



NetChat Communications System

Steven Fuqua, Andy Street, Barnett Trzcinski
TJHSST Computer Systems Lab 2006-2007

Abstract

The project focuses on an implementation of a server-client system. The principle is to allow for a module format, allowing the network to transmit various forms of data (IM, email, news feeds, etc.) using a standardized XML-based encoding scheme.

- Area 1: Networking is a foundation required for the project to function. In addition, this brings along the idea of network security.

- Area 2: Modularized programming allows for abstraction of key components of the program, as well as allowing the system to be easily adaptable to new functionality.

- Area 3: Developing an appropriate XML scheme for transmitting data will be a significant part of the early stages of the project.

Individual Assignments

•Server – Barnett Trzcinski

- Scripted in Ruby, using the standard library with some external modules as needed.
- Uses OpenSSL and XML communication (through the NetChat Protocol)

•Py-Client – Steven Fuqua

- Primary console client in-development written in Python 2.5 with Twisted and Curses

•J-Client – Andy Street

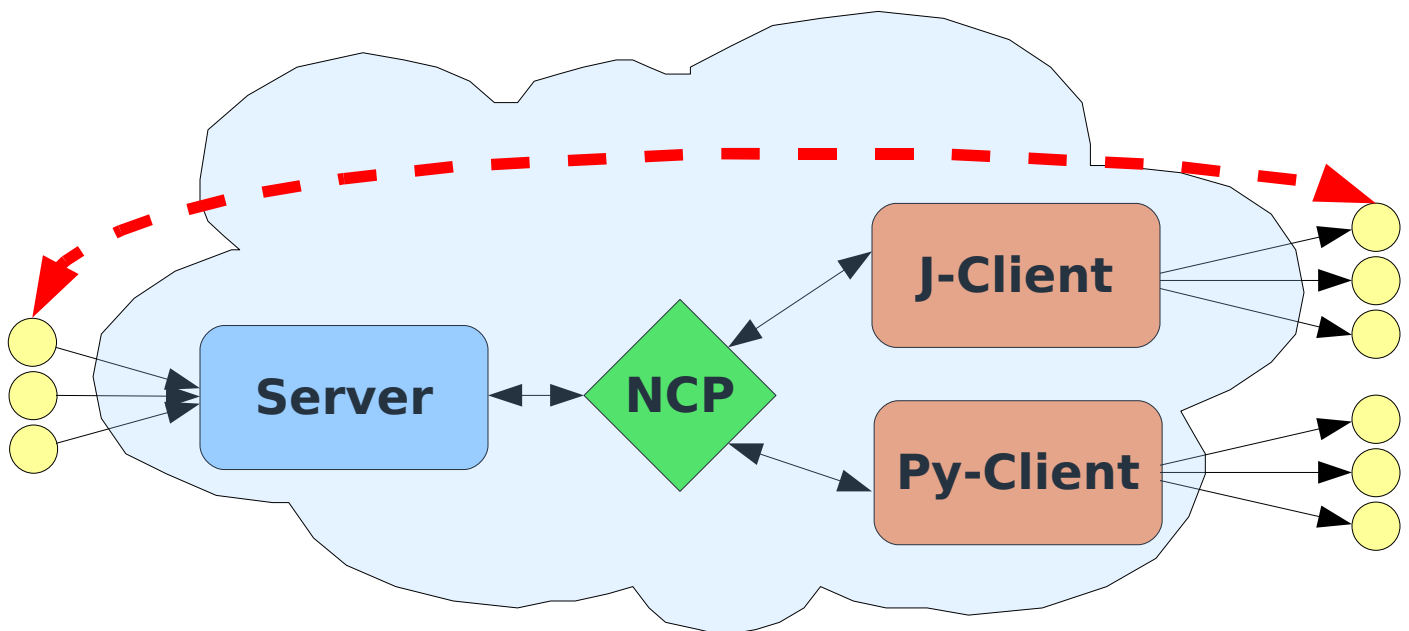
- Production GUI client – typically slow to develop but highly portable (Java)

Overarching Goals

- NCP/XML Portable Protocol** to enable anyone to write communications agents for it

- Open Standards** to simplify community code sharing.

Communications Architecture Diagram



● Communications Module (login, chat, etc.)

← - - - → A Complete Path of Communication (module to module)

☁ Intermediate Data Transport