



### AFS File Sharing Service

The Office of Information Technology (OIT) offers a fee-based, **AFS File Sharing Service** that allows individuals, groups, departments, or entire colleges to increase available disk space within the [TerpConnect](#) computing environment. By default, TerpConnect offers one gigabyte (GB) of storage at no charge to all faculty, staff, and students. If the standard allocation is not enough, the **AFS File Sharing Service** provides the ability to add more storage as needed. The underlying file sharing technology used by TerpConnect is [AFS](#), a distributed file system developed at Carnegie Mellon University and known for its robust, scalable, and secure architecture. The AFS environment (and by extension, the TerpConnect environment as well) is accessible using client software available for Microsoft Windows, OS X, Linux, and Solaris. It can also be accessed using WebDAV or through a web browser (e.g., Firefox, Internet Explorer, or Safari).

#### Service Benefits

There are many reasons why individuals or departments might wish to choose OIT's **AFS File Sharing Service**. Benefits include:

- Reduced cost (no need to purchase a server or to allocate resources to provide system administration or account maintenance)
- Robustness (data resides on a top-of-the line, fault-tolerant storage array)
- Security (authentication and authorization uses University Directory credentials)
- Sustainability (decreased use of campus computing resources)
- Flexibility of access
  - Connect from Windows, OS X, Linux, and Solaris environments.
  - Connect from on- or off-campus using HTTPS, WebDAV, SSH, or SFTP
  - Access data by individual or group
- Offsite backups (additional fee required)
- Peace of mind (24x7 system monitoring and support)

#### Service Description

The **AFS File Sharing Service** provides individuals, groups, and departments the flexibility to administer network-accessible disk space as best suits their needs. The following table lists common tasks performed by customers and OIT administrators:

Function	Customer	OIT
Create Initial Storage Partition		X
Increase Storage Allocation (partition size)		X
Create/Rename/Delete Volumes	X	
Manage Volume Quotas	X	
Restore Deleted Files	X <sup>†</sup>	X
Modify Directory Access Control Lists	X	
Manage Groups (create, rename, delete)	X	
Manage Group Membership (add remove)	X	

<sup>†</sup> Customers can restore from the previous night's on-disk backup. OIT will recover older data from tape.

## Service Pricing

The charge for OIT's **AFS File Sharing Service** is determined as follows:

- storage – \$.16 per GB per month. Storage is available in 50GB allocations.
- infrastructure and administration – \$1,000 annually

OIT will invoice customers annually. The billing periods begins with the first full month of service and ends on June 30. Below are several possible pricing scenarios:

Sample Pricing (Annualized)			
Storage Allocation	Disk	Support	Total
50 GB	\$96.00	\$1,000.00	\$1,096.00
100 GB	\$192.00	\$1,000.00	\$1,192.00
250 GB	\$480.00	\$1,000.00	\$1,480.00
500 GB	\$960.00	\$1,000.00	\$1,960.00
750 GB	\$1,440.00	\$1,000.00	\$2,440.00
1,000 GB	\$1,920.00	\$1,000.00	\$2,920.00

Additional configurations can be purchased as needed in 50GB blocks.

OIT provides a separately chargeable [backup service](#), which includes off-site storage of tapes. The cost of this service is \$0.23 per GB backed up per month. Although not required, this service is strongly recommended. Customers who purchase the backup service will receive a monthly invoice that reflects usage charges. The total amount of the bill will vary depending on the amount of data backed during a given month.

## Customer Requirements

Using **AFS File Sharing Service** requires at least one of the following:

1. a Glue'ed Solaris or Linux server or workstation
2. AFS client software for your operating system, which can be downloaded at no charge from the [OpenAFS website](#).
3. WebDAV client software:
  - for Microsoft Windows XP, OIT recommends WebDrive, which is available at no charge from the [Helpdesk website](#). Installation and configuration instructions are available [here](#).
  - for Microsoft Windows Vista, OIT recommends the integrated client. Configuration instructions can be found [here](#).
  - for OS X, OIT recommends the integrated client. Configuration instructions can be found [here](#).
  - for standalone Linux, a client can be downloaded from [here](#) at no charge.
4. Secure FTP. OIT recommends [F-Secure](#) for Microsoft Windows and either [Fugu](#) or [Transmit](#) for OS X. All are available as free downloads.
5. a Web Browser, such as Firefox, Internet Explorer, or Safari. Other browsers may also work, but they have not been tested and are not supported by the OIT Helpdesk.

If you are interested in learning more about the AFS Storage Service, contact the OIT Helpdesk at x51500.