kyndryl

Simplify your journey for infrastructure transformation and application modernization

Build cloud for variety, velocity and volume

Highlights

– Build enterprise solutions for infrastructure transformation and application modernization

– Enable hybrid cloud environments across private cloud and major hyperscalers

– Reduce the cost of provisioning and de-provisioning for basic server builds

– Implement automation with pre- and post-provisioning workflow, integrate with tools and create application-ready cloud infrastructure

– Automate and simplify repetitive, complex and tedious operations task

Challenges

The IBM Institute for Business Value estimates that **98% of organizations plan to adopt multiple hybrid clouds by 2021**, however:

– Only **41%** have a multicloud management strategy[1]
– Only **38% have the procedures and tools** they need to operate that environment[1]
– Just **30%** have a **multicloud orchestrator** or other multicloud management platform[1]

Clearly, hybrid multicloud is not the future—it's already here. Now, IT leaders face the challenge of demystifying the hybrid multicloud environment to unlock the true value of digital transformation.

Moving IT functions to the cloud can give your enterprise many benefits, but orchestration and automation across multiple technologies, cloud environments and service providers can be complex and expensive.

Are you facing these key questions?

1 How can I build cloud native and DevOps capabilities for my enterprise in a safe, secure and cost-effective manner?

2 How can I avoid vendor lock-in and realize the benefits of open architectures?

3 How can I orchestrate across multiple technologies and public clouds like Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP) and IBM® Cloud®?

4 How can I quickly build a virtualized or containerized platform for faster application development and deployment?

5 How can I enable my application team to provision infrastructure efficiently using infrastructure as code (IaC)?

6 How can I build infrastructure services for a multicloud environment?

Drawing on years of experience with successful, real-world implementations, Kyndryl™ Multicloud Deployment Services provides an intelligent, fully managed multicloud orchestration and automation platform for both container and virtualization workloads, powered by enterprise-ready standard blueprints.

Kyndryl Multicloud Deployment Services:

Reduces complexity: Integrates multicloud environments with a single orchestrating platform

Improves DevOps: Deploys automated patterns and workflows, boosts operational efficiency and reduces services deployment time

Enables Zero touch IT: You control, you drive. Streamlines management, limits the need for IT resources, tracks governance issues and much more with a self-service portal

Ready to use: Centrally hosted plug-and-play functionality integrates with existing tools and architectures

Works with virtually any technology: Uses open architecture, allowing the flexibility to use most leading cloud management technologies like IBM, Red Hat®, VMware, AWS and Microsoft Azure
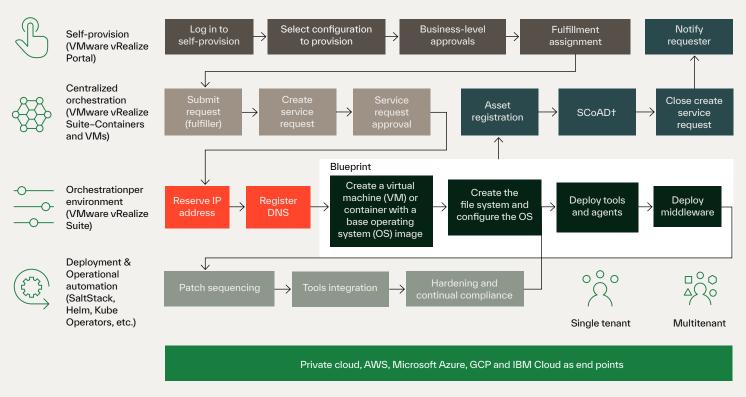
Helps future-proof your infrastructure: Allows you to build next-generation platforms that provide virtualization and container orchestration with cloud-native infrastructure support to help ensure an agile and modern architecture

Building a platform that scales with variety, velocity and volume

Kyndryl Multicloud Deployment Services provides a cloud engineering solution that can help enterprises transform infrastructure and modernize applications for a journey to cloud that is agile, efficient, predictable and security-rich.

– Realize significant improvements in speed and agility
– Improve efficiency with end-to-end integration
– Employ the principles of DevSecOps for a security-rich design
– Increase predictability with standard pre-tested configurations and assessments
– Reduce costs with scope

Self-provision
(VMware vRealize
Portal)

Log in to self-provision → Select configuration to provision → Business-level approvals → Fulfillment assignment

Notify requester

Centralized orchestration
(VMware vRealize
Suite–Containers
and VMs)

Submit request (fulfiller) → Create service request → Service request approval

Asset registration → SCoAD† → Close create service request

Orchestrationper
environment
(VMware vRealize
Suite)

Blueprint

Reserve IP address → Register DNS → Create a virtual machine (VM) or container with a base operating system (OS) image → Create the file system and configure the OS → Deploy tools and agents → Deploy middleware

Deployment &
Operational
automation
(SaltStack,
Helm, Kube
Operators, etc.)

Patch sequencing → Tools integration → Hardening and continual compliance

Single tenant   Multitenant

Private cloud, AWS, Microsoft Azure, GCP and IBM Cloud as end points

† Secondary controls over activation and deactivation (SCoAD) – available as custom requirement

Managing different configurations using multitenant architecture

Service providers and enterprises looking to isolate vRA self-service portals for each business group can achieve this goal with multitenant architecture. Kyndryl Multicloud Deployment Services helps enable enterprise deployment for internal, multitenant use where each department or business unit gets a dedicated self-service portal. Our solution also helps enable service provider deployment, providing multitenancy to multiple clients with each client getting dedicated tenant access and a self-service portal.

Improving business agility with a centrally hosted IT-as-a-service solution

You can use Kyndryl Multicloud Deployment Services to:

– Orchestrate and automate delivery of infrastructure, application and custom IT services using patterns—repeatable and intelligible forms of code designed to automate infrastructure, middleware builds and operations.
– Deploy application workloads across on-premises and off-premises environments (for example, public and private clouds).
– Support direct integration of service management capability.
– Design and build solution blueprints using patterns.
– Provide user-defined, policy-based governance and logical application modeling to help ensure that multi-technology, multicloud services are delivered at the right size and service level for each task performed.
– Automate plan, build and deployment capabilities (day 0 and day 1) and delivery support services (day 2).

Integrating managed services functions for a more comprehensive solution

The dedicated, customized portal and dashboard help simplify the process of monitoring, managing and implementing intelligent operations for the environment. Tailored to your organization's specific needs, the dashboard provides a graphical integrated development environment that facilitates development of workflows and uses packages to export and import workflows. The solution also supports operations automation for patching, incident remediation and health scans with security and compliance management.
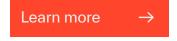
Improving DevOps by deploying automated patterns and workflows

The services take advantage of software-defined data center (SDDC) criteria and a range of assets for automation. These assets include global pattern factory capabilities that can boost operational efficiency and drastically reduce the time required to deploy middleware services.

Why Kyndryl?

Kyndryl has deep expertise in designing, running and managing the most modern, efficient and reliable technology infrastructure that the world depends on every day. We are deeply committed to advancing the critical infrastructure that powers human progress. We're building on our foundation of excellence by creating systems in new ways: bringing in the right partners, investing in our business, and working side-by-side with our customers to unlock potential.

To learn more about how Kyndryl Multicloud Deployment Services can simplify and optimize your journey to becoming a digital enterprise, contact your Kyndryl representative or visit us at www.kyndryl.com

Learn more →

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Citations

1 Assembling your cloud orchestra: A field guide to multicloud management, IBM Institute for Business Value, October 2018