

# AFS Quota and Allocations

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**AFS**



# AFS

- Distributed Filesystem
- Supported Clients on Microsoft Windows, Linux, and Solaris workstations
- OpenAFS

# AFS Infrastructure



# AFS Infrastructure

- Built on Sun-Fire 280R servers
- High Reliability SCSI RAID arrays
- Regular Backups

# AFS Allocation Classes



# AFS Allocation Classes

An organizational designation for easy administration of the AFS Cell.

Three such classes in SCS are:

- User
- Academic
- Project

# AFS Allocation Classes

User	All SCS user accounts
Academic	Available by request for specific terms: 15555-f05 Individual student volumes available: 15555-f05-users
Project	Available by request for all the various affiliated SCS projects.



AFS  
“Quota”

*versus*

“Allocation”

# AFS “Quota” v. “Allocation”

There is a distinct difference between individual volume quota and overall allocation afforded to AFS requests.

It becomes even more relevant in the context of project space requests.



# AFS “Quota” v. “Allocation”

***Overall allocation*** is the total capacity assigned to your space request.

***Volume quota*** refers only to the size of a single “slice” of that overall allocation: a volume.

# AFS Quota Management



# AFS Quota Management

Anyone may manage their own “user space” by using the SCS Jeeves service.

```
$ telnet -xa jeeves
Trying 128.2.191.155...
Connected to SERVICEBERRY.SRV.cs.cmu.edu.
Escape character is '^]'.
[ Kerberos V4 accepts you ]
[ Kerberos V4 challenge successful ]
```

Solaris (serviceberry.srv.cs.cmu.edu) (pts/2)

Automatic login: bovik

Welcome to Jeeves, bovik.@CS.CMU.EDU.  
For further information see  
<http://www.cs.cmu.edu/~help/admin/jeeves.html>

1. Perform AFS related operation (afs)
2. Perform Kerberos related operation (kerberos)
3. Perform electronic mail related operation (mail)
4. Perform WWW related operation (www)
5. Perform CorporateTime calendar server related operation (corptime)
6. Disconnect from Jeeves (quit)

Choose option by number or parenthesized keyword.

Enter selection: afs quota

AFS quota operations

1. Display an AFS volume quota  
Syntax: display <volume name>  
Example: display user.bovik
2. Change an AFS volume quota  
Syntax: change <volume name> <quota in kilobytes>  
Example: change user.bovik 20000
3. Return to the AFS menu (back)
4. Disconnect from Jeeves (quit)

Enter selection:

# AFS Quota Management

Projects are encouraged to select two individuals to act as “Class Admins” for a request.

These individuals may use Jeeves to adjust individual volume quotas as well as create new volumes on demand.

These new volumes may not exceed the maximum overall allocation for the project, or the individual maximum volume size.



# AFS Quota Management

Class admins may manage volume quotas to make more efficient use of their allocated space.

It is not necessary to create all the volumes you need to initially reserve allocated space. Quota fluctuations for individual volumes will not affect the overall allocation for a project.

# The Numbers!



# Default Volume sizes

at Creation Time

	Current	<i>Goal</i>
User	10 MB	<i>1 GB</i>
Academic	*	*
Project	1.5 GB	*

\* space allocated as needed, 25 GB volume max. size still applies.

# Maximum Volume Sizes

	Current	Goal
User	1 GB	? GB * <i>contact us</i>
Academic	1.5 GB	25 GB avail. now
Project	1.5 GB	25 GB avail. now

\* The new maximum size for user volumes are being discussed.



# Maximum Allocation Sizes

	Current	Goal
User	1 GB	? GB <i>contact us</i>
Academic	*	*
Project	50 GB at no cost	50+ GB** contact us

\* space allocated as needed, 25 GB volume max. size still applies.

\*\* A one time charge with no recurring fees. Policy and costing is still under discussion.

# Maximum Allocation Sizes

The 50+ GB costing policy is currently being discussed.

There will be a one time charge for the allocation, not a recurring monthly fee.

If you have needs in this category, please contact us.



**Contact Us**

# Contact Us

[help+@cs.cmu.edu](mailto:help+@cs.cmu.edu)

For any:

- Questions pertaining to AFS quotas or allocation of space.
- New requests of academic or project space.
- Data storage needs.



# Contact Us

[help+@cs.cmu.edu](mailto:help+@cs.cmu.edu)

## OpenAFS

<http://www.openafs.org/>

## Our SCS Facilities Announcements page

<http://www.cs.cmu.edu/~help/>

## Using the Jeeves Service

<http://www.cs.cmu.edu/~help/jeeves/>

## Requesting AFS Project Space

[http://www.cs.cmu.edu/~help/afs/project\\_volumes.html](http://www.cs.cmu.edu/~help/afs/project_volumes.html)