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I have been using GENI for a little over a year as a researcher and educator. I have submitted an NSF grant proposal (1525568) where GENI is the central component in introducing Cybersecurity to Liberal Arts (LIA) Primarily Undergraduate Institutions (PUI).

- What GENI capabilities are most important?

For me the flexibility to reserve a topology completely online without having to maintain the machines is extremely important. I am an assistant professor in a primarily undergraduate liberal arts institution and I would not be able to experiment for my research and involve undergraduate students in this experimentation without this capability.

The second important feature is SDN and the capability to use it for research and education. It is easy to deploy already existent OVS images and use them in a class to teach very modern computer networks applications. Furthermore it is again a huge convenience not to have to buy the expensive and high maintenance infrastructure.

Finally, being able to experiment and run network attacks on a realistic environment such as GENI is extremely important for research and education. It is difficult or impossible to run such experiments in a school network. It would involve huge bureaucracy, wasted energy, and time that would be taken away from research and education. GENI offers this capability within minutes and worry free of maintenance so that a researcher or educator can focus on the important things.

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

GENI should continue offering GEC conferences and maybe even expand to smaller cities. Myself and my students have benefited greatly from these conferences. It is an important learning, networking, and creating community type of event.

In terms of GENI development, I think it is great that GENI has a new interface such as Jacks. JFed is also very well made.

I think that the collaborative activities with Europe and other continents should continue and maybe be expanded even more to an international GENI Engineering Conference.

- How should GENI be governed and sustained?

I think there should be involvement of academia, government organizations, and private sector. All parties can have shared governance of GENI since they have a stake in research for the future internet technologies and education for the future engineers and computer scientists.

- How can the GENI experience inform better research cyberinfrastructure?

The GENI experience can shape education in computer networks and security. It is already a large ecosystem that can develop the future engineers and computer scientists. It can help build collaboration and by bringing together a diverse audience from academia, government, and private companies it can generate novel solutions.

One area that I would like GENI to put more emphasis on is experimentation for Cybersecurity. I am aware that Deterlab is used in Cybersecurity. However, GENI offers more capabilities. I would like to be able to predominantly use GENI in my teaching security courses and labs as well as in my research.

Best regards,

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