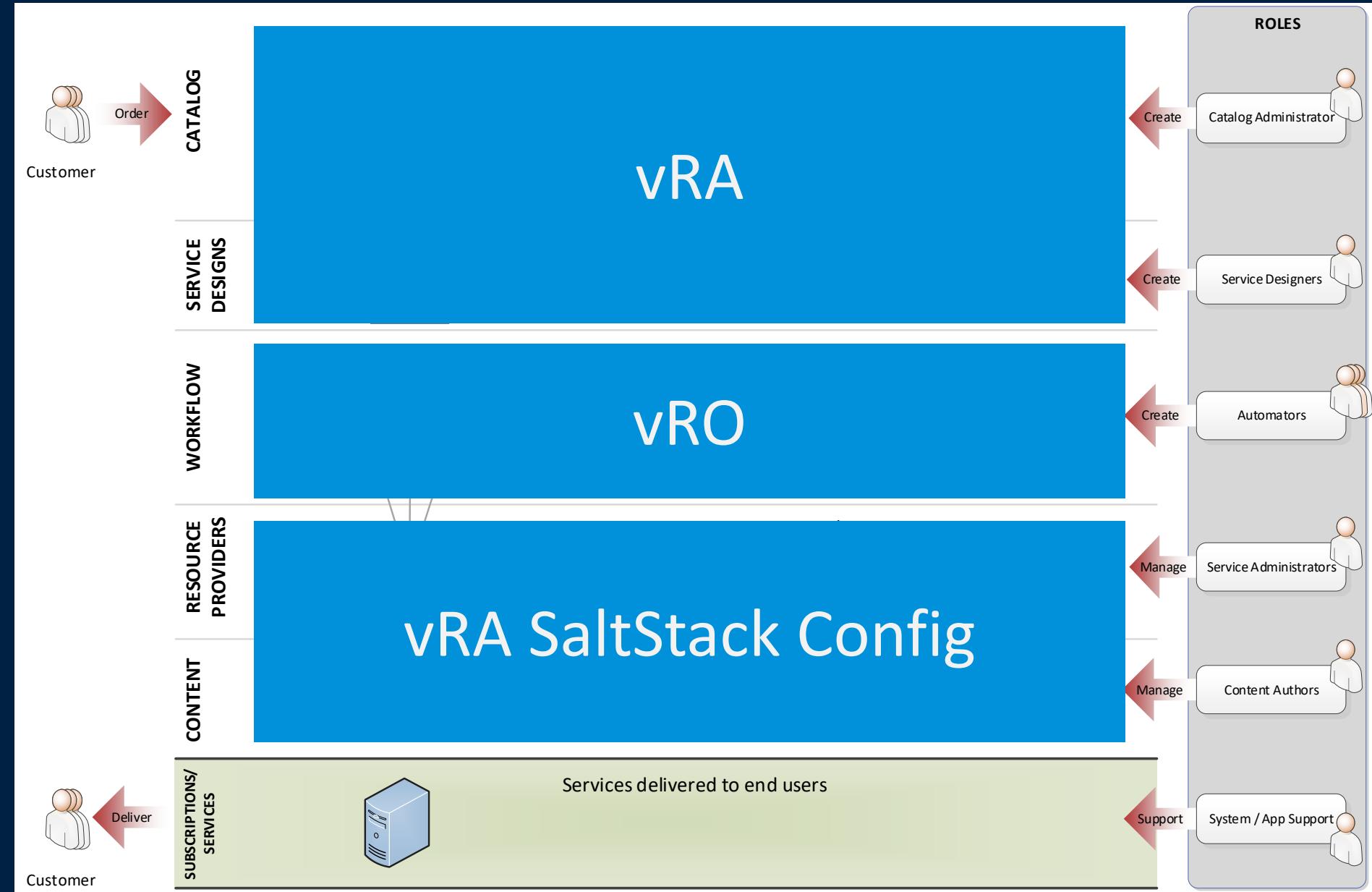
Examples of actions:

Servers:

- Install Software
- Configure Apps
- OS configuration
- Scan for Config Compliance
- Scan for vulnerabilities

Networks:

- Add/Remove users
- Create Routes
- Create Load Balancing pools



Why SaltStack

Why vRA SaltStack Config

1. Scale (1 > 10 > 100 > 1000 > 10,000 > 100,000+ assets)
2. Performance (Seconds and minutes)
3. Security (Continuous, self-healing, certified)
4. Customer choice (agent/agentless, imperative/declarative, ...)

Why vRA SaltStack Config



Manages It All

- Servers, Networks, Storage, IoT, Cloud
- Windows, Linux, Solaris, AIX...
- Orchestrate technical changes
- Provisioning/Config Mgt/Audit
- CIS certified – more than just OpenSCAP scanning)
- Vulnerability management & patching



Scale & Speed

- Multimaster (Clustering, HA, Partitioning)
- Lightweight; 100K+ nodes
- Fast; Parallel Workload Execution
- Change in seconds and minutes
- Benchmarked to 1M nodes



Flexible

- Reuse existing assets (import vs integrate)
- API-First Architecture
- Event Driven
- Integrate with Security Vendors (Tenable/ Rapid7/ Qualys/Kenna)
- 11 Types of Modules (not just Config Mgt!)



Is Everywhere

- Estimated >50M nodes under management
- Python ubiquity (skills availability)
- Open source modules + community
- Top 50 GitHub project

How are people using SaltStack Config today?

Datacenter Operations

Configuration Management



Thousands of businesses use SaltStack Enterprise and Open source technology to manage datacentre assets

TYPICAL USE CASES

- Network & Storage Devices
- App Deployment/Config
- Server config; Unix/Linux/Windows
- Vulnerability Management
- Deploy/Manage directly to 33 cloud vendors
- Automated Incident resolution
- Continuous Compliance
- Certificate Management

IBM Cloud

70,000 Network Devices



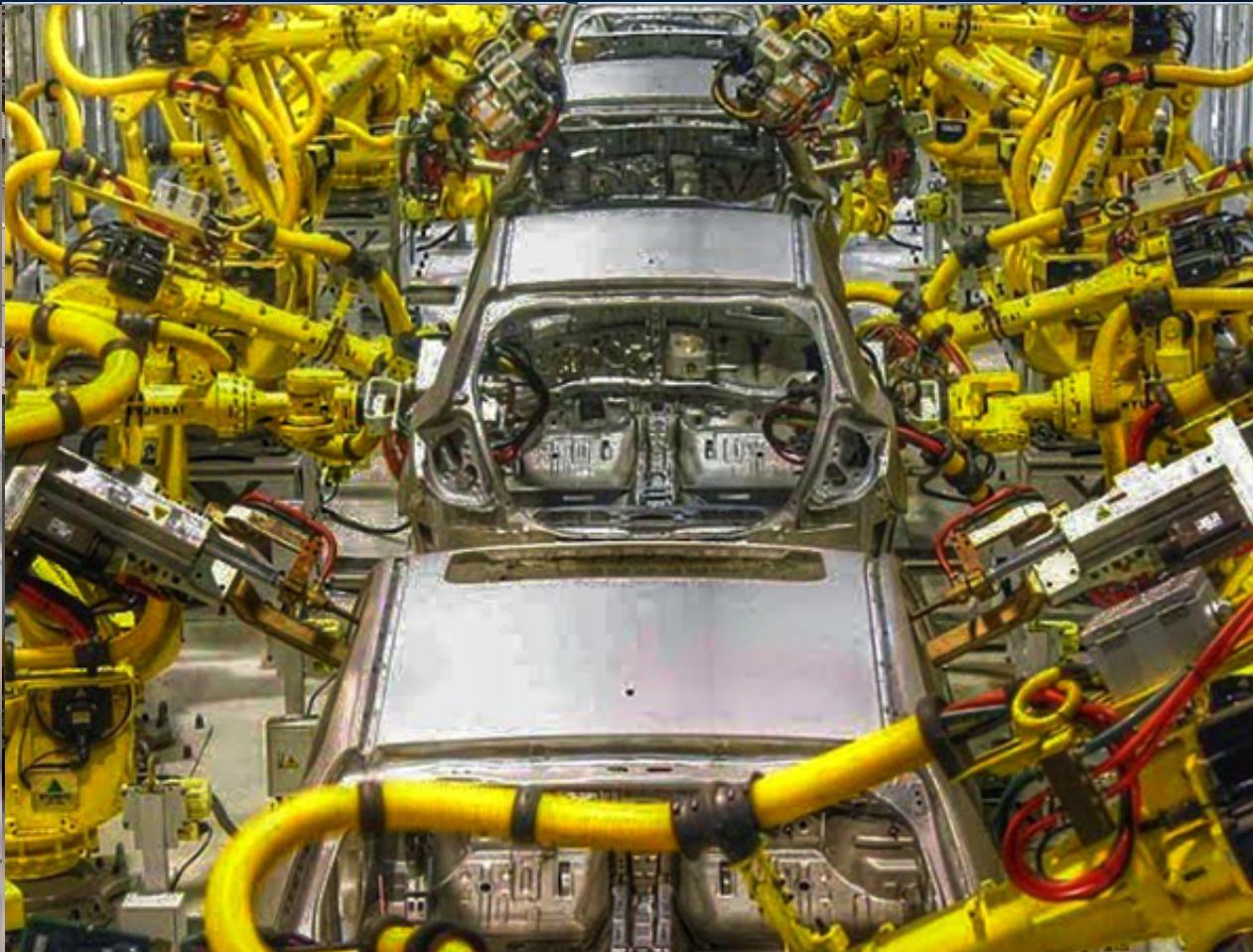
Global Command and Control layer that provides comprehensive audit, remote management, patch and security/detection for the IBM cloud.

RESULTS

- Global network Control from a single platform
- 19 Man Years saved on first project, alone
- 75% reduction of manual tasks

SOLUTION

- Global SDN principles applied through control layer
- Firmware updates to 70K network devices via event-driven automation
- Automation of significant compliance workflow bottlenecks



BMW are rolling SaltStack out to centrally manage, and secure, the IPCs that control the manufacturing robotics in their plants.

GOALS

- Single global control plane to manage and secure plant IPCs
- Estimated 60,000 nodes
- Reduced time to retool factories

SOLUTION

- Hosted in Azure, using Azure PaaS services
- Azure DevOps pipelines to deploy apps and configuration

Another “German Automotive”

Managing Workloads For Cloud Estates



Private cloud PaaS provisioning system delivering end-to-end builds with fully configured environment (networks, firewalls, Domain Join, etc)

RESULTS

- Fully provision a managed environment in < 1hr
- Distributed “in-source” development lifecycle between different PaaS solution providers

SOLUTION

- vSphere for hypervisor, NSX for networks, vRA for integration, SaltStack Config for config management (deploy, manage)
- Automated patching



Global Command and Control plane for 5G private mobile network offering offers customers 5G as a Service.

RESULTS

- Central management plane for mobile 5G networks
- “Phone Home” management – easy to use and install
- Provides managed service for mobile 5G networks

SOLUTION

- SaltStack Config is control plane
- SaltStack manages core network components, apps; deploy/configure OS & network device configs and container management
- Configurations constantly enforced

Thank You

Please email any questions to dfidler@vmware.com

Additional Info

Product Documentation

- <http://docs.saltstack.com>

Managing One Million Minions (End points)

- <https://www.youtube.com/watch?v=kpjgB-qltHw>

SaltStack YouTube Channel

- <https://www.youtube.com/user/SaltStack>

SaltStack Enablement Europe

- <https://onevmw.sharepoint.com/sites/SaltStackEnablement>

Demo Resources

- <http://fielddemo.cmbu.local/demolink-auto>