

Solution brief

Scalable Iron Cloud storage for digital pathology slide images

A storage solution that's flexible, secure, and cost-effective

Challenge

The digital pathology workflow is different. High-resolution whole slide images could exceed 1GB each, with labs potentially producing thousands of slides per day. This reality has healthcare organizations searching for storage strategies to make their digital pathology programs affordable and resilient.

Key considerations

- Growing volumes of data are best managed by solutions with scalable capacity.
- Storage models must be flexible enough to reduce complexity and meet a variety of accessibility needs.
- Predictable pricing structures can control costs while maintaining ease of data access.
- The storage environment must be secure, protecting patient health information and ensuring data sovereignty.

What if you could

By working with Iron Mountain, your organization can take advantage of Iron Cloud Digital Pathology Storage.

The solution supports your digital pathology storage strategy with three crucial benefits:

- > **Scalability:** Enjoy an elastic storage footprint that grows with you. Expand your storage of active data as needed with no hidden fees for egress, ingress, or access. Data lives securely in Iron Mountain's Iron Cloud data centers. Digital slide images are available with a simple request and delivered via the cloud.
- > **Cost-effective pricing:** Remove the upfront expenses and complexities of tape infrastructure or onsite disk storage. Iron Mountain may lower your total cost of ownership with its inclusive and flexible multi-tiered pricing model.



Industry fact

More than 85% of organizations will embrace a cloud-first principle by 2025.

[Gartner](#)



➤ **Security:** Known for its sophisticated security measures, Iron Mountain maintains data encryption when your information is in transit and at rest. Iron Mountain's zero trust network architecture is designed to ensure data integrity, cybersecurity, and data durability. This means your slide images are protected—supporting compliance, research, and value creation.

The Iron Cloud Digital Pathology Storage solution works as an ideal complement to your organization's deployment of Digital Pathology on Demand, an as-a-service solution from Iron Mountain. Digital slide images are securely stored in the Iron Mountain Cloud while physical slides remain safe in Iron Mountain vaults.

How it works

The Iron Cloud Digital Pathology Storage solution combines multi-tiered storage options with an on-demand pricing model that includes online access, data protection, and archiving.

Here's the process:

1. Customers can request and retrieve data immediately from the Active/Hot Tier which uses the industry standard S3 Protocol.
2. Iron Cloud creates two identical copies of digital slides from the Active/Hot tier that are stored in Warm and Cold tiers.
3. Warm tier data can be retrieved within minutes to hours. Cold tier

data is kept as archival to meet compliance and other requirements.

4. Iron Mountain manages the data lifecycle policy, maintaining multiple copies of data on multiple copies of media, stored in multiple locations even after the data ages out of the Active/Hot Tier.

Business benefits

Carefully crafted features in the Iron Cloud Digital Pathology Storage solution are aimed at driving benefits for healthcare organizations, including:



Built-in resilience: The high-availability model will scale as your digital images expand and flex as your data storage needs shift.



Lower total cost of ownership: The multi-tiered model is favorable compared to hyper-scaling, which may keep all data in active/hot storage at a higher rate.



Predictable pricing: Unlimited digital slide access precludes additional fees for requests, egress, or ingress. And there are no added costs for resilience or data encryption.



Reduced risk: The highly secured Iron Mountain cloud environment reduces risks associated with compliance and cybersecurity.

Experience you can trust

Iron Mountain is a global business dedicated to storing, protecting, and managing information and assets for organizations worldwide. This includes over 2,000 healthcare customers, the Top 10 global pharmaceutical companies, and 94 imaging centers that digitize more than 1.5 billion documents annually. Iron Mountain already maintains 850M patient records, 1B+ medical images, and 1B+ pathology slides in its secure storage.

Extensive experience with healthcare and research companies has enabled Iron Mountain to develop a proven process for supporting pathology customers. And Iron Mountain's data centers are powered by 100% renewable energy.

[Contact an Iron Mountain expert today to learn how your organization can benefit from Iron Cloud Digital Pathology Storage.](#)

800.899.IRON | [ironmountain.com](https://www.ironmountain.com)

About Iron Mountain

Iron Mountain Incorporated (NYSE: IRM), founded in 1951, is the global leader for storage and information management services. Trusted by more than 220,000 organizations around the world, and with a real estate network of more than 85 million square feet across more than 1,400 facilities in over 50 countries, Iron Mountain stores and protects billions of information assets, including critical business information, highly sensitive data, and cultural and historical artifacts. Providing solutions that include secure storage, information management, digital transformation, secure destruction, as well as data centers, art storage and logistics, and cloud services, Iron Mountain helps organizations to lower cost and risk, comply with regulations, recover from disaster, and enable a more digital way of working. Visit www.ironmountain.com for more information.

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