Migrate Power Now

Don’t wait for a crisis to migrate your Power workloads to the cloud. Move them in their native format with minimal risk and immediately gain cloud advantages.

Skytap

Introduction

Traditional applications running on AIX, IBM i, or Linux on IBM Power Systems in the data center are business-critical for most Fortune 500 companies, but lack the flexibility and resilience of cloud-based applications. The teams responsible for these applications may not fully understand the benefits of the cloud, or if they do, worry about the risks involved in moving to the cloud and the perceived need to replatform sprawling, monolithic applications.

It's only when faced with a compelling event such as an expensive hardware refresh, current service provider exiting the Power business, data center consolidation, or expansion needs that companies start to really look at how they can move these legacy applications and workloads into the cloud.

Why move to the cloud?

Most Power-based applications are mission-critical and have been heavily customized to fit the needs of the business, often over the course of decades. If they need to be moved, refactoring is often the first and only option considered, which is risky, expensive, and requires significant amounts of time.

However, there is a way to “lift and shift” your Power workloads now and refactor later. You can move Power workloads into IBM Cloud or Microsoft Azure just as they are on-premises with minimal risk, and your teams continue to work as they always have.

Instead of expensive hardware upgrades to accommodate maximum capacity needs, the cloud provides elastic capacity that can be adjusted up or down in sync with actual usage. This elasticity and the resilience of the cloud make it ideal for disaster recovery without the expense of over-provisioning. You also gain the ability to create limitless clones of your application environments for development and testing.

At the same time, your company may already have x86-based applications running in either Microsoft Azure or IBM Cloud. You can move existing AIX, IBM i, and/or Linux on Power workloads into the cloud in their native format - without rewriting - where they can co-exist with x86 workloads. And there’s no need to wait until something forces the move.

Customer case study: tight deadline “lift and shift”

Intertek-PSI is a consulting engineering and test firm whose existing service provider discontinued its support of Power. Intertek-PSI had to “lift and shift” its Infor Lawson ERP application and associated x86 front-end systems, along with 29 terabytes of data, into the cloud under a tight deadline - all with minimal downtime and without impacting users or increasing costs.

Skytap and IT solutions firm Meridian IT implemented a backup solution using Commvault in Azure and a phased transfer of workloads that allowed Intertek-PSI to achieve its goals, while improving performance, reliability, and disaster recovery capabilities for the same or lower cost. The applications transitioned seamlessly to the cloud without disrupting the business.

Afterwards, Aaron Wetherhold, the company’s IT Director, Building & Construction Division, observed, “The only reason we did it is because we had to do something. Looking back, I wish we had done this years earlier. It’s faster, it’s better, and it’s probably even better than cost neutral.”

Case Study: https://www.skytap.com/case-studies/intertek-psi/

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- Aaron Wetherhold

Cloud benefits with minimal risk

Using Skytap gives you immediate benefits with very little risk. Skytap is a cloud service that natively runs traditional workloads in IBM Cloud or Azure. Skytap environments are replicas of on-premises data center environments, including infrastructure, storage, networking, OS, middleware, memory state, and applications. Environments can be set up and torn down in minutes.

Minimize risk
Complete environments, including VMs/LPARs, network configurations, and business applications, are migrated exactly as they are on-prem, without rewriting or replatforming. You get a safe path to the cloud with minimal re-engineering risk.

Maximize existing talent
Existing IT, development, and test staff continue to use the same processes and tools they always have. No need to retrain or hire new talent. Give teams the opportunity to learn cloud concepts and explore cloud-native services.

Increase staff efficiency
Developers and testers can quickly and easily self-provision clone environments, eliminating the wait time for resources and removing the risk of configuration drift common with physical systems. IT retains oversight and control.

Align spending with usage
The cloud's elasticity and scalability mean you only pay for capacity you actually use. Instead of expensive CAPEX investments for maximum need, Skytap's pay-as-you-go OPEX model aligns the cost of resources directly with application and business needs.

Implement cost-effective disaster recovery
Rather than investing in duplicate systems in an offsite data center for backup and DR, Skytap allows replica environments to be scaled up immediately during an outage and released when normal operations resume. You can meet aggressive recovery objectives and only pay for capacity used during the outage.

Customer case study: Supporting regional growth

A global services company was aggressively migrating its x86 workloads to Azure to support regional business growth through cloud scalability. As the company exited data centers, it needed to move mission-critical AIX and IBM i workloads running on IBM Power Systems into Azure, along with associated front-end x86 systems — all with very low levels of risk and without business interruption. The combined AIX, IBM I, and x86 workloads needed to be segregated by region to ensure compliance with regional data handling and cybersecurity regulations.

Skytap, Microsoft, and the company collaborated to migrate multiple terabytes of RAM and hundreds of terabytes of data and virtualized servers. Power workloads were moved in their native format without rewriting, allowing IT and dev teams to work with the applications as they did on-premises. With both Power and x86 workloads in the cloud, low-latency connectivity ensures high performance between front-end and back-end systems.

Each Skytap environment is network-isolated from others to allow regional control and flexibility to adapt to changing business needs, and Skytap's reporting helps ensure regulatory compliance. The company can now take advantage of cloud availability, reliability, and scalability without the cost of maintaining expensive data centers for their Power workloads.

Migration doesn’t have to be hard

The key to a smooth and successful migration is a well-thought-out and executed plan.
The following steps can help ensure success:

1. Do your planning
Identify your goals and migration team. Assess existing workloads, including capacity and scalability needs; network, hardware, and OS configurations; and workload sizing. Plan for license compliance, OS upgrades, and moving data. Migrations are typically performed as imports/exports, backups, and/or physical media transfers depending on workload and data size.

2. Configure Skytap environments
Set up Skytap in preparation for importing VMs, vApps, or LPARs. Skytap mirrors an application’s complete, on-premises configuration, allowing it to be migrated without change. Each Skytap environment includes everything the application needs, from VMs to network and development resources. Environments are saved as templates that can be copied as often as needed in just minutes.

3. Migrate non-production workloads
Move non-production workloads such as dev/test into Skytap to validate the migration plan. Make any necessary adjustments to the process and repeat the migration. Perform unit and systems tests to validate performance and ensure that migration can be completed in the desired time frame.

4. Migrate production workloads
On the planned cutover date, import production workloads into Skytap. With the application now in the cloud, dev/test teams can quickly stand up and tear down Skytap environments as often as they need to without impacting production.

For a deeper dive into migrating with Skytap, read Migrate your Power workloads now - Migration Guide.

Customer case study:
Application access without hardware cost

A global manufacturer had a legacy AIX-based ERP system that was no longer a mission-critical application but needed to be readily available for reference. The data center-based IBM Power Systems hosting the application were approaching end of service life (EOSL) and the company didn't want to invest in new hardware.

The team responsible for the application chose Skytap as an alternative to the expensive hardware upgrade. With Skytap, they were able to migrate the entire AIX LPAR and nearly 15TB of data into the cloud without rewriting or replatforming. Because of the large data set, a physical NAS device was used to transfer the data.

Once the application was in Skytap, the cost of supporting it transitioned from capital intensive spending to a pay-as-you-go, usage-based OPEX model where the company only has to pay for actual compute resources used, as they are used. Because the application is used infrequently, the overall cost of maintaining it is significantly below the expense of new hardware, maintenance contracts, and the associated data center costs such as networking and power.

Migrate now with Skytap

There's no reason to wait until an event forces migration. By moving your business-critical applications into Skytap now, you'll be assured that they are running on the latest IBM Power Systems hardware with no more worries about maintenance contracts or hardware upgrades. Low-latency connections to other applications and data in the cloud improves application performance, and Skytap's pay-as-you-go model ensures you only pay for capacity you use.

Skytap also makes it easy to implement a state-of-the-art disaster recovery solution. A single DR workload can be mixed across x86, AIX, IBM i, all running in the same cloud-based DR data center.

And, once an application is in Skytap, you can replatform at your own pace with low levels of risk. Introduce agile development methods and DevOps to encourage innovation, and enhance applications with cloud-native services such as data analytics and AI to better respond to business and customer needs.

About Skytap

Skytap is a cloud service purpose-built to natively run traditional systems in the cloud. Our customers use Skytap for running production, disaster recovery, virtual training labs, and development workloads. We are the only cloud service to support AIX, IBM i, and Linux on IBM Power together with x86 workloads, enabling businesses to accelerate their journey to the cloud and increase innovation. To learn more about Skytap or schedule a demo, visit www.skytap.com

Additional Resources

White paper: DevOps for IBM Power Workloads in the Cloud

Use case: Production and Disaster Recovery

Try Skytap today!

It takes just a few minutes and pay-as-you-go pricing lets you work with Skytap risk-free.

Find Skytap in the **Azure Marketplace** or **IBM Cloud Catalog**.

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