1.   Running Jacktrip

At the moment, I have run jack and jacktrip as user processes. The difficulty presented here is that user processes usually disappear upon logout or connection loss. One common way around that is to use GNU screen. Simply type

`screen`

to begin a new screen session. To detach from a screen session (so you can log off), you must first press Control-a, then press d. That will detach you from your screen session, and a message will show that you detached. To re-attach, use

`screen -r`

Jack is already installed for all server users. However, it is problematic if jack is already running from another jacktrip admin; multiple jack servers might confuse our computer. To check if jack is running, use:

`ps -e | grep jack`

Jackd and jacktrip will appear if they are running, similar to below.

```
$ ps -e | grep jack
 9926 pts/2    00:00:00 jackd
```

Server administrators can kill another user's jackd and jacktrip processes with

`sudo pkill jacktrip`

or

`sudo kill <PID>`

The PID of jackd is 9926 in the above ps reading. If jackd is not running, first confirm that you're in a screen session. Start jackd with

`jackd -d dummy -r 48000 -p 64 &`

Start jacktrip with

`jacktrip -S -z -q 12 -p 4`

During a production run, it is more useful to run with -p 2 so that participants only hear the others. I will update this document with more strategies as we find them.

2.   Other jack utilities

I installed a few useful utilities. I advise running these in their own screen sessions. You can give names to your screen sessions when starting them. See:

`screen -S jacktrip`

You could detach and then re-attach with

`screen -r jacktrip`

If you are in an existing screen session, you can ctrl-a then ": sessionname your_name_here" to rename the screen session.

-   jack_capture

Jack_capture is a very basic recording program. It doesn't look like there's a way to make it capture jacktrip stuff automatically, so I installed another program. Most likely, you'll want to start jack_capture as

```
jack_capture --manual-connections -c <number>
```

which sets up a recorder for <number> channels of audio, which you can edit later.

-   njconnect

Njconnect is a terminal-based connection-maker for jack. It's similar to qjackctl (Jack Control on Windows), except it doesn't require any sort of graphical interface. Just use "njconnect" to start it after jack and possibly jacktrip and jack_capture are running. Press "a" to see the server's audio connections. Use the arrow keys to navigate inputs, outputs, and existing connections. Highlight an input/output pair and press "c" to connect. Highlight a connection and press "d" to disconnect. Press "q" to quit.