This thesis is about solving problems using systems for distributed computing. In the beginning, it provides the reader brief introduction to the area of systems for distributed computing and introduces some of the existing systems. Further there is a proposal of a new distributed computing system. Design of this system is described thoroughly including the processes, network connections and messages which are used for communication between the processes. The system is then compared to existing implementations. Advantages and disadvantages are discussed. At the end there are some ideas how the system can be improved in the future.