

Agenda

- SUSE 簡介
- 現行三大挑戰
 - Challenge #1 Control Expanding Infrastructure
 - Challenge #2 Support Evolving Workloads
 - Challenge #3 Keep Pace with Rapid Deployments
- SUSE 解決方案
- SUSE Demo
- Summary



Industry's Largest Independent Open Source Company

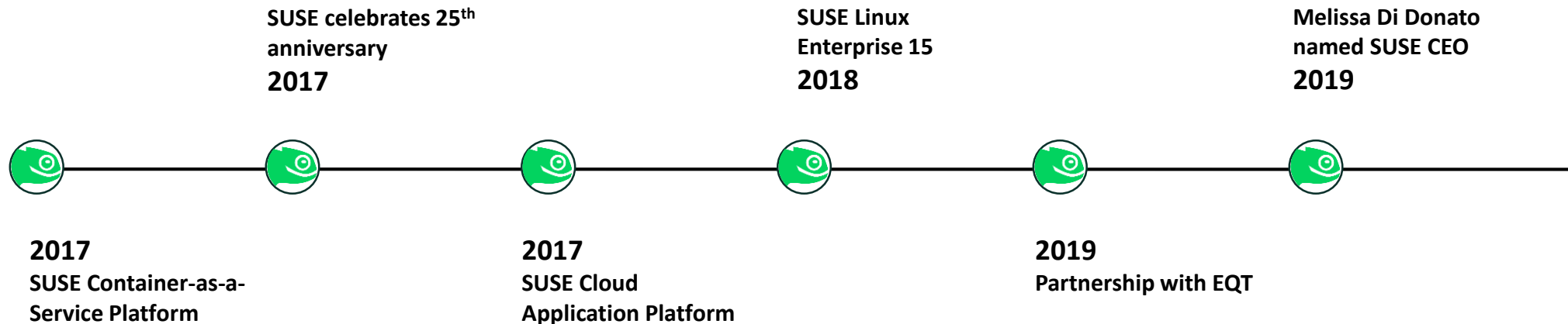
SUSE's inspiration, innovation and success come from our commitment to the open source community and ethos. As the world's largest independent open source company, we are in a position to best serve customer needs, accelerate our growth and move at a speed like never before. SUSE will continue to be the most customer-centric open source company in the world, meeting customers where they are and helping them get to what success looks like to them, versus locking them in. This has never been more important than in today's fast-moving marketplace where customers value the choice and flexibility that SUSE provides.

28 Years of History

Founded in 1992, SUSE is the world's first provider of an Enterprise Linux distribution.

Today, thousands of businesses worldwide rely on SUSE for their mission-critical computing and IT management needs.

1992 to 2000	2001 to 2010	2011 to Present	2017 to Present
The Pioneering Years	Building a Strong Ecosystem	Enabling an Always Open Data Center	From Linux Pioneer to Software-defined Infrastructure and Beyond

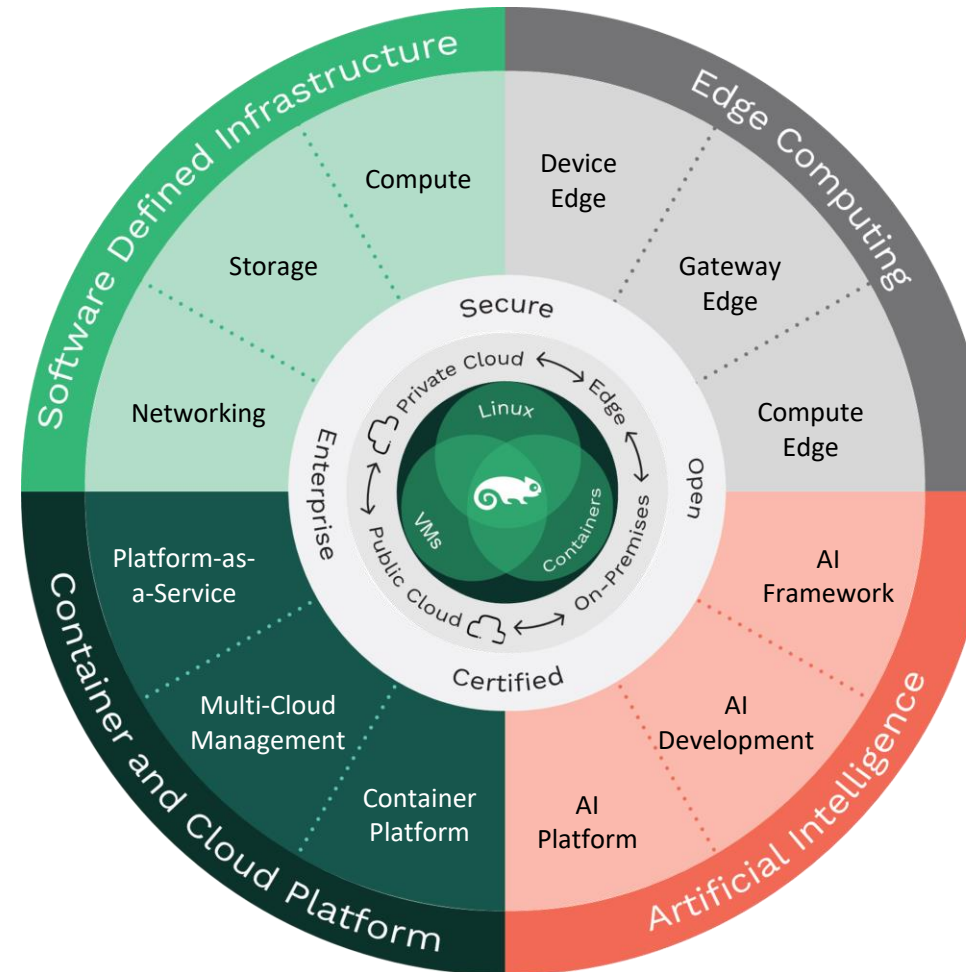


SUSE: The Power of Many

Simplify with Software Defined Infrastructure

Accelerate digital transformation by simplifying and abstracting IT infrastructure

Modernize with Container & Cloud Platform
Provide new applications and succeed with cloud and hybrid cloud



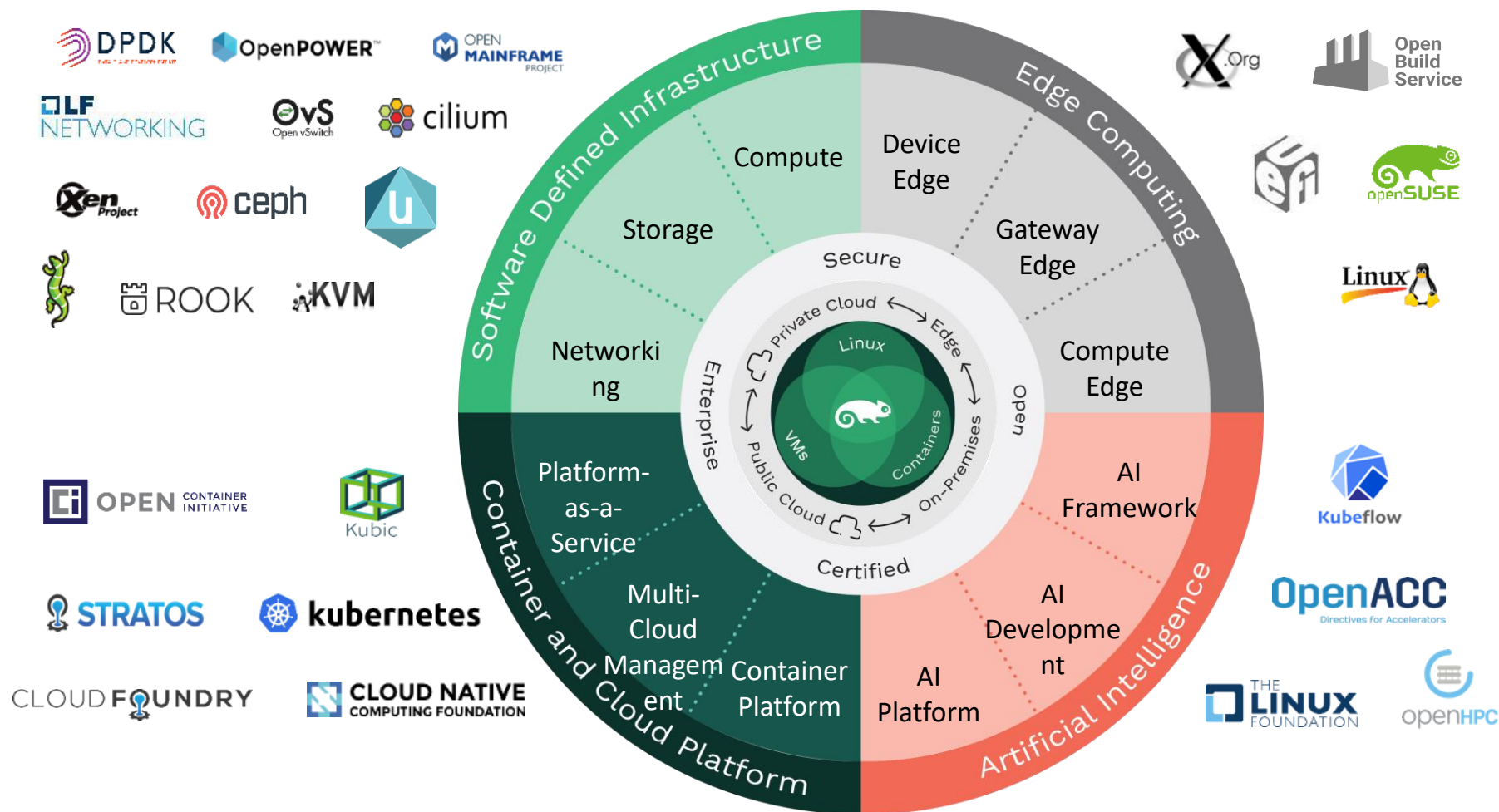
Innovate at the Edge

Digitize products with intelligence

Accelerate with Artificial Intelligence

Make automated solutions smarter

SUSE Supported Open Source Projects

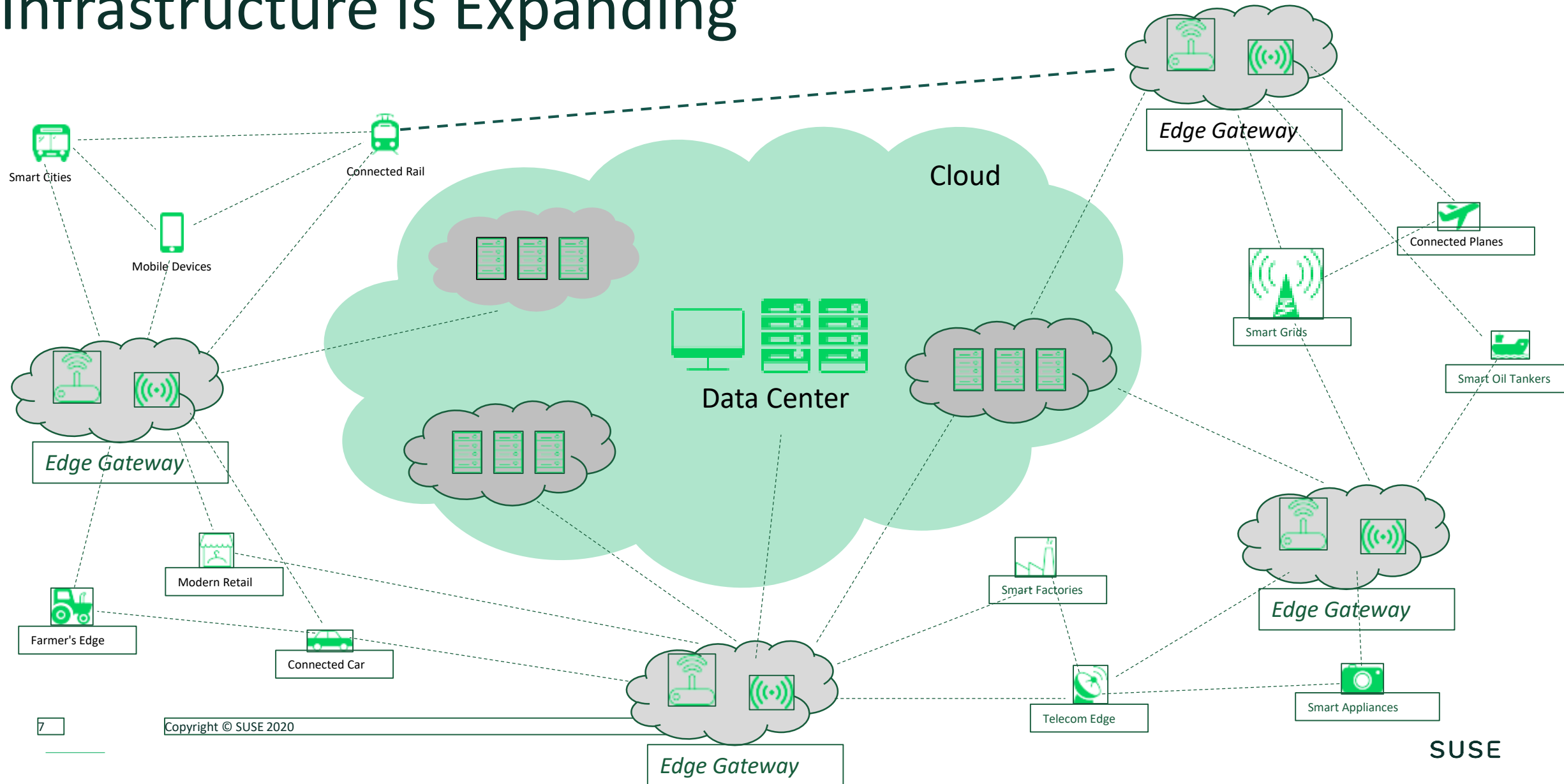


Challenge #1

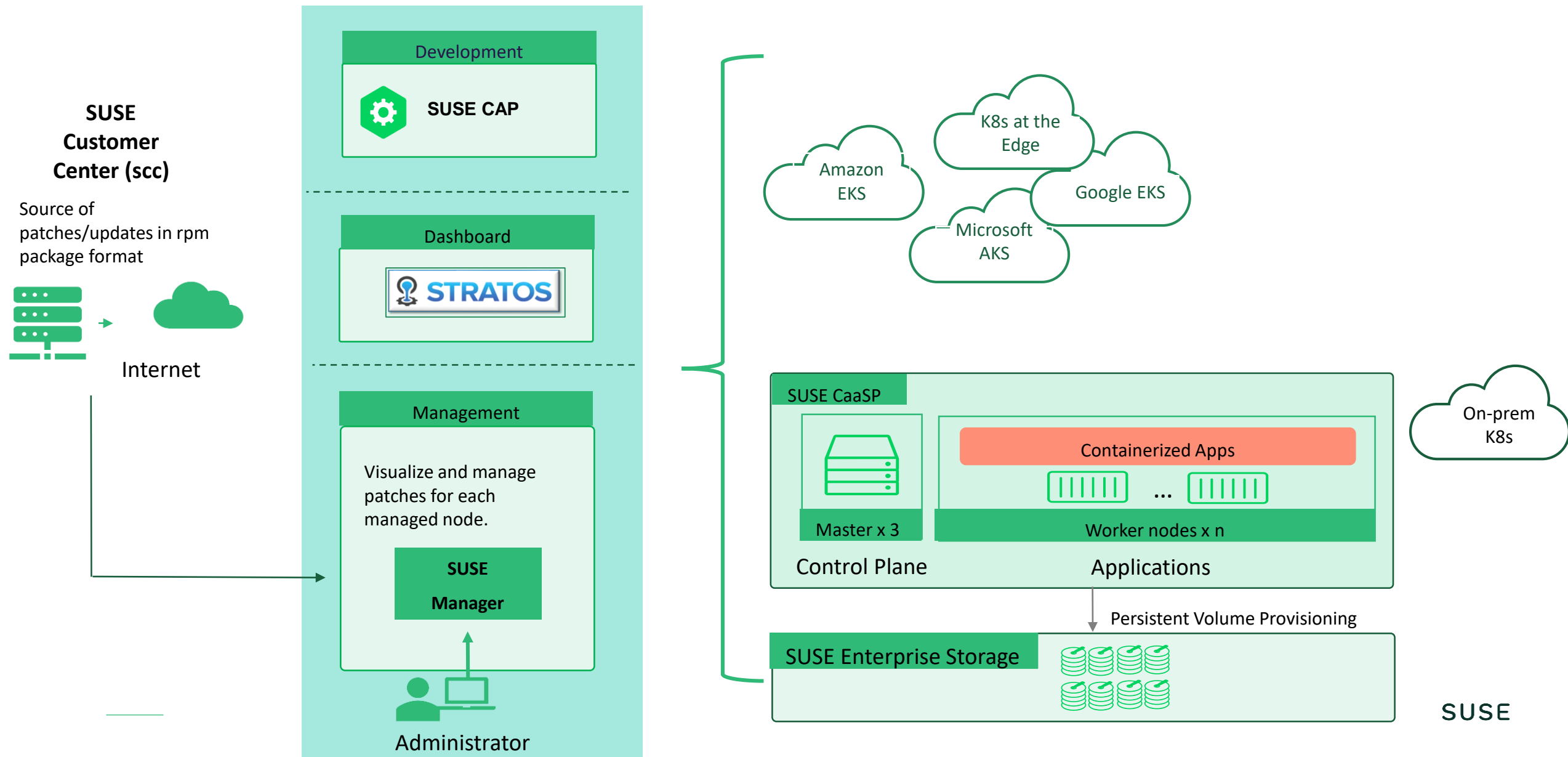
Control Expanding Infrastructure



Infrastructure is Expanding



SUSE consolidates all management environment

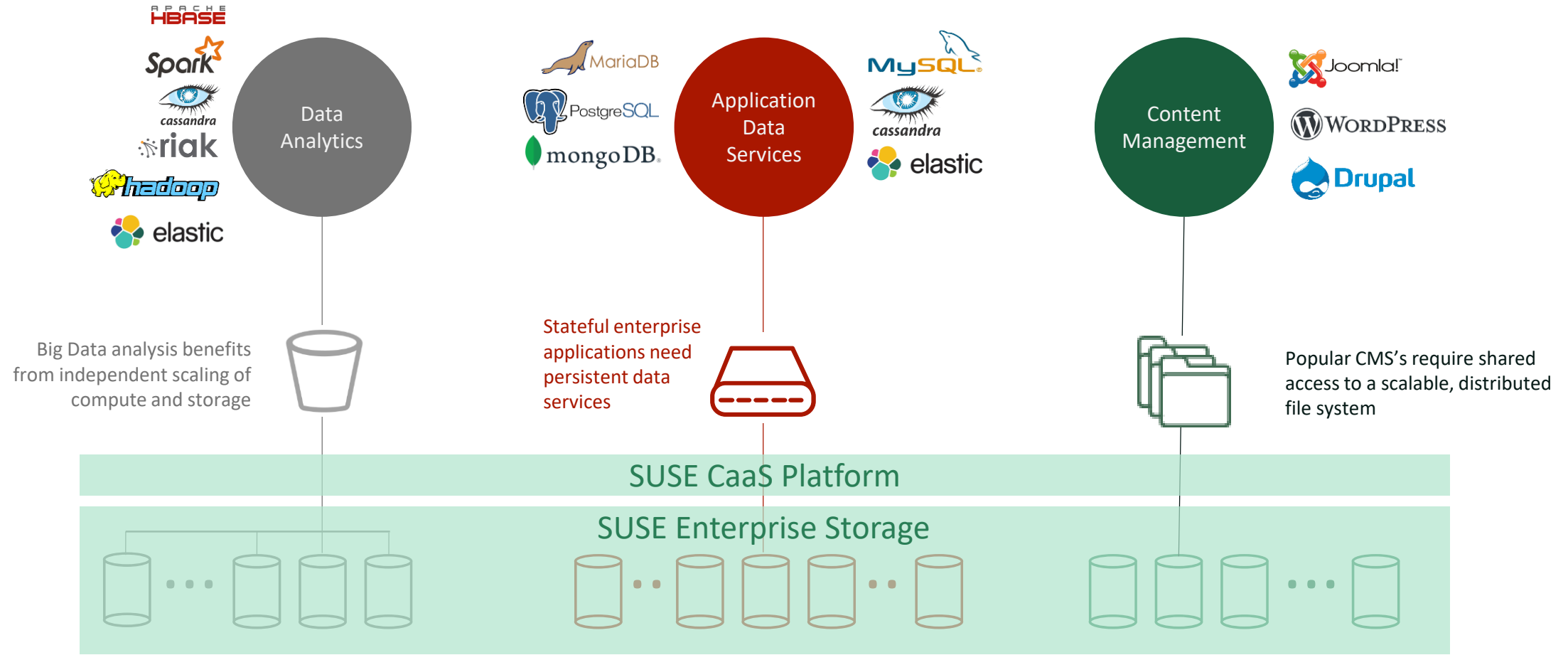


Challenge #2

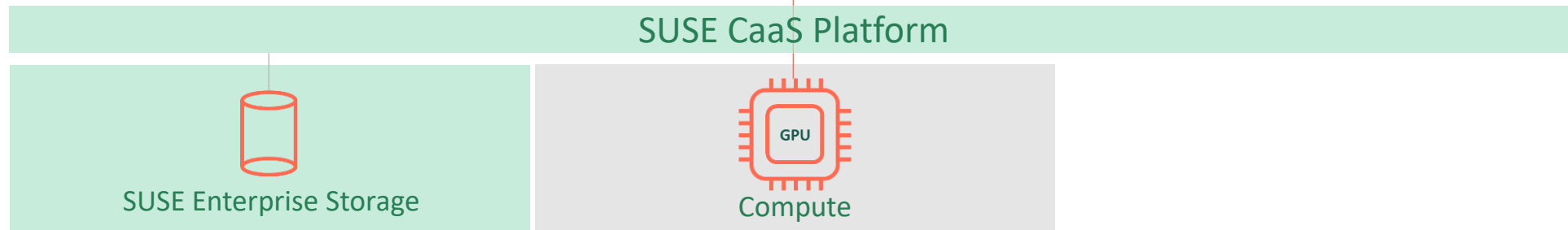
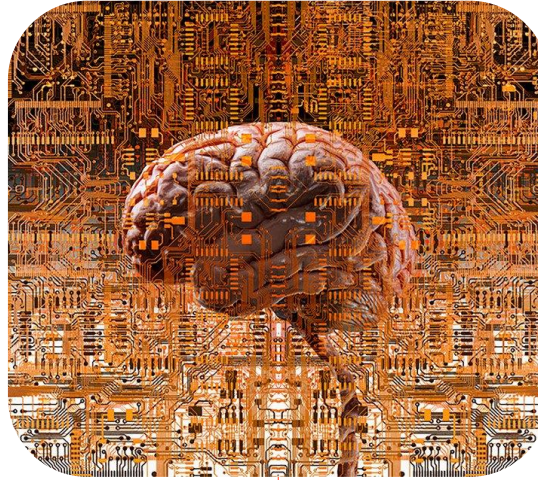
Support Evolving Workloads



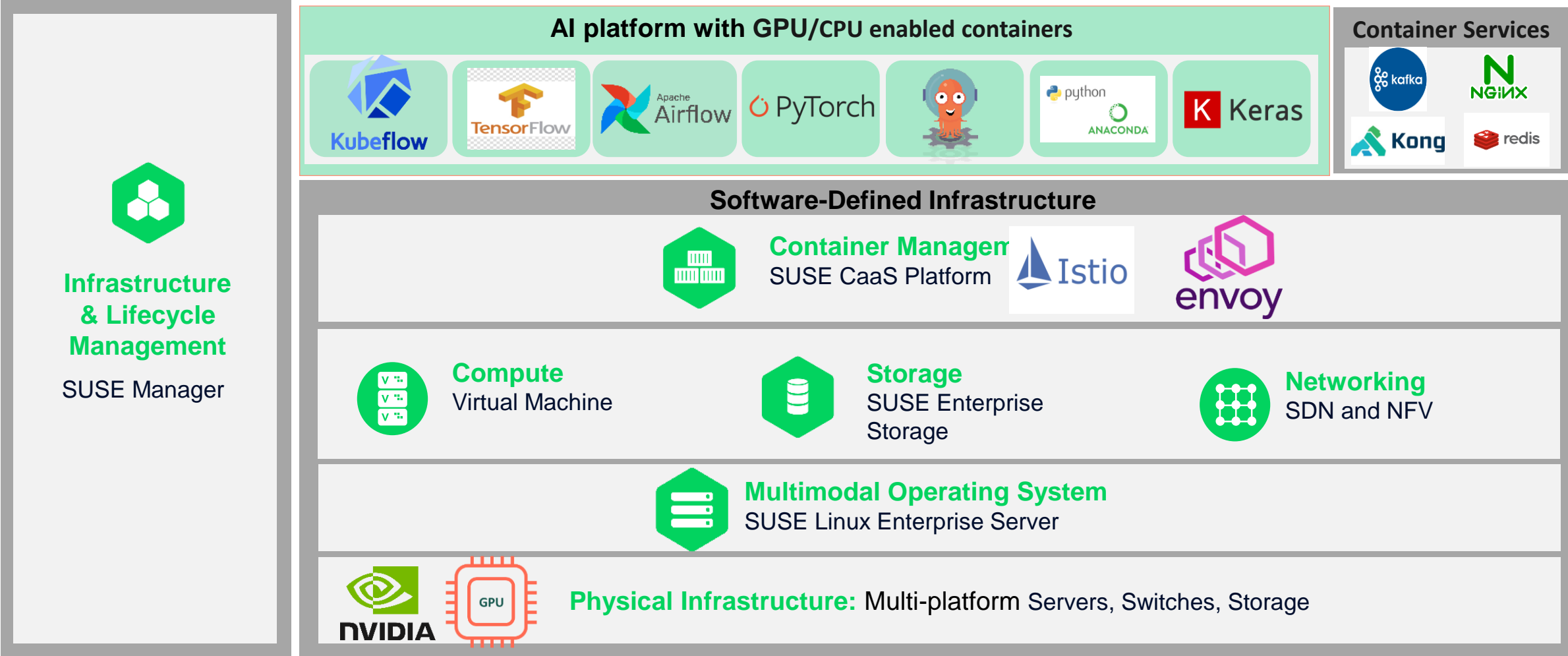
SUSE Meets Modern Workloads' Storage Demands



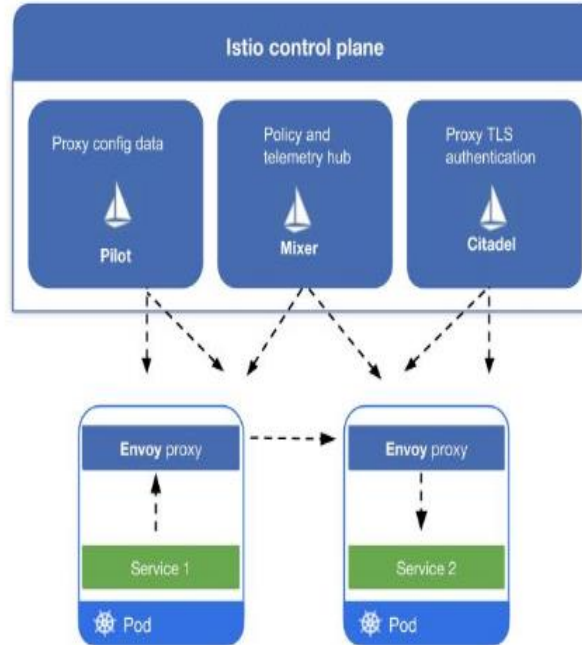
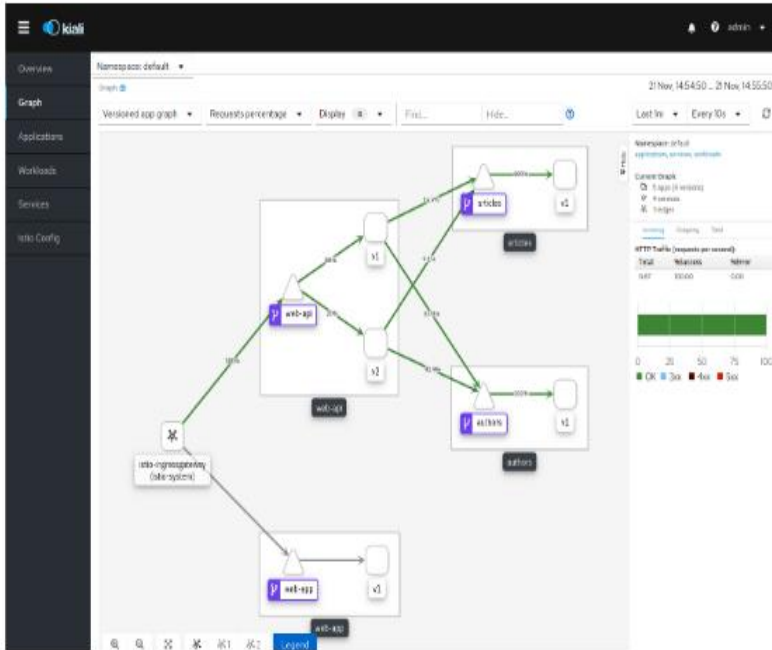
... And AI/ML Compute Demands



SUSE Artificial Intelligence Stack-Reference Architecture



SUSE Container Platform - Security & Microservice Ready



- Separates concerns \ Network security
- Traffic shaping \ Network performance optimization
- Circuit breaking \ Tracing and observability

Network-Plugin : Cilium

- Scalability with eBPF instead of IP table proxy mode.
- Cluster-wide Network Policies
- Support L3/L4/L7
 - L7 aware => Improve Application Security

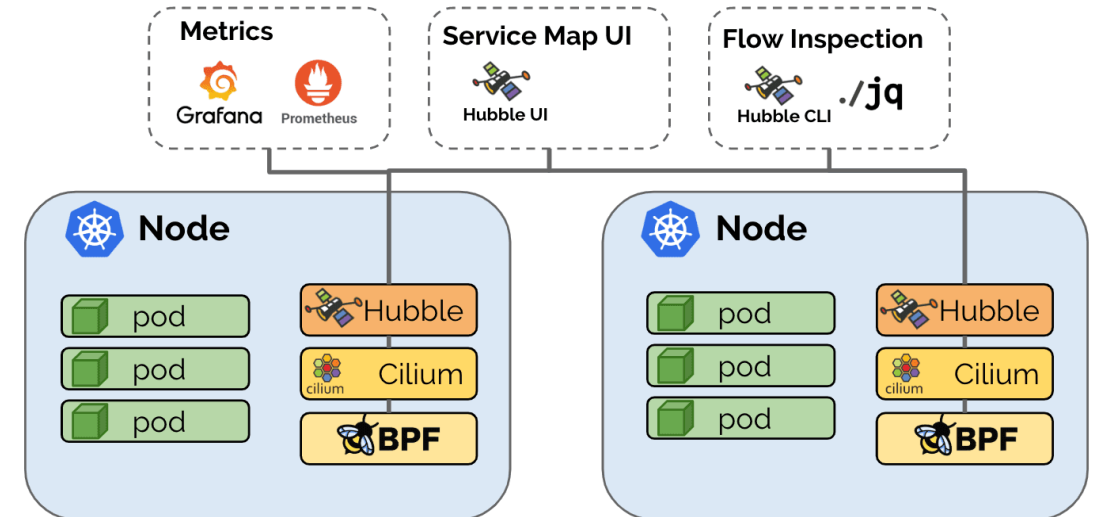
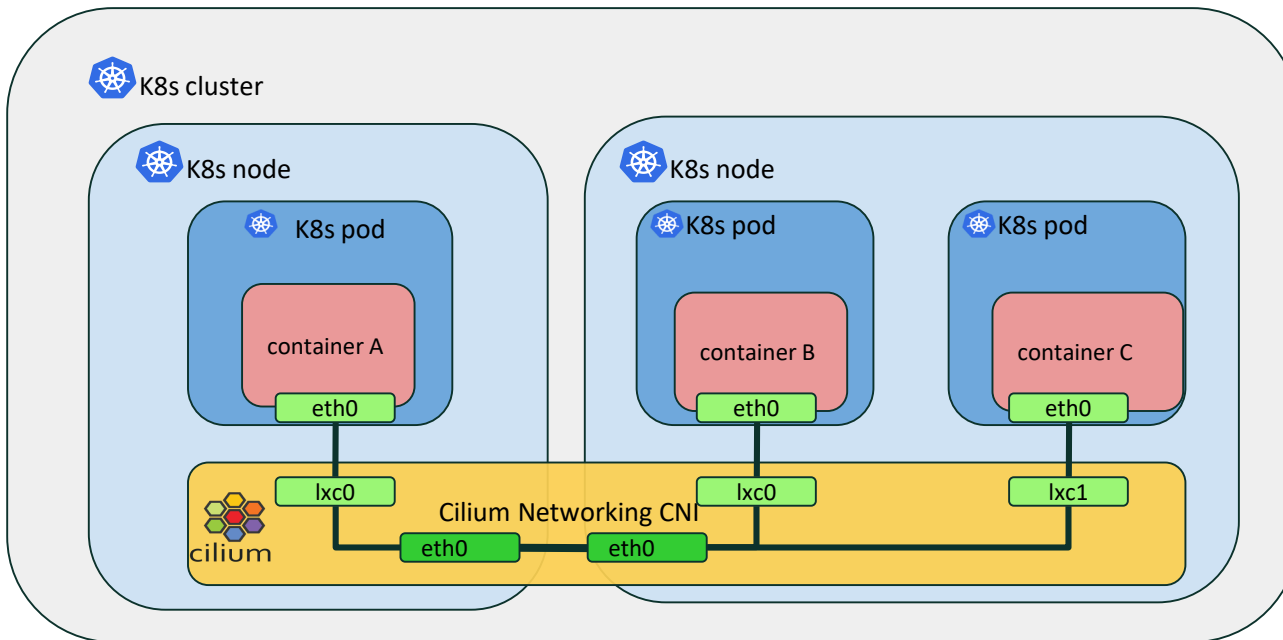
<https://cilium.io/>



Container Management
SUSE CaaS Platform



cilium



Strengthen Application Security at Scale

Easily create and manage pod-to-pod communication policies Security policy rules that are separated from application code.

Container Image Scanning:

- **SUSE Manager**
 - Clair (Used by Portus and Harbor)
 - Trivy(AquaSec)



Image Signing:

- **Skopeo**(available in SLES15SP1)



Cluster Vulnerability Scanning:

Kube-hunt



Cluster Compliance Tool:

Kube-Bench



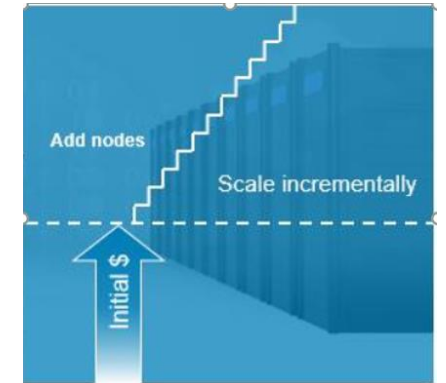
Challenge #3

Keep Pace with Rapid Deployments



New Applications Accelerate Change

- These "new age" applications generate new data
- Data is mined for future development or business opportunities
- The infrastructure must "**auto-scale**" to handle this accelerated growth



Automation provides

- **Speed** of deployment and change
- **Reduces human error** building repeatable processes
- **Efficiency** saving infrastructure costs



Edge

Applications Deployed



Core



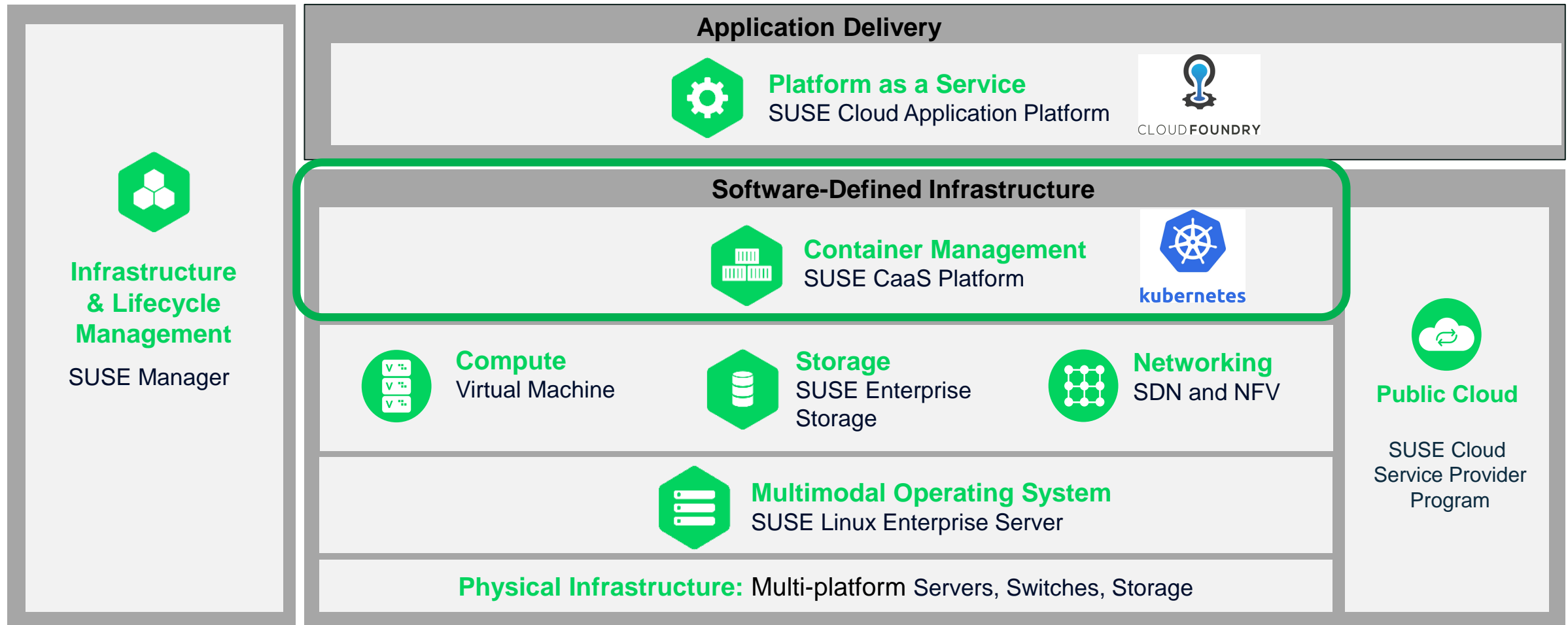
Cloud

SUSE

SUSE Solutions



SUSE Software-defined Infrastructure Portfolio & Application Delivery Approach



SUSE's approach – Open and Open

Modular Kubernetes Solution Architecture Flexible packaging to match your needs

Kubernetes user experiences

IT Cloud Service

DIY DevOps Automation



SUSE Cloud Application Platform
Platform as a Service



SUSE CaaS Platform
Container Management



kubernetes



Amazon
EKS



Microsoft
AKS



Google
GKE

Kubernetes operator experiences

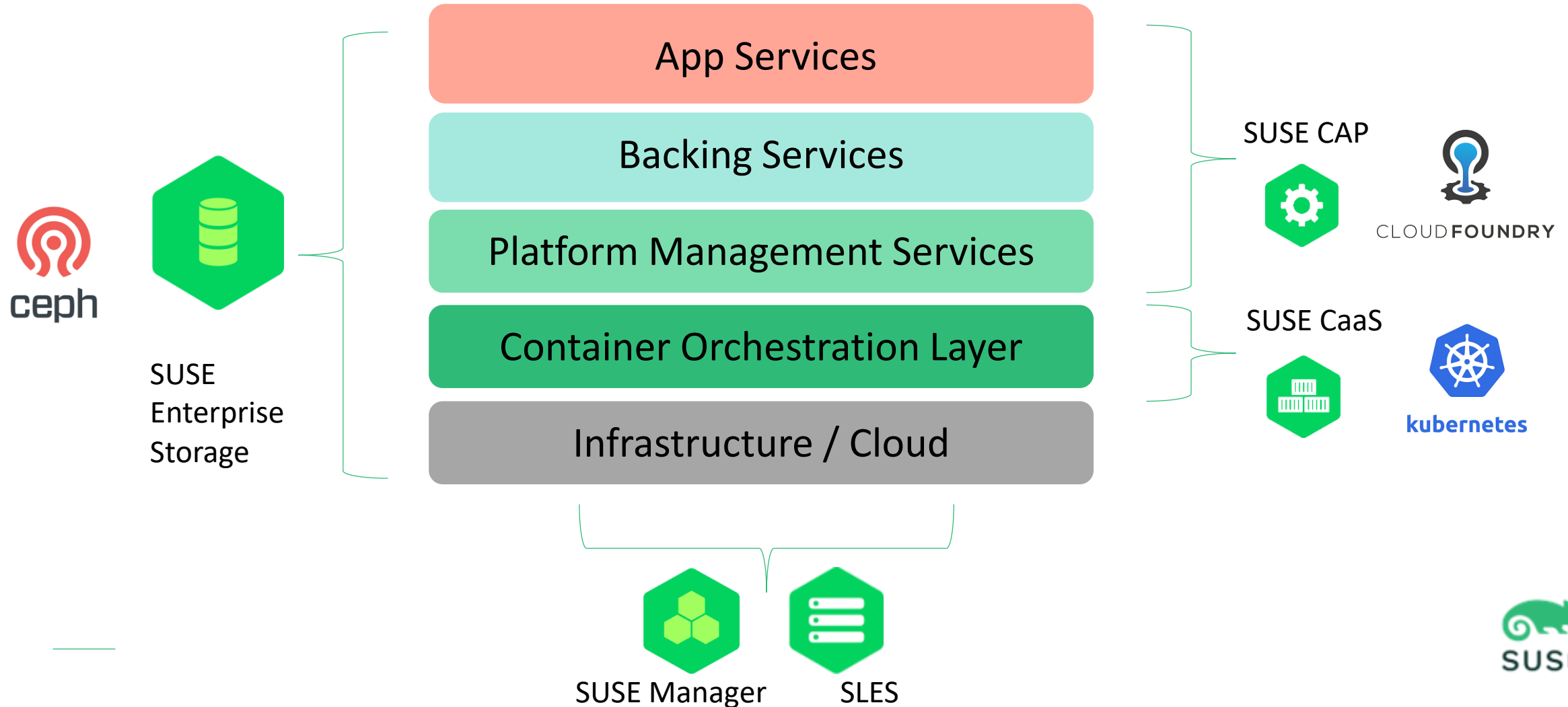


SUSE

SUSE Total Solution



Emerging Cloud Foundry, K8S Infrastructure, and Ceph



SUSE Total Solution - Operational Model 案例

Admin / Infra Nodes

- SUSE KVM Server
- SUSE Manager 4.1
- SUSE CaaS 4.2 x 3 Master
- SLES 15 SP2



Infra services :
CaaS Admin Services

Computing Nodes:

- SUSE CaaS 4.2 x 4 Minions
- SLES 15 SP2



Backing Services
App Services

Storage Nodes:

- SUSE Enterprise Storage 7.0
- SLES 15 SP2



Storage Services

Demo 情境



Demo 情境

實例一

SUSE CAP 加速開發
人員生產效率

實例二

資料治理
DataRail+ 如何善用
SUSE CaaS容
器平台的運算力

Scaling with SUSE CaaSP

SUSE

Demo 情境

實例一

SUSE CAP 加速開發
人員生產效率

Scaling with SUSE CaaSP

SUSE

快速交付應用獲取客戶經驗 (Accelerate Delivery)

預期效益(What you will get)

增加開發人員測試效率,以達快速交付應用的目標

問題(The problem)

開發人員要球需要測試環境, 等待時間 與 執行環境不一致, 導致程式碼測試耗時沒有效率

原因(Background)

開發人員與維運的人力比懸殊或是硬體資源不足
維運者需要較多時間處理 Productions 環境

解決方案(The Solution)

透過讓開發人員能夠重複隨測試需求, 以自主服務的啟動測試環境, 直到程式碼符合預期, 再 commit 到 repo 進行下階段整合測試



SLES



DevOps

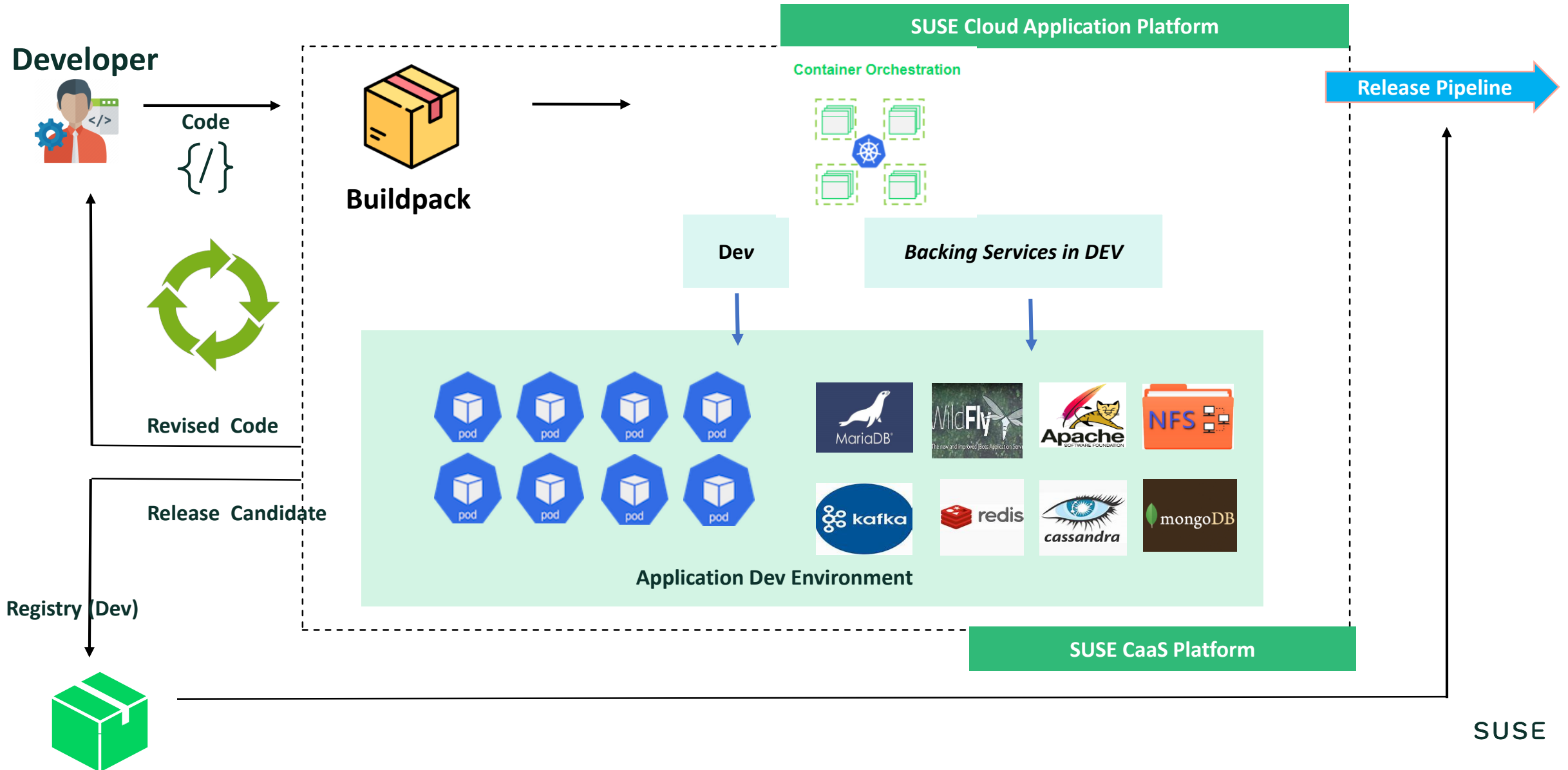


CAP

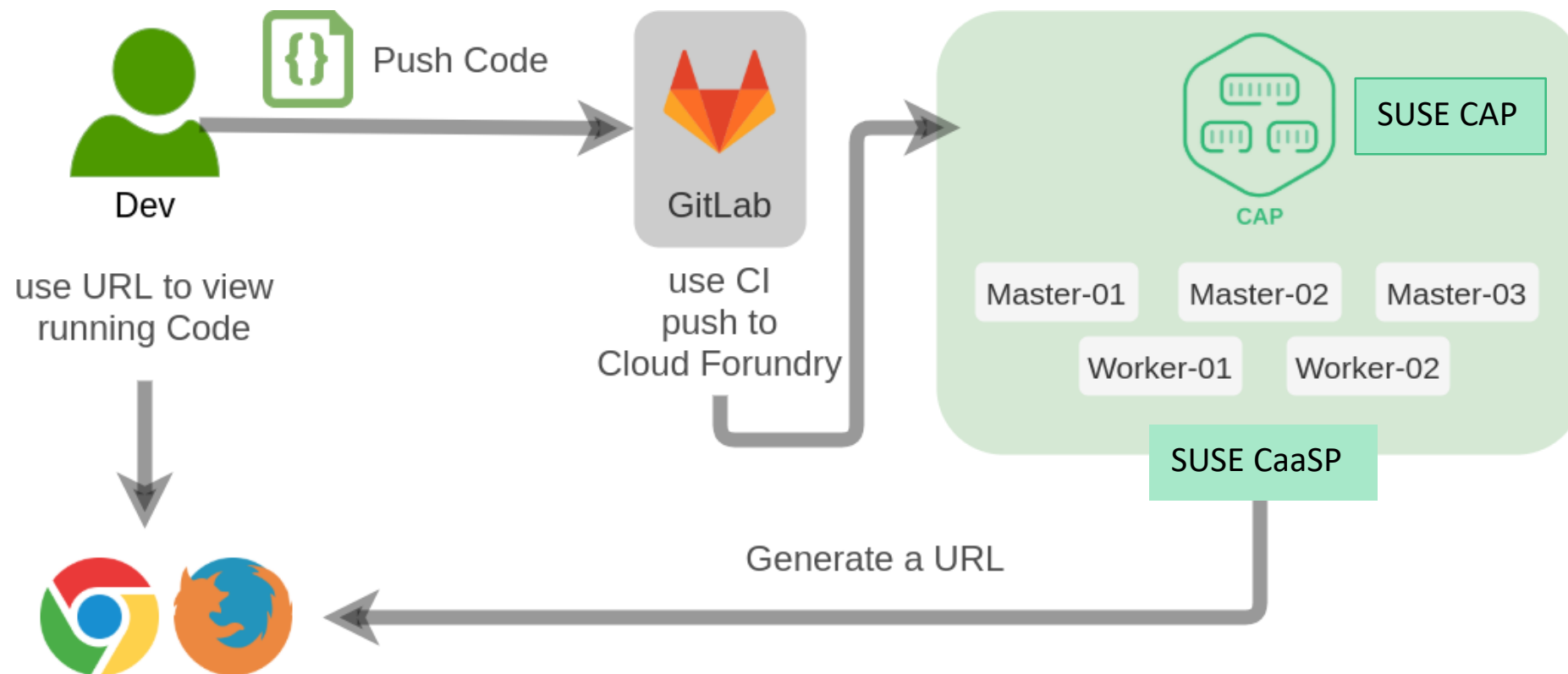


CAAS

How SUSE CAP apply for Dev environment



Demo 運作流程圖

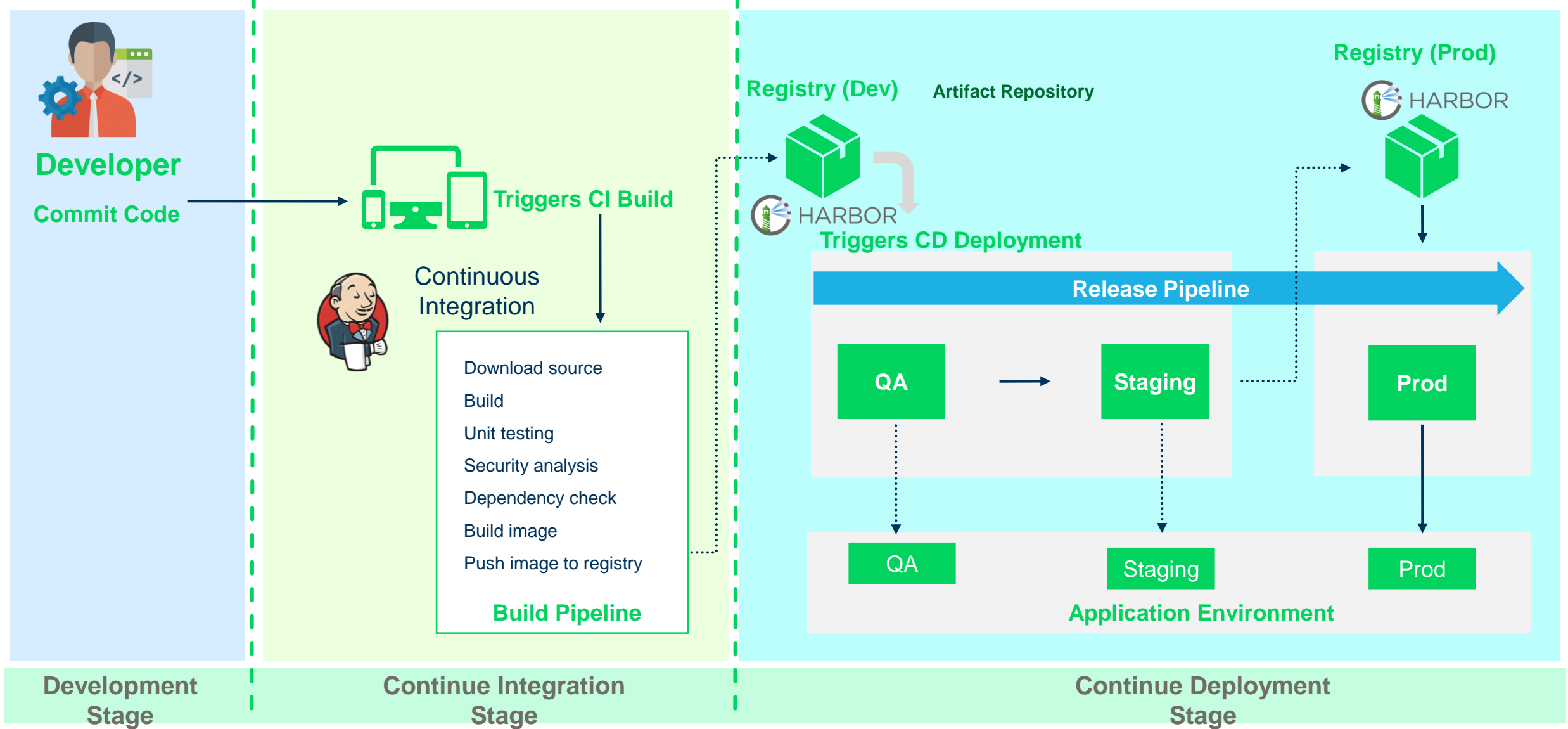




Show time!

Sep 26, 2020 @Taipei

How does an Application Move from Code to Production?



Demo 情境

實例二

資料治理
DataRail+ 如何善用 SUSE CaaS 容器平台的運算力

Scaling with SUSE CaaSP

SUSE

資料治理 **DataRail+** 如何善用 SUSE CaaS 容器平台的運算力

預期效益(What you will get)

迅速累積各種環境下的測試結果，提升開發測試效率達到快速除錯，使產品品質最佳化。

問題(The problem)

市場對於不同交易速度均有需求 (從 VISA 等級的 2000 TPS 到 低交易量的 20 TPS) 因應上述需求特殊性，測試環境變動性大，單一模式的測試無法符合實際執行環境

原因(Background)

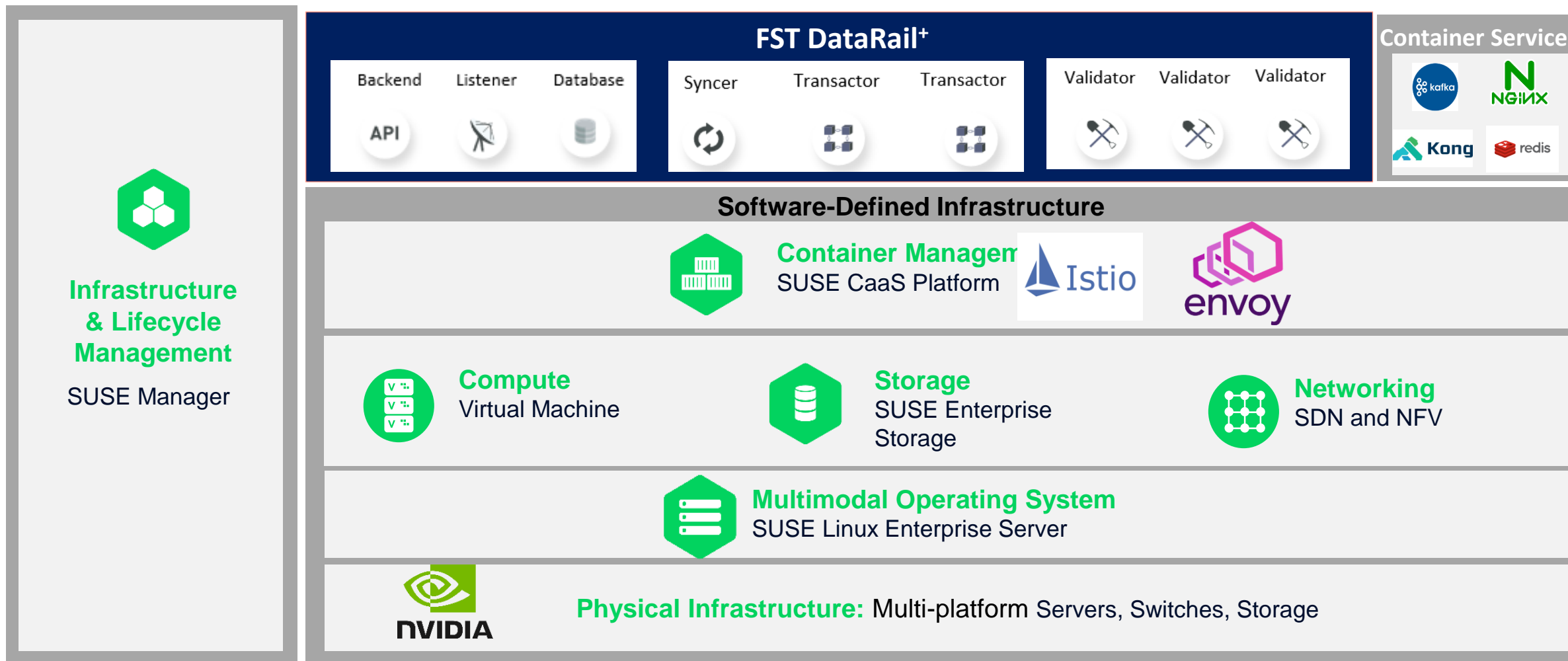
建置多種測試環境及分配硬體資源的成本及耗時過高，過去僅能以單一模式測試進行

解決方案(The Solution)

透過調整設定檔即可迅速同步調整**多重測試環境**，並針對不同開發需求設計各種測試生態彈性分配運算資源及透過參數設定靈活變動，進行多樣性的開發測試



SUSE & FST DataRail+ Architecture



One more show!



Demo 情境

實例一

SUSE CAP 加速開發
人員生產效率

實例二

資料治理
DataRail+ 如何善用
SUSE CaaS容
器平台的運算力

Scaling with SUSE CaaSP

SUSE

Learn More

Let the experts at SUSE help you **Scale with Containers** to meet today's most demanding infrastructure management challenges



Scale with Containers

<https://www.suse.com/solutions/scale-with-containers/>



SUSE CaaS Platform

<https://www.suse.com/products/caas-platform/>



SUSE Enterprise Storage

<https://www.suse.com/products/suse-enterprise-storage/>



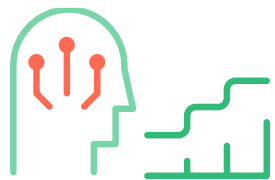
SUSE Global Services

<https://www.suse.com/services/>



Special Offer: Accelerate Innovation

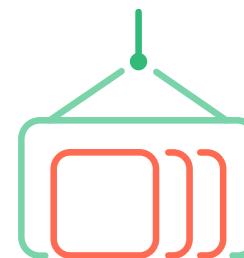
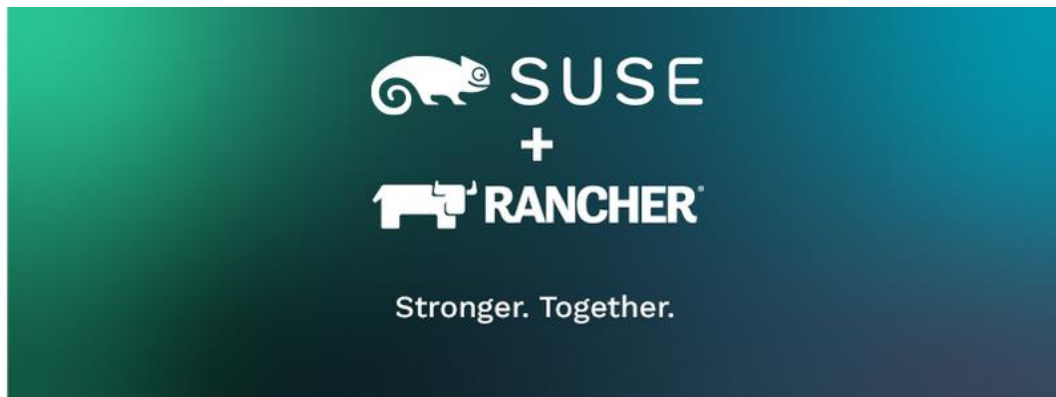
<https://www.suse.com/campaigns/accelerate-innovation/>



Power AI & Analytics



Innovate At
The Edge



Scale With
Containers



kubernetes



Deliver
Applications
Faster



A decorative design on a green background. A horizontal dotted line starts from the left edge and curves down to a solid black dot. From this dot, a solid white line extends horizontally to the right, then turns up to form a rounded rectangle. In the top right corner, there is a grid of small white dots.

Thank You