

CISCO *Live!*



#CiscoLive



The bridge to possible

# Event driven infrastructure

## with Intersight Kubernetes Service and TriggerMesh

Chris Parlette – Senior Solutions Architect, TriggerMesh

Mel Delgado – Developer Advocate, Cisco

Boris Aelen – Technical Marketing Engineer, Cisco

DEVNET-2090

# 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 17, 2022.



<https://ciscolive.ciscoevents.com/ciscolivebot/#DEVNET-2090>

# Developer Relations

Developer Advocate

Resources

- Learning Labs
- Sandboxes



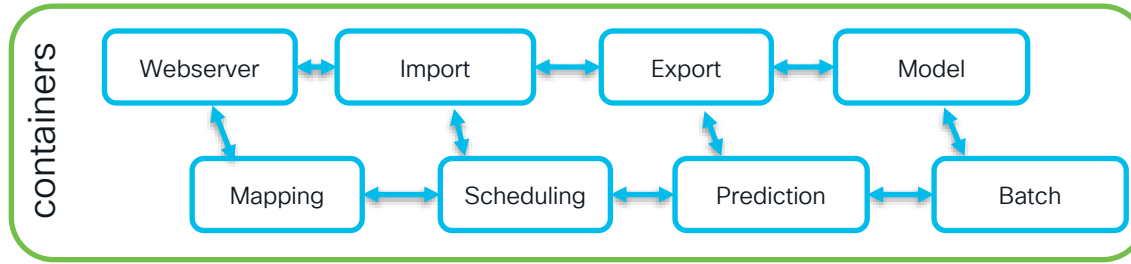


# Agenda

- Intersight Kubernetes Service
- TriggerMesh
- Use-Cases
- Demo

# Intersight Kubernetes Service

# Cloud Native Architecture

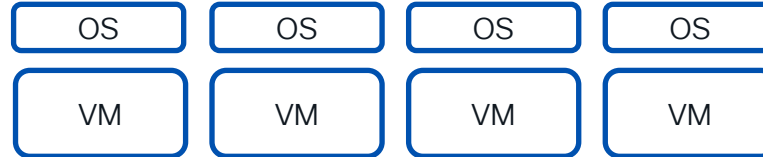


CI/CD

container  
registry

build server

Kubernetes



Virtualization

Physical Infra



LEO Analytics

# Cloud Native landscape.cncf.io

The main grid is organized into several categories, each with a vertical label on the left and a horizontal header at the top of the category. The categories and their sub-sections are:

- App Definition and Development** (vertical label):
  - Database: KV, Vitess, etc.
  - Streaming & Messaging: cloudevents, NATS, etc.
  - Application Definition & Image Build: HELM, Buildpacks.io, etc.
  - Continuous Integration & Delivery: argo, flux, etc.
- Orchestration & Management** (vertical label):
  - Scheduling & Orchestration: kubernetes, etc.
  - Coordination & Service Discovery: CoreDNS, etcd, etc.
  - Remote Procedure Call: gRPC, etc.
  - Service Proxy: envoy, etc.
  - API Gateway: KONG, etc.
  - Service Mesh: LINKERD, etc.
- Runtime** (vertical label):
  - Cloud Native Storage: ROOK, LONGHORN, etc.
  - Container Runtime: cri-o, etc.
  - Cloud Native Network: cilium, CNI, etc.
- Provisioning** (vertical label):
  - Automation & Configuration: Kubeflow, etc.
  - Container Registry: JIB, etc.
  - Security & Compliance: Falco, etc.
  - Key Management: spiffe, SPIRE, etc.

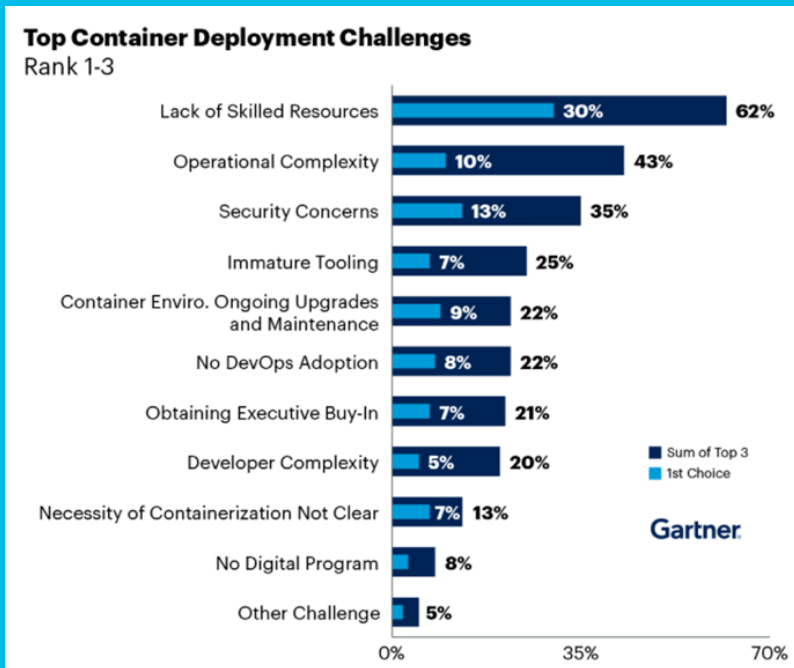
This section is titled "Observability and Analysis" and includes sub-sections for:

- Monitoring**: Prometheus, Thanos, etc.
- Logging**: fluentd, etc.
- Tracing**: Jaeger, etc.
- Chaos Engineering**: Chaos Mesh, etc.

This section is titled "Serverless" and includes a "Serverless Landscape" overview and a "See the serverless interactive display at a.cncf.io" link.



# Challenges



# Solution



Fully Automated



Delivered as-a-Service

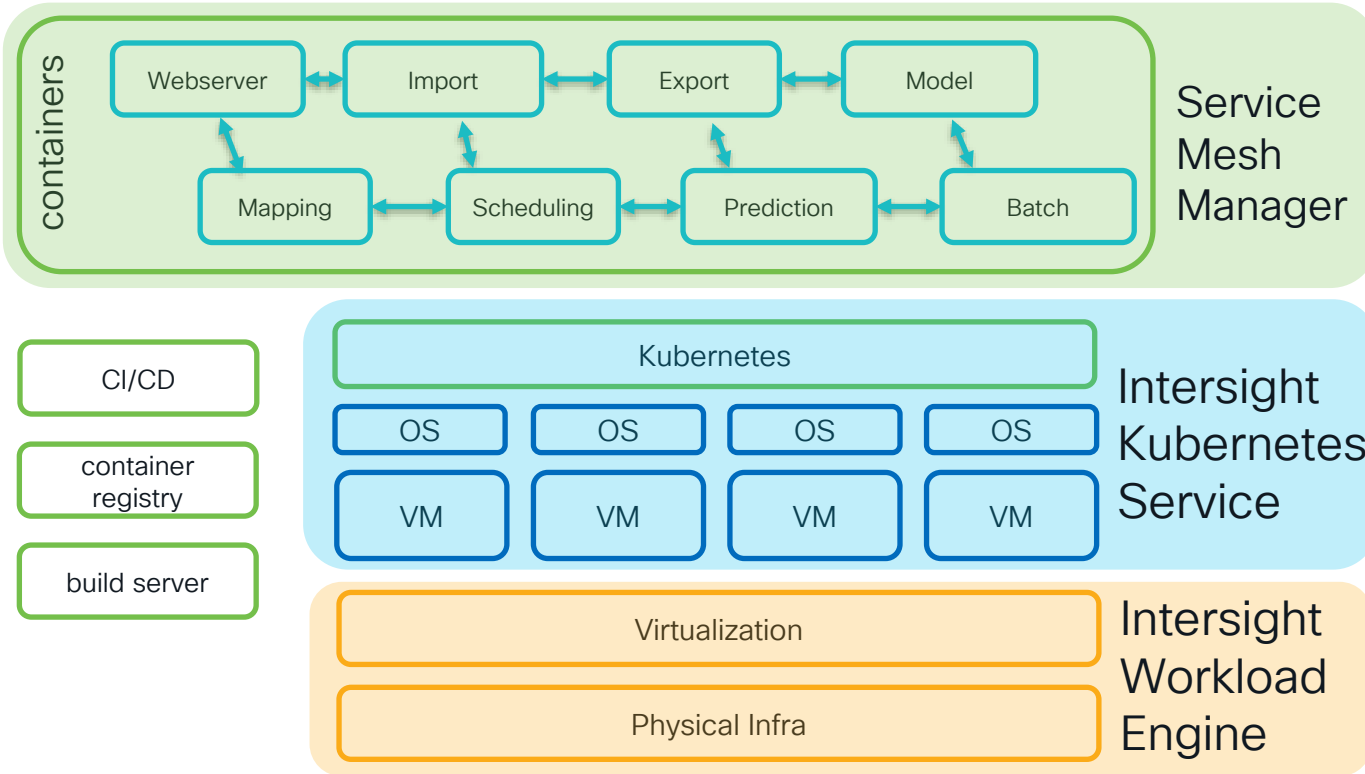





Curated & Secured



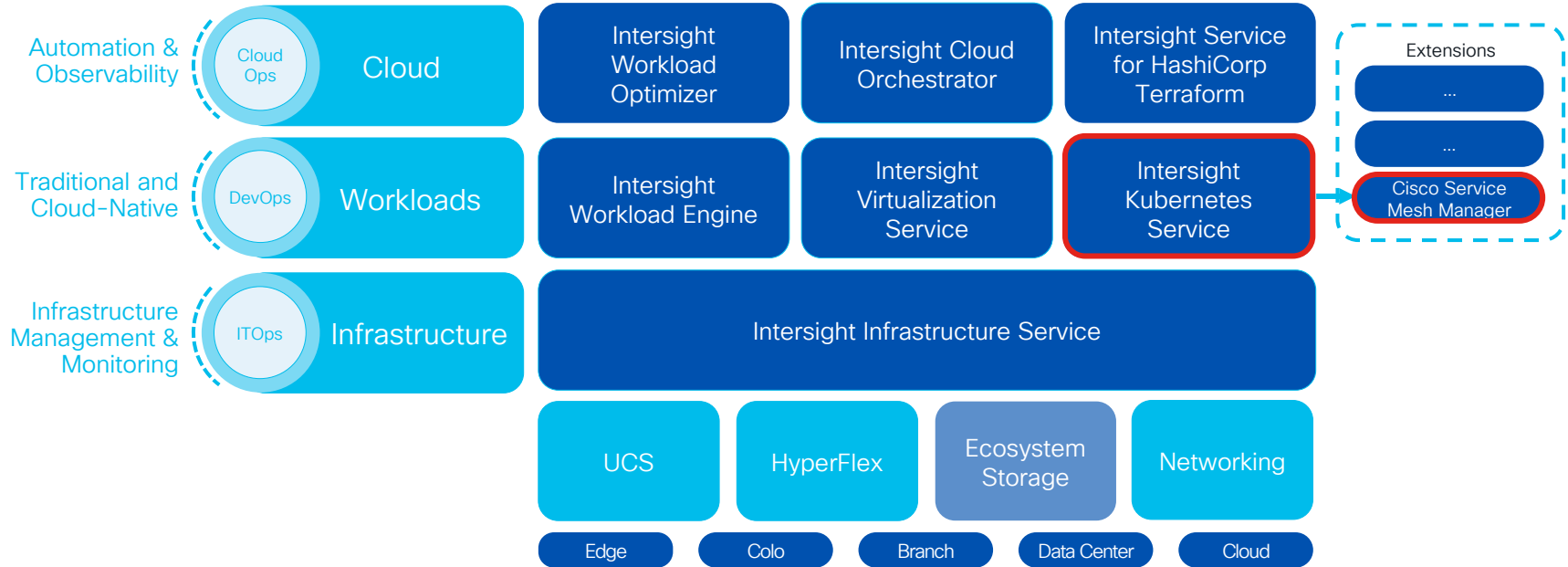
*“Cloud is an **operating model**  
not a destination”*

# Intersight delivering a Cloud Native Solution



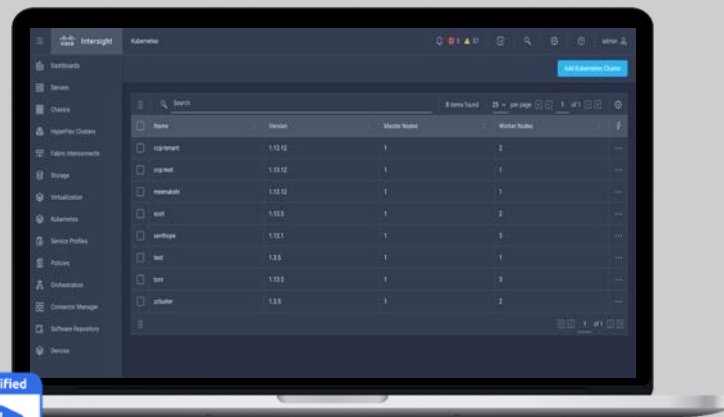
-  Fully Automated
-  Delivered as-a-Service
-  Curated & Secured

# Intersight Hybrid Cloud Platform



# Cisco Intersight Kubernetes Service

Operationalize production-grade K8s with a turn-key, flexible platform



Generally Available March '21



Native Kubernetes – 100% Upstream  
Production Grade: hardened, secure, robust

Validated Out-of-the-box Container Interfaces  
Networking | Storage | Load balancing

Curated Add-ons (open source and 3<sup>rd</sup>-party)  
Monitoring | Service Mesh

Simplify Kubernetes day 0 to day N  
operations anywhere

More value with multiple options  
(hypervisors, storage and bare metal)

Reduce risk and cost with a security-  
hardened, highly-available platform

# IKS Demo

# TriggerMesh

INTEGRATE | AUTOMATE | ACCELERATE

# Bringing DevOps to Enterprise Integration

Reference  
Customers



Accolades



In Cloud Computing



Hot Cloud Tech Companies  
To Watch In 2022



Top Cloud Trends and  
Private Companies

Investors





Increasing complexity and growing integration needs

# What Enterprises are Facing



Building Data Pipelines

# Accelerate Integration

Stream data from any source to any other source using event-driven architecture. Break up data gravity, sync data, or create automated workflows between applications no matter where a workload is deployed.



Extensible, cloud-native, open source, devops-friendly, multicloud

# TriggerMesh Advantages

The best way for enterprises to integrate cloud services and on-premises applications



## Declarative API

DevOps and GitOps approach to enterprise integration.



## Multi & Hybrid Cloud

Architecture agnostic to support multicloud, hybrid cloud, and on-premises.



## Industry-standard

Modern architecture built on technology that will be relevant for years/decades



## Lower Costs

Self-service mindset allows users to deploy without expensive consultants



## Extensible

Plug-in architecture to extend by TriggerMesh or your team



## Open Source

Apache v2 Open Source License  
Backed by TriggerMesh, VMware, and Cisco

One platform for everyone

# DevOps, DataOps, and Developers

A

DevOps professionals can use the **Kubernetes-like Declarative API**



B

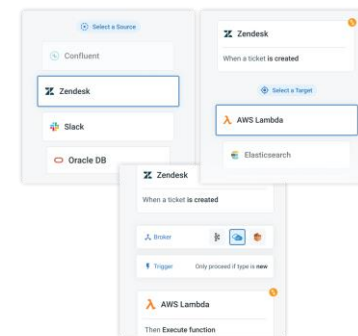
Developers can use our new human readable **TriggerMesh Integration Language**

```
target container "my_app" {
  image = "registry.example.com/myapp:v1"
  public = false
  env_var "ENV_VAR_FROM_SECRET" {
    value = secret_ref("secret-name",
      "secret-key")
  }
}

source aws_sqs "my_queue" {
  arn = "arn:aws:sqs:us-east-2:123456789012:my-queue"
  credentials = secret_name("my-aws-access-keys")
  to = router.dispatch
}
```

C

Less technical users can use the **Low Code Visual Editor**



Analyze and act fast on security notifications from any cloud with event-driven integration

# Multi-cloud Security: ONUG CSNF

TriggerMesh open source integration platform standardizes multi-cloud security events and routes them to Security Information Event Management (SIEM) systems like Splunk, Azure Sentinel, and IBM Security QRadar.



Save money & improve business agility

# Hybrid and Multi-cloud Integration



## Modernize Event Service Buses

Bridge mainframe-centric IBM MQ (or Tibco) to the cloud.



## Reduce Integration Costs

Cap costs of expensive proprietary integration platforms (e.g. Mulesoft).



## Run Serverless On-premises

Create a function-as-a-service environment on prem similar to AWS Lambda.



## Multicloud Workflows

Chain together cloud services like Salesforce and Twilio.



## Replicate Data in Real-time

Replace blocking ETL processes with real-time integrations to and from any source.



## Stream Data between Clouds

Stream cloud metrics from Oracle Cloud Infrastructure to Datadog.

# TriggerMesh Demo

# Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.





# Continue your education

## Here at Cisco Live - Options



Group Q&A, 1-2pm mtg room in DevNet booth



**Meet the Engineer (MTE)** – book us 1:1

*“Session Catalog”*, submenu above *“Filters”*:

*“Schedule Meet the Engineer Meeting”*, ***“Onsite Meet the Engineer”***



Connect as a group via **Webex** Mobile App

Webex Space: **DEVNET-2090**, Event Driven Infrastructure with Intersight  
Kubernetes Service and TriggerMesh

## After Cisco Live with TriggerMesh



Monthly newsletters, Tech Talks, and request a demo: [triggermesh.com](https://triggermesh.com)

# Cisco Learning and Certifications

From technology training and team development to Cisco certifications and learning plans, let us help you empower your business and career. [www.cisco.com/go/certs](https://www.cisco.com/go/certs)

## Pay for Learning with Cisco Learning Credits

(CLCs) are prepaid training vouchers redeemed directly with Cisco.



## Learn

### Cisco U.

IT learning hub that guides teams and learners toward their goals

### Cisco Digital Learning

Subscription-based product, technology, and certification training

### Cisco Modeling Labs

Network simulation platform for design, testing, and troubleshooting

### Cisco Learning Network

Resource community portal for certifications and learning



## Train

### Cisco Training Bootcamps

Intensive team & individual automation and technology training programs

### Cisco Learning Partner Program

Authorized training partners supporting Cisco technology and career certifications

### Cisco Instructor-led and Virtual Instructor-led training

Accelerated curriculum of product, technology, and certification courses



## Certify

### Cisco Certifications and Specialist Certifications

Award-winning certification program empowers students and IT Professionals to advance their technical careers

### Cisco Guided Study Groups

180-day certification prep program with learning and support

### Cisco Continuing Education Program

Recertification training options for Cisco certified individuals

Here at the event? Visit us at **The Learning and Certifications lounge at the World of Solutions**



The bridge to possible

# Thank you

CISCO *Live!*



#CiscoLive