Deploying Kubernetes-Based Applications with Multi-Access Edge Computing (MEC)

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About the Presenter

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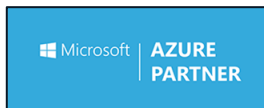Previously: okta McAfee RSA CISCO neustar

Rafay Delivers Best-In-Class Automation & Standardization For Kubernetes

KUBERNETES MANAGEMENT & OPERATIONS PLATFORM

Continuously deploy containerized apps

Operate Kubernetes clusters anywhere

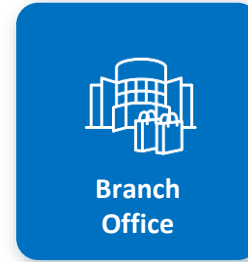Standardize Kubernetes environments with centralized governance and policy management capabilities

The New Landscape for Enterprise Apps?

Datacenter

Public Cloud

Network Edge

Branch Office
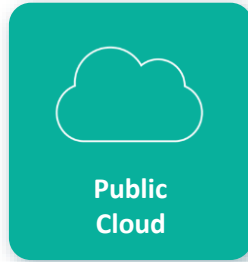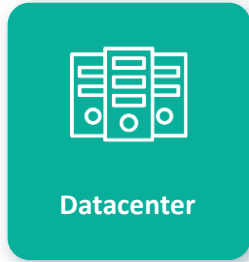
Resulting in Three Enterprise Challenges

Connectivity
Access can be over wired, wireless, private 5G or public 5G or combination

01

Security
Securely manage "low complexity" devices to enterprise network

02

Scalability
Ability to deploy and operate apps at right location for UX, cost, security etc.

03

RAFAY
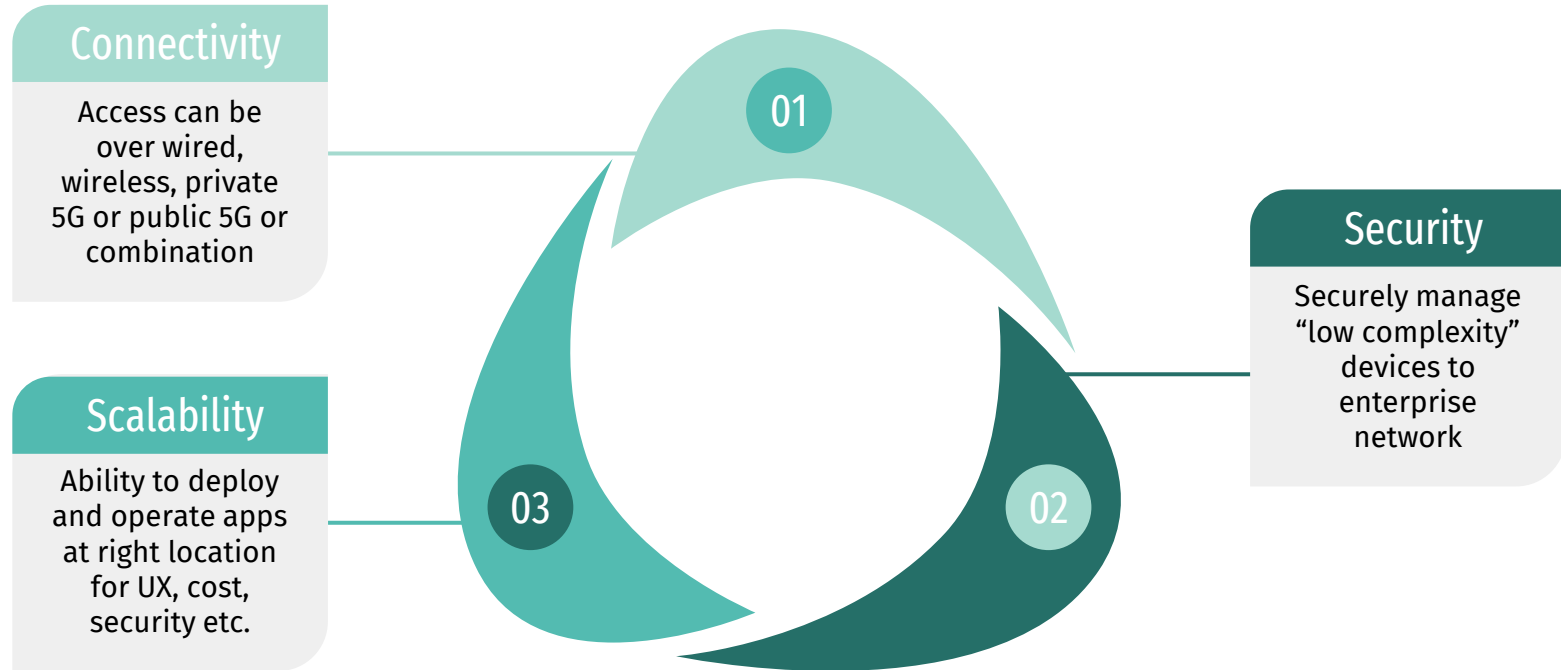
Requiring Four Critical Requirements to be Addressed

Turnkey Cluster Provisioning & Lifecycle Mgmt

Automated provisioning and upgrades for EKS, AKS, GKE & Upstream Kubernetes

Multi-Cluster Standardization & Addon Management

Standardization of configuration across multiple cluster via centralized blueprints & drift detection

Self-Service Single- & Multi-Tenant Cluster Consumption

Enable internal customers to easily consume multiple clusters, namespaces or a combination with centralized governance
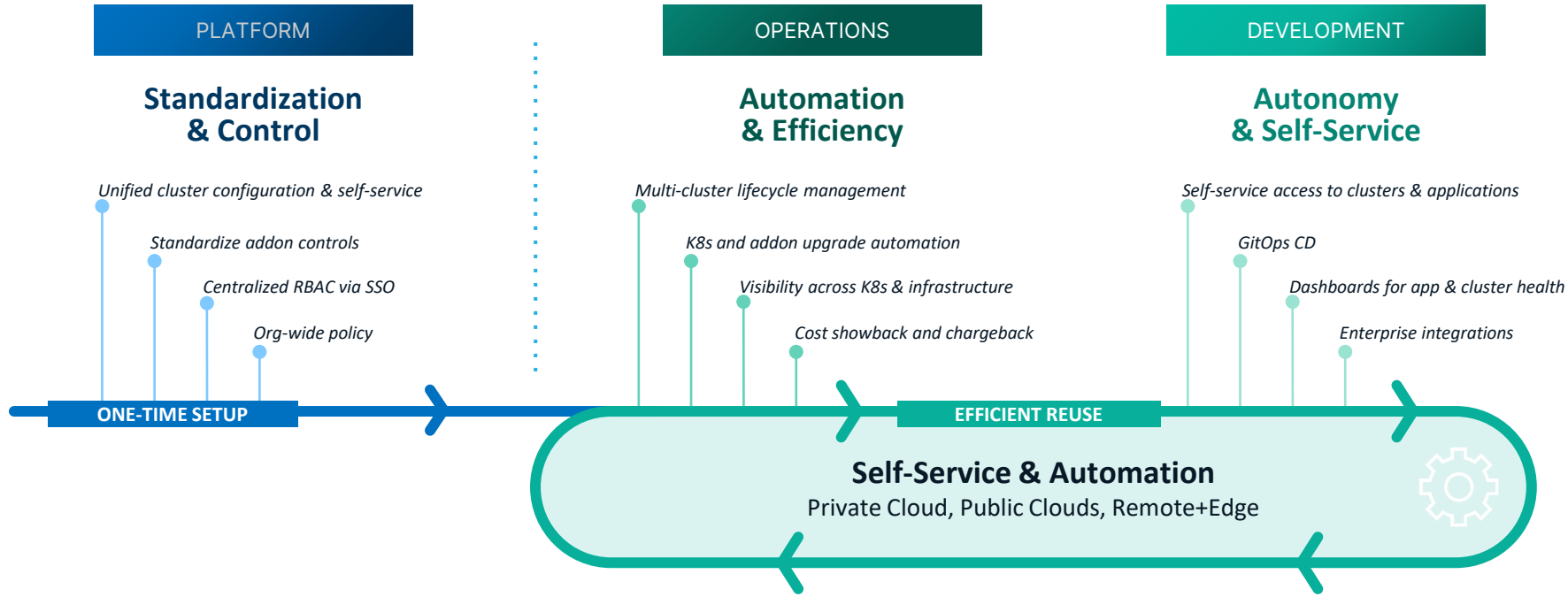
Zero-Trust Based Multi-Cluster Access

Enable operators to easily access multiple clusters and/or namespaces with centralized control and auditing

Requirements Span Three Distinct Functions

PLATFORM

Standardization & Control

- Unified cluster configuration & self-service
- Standardize addon controls
- Centralized RBAC via SSO
- Org-wide policy

ONE-TIME SETUP

OPERATIONS

Automation & Efficiency

- Multi-cluster lifecycle management
- K8s and addon upgrade automation
- Visibility across K8s & infrastructure
- Cost showback and chargeback

DEVELOPMENT

Autonomy & Self-Service

- Self-service access to clusters & applications
- GitOps CD
- Dashboards for app & cluster health
- Enterprise integrations

EFFICIENT REUSE

Self-Service & Automation
Private Cloud, Public Clouds, Remote+Edge

A Complete Solution for Infrastructure & Operations

RAFAY KUBERNETES OPERATIONS PLATFORM

Automation & Self-Service

Multi-Cluster Mgmt	GitOps for K8s	Environment Manager	Visibility & Monitoring	K8s Addon Catalog

Security & Governance

Zero-Trust Access	Blueprints & Drift Detection	Cost Management	Service Mesh Manager	K8s Policy Management	Network Policy Manager	Backup & Restore

Kubernetes Distros & Managed Services | intel SMART EDGE | OPENSHIFT | VMware Tanzu | Upstream Kubernetes | Amazon EKS | Amazon EKS Anywhere | Google GKE | Azure AKS

Infrastructure | Datacenter | aws | Azure | | Remote & Edge

RAFAY

Delivering Value to Enterprise & Telco Customers

Retail Apps | Manufacturing Apps | Enterprise Apps | Security Apps

intel SMART EDGE

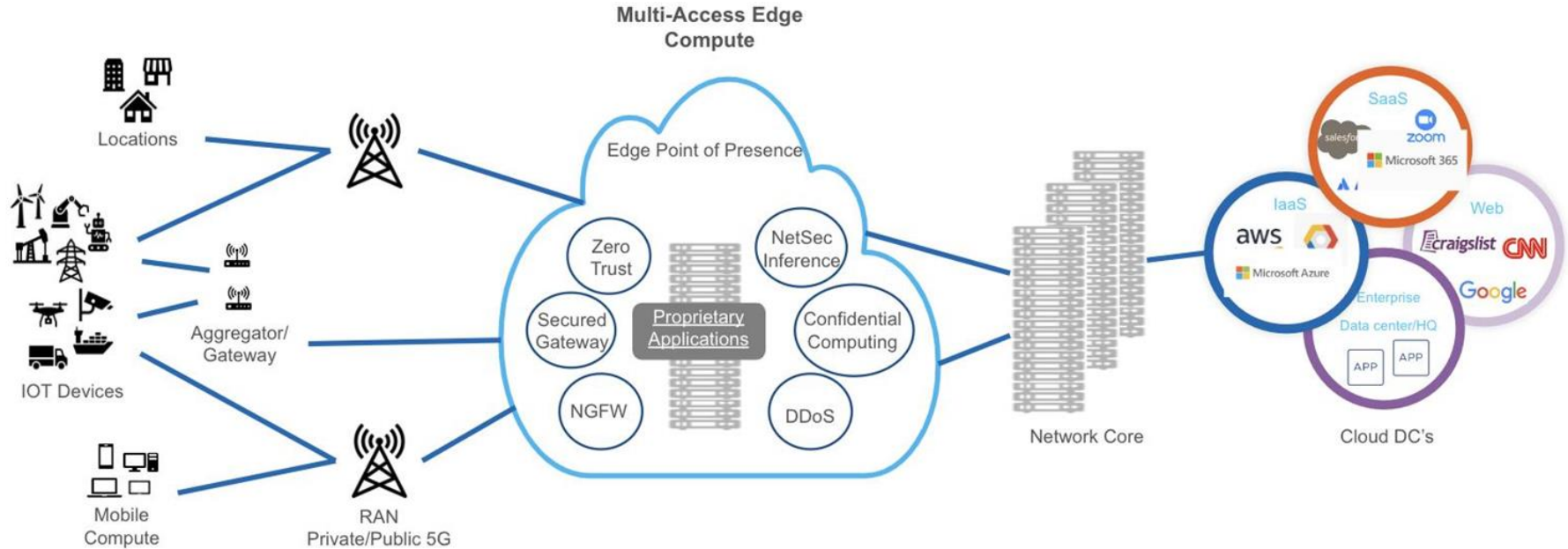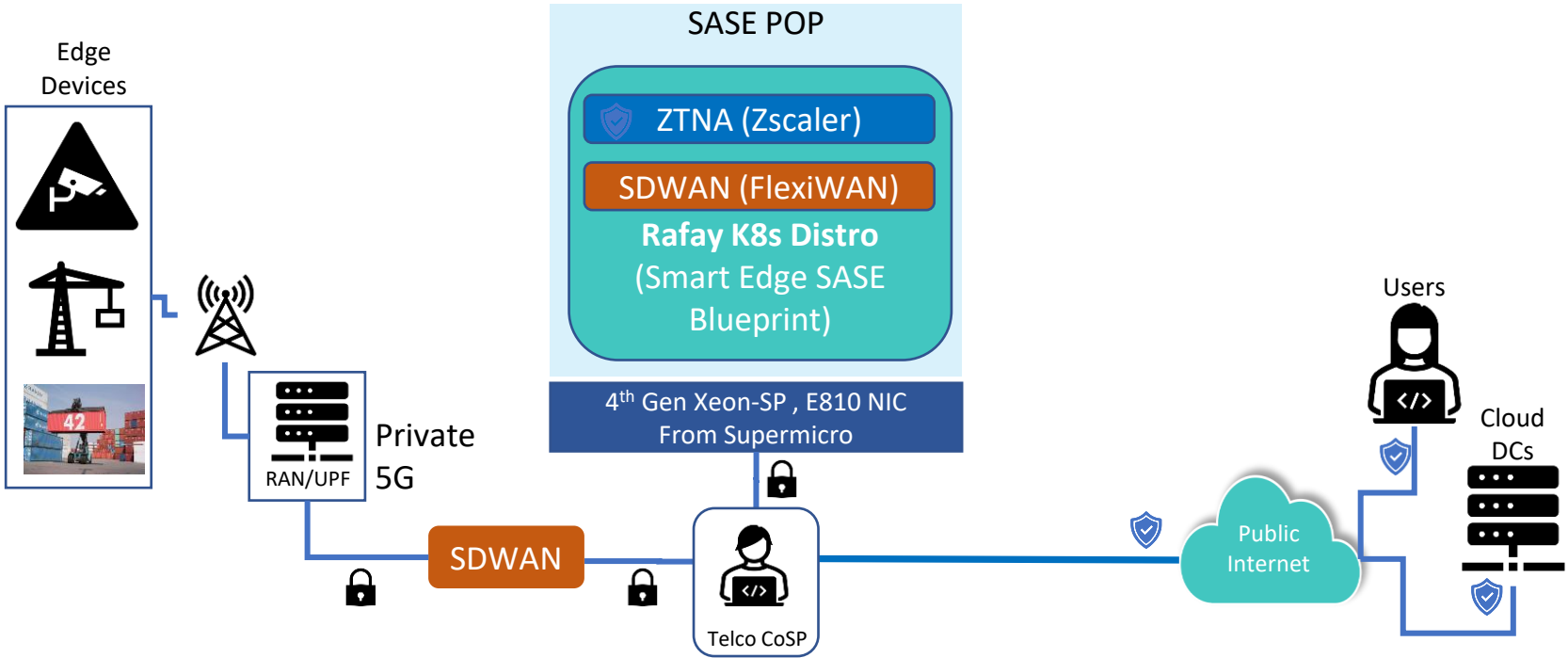Rafay Blueprint for Edge

Edge HW Platform

Enterprise Edge

Rafay K8s Operations Platform

MEC for Enterprises with Secure Access Service Edge (SASE)

Illustrative Architecture

Multi Cluster Standardization

Turnkey Cluster Provisioning and Lifecycle Mgmt	Multi-Cluster Standardization & Addon Management	Self-Service Single- & Multi-Tenant Cluster Consumption	Zero-Trust Based Multi-Cluster Access
Automated provisioning and upgrades for EKS, AKS, GKE & Upstream Kubernetes	Standardization of configuration across multiple cluster via centralized blueprints & drift detection	Enable internal customers to easily consume multiple clusters, namespaces or a combination with centralized governance	Enable operators to easily access multiple clusters and/or namespaces with centralized control and auditing

Secure Access and Remote Management

Turnkey Cluster Provisioning and Lifecycle Mgmt

Automated provisioning and upgrades for EKS, AKS, GKE & Upstream Kubernetes

Multi-Cluster Standardization & Addon Management

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RAFAY

RAFAY + intel SMART edge

Govern Millions Of **Performance-Optimized, Secure, Edge-Native Clusters** Across Thousands Of Companies Through A Singular SaaS Offering

✓ Manage 1000s of edge clusters

✓ Performance-Enhanced from the Platform level

✓ Drift Detection

✓ Zero Trust Security

✓ Lifecycle/Policy Management