

Center Specs

Center for Information Protection
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Overview of Research Activities

The Purpose of the Center for Information Protection is to research and validate the means and methods necessary to improve the overall assurance posture of this nation's cyber infrastructure. To this end, the CIP will partner providers and users of security solutions to protect data and information assets critical to their industry.

The Vision of the Center for Information Protection is to bring together, through research, the solution providers and the organizations that rely on the cyber infrastructure to identify and solve the complex security problems facing organizations. The center will be the communication mediator for the exchange of ideas and to identify common problems and concerns facing the cyber infrastructure.

The Goals of the Center for Information Protection are to (1) assist industry in its internal research and development by partnering industrial and faculty researchers; (2) improve the training and education of employees in Information Assurance; (3) provide a common repository for all CIP members that contains information assurance research results, relevant literature, and other resources that can be shared within the membership; (4) review, improve, and model specific protection architectures tailored to security problems present in critical infrastructure industries; and (5) provide a well trained pool of students.

We have identified several areas of common interest including Intrusion Detection, Network Traceback , Forensics, Regulatory Compliance, and Wireless Security. Sample projects include:

Integrating process modeling with IT audit control systems for regulatory compliance
Intrusion detection in wireless ad hoc networks
Secure and dependable information delivery in wireless ad hoc sensor networks
Specification-guided misuse and anomaly intrusion detection
Security analysis using visualization of network topology
Architectural Approaches to Embedded Program Flow Protection
Bootstrapping trust in Service-Oriented Architectures
Intrusion Detection & Response Systems
Identity Disclosure Protection: A Data Reconstruction Approach for Preserving Privacy in Data Mining

Other Areas of Interest for Collaboration

Infrastructure protection like power systems control