

## **Working Prototype Known Problems Report**

**Product: BackupBuddies**

**Team: Free Cloud Backups**

### **Unclear storage slider functionality:**

- **Description:** Allocating a storage amount less than the amount you are currently hosting does not remove the files, rather it resets the max amount you can store.
- **Inputs:** Sliding the slider below the amount that the user is currently storing
- **Location:** Network.java could be made to choose existing files for deletion
- **Solution:** Implement a function that dynamically chooses files to delete based on to be determined criteria.

### **Strict firewall configurations can block peers from connecting:**

- **Description:** Some networks are configured with firewalls that block incoming or outgoing TCP connections
- **Inputs:** Connect to a peer that is protected by a firewall
- **Location:** The user's network configuration
- **Solution:** Implement TCP hole-punching, although this is not a perfect solution

### **File Upload causes freezes with very large files:**

- **Description:** Often, the GUI will wait for a file to finish uploading before repainting. In certain circumstances, it can stay frozen on a failed transfer.
- **Input:** Selecting a peer and uploading a file.
- **Location:** Interface.java, Network.java
- **Solution:** Move upload to a different thread. Add locking as needed to avoid data races, and retrieve the result after it completes

### **The active location on the log refreshes when a new event is added, even when moving the slider:**

- **Description:** Events added to the log will snap the scrollbar to the new event, only allowing the user to see previous events until a new event is added.
- **Inputs:** When performing any action that displays to the log, (uploading, downloading, setting the encryption password, etc)
- **Location:** GuiMain.java, line 145-151
- **Solution:** Only snap the scrollbar when new events are added and when the user is not currently viewing a different event

### **Pop-up warning for the slider pops up only once on click when not connected to a network:**

- **Description:** If the user ignores the first pop-up warning for the storage slider, it will not warn them a second time. The actionlistener stateChanged() fires in different circumstances for different operating systems.
- **Inputs:** Before connecting to a network, allocate different storage sizes multiple times after being warned no change has been made.
- **Location:** GuiMain.java, line 595-608
- **Solution:** Write a custom action listener that is more consistent across operating systems

### **GUI sometimes fails to update to show when peers' status changes**

- **Description:** When a connection is closed by the other end, or the network is changed by changing the password, the GUI sometimes fails to show the peers as offline. It may also affect newly-joined peers.
- **Inputs:** Changing the password and pressing join when already logged in to a network, or

disconnecting from the Internet

- Location: GuiMain.java, Interface.java, Network.java
- Solution: Unknown

Display name field always defaults to the hostname, even if a previously entered display name exists

- Description: Rather than fetching the display name from a newly-loaded network, it uses the host name
- Inputs: Launch program, set a display name, close program, launch program
- Location: GuiMain.java, Interface.java
- Solution: Load the network before requesting current display name