Thesis Proposal (MA/BA/IDP) + HiWi

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Creation of a Virtual iLab Isle

Outline

This offer is for those of you who either participated in the iLab 1 or 2. As you will remember, you were spending quite some time in the laboratory room. That is good since you cooperated with your team partner and ran some nice experiments.

In addition to the physical lab space we want to offer a virtual one. It can be used by the iLab participants for preparation, or when the room is full. We even think about possibly offering to do some labs inside a virtual isle.



The virtual iLab isle will consist of virtual machines and software routers. The experience should be very similar to a physical isle (e.g. cabling...). We also want some kind of reservation and spawning mechanism, and a protection that ensures both team partners are online in the virtual isle...

Possible Structure

- Analysis
 - o Technology review
- Related work
 - O Which other virtual lab environments exist?
- Design
 - o Which components do you need?
 - o Security, dependability, scalability, ...
 - Which are options for the design? Why are your choices good?
- Implementation
 - How did you implement your requirements?
- Evaluation
 - o How well does it work?
 - Usability study with real people.

Requirements

Curiosity, Dedication, Joy to work in a team. Linux, Virtualization. Ability to write good code (including unit tests and documentation).

Contact

If you are interested, please send an email briefly explaining why you think to be the right person for this thesis to:

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