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CODE1181LV

Automate Building Your Hosts with REDFISH API

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#vmwareexplore #CODE1181LV

Agenda

What is the REDFISH API

Why Use REDFISH

Getting Started

Tips for Starting to Learn REDFISH

Basic Structure of REDFISH

Demos (or videos of Demos)

CICD Pipelines

What is REDFISH?

- API for managing the Software Defined Datacenter
- v1.0 was released from DMTF in August 2015
- Goal to modernize server IPMI/BMC and drive wide standardization across the industry
- As of v2024.2 REDFISH is widely adopted across server vendors

Why Use REDFISH?

- Vendor agnostic automation tool.
- Adopt infrastructure as code all the way down to raw hardware.
- Increase efficiency and productivity by eliminating repeating manual tasks.
- More easily monitor and maintain configuration drift across the datacenter(s) .

How to Get Started

Identify

Enable

Plan

Step 4: Start Learning

- I am not a developer, and learning APIs does not come naturally to me, they read like Latin at first.
- Everyone learns differently.
- Start small and build up. (like LEGOs)
- Many different tools to help:
  - API Clients – help keep organized learning, can make variables and templating easier
  - CLI – Multiple packages for each to help translate REDFISH to an already known scripting language
  - Automation Tool – Can incorporate REDFISH into a larger automation tool you are using

Basic REDFISH Structure

/redfish/v1 /Systems/<id>

- CPU, Memory, Local Disk, PSU, NICs, BIOS, etc.

/redfish/v1 /Managers/<id>

- BMC Information, BMC and System Firmware, Virtual Media

/redfish/v1 /Chassis/<id>

- Fans, Thermals, Local Disk, Power, NICs, etc.

/redfish/v1 /TaskService

- Information and Status for management jobs/tasks

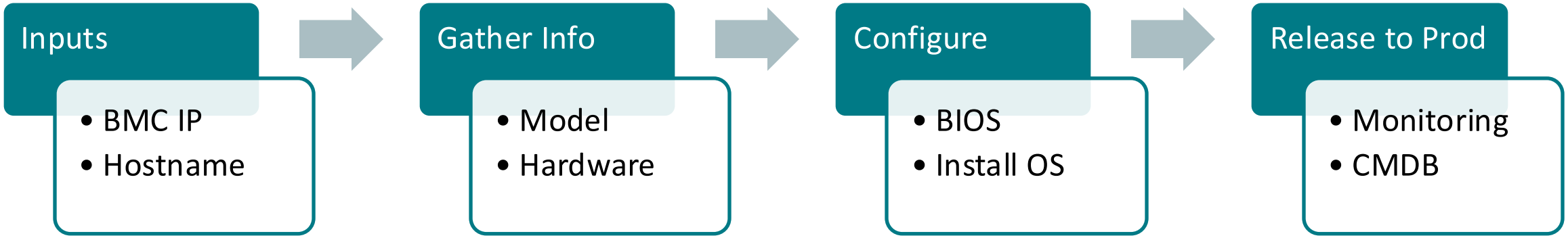
Now the Demos

or Videos of Demos

Get Info → Configure BIOS → OS Install

Operationalize

CICD Pipelines



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