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Titolo Python network programmin

Python network programming cookbook: over 70 detailed recipes to develop practical solutions for a wide range of real-world network programming tasks // Dr. M. O. Faruque Sarker; cover image by

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www.PacktPub.com; Table of Contents; Preface; Chapter 1: Sockets, IPv4, and Simple Client/Server Programming; Introduction; Printing your machine's name and IPv4 address; Retrieving a remote machine's IP address; Converting an IPv4 address to different formats; Finding a service name, given the port and protocol; Converting integers to and from host to network byte order; Setting and getting the default socket timeout; Handling socket errors gracefully; Modifying socket's

send/receive buffer sizes

Changing a socket to the blocking/non-blocking modeReusing socket addresses; Printing the current time from the Internet time server; Writing a SNTP client; Writing a simple echo client/server application;

Chapter 2: Multiplexing Socket I/O for Better Performance:

Introduction; Using ForkingMixIn in your socket server applications; Using ThreadingMixIn in your socket server applications; Writing a chat server using select.select; Multiplexing a web server using select.epoll;

Multiplexing an echo server using Diesel concurrent library

Chapter 3: IPv6, Unix Domain Sockets, and Network Interfaces Introduction; Forwarding a local port to a remote host; Pinging hosts on the network with ICMP; Waiting for a remote network service; Enumerating interfaces on your machine; Finding the IP address for a specific interface on your machine; Finding whether an interface is up on your machine; Detecting inactive machines on your network; Performing a basic IPC using connected sockets (socketpair); Performing IPC using Unix domain sockets; Finding out if your Python supports IPv6 sockets; Extracting an IPv6 prefix from an IPv6 address Writing an IPv6 echo client/serverChapter 4: Programming with HTTP for the Internet; Introduction; Downloading data from an HTTP server; Serving HTTP requests from your machine; Extracting cookie information after visiting a website; Submitting web forms; Sending web requests through a proxy server; Checking whether a web page exists with the HEAD request; Spoofing Mozilla Firefox in your client code: Saving bandwidth in web requests with the HTTP compression: Writing an HTTP fail-over client with resume and partial downloading; Writing a simple HTTPS server code with Python and OpenSSL Chapter 5: E-mail protocols, FTP, and CGI programmingIntroduction; Listing the files in a remote FTP server; Uploading a local file to a remote FTP server; E-mailing your current working directory as a compressed ZIP file: Downloading your Google e-mail with POP3: Checking your remote e-mail with IMAP; Sending an e-mail with an attachment via Gmail SMTP server; Writing a questbook for your (Python-based) web server with CGI; Chapter 6: Screen-scraping and Other Practical Applications; Introduction; Searching for business addresses using the Google Maps API Searching for geographic coordinates using the Google Maps URL

## Sommario/riassunto

An easy-to-follow guide full of hands-on examples on real-world networking tasks. It covers the advanced topics of network programming in Python using a set of selected recipes. If you are a network programmer, system/network administrator, or a web application developer, this book is ideal for you. You should have a basic familiarity with the Python programming language and TCP/IP networking concepts. However if you are a novice, you will develop an understanding of the concepts as you progress with this book. This book will serve as a supplementary material for developing hands-on skills in a