

susecondigital ²⁰

Managing Containerized Applications In Multi-Cloud Environments

DEV-1305

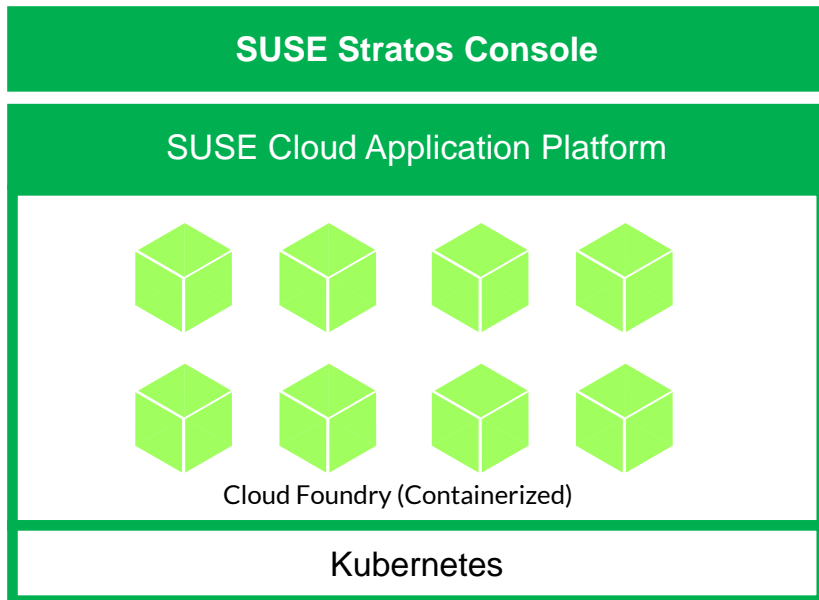
DEV Neil MacDougall

SUSE

What Is Stratos?

Web-based Management User Interface for managing
Cloud Foundry applications and Kubernetes workloads

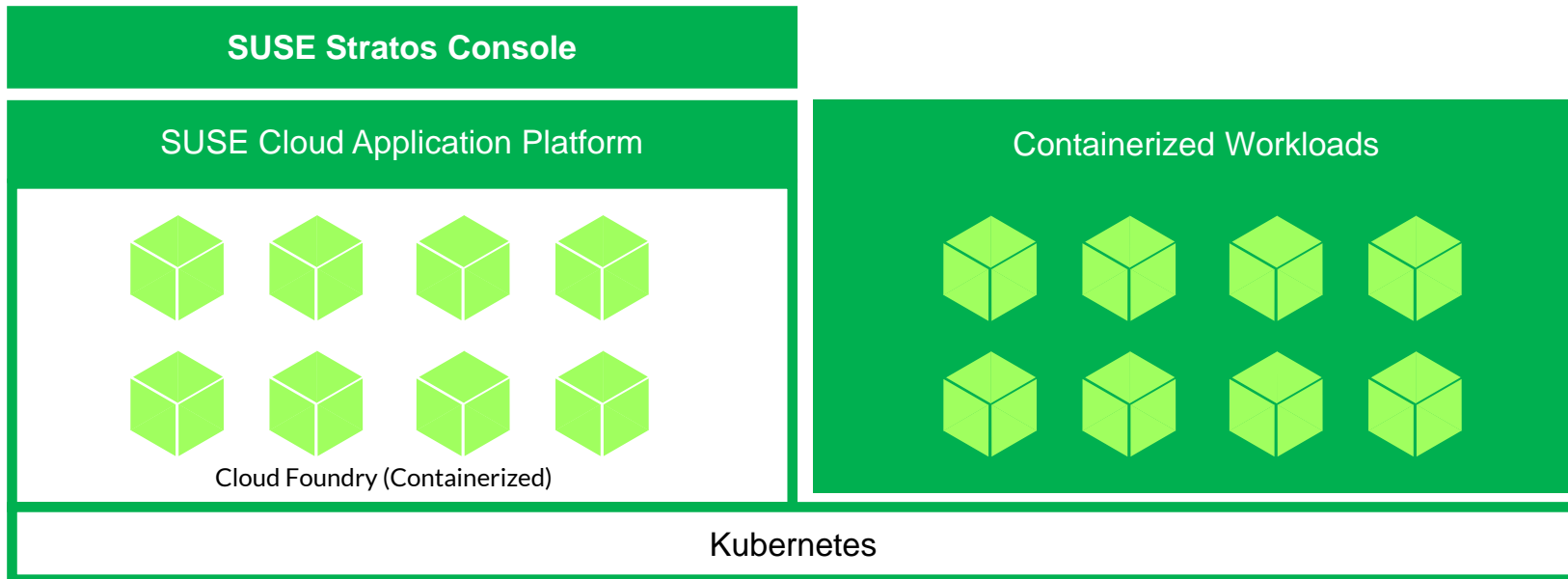
It Started With Cloud Foundry



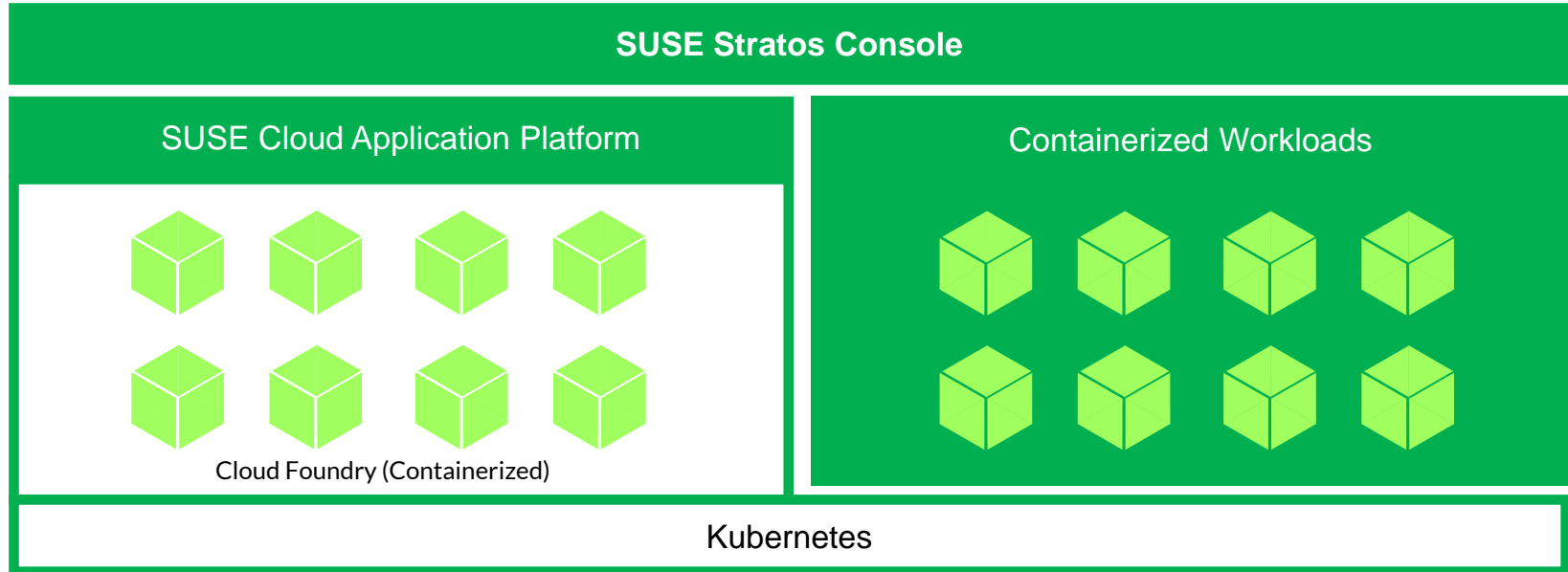
Includes SUSE-branded Stratos

Stratos provides an easy-to-use web-based application that allows developers and administrators to manage their applications and Cloud Foundry deployment(s).

Developers Run Workloads In Kubernetes Too



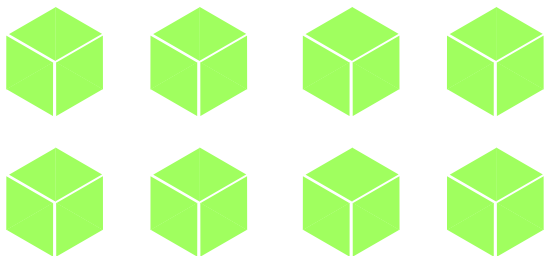
A Unified Management Tool



Multi-Cloud Support

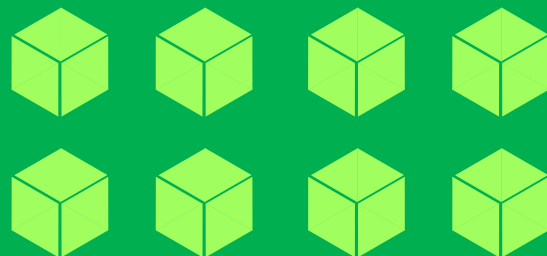
SUSE Stratos Console

SUSE Cloud Application Platform



Cloud Foundry (Containerized)

Containerized Workloads



Azure AKS



Amazon EKS



GKE



SUSE CaaS

Building Out A Richer Management Experience



Cloud Foundry



Azure AKS



Amazon EKS



GKE



SUSE CaaSP



Prometheus



Helm Repository



Kubernetes

Kubernetes



Cloud Foundry



Kubernetes



Prometheus



Helm Repository

- Ability to connect Stratos to one or more Kubernetes Clusters
- Authentication for Azure, AWS, GKE, SUSE CaaS
- Views aimed at helping users view SUSE Cloud Application Platform in their Kubernetes environment
- View Namespaces, Pods
- Install and embed Kubernetes Dashboard

Prometheus



Cloud Foundry



Kubernetes



Prometheus



Helm Repository

- Metrics Helm Chart allows Prometheus to be deployed with an nginx providing authentication and
- CF Firehose exporter collecting metrics from Cloud Foundry
- Kube Node Exporter collecting metrics from Kubernetes
- Stratos views extend to include metrics when a metrics endpoint is connected
- Initial set of views to show CPU, Disk and Memory metrics

Helm



Cloud Foundry



Kubernetes



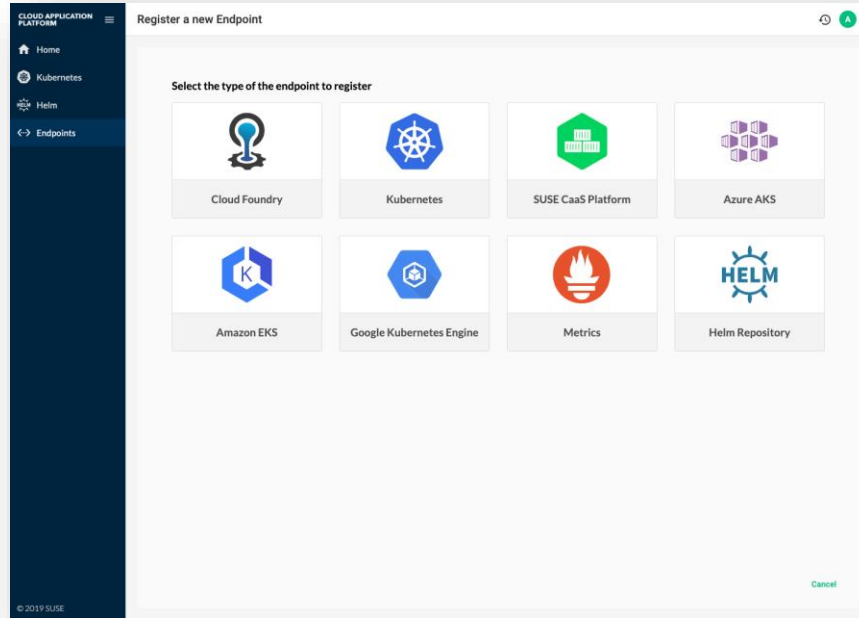
Prometheus



Helm Repository

- Integration of Open-Source Monocular project
- Add Helm Repositories to Stratos
- Browse and view Charts
- Install a Helm Chart from Stratos (Create Release)
- View Releases and Release detail
- Delete a Release

Demo



NOTE: Some features shown are not in the currently release product and are subject to change



Simplify, Modernize, Accelerate

Simplify

- Intuitive, web-based single-pane-of-glass management UI
- Single, simple install with minimal configuration

Modernize

- Integrated best-in-class Open-Source tools and technologies

Accelerate

- Manage multi-cluster environments in one place. Switch between these instantaneously.
- Bring together an integrated, rich set of functionality



Q&A
Please Submit Your
Questions

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The background is a solid green color with a white grid pattern that forms wavy, organic shapes. The grid lines are thin and create a mesh-like texture. The overall aesthetic is clean and modern.

SUSEcon digital '20

Abstract

In this talk we will discuss and demonstrate the Stratos web-based management interface (part of SUSE Application Delivery Solutions) to deploy and manage containerized applications in multi-cloud environments. We'll show how workloads can be deployed to Kubernetes clusters in the public cloud (GKE, AWS and Azure) as well as SUSE CaaS Platform using the Helm UI built-in to Stratos. In addition, we'll show how applications can be deployed and managed within SUSE Cloud Application Platform onto the same Kubernetes infrastructure. We'll talk about where SUSE is headed next in building out Stratos as a rich management experience for containerized applications in multi-cloud environments.