# WCS Tech Project: Networking Meeting

First Meeting October 15th, 2003 Mike Steder

#### Meeting Goals

- Tech Project Specifics
  - Go over our objectives
  - Available technologies
  - Brief overview of Network Topologies
- Division of Labor
  - Buddy System
  - Sub Groups
- Scheduling

### Technologies

- Python Based Networking
  - Python Sockets
  - Threaded Server Objects
  - Asynchronus Servers
  - Twisted Python
    - Framework
    - Library
  - Python Services (Http, Ftp, etc)
- Instant Messenging
  - Defining a new Jabber Protocol
  - Create a horrible freak of nature by trying to use AOL/Oscar.

## Topologies

- Ad-hoc/Peer-2-Peer
  - No central server
  - Clients need some method to discover each other
  - Flexible, Powerful, HIP
- Client/Server Model
  - Central Server
    - Handles all client traffic at some point
    - Allows tighter control of the system
  - Server Down Time/Maximum Load?
    (Doesn't scale like p2p)
  - Easier to implement.

### Design Ideas

- Movement between Machines/Nodes?
  - Imposing a spatial relationship between machines.
  - How to creatures move between nodes?
- Point of Code Execution
  - Ownership of Creature Objects
  - Where to creatures Exist?
- Message Protocol:
  - Encoding
    - XML
    - Plaintext/Binary
  - Compression

## Buddy System

- Goal: To distribute programming ability throughout the group.
- To encourage sharing of information and skills
- We can play around the concept of Xtreme Marke^H^H--Programming.

#### Division of Labor

- Data Objects
  - Packing and Unpacking Datasets
  - Data formatting
- Server
- Client
- Authentication/Security
  - Associating Users with Creatures
  - User Accounts
- Platform Specifics/Integration
  - Porting Networking Code
  - Installation Routines

# First Coding Meeting

- Date: TBA
- Topic: To begin coding, and lay the groundwork for WCS Tech Project Code Base
- Specifics
  - Setup Source Code Management
  - Actually look at some core code
  - Decide on simple conventions for code objects, syntax, and errors.

#### Next Time...

- Decide on Client/Server vs. P2P networking.
- Decide on groups/buddys based on prior coding experience.
- Continue Discussion of Networking Concepts
- Go over coding concepts, styles
- Decide what areas people/groups are going to program.
- Go over example networking code.

### Meeting Minutes

- Began @ 9:00pm in DCL3211.
- Discussed Networking Concepts
  - Python Networking Facilities
  - Threading Servers, Asynchronus Servers
- Discussed Basic Questions About Networking
  - Client/Server vs. Ad-hoc/p2p
  - Encryption
  - Transmission of Creatures from machine to machine
- Continues->

### Meeting Minutes(Cont.)

- Discussed Issues about Creature Persistance
  - What happens to a creature when it moves from your machine to your neighbors?
  - How can creatures find there way home?
  - How do you define ownership of a creature?
- Discussed the issue of how clients will find each other when they first start.
- Meeting Finished @ 10 pm.