

## Generic Tests :

Si No	Test Case	Type	Status	Comments
1	Start the mds server with correct parameters	Positive	Pass	
2	start mds server with incorrect parameters	Negative	Pass	
3	start data server(s) with incorrect parameters	Negative	Pass	
4	start data server(s) with correct parameters	Positive	Pass	
5	start pnfs client giving incorrect parameters	Negative	Pass	
6	start the pnfs client with incorrect parameters	Positive	Pass	
7	Check if mount has happened correctly	Positive	Pass	
8	Run cat /etc/fstab or mtab	Positive	Pass	
9	Run ls on empty folder with -a -l options	Positive	Pass	Run it both times when the folder is empty and when it has some contents
10	Copy file from the local file system to the mount location	Positive	Pass	
11	Create Directories	Positive	Pass	
12	Create files	Positive	Pass	Created files by using vi and appending data with '>>' operator
13	Remove Directories	Positive	Pass	
14	Create sym links	Positive	Failed	Symlinks are implemented but not completely. As of now its not supported completely
15	Unlink	Positive	Pass	
16	Create hard links	Positive	Failed	Hardlinks are implemented but not completely. As of now its not supported completely
17	Remove file(s)	Positive	Pass	
18	Change owner	Positive	Pass	
19	Change permission	Positive	Pass	
20	Open file using vi	Positive	Pass	
21	Read file	Positive	Pass	
22	cat file	Positive	Pass	
23	Move files	Positive	Pass	
24	Move directories	Positive	Failed	Renaming directories is not supported currently
25	Rename files	Positive	Pass	Pass
26	Rename Directories	Positive	Failed	Renaming and Moving directories is not supported currently
27	Append data to a file	Positive	Pass	

## Other Test Cases :

Si No	Test Case	Type	Status	Comments
1	Copy a large file of size > 16k [ stripe size ] to the mount location	Positive	Pass	
2	Modify the large file and make it > 32 k	Positive	Pass	
3	Modify the large file and reduce the file size to 4k	Positive	Pass	
4	Read a large file from the mount location	Positive	Pass	
5	Do a read or write on a large file with 1 data server and multiple data servers	Positive	Pass	

## Scalability / Performance test details :

We had a dedicated machine running as a mds\_server acting as the meta data server. A file of 1.4Mb was copied to the mount location and read from the same place and back to the local machine. Number of data servers in the system were varied from 1 to 3 and the same operation was performed. time command of linux was used to evaluate the performance.

A file was copied to the mount location using cp command to calculate the write time. This file was then read from the same mount location to a location on the local file system to calculate the read time.

File Size :		
No of Data Servers	Read	Write
1	0.417	4.457 s
2	0.409	3.803
3	0.397	3.119