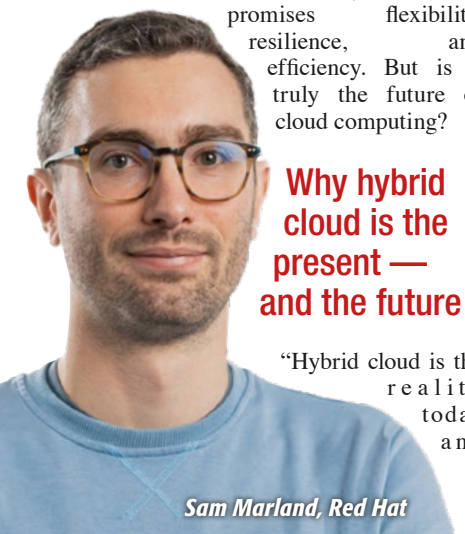
Cloud: the future is hybrid

Is the future of business computing hybrid? What should enterprises consider when it comes to their cloud needs, and how big an impact is automation playing?

As UK enterprises navigate an increasingly digital landscape, hybrid cloud has emerged as the preferred approach for managing IT infrastructure. A combination of on-premises, private cloud, and public cloud environments, hybrid cloud promises flexibility, resilience, and efficiency. But is it truly the future of cloud computing?



Sam Marland, Red Hat

Why hybrid cloud is the present — and the future

"Hybrid cloud is the reality today and will continue to be because enterprises need choice," asserts Sam Marland, Senior Manager, Solution Architecture at Red Hat. "Just as organisations have historically used multiple operating systems or database technologies depending on the use case, they will continue to adopt a mix of hosting environments. A well-architected hybrid cloud strategy provides flexibility, resilience, and the ability to adapt much faster in a volatile and uncertain business environment."

Matt Tebay, Multi-Cloud Evangelist at OVHcloud, reinforces this perspective: "hybrid cloud is the standard operating model for most businesses today. By 2027, 90% of organisations will adopt a hybrid cloud approach, according to Gartner. Hybrid cloud offers better flexibility, scalability, and more control over data — all while avoiding lock-in."

James Sturrock, Director of Systems Engineering at Nutanix, believes that the future of cloud is undeniably hybrid as enterprises increasingly recognise that no single cloud model fits all workloads.

"Hybrid cloud provides the flexibility to run critical applications on-premises while leveraging the scalability and innovation of public cloud services. This approach ensures data sovereignty, cost optimisation, and seamless integration with existing infrastructure," notes Sturrock. "When you consider all of the major changes that the world has gone through in the last decade from the shift to SaaS, IAC, 100% remote working to the release of real-world AI, the only way for businesses to protect their assets but innovate at a massively accelerated pace is to embrace hybrid multi-cloud."

Indeed, a hybrid approach allows businesses to put workloads in the right environment for their needs. Sensitive data can remain on-premises without losing the flexibility of public cloud for other workloads. It also helps organisations to improve their overall resiliency by keeping data in different locations.

Yet, hybrid cloud is not a one-size-fits-all solution. Mark Chinery, Enterprise IT Head of Consultancy at FluidOne, observes that "the vast majority of companies we work with have been in a hybrid cloud environment for a number of years. Some companies with lower infrastructure footprints are moving to cloud-native, while others with heavy server infrastructure remain hybrid or are even moving back to on-premise due to the cost of cloud infrastructure."

Matt Tebay, OVHCloud

Proper preparation prevents particularly poor performance

Hybrid cloud isn't a single technology but an approach to building resilient, flexible compute platforms that support evolving business needs.

Marland acknowledges that while a single-provider solution may seem attractive initially – offering simplicity, streamlined processes and faster time to market – many organisations find that these benefits are difficult to sustain as their needs change.

As Tebay notes, "one of the main factors to consider in a hybrid cloud approach is interoperability. Open-source systems are usually better because they're easily transferable. Kubernetes and Rancher, for example, allow businesses to manage multi-cloud environments with ease and move workloads between on-prem and cloud."

Adopting a hybrid cloud strategy requires a deep understanding of interoperability, security, and data management. Tebay highlights that hybrid cloud environments can become complex very quickly, so it's important to understand where the data is physically.

"This is one of the major reasons why companies are often reluctant to move to the cloud; having data nearby gives a sense of control," explains Tebay. "However, infrastructure providers are getting better at sharing where data is hosted, which allows organisations to understand the laws and processes that cloud data is subject to."

Meanwhile, Sturrock highlights two key technical aspects: "license mobility — you should always be able to move your licenses between clouds without having to re-purchase. And the ability to change clouds as your business requires — whether due to cost, performance, or geography, seamless movement between clouds and on-premises is essential."

When looking to make the shift to hybrid cloud, Chinery recommends following the 'Cloud Adoption Framework' from Microsoft to ensure the environment is set-up to best practice from day one and evaluate costs before implementing solutions – otherwise costs can run away with ambition.

"As the famous saying goes: proper preparation prevents particularly poor performance," highlights Tebay. "Technology leaders should do a thorough assessment of their IT needs alongside their business objectives and make sure that they're aligned before even starting to formally plan their hybrid cloud strategy. Time is precious, but it's always valuable to take time out and do an infrastructure health check, identifying which workloads are best suited to which environment in terms of cost, latency, sensitivity and other business requirements. It's also important to engage with different providers and choose the one that aligns best with your vision for cloud. Does their roadmap match your needs, for example? Does their technology performance and price align with your requirements? Is it a good cultural fit, and is the support appropriate for your business?"

Aron Brand, CTERA

Meanwhile, Sturrock suggests starting with a clear strategy that identifies which workloads benefit most from hybrid deployment: "invest in a platform that simplifies management across cloud environments, ensuring security, scalability, and operational efficiency, avoiding lock-in as much as possible – the future is fluid."

The real challenge for IT leaders is not choosing sides, rather architecting a system that dynamically places workloads and data where they drive the best business outcomes.

Aron Brand, CTO, CTERA: "storage sits at the core of this transformation. In the modern data economy, where data has become a core element of competitive advantage, data needs to be shared and used across local data centres, edge devices, and hyperscale clouds. IT architectures must reflect this reality, enabling seamless data mobility while maintaining governance, security, and performance. Hybrid cloud storage addresses this need - allowing IT teams to balance cost, speed, flexibility, and regulatory compliance."

Strengthening the hybrid case

Today, artificial intelligence (AI) and machine learning (ML) are accelerating cloud adoption by driving demand for increased compute power and seamless data access.

"Good automation strategies give both cost benefits and flexibility in the cloud," says Marland. "Quite often, automation in the cloud is easier because of the standardised nature of cloud offerings. AI/ML is potentially a key driver for cloud adoption over the next few years as the cloud has cornered the market for the underlying hardware."

Sturrock points out that "the government's announcement to invest in AI further fuels innovation, making hybrid cloud essential for managing and scaling AI workloads while ensuring data privacy and compliance."

Moreover, "open-source technologies to host AI/ML backend on less performant devices, or even more conventional processors are becoming available," notes Marland. "Model size reduction, and virtualised large language models are already being used to make AI/ML more accessible at a lower cost. This should reduce the cost and barriers to entry and make AI/ML even more accessible in a way that does not tie you to the cloud or even a particular cloud vendor."

And, with hybrid cloud becoming the norm, enterprises are increasingly adopting modern cloud-native technologies.

According to Marland, the traditional siloed approach to cloud management is no longer sustainable. Historically, application teams have been able to dictate specific service levels within availability zones and regions, while infrastructure teams have struggled to meet these demands due to the complexity of on-prem environments.

This disparity has created a bottleneck, preventing infrastructure teams from keeping up with changing business needs.

"A cloud-native design approach that applies equally to both infrastructure and application teams is essential for a unified hybrid cloud strategy. This means adopting principles like infrastructure-as-code, serverless computing, and containerisation across the entire ecosystem to create a seamless and integrated experience," says Marland. "We see enterprises unifying their on-premises and off-premises approaches using these technologies. Cloud has brought a better 'as-a-service' mindset to application and infrastructure teams, while containerisation and the standardisation of Kubernetes has brought in options for portability for customers embracing hybrid cloud. The one warning is to watch out for external dependencies that are either present on-premises or in the cloud. These are the handcuffs which can restrict portability and true hybrid cloud approaches."

Sturrock agrees that infrastructure as code, serverless computing, and containerisation will grow as hybrid cloud adoption increases.

"Nutanix's 7th Annual Enterprise Cloud Index report reveals that nearly 95% of UK organisations are containerising applications, with Kubernetes deployment across multiple environments reaching 60%," says Sturrock. "This highlights how these technologies streamline operations, enhance scalability, and enable faster application deployment across hybrid environments, driven by the need for infrastructure modernisation and cloud-native efficiencies."

The long-term impact

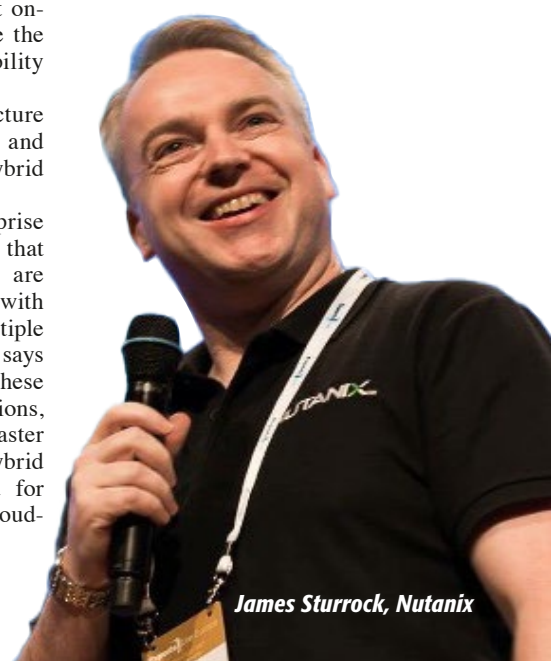
A hybrid cloud strategy fundamentally changes enterprise networking in the UK and the world at large.

Chinery explains that "a move to hybrid cloud requires increased network complexity, with architecture having to connect and manage workloads both on-premise and in the cloud. Enterprises look to use dedicated cloud connections that don't route through the public internet, offering more reliability, faster speeds, consistent latency, and higher security."

Indeed, Marland sees a shift in priorities: "hybrid cloud will drive competitive advantage, shifting focus away from infrastructure maintenance toward higher-value work. The adoption of hybrid cloud and a holistic, common platform to manage it will simplify infrastructure, creating a more agile IT environment that supports business needs and innovation."

"The organisations that will lead in the coming decade are those that master data placement and workload portability - not by choosing between cloud and on-premises, but by harnessing their opposing strengths in a continuous cycle of adaptation and innovation," notes Brand.

Hybrid cloud is no longer just an option; it is a strategic necessity for enterprises looking to balance flexibility, security, and performance. And, with advancements in AI, automation, and cloud-native technologies, the hybrid cloud landscape is evolving rapidly — empowering enterprises to innovate and stay competitive in an increasingly digital world. ■



James Sturrock, Nutanix