

Introduction:

The testing during the implementation of the program was not documented. After completion both the client and the server were tested and all the function on both applications. The program was developed in Ruby and was tested between Linux machines, as well as between Windows machines and one last time between a Windows and a Linux machine. All three test were successful after altering some of the firewall configurations. To avoid repetition only the test on Linux using local host would be test since the results for all other tests were the same.

TEST LIST

Test #	Feature Being Tested	Outcome	Pass / Fail	Figure
1	Multiple Clients Connecting	Both connected	Pass	Fig 1
2	Multiple Clients sending commands to the server	both got the lists	Pass	Fig 2
3	Client one request a file	Client gets the File	Pass	Fig 3
4	Client two requests a different file	Client gets the file	Pass	Fig 4
5	Client tries to get a file twice	Application notifies user	Pass	Fig 5
6	Clients tries to send a file twice	Server notifies user	Pass	Fig 6, Fig11
7	Client exits the application	Application shuts down	Pass	Fig 7
8	Server keeps the log	Disconnected user shows	Pass	Fig 7
9	Server stops	Application exits	Pass	Fig 8
10	Clients try to communicate with stopped server	Prompted with a message and exit the application	Pass	Fig 8
11	Server list	Shows the three files	Pass	Fig 9
12	Client sends file to server	Server receives it and it has 4 files total	Pass	Fig 10
13	Two clients send a file at almost the same time	The server creates the file fast enough to notify the other client that it already exists	Pass	Fig 12

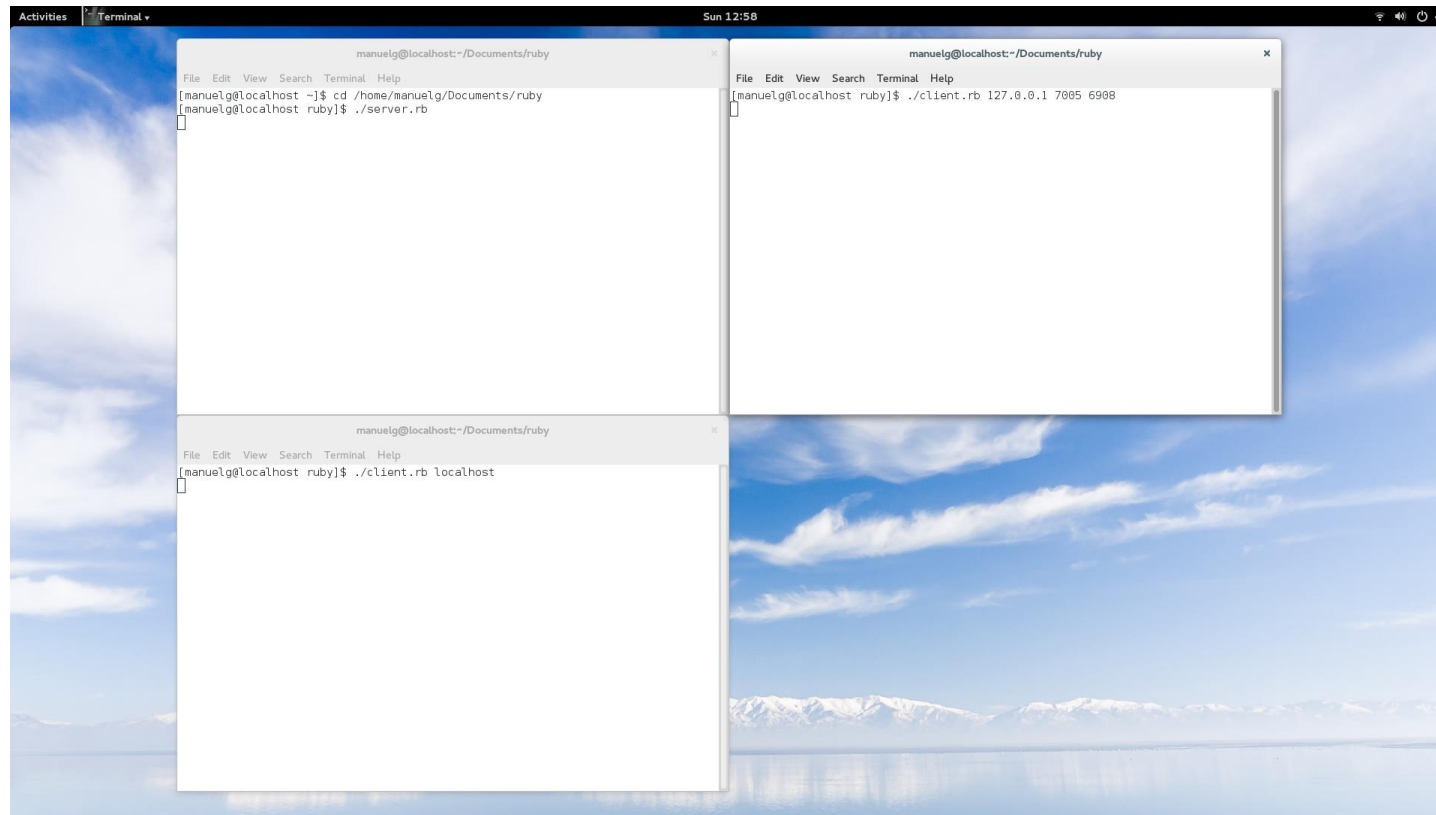


Figure 1

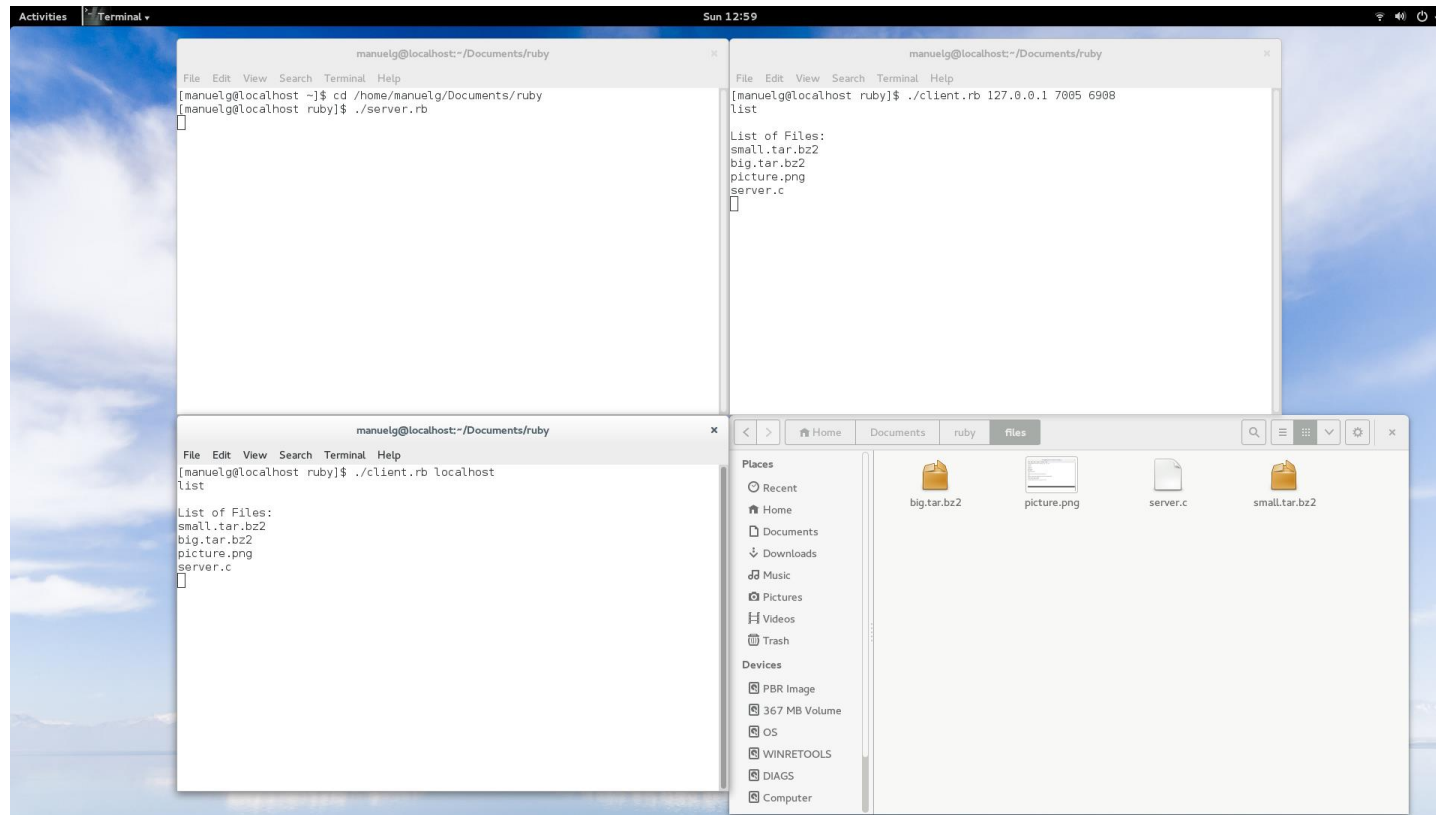


Figure 2

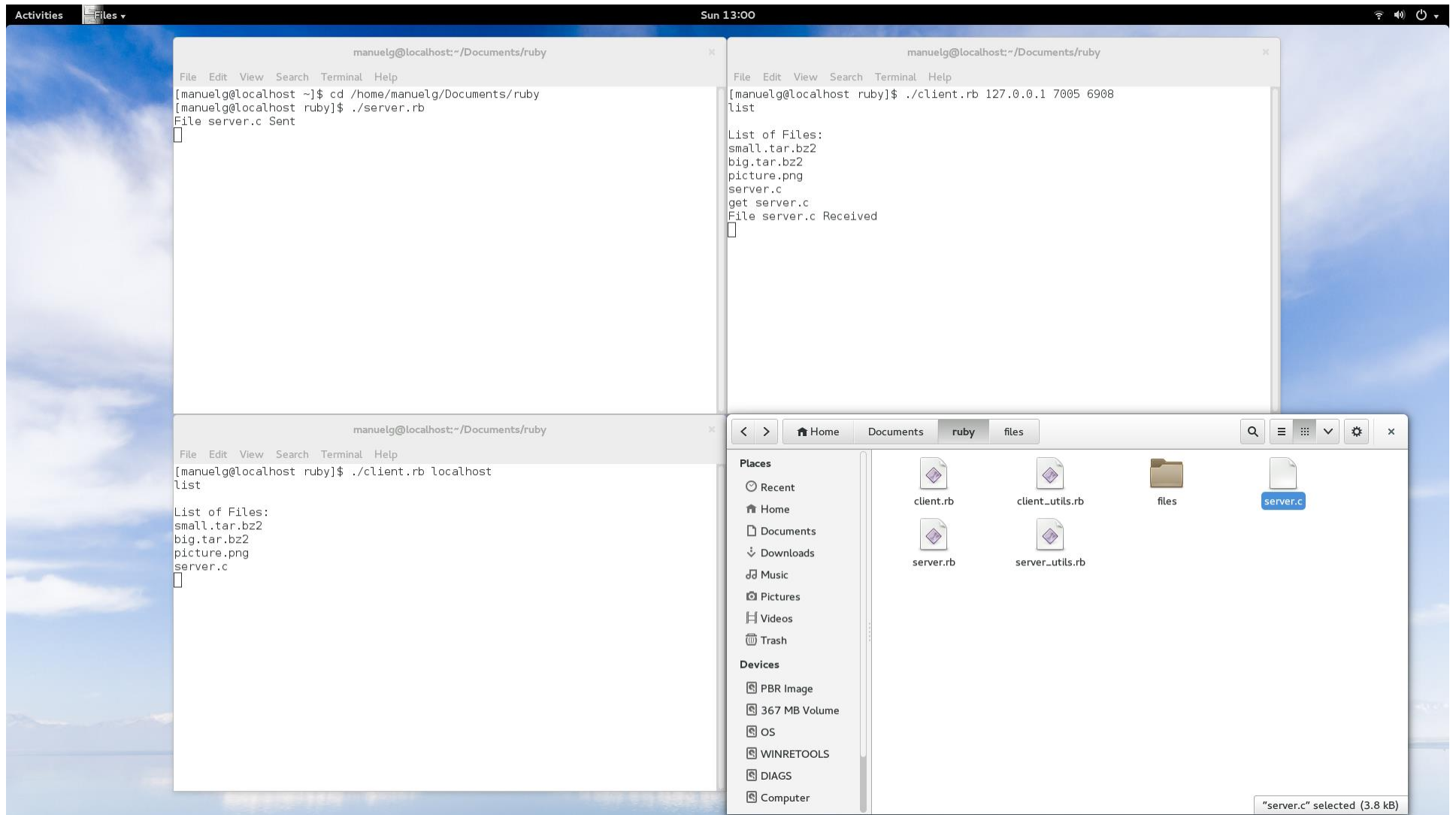


Figure 3

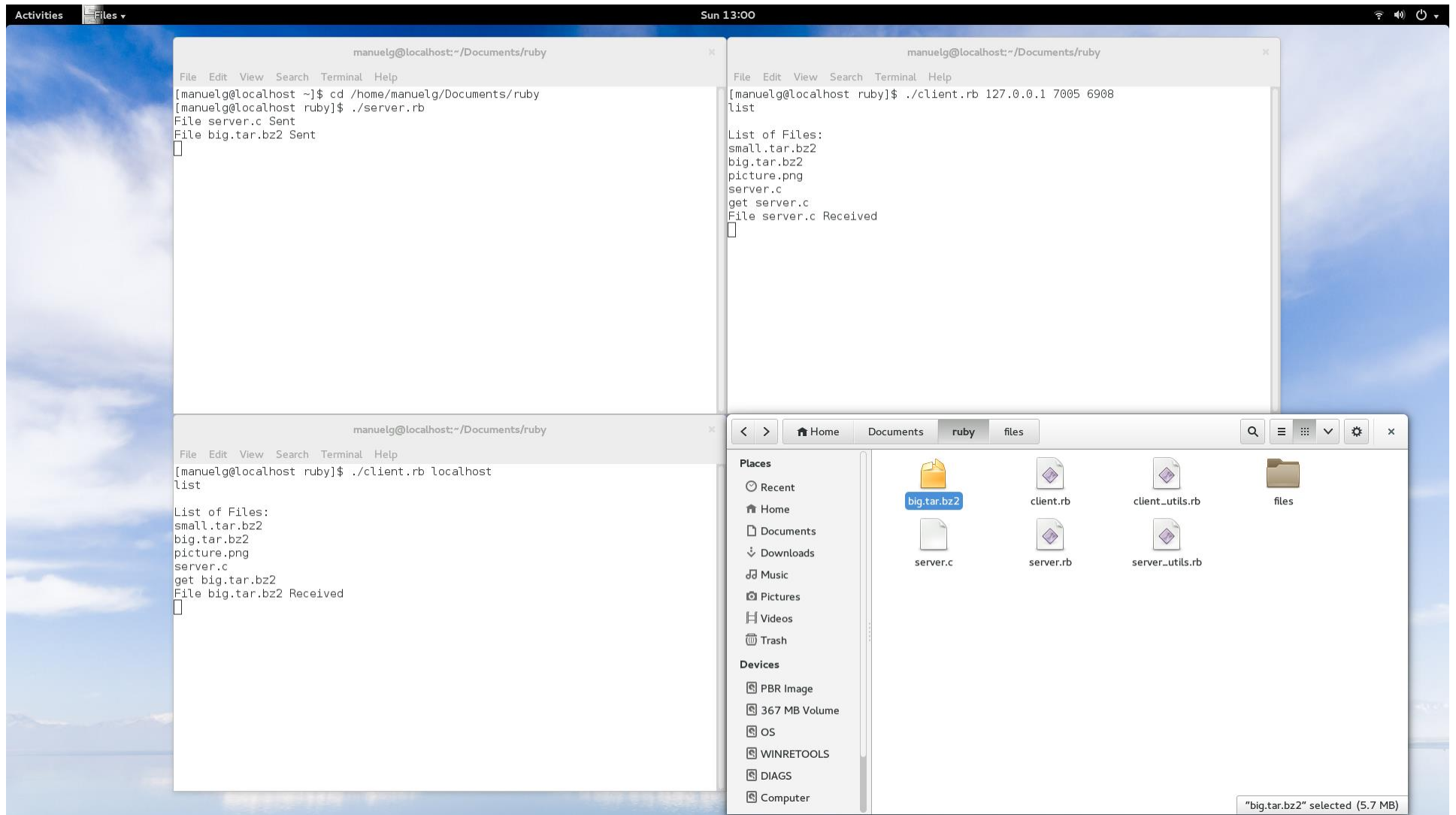
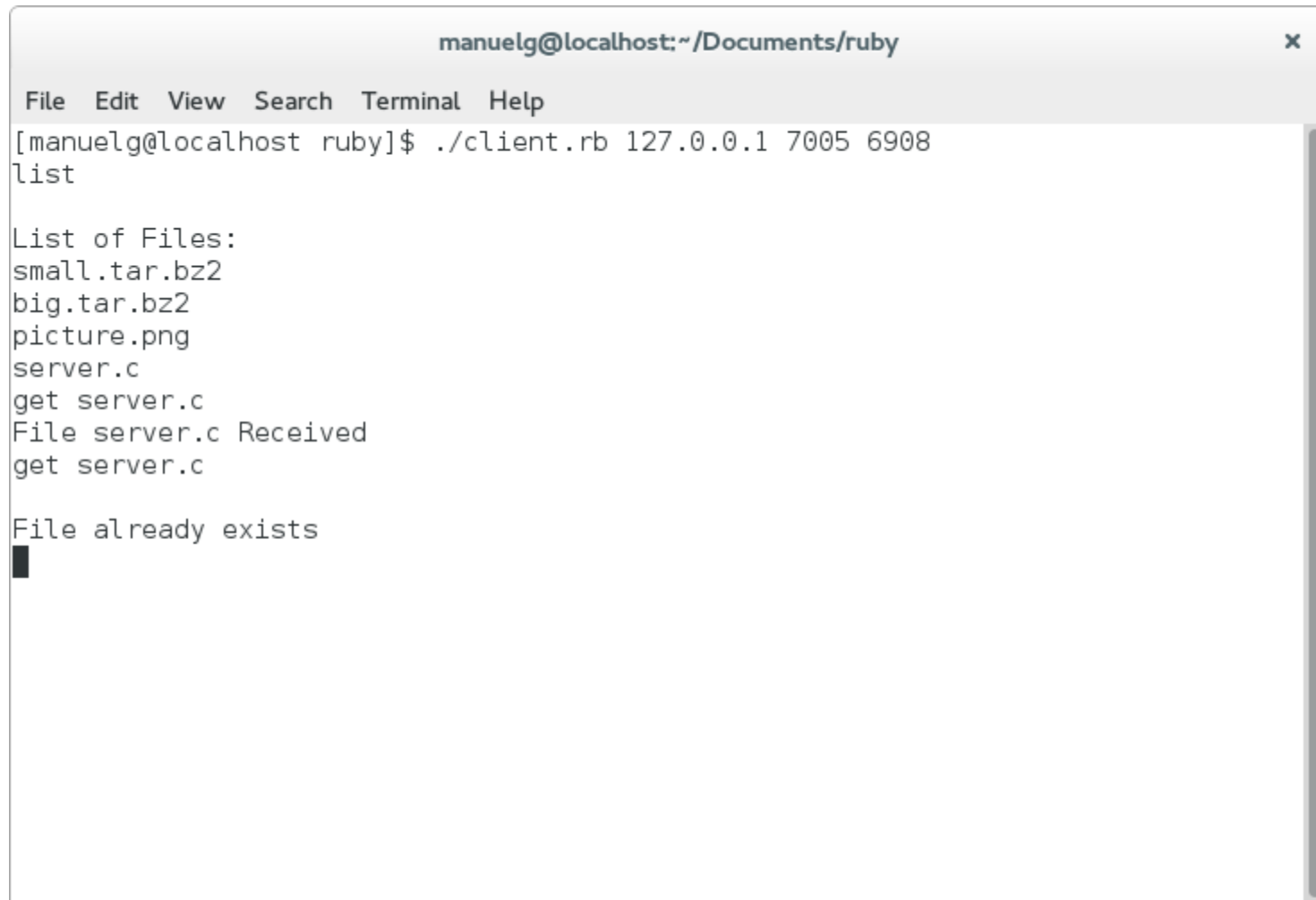


Figure 4

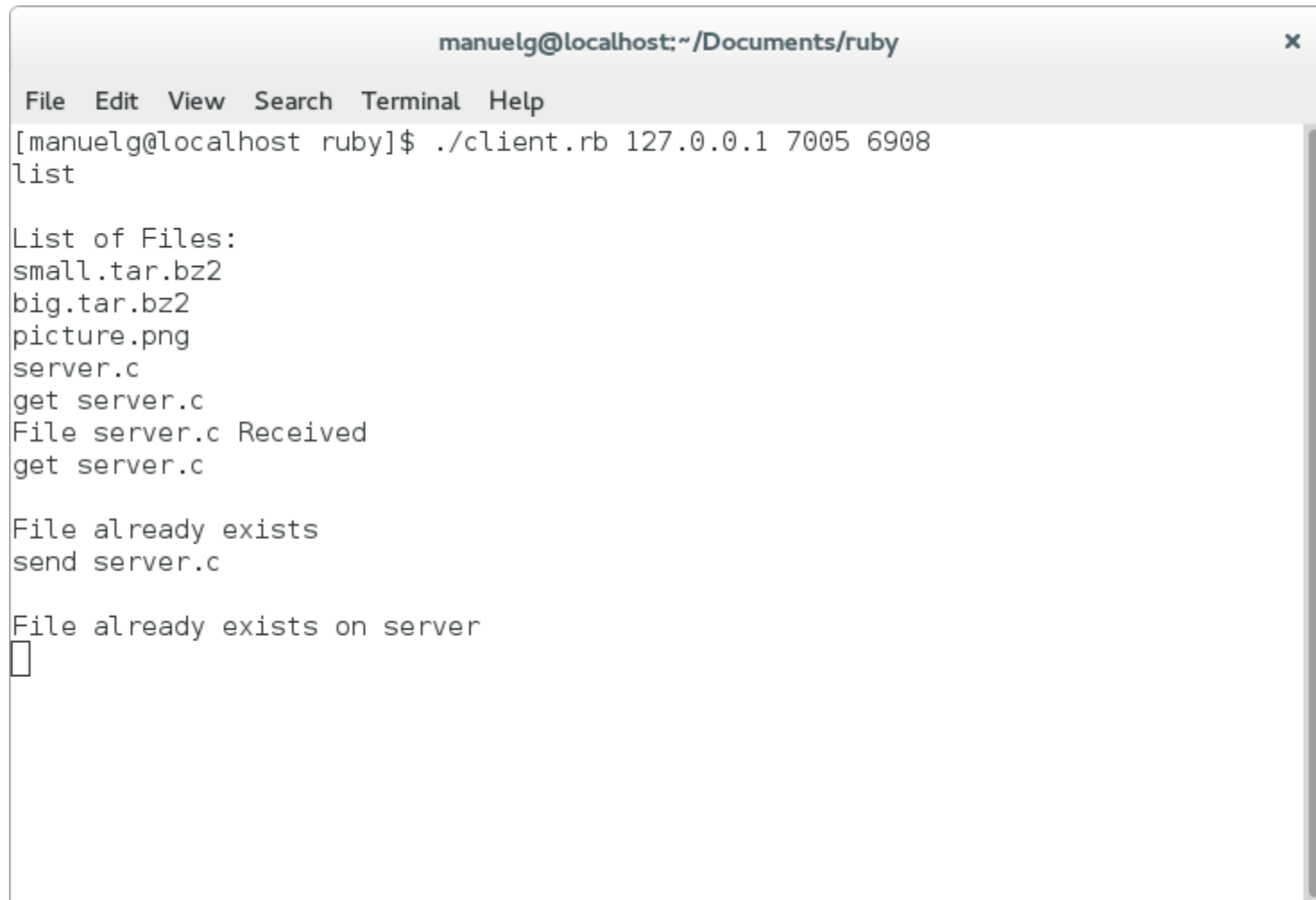
A terminal window titled "manuelg@localhost:~/Documents/ruby" with a close button (x) in the top right corner. The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows a Ruby script being executed: [manuelg@localhost ruby]\$./client.rb 127.0.0.1 7005 6908. The script outputs "list", followed by "List of Files:", then a list of files: "small.tar.bz2", "big.tar.bz2", "picture.png", and "server.c". It then shows "get server.c", "File server.c Received", and "get server.c". Finally, it outputs "File already exists" and ends with a cursor.

```
manuelg@localhost:~/Documents/ruby
File Edit View Search Terminal Help
[manuelg@localhost ruby]$ ./client.rb 127.0.0.1 7005 6908
list

List of Files:
small.tar.bz2
big.tar.bz2
picture.png
server.c
get server.c
File server.c Received
get server.c

File already exists
█
```

Figure 5

A terminal window titled 'manuelg@localhost:~/Documents/ruby' with a standard menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of a Ruby script './client.rb' with arguments '127.0.0.1 7005 6908'. The script outputs a list of files, attempts to get 'server.c' from a server, and reports that the file already exists on the server. The terminal has a vertical scrollbar on the right side.

```
manuelg@localhost:~/Documents/ruby
File Edit View Search Terminal Help
[manuelg@localhost ruby]$ ./client.rb 127.0.0.1 7005 6908
list

List of Files:
small.tar.bz2
big.tar.bz2
picture.png
server.c
get server.c
File server.c Received
get server.c

File already exists
send server.c

File already exists on server
█
```

Figure 6

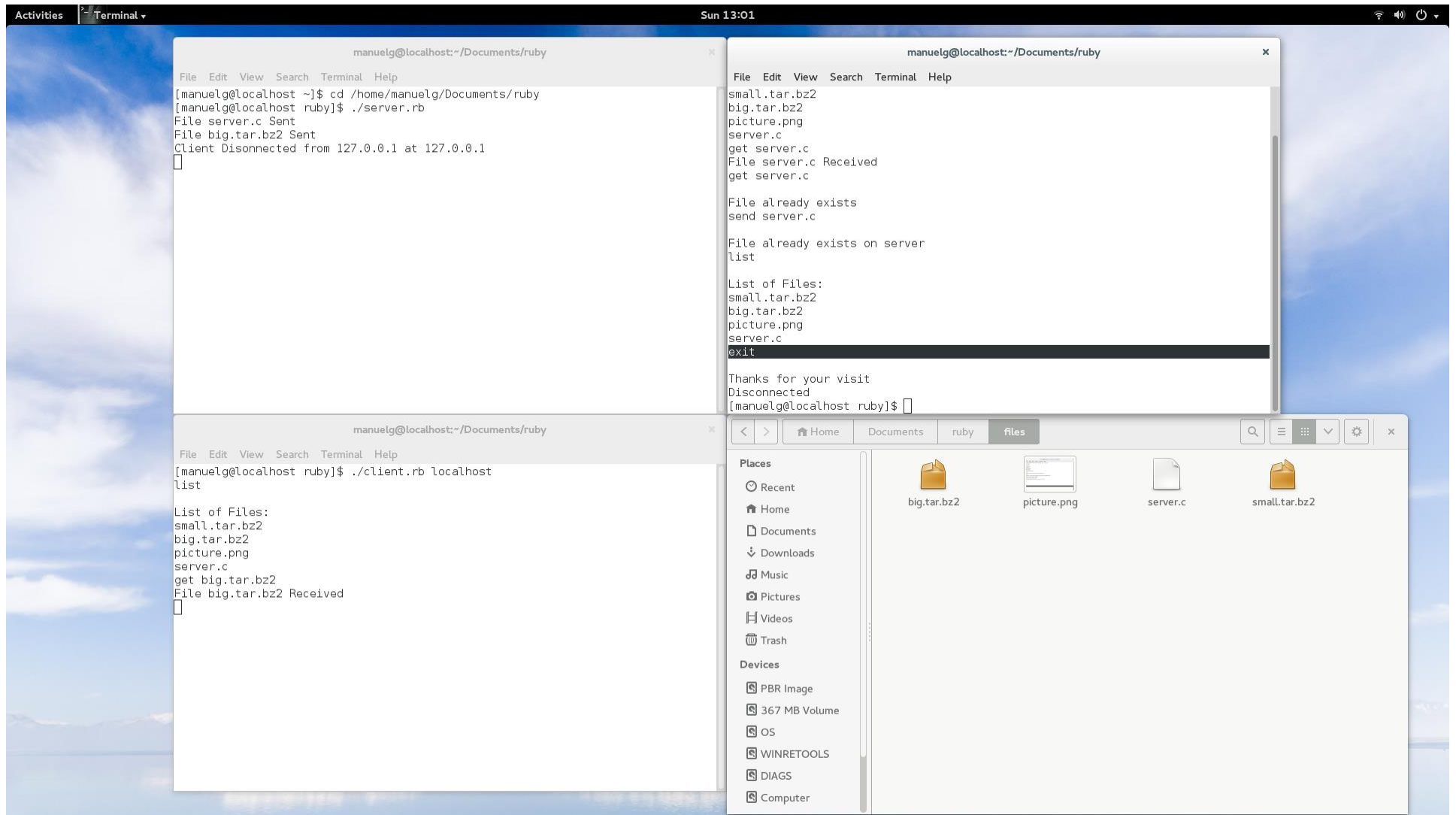


Figure 7

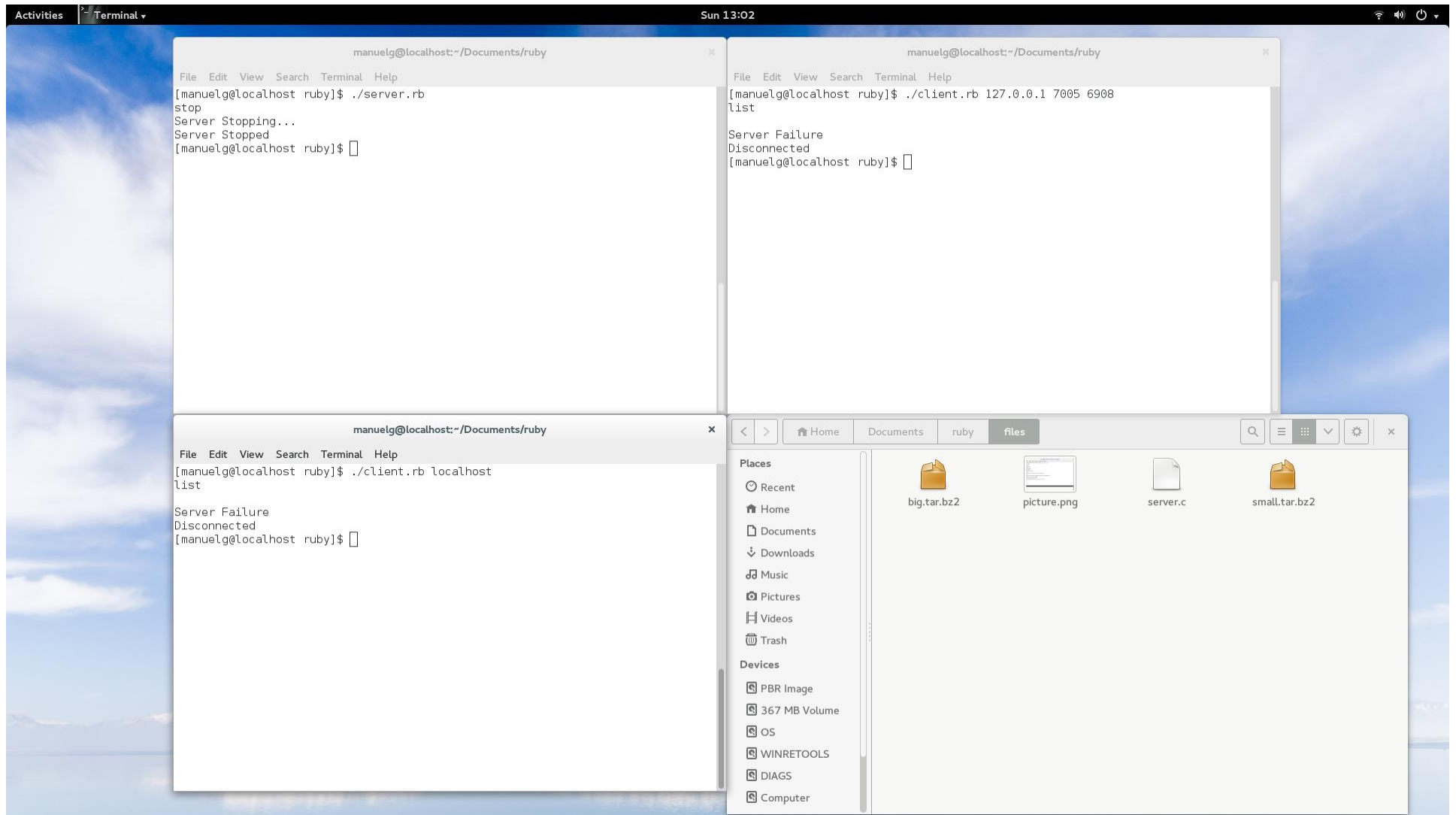


Figure 8

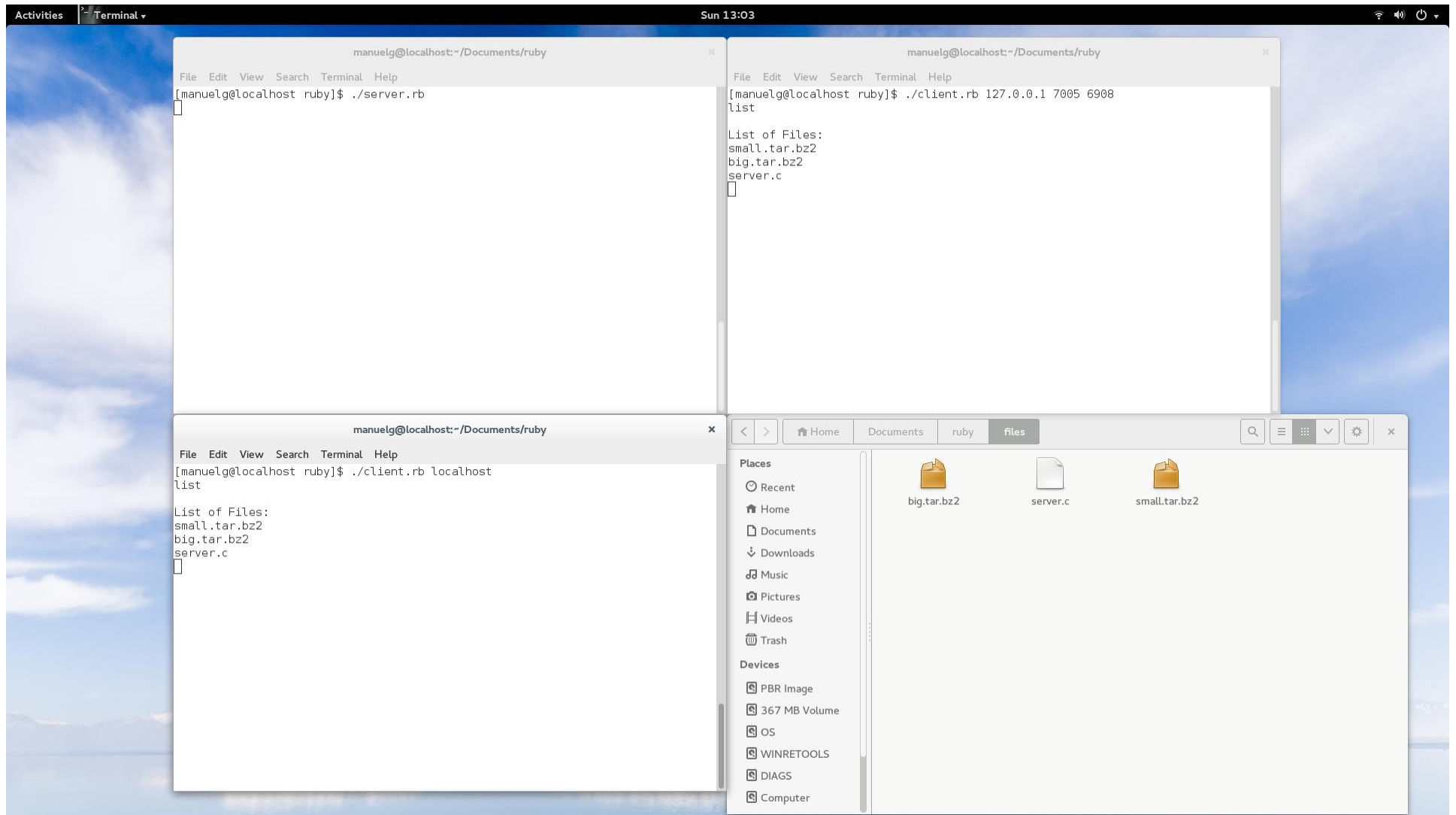


Figure 9

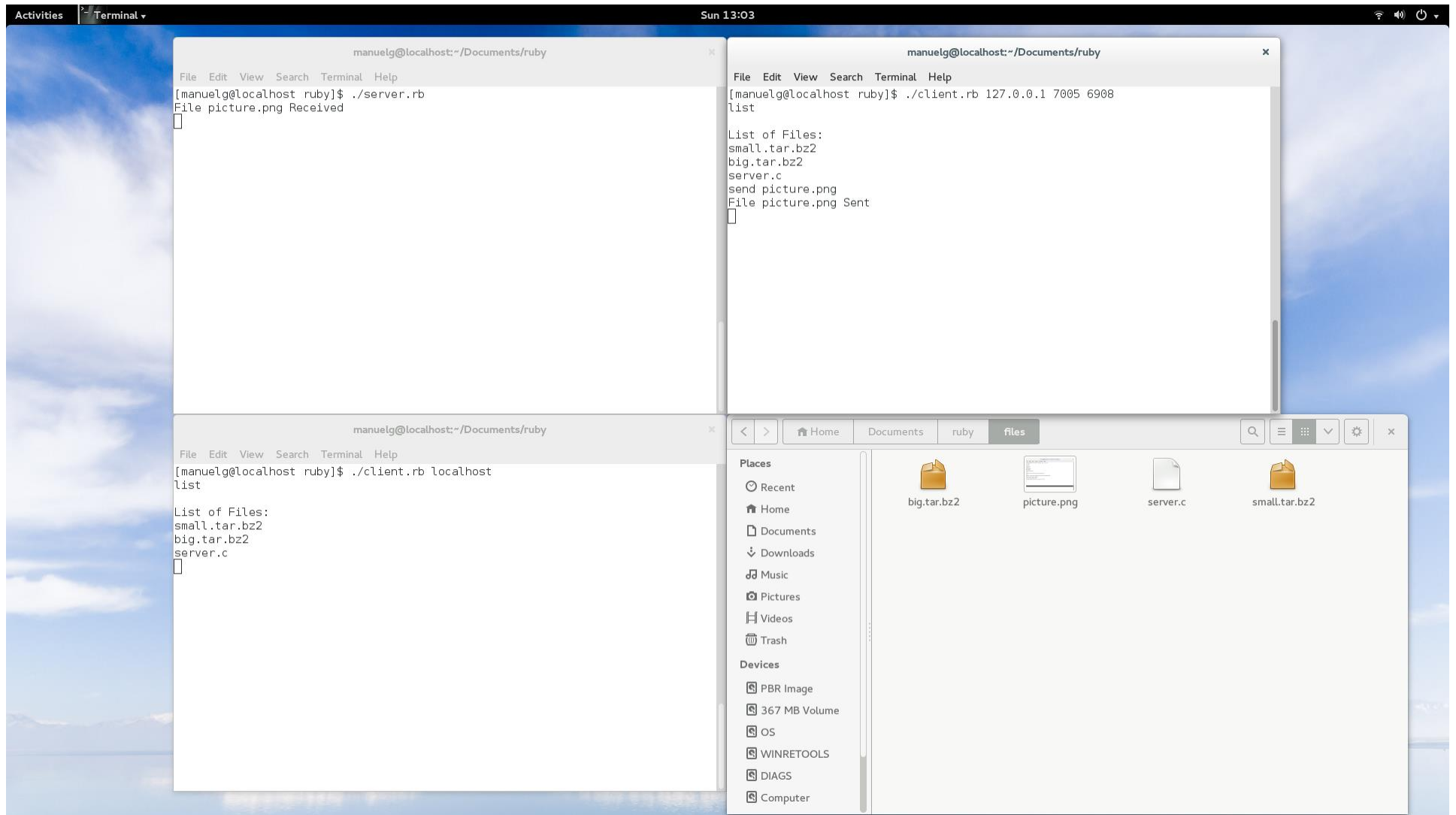


Figure 10

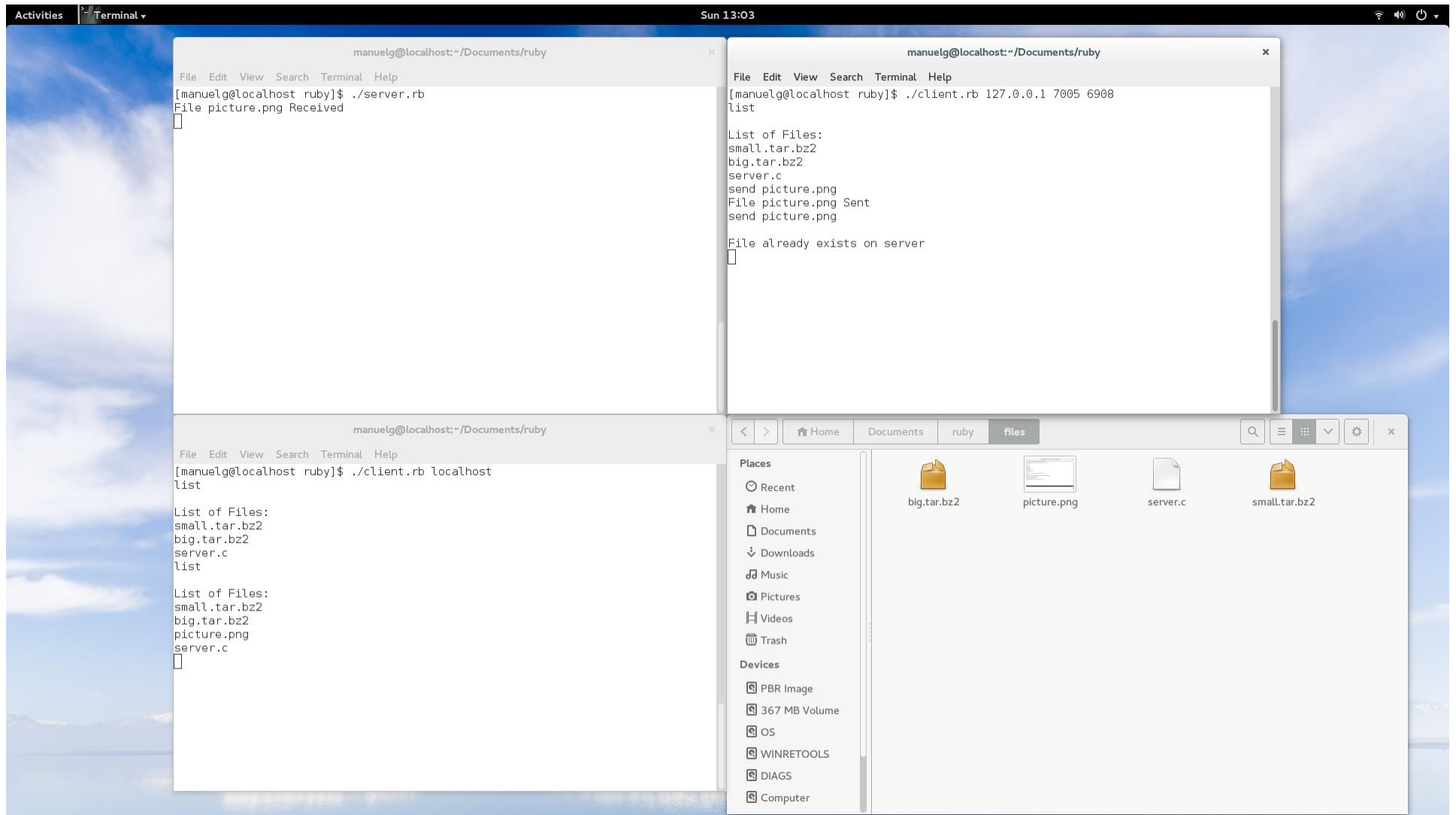


Figure 11

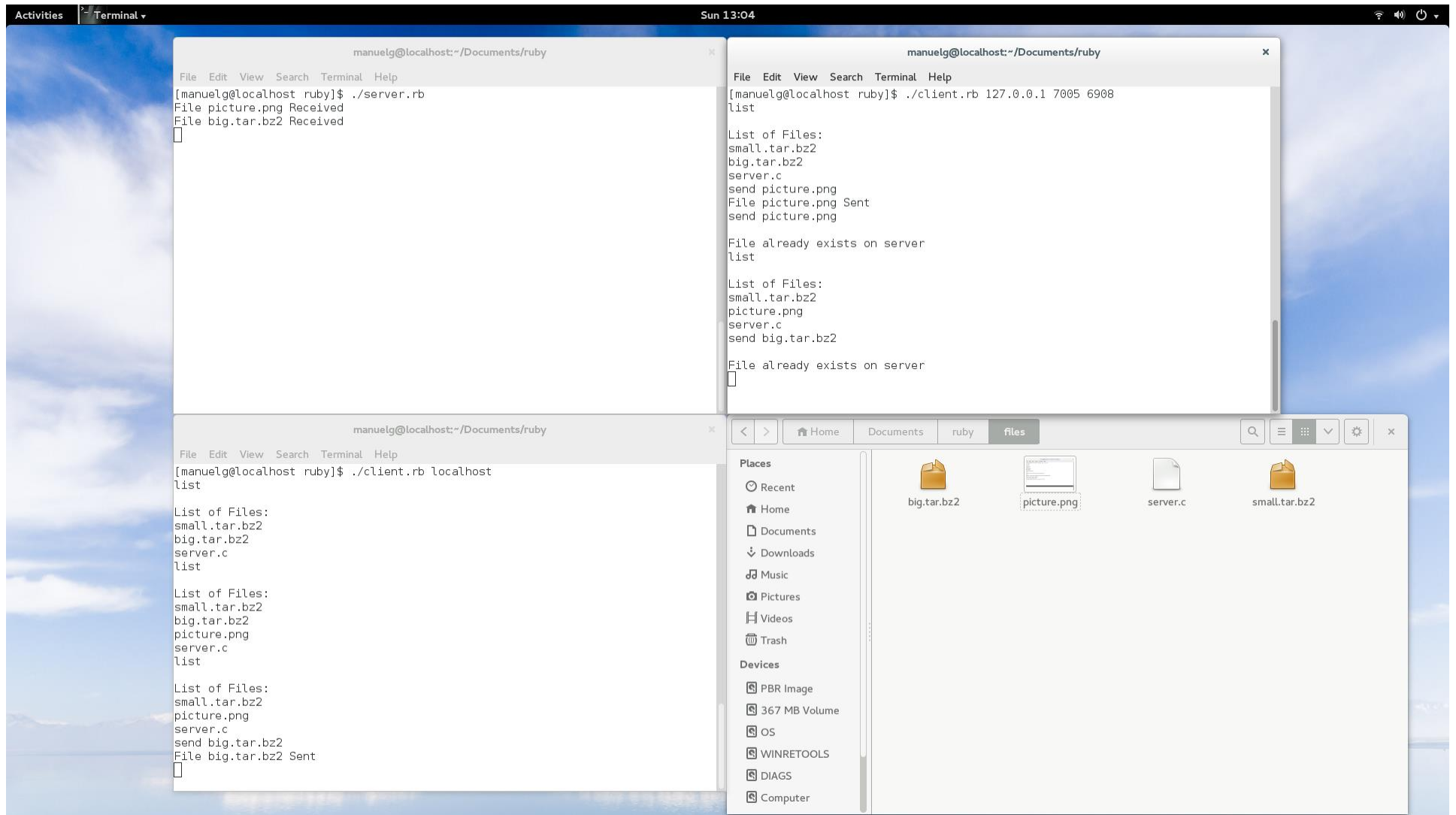


Figure 12