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Engaging Students in Real-life Data and Network Security Assessment of Pace Computing Environment

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Status Reports

Format for both the Interim and Final Reports:

At the top of the first page of the report, please include the following:

• Title of the Project

Engaging Students in Real-life Data and Network Security Assessment of Pace Computing Environment

• Cornerstone #

Cornerstone 3: Interdisciplinary Informatics

- Principal Investigators Names along with their School/College
 Narayan Murthy, Professor, Computer Science, Seidenberg School of CSIS
 Ravi Ravishanker, Vice President for Information Technology and Chief Information
 Officer, ITS
- Date
 June 1, 2010

Mid-Project Reports - Please submit the following:

- A) Please outline your original goals.
- Design activities in which students from Seidenberg School will participate in assessing the real-life data and network security in Pace University through the collaboration with Pace ITS.
- Incorporate the experience gained in our security courses.
- Utilize the collaboration between Seidenberg and ITS to benefit students by allowing them to put theory into practice.
- Provide the students' findings to ITS to help improve computing and networking security.



B) What progress have you made towards your original goals on your project to date?

Students who have worked on the project:

Suhas Ravish and Stanley Alphonso. Both of them have worked on server security, application security and network security. They have worked on both Windows and Linux platforms. A report, Windows Server Security Report, detailing work done in Windows environment is attached to this email.

We are still working on selected security tools in Linux environment. Here is a list of tools we have recently completed or still working:

- Advanced Intrusion Detection Environment (AIDE)
- A comprehensive vulnerability scanning program Nessus
- An open source (GPL) web server scanner Nikto
- An open source utility for network exploration or security auditing Nmap
- C) Has your project impacted students? If so, how many?

Some of the security tools are being used in IT603 and IT628 immediately in summer 2010. More tools will be incorporated into security courses in fall 2010 and subsequent semesters.

D) Has your project impacted other faculty members? If so, how many?

After the completion of the project, the report will be made available to all Seidenberg faculty who teach security courses.

E) What are your next steps?

We are currently testing the security tools on experimental servers, which we have set up for this project. With the permission of ITS, we plan to run these security tools on live Pace systems to understand vulnerabilities in Pace's systems. ITS may not be comfortable letting us administer this full scale. But we plan to do it at least in a limited form.

Include our experience in several Seidenberg security courses.