Modernize and Innovate with Capgemini and VMware

PaaS Engineering Services

Get an optimized Kubernetes platform environment to accelerate your application modernization requirements.

Container strategies are core to app modernization success

A robust container strategy establishes a blueprint for accelerating the delivery of business value and helps realize the promise of cloud. This means choosing and managing a platform to manage your containers. Platform as a Service (PaaS) solutions offer potential benefits to operations and developers alike.

Reduce cost and complexity for workload management
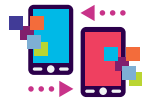
Streamline app development and deployment

Avoid infrastructure maintenance and updates

Achieve scalability and resiliency

PaaS has promise, if you are ready to manage it

While PaaS is meant to accelerate outcomes, it can represent disruptive technology that your teams are not ready to incorporate or manage. This throws up challenges to app modernization, rapid app deployment, and the operational efficiencies you need.

Only 13% of microservices users say they have production-proven platforms[1]

You need a robust cloud native platform

Developing and deploying modern apps requires a modern, container-based application architecture, supported by a modern release methodology and a scalable infrastructure that supports automation. A robust cloud native platform helps you to:

Key challenges to address

Skills gap to manage Kubernetes

Can't accelerate time to market

Concern for vendor lock-in

Unable to achieve lower TCO

Lack of governance leading to sprawl

Overhead maintaining the platform

New security considerations

Local and global load balancing issues

Effectively navigate the cloud-native landscape

Minimize IT overhead to manage the platform

Expedite app assessments for modernization journey

Provide a turnkey experience to sidestep skill gaps

Accelerate overall container adoption

Include accelerators for fast adoption but with flexibility and minimal vendor lock-in

Streamline path to DevOps and platform maturity

1 Source: Forrester, "Microservice Application Platforms Need A New Type Of Reference Architecture," Mar 2020
https://www.forrester.com/report/Microservice+Application+Platforms+Need+A+New+Type+Of+Reference+Architecture/-/E-RES159403

Creating cloud-native applications that improve your business agility

Capgemini

Capgemini provides modernization and innovation capabilities

- Strong operational expertise
- Industrialized managed services layer
- Align projects to business outcomes

vmware®

VMware helps clients create an optimized dev environment

- Create new cloud-native apps
- Replatform existing ones
- Improve app speed and agility

Together, we help design, build and manage platforms with services that support:

Microservices

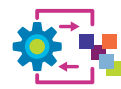Accelerate time-to-market with smaller, logical units of deployment

Containerization

Quickly move, enhance and scale applications with independent containers enabling modular development and deployment

Agility and Excellence

Adopt our agile framework, supporting its technical aspects and enabling agile testing

DevOps

Change org culture, skills and approaches and adopt end-to-end automation, microservices and continuous deployment

This enables you to

Save time and money

Accelerate app creation and modernization

Reduce time to market for new offerings

Capgemini PaaS Engineering Services
Powered by VMware Tanzu

Replatforming-in-a-Box
Automated containerization for application instances

- Jumpstart app modernization journey with minimal costs
- Replatform and deploy with automated containerization

Multi-Cluster Managed Services
Manage Kubernetes estate at enterprise scale

- Turnkey multi-site, multi-cloud, multi-vendor cluster management
- Managed Services for onboarding, operations and compliance

Database PaaS
One-click enterprise database experience

- Auto-provision any database with Kubernetes-native capabilities
- Turnkey, self-serve database deployments and management

Application modernization with Replatforming-in-a-Box
Automate deployment and management of containers across clouds, hardware and edge.
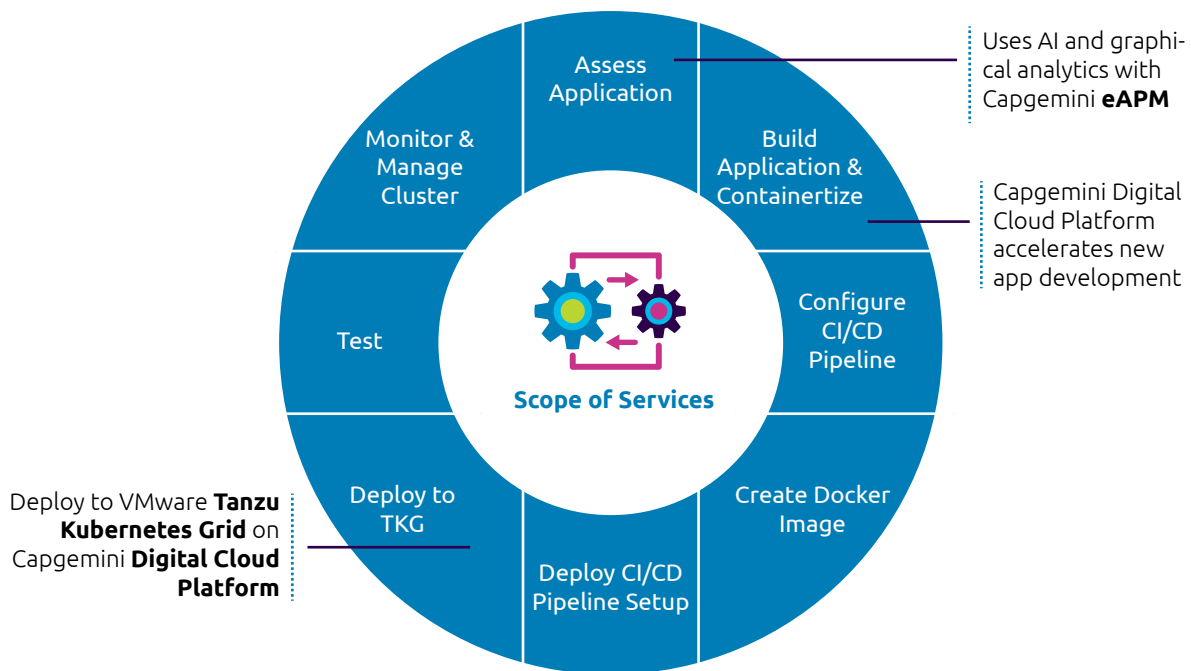
Capgemini's Replatforming-in-a-Box accelerates your ability to containerize applications, no matter where you are on your app modernization journey, making them portable, easier to maintain and update, and faster to deploy. It also brings your apps closer to cloud where you can take advantage of a resilient, scalable infrastructure and cloud-native services. Capgemini has extensive industry application domain experience and harnesses that experience, plus proprietary accelerator technologies, to assess your apps and technical debt and recommend a way forward.

Replatform and deploy existing apps in under 4 weeks with automated containerization	Automated provision, build, deploy, update, destroy for containerized apps	Service catalog and self-serve capabilities integrated with DevSecOps pipeline

Scope of Replatforming-in-a-Box services

Assess Application — Uses AI and graphical analytics with Capgemini **eAPM**

Build Application & Containertize — Capgemini Digital Cloud Platform accelerates new app development

Deploy to VMware **Tanzu Kubernetes Grid** on Capgemini **Digital Cloud Platform**

Scope of Services: Monitor & Manage Cluster, Test, Deploy to TKG, Deploy CI/CD Pipeline Setup, Create Docker Image, Configure CI/CD Pipeline, Build Application & Containertize, Assess Application

Benefits of Replatforming-in-a-Box services

Time to market
27-50x improvement in release velocity

Business continuity
Zero downtime using innovative provisioning model

Compatibility
No cloud provider lock-in

Flexibility
Increased configurations and infrastructure as code

TCO optimization
Optimize legacy apps to get more out of existing investments

Improve quality
<1% production code with defects

Save time
25-70% reduction in platform support

Self-healing
2-10 mins average failure recovery

Multi-Cluster Managed Services
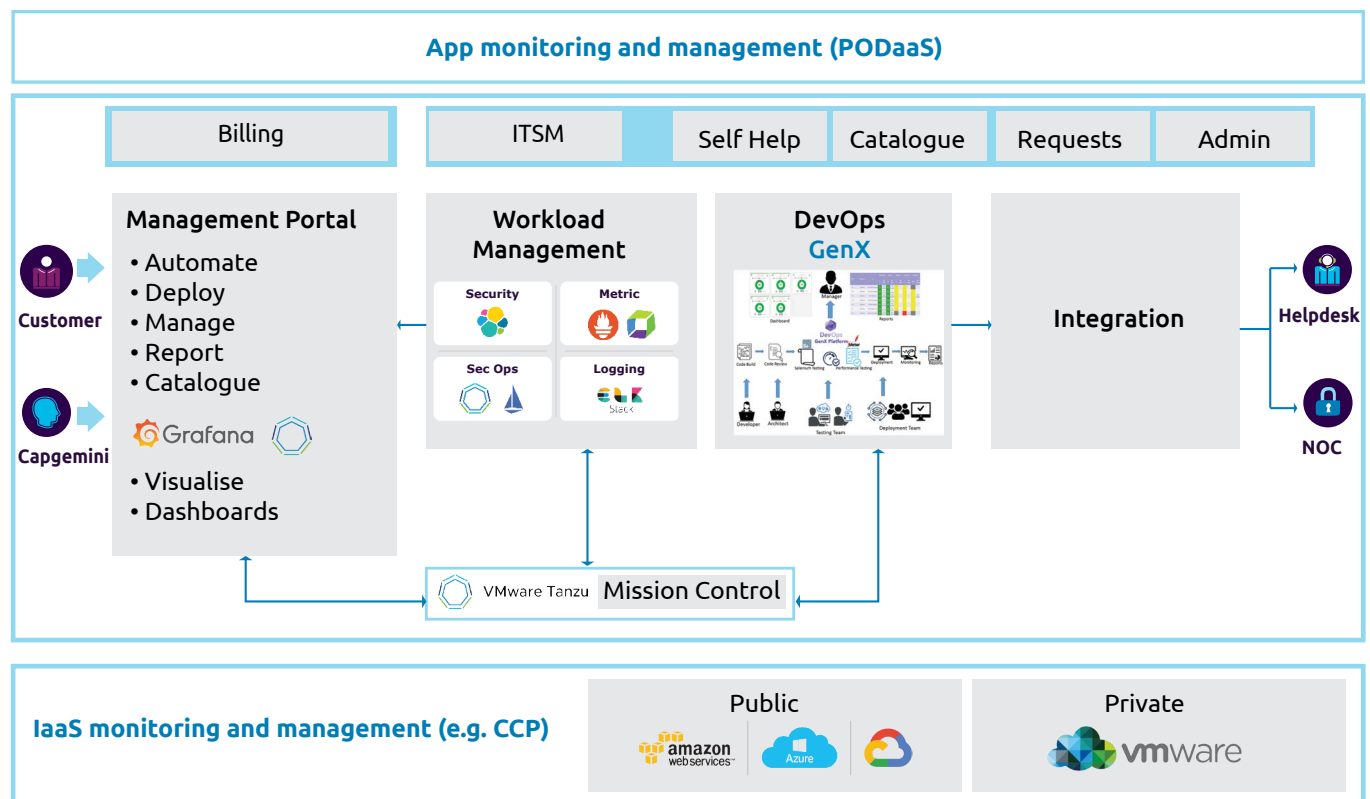**Manage multi-cloud, multi-site, multi-vendor Kubernetes clusters without worrying about the platform.**

Take the effort out of managing your Kubernetes platform and focus on your developers productivity and modernized applications. Capgemini's Multi-Cluster Managed Services will design and deploy your Kubernetes management platform for you, making it possible to reduce the risk and complexity of managing multi-cluster environments.

- Provision and manage enterprise-wide access and policy management for all clusters

- Manage data protection, compliance and availability across the cluster estate

- Wide library of commercial and community tools available that work with your clusters

- Financial analysis
- Service management
- Monitoring & analysis
- HA/DR
- Automation
- Security
- Platform management
- Platform architecture

App monitoring and management (PODaaS)

| Billing | ITSM | Self Help | Catalogue | Requests | Admin |

Management Portal
- Automate
- Deploy
- Manage
- Report
- Catalogue

Grafana

- Visualise
- Dashboards

Workload Management
- Security
- Metric
- Sec Ops
- Logging

DevOps GenX

Integration

Customer

Capgemini

Helpdesk

NOC

VMware Tanzu **Mission Control**

IaaS monitoring and management (e.g. CCP)

Public — amazon web services | Azure |

Private — vmware

Benefits of the Multi-Cluster Managed Services

Speed
"Click & deploy" clusters and high degrees of automation

Scale
Scale easily to support growth

Security
Improve observability with policy-driven management and enterprise controls

Lower cost
Centralize monitoring of non-container and container apps; avoid infrastructure overhead

Database PaaS

A turnkey experience to provision and manage your databases with Kubernetes-native capabilities.

Whether you're looking to adopt a Kubernetes platform or not, there is great benefit in leveraging Kubernetes for your databases. Capgemini's Database PaaS takes our Multi-Cluster Managed Service and abstracts it a layer further to provide a self-serve database experience for any user. Container-based databases have more inherent ability to scale and using Kubernetes introduces a wide range of automation possibilities. As a manged service, all the overhead associated with the platform is handled by us. In parallel, you can easily leverage the platform from your CI/CD for container management as well.
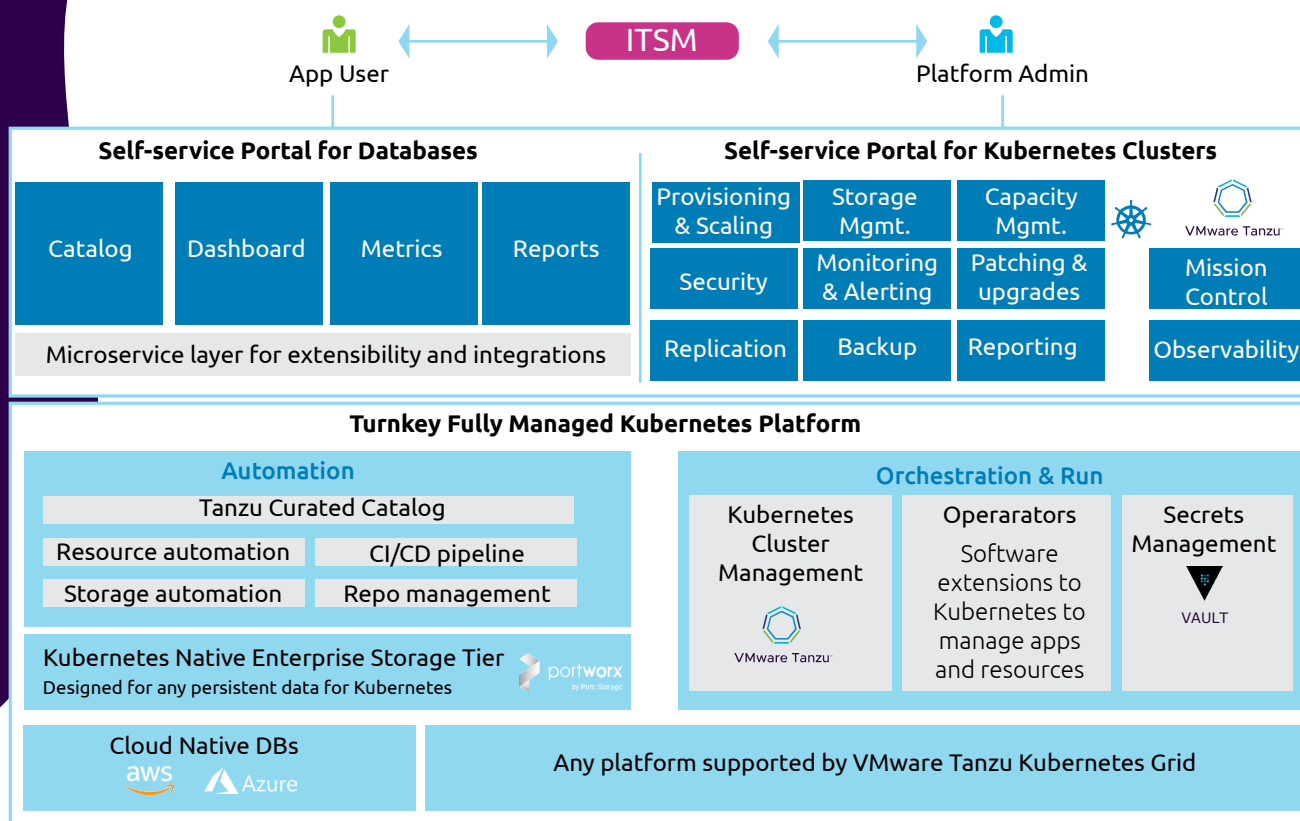
Self-service; automated provisioning and management; automate DBA activities

Leverage out-of-box Kubernetes features for scaling, auto-healing and automation

Validated database images ready-to-go from Tanzu Application Catalog

App User ← ITSM → Platform Admin

Self-service Portal for Databases

| Catalog | Dashboard | Metrics | Reports |

Microservice layer for extensibility and integrations

Self-service Portal for Kubernetes Clusters

Provisioning & Scaling	Storage Mgmt.	Capacity Mgmt.	VMware Tanzu
Security	Monitoring & Alerting	Patching & upgrades	Mission Control
Replication	Backup	Reporting	Observability

Turnkey Fully Managed Kubernetes Platform

Automation

Tanzu Curated Catalog

| Resource automation | CI/CD pipeline |
| Storage automation | Repo management |

Kubernetes Native Enterprise Storage Tier
Designed for any persistent data for Kubernetes
portworx by Pure Storage

Orchestration & Run

Kubernetes Cluster Management
VMware Tanzu

Operarators
Software extensions to Kubernetes to manage apps and resources

Secrets Management
VAULT

Cloud Native DBs
aws Azure

Any platform supported by VMware Tanzu Kubernetes Grid

Benefits of Database PaaS services

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Capgemini + VMware: A robust partnership

Our combined capabilities in applications and multi-cloud capabilities extends across heritage and transformational IT strategies. We share fundamental values and expertise that enable us to help drive your business outcomes.

Joint solution Benefits

App Modernization and Multi-cloud

We help clients solve their most complex business and technology challenges through the delivery of Application Modernization and Multi-Cloud for transformational outcomes at scale.
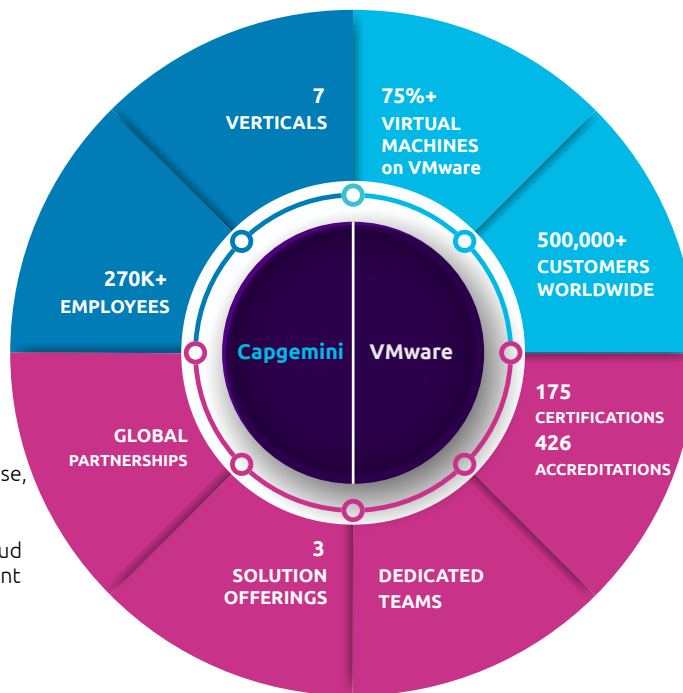
Client Innovation

We provide industry expertise, business acumen, global presence, and the strategic application of cloud and cloud native practices to drive client innovation agendas

Results-driven

Industry centric business solutions that deliver innovation and real business outcomes.

Diagram center: **Capgemini** | **VMware**

- 7 VERTICALS
- 75%+ VIRTUAL MACHINES on VMware
- 500,000+ CUSTOMERS WORLDWIDE
- 175 CERTIFICATIONS 426 ACCREDITATIONS
- DEDICATED TEAMS
- 3 SOLUTION OFFERINGS
- GLOBAL PARTNERSHIPS
- 270K+ EMPLOYEES

Joint Solution Offerings

Capgemini Cloud Platform – Dedicated Hosted Powered by VMware Solutions

Enable consistent tools, security, governance, and operating environment across any cloud (AWS, Azure, GCP). Combines Capgemini's multi-cloud platform with VMware's hybrid cloud to extend on-premises vSphere environments in AWS, Azure, and GCP

Capgemini Data Center Transformation Private Cloud

Combine Capgemini DCT phased services methodology with VMware Cloud Foundation for private cloud. VMware Cloud Foundation leverages consistent infrastructure and consistent operations for hybrid cloud.

Capgemini PaaS Engineering Services

Delivers modern applications by applying cloud native design principles to improve customer experience, disrupt the market and reduce operating expenses. VMware Tanzu platform brings consistent developer experience and IT operations manageability and scalability.

Get in touch

To learn more, visit

www.capgemini.com/partner/vmware

For customized applications for your business, reach out to:
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Application & Cloud Technologies
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About
Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50 year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fuelled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

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