

Homework 1 (preparation)

OVERVIEW

Due date: ~~4/24/14~~ 2/4/14

What to hand in:

- A screenshot of your virtual machine
 - Open a terminal and make sure your UIC netid is visible (`echo your_uic_id`)
 - Also issue the `date` in your terminal before taking the screenshot.
- The configuration file for the VM. The extension of this file is `.vbox`
 - If, for some reason, you cannot use VirtualBox, please add a note in a text file in the homework 1 directory explaining what you tried to resolve the problem and what you used instead.
- **Do not** check in the virtual hard drive or any snapshots. **Only** the two items above are requested.

DESCRIPTION

The goal of this homework is to prepare a development environment which will be used for the following homeworks. We will use virtualization to ensure everybody has the same environment, and also to protect your main computer system from any mistakes you might make. Remember, making a mistake in kernel mode can affect the stability of your computer and has the potential to destroy data. By using a virtual machine, we can isolate our experiments in a safe sandbox.

- Please install VirtualBox (<http://www.virtualbox.org>) and create a virtual machine and install Ubuntu 13.1 **32 BIT**.
- Recommended memory 512MB to 1GB; Recommended disk: 8-10GB. Please make sure to use a dynamically allocated disk.

Hints:

- Experiment with the snapshot option. It will save you a lot of time on the other homeworks.
- Make sure to make regular backups of your projects and homework within the virtual machine (or use the snapshot mechanism). Or, better, keep all your work under version control with an outside version control server.
- At least one person has reported that there are issues when using special characters (quotes for example) for naming the virtual machine. It is probably best to only use `[a-z,0-9,_]` when naming your VM.
- Performance will improve by using some special drivers in the guest (=Ubuntu) operating system. These drivers use a more efficient way to communicate with VirtualBox, enabling functionality such as sharing of files between host and guest and GUI integration. See here <https://www.virtualbox.org/manual/ch04.html> for more information.
- Disabling the unity interface can also improve performance.