Networking & Information Security: Improving Online Learning Through Simulation

Dr. Loyce Pailen & Julie Gilliam University of Maryland University College

Abstract The lack of hands-on and practical experience for networking and security classes can be one of the largest obstacles for online learning. The authors will examine the traditional methods used to teach networking and information security and compare the equivalent online simulated experiences. The obstacles of online learning and the problems associated with implementing simulations will be investigated. The Online Implementation Framework will illustrate how the simulated tools were selected and integrated into the classroom. From the results and lessons learned, best practices will be formulated. This presentation will illustrate how online networking and security courses can be improved through simulation.