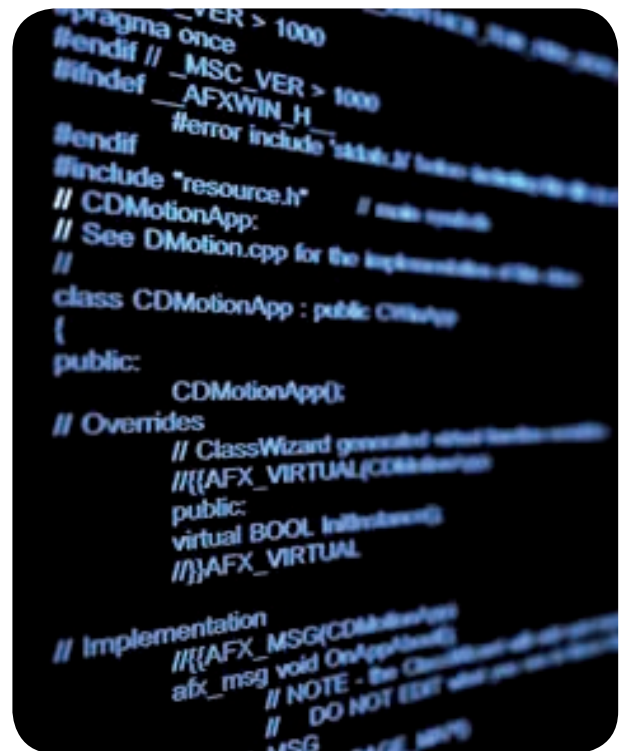


Securing Web Applications using Taint Analysis

Web applications often have security holes that allow attackers to obtain confidential information or gain unauthorized access. Most of these attacks are often the result of improper or no user input validation. To help discovering such vulnerabilities, taint analysis has been developed for popular web scripting languages. Considering user input as untrustworthy or tainted data, taint analysis tracks how these values are propagated inside the applications. If a tainted value reaches a security critical operation, the analysis raises an alarm to indicate a possible attack or, alternatively, that sanitization of data is needed. Tainted values can be sanitized (i.e. considered trustworthy) if they pass through some special functions that remove any pattern that could potentially produce a security breach.

This talk shows how to provide a taint analysis via a library. Providing security via a library does not require a special purpose interpreter or compiler, which makes this technology more likely to be adopted in practice. To the best of our knowledge, this is the first library to provide taint analysis with only about 300 lines of code (LOC).



Date: April 27, 11.30 – 12.30

Title: Securing Web Applications using Taint Analysis

Speaker: Alejandro Russo, PhD Post-doc,
Department of Computer Science and Engineering,
Chalmers University of Technology

Location: Security Lab, Lindholmspiren 5, Göteborg

Registration: E-mail anmalan@lindholmen.se no later than 22th of April. The seminar is open to all who have an interest in societal security and the use of information technology. The number of participants is limited. We offer a light lunch before the seminar.

Road description: Visit www.lindholmen.se

More information: Leif Axelsson, Lindholmen Science Park. E-mail: leif.axelsson@lindholmen.se
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Security Arena

Security Arena at Lindholmen Science Park carries out research, methods and technology development applied to all phases of crisis management. Besides the research the work aims to conceptual development and pilot projects in collaboration between the industry, academia and end-users. This is a joint work between Lindholmen Science Park, Swedish Civil Contingencies Agency, Volvo, Saab, Ericsson and Chalmers.

One of the goals is to spread knowledge about societal security and we are pleased to invite you to a series of free seminars about the research taking place at Security Arena.

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Welcome!

