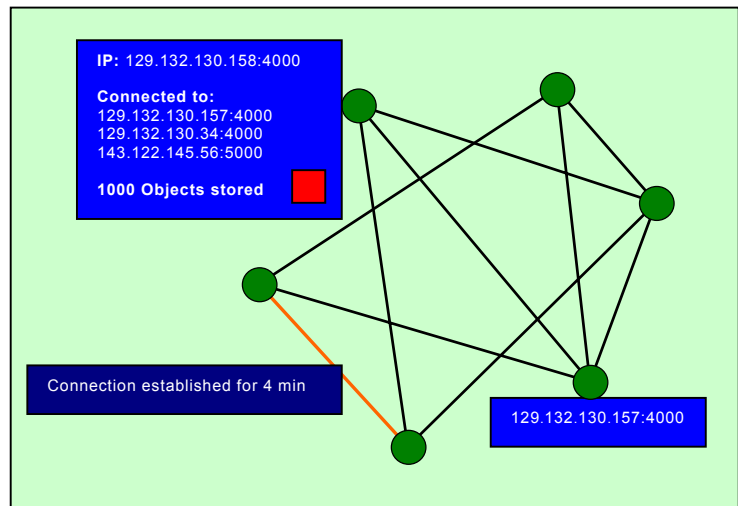


## Semester/Diploma/Master's Thesis "Implementation of a monitoring and testing tool for a Peer-to-Peer System"

Implementing a Peer-to-Peer System is one thing. But in order to test, use and present it, a monitoring tool comes very handy. Such helping tool visualizes for example the actual connectivity of the system. Or it provides statistic data and whatever else information is considered useful or might give some insight about the system, how it works and what its actual state is.

Monitoring a Peer-to-Peer System is certainly an exciting thing to do, but it might be even more interesting to control the system. So a next step would be to extend the monitoring tool to become a test environment. With such testing tool we could at random cut connections, start new Peers and so on while observing what is happening with the rest of the system.

Another (optional) part of this thesis would include an analysis of the model of the underlying Peer-to-Peer System. To what degree is the system fault tolerant? What kind of failures can be handled? This might as well include an analysis of the Peer-to-Peer architecture and its behavior. Several cases could be theoretically analyzed and then practically tested and verified.



Implementing such tool includes understanding and analysis of the Peer-to-Peer System, which is used in an ongoing research project of our group.

The goal of this thesis is to understand the Peer-to-Peer System, to be aware of its strength, and to see its limitations.

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