Detecting known vulnerabilities from within design and development tools

SHARES
Share and Reuse of Security Models

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The SHIELD project

SHIELDs Main objective

The main objective of SHIELDs is to bridge the gap between security experts and software developers and thereby reduce the occurrence of security vulnerabilities.

Project data

Project type: Collaborative Project (STREP)
Duration: 30 months
Project start: January 1, 2008
Partners: LiU (Sweden), SINTEF (Norway), TXT (Italy), Fraunhofer (Germany), SEARCH-LAB (Hungary), ESI (Spain), Institut National de Télécommunications (France), Montimage (France)
The SHIELDSDS Approach

Security tool
- Testing rules
- Elimination strategies
- Inspection rules
- Inspection Indicators

Security expert
- Models
- Information
- Software developer

SHIELDSDS repository of security models
SHIELDs Models

- Vulnerability models
  - Vulnerability Cause Graphs (VCG)

- Threat models
  - Misuse Case
  - Attack Trees

- Security activity models
  - Security Activity Graphs (SAG)

- Inspection models
  - Security Goal Indicator Trees (SGIT)
    - Guided Security Inspection Checklists
  - Vulnerability Inspection Diagrams
    - Security inspection scenarios,
The SHIELD consortium

- Linköpings universitet (Sweden)
- Stiftelsen SINTEF (Norway)
- European Software Institute (Spain)
- Fraunhofer IESE (Germany)
- Institut National de Télécommunications (France)
- Montimage SARL (France)
- SEARCH-LAB Ltd (Hungary)
- TXT e-solutions SPA (Italy)