

AWS - FSx

<https://aws.amazon.com/fsx/>

- Amazon FSx makes it easy and cost effective to launch and run popular file systems that are fully managed by AWS.
- With Amazon FSx, you can leverage the rich feature sets and fast performance of widely-used open source and commercially-licensed file systems, while avoiding time-consuming administrative tasks such as hardware provisioning, software configuration, patching, and backups.
- It provides cost-efficient capacity with high levels of reliability, and integrates with a broad portfolio of AWS services to enable faster innovation.
- Amazon FSx provides two file systems to choose from:
 - Amazon FSx for Windows File Server for business applications and
 - Amazon FSx for Lustre for compute-intensive workloads.

Amazon FSx for Windows File Server: feature-rich file storage for business applications

- Amazon FSx for Windows File Server provides fully managed file storage that is accessible over the industry-standard **Server Message Block (SMB)** protocol.
- Built on Windows Server, Amazon FSx delivers a wide range of administrative features such as **data deduplication, end-user file restore, and Microsoft Active Directory (AD) integration**.
- It offers single-AZ and multi-AZ deployment options, fully managed backups, and encryption of data at rest and in transit.
- With the HDD storage option, Amazon FSx for Windows File Server offers the lowest-cost file storage in the cloud for Windows applications and workloads.
- **You can access Amazon FSx from Windows, Linux, or MacOS compute instances and devices running on AWS or on premises.**
- You can optimize cost and performance with multiple storage options, and you can grow your file system storage and scale your performance at any time.

Amazon FSx for Lustre: fast and scalable shared storage to power your compute workloads

- Amazon FSx for Lustre is a fully managed service that provides **cost-effective high-performance storage for compute workloads**.
- Many workloads **such as machine learning, high-performance computing (HPC), video rendering, and financial simulations depend on compute instances accessing the same set of data through high-performance shared storage**.
- Powered by Lustre, the world's most popular high-performance file system, FSx for Lustre offers **shared storage with low latencies, up to hundreds of gigabytes per second of throughput, and millions of IOPS**.

- FSx for Lustre offers multiple deployment types, storage types, and throughput performance levels to optimize cost and performance for your workload requirements.
- FSx for Lustre file systems can also be linked to Amazon S3 buckets, allowing you to access and process data concurrently from both a high-performance file system and from the S3 API.

BENEFITS - Amazon FSx for Windows / Lustre

- Cost-effective
- Fast and flexible performance
- Available and durable
- Simple and fully managed
- Secure and compliant
- Integrated with AWS services