Let's go cisco live! #CiscoLive



I built a private cloud in 4 hours

- let me show you how -

Stefano Gioia, Technical Solution Architect

BRKCLD-1010



Cisco Webex App

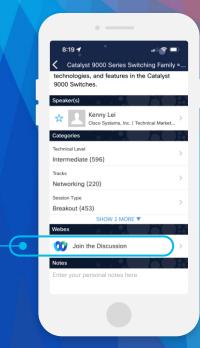
Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click "Join the Discussion"
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 9, 2023.



https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCLD-1010

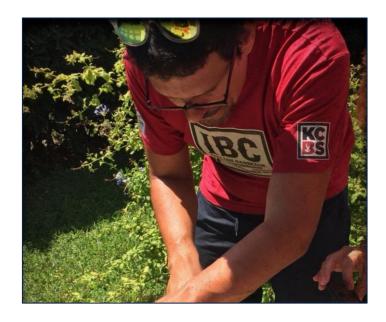




- What is Intersight?
 - Overview & Use Cases
- Building a private cloud in 4 hours
 - Overview
 - Demo

Stefano Gioia

- Technical Solution Architect, EMEAR
- In Cisco from 2017
 - Ericsson, BEA, Oracle
- Automation, Orchestration and Full Stack Observability
- KCBS Judge (!)
- 2 children, one wife



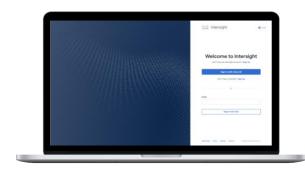


Simplify IT operations

With hybrid cloud operations management



CISCO INTERSIGHT





Visualize

Your global on-premises, cloud, and edge environments



Automate

Networking and computing deployments and configuration



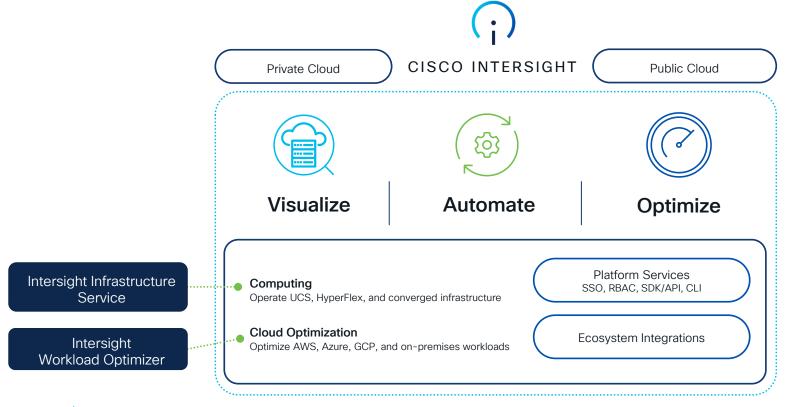
Optimize

Performance, cost, and user experience

From one place



Simplify IT Operations

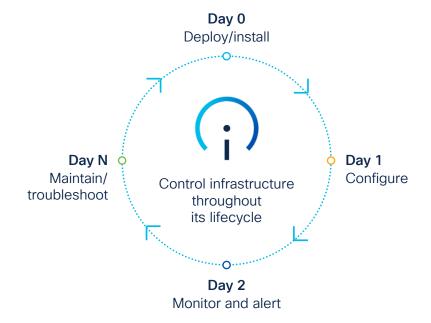




Cisco Intersight: Control

Infrastructure lifecycle management

Deploy, configure, and operate servers, VMs, storage, and networking throughout their lifecycle, from one place... anytime, anywhere



"Intersight has reduced the weight of routine deployment and monitoring tasks so we can focus on the work that helps our business."

So, what I can do with Intersight?

A few ideas...



Deploy and configure infrastructure in minutes, not hours, anywhere?



Control power management across your server fleet to maintain intended energy use?



Operate your entire on-premises and edge environment from one dashboard?



Address potential hardware, OS, or software issues before they impact users, or minimize them when they occur?



Continuously identify and close security gaps?



Give your staff the ability to accomplish more without creating additional burdens?



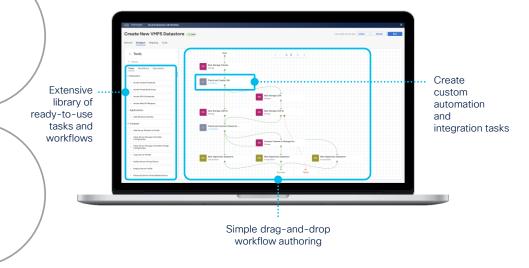
Cisco Intersight: Automate

Create automated workflows to...

- Accelerate delivery of apps and infrastructure
- Reduce risk with standardization
- Simplify cross-domain orchestration

Two options

- Workflow designer
 Drag-and-drop workflow authoring
- APIs/SDKs
 For using your existing automation tools (Ansible, Terraform, etc.)

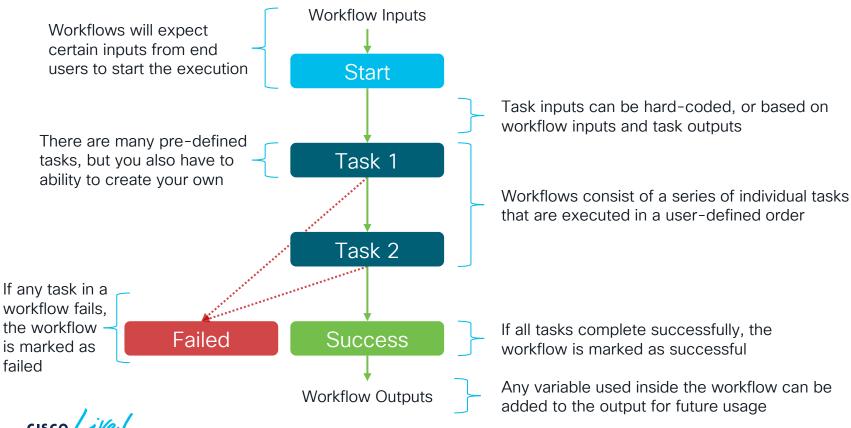


"With consistent and repeatable workflows offered by Cisco Intersight, IT teams can save time and decrease operational costs."





What is a workflow?



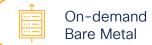
#CiscoLive

I built a private cloud in 4 hours

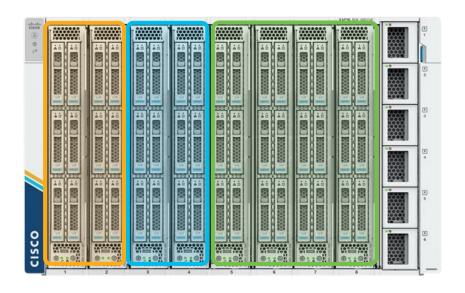
The Original Plan

Leveraging our new toy in our lab











I built a private cloud in 4 hours:

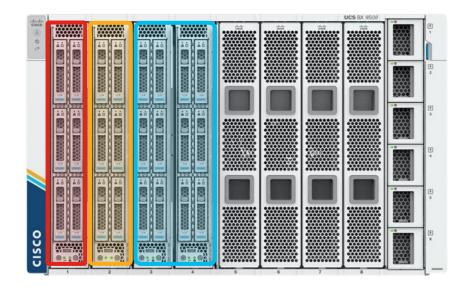
Reality Check

Leveraging our new toy in our lab











I built a private cloud in 4 hours:

So where's the Kubernetes Cluster you've promised?

Leveraging our toys in our lab



Private Cloud VMware



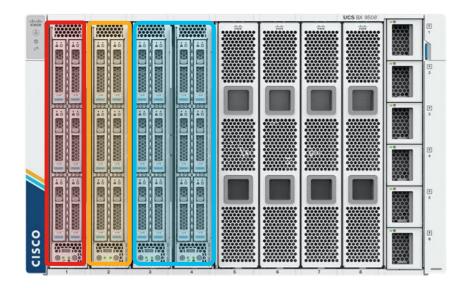
On-demand Bare Metal



Stolen by... Intersight TME



Kubernetes Cluster





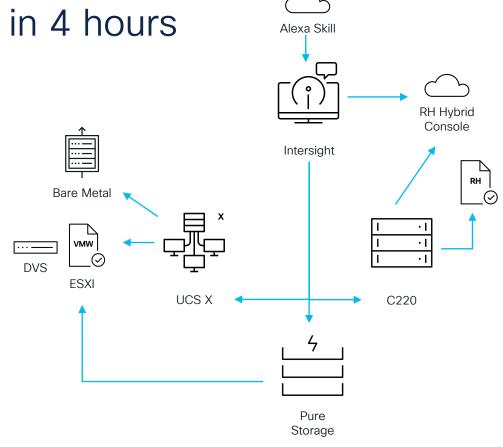
3x C220



I built a private cloud in 4 hours

What we will do

- Part 01: VM-based cluster
 - UCSX Server Provisioning
 - Creating a VMware cluster
 - Install and configure ESXI on UCSX
 - Pure Storage Configuration
- Part 02: Bare Metal K8s cluster
 - Deploying OpenShift on C220
- Part 03: Consuming VMs and BM
 - Use API to deploy VM via Alexa Skill

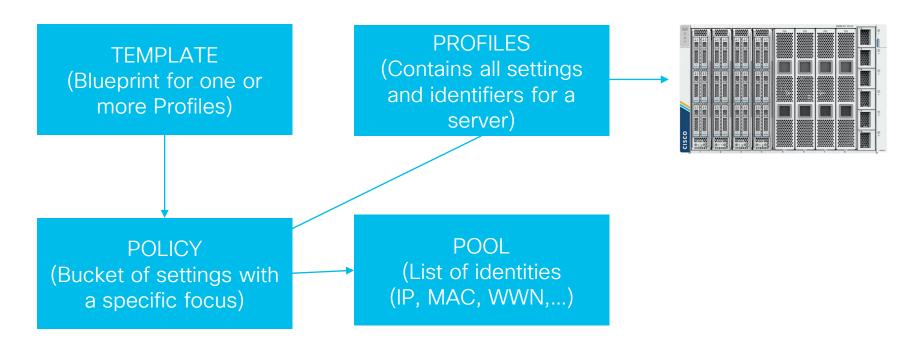




Part 1: VM-based cluster Demo 1: Server Provisioning



Programmable UCS hardware





VIDEO

Part 1: VM-based cluster Demo 1: Server Provisioning



Part 1: VM-based cluster Demo 2: Creating a VMware cluster



VIDEO

Part 1: VM-based cluster Demo 2: Creating a VMware cluster



Part 1: VM-based cluster
Demo 3: Install and configure ESXI on
UCSX



VIDEO

Part 1: VM-based cluster
Demo 3: Install and configure ESXI on UCSX



Part 1: VM-based cluster
Demo 4: Pure Storage
Configuration



VIDEO

Part 1: VM-based cluster Demo 4: Pure Storage Configuration

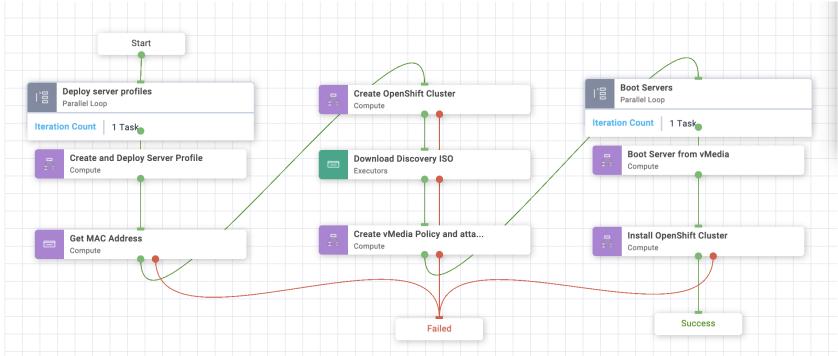


Part 2: Bare Metal K8s Deploying OpenShift on C220



OpenShift Bare Metal Provisioning on C220

with Cisco Intersight





VIDEO
Part 2: Bare Metal K8s
Deploying OpenShift on C220



Part 3: Consuming VMs and BareMetal



Intersight API/SDKs

Cisco Intersight API



Easily integrate existing tools into Intersight

Get the best of Intersight and your current tools

Maximize your investments

SDKs



Pre-packaged API clients

Easy way to start programming against Intersight

Full access to the API

Current SDKs







python* **



VIDEO
Part 3: Consuming VMs and BM
Use API to deploy VM via Alexa Skill



Resources

- All videos and workflowa used in this presentation will be available from the 15th of June 2023
 - https://github.com/gi0ste/BRKCLD-1010



Fill out your session surveys!



Attendees who fill out a minimum of four session surveys and the overall event survey will get **Cisco Live-branded socks** (while supplies last)!



Attendees will also earn 100 points in the Cisco Live Challenge for every survey completed.



These points help you get on the leaderboard and increase your chances of winning daily and grand prizes



BRKCLD-1010

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- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand



Thank you



Cisco Live Challenge

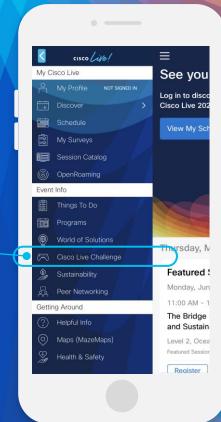
Gamify your Cisco Live experience! Get points for attending this session!

How:

- Open the Cisco Events App.
- 2 Click on 'Cisco Live Challenge' in the side menu.
- 3 Click on View Your Badges at the top.
- 4 Click the + at the bottom of the screen and scan the QR code:







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