GENI OpenFlow Project Status Report

Period: April 2010 – June 2010

I. Major accomplishments

A. Milestones achieved

- Contract completed May, 25 2010 (delaying milestones projected to occur beginning March, 2010).

B. Deliverables made

II. Description of work performed during last quarter

A. Activities and findings

- Eric Boyd, Matt Zekauskas, Brian Cashman designed OpenFlow backbone based GEC6, and what was written in the response to the Spiral2 solicitation.
- Eric Boyd, Matt Zekauskas, Brian Cashman worked to ascertain equipment options, and if Juniper was viable (including meeting with Juniper at the Internet2 2009 Fall Member Meeting and numerous phone conversations). Outcome (at the time) the only viable option: HP.
- Eric Boyd, Matt Zekauskas, Brian Cashman designed the OpenFlow backbone in light of new Internet2 network connectivity due to the end of the GENI wave MOU.
- Eric Boyd, Matt Zekauskas, Brian Cashman learned that once again Juniper might be an option, and re-priced a MX80 implementation instead of the HP5406 implementation, now less expensive due to the fewer number of 10G interfaces.
- Eric Boyd, Matt Zekauskas, Brian Cashman are currently investigating the real viability of Juniper as an option before GEC9.

B. Project participants

Eric Boyd (Internet2)
Matt Zekauskas (Internet2)
Brian Cashman (Internet2)
Randy Frank (Internet2)

C. Publications (individual and organizational)

D. Outreach activities

E. Collaborations
- Matt Zekauskas attended OpenFlow campus participants meeting at GEC6 (Salt Lake City, November, 2009).
- Matt Zekauskas attended OpenFlow backbone + campus meeting at GEC7 (Duke, March, 2010).
- Matt attended periodic OpenFlow backbone meetings ("backbone integration") organized by the GPO starting last November/December, and becoming bi-weekly in May.
- Randall Frank, Internet2's CTO, attended the OpenFlow CIO Summit at Stanford. The purpose of this summit was to discuss issues associated with deploying OpenFlow enabled networks within campuses, regional networks, and the national backbones. Randy presented Internet2's currently plans for deployment of OpenFlow enabled services within the current Internet2 backbone using GENI funding, as well as future possibilities for more integrated deployment within the network.

F. Other Contributions