Minutes from team meeting held on 4/30/12:

ARs:

- **John**: make an account for the ReviewBoard site.
- **Devin**: talk to Greg about getting everyone ssh access to all necessary machines in the capstone lab.
- **John**: set up a Linux install on the EeePC box (the EeePC box will be used for local backups).
- **Everyone**: prepare at least 4 questions each in preparation for the meeting with the project sponsors.

- Meeting started at 6:05 p.m.
- Kyle: John still needs to make an account for the ReviewBoard site.
- Devin will talk to Greg about getting everyone ssh access to all necessary machines in the capstone lab.
- The meeting with the Intel sponsors will be held on Wednesday, 5/2 at the Intel Jones Farm campus, Building 3.
- The team will meet in the Building 3 lobby before 4:45.
- John will set up a Linux install on the EeePC box (the EeePC box will be used for local backups).
- Jacob: dmidecode:
    - Pulls BIOS info, RAM info, etc.
    - Does not get info from hardware
    - BIOS creates DMI table
    - Jacob can't see connection between DMIdecode and our project
- Kyle: pahole:
    - Checks to see if objects (structures) are nicely packed after program has been compiled to a binary
- Katya: debugfs:
    - There is a kernel level infrastructure named debugfs (our team will be using this software in our project) and there is a file system debugging tool also named debugfs
- Devin: debugfs:
    - Similar to sysfs and "/proc" systems in linux
    - Kyle: debugfs is closer to the "/proc" system than to the sysfs system
- Question: is all of the data we are concerned with inside the E1000 driver contained in the adapter structure?
- John: QEMU:
    - Open source

    - Code base is used in Wine and Win4Lin
- Devin: The main reason for using QEMU is that we are changing parts of the kernel, and breaking the kernel can be fixed by restoring the virtual image.
- Kyle: we will need to run our virtual machines on a VTX compatible physical machine.
- Devin: E1000
    - Once inserted into the kernel, this driver can interface with many different types of network interfaces.
- Devin: We need to find out where the most efficient place to execute our code will be inside of the driver.

- Jacob:
    - We need to ensure clear transmit and receive paths
    - We need to execute our code inside helper functions
- Kyle: We will most likely be working with the E1000e driver (PCIe version).
- Kyle gave a demo of the pahole utility.
- Devin: we need a very well encapsulated code structure inside of driver.
- Kyle: Python could easily be used for implementing a user application for our project.
- PJ is better for straight answers about the project.
- Questions to ask sponsors at the Wednesday meeting:
    - Does the adapter struct contain all relevant information?
    - Will we be using PCIe version of the E1000 driver?
    - How would we accomplish performance change assessment due to debugging?
- Team members should come up with ~4 questions each in preparation for the meeting with the project sponsors.
- Next week:
    - We should be thinking about a detailed V+V plan
    - We should be considering what kind of tests to use for our code
- Meeting ended at 7:30 p.m.