

Requirements Document

1 Introduction

SharePaste is an application for syncing clipboard across several Windows-based devices. The main idea is to simply exchange text, files, links and etc. between computers using common combinations Ctrl+C and Ctrl+V.

2 User Requirements

2.1 Software Interfaces

C++ and Qt framework will be used for creating the application. Interaction between clients should be implemented using SSL encryption. For catching hotkeys will be used WinAPI.

2.2 User Interfaces

User can interact with the application by pressing "copy" and "paste" combinations. There will be two modes: clipboards auto sync or manual pasting from synced clipboard. Also tray icon will be realized and it will open the settings window and notice about events. In settings window it will be possibility to configure connections, choose application mode, and also create or connect to a private group of users (so called "Companies") where search will be accomplished by name and access by password.

2.3 User Characteristics

No special skills are required, except first setup and connection to other devices. Only basic copy/paste knowledge will be necessary.

2.4 Assumptions and Dependencies

1. Different network architecture.
2. Users requests for fixing bad interface solutions.
3. Operating system limitations.
4. Unnecessary complexity in some elements realization.
5. Connection speed between the clients.

3 System Requirements

3.1 Functional Requirements

1. Clipboard synchronization
2. Ability to choose mode:
 - clipboards auto sync
 - manual pasting from synced clipboard
(for example by Ctrl+Shift+V combination)
3. Realization of private groups of users ("Companies") inside which clipboard data will be synchronized:

- creating new groups
- searching companies by name
- getting access to data by password

4. Settings interface that allowing to change application (modes and notifications) or connection settings (ip address and ports)

3.2 Non-Functional Requirements

3.2.1 SOFTWARE QUALITY ATTRIBUTES

Application must be simple in use and unnoticeable for user. All actions like getting data from clipboard must be automatically completed without any unnecessary operations from user. Application must work directly with OS Windows's clipboard without requiring any additional knowledge to use it. Data synchronization must be in matter of a seconds.