



LIONSHARE

Agenda

- Old Prototype Code Summary
- Current Feature List
- LionShare Proposed Architecture Discussion
- Agenda for Thursday's Conference Call
- Current Short Term Work Plan



Misconceptions

- Java Sucks!
- Gnutella Sucks!
- P2P is a FAD
- P2P is illegal
- P2P = File Sharing Only



Limewire Background

- Gnutella Protocol 0.6 w/ Extensions
 - Ultrapeers
 - HUGE
 - XML Hashmap
 - And So much more OH my!
- Java 118 Compatible
 - Blame Steve Jobs
 - Some 1.3/1.4 Stuff for OSX



Limewire Code

- Released Under the GPL
- No Spyware!
- Two Main Projects
 - Core
 - Gui
- Public CVS at <http://www.limewire.org>
- They keep doing our work for us:
 - Skins, Browse Host, XML Support



Gnutella in a Nutshell

Ping Used to actively discover hosts on the network. A servant receiving a Ping message is expected to respond with one or more Pong messages.

Pong The response to a Ping. Includes the address of a connected Gnutella servant, the listening port of that servant, and information regarding the amount of data it is making available to the network.

Query The primary mechanism for searching the distributed network. A servant receiving a Query message will respond with a Query Hit if a match is found against its local data set.



Gnutella (cont)

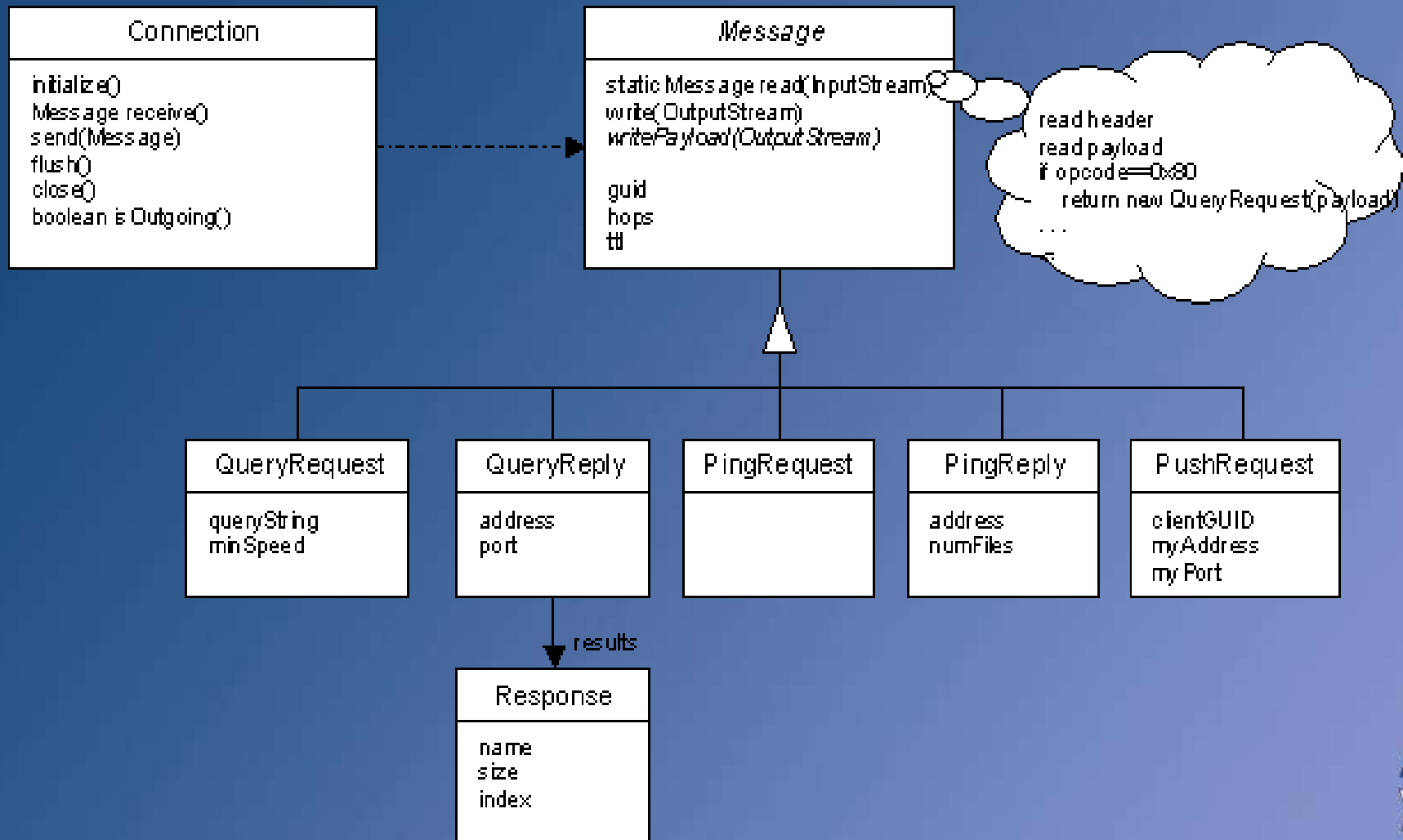
QueryHit The response to a Query. This message provides the recipient with enough information to acquire the data matching the corresponding Query.

Push A mechanism that allows a firewalled servant to contribute file-based data to the network.

Bye An optional message used to inform the remote host that you are closing the connection, and your reason for doing so.



Limewire Backend



LionShare Protoype

- Originally Limewire 2.6 based
 - Converted to 3.0 in Sept
 - Converting to 3.6 NOW
- Major Changes
 - Connection Headers
 - “Private Network”
 - De-Limewired
 - Image Schema Support (Dublin Core)
 - Skins



Old Features/Half Projects

- Image Viewer Support
- Automatic Thumbnailing
- RLKC
 - Really Lousy Kerberos Code
 - Java 1.4 GSSAPI
 - Rewrite Planned
- PeerServer Proof of Concept
 - Modified version of the Client
 - HTTP post
 - Fixed address on queries



Website

- <http://lionshare.its.psu.edu>
- <http://lionshare.its.psu.edu/twiki>
- <http://lionshare.its.psu.edu/cgi-bin/viewcvs.cgi/>
- <http://lionshare.its.psu.edu/cgi-bin/awstats.pl>
- <http://lionshare.its.psu.edu/phpsysinfo/>



Downloading & Compiling

- Prerequisites:
- Java SDK 1.3+ <http://java.sun.com>
- Apache ANT <http://ant.apache.org/>
- CVS <http://www.cvshome.org/>
- Export \$CVS_RSH=ssh
- *cvs -d :ext:username@lionshare.its.psu.edu:/cvs
-co client-old*



Compiling

```
cd limewire/core
```

```
ant
```

```
jar -cvf ../gui/lib/core.jar
```

```
cd ../gui
```

```
ant
```

```
./run Linux/Solaris
```

```
run.bat Windows
```

```
./runosx Mac OSX
```

** you could always just add the com directory to your classpath
instead of making a jar*



Current Work

- PeerServer – Geoff Schulman
- Metadata Storage, Profile, Automation – Lorin Metzger
- Image view in Search – Issac Gerg
- Limewire 3.6 Conversion – Alex Valentine

