

Performance Evaluation is based on 2 approaches:

- Push: Responsibility of peer as server to broadcast information of the modification to all the neighbor peers.
- Pull: Responsibility of Peer as client to fetch the information from server to know if there is any modification done once we have our TTR expired.

System Configuration:

- Total no of peers: 10
- Distinct physical folder for each peer
- All the peers are up and running .
- Network is connected
- RAM: 8GB
- Variation can be made to the files in original folder.

Push Approach:

Testing the effectiveness of PUSH. Let one peer do queries

On modifying system load:

Peer	Average response time per client query request(msec)
1	345
2	500
3	780
4	1095

Time to Refresh:

Peer	Average response time per client query request(msec)
1	25

2	36
3	45
4	59

- It implies that as the number of peers requests rises simultaneously, the % of invalid query results that comes back is anyway less because of extra network occupied

Pull Approach:

Testing the effectiveness of PULL

Time to download on modifying the system load:

Peer	Average response time per client query request (msec)
1	525
2	779
3	983
4	1330

Time to refresh:-

Peer	Average response time per client query request (msec)
1	31
2	42
3	52
4	68

Percentage of invalid query: With respect to TTR

TTR(min)	%
1	5
2	19
5	35