

# Next Steps

P2P Infrastructure Workshop

May 28, 2008

# Warning

- These slides are just some rough notes from the end that were used to help drive discussion at the end of the meeting
- Don't take them as the actual Next Steps

# Localization

- Was for peers to find AS Numbers
- Way to locate an iTracker
- Way for ISP to let customer know what status of account ( like cellular #number minutes left in month in cell phone)
  
- Way for an application to ask network oracle in real time what is a good “peer” to talk to right now
- Does not reveal complete routing topology to application
- Does not reveal all of what users is doing to the network
  
- Oracle to use routing information to answer questions
- What does Local mean - delays, hop count, scopes
  
- May help reduce transit costs

## Caching & Peers

- Protocol to Cache should be same as protocol to peers

# Tracker Format

- Standardize to delegate from global tracker to local tracker
  - Should be explicit and off-path

# Caching

- Investigate costs & cost savings
- Find out if people would deploy

# Federated Identity

- Cross domain / Cross operator / Authentication

# DSCP

- Questions around incentives?



# Terminology BCP

- Create well defined terms that ISPs can use to explain to users what service they can expect

# TCP Fairness

- P2P apps use of multiple TCP flows?

# Split

- Pricing (virtual or real)
  - Very hard to get right
  - Many got wrong
- Signaling about what fairness will be forced on you
- VS.
  - Congestion is Cost?

# IRTF

- Economics

# Misc.

- Consider super peer
- Peer selection
- Bring in bittorrent protocol
- “Grandma has a server”

# Quick Fix?

- Need to think about long term game as well as quick fix

# Scavenger Class / DSCP

- using scavenger class
- Question around incentives?

# Indication of Charging



Talking to local net

# Thanks

- Authors
- Program Committee
  - Lars Eggert
  - John Morris
  - Daniel Weitzner
  - Dave Clark
- MIT
- AMS