Plan and Status Report of OpenFlow Deployment at UMass Lowell

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Executive Summary

The UMLPEN team at UMass Lowell plans to enable OpenFlow functionalities in UMass Lowell campus network. The OpenFlow capabilities are implemented through extended firmware to existing Extreme switches already deployed throughout the campus network. This deployment project is in collaboration with the R&D team of Extreme Network and campus IT team. The goal of the project is to have an operational OpenFlow network in Ball Hall of UMass Lowell by July 2011, study the network operations, and roll out the deployment to other parts of the campus in the 2nd half of the year.

Plan and Current Status

The OpenFlow campus deployment consists of four stages:

Stages	Target date	Status
Design of OpenFlow capable switches by Extreme Networks	end of March, 2011	first OpenFlow firmware has been delivered by Extreme to UML on April 1.
OpenFlow switch testing in lab	end of April 2011	UML team is conducting tests using the Extreme Summit X650 switch in the lab
Test additional Extreme switches in Ball Hall	end of June	Three switches in Ball Hall have been identified*.
Demo and Documentation	GEC11	planned

**The current version of OpenFlow firmware supports a number of models in Extreme's product line. Three X480 switches on the current network are identified and will be updated for testing. The network diagram is not included in this document due to security concerns.*

Project participants

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