- Test script : test.sh
- Test log files are placed in test log folder in the source code
- time command of linux is used to calculate the performance
- Buffer size is set to a maximum of 4096 bytes for every read / write

Test Case 1: Relay Test Case

Here we try to search a file from compute-0-0 and the file should be served by compute-0-3. This is to test that the request are relayed properly.

| Si. No | File Size | Time taken (seconds) |
|--------|-----------|----------------------|
| 1 | 1.1K | 5.272 |
| 2 | 2.1K | 5.364 |
| 3 | 4.2K | 46.058 |
| 4 | 8.3K | 86.746 |
| 5 | 11K | 86.811 |

Multiple clients trying to fetch the file

| Si. No | File Size | Time taken (seconds) |
|--------|-----------|----------------------|
| 1 | 1.1K | 5.272 |
| 2 | 2.1K | 5.364 |
| 3 | 4.2K | 46.058 |
| 4 | 8.3K | 86.746 |
| 5 | 11K | 86.811 |

Test Case 2: Star Test Case

4 Nodes:

```
compute-0-0 - Peers: compute-0-1, compute-0-2, compute-0-3 compute-0-1 - Peers: compute-0-0, compute-0-2, compute-0-3 compute-0-2 - Peers: compute-0-0, compute-0-1, compute-0-3 compute-0-3 - Peers: compute-0-0, compute-0-1, compute-0-2
```

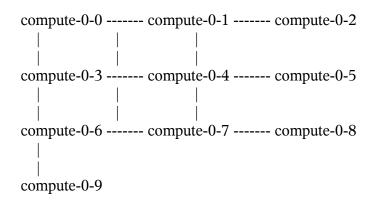
| Si. No | File Size | Time taken (seconds) |
|--------|-----------|----------------------|
| 1 | 1.1K | 5.272 |
| 2 | 2.1K | 5.364 |
| 3 | 4.2K | 46.058 |
| 4 | 8.3K | 86.746 |
| 5 | 11K | 86.811 |

Multiple clients trying to connect

| Si. No | File Size | Time taken (seconds) |
|--------|-----------|----------------------|
| 1 | 1.1K | 5.272 |
| 2 | 2.1K | 5.364 |
| 3 | 4.2K | 46.058 |
| 4 | 8.3K | 86.746 |
| 5 | 11K | 86.811 |

Test Case 3:

10 Nodes : compute-0-0, compute-0-1, compute-0-2, compute-0-3, compute-0-4, compute-0-5, compute-0-6, compute-0-7, compute-0-8, compute-0-9



| Si. No | File Size | Time taken (seconds) |
|--------|-----------|----------------------|
| 1 | 1.1K | 5.272 |
| 2 | 2.1K | 5.364 |
| 3 | 4.2K | 46.058 |
| 4 | 8.3K | 86.746 |
| 5 | 11K | 86.811 |

Multiple clients trying to connect

| Si. No | File Size | Time taken (seconds) |
|--------|-----------|----------------------|
| 1 | 1.1K | 5.272 |
| 2 | 2.1K | 5.364 |
| 3 | 4.2K | 46.058 |
| 4 | 8.3K | 86.746 |
| 5 | 11K | 86.811 |