CloudStor
Research Data Storage and Collaboration

CloudStor facilitates national and international collaboration by providing researchers with the ability to easily and securely send, store and share data.

CloudStor is an AARNet owned and operated service that provides fast, secure and easy-to-use cloud data storage and data transfer solutions, all hosted on the AARNet network.

Research Data Storage

Unlike most cloud storage services, CloudStor is designed for the Australian research community, with features including:

- One terabyte of storage automatically available to individual researchers at AARNet-connected institutions.

- Single Sign On access using home institution credentials, either via the Australian Access Federation members or integrating with an institution's identity management platform.

- Synchronise files to the desktop or access via web interface from desktop or mobile device.

- Easy sharing of data files and folders between researchers and institutions.

- Direct and encrypted file sharing tools.

- Group drives for project based collaboration within and between research institutions.

- Packaging tools for collating, describing, sharing and publishing data collections and associated metadata.

- Multiple access and integration options for users and institutions, including web browser, mobile client, sync client, and interfaces for WebDav and S3.

- A range of options for automation of data loading from scientific instruments.

- Real-time data analysis and visualisation tools.

- Online document editing and collaboration tools.

- Storage is located in Australia, owned and operated by AARNet, and directly connected to the AARNet backbone for rapid and convenient access.

- Data is replicated a minimum of two times at geographically distributed storage nodes for high reliability and availability.

- Data is backed up to tape storage, providing persistent backups and a third copy.

- High speed access from institutional and national compute clouds and HPC.

CloudStor Applications

AARNet provides applications to support research data workflows including:

- The CloudStor Portal, a responsive web-browser environment supporting drag and drop and real-time data interaction.

- The CloudStor Sync Client, available for Windows, Mac OSX, Linux, iOS and Android.

- OnlyOffice for collaboratively editing a wide range of Microsoft document types directly in the CloudStor portal.

- CloudStor FileSender for encrypted direct sharing of large data files and folders between researchers.

- CloudStor SWAN Service for Web-based Analysis to support the creation, execution and sharing of Jupyter Notebooks that provide data analytics using R, Python, Octave and C++.

- S3 storage services for high speed data storage and access.

- CloudStor Rocket for high speed multi-thread data upload from desktops and scientific instruments.

- Collections tool for data packaging, creating Bagit based packages with metadata for sharing and publication.

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CloudStor Security

AARNet's CloudStor is designed to provide security for research data across the AARNet hosted infrastructure. Our CloudStor security and data integrity measures include:

- All services are segregated behind high availability web proxy services.

- All storage disks are system encrypted providing encryption at rest.

- S3 storage disks are individually encrypted.

- All connections are secured via TLS encrypted tunnels.

- All data is replicated to two different geographic locations.

- All data is backed up to tape, backups are performed daily and daily backups retained for 90 days, with monthly backups retained post 90 days.

- All system and user access is logged and added to our elastic analytics engine.

- An independent security audit and penetration test is performed yearly.

- All data is housed within Australia on equipment owned by AARNet.

- Terms and Conditions, including AARNet's CloudStor privacy policy, are detailed here: https://support.aarnet.edu.au/hc/en-us/articles/115003219568-CloudStor-Terms-and-Conditions-of-Service

CloudStor Enterprise Agreements

In addition to 1TB of personal user storage, all AARNet customer institutions and organisations are entitled to 10TB of group drive space without any additional charge. Through a CloudStor Enterprise Agreement research organisations can purchase additional storage in allocations of 100TB, 200TB, 500TB and multiples of 1PB. Please contact support@aarnet.edu.au for pricing.

Contact Us

Please email support@aarnet.edu.au with your contact details and we will get in touch to discuss your research data needs.

1TB storage free to researchers

Cloud based collaboration and storage

Single Sign On

Available on iOS, Android, Mac and PC

aarnet.edu.au • cloudstor.aarnet.edu.au