## **Evaluation Part III**

Here we are comparing performance of Centralized system VS Distributed System for download operation. Evaluation-I has performance evaluation of distributed system. Same kind of evaluation performed here on Centralized System.

10000 number of files are registered and downloaded from Single peer, two peers, four peers and eight peers concurrently. Size of each file is 1KB.

Total number of files = 10000

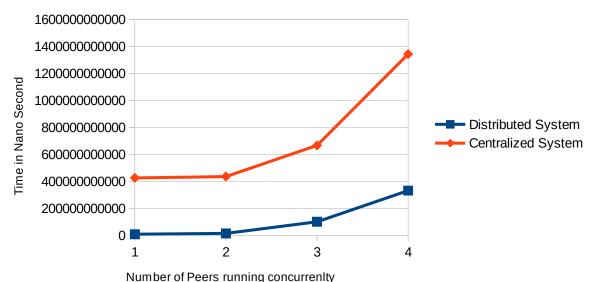
Size of each file = 1KB

Following is the table and graph shows time required for download operation when performing download operation from one peer, two peer, four peer and eight peer concurrently respectively.

Time required for Download operation in Distributed and Centralized System :

Number of Peers running concurrently	Time Required for Download (Nano Second)	
	Distributed System	Centralized System
1	7,504,035,389.00	425,387,114,991.00
2	13,377,177,791.50	435,301,178,315.00
4	99,919,666,915.25	666,337,483,978.00
8	331,067,504,897.75	1,343,756,946,353.00

## Time required for Download Operation



## **Evaluation Details for Centralized System**

1. Downloading 10000 files from one Peer.

Size of each file 1KB.

Time Required (Nano Second) : 590223921821

Time required for operation in Nano Second

	Download
Peer 1	425387114991

```
Menu
(Local Server IP: /10.0.0.30:1110)
1. Show available files
2. Enter file name to download
3. Exit
Enter your choice:
2
Start time1315334086801
Ended at 1740721119136
Time required for download(NanoSecond): 425387114991
```

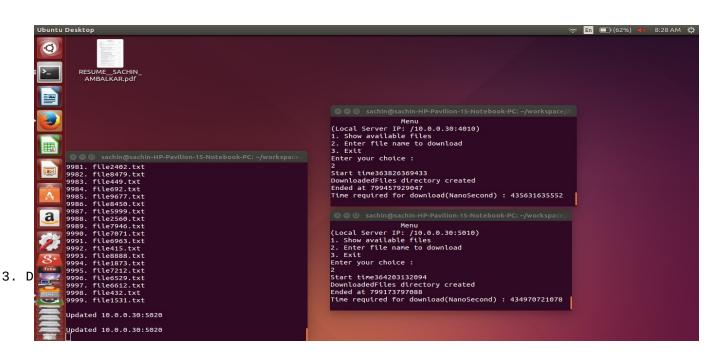
2. Downloading 10000 files from two Peers concurrently.

Size of each file 1KB.

Time Required (Nano Second): 438222670784

Time required for operation in Nano Second

	Download
Peer 1	435631635552
Peer 2	434970721078
Average	435301178315



Size of each file 1KB.

Time Required (Nano Second): 438222670784

Time required for operation in Nano Second:

	Download
Peer 1	667905753800
Peer 2	668031786837
Peer 3	665152620805
Peer 4	664259774470
Average	666337483978

