# Internship “Living Lab” Projects

Connie Justice, John G Ryan

To provide real world experience in Networking and Security to students by supporting the Computer and Information Technology Department Students, Classes and Faculty.

## Project Descriptions

### Red Hat Enterprise 4 Linux Firewall and DHCP Server (Ben Green)

Provides constant network addressing and routing services to the class laboratories. Creates a non-routable environment for using network sniffing and security tools with out affecting the overall campus network. Uses Internet Protocol Tables to filter out malicious traffic coming in to the computer labs.

### Red Hat Enterprise 4 Linux SNORT Network Intrusion Detection System (John G Ryan)

Monitors incoming network packets and creates a database of bad traffic based upon signatures of Internet packet information.

### Kerberos Key Distribution Server (Kyle Randal)

Provides students with a centralized database to store public keys across trust domains. Supported the CERIAS IAEGC Network Security class, summer 04.

### SUSE /Novell Linux NAGIOS Monitor (Leila Lynch)

Monitors network, server and application availability across various platforms. Reports network outages, downed servers, failing applications, hard disk usage, processor loads, and service status to email addresses and mobile phone accounts. Watch Dog for malicious attacks to computer systems and critical applications.

### Microsoft Windows Server 2003 MRTG Server (Pat Stalvey)

Monitors and graphs network traffic to analyze anomalies in utilization. Displays aggregate of information to establish a baseline of network flow rates. Eases the identification of utilization spikes due to possible attacks based upon Internet Protocol Addresses.

### Girls Conference Lab Instruction using Forensics Tool Kit Software (Shaunta Bishop, Kevin Williams, Shira Dankner)

### Secure Indiana Conference Booth

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