

STRAIGHT TALK, — — *REAL* *ANSWERS*

The **five** key
considerations to deploying
a private cloud

IBM

For business leaders,

a public cloud option is just the excuse they've been looking for to get out of the infrastructure game entirely.

It's safe to say that the founders of companies like China Life Insurance, McDonalds, or Carrefour didn't plan to expend huge budgets on computers, or the resources needed to run them. For the next generation of leaders in business technology, avoiding the pitfalls of legacy infrastructure by going all-in on public cloud platforms seems incredibly attractive.

But investing in infrastructure that you don't control can have its downsides, too. Will public cloud resources support your critical business workloads alongside collaboration and IT infrastructure apps? Will they let you load and access your critical business data quickly, and scale seamlessly with your changing needs? Will they insulate you from outages and security threats? Will they give you the freedom to deploy the right hardware and software solutions that give your business a competitive edge? And, at the end of it all, will they actually save you money?

We get it.

There is a lot of talk out there today about cloud. **By now, everyone agrees that strong usage of cloud platforms is a critical component of a good infrastructure strategy.** You may be well into your transition to cloud, enjoying the fruits and the speedbumps that come with deploying leading edge technology. But if you're still early in your cloud journey, or if you're sticking your head above water to see if there might be a better way, **read on.**

We'll explore five key ways an IBM solution powered by Nutanix software can combine the simplicity of a public cloud with the flexibility and security an on-premises solution can guarantee your business.

Seamlessly manage *all* your infrastructure

Manage the compute, storage, and network for all of your business-critical applications, from email to ERP, with simple building blocks and a single pane of control.

Nutanix follows a design-first philosophy that delivers an intuitive consumer-grade design to create a user experience that delights customers. **Nutanix Prism is an end-to-end management solution for virtualized datacenter environments that streamlines and automates common workflows, eliminating the need for multiple management solutions across datacenter operations.** Powered by advanced machine learning technology, Prism analyzes system data to generate actionable insights for optimizing virtualization and infrastructure management.

With IBM Hyperconverged Systems powered by Nutanix, you can now take the simplicity of the Nutanix Prism management console and apply it to the leading performance offered by the IBM Power Systems infrastructure. This means you can run core business application workloads, like database, ERP, and analytics, on a platform that's optimized to run data intensive workloads – all managed with tools rivaling the simplicity offered by public cloud platforms. Not only that, you can seamlessly manage all of your Nutanix-based clusters, regardless of the architecture or brand of the computing platform underneath, with a single instance of Prism called Prism Central.



As evidence, a recent IDC study showed that a Nutanix-based infrastructure solution requires on average **61% less IT staff time** to deploy, manage, and support than their legacy infrastructures.ⁱ

Optimize for your business today, and tomorrow

Get the flexibility of a custom build—minus the time, cost and long-term commitments of one.

With Nutanix software-defined infrastructure, you add capacity and performance only when you need it. No more costly overprovisioning. You can do away with the cost and complexity of setting up storage arrays and networks. Furthermore, with the built-in Nutanix AHV hypervisor, you significantly reduce the cost of virtualization licensing and support. Also, by having a single pane of glass to manage multiple clusters around the world, you can eliminate the cost of specialized IT skills at every location. This helps you get your applications up and running more quickly.

More recently Nutanix announced their new Calm application lifecycle management and cloud orchestration software. Calm simplifies the set-up and management of custom enterprise applications by incorporating all elements of each app, including relevant VMs, configurations and related binaries, into an easy-to-use-

blueprint that is managed by the infrastructure team. **By making the deployment and lifecycle management of common applications both automated and easily repeatable, infrastructure teams can eliminate the hours and days devoted to routine application management.**

IBM has always had a worldwide team of experts, and a healthy ecosystem of business partners, to help any client deploy a private cloud that was right for them. But IBM Hyperconverged Systems running Nutanix Enterprise Cloud software provides an opportunity to deploy – within days – a right-sized cloud that’s fit for any purpose you can dream up. And because the hardware and software components are standardized, you can add capacity to support business growth anytime you like. The IBM Hyperconverged Systems powered by Nutanix are shipped in days and deployed in minutes, meaning faster time to value.



In fact, IDC reports that the time savings from a Nutanix-based infrastructure solution would reduce an organization’s 5-year cost of IT operations by **60%**.ⁱⁱ

Keep your critical data safe and accessible

Empower your people with the ability to generate, share and analyze the data that makes your business run.

The Nutanix Enterprise Cloud Platform combines powerful security features, including two-factor authentication and data at rest encryption, with a Security Development Lifecycle (SecDL) that is integrated into product development. The Nutanix custom security baseline exceeds the requirements of the U.S. Department of Defense and comes built-in for all customers.

Powerful automation and self-healing security models help maintain continuous security with efficiency and ease. Nutanix developed its own Security Technical Implementation Guide (STIG) to enable secure installation and maintenance of its systems. Additionally,

Nutanix offers a natively integrated solution for data protection and continuous availability at VM-level granularity. This robust system design provides rapid fault detection, isolation and recovery to ensure always-on operation.

IBM infrastructure solutions have always had a track record for availability and resiliency. **Combined with Nutanix integrated functions for network security and data replication, IBM Hyperconverged Systems provide the simplest solution to deploy cloud infrastructure in your datacenter that is always available and always secure.**



For example, Security Configuration Management Automation (SCMA) **continuously checks more than 800 security entities** in the Nutanix STIGs. This enables the infrastructure to self-heal any deviation from the security baseline configuration to remain in compliance.

Own your technology roadmap

Build a cognitive cloud with the unique mix of hardware and software technology innovations your business needs to lead.

With a Nutanix-based IBM cluster, you can refresh your infrastructure without data migration or downtime. **This effectively makes the IBM Hyperconverged system an eternal cluster.** You can insert new advances in hardware technology over time by adding the latest model nodes without having to “forklift” out older productive nodes. In addition, you can scale to any size environment with 100% predictability and no risk. Once deployed, you can find and fix issues instantly with analytics and monitoring. This means fewer open tickets and faster time to resolution, in order to get on with your work.

Additionally, IBM Hyperconverged Systems give you access to the OpenPOWER platform, which is open where the x86 platform innovation is restricted. The OpenPOWER Foundation, with key partners like Google and NVIDIA, is committed to driving innovation into the datacenter through partnerships. Customers running OpenPOWER platforms will have the fastest access to breakthrough datacenter technologies (like PCIe v4 and accelerators) as they develop, without being limited to whatever capabilities a large controlling technology supplier chooses to include.

“Google is excited about IBM’s progress in the development of the latest POWER technology. ... The POWER9 OpenCAPI bus and large memory capabilities allow for further opportunities for innovation in Google data centers.”

—BART SANO
VP of Platforms, Google

Deliver business value

Be the team that earns its place in the business by consistently providing value through the smart application of technology.

With all the data services built into the Nutanix Acropolis cloud operating systems, you get space efficiency, data protection and security hardening capabilities included. No add-on software required. **This eliminates complexity and helps cut infrastructure costs by up to 60%.**

IBM Power Systems infrastructure has consistently offered better value per dollar for key enterprise workloads. These new hyperconverged systems are poised to continue that trend, delivering better performance in an efficient, simple to manage solution that no other solution can provide.



As a proof point, deploying a MongoDB enterprise database on IBM Hyperconverged Systems powered by Nutanix yields **2.4X better price-performance** than a hyperconverged system built on x86.

Experience the benefits where simplicity meets performance with the **IBM Hyperconverged Systems powered by Nutanix.**

Learn what the IBM-Nutanix offering could do to further propel your business at ibm.biz/NutanixIBM.

Ready to learn more? Don't wait.

Visit us on the web at ibm.com/us-en/marketplace/hyperconverged-systems or call your IBM account manager or authorized IBM Business Partner today.