NCSA CyberSecurity wins an NSF CICI award with PSC

Butler, Slagell and Withers of NCSA win an NSF award for \$499,206 along with co-PIs Ravi lyer of UIUC and Jim Marsteller at PSC. This work will bring a new security appliance and tools for sharing and using intelligence to the many Science DMZ communities supported by NSF.

Abstract

This research is expected to significantly enhance the security of campus and research networks. It addresses the emerging security challenge of open, unrestricted access to campus research networks, but beyond that it lays the foundation for an evolvable intelligence sharing network with the very real potential for national scale analysis of that intelligence. Further it will supply cyber security researchers with a rich real-world intelligence source upon which to test their theories, tools, and techniques. The research will produce a new kind of virtual security appliance that will significantly enhance the security posture of open science networks so that advanced high-performance network-based research can be carried out free of performance lags induced by more traditional security controls.

This research will integrate prior research results, expertise and security products from from both the National Science Foundation and the Department of Energy to advance the security infrastructure available for open science networks, aka Science DMZs. Further the effort will actively promote sharing of intelligence among science DMZ participants as well as with national academic computational resources and organizations that wish to participate. Beyond meeting the security needs of campus-based DMZs, the effort will lay the foundation for an intelligence sharing infrastructure that will provide a significant benefit to the cybersecurity research community, making possible the collection, annotation, and open distribution of a national scale security intelligence to help test and validate on-going security research.