TauNet Software Design Specification

document version 0.1

1 Introduction

1.1 Notice

This document is a work in progress and not a full representation of the TauNet system.

1.2 Purpose

The purpose of this document is to inform developers about the interworking of the TauNet system. This document describes the architecture of the TauNet system, the coupling of the individual modules, and the function of those modules.

1.3 Scope

The purpose of this software is to provide a platform for encrypted communication.

1.4 Overview

This document describes the overall system architecture, the module design, and the rationale behind those designs.

2.0 System Architecture

This system follows a loose object oriented design. Functionality is separated into roughly independent modules. Each module that needs the services of another will contain a pointer to the required module.

2.1 Architecture Design

The functionality of this program is separated into several modules described here.

2.1.1 User Interface

The User Interface Menu is contained in the *uiComponent*. This component is responsible for drawing menus and handling user input. This module allow the modification of the user table, the ip table, and the crypto key via the settings menu. This module uses the *regComponent* to modify program data.

User Interface drawing during messaging is handled by the *msgComponent*.

2.1.2 Data Passing and File Management

The data and user files of the TauNet system are managed by the *regComponent*.

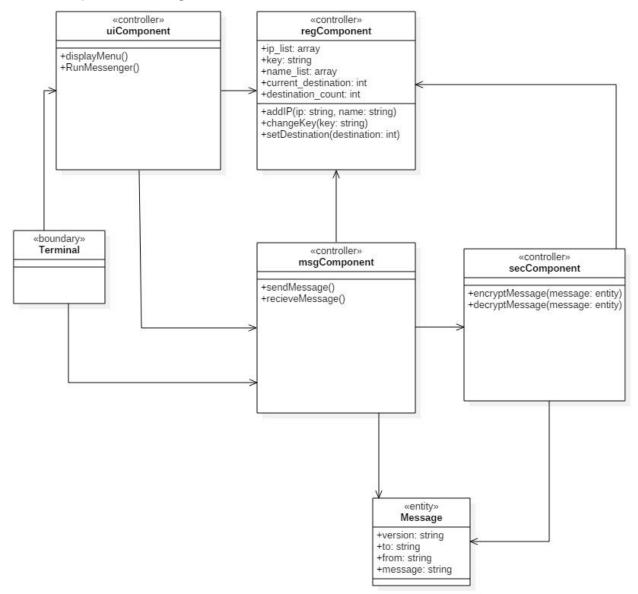
2.1.3 Messaging / Network Connections

The network connections and message sending are managed by the *msgComponent*. This component uses the *regComponent* and *secComponent* during operation.

2.1.4 Data Encryption

The encryption and decryption of messages is the responsibility of the secComponent.

2.2 Decomposition Design



2.3 Design Rationale

The rational for an object oriented design to to provide a system with high cohesion and low coupling between modules.

3.0 Data Design

- 3.1 Data Description
- 3.2 Data Dictionary
- 4.0 Component Design
- 5.0 Human Interface Design
- 5.1 Overview of UI