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- What GENI capabilities are most important?

I make good use of both the WiMAX and wired testbeds. Having both of those in the future would of course be very important to me. Continued support for stitching is also very important. It allows us to conduct tests without the overhead of tunnels and the variability of operating over the public internet.

WiMAX does have its limitations though, and is clearly not as predominant as LTE. As such, I'd like to see more LTE testbeds come into play if possible.

- What activities should GENI continue, expand, or wind down?

Personally, I enjoy the GECs and find them to be a great opportunity to collaborate and demonstrate our work. I know they are being wound down at present, but some occasional gathering would be important to me.

- How should GENI be governed and sustained?

I've heard talk about universities taking over. This sounds great, but might cause some intermittent issues when people come and go. In particular, I am referring to those universities that have graduate students manage many of the GENI resources. At present, we rely on the GPO to help make transitions easier. If the GPO were to go, it would be up to the university to manage knowledge and role transfers effectively.

- How can the GENI experience inform better research cyberinfrastructure?

I think GENI is a great testbed. Over the years, it has turned into a very easy-to-use service where experimenters have to manage hardly any technical details specific to the underlying infrastructure.

I have had many problems though with MAC learning on my stitched links. The problems arise when packets with the same MACs traverse different stitched links through some single intermediate switch. I have ideas on how to mediate this, but it's a difficult problem to solve and abstract away from the user. It would be nice if we could find a good way to solve this and make it so users do not have to worry about MAC learning within a stitched link.

Lastly, the control interface of GENI resources can be made public for e.g. running a web server. It's not widely known by experimenters the implications of using the control interface for heavy traffic applications e.g. video streaming. It would be very useful to have the ability to have public interfaces on GENI resources that do not contend with critical aggregate services or with other users.