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# Powering Data Center Infrastructure Programmability and Automation: Cisco Intersight's API and Integrations

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**CISCO** *Live!*

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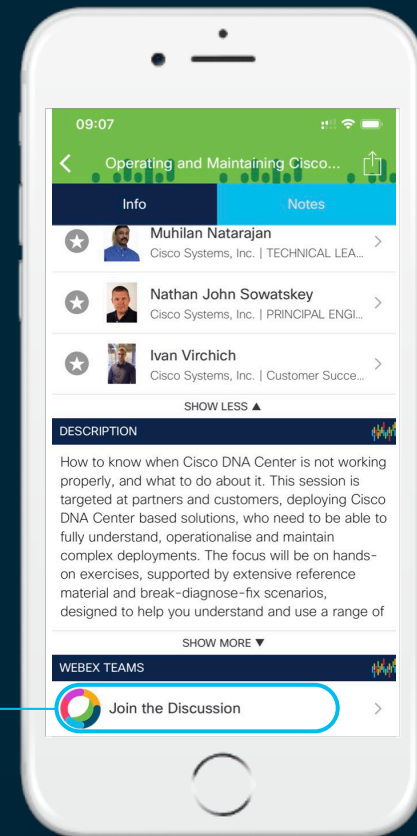
# Cisco Webex Teams

## Questions?

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

## How

- 1 Find this session in the Cisco Events Mobile App
- 2 Click “Join the Discussion”
- 3 Install Webex Teams or go directly to the team space
- 4 Enter messages/questions in the team space



# Agenda

- Intersight Overview
- Intersight API and Developer Tools
- API Integrations
- Demo: Intersight Configuration
- Next Steps

# Intersight Overview

# Infrastructure Management Challenges

- How many tools/processes are needed to manage the infrastructure?



Traditional  
management

“Building a monster  
to manage the monster”

# UCS Today

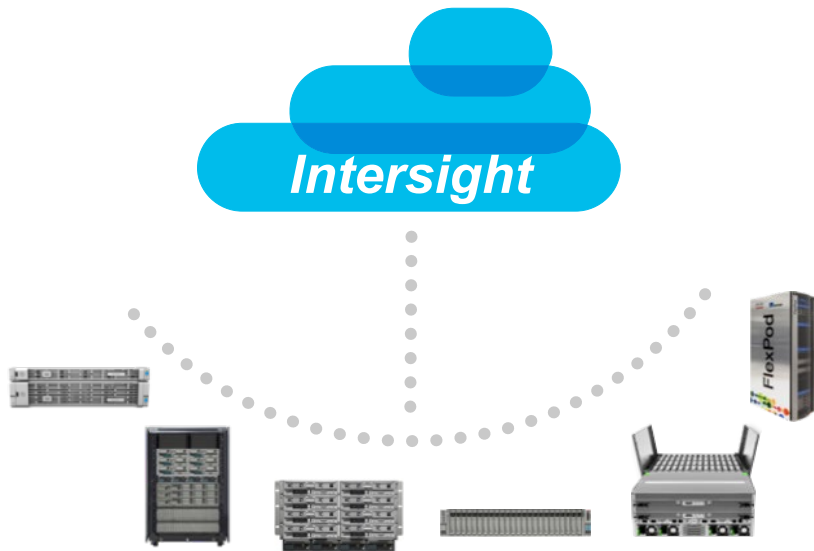
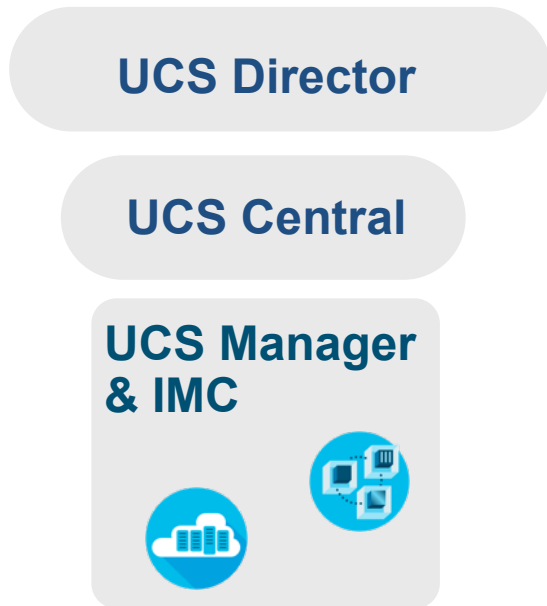
It's not a server.



It's a system.

- Unified Management Plane
  - Inventory, configuration, and updates through one interface
- On premises tools to manage devices at scale

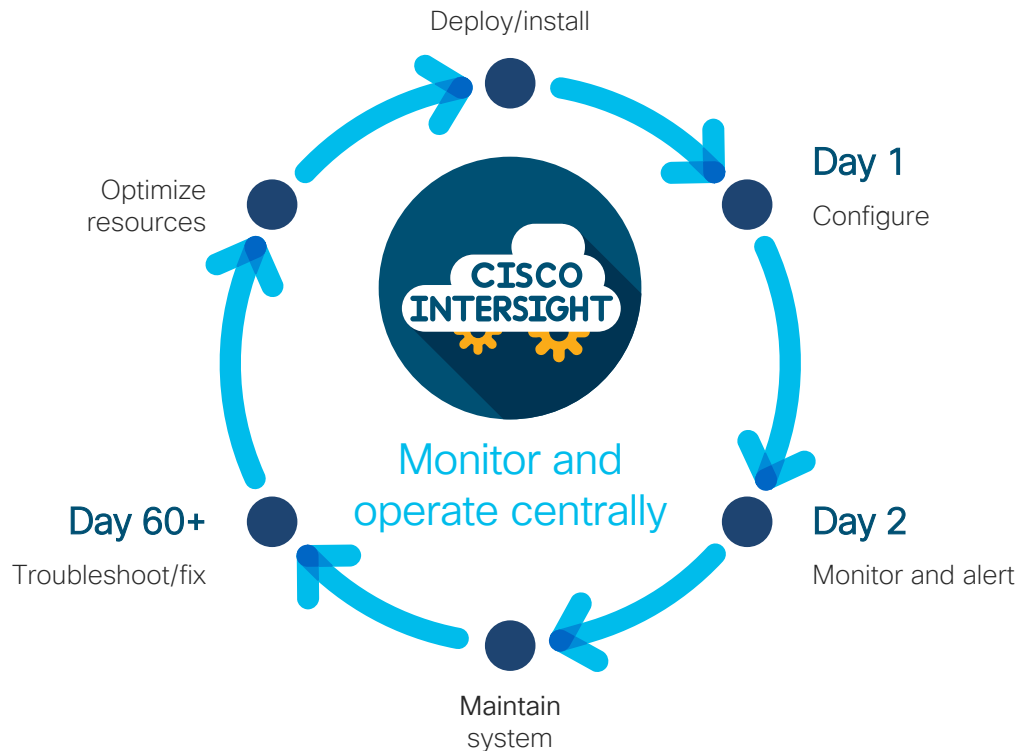
# Cisco Intersight: Connect Everything



Cisco hosted Software as a Service



# Cisco Intersight: Connect and Use the Data



## Benefits

- ✓ Quicker deployment times
- ✓ Fewer tools
- ✓ Lower administration costs
- ✓ Lower configuration risk
- ✓ Faster Problem Resolution

# Cisco Maintained SaaS: Not “Another Tool”



## SaaS-consumption model

No care and feeding of management tools



## Seamless extensibility

Across technologies and geography



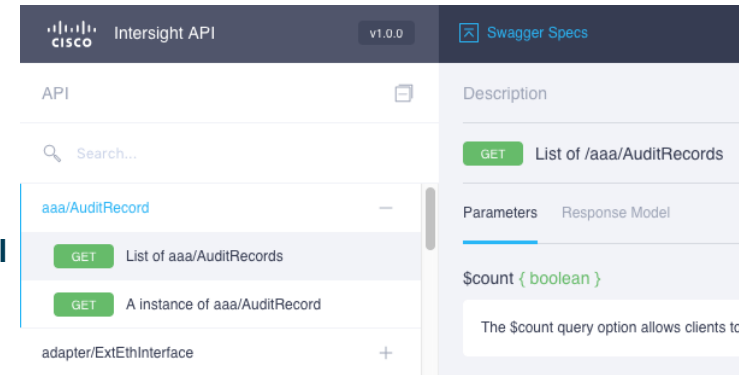
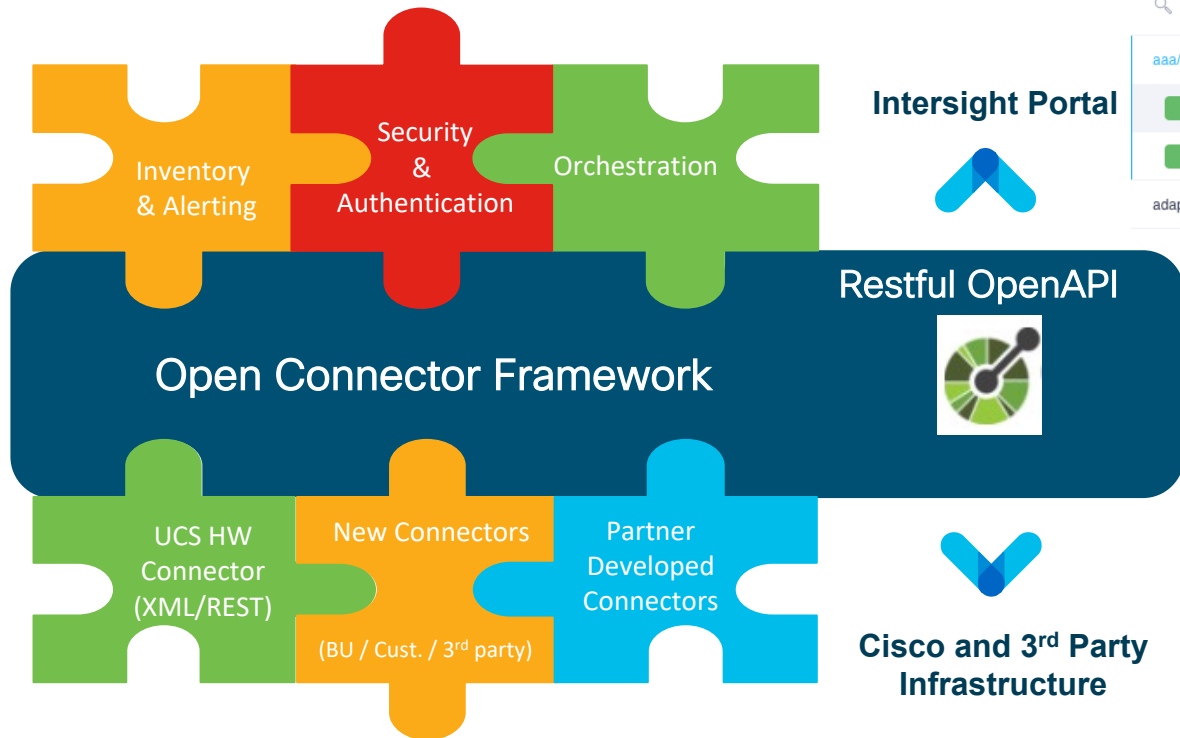
## Continuous feature integration

Rapid development, delivery, and customer feedback

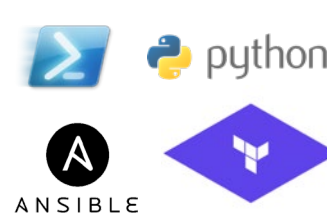
# Intersight API and Developer Tools

# Single API Endpoint

## Extensible Architecture for API Integrations

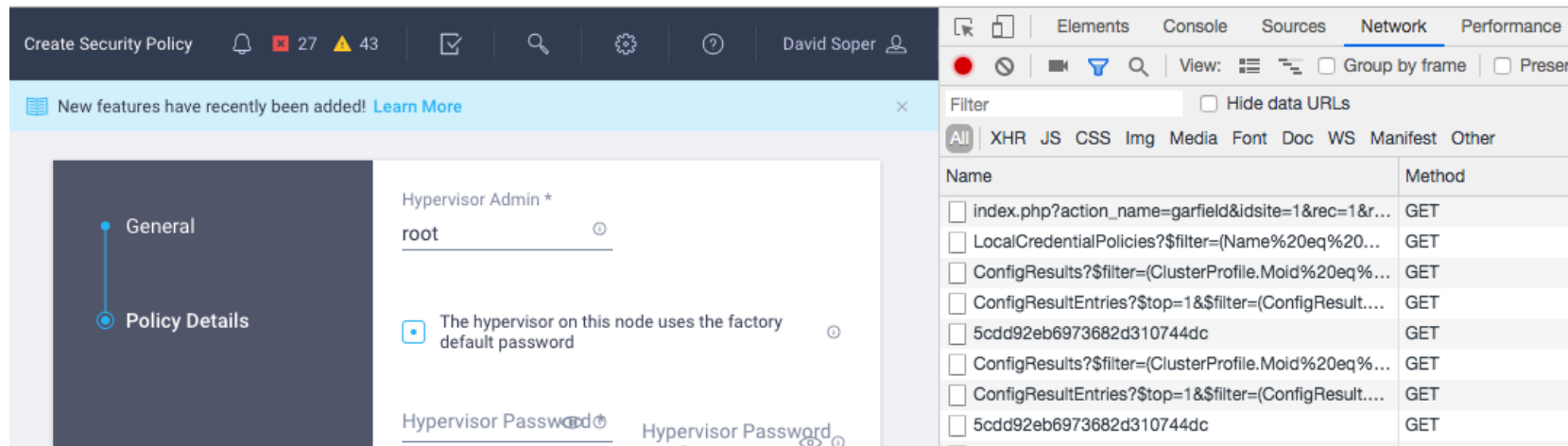


Example: Tools and SDK



# API Browser and Documentation

- Your browser developer console shows how the UI uses the API



- View current configuration at <https://intersight.com/mobrowser/>
- Built in REST client: <https://intersight.com/apidocs/>

# API Query Language

- Powerful Query Language
  - Filter, select, and many other operations to avoid post processing data

The screenshot displays the REST Client interface. The top navigation bar includes links for Guides, API Reference, Downloads, and Support, along with a user profile for David Soper. The main panel is titled 'GET Read a 'compute.PhysicalSummary' resource.' and features a 'REST Client' toggle switch. Below this, there are tabs for 'Parameters' and 'Response Model'. The 'Parameters' tab is active, showing three query options: '\$filter { string }', '\$select { string }', and '\$orderby { string }'. Each option has a description: '\$filter' is for filtering documents based on a predicate expression; '\$select' is for specifying a subset of properties to return; and '\$orderby' is for determining the order of documents. To the right, a 'REST Client' window shows a GET request to '/api/v1/compute/PhysicalSummaries'. The request parameters are '\$filter=PlatformType eq 'IMC'' and '\$select=Model'. The response status is '200 Success'. The 'Response Text' tab is active, displaying a JSON response with a 'Results' array containing one object with 'Model', 'MoId', and 'ObjectType' fields.

Guides API Reference Downloads Support David Soper

GET Read a 'compute.PhysicalSummary' resource. REST Client

Parameters Response Model

**\$filter { string }** query

Filter criteria for documents to return. A URI with a \$filter System Query Option identifies a subset of the Entries from the Collection of Entries identified by the Resource Path section of the URI. The subset is determined by selecting only the Entries that satisfy the predicate expression specified by the query option. The expression language that is used in \$filter operators supports references to properties and literals. The literal values can be strings enclosed in single quotes, numbers and boolean values (true or false) or any of the additional literal representations shown in the Abstract Type System section. Query examples: \$filter=Name eq 'Bob' \$filter=Tags/any(t: t/Key eq 'Site') \$filter=Tags/any(t: t/Key eq 'Site' and t/Value eq 'London')

**\$select { string }** query

Specifies a subset of properties to return.

**\$orderby { string }** query

Determines what values are used to order a collection of documents.

REST Client

GET /api/v1/compute/PhysicalSummaries

+ Query Parameter

Key	Value	
\$filter	PlatformType eq 'IMC'	
\$select	Model	

Send 200 Success

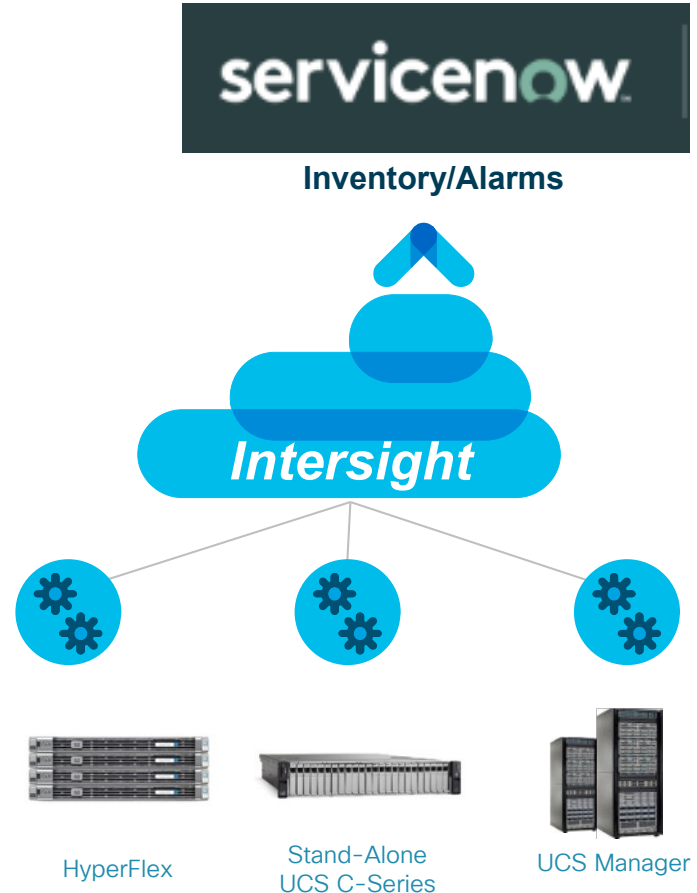
Response Text Response Info

```
1 {
2   "Results": [
3     {
4       "Model": "HXAF220C-M5SX",
5       "MoId": "5ad4b2ec393130316d129e4",
6       "ObjectType": "compute.PhysicalS
7     },
8   ]
9 }
```

# Intersight API Integrations

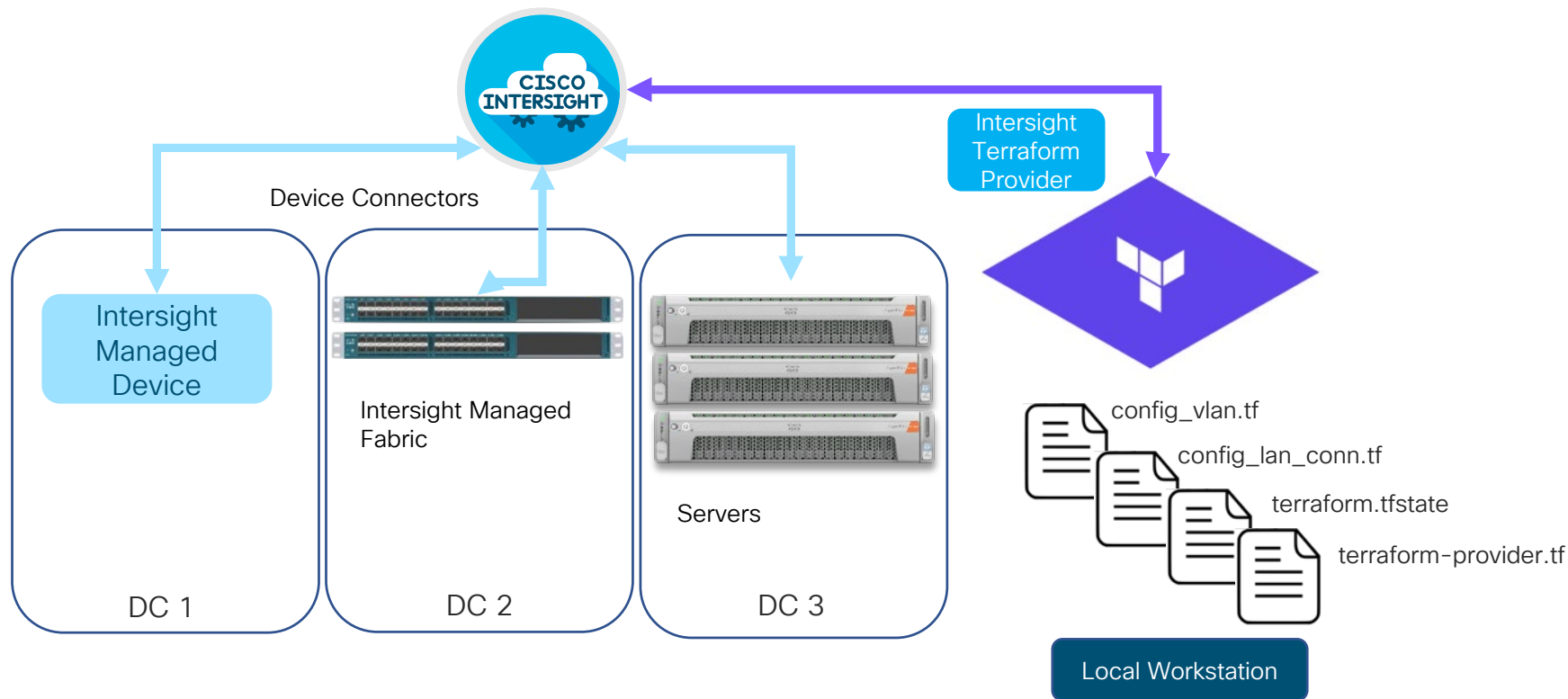
# Intersight ServiceNow Application

- API access can be Read-Only
  - Additional RBAC within ServiceNow
- App Features
  - Device Inventory and Sync
  - Incident Management
    - Using alarms retrieved from Intersight
  - Analysis reports and dashboards powered by ServiceNow



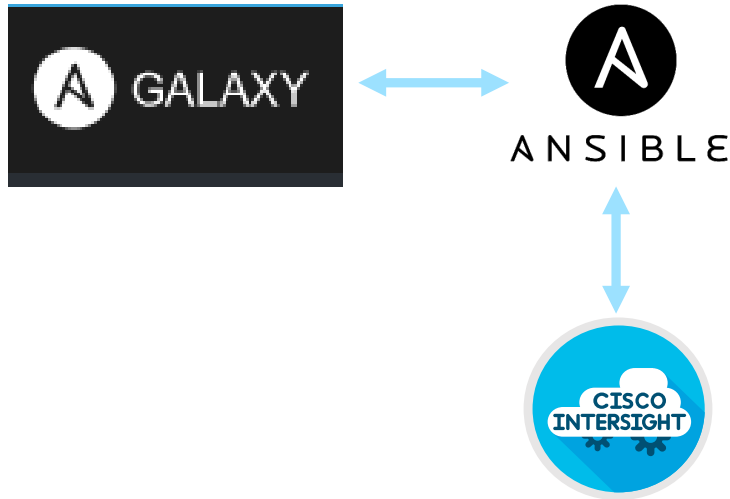


# Intersight Terraform Provider



# Intersight Ansible Modules

- Cisco Intersight Collection - Modules in Ansible Galaxy
  - Details at <https://galaxy.ansible.com/cisco/intersight>
  - install/update without requiring updates in Ansible core  
`ansible-galaxy collection install cisco.intersight`



An abstract graphic at the top of the slide consists of a repeating pattern of vertical bars and small circles in a dark blue color, set against a slightly lighter blue background.

# Demo: Intersight Configuration

# Complete your online session survey



- Please complete your session survey after each session. Your feedback is very important.
- Complete a minimum of 4 session surveys and the Overall Conference survey (starting on Thursday) to receive your Cisco Live t-shirt.
- All surveys can be taken in the Cisco Events Mobile App or by logging in to the Content Catalog on [ciscolive.com/emea](https://ciscolive.com/emea).

Cisco Live sessions will be available for viewing on demand after the event at [ciscolive.com](https://ciscolive.com).

# Continue your education



Demos in the  
Cisco Showcase



Walk-In Labs



Meet the Engineer  
1:1 meetings



Related sessions



Thank you





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