Index

A
abstract services 201, 204
abstract syntax tree (AST) 8
Accountability Service (AS) 326
ActionScript 3.0 (AS3) 1
ActionScript bytecode (ABC) 4
ActionScript Refactoring Tool (ART) 2
ActionScript Virtual Machine (AVM) 4
Adaptive Educational Hypermedia System (AEHS) 83
Address Resolution (ARP) 351
Aggregation-Select-Project-Join (ASPJ) 160
Algebraic State Transition Diagram (ASTD) 253
Allegrograph 66, 81
Another Tool for Language Recognition (ANTLR) 28
argumentation analyzer 65-66, 74
ontology-based reasoner 66, 72, 74, 77
rule-based reasoner 65-66, 73, 78, 80
semantic lexical-based reasoner 66
As Automatically As Possible (AAAP) 233
As Early As Possible (AEAP) 233
ATLAS Transformation Language (ATL) 268

B
background net 120-132
backing reliability 74-75
Back-Net Builder 122, 124
Back-Net Learner 122, 124
belief-desire-intention (BDI) 103
biodefense and emerging infectious diseases (BEI) 318, 320
Bond Energy 164
Broker-Referral Level (B-RefL) 341
Business Process Constraint Language (BPCL) 270
Business Process Execution Language (BPEL) 104, 177
Business Process Management (BPM) 104, 211
Business rules engines (BREs) 211
business-to-business (B2B) 211, 230

C
cache profiling tool (SLO) 41
Cascading Style Sheets (CSS) 24
certainty degree 70-71, 74-76
Change Protocol for Collaboration (CPC) 216
Clinical Document Architecture (CDA) 281
Common Sub-expression Elimination (CSE) 5, 14
Community Conflict 64
complex event processing (CEP) 180
Consumer-Collaboration Level (C-ColL) 339
Consumer-Competition Level (C-ComL) 338
Consumer/Provider-Loyalty Level (C/P-LoyL) 341
content-based routing (CBR) 181
contradicting statements 74-75
customer relationship management (CRM) 303

data as a service (DaaS) 193
dead code elimination (DCE) 5
define navigation model 140
degree of argument 76
degree of expertise 74-75
delay tolerant network (DNT) 352
demilitarized zone (DMZ) 366
description logics (DL) 73
discrete cosine transformation (DCT) 278
document image exchange platform (DIEP) 294
document object model (DOM) 24
dynamical IP addresses acquisition (DHCP) 351
dynamic collaborations 228-231, 239, 243, 249-250
dynamic memory (DRAM) 4
dynamic penalty order (DPO) 58
## Index

### E
- Emerging Infectious Diseases (EIDs) 318
- Enterprise Privacy Authorization Language (EPAL) 282
- Enterprise Resource Planning (ERP) 177
- enterprise service bus (ESB) 177, 179, 211, 257
- error ratio 163, 170-173
- event-condition-action (ECA) 108, 180, 189
- event-driven architectures (EDA) 177
- Event-driven Processes (EPC) 189
- Event-Flow Registry 180-182
- Event Registry 180-182
- eXtended Markup Language Stylesheet Language (XSL) 288
- Extensible Markup Language (XML) 84, 212
- Extract, Transform and Load (ETL) 177

### F
- Felder-Silverman Learning Styles Model (FSLSM) 88
- Form Transformation Tool (FTT) 23-24
- Function Points Analysis (FPA) 194

### G
- Global Positioning System (GPS) 319
- graphical IBIS system (gIBIS) 78
- Graphical User Interface (GUI) 129, 366

### H
- Health Information Systems (HIS) 278
- Health Insurance Portability and Accountability Act of 1996 (HIPAA) 276
- Hypertext Markup Language (HTML) 288

### I
- IMS Learner Information Package Specification (IMS LIP) 87
- Information Inconsistency 64
- Infrastructure as a Service (IaaS) 193
- Input, Output, Precondition, and Effect (IOPE) 201
- Issue Formulation 69

### J
- Java 2 Enterprise Edition (J2EE) 283
- Java 2 platform, micro edition (J2ME) 328
- JavaServer Pages (JSP) 25
- Just-in-Time (JIT) 4, 22

### K
- knowledge-based systems (KBS) 130
- Knowledge Base (KB) 136
- Knowledge Description Language (KDL) 130
- Knowware System (KWS) 130, 132

### L
- Learning Objects (LOs) 83-84, 98
- Lightweight Directory Access Protocol (LDAP) 375
- lines of code (LOC) 39
- Local Area Network (LAN) 371
- lossless compression 162, 164, 168-169
- Lossless strategy 162-163
- lossy compression 162-164, 166-168, 172-173
- lossy strategy 162-163
- Low Level Virtual Machine (LLVM) 6

### M
- Machine Code (MD) 5
- Macromedia Intermediate Representation (MIR) 4
- Manufacturing Execution System (MES) 178
- Manufacturing Service Bus (MSB) 177
- Mashup Service Query Language (MSQL) 202
- Matrix-Based Provenance (MBP) 159
- maximal error-free blocks 164-169
- Maximum splitting strategy 164
- Media Access Control (MAC) 351
- Mobile Gene Management System (MGMS) 328
- Mobile Relay Network (MRN) 348-349, 353
- Mobile Relay Services (MRS) 353
- Multi-Agents (MA) 231
- multimedia message services (MMS) 306
- multivariate analyses of variance (MANOVA) 309

### O
- Object Management Group (OMG) 105

### P
- Personalized Filter 128-131
- Picture Archiving and Communication System (PACS) 278
- policy administration point (PAP) 257
- policy-based network management (PBNM) 231
- policy decision point (PDP) 253
- policy enforcement manager (PEM) 253
- policy enforcement point (PEP) 257
- Portsmouth Real-Time Travel Information System (PORTAL) 350
Position Proposal 70, 72
preference queries and results ranking (PQRR) 58
Privacy Policy Compliance System (PPCS) 282
Privacy Preferences Project (P3P) 281, 286
Production Planning Service Bus (PPSB) 186
product lifecycle management (PLM) 177, 183
Protected Health Information (PHI) 291, 293
Provenance tracking 159, 161, 163, 171, 174
Provider/Broker-Referral Level (PB-RefL) 342
Provider-Competition Level (P-ComL) 339
Public Key Infrastructure (PKI) 278

Q
Quality of Services (QoS) 200-201
Query Information Service (QIS) 355

R
Radio Frequency Identification (RFID) 295, 365
Radiology Information System (RIS) 278
refactoring system (FTT) 41
Resource-as-a-Service (RaaS) 236
Resource Description Framework (RDF) 80, 103
Rich Internet Application (RIA) 1, 23
Role Based Access Control (RBAC) 275
Rule Interchange Format (RIF) 102-103, 105

S
SAM Schema (SAMS) 65
Search Engine API 129
Search Engine Optimization (SEO) 121
Secured Socket Layer (SSL) 282
Semantic Argumentation Model (SAM) 65
semantic web services (SWS) 136
separation of duty algebra (SoDA) 270
separation of duty (SoD) 253
service-component architectures (SCA) 188
Service Level Agreements (SLAs) 229-230, 324
Service Optimization 201, 204
Service Oriented Architecture (SOA) 193, 211, 319
service-oriented computing (SOC) 180
service oriented enterprises (SOE) 210
Severe Acute Respiratory Syndrome (SARS) 318
Sharable Content Object Reference Model (SCORM) 84, 99
Sharable Content Objects (SCOs) 86
Simple Knowledge Organization System (SKOS) 68
Simple Object Access Protocol (SOAP) 278
small-and-medium enterprises (SME) 367
Smart Mobile Restaurant Guide (SMRG) 342
social network site (SNS) 140
Software as a Service (SaaS) 193
Static Selectivity Order 58
storage ratio 163, 170-173
Supervisory Control and Data Acquisition (SCADA) 178

T
Text Document Database 124

U
Unified Modeling Language (UML) 282
Universal Description, Discovery and Integration (UDDI) 277, 298
Unstructured Information 64
user interface (UI) 137, 197, 322

V
Vehicular ad hoc Network (VANET) 348-349
Vehicular Network for Ubiquitous Travel Query (VUTQ) 349
Vehicular Sensor Network (VSN) 349, 353
Virtual Critical Care Unit (VicCU®) 231
Virtual Organization (VO) 229
Virtual Terminal (VT) 232, 241
Visualisation Ontology model (VOM) 148

W
WAP Markup Language (WML) 288
Web Ontology Language (OWL) 87, 103, 281
Web Service Collaborative Context Definition Language (WS-CCDL) 228, 230, 245
web service description language (WSDL) 321
Web Service Level Agreement (WSLA) 230, 249
Web Service Management System (WSMS) 197, 200, 324
Web services (WS) 253
Windows Communication Foundation (WCF) 185
WordNet 72-73, 75, 82
World Wide Web Consortium (W3C) 105, 135, 281, 296-297

X
XML contextual preference (XCP) 44, 47-48
XML Declarative Description (XDD) 87
XML preference query 52
XML structural preference graph 52