Southern Illinois University Carbondale **OpenSIUC**

CASA Faculty Research Flash Talk

College of Applied Sciences and Arts

4-28-2017

Wireless Mesh Networks and Software Defined Networks

Tom Imboden *SIUC*

Follow this and additional works at: http://opensiuc.lib.siu.edu/casa flashtalk

Recommended Citation

Imboden, Tom. "Wireless Mesh Networks and Software Defined Networks." (Apr 2017).

This Article is brought to you for free and open access by the College of Applied Sciences and Arts at OpenSIUC. It has been accepted for inclusion in CASA Faculty Research Flash Talk by an authorized administrator of OpenSIUC. For more information, please contact opensiuc@lib.siu.edu.

Wireless Mesh Networks and Software Defined Networks

Tom Imboden

Associate Professor, Information Systems and Applied Technologies

Networking and communication technologies are areas constantly changing as researchers and engineers strive to increase speeds and improve reliability as more and more devices are becoming Internet enabled and connectivity is expected by consumers at nearly all times. Two technologies that show promise to provide improvement for communications are wireless mesh networks (WMN) and software defined networks (SDN). WMNs allow extending wireless networks beyond traditional limitations of physical wired infrastructure. SDN seeks to provide centralized control of network nodes through the use of protocols to implement network changes on distributed infrastructure as directed by centralized management policy and direction. While both WMN and SDN provide unique promise for improved communication in certain scenarios, there has been little work combining the two technologies in a laboratory testbed. This discussion will focus on current work to implement WMN and SDN together and provide quantitative measurement of network performance across the test network.