

## 1. JXTA survey

### Overview:

JXTA is an open, cross-platform and language-dependent P2P protocol brought up by Sun, as an underlying substrate for p2p-oriented applications. It provides the minimal subset of services that P2P network needs, and excludes any other specific logic, policies and components. For example, it even does not depend on TCP/IP stack. Maybe, it can be a reference for our simulations or even implementations.

Currently, the implementation based on Java has been released.

Some notes.

#### a. The most important concepts is

- 1) peers
- 2) peer groups
- 3) Pipe
- 4) Message
- 5) Advertisements

b. Pipe is one-way and asynchronous. Each pair of communicating peers should establish two pipes.

c. Message and advertisement is XML based, and this feature increases the interoperability. Besides, the format message is flexible enough. The protocol imposes on little constraints.

#### d. Core underlying protocols

- 1) PDP (Peer Discovery Protocol)
- 2) PIP (Peer Information Protocol)
- 3) PBP (Pipe Binding Protocol)
- 4) ERP (Endpoint Routing Protocol)
- 5) RVP (Rendezvous Protocol)
- 6) PRP (Peer Resolver Protocol)

2. Begin to survey "Virtualized Rich Multimedia Clients - The novel Enablers for a new NGN Service Delivery Concept"