

Enterprise Cloud Migration Strategies

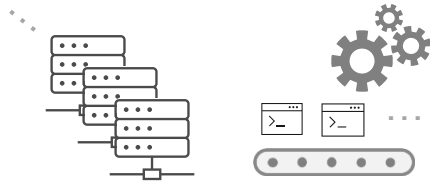
John McCarthy & Umar Kabir

Sales Engineering/Product Management



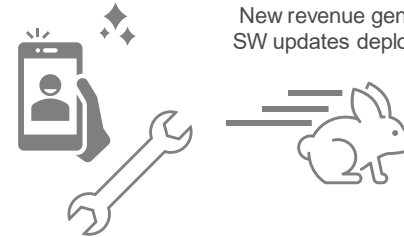
Motivations

Vendor-neutral, standardized datacenter, operations, management, automated "conveyor belt" SW roll-outs



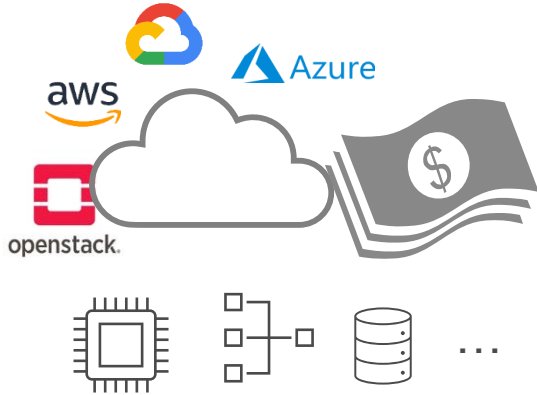
Optimized, reduced costs of datacenter & operations

New revenue generating services & SW updates deployed on demand ...



On-demand introduction of new services and SW upgrades

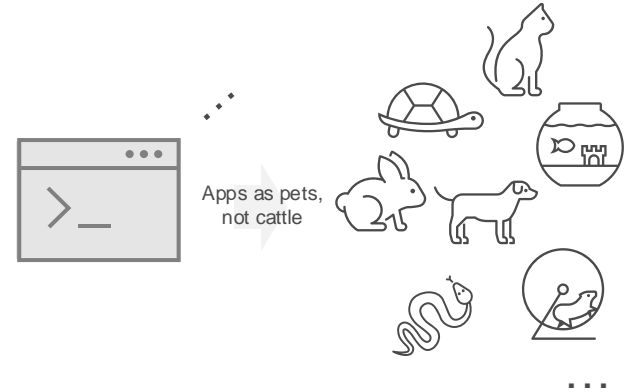
Challenges



Cloud Infrastructure
Costs

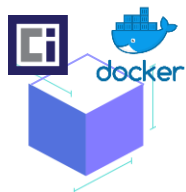


Limited Cloud Resiliency



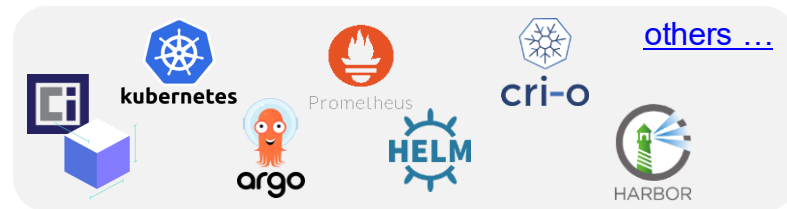
Implementation of Vendor
Agnostic CI/CD, LCM, Ops ...

What to Look For



Solutions Based on Cloud Native Technology

- Containers as portable programs
- Kubernetes (K8s) as the OS of the cloud
- Automation at every step

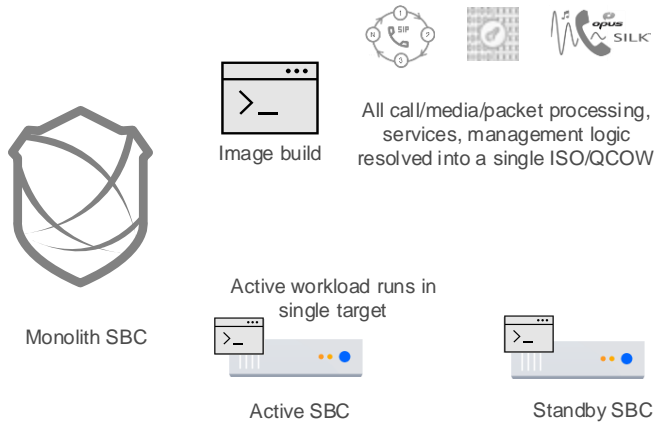


Solutions Supporting Industry Best Practices

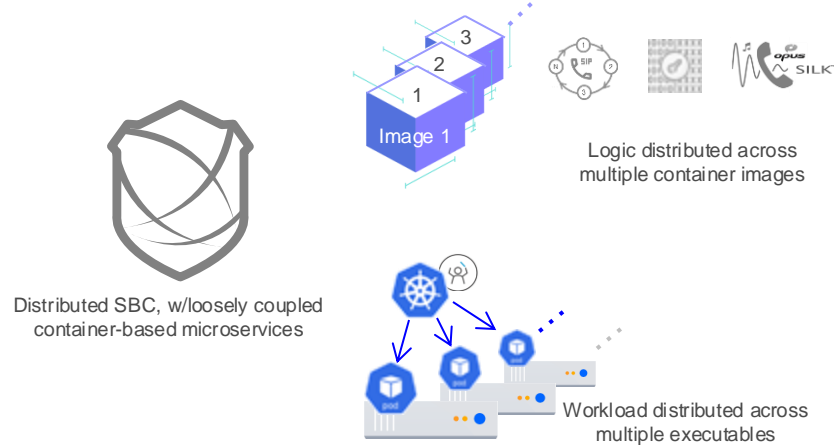
- Software developed, delivered & deployed quickly, efficiently and with minimal manual intervention
- Standardized operations & tooling for optimized cloud operations

**References in the notes*

Monolith SBC vs. Cloud Native SBC



- All code compiled into a **single image**
- Tightly coupling to a single target for all active traffic
- **Benefits** of cloud computing **not realized**



- Code compiled into **multiple container** images
- Loose coupling to cloud compute resources
- **Benefits** of cloud computing **realized**

Cloud Native Solution Available NOW



Container microservices
Enabling SW rollout and distributed processing

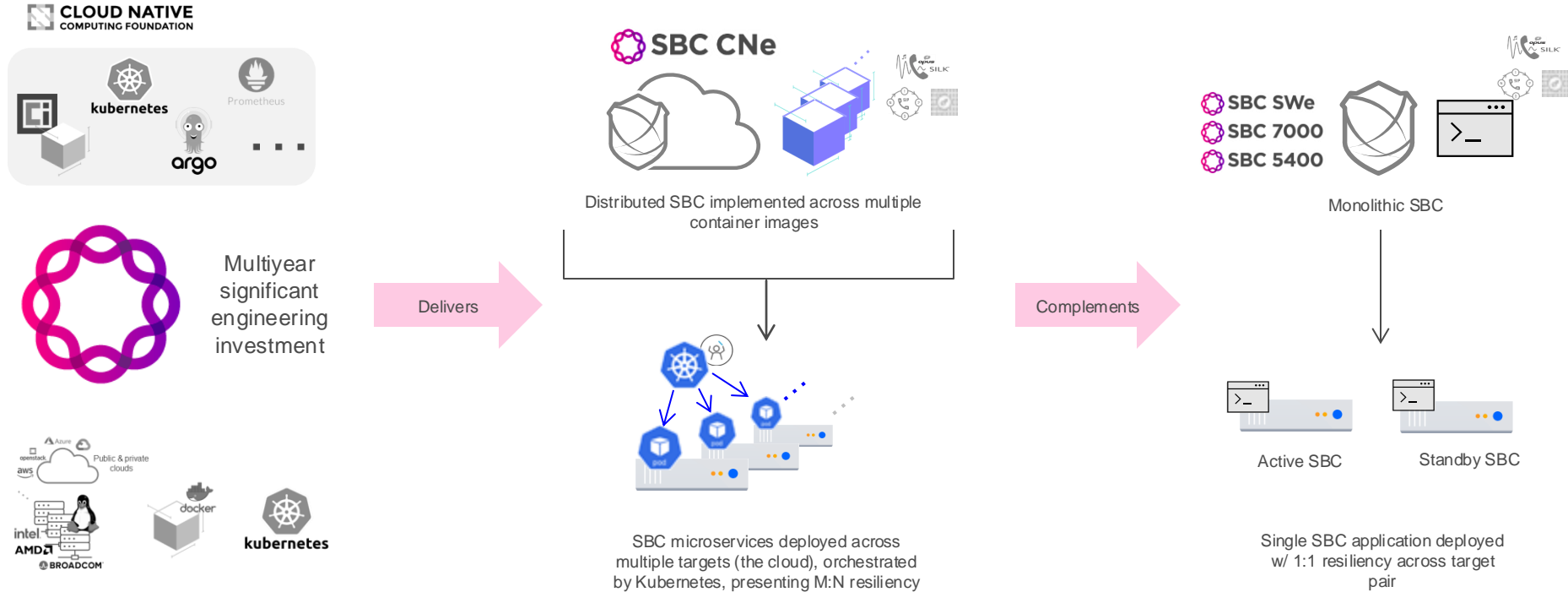
Authentic Cloud Native Offer ... Built to Customer Expectations

Achieve cloud resiliency, scalability, automated LCM

Automation everywhere for DevOps

CI/CD Upgrades & Testing Data Collection Declarative Provisioning

Ribbon's Multiyear Journey to the Cloud Native SBC

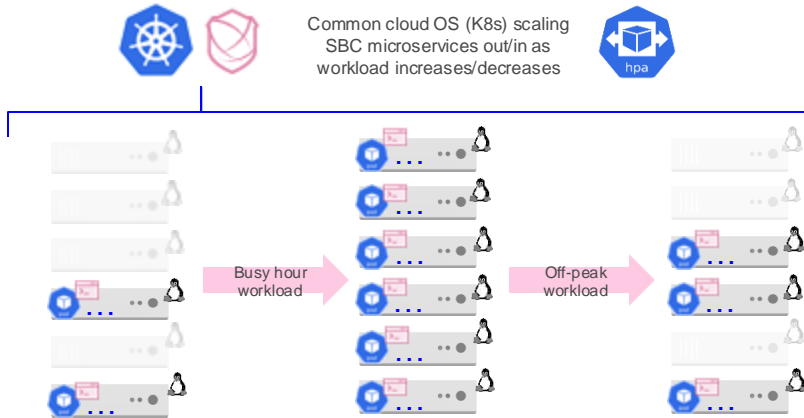


Cloud Native Core vs. Monolithic Core Comparison

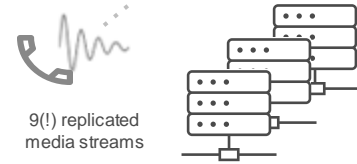


Product Type	Cloud Native Core Solutions	Monolithic PNFs/VNFs
Infrastructure	Whitebox servers/Linux OS	Costly proprietary HW & SW
Workload scaling	Automated real time scale out/in	Fixed
Resiliency	Automated, infrastructure flexible M:N	1:1
Security posture	Common & under customer control	Vendor dependent
Service Launch Agility	Faster Agile CI/CD and automation	Slow
Upgrade Type	Automated staged canary (Immutable)	New ISO; manual MOPs
Opportunities for Automation	ACUMEN-directed cluster behavior	No
Upgrade frequency & nature	4 – 8/year, highly automated (LEAP)	1/year, manual upgrade cycle

Elasticity with No Boundaries



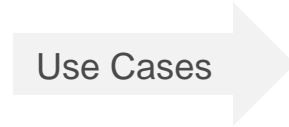
Cloud Native Customer Data Center



9(!) replicated media streams

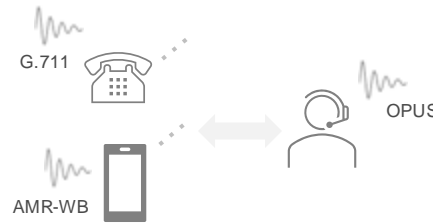
No networking bottlenecks

AI based tools for customer engagement coaching, compliance, training, ...



Holiday call agent traffic spike

No lost revenue



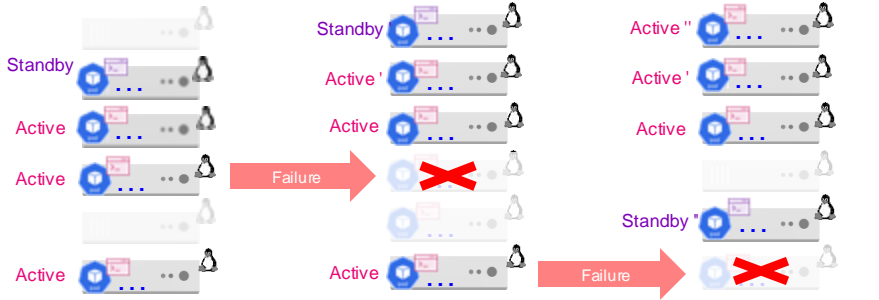
No unhappy customers

Call agent ↔ customer compute intense high fidelity media normalization

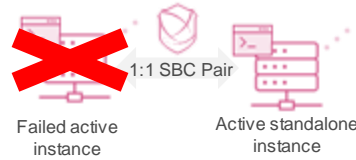
Cloud Native Always Available, Efficient Resiliency



Common cloud OS (K8s) "re-distributing" pods as the M:N SBC encounters issues

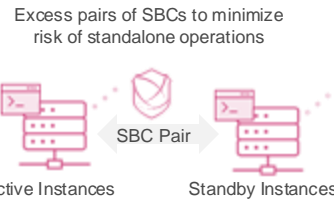


Cloud Native Customer Data Center



Heightened service interruption risk

or



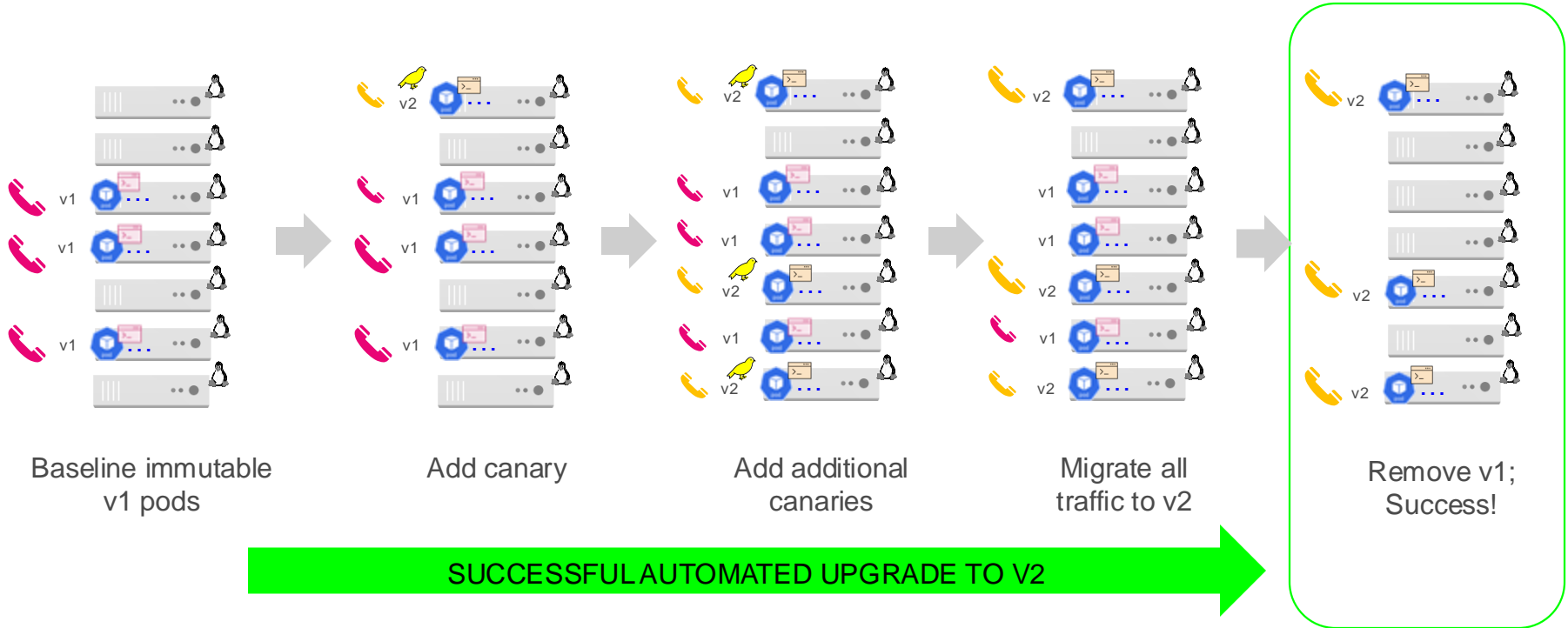
Extra infrastructure costs

Traditional Customer Data Center w/Monolithic SBCs

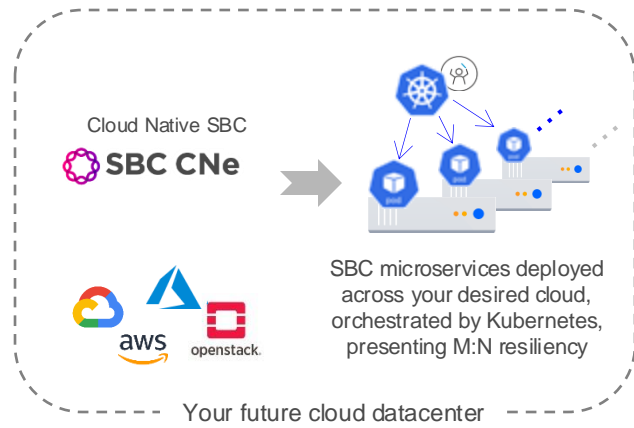
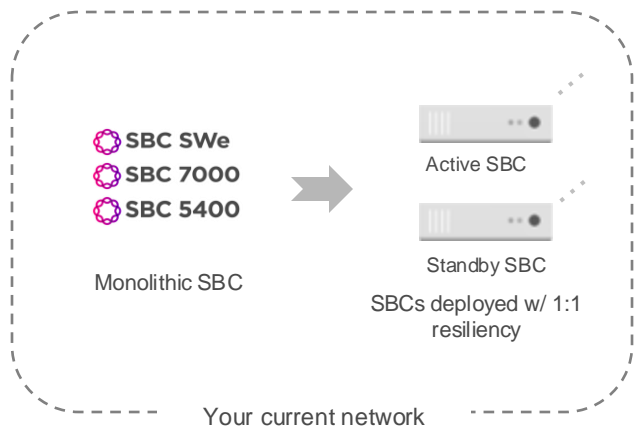
Automated Deployment of New Services & Security Updates



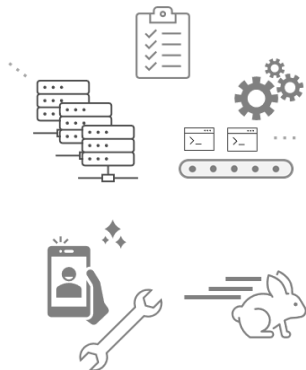
Cloud Native Customer Data Center



Ribbon Will Support You on Your Cloud Native Journey



The Wrap



Reduced cost
datacenter

Fast & furious
SW updates

The Promise of the
Cloud



But ... challenges exist



Ribbon here to help you
overcome the challenges and
realize cloud benefits

Thank You

ribbon
INSIGHTS

