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MEMORANDUM

To: Dr. Hugh Smith

From: Jacob Hladky

Subject: Recommendations for Integrating IPv6 into the CPE464 Curriculum

Date: May 8, 2015

Dr. Smith,

The attached report contains the results of my research into various IPv6 technologies and of our interview on on April 28, 2015. The following summarizes the report and its conclusions.

Methods
In addition to our interview, I researched several different technologies which implemented IPv6. I chose technologies to research based on the parallels the technology had to IPv4 and how familiar I thought CPE464 lab students would be with the technology. I eventually chose to research IPv4 tunneling, autoconfiguration, and DHCP.

Results
From our interview I found that there were three ways to introduce new content into the curriculum: by integrating it with all existing labs (the "multiple" method), by splitting the content with two existing labs (the "double" method), or by adding a new lab in place of the current lab make-up session (the "single" method).

From my secondary research online I compared the three technologies in a decision matrix based on the above criteria. A truncated version of that table is reproduced below.

Technology	Total Score (0-18)
Tunneling	14
Auto-configuration	6
DHCP	13

Recommendations
I recommend that a single new lab be added to the curriculum, with no modification to the other labs. The lab should teach IPv6 by having students implement an IPv6 tunnel through an existing IPv4 network. Instructions for implementing tunneling can be found in the Cisco guide "IPv6 tunnel through an IPv4 network."

Further elaboration on these topics is available in the report. Thank you for your guidance.