Index

A

Access Control Rules 126, 144, 151, 290, 296, 299, 305
Adobe Photoshop 251, 256, 274
AEGIS (Appropriate and Effective Guidance for Information Security) 44
Air Traffic Management (ATM) 57, 71
American National Standard for Information Technology Role-Based Access Control (ANSI RBAC) 177
answer set programming 63, 138-140, 145-146, 149, 160
anti-virus software 114
(ASP) paradigm 63
Attribute-based access control (ABAC) 291

B

Best Practices 26, 91-96, 98-101, 162, 164, 168-175, 296
Blocking mechanisms 105
Body Sensor Network (BSN) 70

C

capacitive sensors 245-247, 277, 283
Capture NX 262-263, 266
Certificate Authority (CA) 206
certificate revocation list (CRL) 211
ciphersuites 235, 237
CLASP (Comprehensive Lightweight Application Security Process) 161
Classical Negated Temporal Interval Rules 148
Client Security Service 185
code generation techniques 237
Code Inspection Worksheets 168
Composite Key Management (CKM) 209, 224
Computer Aided Integration of Requirements and Information Security (CAIRIS) 36

Computer Emergency Response Team (CERT) 161
Core RBAC 178-180, 182, 191-194, 197-200
credibility 24
Cross-Enterprise Document Sharing (XDS) 296-297
cryptography 19, 211, 213, 225, 237

database management systems (DBMS) 91
data warehouses (DW) 82
department of Homeland Security 162
discretionary access control (DAC) 177

eclipse modeling framework (EMF) 22
e-Health Smart Items 57
electrical health record (EHR) 70, 286
eenterprise java beans (EJB) 177-178, 182
epistemic logic programming 129, 135-136
european data protection directive (DPD) 287
executable slicing 113-115, 118, 120, 122
extensible markup language (XML) 138, 159, 178
eXtreme Programming (XP) 162-163

f

fact expression 128, 131-132
failure to acquire error 241
false accept rate (FAR) 241, 247
false identification rate (FIR) 241
false rejection rate (FRR) 241
fingerprint scanners 240-241, 247-248, 274, 281-283
foot-printing 50

G

GIMP 252, 263, 282
global workflow model 81
graphical user interfaces (GUI) 178
ground fact 128, 132
Health Insurance Portability and Accountability Act (HIPAA) 287

Identifying mechanisms 103
infrastructure networks 205

Java Authentication and Authorization Service (JAAS) 33, 194, 203
JavaSPI 225-230, 233-235, 237-238

Key Management Scheme (KMS) 205, 221
Kit Theft 50

Latent Semantic Indexing 115, 117, 123-124
local workflow model 81

malicious software classifier 122
Mobile Ad Hoc Networks (MANETs) 205
Mobile Certificate Authority (MOCA) 207
Model Driven Development (MDD) 77
Model Driven Security (MDS) 80, 84
Monitoring Action 73

National Vulnerability Database 161, 174

Object Constraint Language (OCL) 81
objective proposition 128
Object Management Group (OMG) 77
OpenSSL 225-226, 237
Optical transmissive sensors 245

Paint 252-253, 255-257, 259
Personal Health Record (PHR) 286
Petri Nets 74

platform independent models (PIM) 77-78
Platform Specific Models (PSM) 78
Pluggable Authentication Module (PAM) 101
Policy Decision Point (PDP) 286, 293
Policy Information Point (PIP) 286, 293
polymorphic virus 122
Powerchex 1, 3-5, 7-12, 15, 17
Pretty Good Privacy (PGP) 208
protected health information (PHI) 287
ProVerif 225, 227-234, 238

randomized projection technique 114
Rational Unified Process (RUP) 162
RESCUE (REquirements with SCenarios for a User-centered Environment) 38
Rogue applications 113-114, 116, 118-119, 122
Role-based Access Control 81, 126, 137-140, 144, 158-159, 177, 179, 201-204, 291, 306
role hierarchies 178, 181, 186-188, 193-194, 199, 306
role propagation 140, 144, 146-147, 152, 157
Root-Cause Database 168

SCADA (Supervisory Control and Data Acquisition) 46
SECTET 81-82, 85, 87
Secure by Design 1-3, 5, 14, 17
Secure Components Specification Model 9, 11, 13
Secure Key Deployment and Exchange Protocol (SKYE) 205
Secure Software Systems Engineering 1-3
Secure Tropos 1, 5-6, 9, 13, 62-64
Security Analysis Model (SAM) 7
Security Attack Model 11
Security Constraint 5-7
Security Goal Indicator Tree (SGIT) 26
Security in Service-oriented Architectures (SiSOA) 21
Self-Organised Key Management 208
Service-oriented software architectures (SOA) 20
SI* modeling framework 57, 59
single administering agent system 127
Situation Awareness 70, 72
Software Development Lifecycle (SDLC) 162, 168
Index

SpiWrapperSim 228-230, 234-235
SQUARE (System QUALity Requirements Engineering) 38
Stable Model Semantics 63, 139, 146, 159
static constraint relations 178
Stuxnet 36-37, 46, 50, 53
subjective proposition 128
System Security Requirements Model 8-9, 15
System State Goal 92, 98-99

T
Tag filtering 29
Temporal Interval Equality Rule 149
Temporal Interval Relationship Reasoning Rules 144
Testing mechanisms 103
Third Party Support 98
Threshold Certificate Authority Scheme 207

U
ultrasound systems 246
UML modeling 82, 228
Unified Modelling Language (UML). 17

V
Vehicular Ad hoc Networking (VANET) 210
Volere 38, 44, 54

W
Warning mechanisms 105
Web Services Security Specification 21, 34
WEBSOM 117
world view semantics 129, 131, 136
World Views Solver 135

X
XACML 285-286, 291, 293-296, 298-299, 307-308
XML access control 126, 137, 140, 151, 159
XPath 138-142, 145, 147, 151-152, 158-159