**Lab Manual – Virtual Desktop Interface Server**

**Computer Science 377 – Operating Systems**

This lab is designed to introduce you to the concepts of virtualization and the idea of cloud computing. You will setup and configure a Virtual Desktop Interface (VDI) server to serve computing sessions to remote users. The server creates desktop sessions that run in a virtualized environment on the server, with input and output over the network. VDIs can also be described as data-center hosted desktops, and their ultimate evolution is to replace traditional power hungry (130W-300W) and problem-prone fat-client workstations with low-power, energy-efficient thin clients (13-30W). It is even possible to serve these VDIs to mobile devices, like smartphones and tablets, giving users epic mobility. VDIs also provide greater reliability, as sessions can be resumed exactly as they were left, with no disruption.

What you will do in this lab:

* Install and configure a Linux Apache, MySQL, PHP Server (LAMP Server) to serve persistent VDIs
* Install an application to the server and publish it to be available for the users
* Create user accounts and publication groups, with different accesses for different groups

You will install a LAMP server with a package that serves VDIs. I used CentOS 5.5 with the oVDI packages and instructions from Ulteo (http://www.ulteo.com), but you can feel free to use another product of your choice. There are many free open-source VDI products, and Ulteo also has instructions for installing their VDI software to other distributions, if desired.

Download and install the VDI software of your choice to one of the machines in the lab. Be sure to review the documentation for the VDI server you choose, and pick your installation packages wisely. Once you have installed and configured your VDI server, install at least three apps of your choosing and create at least user groups, with different app permissions. You must configure the VDIs to be served as persistent desktops, that is, an actual desktop that you can close and resume at any time, without state loss.