

CASE STUDY

Imperial College Healthcare NHS Trust Speeds Up Medical Image Access While Cutting Archive Costs

Imperial College Healthcare NHS Trust transformed digital pathology with Wasabi—giving clinicians fast access to archived images while reducing storage complexity and cost.

Overview

Imperial College Healthcare NHS Trust, one of the UK's largest acute trusts, turned to Wasabi and trusted IT partner Infratech to modernize storage for its Philips IMS digital pathology platform. With Infratech's guidance, the Trust eliminated costly on-prem refresh cycles and created a fast, cloud-based archive that gives clinicians easy access to high-resolution pathology images—without infrastructure headaches or egress fees.

Challenges

Before Wasabi, the Trust stored digital pathology images entirely on-premises, using a tiered structure: 30 days on fast IMS storage, six months on local archival disks, and long-term retention on NAS-based SMB shares. This setup consumed significant rack space, required frequent Infrastructure refreshes, and posed performance challenges when retrieving older files.

- **Inefficient use of on-premises** Pathology images ranged from 1.5 to 3 GB each and took up on-site storage capacity needed for other data.
- Cost-prohibitive fees AWS and Azure's egress and API fees made storage costs too high and billing unpredictable.
- Slow image downloads Cloud storage options were mostly cold and retrieval times could take 12-14 hours.



USE CASE:

- Active archiving
- Cloud NAS
- Medical image archiving

INDUSTRY:

- Healthcare

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Pulling down a 1.5 GB file from Wasabi is about as fast as our previous local archive storage.

- Yusuf Mangera, Technical Architect, Imperial College Healthcare NHS Trust

Solutions

The Trust evaluated AWS, Azure, and on-premises options, but Wasabi stood out for its predictable pricing and lack of egress or API fees—critical factors for managing large-scale digital pathology archives.

Working with Infratech, and validated by the Philips IMS team, the Trust designed a tiered storage workflow that begins with 30 days on a third-party image management system, followed by six months on-premises. Afterward, files are moved to Wasabi via a secure 10 Gb Wasabi Direct Connect link for long-term storage and fast, seamless access.

- High-speed, dedicated connectivity Wasabi Direct Connect provides a secure 10 GB private link between the Trust and the Wasabi cloud, ensuring faster and compliant data transfers and consistent performance for highresolution image access.
- Partner expertise and support Infratech knew Wasabi solutions well and helped set up a testing environment as a POC for hot cloud storage.
- Streamlined active archiving Wasabi enables cloud tiering older, highresolution pathology images from local systems, freeing up on-prem resources while keeping data instantly accessible when needed through Wasabi Cloud NAS.

Conclusion

With Wasabi Hot Cloud Storage and Wasabi Direct Connect, the Trust implemented a fast, scalable active archive for high-resolution pathology images—without disrupting workflows or overloading on-prem resources. Clinicians now retrieve large files in seconds, and IT benefits from a low-maintenance solution that's built for long-term retention.

- **30x faster access** File retrieval times dropped from up to 14 hours to as little as 30 seconds for 1.5 GB pathology images.
- 0 support tickets Clinicians access archived images seamlessly, with no disruptions or learning curve.
- **Eliminated refresh cycles** The Trust avoided a 5-year on-prem hardware replacement plan by moving archives to the cloud.
- **Up to 400 TB archived** Large volumes of diagnostic imaging are now stored securely and cost-effectively in the cloud, with room to scale.



With clinical archives, we can't predict when or how much data we'll need to retrieve. That's why Wasabi's no-egress-fee model was such a benefit. We can access hundreds of gigabytes weekly without worrying about surprise costs.

 Yusuf Mangera, Technical Architect, Imperial College Healthcare NHS Trust



As far as the clinicians are concerned, it feels like on-prem storage. The fact that we hear nothing from them is the best feedback—it means it's working seamlessly.

- Yusuf Mangera, Technical Architect, Imperial College Healthcare NHS Trust