





IC Security Group

http://icsecurity.di.uniroma1.it

Group Coordinator: Prof. Luigi V. Mancini http://mastersecurity.uniroma1.it





Research Topics



- Critical infrastructure protection
- Homeland security
- Vulnerability assessment and exploit analysis
- Intrusion detection and prevention
- Secure Multicasting
- Ad hoc, wireless networks
- Protection from malicious code
- Network Mobility

- Web security
- Steganography and digital watermarking
- Public Key Infrastructures X.509,
- SPKI/SDSI
- Access Control, Trust Management
- Secure electronic commerce, micro-payments
- Privacy & anonymity







Projects



- **ASP**: Application Security Project
- **REMUS**: REference Monitor for Unix Systems
- **SOCKMI**: SOcket MIgration System
- **Spada@web**: Web-based management and representation of spatial and geographic data
- **WEB MINDS**: Wide-scalE Broadband Middleware for Network Distributed Services
- WHIPS: Windows Host Intrusion Prevention System
- **Aficionados**: European winner project of the Ricoh & SUN Java programming contest 2006

Events

• **PRISE** 2006 - 2007







ASP: Application Security Project 1/3



Objectives

- •Methodology enhancement to implement Security in Software Development Life Cycle
- Project works on Software Security
- Meetings and conferences on Software Security

Coordinators

- •prof. Luigi V Mancini, Dipartimento di Informatica, Universita' di Roma "La Sapienza", Italy (Full Professor and Director of "Master di Sicurezza Informatica")
- •dott. Roberto Battistoni, Italian Government Institution, Italy (Master's Project Work activities coordinator and Software Security Specialist)
- •dott. Roberto D'Addario, 3COM, Italy (Master's Project Work activities coordinator)







ASP: Application Security Project 2/3



Projects

- Research on Secure Software Development Life Cycle (SSDLC)
 - Guide Lines for SSDLC
 - Best Practices for Requirements
 - Best Practices for Design
 - Best Practices for Coding
- **Web Site vulnerability assessment** of a very important Italian Company (gray box) with OWASP Test Methodology (but sorry for company name...we have an NDA!)



• **SQL Hurricane**: Java library for detection and prevention of SQL Injection attacks (it is based on SQL grammar checking and SQL statement syntax tree validator)





ASP: Application Security Project 3/3



Golden Sponsor:



Collaborators: OWASP Italy Chapter



Membership: OWASP









Security Master





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