

## CyWi: Open-Source Wireless Innovation Lab for Smart Ag, AR/VR, and Beyond

**Team Number:** sddec19-02      **Client:** Dr. Hongwei Zhang      **Faculty Advisor:** Dr. Hongwei Zhang

### Team Members

Chenye Lim	Ryan Cullinan
Jian Chew	Shay Willems
Pawel Darowski	Tyler Beder

### Dates

October 12 to October 25, 2019

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### Biweekly Summary

After looking at refining the topology of our server set up. We have determined our best route is to install Zen hypervisor on top of Linux to handle our virtualization. This week we worked towards installation and set up of our virtual machines.

After the attenuation testing on SDR, our client would like us to test whether we can get better packet delivery rate with lower attenuation. Besides that, the requirement of SDR being able to connect across the room was not satisfied with the previous configuration that we determined. For the past 2 weeks, we have been trying to find the SDR configuration that meets our client's requirements.

### Accomplishments

- We figured a way to prevent interference while testing TI Motes.

### Pending Issues

- Cannot get Xen to install on top of Ubuntu 18.04

### Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Chenye Lim	Find the SDR configuration that meets client's configuration. Ordered necessary parts for TI Motes attenuator soldering.	5	58
Jian Chew	Find the SDR configuration that meets client's configuration.	28	92
Pawel Darowski	Prepared for Emulab install	4	67
Ryan Cullinan	Researched Zen hypervisor. Installed Linux back on server. Worked on Zen install	14	58
Shay Willems	Attenuator testing	5	49
Tyler Beder	Attenuator testing	5	43

### Plan for Coming Week

- Install and begin configuring Emulab
- Connect SDR to the server
- Finalize parts to order for equipments