

Paradigm Solutions

Welcome

Mr. Swarner

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TCP/IP Packet Descriptor
Requirements Specifications

Paradigm Solutions

Team Leader:

Jim DeSario

Software Consultant:

Mark Mossman

System Administrator:

Mike Sebast

Librarian:

Justin Waterman

Public Relations:

Jon Baker

Webmaster:

Ryan Fischer

Requirements Specifications Presentation

Presentation Agenda

| | |
|------------------|---------------------------|
| Jim DeSario: | Introduction & Conclusion |
| Mark Mossman: | Requirements |
| Mike Sebast: | Prototypes |
| Justin Waterman: | Data Flow Diagrams |

Requirements

- Maintaining functionality of the original TCP/IP Packet Descriptor program
- Being a fully web-based program using PHP
- Accessible by all the most common browsers and operating systems
- Ability to add saved Ethereal data sessions
- Ability to view multiple data sessions
- Ability to select any packet from a saved data session

Requirements Cont.

- Fit the entire GUI on no more than three screens
- Avoid any use of pop-ups
- Viewable at 1024x786 screen resolution
- Include links to all past contributing teams
- Easily adaptable for future development



Agenda

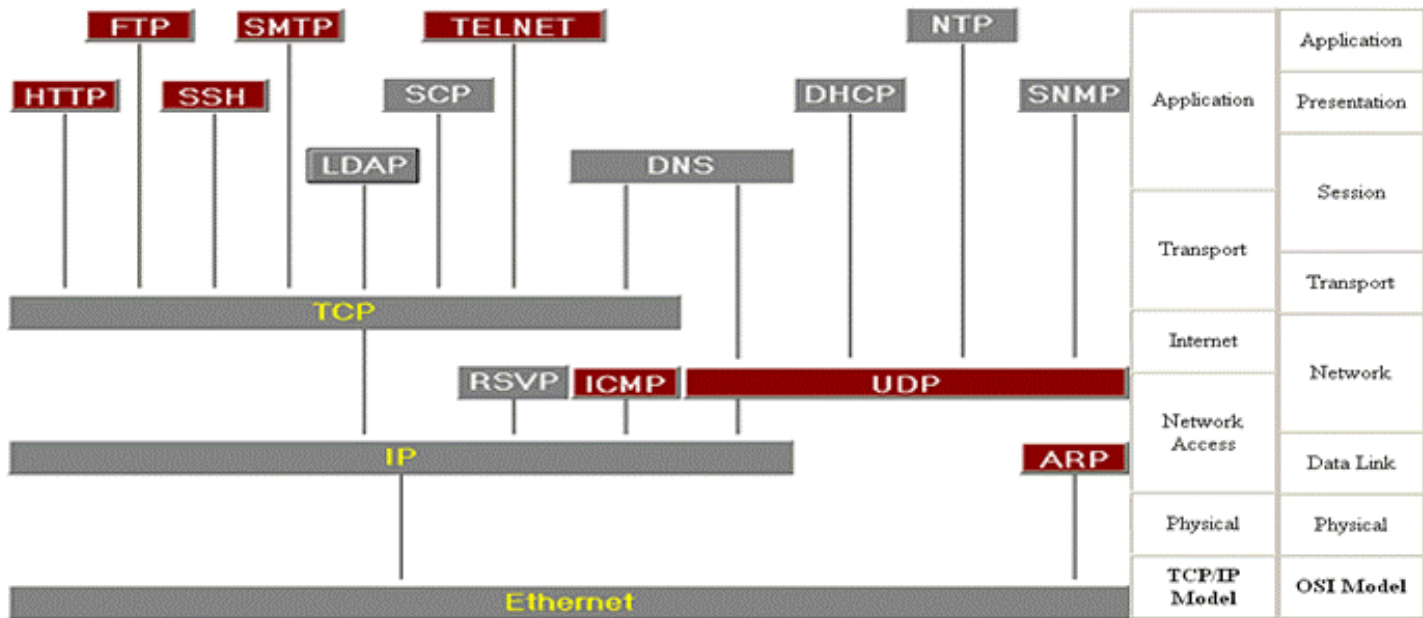
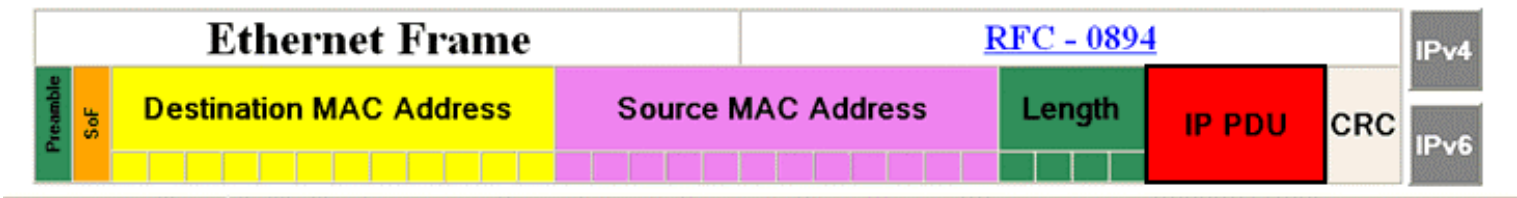
Introduction

Requirements

Prototypes

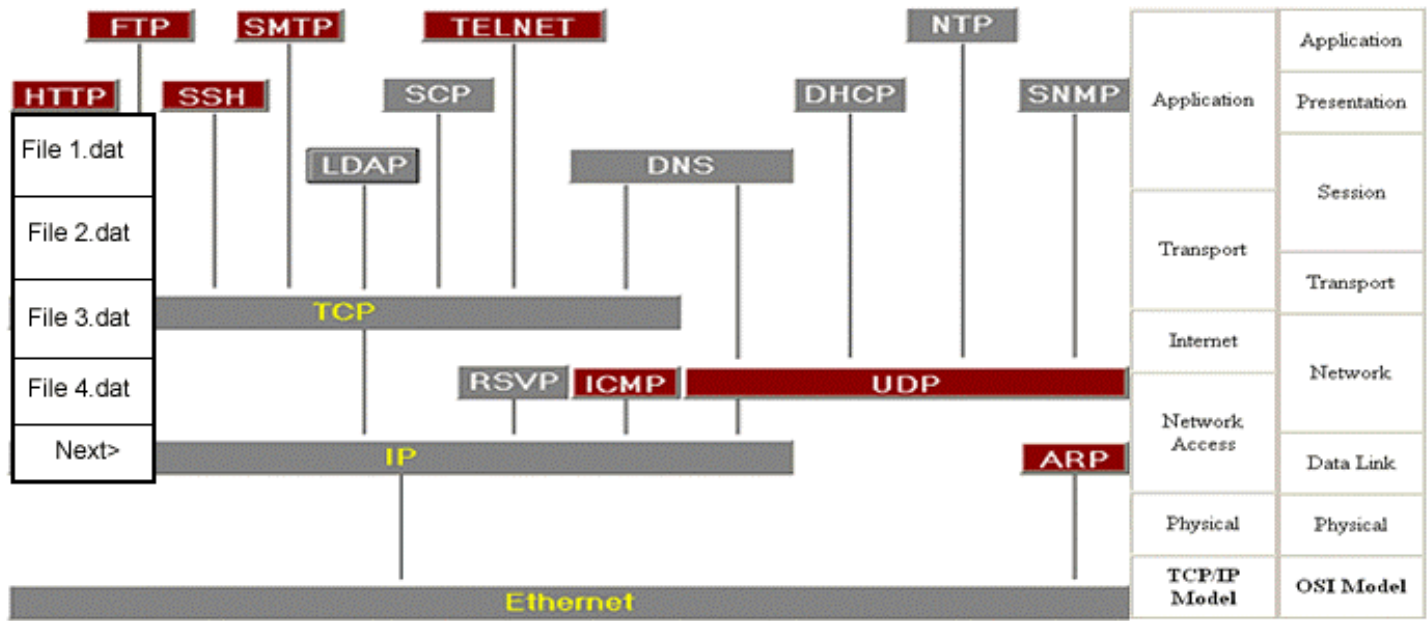
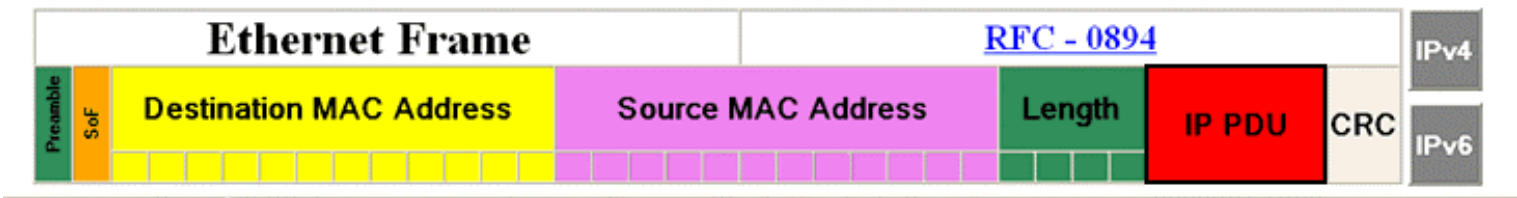
Data Flow Diagrams

Conclusion



Internet Protocol version 6 (IPv6) - Not currently implemented

IPv6 is designed as an evolutionary upgrade to the Internet Protocol and will, in fact, coexist with the older IPv4 for some time. IPv6 is designed to allow the Internet to grow steadily, both in terms of the number of hosts connected and the total amount of data traffic transmitted



HTTP - HyperText Transfer Protocol

The underlying protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions Web servers and browsers should take in response to various commands. HTTP is called a stateless protocol because each command is executed independently, without any knowledge of the commands that came before it.

Packet Selection

| Id. | Time | Source | Destination | Protocol | Info |
|-----|-------------|-----------------|-----------------|----------|------------------------------------|
| 24 | 3020.230940 | 192.168.130.1 | 192.168.255.252 | HTTP | Continuation |
| 25 | 3149.914117 | 217.24.128.13 | 192.168.130.4 | SMTP | Message Body |
| 26 | 3158.896061 | 192.168.130.1 | 192.168.255.252 | HTTP | HTTP/1.1 403 Access Forbidden |
| 27 | 3268.422867 | 217.24.128.13 | 192.168.130.4 | SMTP | Message Body |
| 28 | 3273.644493 | 192.168.255.252 | 192.168.130.1 | HTTP | POST /cgi-bin/FormMail.pl HTTP/1.0 |
| 29 | 3312.256063 | 192.168.130.1 | 192.168.255.252 | HTTP | HTTP/1.1 403 Access Forbidden |
| 30 | 3325.638860 | 192.168.130.4 | 213.155.147.242 | POP | Response: +OK 125668 octets |
| 31 | 3374.533087 | 192.168.255.252 | 192.168.130.1 | HTTP | Continuation |
| 32 | 3412.878161 | 192.168.255.252 | 192.168.130.1 | HTTP | Continuation |
| 33 | 3452.928458 | 192.168.255.252 | 192.168.130.1 | HTTP | Continuation |
| 34 | 3473.016229 | 192.168.255.252 | 192.168.130.1 | HTTP | Continuation |
| 35 | 3499.314876 | 192.168.130.1 | 192.168.255.252 | HTTP | HTTP/1.1 403 Access Forbidden |
| 36 | 3505.579999 | 192.168.255.252 | 192.168.130.1 | HTTP | Continuation |
| 37 | 3508.630714 | 192.168.130.4 | 212.159.58.182 | POP | Response: +OK |
| 38 | 3524.638527 | 192.168.255.252 | 192.168.130.1 | HTTP | Continuation |
| 39 | 3530.648523 | 192.168.130.1 | 192.168.255.252 | HTTP | HTTP/1.1 403 Access Forbidden |

View Packet

Choose Protocol

Click a logo to learn more about contributing teams

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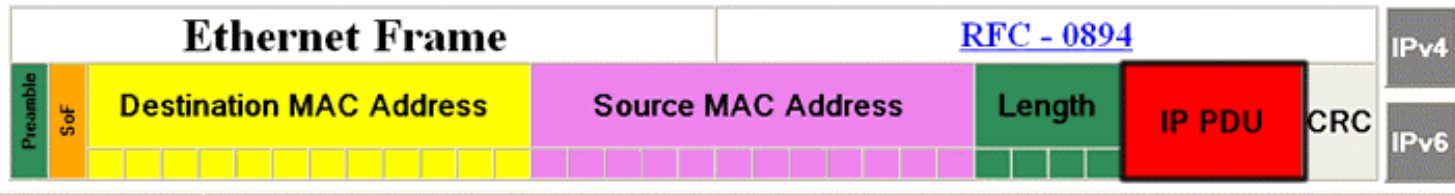


Blue Technologies



Mirage, Inc.





Choose Packet
Choose Protocol

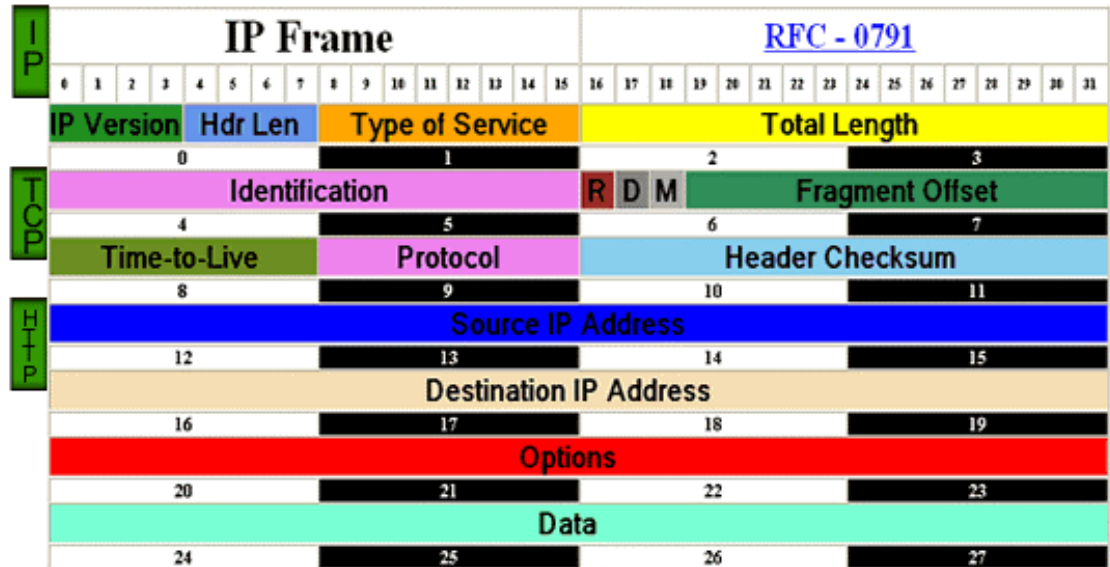
HTTP PDU
IP Frame

Fragment Offset Field

Decimal

Start bit: 51
Length: 13 bit

Position of this fragment in the original datagram, in units of 8 bytes.



Information Display



Agenda

Introduction

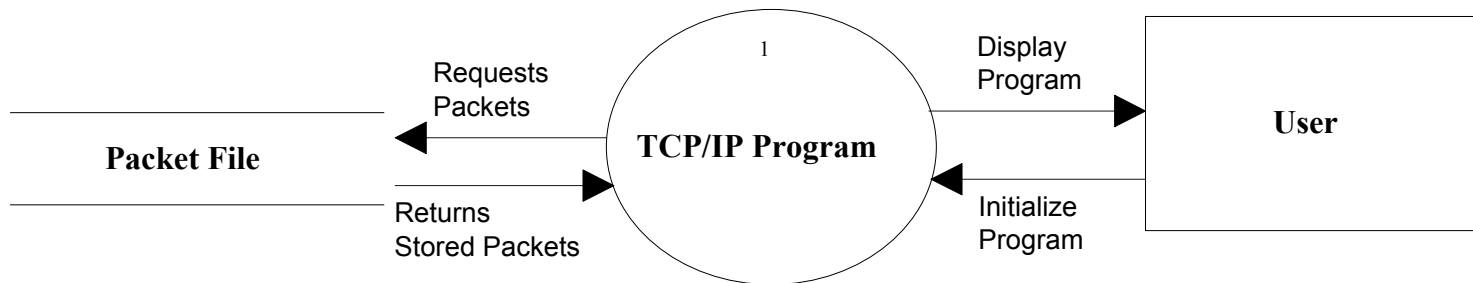
Requirements

Prototypes

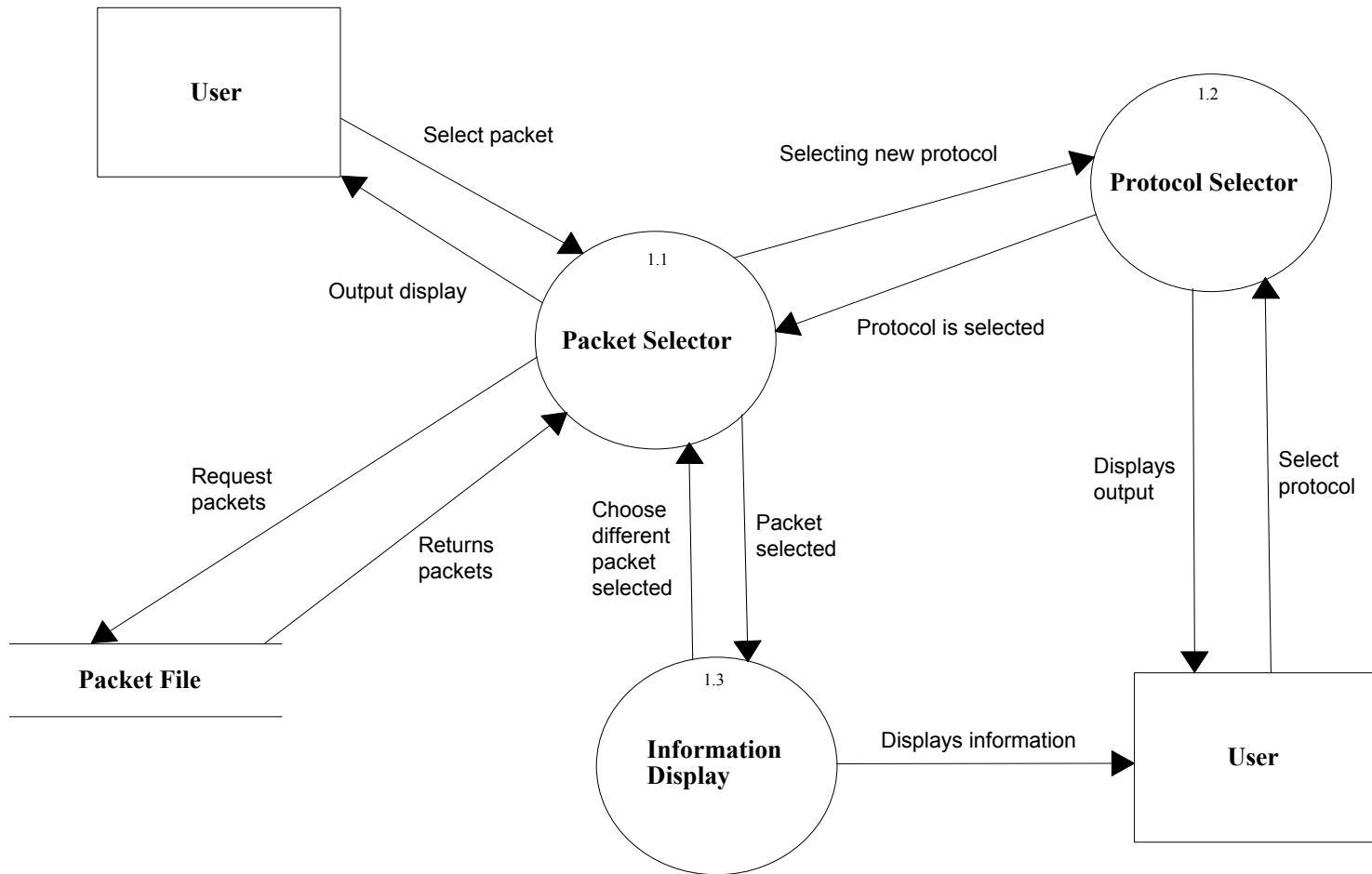
Data Flow Diagrams

Conclusion

Context Diagram

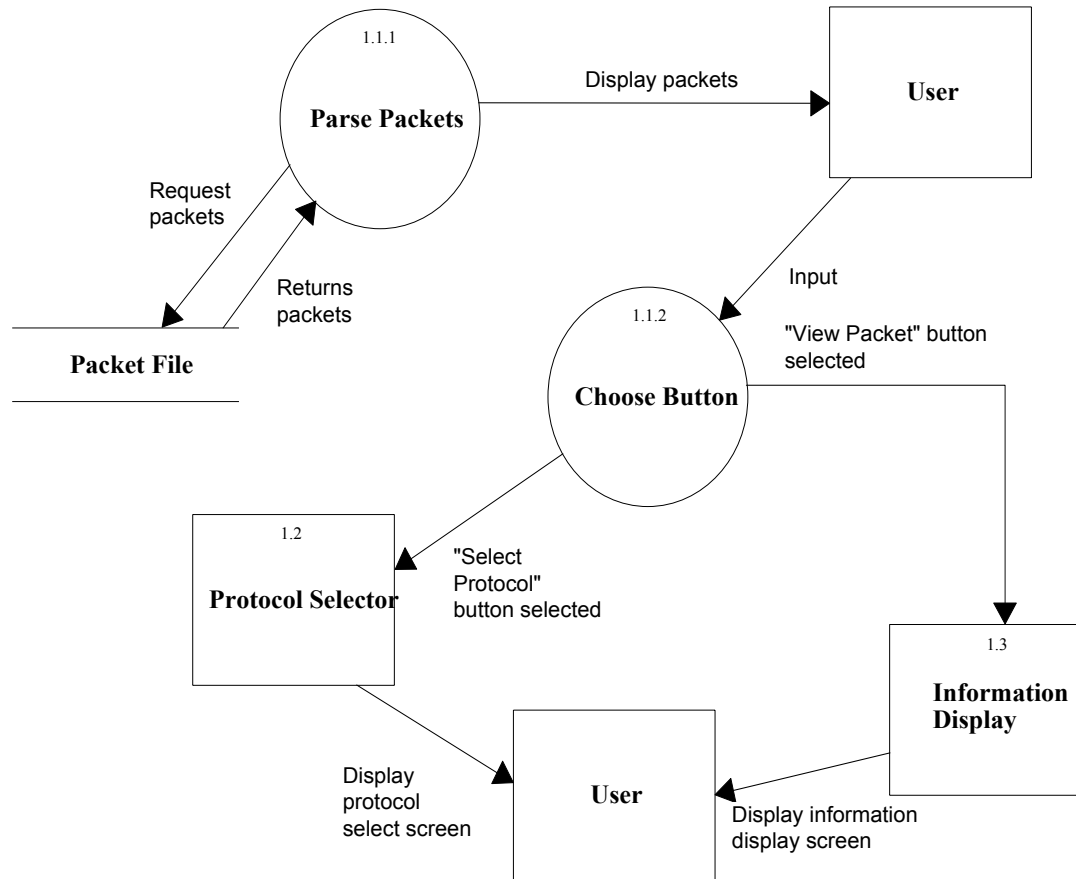


Level 1 Diagram



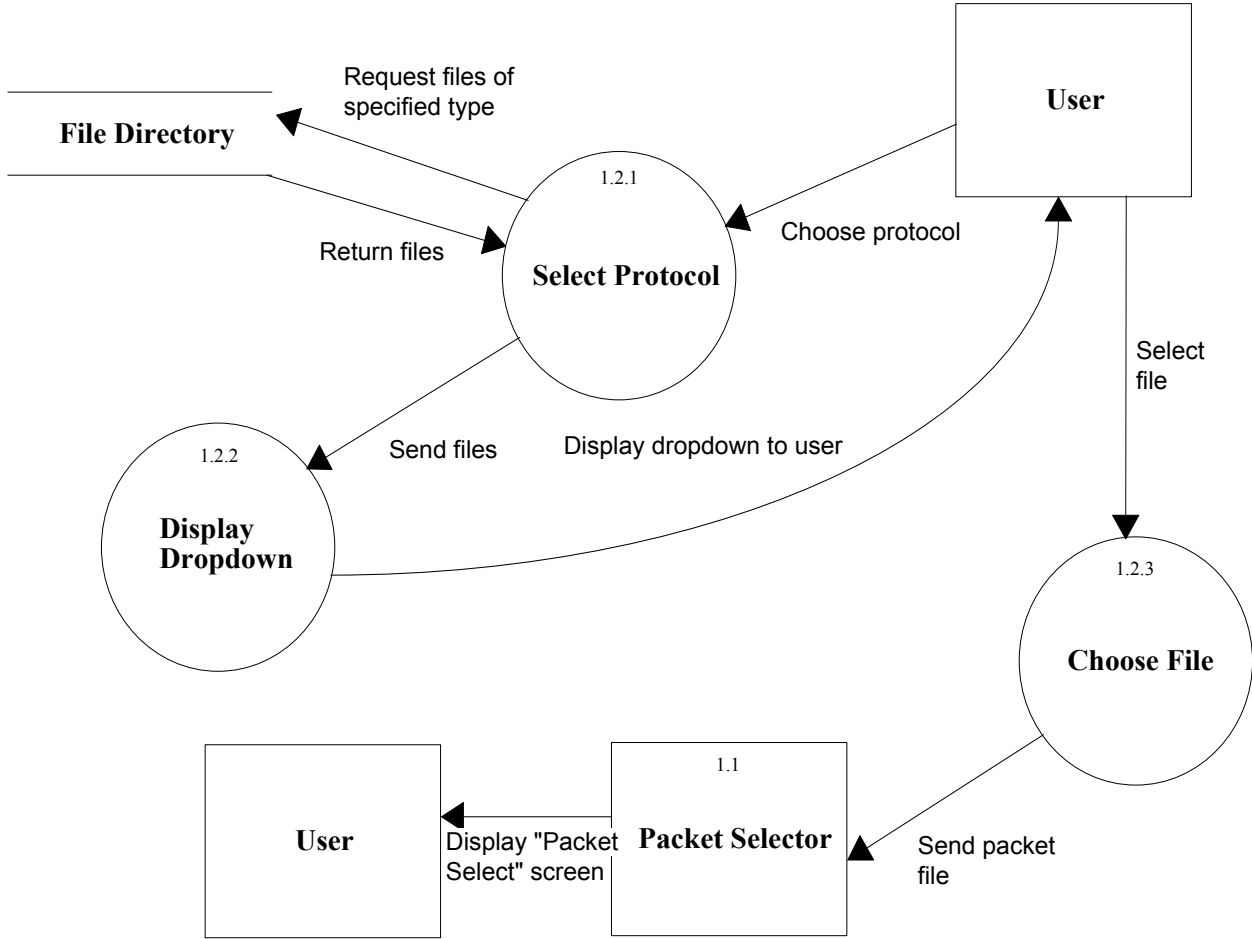
Level 1.1 Diagram

Packet Selector



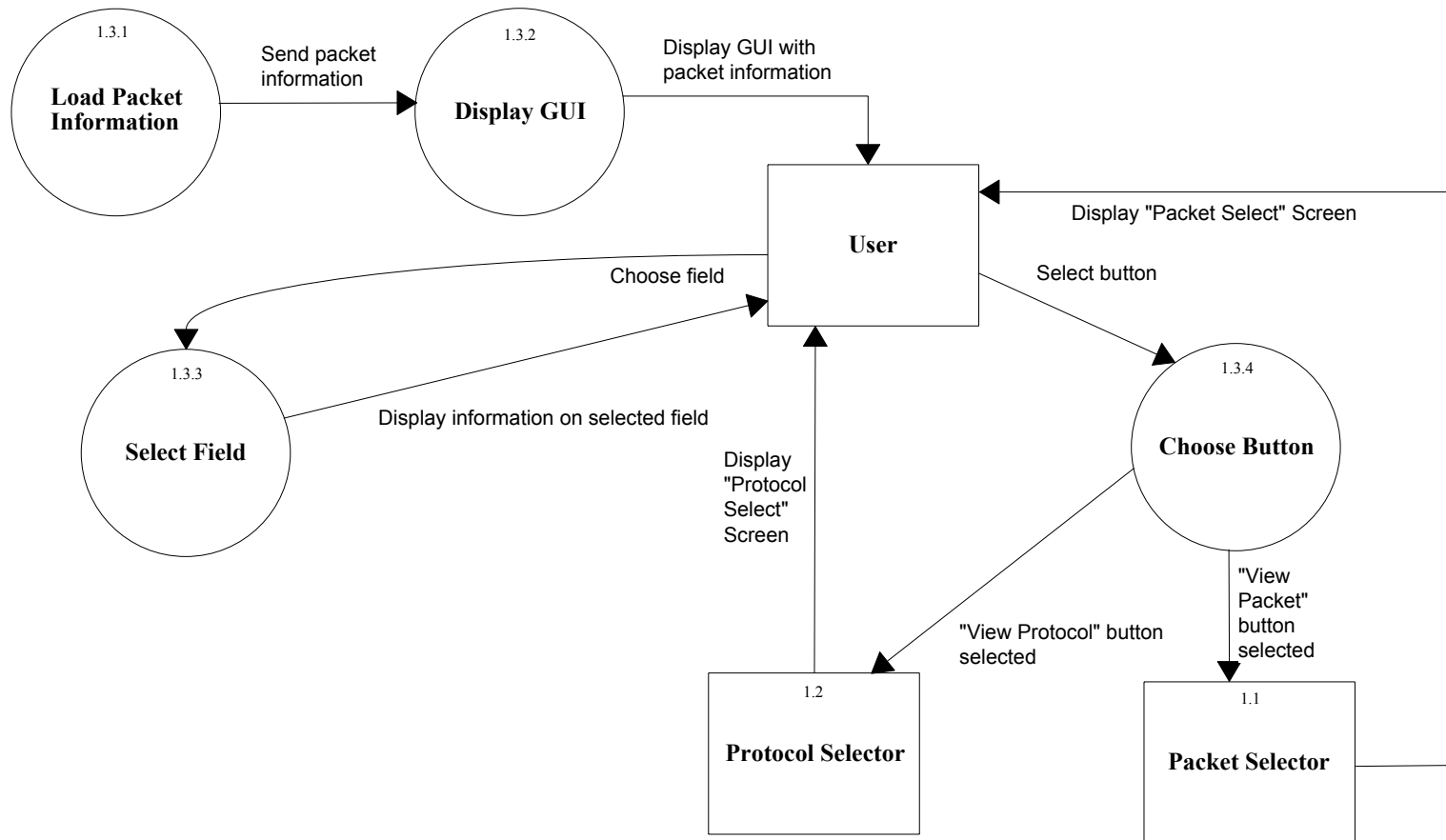
Level 1.2 Diagram

Protocol Selector



Level 1.3 Diagram

Information Display



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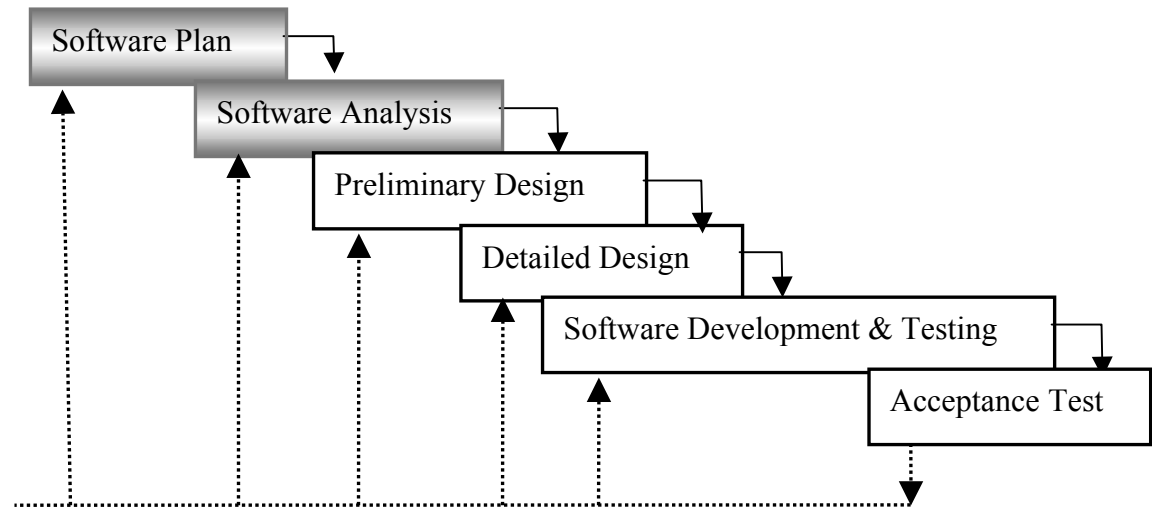
Data Flow Diagrams

Conclusion

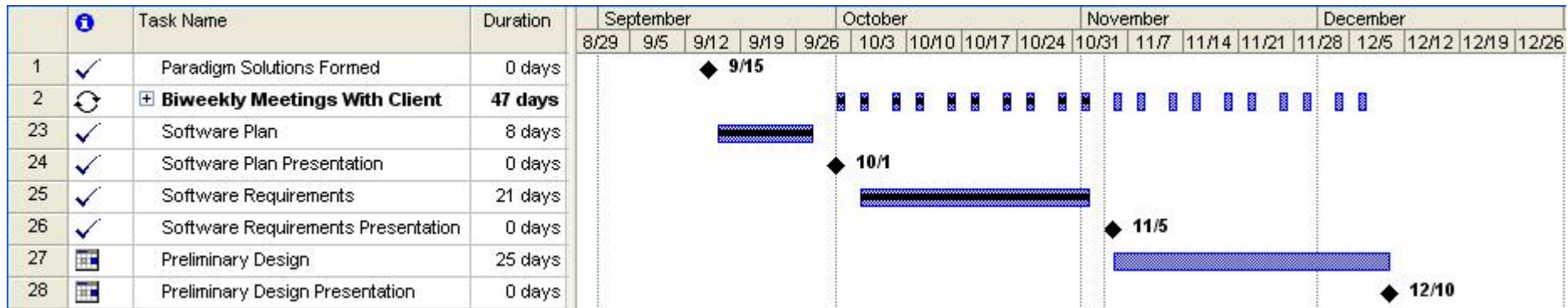
Project Plan

■ Waterfall Model

- Software Plan
- Requirement Specifications
- Preliminary Design
- Detailed Design
- Acceptance Test



Gantt Chart





Supporting Documents

Preliminary Design:

Document Due: Dec. 6

Presentation Date: Dec. 8



Summary

Questions and Comments



Thank You

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