

Project 3 Report

Members:

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Objective: The objective of this project is to implement the Pastry protocol and its performance comparison for different number of nodes and requests.

Introduction: Pastry is an overlay network and routing network for the implementation of a distributed hash table (DHT). There will not be a single point of failure as the key-value pairs are stored redundantly. If there is a failure it will be immediately fixed. Hence, there will not be a data loss.

Execution:

- `dotnet fsi --langversion:preview project3.fsx numNodes numRequests`
For example: `dotnet fsi --langversion:preview project3.fsx 100 10`

Results:

Number of Nodes	Number of Requests	Average hops per route
100	10	1.57
500	20	2.38
1000	60	2.74
2500	100	3.25
5000	100	3.62
10000	200	4.01