Community-Powered Problem-Solving

Nick Lewis, program manager for security and identity at Internet2, describes how the community-driven Internet2 NET+ program helps higher ed institutions get fast, proven answers to their questions and vetted solutions for their cloud and security challenges.

What role does Internet2 see itself playing in supporting the improvement of your members’ security postures?

NICK LEWIS: We facilitate the community engaging with each other to identify best practices. For example, let’s say there’s a particular challenge that a campus is trying to figure out. They may go into a community call, where campuses can ask their peers: How do you solve this problem? And then they can get immediate feedback. Or there are many ways institutions collaborate digitally, including e-mail lists, Slack channels and wikis, where they can engage with peers to identify best practices. That is all part of the NET+ program, where advisory boards and community events help to foster more optimal service offerings and benchmarking. And a program manager like myself is engaged with and supports these types of discussions.

After a number of campuses have verbalized similar challenges, we’ll realize maybe there’s something there that we need to write up, to share broadly with the community, where they can look at a frequently asked questions repository and find the answers to their questions. And that’s even faster than going and asking their peers.

Internet2 also supports its members’ security postures through additional programs such as InCommon’s secure, privacy-preserving trust fabric that enables institutions to make appropriate decisions about the release of identity information and the control of access to protected online resources, as well as through community activities like MANRS and HECVAT, among others. Security influences everything we offer, from our research and education network to access to cloud services.

During the pandemic, were you convening meetings with people to find out what they were experiencing and how you could serve them?

Yes, we’ve convened quite a few virtual meetings and events. I’ll give you an example. One of the services that we offer is the NET+ Splunk program. In April 2020, Splunk released something called a remote work dashboard. One of the things this new dashboard did was help administrators monitor Zoom usage. Everybody was moving course instruction and meetings to videoconferencing. One of the campuses on an e-mail list said, “Oh, we’re using this tool.” I followed up and said, “Do you want to speak on the next community call and share what you’ve learned?” We had something like 70 campuses on the call that we held in collaboration with the NET+ Zoom program. We’ve done similar community calls on videoconferencing with services such as Microsoft Teams, among others.

Essentially, somebody had implemented a feature that Splunk had released two weeks prior and then they talked about it on a community call a week and a half later and answered many questions from their peers. I’ve heard from people who attended that call about how valuable that was and how it allowed them to figure out, “I really should be sending my Zoom logs into my Splunk implementation so
that I can distribute this out to my help desk so they can better help the people on my campus to troubleshoot what’s going on with their videoconferences.” It was such a fantastic and timely engagement and that just organically came together when somebody said they were using this new feature. It proved beneficial to so many campuses.

Many service providers were doing these types of webinars themselves, but when you hear something from your peers, it resonates differently than when you hear it from a service provider.

You also do service evaluation processes, where a group of people from different colleges and universities try out a new program and report back. Are there any evaluation projects going on right now?

Oh, sure. We’re working on a service evaluation where Rick Haugerud, chief information security officer for the University of Nebraska-Lincoln, is sponsoring the NET+ Palo Alto Networks service evaluation. And then we’ve got three additional services that are very close to completion, which are outside of the security portfolio. There’s a service evaluation for Google Workspace for Education that has a huge security advantage for campuses. Another is signNow/airSlate. And the third is CloudCheckr, a tool for managing infrastructure as a service for cost management and configuration settings.

Once we’ve completed the service evaluation phase, we’ll work on building communities around those services, similar to the other NET+ services, and ask the community what hot topics they are seeing on their campuses. Then we’ll try to find service providers that have solved those problems for one campus and could for others.

Sometimes, service providers will approach us. They’ll say they’ve had a number of campuses ask them to work with the NET+ program on a service evaluation so that they can better meet the needs of institutions across higher education.

There are probably plenty of schools that still aren’t participating in NET+. How do they get engaged?

I think the one thing that every institution needs to understand is that Internet2 and NET+ exist only because of the engagement of institutions. So, beyond simply contacting us to get involved with a NET+ service offering, I would encourage institutions to get involved in working groups and advisory boards. That is where needs are heard and program direction is voiced.

Campuses are very large places, obviously, and they are very distributed. And so, I may be talking to one person in one part of IT who may not share information about NET+ internally. We as an organization are trying to take the time necessary to help campuses understand how to engage with the entire campus community. It may be a discussion to figure out interest – zero trust or multifactor authentication or remote access – and then to have that discussion: “Here’s a community group or something you might be interested in,” or “We have a service advisory board that’s looking for new campuses to be involved.”

I’ve worked in higher education my whole career. It’s invigorating to work with peers across the community to solve problems that scale for most, if not every institution, and to solve challenges such as, how do you best deploy multifactor authentication? Or, how do you best monitor your authentication logs with a security event management or centralized logging service like Splunk, so that you can solve immediate challenges or problems for the campuses?

That’s really rewarding on a personal level. Helping your peers solve problems and collectively come up with solutions is a great thing, and we are here to support the research and higher education community to accomplish that.