aws

Cloud data and file storage for healthcare workloads

Cutting-edge platforms, managed services and partners to enhance the storage of healthcare data in the cloud

AWS in healthcare

The Amazon Web Services (AWS) healthcare mission is to enable access and delivery of person-centred care in order to improve outcomes and lower costs by accelerating the digitisation and utilisation of healthcare data. Our aim is to help the National Health Service (NHS) and its partners develop cloud strategies to achieve more with less, modernise technology, and digitally transform back office and clinical services.

How cloud storage can help NHS data agenda

Across the UK, NHS hospitals are adopting cloud storage, a flexible digital solution for storing data. Cloud storage adjusts capacity according to needs, saving costs and ensuring efficient space utilisation. Whether doctors access patient records at hospitals or at home, this technology streamlines information retrieval, promoting collaboration among hospital teams and across different locations.

Cloud storage fosters innovation by enabling hospitals to simply integrate new tools to safeguard data privacy, enhance patient care and stay current with technological advancements. By reducing concerns about managing complex IT infrastructure, hospitals can focus on strategic initiatives and improving healthcare services.

Benefits of AWS cloud storage services

Access the storage you need faster.

Make resources available in minutes, not weeks. Speed time to market, avoid complex capacity planning and reduce over provisioning with just a few clicks.

Reduce the time and storage spend allowing innovation to take its place.

Minimise your total cost of ownership (TCO) with managed services that eliminate infrastructure maintenance. Optimise your storage costs based on how frequently and quickly you need to access your data.
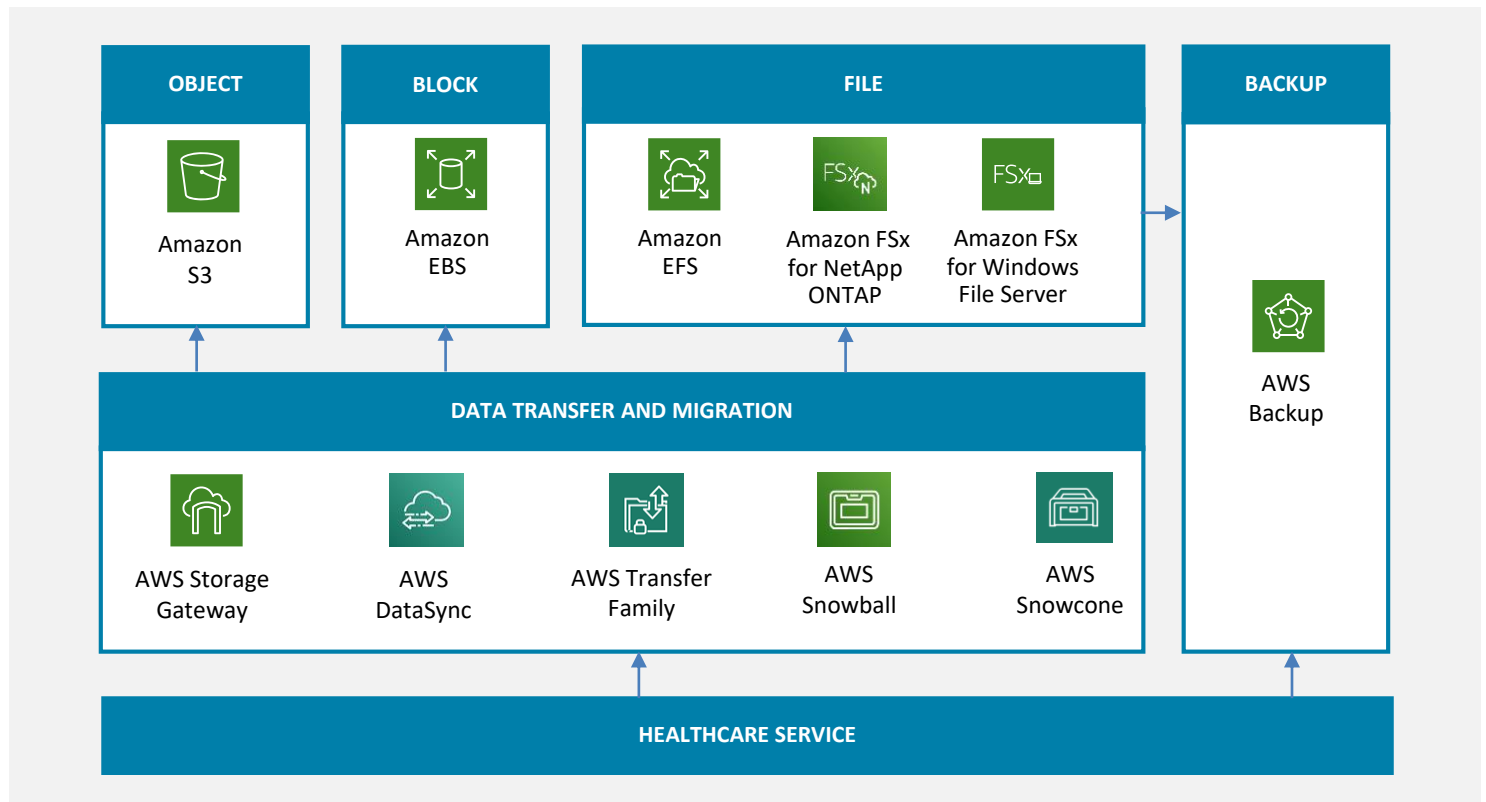
Secure and protect your data

Safeguard your data with unmatched security and storage designed for 99.999999999 (11 9s) of durability and multi Availability Zone resilience. Keep data available to your applications with data resilience provided through options from granular restore to recovery across AWS and on-premises.
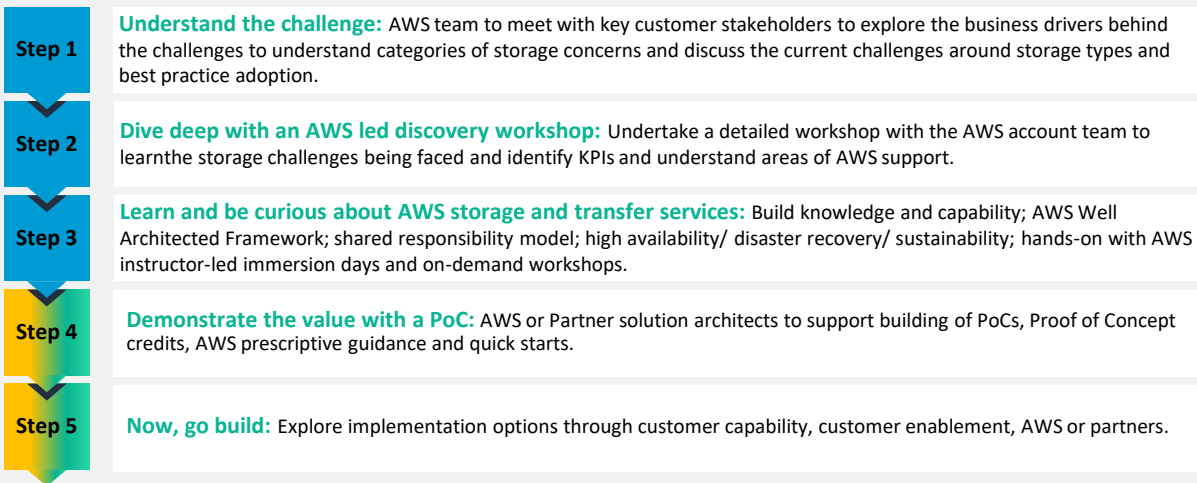
A complete cloud storage portfolio

One of the most important technology decisions a NHS organisation will make is where to store data. AWS offers the most complete set of cloud storage services for object, block and file storage. Over the last few years, we have built a rich set of data storage services, like AWS Backup, Transfer Family and Intelligent Tiering and Compression. AWS provides a broad set of choices for hybrid and edge, so you can innovate anywhere you need and have the widest choices of data migration to help you move data online or offline, depending on the need of your business.

| | | OBJECT | BLOCK | FILE | | | BACKUP |

OBJECT — Amazon S3

BLOCK — Amazon EBS

FILE — Amazon EFS, Amazon FSx for NetApp ONTAP, Amazon FSx for Windows File Server

BACKUP — AWS Backup

DATA TRANSFER AND MIGRATION — AWS Storage Gateway, AWS DataSync, AWS Transfer Family, AWS Snowball, AWS Snowcone

HEALTHCARE SERVICE

Amazon Simple Storage Service (S3)	Provides object storage through a web service interface (console and API).
Amazon Elastic Block Storage (EBS)	Provides raw block-level storage that can attach to Amazon EC2 compute instances and VMware on AWS instances
Amazon Elastic File Storage (EFS)	Cloud storage service designed to provide scalable, elastic, concurrent and encrypted file storage for use with both AWS cloud services and on-premises resources.
Amazon FSx for Netapp ONTAP	Fully managed file storage built on NetApp's popular ONTAP file system
Amazon FSx for Windows File Server	Fully managed file storage built on Microsoft Windows Server.
AWS Storage Gateway	Set of hybrid cloud services that gives you on-premises access to virtually unlimited cloud storage
AWS DataSync	Is a secure, online service that automates and accelerates moving data between on-premises and AWS storage services.
AWS Transfer Family	Securely scales your recurring business-to-business file transfers to Amazon Simple Storage Service (S3) and Amazon Elastic File System (EFS) using SFTP, FTPS and FTP protocols.
AWS Snowcone and Snowball	Physical devices and capacity points, most with built-in computing capabilities, to transfer large amounts of data on-premise to the AWS Cloud without streaming over the internet
AWS Backup	Enables you to centralise and automate data protection across on-premises and AWS services.

AWS storage bundle

The storage bundle offers a list of no-cost activities that can be implemented over a short timeframe. These activities are designed to align with NHS organisation resource commitments. The list is not exhaustive but rather aims to address a key business risk or current concern of the customer (also known as a "quick win"). These activities do not require any commercial agreements to be in place and are aimed to provide NHS organisations with advanced knowledge and understanding on how to define, plan and deliver the right outcome prior to any commercial activity.

|		
Step 1	**Understand the challenge:** AWS team to meet with key customer stakeholders to explore the business drivers behind the challenges to understand categories of storage concerns and discuss the current challenges around storage types and best practice adoption.	No cost AWS offering
Step 2	**Dive deep with an AWS led discovery workshop:** Undertake a detailed workshop with the AWS account team to learn the storage challenges being faced and identify KPIs and understand areas of AWS support.	AWS Customer Incentives
Step 3	**Learn and be curious about AWS storage and transfer services:** Build knowledge and capability; AWS Well Architected Framework; shared responsibility model; high availability/ disaster recovery/ sustainability; hands-on with AWS instructor-led immersion days and on-demand workshops.	AWS Preserve or Partner
Step 4	**Demonstrate the value with a PoC:** AWS or Partner solution architects to support building of PoCs, Proof of Concept credits, AWS prescriptive guidance and quick starts.	
Step 5	**Now, go build:** Explore implementation options through customer capability, customer enablement, AWS or partners.	

AWS NHS Data Egress Waver (NHS DEW)

Sometimes it's hard to know how much sending data will cost, and that can be tricky for your budgets. We want to make it simple for you to use AWS without worrying about extra costs. Before, some people were choosing other options that cost more, just because they knew how much it would be. With the NHS DEW program, you can adopt or maintain AWS cloud workloads and not stress about network egress charge forecasting.

AWS has listened to customer feedback and taken steps to remove this concern, by offering a wider range of NHS organisations a data egress discount. AWS customers may be eligible for waiver of egress charges under this program if they are a:

- **NHS Trusts**
- **Integrated Care Systems (ICS's)**
- **Arms Length Body (ALB's)**
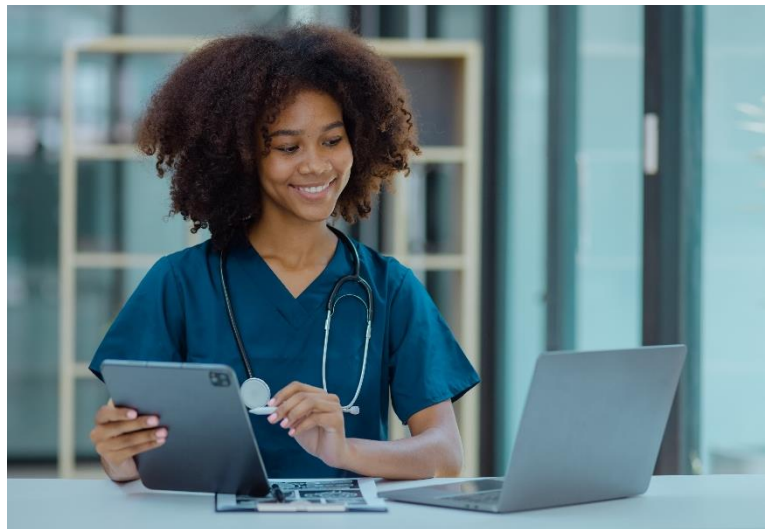
If you use AWS cloud services within your NHS organisation AWS account, we'll give you a discount on the charges when you send data from AWS to the Internet or over the Health and Social Care Network (HSCN) or Scottish Health Protection Network (SHPN). This helps you save time forecasting budgets and savings of up to 15 percent of the total of what you spend on AWS services each month.

AWS Partner offerings for NHS customers

One significant advantage that AWS partners bring to the table is the availability of no-cost offerings to customers. These no-cost offerings are designed to enable businesses to explore and adopt solutions on AWS cloud services more effectively without incurring any upfront expenses. Through these initiatives, AWS partners offer a range of valuable resources, such as workshops, training sessions and proof of concept support, to assist customers in understanding how AWS can address their unique requirements.

Partner	Offering
CloudScaler	Cloudscaler's expertise and successful customer experience enables NHS Trusts to define a data backup strategy with our exclusive no-cost one-day consultation experience. Unleash the power of our expert team to evaluate your existing setup and unveil opportunities for enhancement. Depart with a tailored blueprint designed to amplify the strength and efficiency of your backup process, ensuring your valuable organization and patient data is always safeguarded. Allow us to transform your current backup approach into a cutting-edge solution that empowers your workforce and reduce your business risk footprint.

Consulting Services

AWS Competency Partners offering consulting services have demonstrated deep AWS technical expertise and proven customer success in specialised areas across industry, use case, and workload.

Solution partner	Solution overview
Accenture	Accenture is a leading, global professional services company that provides an end-to-end solution to migrate to and manage operations on AWS. Accenture's staff of 700,000+ includes more than 40,000 trained who hold more than 30,000 AWS Certifications.
CloudScaler	We design, build, operate, and support world-class AWS platforms. We take a structured approach, deploying highly resilient and scalable infrastructure, and applying a control framework that meets the highest regulatory and industry standards. Cloudscaler will help you implement a cloud operating model that works.
CirrusHQ	CirrusHQ are your leading, cloud managed and professional services partner for AWS. We work globally with commercial, public-sector and not-for-profit organisations to enable IT transformation, competitive advantage and new ways of operating using AWS. We are your experts in cloud strategy, architecture, migration, devops and 24x7 operational management and cost reduction of your cloud services.
Iron Mountian	Organizations across the globe trust us to store and protect information and assets. Thousands of local enterprises work with us, as does almost all of the FORTUNE 1000. From critical business information to geological samples, works of fine art to original recordings of treasured artists, our customers can rely on us to protect what they value and help unlock its potential.
Rackspace	Rackspace helps businesses tap the power of the Amazon Web Services Cloud from a trusted partner with a track record of managing business-critical applications. The Fanatical Support for AWS team of engineers and architects has amassed more than 1000 AWS technical certifications, and leverage this expertise to deliver operational tooling, best practices, and specialised expertise on top of AWS.'
TCS	Tata Consultancy Services (TCS) is an IT services, consulting and business solutions organistion that has been partnering with many of the world's largest businesses in their transformation journeys for the last fifty years. TCS offers a consulting-led, Cognitive powered, integrated portfolio of IT, Business & Technology Services, and engineering.

AWS Storage Technology solutions partners

Archive

Solutions that leverage Amazon S3 Glacier for durable and cost-effective long-term data backup.

Solution partner	Solution overview
Cohesity	Cohesity makes it easy to protect, manage, and derive value from data. We offer services consolidated on one multicloud data platform: backup & recovery, disaster recovery, copy data management, and data compliance, security, and analytics — reducing complexity and eliminating mass data fragmentation. Cohesity can be consumed as a service, self-managed, or through a Cohesity-powered partner.
NetApp	Build apps on the cloud and manage them with ease. NetApp delivers enterprise-grade storage for hundreds of use cases to run file shares and block-level storage serving NAS and SAN protocols (NFS, SMB, iSCSI), Disaster Recovery, Microsoft Workloads, DevOps, Databases, or any other enterprise workload. Optimise infrastructure costs with guaranteed SLAs for performance, durability, and availability.
Rubrick	Rubrik Cloud Data Management delivers backup, instant application availability, replication, DR, search, archival, analytics, and copy data management for your cloud-native, hybrid cloud, and data center applications in one software fabric. Spin up apps in AWS for DR or test/dev. Near Zero RTO. Immutability for Ransomware.

Business Continuity/Disaster Recovery

Solutions that utilise AWS to enable recovery strategies focused on recovery time and recovery point objective requirements.

Solution partner	Solution overview
Cohesity	Cohesity makes it easy to protect, manage, and derive value from data. We offer services consolidated on one multicloud data platform: backup & recovery, disaster recovery, copy data management, and data compliance, security, and analytics — reducing complexity and eliminating mass data fragmentation. Cohesity can be consumed as a service, self-managed, or through a Cohesity-powered partner.
Hewlett Packard Enterprise	HPE is a global, edge-to-cloud Platform-as-a-Service company built to transform your business. Together with Aruba Networks, a Hewlett Packard Enterprise company, we help you connect, protect, analyse, and act on all your data and applications wherever they live, from edge to cloud, so you can turn insights into outcomes at the speed required to thrive in today's complex world.
NetApp	Build apps on the cloud and manage them with ease. NetApp delivers enterprise-grade storage for hundreds of use cases to run file shares and block-level storage serving NAS and SAN protocols (NFS, SMB, iSCSI), Disaster Recovery, Microsoft Workloads, DevOps, Databases, or any other enterprise workload. Optimise infrastructure costs with guaranteed SLAs for performance, durability, and availability.

Backup & Restore

Backup and restore solutions protect data from physical or logical errors, such as system failure, application error, or accidental deletion.

Solution partner	Solution overview
Clumio	Clumio is a secure, backup-as-a-service for the enterprise that replaces the complexity of managing data across all clouds with an authentic approach to SaaS. Regardless of where your data is managed, created or stored—whether it's in a cloud, a hypervisor, a database, or from another SaaS solution, you will have a unified view of all of your backup data for the first time.
Cohesity	Cohesity makes it easy to protect, manage, and derive value from data. We offer services consolidated on one multicloud data platform: backup & recovery, disaster recovery, copy data management, and data compliance, security, and analytics — reducing complexity and eliminating mass data fragmentation. Cohesity can be consumed as a service, self-managed, or through a Cohesity-powered partner.
Commvault	Commvault's industry-leading intelligent data management platform provides seamless backup, recovery, disaster recovery and data insight for cloud-based workloads. Applications can be recovered, migrated, and reported upon for recovery readiness, compliance and data insight initiatives.
Druva	Druva is a 100% SaaS platform built on AWS providing data protection and management across endpoints, data centers and cloud workloads. Druva is the only cloud-native, all-in-one Backup and Disaster Recovery (DR) solution in the market. Druva's native cloud approach and patented global deduplication offer customers scalability, operational simplicity, and lower TCO.
Elastio	Elastio continuously tests the recoverability of your data by deeply inspecting AWS Backups and snapshots for vulnerabilities and identifying corruption, ransomware, and malware. It assures the fast recovery of your data by identifying your last clean recovery point and providing tools to remediate any identified threats. Elastio integrates with AWS Backup and your favorite security tools.
MSP360	sMSP360™ Managed Backup Service (MBS) is a data backup solution for managed service providers and IT departments who require centralised job management, monitoring, reporting, and licensing control. MSP360™ offers all of the features you would expect in backup software, including, image-level backup, file-based backup and even support for Microsoft SQL Server and Microsoft Exchange.
N2W Software	N2WS is a leader in enterprise data protection and lifecycle management for production workloads running on AWS. N2WS provides a simple tool to orchestrate and scale backup and disaster recovery in the cloud for high availability. N2WS Backup & Recovery integrates seamlessly into any AWS environment, providing full data visibility, operational efficiency, and storage and resource optimization.
OwnBackup	OwnBackup is designed for organizations that use Salesforce CRM solutions. It provides daily, automated cloud-to-cloud backups to protect data from loss and corruption, and enables customers to identify unwanted data changes, additions or deletions, then easily restore data back into production.
Veritas	Veritas helps enterprises address information management challenges including backup and recovery, business continuity, software-defined storage and information governance. Every one of our industry-leading solutions is designed around the principle that information is more important than infrastructure. Veritas provides Information Management solutions for 86% of Fortune 500 companies.
Veeam	Veeam® is a leader in backup solutions that deliver Cloud Data Management™. Veeam provides a single platform for modernising backup, accelerating hybrid cloud and securing your data. Our solutions are simple to install and run, flexible enough to fit into any environment and always reliable.

Primary Storage

Solutions that leverage file, block, object, and streamed data formats as an extension to on-premises storage.

Solution partner	Solution overview
Bytes	Bytes AWS is one of the fastest growing AWS partners in the UK with 200+ customers, we manage $6m+ AWS consumption p/m for our customers and have completed 100's migrations. Our focus is ensuring our customers receive the highest possible levels of service & ensure they are taking advantage of the various funding programmes to help them on their AWS journey securing $3m+ in funding in 2022.
CDW	CDW is a leading multi-brand technology solutions provider to business, government, education and healthcare organisations in the United States, Canada and the United Kingdom. A Fortune 500 company with multi-national capabilities, CDW was founded in 1984 and employs more than 9,000 coworkers
Hitachi Vantara	Hitachi Vantara LLC delivers service-level-driven outcomes for demanding applications on AWS cloud from edge to data center to cloud with our comprehensive, enterprise-grade, AWS cloud validated capabilities.
InterVision Systems	InterVision is a strategic service provider helping organisations run, grow and transform their businesses with the power of cloud and modern IT services. Our experts leverage our expansive history in technology solutions, deep bench of certified engineers, data scientists and ecosystem of partners to excel in delivering professional and managed services to commercial and public sectors.
Rackspace	Rackspace helps businesses tap the power of the Amazon Web Services Cloud from a trusted partner with a track record of managing business-critical applications. The Fanatical Support for AWS team of engineers and architects has amassed more than 1000 AWS technical certifications, and leverage this expertise to deliver operational tooling, best practices, and specialised expertise on top of AWS.'
Softcat	Softcat is a leading UK IT reseller with over twenty years' experience delivering IT solutions. We provide bespoke, innovative end-to-end technology solutions that help your business and organisation to succeed. As an APN Advanced Consulting Services Partner we have a wide range of cloud services and frameworks to guide and support you through your cloud journey with AWS.
Sungard	For 40 years Sungard AS has consistently delivered resilient IT solutions to their customers. Responding to the market and customer requirements, Sungard AS leverages AWS to recover, backup and run customer mission critical workloads. Our solutions are fully managed and SLA backed, allowing customers to benefit from AWS' scale and agility, without the need for in-house AWS skills/resources.
Tata Consultancy Services	Tata Consultancy Services (TCS) is an IT services, consulting and business solutions organisation that has been partnering with many of the world's largest businesses in their transformation journeys for the last fifty years. TCS offers a consulting-led, Cognitive powered, integrated portfolio of IT, Business & Technology Services, and engineering.

Get started

To get started contact your AWS account team to learn more on how we can:

- Support you on your cloud journey

- Understand your technical landscape

- Build your Cloud Business Case

- Identify the best procurement route for your Trust

- Identify quick wins and initial migration opportunities

AWS resources

- Guidance for NHS Trusts Adopting AWS Cloud Services

- AWS Storage

- AWS for Health

- AWS Partner Network

Get in touch

Email: aws-uk-healthcare@amazon.com

aws