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CS 594 Internetworking Protocols

Bar Movshovich Internet Relay Chat Protocol

Status of This Memo

This memo defines an Experimental Protocol for the Internet Chat room. Future client operators are very likely to be added.

Abstract

The IRC protocol was developed over the last 4 years since it was first implemented as a means for users on a BBS to chat amongst themselves. Now it supports a world-wide network of servers and clients, and is stringing to cope with growth. Over the past 2 years, the average number of users connected to the main IRC network has grown by a factor of 10.

The IRC protocol is a text-based protocol, with the simplest client being any socket program capable of connecting to the server.

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1.   Introduction

The IRC (Internet Relay Chat) protocol has been designed over a number of years for use with text based conferencing. This document describes the current IRC protocol.

The IRC protocol being used here is running on systems using the TCP/IP network protocol. There is no specific reason the TCP protocol was chosen when most other protocols would have worked as well.

IRC itself is a teleconferencing system which (through the use of the client-server model) is well-suited to running on many machines in a distributed fashion. A typical setup involves a single process (the server) forming a central point for clients (or other servers) to connect to, performing the required message delivery/multiplexing and other functions.

1.1   Servers

The server is the main central point for the IRC network. The server is what every client connects to and where clients can communicate with one

another.

1.2   Clients

A client is anything connecting to a server that is not another server. Whenever a new client enters the server, they are asked to input their name which is what will be displayed to all other users on the network when they communicate. Their name and IP address is what will be stored on the server

1.2.1   Client Operators

To allow the clients to be able to communicate with one another or to create rooms for them to talk to, several client commands were created.

Those commands are:

CREATE	- Create a room with a given name such as "Music".
LIST	- List all rooms currently available on the server.
JOIN	- Join a room that exists on the server.
LEAVE	- Leave a room that exists on the server.
SHOW_MEM	- List all members of a specific room on the server.