SOLUTION BRIEF: PHARMACEUTICAL & LIFE SCIENCE

Balancing Agility and Risk Across Private and Hybrid Cloud

Morpheus is a powerful digital business enabler and self-service engine to provide agility, control, and efficiency for industries that need to move fast while still managing risk. Quickly enable on-premises private clouds and centralize public cloud access in a standard way for zero lock-in.



In highly regulated sectors there is constant tension between delivery innovation and constant compliance

Rapid delivery of application services t is key where new compound patents are the primary value driver for the an organization. In an industry where time is money, maximizing exclusive access to innovation is critical.

At the same time, operating at global scale means companies in this sector must meet the regulations of the countries they operate in and failure to do so can lead to significant penalty.

This means teams from Quality, Privacy, Cyber Security, and Legal must have their audit trail and compliance needs addressed without slowing down growth from new discoveries.

It's hard to radically improve velocity in an always changing hybrid IT landscape

- IT struggles with years of technical debt, fragmented infrastructure, and regulatory overhead which slows down service delivery.
- On-premises technologies from VMware, Red Hat, and Microsoft by themselves do not enable elastic and self-service private cloud.
- VM automation isn't enough. R&D teams have embraced containers and cloud-native services for next-gen research applications.
- Configuration and Infrastructure-as-Code tools can help, but stitching together disconnected technologies is too complex
- The variety of cloud options and application architectures compound the challenge and expose major IT skill gaps.

Morpheus Data is the market leader in persona-based cloud management and unified operations orchestration.

A Leader in the Gartner 2020 Magic Quadrant for Cloud Management Platforms (CMP), Morpheus has the highest capability scores for provisioning, brokerage and governance plus the highest customer scores in the industry.

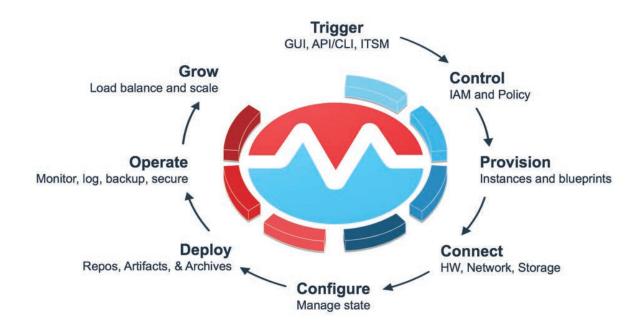
Morpheus has significant experience in Pharma and Life Science with thousands of workloads under management and experience transforming companies like <u>AstraZeneca</u> and DaVita.

What is PERSONA-BASED hybrid cloud management and how is it different?

It means Developers, IT, Security Professionals, and Product Teams each get their unique self-service needs addressed without any compromise.

- Individualized access to a customizable toolkit and catalog via GUI, full-fidelity API and CLI, or ITSM tools like ServiceNow.
- Flexible catalog builder with items ranging from a basic operating system, individual application service, or full multi-tier stack.
- Workflow and Job engine to simplify day-2 operations and enable GitOps style workflows using a range of task types.
- Built-in CNCF-certified Kubernetes (K8) cluster management and integration to popular external K8 and Docker services.
- Native blueprints and infrastructure-as code plus the ability to enhance tools like Ansible, Terraform, CloudFormation, ARM, etc.

A secure automation engine for the full server build process



Why is Morpheus the unified operations orchestration choice for government organizations around the globe?

It gives complex organizations the speed and agility of self-service without compromising control along with a 100% agnostic approach to eliminate the cost and risk of vendor lock-in.

Plus, with more built-in integrations and native functionality than any other platform, Morpheus can be up and running in an hour including connections into ITSM and CMDB, Identity Management, IPAM, DNS, Configuration Management, Backup Tools, Logging, Monitoring, and more.



How does Morpheus work?

Morpheus has all the discovery, governance, reporting and automation hooks to quickly create and consume on-premises private clouds from existing hypervisors like VMware, Nutanix, OpenStack, and KVM while also managing access to Public Clouds from AWS, Azure, GCP, Oracle, etc.

It's a secure Linux install package that deploys in under an hour on a wide variety of popular Linux distributions. This means it can run on-premises or could install in public clouds. Morpheus is also extremely scalable. A single all-in-one deployment can scale to several thousand instances or you can use a distributed setup for additional performance and resiliency.

Because it's not a hosted SaaS platform, it is much easier to use in tightly governed environments where security and regulation impact deployment of new software stacks. Wherever you install it, Morpheus can provision and manage across all your on-premises and public cloud endpoints.

How has Morpheus been implemented at several global life science companies?

- Users request services via ITSM or directly via the Morpheus GUI/API and are mapped to services, clouds, and policies via identity management integration and RBAC.
- 2. Morpheus performs a series of compliance and policy checks for capacity, user permissions, approvals, budgets, etc.
- 3. Service is built using hardened images in combination with configuration management and tag enforcement.
- Morpheus adds service monitoring checks, confirms audit trail, creates or updates CMDB records, and applies backup, logging, and monitoring agents.
- Vulnerability scan is performed and completion results are used for final qualification of all related services.
- 6. User is notified of service availability and completed build in a manner of minutes.

UNIFIED: Because simple always wins

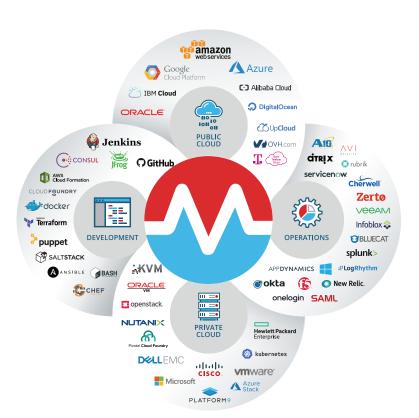
Bridge the gap between teams and technology plus assure transparency and visibility of resource utilization. Get more value from IT investments by linking tools in a single converged framework.

AGNOSTIC: Because who likes lock-in

Provide consistent operation across hypervisors, container platforms, and cloud services with freedom to mix-and-match technologies without sacrificing the benefits of native API access.

RESPONSIVE: Because things change

Utilize a built-in library of nearly 100 codeless integrations or embrace whatever comes next via an extensible plug-in architecture and virtually limitless task automation and workflow engine.



"Our agility and performance with Morpheus surpassed all expectations.

Service delivery used to take 80 hours per server end-to-end, but now we can easily provision 30 servers at a time in 27 minutes start to finish.

We couldn't have realized this level of automation with a traditional CMP."

Sr. Cloud Architect AstraZeneca



