

The thesis begins with discussion of usability of transactions in peer-to-peer environment, with the result that transactions are useful for some kinds of peer-to-peer applications, and specifies requirements on transaction coordination protocol that is suitable for peer-to-peer environment. After that, introductions to the JXTA peer-to-peer platform and to the BTP coordination protocol follow. The last part of the thesis

is devoted to the BTP-JXTA framework, which I have developed. The framework extends the JXTA platform with a transaction service that uses the BTP as its coordination protocol. The description of the framework

focuses on architecture and important implementation concepts and on the methodology of testing that was used.