

System and Network Security Acronyms and Abbreviations

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Karen Scarfone Victoria Thompson

COMPUTER SECURITY

Computer Security Division Information Technology Laboratory National Institute of Standards and Technology Gaithersburg, MD 20899-8930

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Note to Reviewers

Reviewers are encouraged to submit additional acronyms and abbreviations related to system and network security, particularly for emerging technologies, for consideration as additions to this report. All suggestions and corrections should be sent to securityacronyms@nist.gov.

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1. Introduction

This report contains a list of selected acronyms and abbreviations for system and network security terms with their generally accepted or preferred definitions. It is intended as a resource for federal agencies and other users of system and network security publications.

The capitalization, spelling, and definitions of acronyms and abbreviations frequently vary among publications. It is easy to understand why this happens. While some acronyms and abbreviations (e.g., WWW) have one universally recognized and understood definition within the domain of system and network security, others (e.g., IA, MAC) have multiple valid definitions depending upon the context in which they are used. Some acronyms bear little resemblance to their definitions, such as Modes of Operation Validation System for the Triple DES Algorithm (TMOVS). Others use unexpected capitalization or spelling (e.g., Electronic Business using eXtensible Markup Language [ebXML] and Organisation for Economic Co-operation and Development [OECD]). As a result, acronyms, abbreviations, and their definitions may be inaccurately or inconsistently defined by authors, perpetuating errors and confusing or misleading readers.

This report is meant to help reduce these errors and confusion by providing the generally accepted or preferred definitions of a list of frequently used acronyms and abbreviations. The list does not include *all* system and network security terms, nor is it a compendium of every acronym and abbreviation found in system and network security documents published by NIST. Readers should refer to each document's list of acronyms and abbreviations (typically found in an appendix) for definitions applicable to that particular document.

The following conventions have been used in the preparation of the list of acronyms and abbreviations in this report.

- Abbreviations and acronyms generally appear in all capital letters, although there are occasional exceptions—for example, meter (m) and decibels referenced to one milliwatt (dBm).
- Technical terms are not capitalized unless they are proper nouns. Names of people, places, and groups, and the titles of protocols, standards, and algorithms are considered proper nouns. For example, certification and accreditation (C&A) is not capitalized, but Advanced Encryption Standard (AES) is capitalized.
- Collective nouns are not capitalized (e.g., wide area network [WAN]).
- When two or more definitions of the same acronym or abbreviation are given, the acronym or abbreviation is italicized and repeated for each definition. Definitions are listed alphabetically.

2. Acronym and Abbreviation List

This section consists of a list of selected system and network security acronyms and abbreviations, along with their generally accepted definitions. When there are multiple definitions for a single term, the acronym or abbreviation is italicized and each definition is listed separately.

Numeric

1xRTT one times radio transmission technology

3DES Triple Data Encryption Standard

3G 3rd Generation

3GPP 3rd Generation Partnership Project3GPP2 3rd Generation Partnership Project 2

Α

A address resource record type
AA ABAC attribute authority

AAA authentication, authorization, and accounting **AAAK** authentication, authorization, and accounting key

AAD additional authenticated data

AAR after action report
AAS adaptive antenna system
ABAC attribute-based access control

ACE access control entry
ACL access control list

ACM Association for Computing Machinery

ACO authenticated cipher offset

AD Active Directory
AD authenticated data
ADS alternate data stream

AES Advanced Encryption Standard

AES-CBC Advanced Encryption Standard-Cipher Block Chaining

AES-CTR Advanced Encryption Standard-Counter Mode

AFH adaptive frequency hopping
A-GPS assisted global positioning system

AH Authentication Header

AIDC automatic identification and data capture

AIM Association for Automatic Identification and Mobility

AIT automatic identification technology
AJAX Asynchronous JavaScript and XML

AK authorization key

AKID authorization key identifier

AKM authentication and key management

ALG application layer gateway

ANSI American National Standards Institute

AP access point

API application programming interface

APWG Anti-Phishing Working Group

ARIN American Registry for Internet Numbers

ARP Address Resolution Protocol

ARPA Advanced Research Projects Agency

AS authentication server
AS authentication service
AS autonomous system
ASC Anti-Spyware Coalition

ASC X9 Accredited Standards Committee X9

ASCII American Standard Code for Information Interchange

ASLR address space layout randomization

ASN autonomous system number ASN.1 Abstract Syntax Notation 1

ASP active server pages

ATA Advanced Technology Attachment

ATIM Announcement Traffic Indication Message

ATM asynchronous transfer mode automated teller machine

AV antivirus

AVIEN Anti-Virus Information Exchange Network

AVP attribute-value pair

В

B2Bbusiness-to-businessBCPbest current practiceBCPbusiness continuity planBGPBorder Gateway ProtocolBGP-4Border Gateway Protocol 4

BIA Bump-in-the-API business impact analysis

BioAPI Biometric Application Programming Interface

BIOS basic input/output system
BITS Bump-in-the-Stack

BPMLBusiness Process Modeling Language**BPSS**Business Process Specification Schema**BRP**business recovery (resumption) plan

BS base station

BSC base station controllerBSI British Standards Institution

BSIA British Security Industry Association

BSP best security practice **BSS** basic service set

BSSID basic service set identifier
BTNS better-than-nothing-security
BTS base transceiver station

BU binding update

BUA binding update acknowledgement

C

C&A certification and accreditation

CA certificate authority
CA certification agent
CA certification authority
CAC common access card

CAIDA Cooperative Association for Internet Data Analysis

CAPTCHA Completely Automated Public Turing Test to Tell Computers and Humans Apart

CARO Computer Antivirus Research Organization
CAVP Cryptographic Algorithm Validation Program

CBC Cipher Block Chaining

CBC-MAC Cipher Block Chaining Message Authentication Code

CBEFF Common Biometric Exchange File Format

CC Common Criteria

CCETM Common Configuration Enumeration

CCEVS Common Criteria Evaluation and Validation Scheme CCIPS Computer Crime and Intellectual Property Section

CCK complementary code keying CCM Counter Mode with CBC-MAC

CCMP Counter Mode with CBC-MAC Protocol
CCRA Common Criteria Recognition Arrangement
CCSS Common Configuration Scoring System

ccTLD country code top-level domain

CD checking disabled CD compact disc

CDFS compact disc file system
CDMA code division multiple access
CD-R compact disc-recordable

CD-ROM compact disc-read only memory

CD-RW compact disc-rewritable CEO chief executive officer

CERIAS Center for Education and Research in Information Assurance and Security

CERT®/CC computer emergency response team
CERT®/CC CERT® Coordination Center

CF CompactFlash®

CFAA Computer Fraud and Abuse Act

CFB Cipher Feedback

CFI computer and financial investigations

CFR Code of Federal Regulations
CFTT computer forensics tool testing
CGA cryptographically generated addresses

CGI Common Gateway Interface

CHAP Challenge-Handshake Authentication Protocol

CHUID cardholder unique identifier
CIDR Classless Inter-Domain Routing
CIFS Common Internet File System
CIO chief information officer

CIP critical infrastructure protection

CIPC Critical Infrastructure Protection Committee

CIPSEA Confidential Information Protection and Statistical Efficiency Act

CIRC computer incident response capability
CIRC computer incident response center
CIRDB CERIAS Incident Response Database
CIRT computer incident response team
CIS Center for Internet Security
CISO chief information security officer

CLF common log format
CLI command line interface
CLR common language runtime

cm centimeter

CMA Certificate Management Authority

CMAC Cipher-based Method Authentication Code

CME Common Malware Enumeration

CMOS complementary metal oxide semiconductor CMS Centers for Medicare and Medicaid Services

CMS Cryptographic Message Syntax
CMSS Common Misuse Scoring System

CMVP Cryptographic Module Validation Program

CN common name CN correspondent node

CNSS Committee on National Security Systems

CNSSI Committee on National Security Systems Instruction

CoAcare-of addresscodeccoder/decoderCOIconflict of interest

COM Component Object Model **COOP** continuity of operations

COPPA Children's Online Privacy Protection Act
CORBA® Common Object Request Broker Architecture

COTS commercial off-the-shelf

CP certificate policyCP contingency plan

CPETM Common Platform Enumeration **CPI** compression parameter index

CPNI Centre for the Protection of National Infrastructure

CPS certification practice statement

CPU central processing unit

CRAM challenge-response authentication mechanism

CRC cyclic redundancy check
CRL certificate revocation list

CS client/server

CSIA Cyber Security Industries Alliance

CSIRC computer security incident response capability **CSIRT** computer security incident response team

CSO chief security officer
CSO computer security object
CSP Credentials Service Provider
CSR certificate signing request

CSRC Computer Security Resource Center

CSRDA Cyber Security Research and Development Act of 2002

CSS cascading style sheet
CSV comma-separated values
CTO chief technology officer
CTR counter mode encryption

CVE Common Vulnerabilities and Exposures
CVSS Common Vulnerability Scoring System
CWE Common Weakness Enumeration

D

DA destination address

DAA designated accrediting authority
 DAA designated approving authority
 DAC discretionary access control
 DAD duplicate address detection
 DAML DARPA Agent Markup Language
 D-AMPS Digital Advanced Mobile Phone Service

DAO Data Access Object

DARPA Defense Advanced Research Projects Agency

dBm decibels referenced to one milliwatt **DBMS** database management system

DC domain controller

DCE Distributed Computing EnvironmentDCOM Distributed Component Object Model

DCS distributed control system

DDMS Department of Defense Metadata Specification

DDoS distributed denial of service
DEA Data Encryption Algorithm
DEP Data Execution Prevention
DES Data Encryption Standard
DFS Distributed File System
dynamic frequency selection

DH Diffie-Hellman

DHAAD Dynamic Home Agent Address Discovery **DHCP** Dynamic Host Configuration Protocol

DHCPv6 Dynamic Host Configuration Protocol for Internet Protocol v6

DHS
 DIMS
 Digital Identity Management Service
 DISA
 U.S. Defense Information Systems Agency

DLL dynamic link library
DMA direct memory access
DMZ demilitarized zone
DN distinguished name
DN domain name

DNP Distributed Network Protocol

DNS domain name system

DNSBL Domain Name System Blacklist

DNSSEC Domain Name System Security Extensions

DOC U.S. Department of Commerce U.S. Department of Defense

DOE U.S. Department of Energy domain of interpretation DOJ U.S. Department of Justice DOM Document Object Model

DoS denial of service

DPA differential power analysis
DRA data recovery agent
DRM digital rights management
DRP disaster recovery plan
DS Delegation Signer
DS distribution system

DS Field differentiated services field
DSA Digital Signature Algorithm
DSL digital subscriber line

DSML Directory Services Markup Language

DSNdelivery status notification**DSOD**dynamic separation of duty**DSS**Digital Signature Standard

DSTM Dual Stack Transition Mechanism **DTC** Distributed Transaction Coordinator

DTD Document Type Definition
DTR derived test requirement
DUID DHCP unique identifier

DVD digital video disc

DVD-R digital video disc - recordable

DVD-ROM digital video disc - read only memory

DVD-RW digital video disc - rewritable

Ε

EAL evaluation assurance level

EAP Extensible Authentication Protocol

EAP-FAST Extensible Authentication Protocol-Flexible Authentication via Secure Tunneling

EAPOL Extensible Authentication Protocol Over LAN

EAPOL-KCK Extensible Authentication Protocol Over LAN Key Confirmation Key EAPOL-KEK Extensible Authentication Protocol Over LAN Key Encryption Key Extensible Authentication Protocol-Transport Layer Security

EAP-TTLS Extensible Authentication Protocol-Tunneled Transport Layer Security

EBGP Exterior Border Gateway Protocol

ebXML Electronic Business using eXtensible Markup Language

EC2NElliptic Curve over G[2N]ECBElectronic Codebook (mode)ECCElliptic Curve CryptographyECDHElliptic Curve Diffie-Hellman

ECDSA Elliptic Curve Digital Signature Algorithm

ECM Enterprise Configuration Manager ECP Encryption Control Protocol

ECPA Electronic Communications Privacy Act
EDGE Enhanced Data rates for GSM Evolution

EDI electronic data interchange

EDR enhanced data rate

EEPROM electronically erasable programmable read-only memory

EFI Extensible Firmware Interface
EFS Encrypting File System
EGP Exterior Gateway Protocol

EH extension header

EICAR European Institute for Computer Antivirus Research
EIGRP Enhanced Interior Gateway Routing Protocol

EIK EAP Integrity Key email electronic mail

EMSenergy management systemEMSEnhanced Messaging ServiceEMSKExtended Master Session Key

EPAL Enterprise Privacy Authorization Language

EPC electronic product code

EPCIS Electronic Product Code Information Services

EPHI electronic protected health information

EPS events per second

ERP enterprise resource planning

ESMS enterprise security management system **ESMTP** Extended Simple Mail Transfer Protocol

ESN electronic serial number

ESP Encapsulating Security Payload

ESS Extended Service Set

ETSI European Telecommunications Standards Institute

EU European Union

EUI-64 Extended Unique Identifier 64 bit

EV-DO Evolution-Data Optimized
ext2fs Second Extended Filesystem
ext3fs Third Extended Filesystem

F

FAQ frequently asked questions **FAR** Federal Acquisition Regulation

FASC-N Federal Agency Smart Credential Number

FASP Federal Agency Security Practices

FAT file allocation table

FBCA Federal Bridge Certification Authority **FBI** Federal Bureau of Investigation

FBI CJIS Federal Bureau of Investigation Criminal Justice Information Services Division

FCC Federal Communications Commission

FCC ID Federal Communications Commission Identification number

FCL final checklist list

FCPF Federal PKI Common Policy Framework

FCRA Fair Credit Reporting Act FCS frame check sequence

FDA Food and Drug Administration FDCC Federal Desktop Core Configuration

FDCE Federated Development and Certification Environment

FDE full disk encryption

FDIC Federal Deposit Insurance Corporation **FEA** Federal Enterprise Architecture

FEK file encryption key

FFMIA Federal Financial Management Improvement Act

FHSS frequency hopping spread spectrum forwarding information base

FICC Federal Identity Credentialing Committee
FIPS Federal Information Processing Standards
FIRSTTM Forum of Incident Response and Security Teams
FISCAM Federal Information System Controls Audit Manual
FISMA Federal Information Security Management Act of 2002
FISSEA Federal Information Systems Security Educators' Association

FLETC Federal Law Enforcement Training Center

FMR false match rate

FMS Fluhrer-Mantin-Shamir FNMR false non match rate

FOIA Freedom of Information Act
FPC Federal Preparedness Circular
FPKI Federal Public Key Infrastructure

FPKIA Federal Public Key Infrastructure Architecture **FPKIPA** Federal Public Key Infrastructure Policy Authority

FQDN fully qualified domain name

FRR false rejection rate
FSO field security office

FTC Federal Trade Commission
FTCA Federal Trade Commission Act

FTP File Transfer Protocol FUS Fast User Switching

FY fiscal year

G

GAO U.S. Government Accountability Office

GB gigabyte

GFAC generalized framework for access control

GFIRST Government Forum of Incident Response and Security Teams

GHz gigahertz

GIG Global Information Grid

GINA graphical identification and authentication

GKEK
Group Key Encryption Key
GLB or GLBA
Gramm-Leach-Bliley Act
Group Master Key
GNU Privacy Guard

GnuPG GNU Privacy Guard
GOTS government off-the-shelf
GPL general public license

GPMC Group Policy Management Console

GPO Group Policy Object

GPRS general packet radio service GPS global positioning system

GR graceful restart

GRE Generic Routing Encapsulation
GRS General Records Schedule
GS1 Global Standards One

GSA U.S. General Services Administration
GSM Global System for Mobile Communications

GTC Generic Token Card GTEK group traffic encryption key

GTK group temporal key gTLD generic top-level domain

GTSM Generalized TTL Security Mechanism

GUI graphical user interface

Н

HA high availabilityHA home agent

HAG high assurance guard HCI host controller interface

HERFhazards of electromagnetic radiation to fuelHEROhazards of electromagnetic radiation to ordnanceHERPhazards of electromagnetic radiation to personnel

HF high frequency

HFS Hierarchical File System

HHS U.S. Department of Health and Human Services

HINFO host information
HIP Host Identity Protocol

HIPAA Health Insurance Portability and Accountability Act

HIPERLAN high-performance radio local area network

HKLM HKEY_Local_Machine **HL7** Health Level Seven

HMAC keyed-hash message authentication code

HMI human-machine interface **HPA** host protected area

HPFS High-Performance File System

HR human resources

HSARPA Homeland Security Advanced Research Projects Agency

HSPD Homeland Security Presidential Directive

HTCIA High Technology Crime Investigation Association

HTCPHyper Text Caching ProtocolHTMLHypertext Markup LanguageHTTPHypertext Transfer Protocol

HTTPS Secure Hypertext Transfer Protocol

Hz hertz

I

I&A identification and authentication

I/O input/output

Institute for Information Infrastructure Protection

IA information assurance
IAB Internet Architecture Board

IACIS® International Association of Computer Investigative Specialists

IAIP Information Analysis and Infrastructure Protection

IANA Internet Assigned Numbers Authority

IAO information assurance officer

IATF Information Assurance Technical Framework

IBC iterated block cipherIBE identity-based encryption

iBGP Internal Border Gateway Protocol
 IBMJSSE IBM Java Secure Socket Extension
 IBSS independent basic service set
 IC3 Internet Crime Complaint Center

ICAMP Incident Cost Analysis and Modeling Project

ICANN Internet Corporation for Assigned Names and Numbers

ICCID Integrated Circuit Card Identification

ICCP Inter-control Center Communications Protocol

ICF Internet Connection Firewall ICMP Internet Control Message Protocol

ICP Internet Cache Protocol
ICS industrial control system
ICS Internet Connection Sharing

ICSA International Computer Security Association

ICV integrity check value

ID identification

IDARTTM Information Design Assurance Red Team IDE integrated development environment

IDE Integrated Drive Electronics

IDEA International Data Encryption Algorithm
 IDEN Integrated Digital Enhanced Network
 ID-FF Identity Federation Framework

IDMEF Intrusion Detection Message Exchange Format

IDMS identity management system

IDPS intrusion detection and prevention system

IDS intrusion detection system

ID-SIS Identity Service Interface Specifications
ID-WSF Identity Web Services Framework

ID-WSF DST Identity Web Services Framework Data Services Template

IE Internet Explorer

IEC International Electrotechnical Commission

IEDintelligent electronic deviceIEEE-SAIEEE Standards AssociationIESGInternet Security Steering GroupIETFInternet Engineering Task Force

IETF BCP Internet Engineering Task Force Best Current Practice
IETF RFC Internet Engineering Task Force Request for Comments

IGMP Internet Group Management Protocol

IGP interior gateway protocol interface identifier

IIF information in identifiable form

IIHI individually identifiable health information

IIS Internet Information Services
IKE Internet Key Exchange
IM instant messaging

IMAPInternet Message Access ProtocolIMEIInternational Mobile Equipment IdentityIMSIInternational Mobile Subscriber Identity

INCITS InterNational Committee for Information Technology Standards

IP Internet Protocol

IPA initial privacy assessment

IPComp Internet Protocol Payload Compression Protocol

Internet Packet Exchange

IPng Internet Protocol Next Generation
IPS intrusion prevention system
IPsec Internet Protocol Security
IPv4 Internet Protocol version 4
IPv6 Internet Protocol version 6

IR infrared

IPX

IR interagency report IRC Internet Relay Chat

IrDA®Infrared Data Association®IRQinterrupt request lineIRSInternal Revenue ServiceIRTFInternet Research Task Force

IS information system

ISA interconnection security agreement
ISA International Society of Automation
ISAC information sharing and analysis center

ISAKMP Internet Security Association and Key Management Protocol

ISAP Information Security Automation Program

ISAPI Internet Server Application Programming Interface ISATAP Intra-Site Automatic Tunnel Addressing Protocol

ISF Information Security Forum

ISID Industrial Security Incident Database

IS-IS Intermediate System-to-Intermediate System

ISM industrial, scientific, and medical ISM information security marking

ISMS information security management system
ISO International Organization for Standardization

ISP Internet service provider

ISSEA International Systems Security Engineering Association

ISSO information systems security officer

ISSPM information systems security program manager

IT information technology

ITAA Information Technology Association of America

ITF Interrogator Talks First

ITL Information Technology Laboratory

ITU International Telecommunications Union

ITU-T International Telecommunications Union-Telecommunication Standardization

Sector

IUT implementation under testIV initialization vector

J

Java EE Java Platform, Enterprise Edition
JAXR Java API for XML Registries

JFFS2 Journaling Flash File System, version 2

JIT just-in-time

JPEG Joint Photographic Experts Group
JRE Java Runtime Environment
JSM Java Security Manager
JSP Java Server Pages

JSSE Java Secure Socket Extension JTAG Joint Test Action Group

JTC1 Joint Technical Committee 1 (International Organization for Standardization

[ISO]/International Electrotechnical Commission [IEC])

JVM Java Virtual Machine

Κ

KB kilobyte

Kbpskilobit per secondKDCkey distribution centerKEKkey encryption keyKGkey generator

KGD key generation and distribution

kHz kilohertz

KINK Kerberized Internet Negotiation of Keys

KSG key stream generator **KSK** key signing key

L

L2CAP Logical Link Control and Adaptation Protocol

L2F Layer 2 Forwarding

L2TP Layer 2 Tunneling Protocol L2VPN Layer 2 Virtual Private Network L3VPN Layer 3 Virtual Private Network

LACNIC Latin American and Caribbean IP Addresses Registry

LAN local area network
LCD liquid crystal display
LDA local delivery agent

LDAP Lightweight Directory Access Protocol

LED light emitting diode

LF low frequency

LFSR linear feedback shift register
LIR local Internet registry

LIR local Internet registry

LM LAN Manager

LMP Link Manager Protocol LOC location (DNS record)

LOS line-of-sight

LRA Local Registration Authority

LUA limited user account

M

m meter

MACmandatory access controlMACmedia access control (layer)MACMedium Access ControlMACmessage authentication code

MAF multi-mode authentication framework

MAN metropolitan area network
MAPS Mail Abuse Prevention System

MB megabyte

Mbpsmegabits per secondMBRmaster boot record

MBSA Microsoft Baseline Security Analyzer

MD message digest
ME mobile equipment
MED multi-exit discriminator
MEP message exchange pattern
MES manufacturing execution system

MHz megahertz

MIBmanagement information baseMICmandatory integrity controlMICmessage integrity checkMICmessage integrity codeMIKEYMultimedia Internet KEYing

MIME Multipurpose Internet Mail Extensions

MIMO multiple-input, multiple-output
MIN mobile identification number

Mini SDmini secure digitalMIPMobile Internet ProtocolMitMman-in-the-middle (attack)MLDMulticast Listener DiscoveryMMCMicrosoft Management Console

MMC MultiMediaCard

MMCmobileMultiMediaCard MobileMMSMultimedia Messaging Service

MN mobile node MO magneto-optical

MOA memorandum of agreement

MOBIKE IKEv2 Mobility and Multihoming Protocol

MODP modular exponential

MOSS MIME Object Security Services MOU memorandum of understanding

MOVS Modes of Operation Validation System

MPA Mobile Prefix Advertisement
MPLS multiprotocol label switching
MPS Mobile Prefix Solicitation
MQV Menezes-Qu-Vanstone
MRI magnetic resonance imaging

MS Microsoft

MS mobile subscriber
MSC mobile switching center

MS-CHAP Microsoft Challenge Handshake Authentication Protocol

MS-DOS Microsoft Disk Operating System
MSDP Multicast Source Discovery Protocol

MSEC multicast security

MSEL Master Scenario Events List
MSIL Microsoft Intermediate Language

MSISDN Mobile Subscriber Integrated Services Digital Network

MSK master session key

MSKB Microsoft Knowledge Base

MSSP managed security services provider
MSWG Metadata Standards Working Group

MTAmail transfer agentMTMMobile Trusted ModuleMTUmaster telemetry unitMTUmaster terminal unit

MTU maximum transmission unit

MUA mail user agent mW milliwatt MX mail exchanger

Ν

NA Neighbor Advertisement NAC network access control

NACI National Agency Check and Inquiries

NAP Network Access Protection

NARA National Archives and Records Administration

NAS network access server
NAT network address translation

NAT-PT network address translation—protocol translation

NAT-T network address translation traversal

NBA network behavior analysis

NBAD network behavior anomaly detection
NCES NetCentric Enterprise Services
NCP National Checklist Program
NCSD National Cyber Security Division

NCSI NIST National Center for Standards and Certification Information

ND Neighbor Discovery

NDAC nondiscretionary access control
NetBEUI NetBIOS Extended User Interface
NetBIOS Network Basic Input/Output System

NetBT NetBIOS over TCP/IP

NFAT network forensic analysis tool
NFC near field communication
NFS network file system
NFS Network File Sharing

NH next header

NIAC National Infrastructure Advisory Council
NIAP National Information Assurance Partnership

NIC network interface card

NICC National Infrastructure Coordinating Center

NIJ National Institute of Justice

NIPC National Infrastructure Protection Center

NIS Network Information System

NISAC National Infrastructure Simulation and Analysis Center NISCC National Infrastructure Security Co-ordination Centre NIST National Institute of Standards and Technology

NISTIR National Institute of Standards and Technology Interagency Report

NLOS non-line-of-sight

NPIVP NIST Personal Identity Verification Program

NPPI nonpublic personal information

NS name server

NSNeighbor SolicitationNSANational Security Agency

NSAPI Netscape Server Application Programming Interface

NSEC Next Secure

NSI national security information

NSRL National Software Reference Library

NSS Network Security Services
NSTB National SCADA Test Bed

NSTISSC National Security Telecommunications and Information Systems Security

Committee

NSTISSI National Security Telecommunications and Information Systems Security

Instruction

NTFS New Technology File System

NTLM NT LAN Manager
NTP Network Time Protocol

NTTAA National Technology Transfer and Advancement Act of 1995

NUD Neighbor Unreachability DetectionNVD National Vulnerability Database

NVLAP National Voluntary Laboratory Accreditation Program

NW3C National White Collar Crime Center

NX no execute

0

OASISTM Organization for the Advancement of Structured Information Standards

OCC Office of the Comptroller of the Currency
OCIO Office of the Chief Information Officer
OCSP Online Certificate Status Protocol
ODBC Open Database Connectivity

OECD Organisation for Economic Co-operation and Development

OEM original equipment manufacturer

OFB output feedback (mode)

OFDM orthogonal frequency-division multiplexing

OGSATM Open Grid Services Architecture

OHA Open Handset Alliance
OIG Office of Inspector General
OLE object linking and embedding
OMB Office of Management and Budget

ONS Object Naming Service

OOB out-of-band

OPC OLE for Process Control

OpenPGP An Open Specification for Pretty Good Privacy

OPM U.S. Office of Personnel Management

ORB open relay blacklist
OS operating system

OSHA Occupational Safety and Health Administration

OSI Open Systems Interconnection
OSPF Open Shortest Path First
OSS open source software

OSSTMM Open Source Security Testing Methodology Manual

OSVDB Open Source Vulnerability Database

OTP one-time password OU organizational unit

OVAL Open Vulnerability and Assessment Language
OWASP Open Web Application Security Project
OWL-S Web Ontology Language for Services

P

P2P peer-to-peer

PACPrivilege Attribute CertificatePACProtected Access CredentialPADpeer authorization databasePAMpluggable authentication module

PAN personal area network

PAOS Reverse HTTP Binding for SOAP **PAP** Password Authentication Protocol

PAP policy access point

PAS publicly available specification
PBA pre-boot authentication
PBAC policy-based access control

PBCC Packet Binary Convolutional Code

PBE pre-boot environment
PBX private branch exchange
PC personal computer
PCI Payment Card Industry

PCIpersonal identity verification card issuerPCI DSSPayment Card Industry Data Security Standard

PCMCIA Personal Computer Memory Card International Association

PCN process control network

PCP IP Payload Compression Protocol

PCS process control system

PCSF Process Control System Forum

PCSRF Process Control Security Requirements Forum

PDA personal digital assistant
PDD Presidential Decision Directive
PDF Portable Document Format
PDP policy decision point

PDS protective distribution systems

PEAP Protected Extensible Authentication Protocol

PED portable electronic devices
PEM Privacy Enhanced Mail
PEP policy enforcement point
PFS perfect forward secrecy
PGP Pretty Good Privacy
PHI protected health information

PHI protected health information
PHP PHP: Hypertext Preprocessor

PHY Physical (layer)

PIA privacy impact assessment

PICSTM Platform for Internet Content Selection
PII personally identifiable information
PIM personal information management

PIM-SM Protocol Independent Multicast—Sparse Mode

PIN personal identification number
PIP policy information point
PIR Public Interest Registry
PIV personal identity verification
PKCS Public Key Cryptography Standard

PKI public key infrastructure PKM privacy key management

PKMv1 Privacy Key Management Protocol version 1PKMv2 Privacy Key Management Protocol version 2

PL public law

PLC programmable logic controller PMA Policy Management Authority

PMK pairwise master key

PMKSA Pairwise Master Key Security Association

PMP point-to-multipoint

PMTU path maximum transmission unit

PN packet number

PNG Portable Network Graphics
POA&M plan of action and milestones

POC point of contact

POCproof of conceptPoEPower over EthernetPOPPost Office Protocol

POP3 Post Office Protocol version 3

PP protection profile
PPP Point-to-Point Protocol

PPTP Point-to-Point Tunneling Protocol

PPVPN provisioner-provided virtual private network

PRA Paperwork Reduction Act
Pre-PAK pre-primary authorization key
PRF pseudorandom function

PRNG pseudorandom number generator

PSK pre-shared key

PSTN public switched telephone network
PTA privacy threshold assessment (or analysis)

PTK pairwise transient key
PTV perceived target value

PUB publication

PUK PIN unblocking key

PVG patch and vulnerability group

Q

QoP quality of protection **QoS** quality of service

R

R&D research and development

R/W read/write
RA receiver address
RA Registration Authority
RA remote assistance
RA Router Advertisement
RAdAC risk adaptive access control

RADIUS Remote Authentication Dial In User Service

RAID redundant array of independent disks

RAM random access memory
RAT remote administration tool
RBAC role-based access control

RC2 Rivest Cipher 2
RC4 Rivest Cipher 4
RCE route cache entry

RCFL Regional Computer Forensics Laboratory

RCP Remote Copy Protocol

RDBMS relational database management system

RDP Remote Desktop Protocol
REL rights expression language
REP Robots Exclusion Protocol

REST Representational State Transfer

RF radio frequency
RFC request for comments
RFD route flap damping

RFID radio frequency identification

RFP request for proposal
RIB routing information base
RIP Routing Information Protocol

RIPE NCC Réseaux IP Européens Network Coordination Centre

RIPng Routing Information Protocol next generation

RIR regional internet registries
RIS Remote Installation Services

RMA reliability, maintainability, and availability

RMON Remote Monitoring
RNG random number generator
ROE rules of engagement
ROM read-only memory

RP responsible person (record)
RPC remote procedure call
RPF Reverse Path Forwarding
RPO recovery point objective

RR resource record

RRSIG resource record signature

RS relay station
RS Router Solicitation
RSA Rivest-Shamir-Adelman
RSBAC rule set-based access control
RSN Robust Security Network

RSNA Robust Security Network Association

RSNIE Robust Security Network Information Element

RSO reduced sign-on

RSS Really Simple Syndication
RSSI received signal strength indication
RSVP Resource ReSerVation Protocol

RTF Rich Text Format

RTLS real-time location system
RTO recovery time objective
RTP Real-Time Transport Protocol

RTU remote terminal unit or remote telemetry unit

RuBAC rule-based access control

R-UIM Removable User Identity Module

S

S/MIME Secure/Multipurpose Internet Mail Extensions

SA security association SA source address

SACL system access control list SAD security association database

SAFER Secure And Fast Encryption Routine

SAID security association identifier

SAISO senior agency information security officer

SAM Security Account Manager SAM software asset management

SAMATE Software Assurance Metrics and Tool Evaluation

SAMLTM Security Assertion Markup LanguageTM

SAN storage area network

S-BGP Secure Border Gateway Protocol

SC subcommittee

SCADA supervisory control and data acquisition SCAP Security Content Automation Protocol

SCP Secure Copy Protocol

SCSI Small Computer System Interface
SCTP Stream Control Transmission Protocol

SD Secure Digital

SDIOSecure Digital Input OutputSDKsoftware development kitSDLCSystem Development Life CycleSDOstandards development organizationSDPSession Description ProtocolSDPService Discovery Protocol

SDPService Discovery ProtocolSEISoftware Engineering InstituteSEMsecurity event managementSENDSecure Neighbor Discovery

SEP secure entry point

SFTP Secure File Transfer Protocol
SHA Secure Hash Algorithm
SHA-1 Secure Hash Algorithm 1

shim6 Site Multihoming by IPv6 Intermediation

SHS Secure Hash Standard

SIA Security Industry Association

SID security identifier

SIEM security information and event management

SIG special interest group

SIIT Stateless IP/ICMP Translation Algorithm

SIM security information management

SIMsubscriber identity moduleSIPSession Initiation ProtocolSISsafety instrumented system

SKEME Secure Key Exchange Mechanism

SLA service level agreement
SMB Server Message Block
SME subject matter expert

S/MIME Secure/Multipurpose Internet Mail Extensions

SMS Short Message Service
SMS Systems Management Server

SMT scar, mark and tattoo

SMTP Simple Mail Transfer Protocol SNL Sandia National Laboratories

SNMP Simple Network Management Protocol

SNTP Simple Network Time Protocol

SOAservice-oriented architectureSOAstart of authority (resource record)soBGPSecure Origin Border Gateway Protocol

SoDseparation of dutiesSOHOsmall office/home officeSOPstandard operating procedure

SORsystem of recordsSORNsystem of records noticeSOXSarbanes-Oxley Act of 2002

SP service pack
 SP special publication
 SPD security policy database
 SPI security parameters index
 SPL Structured Product Labeling

SPMLTM Service Provisioning Markup LanguageTM

SPP-ICS System Protection Profile for Industrial Control Systems

SQL Structured Query Language

SR service release SRES signed response

SRTP Secure Real-Time Transport Protocol

SS subscriber station

SSDP Simple Service Discovery Protocol

SSE-CMM Systems Security Engineering-Capability Maturity Model

SSH Secure Shell

SSI Server Side Includes
SSID service set identifier
SSL Secure Sockets Layer

SSLF Specialized Security-Limited Functionality

SSN social security number

SSO single sign-on

SSoD static separation of duty SSP secure simple pairing

SSPI Security Support Provider Interface

ST security target STA station

STIG security technical implementation guide

STS security token service

SUID Set-User-ID

SWSA Semantic Web Services Initiative Architecture

SZ security zone

Т

TA test assertion
TA transmitter address

TACACS Terminal Access Controller Access Control System

TAG technical advisory group

TB terabyte

TC technical committee

TC68 ISO/IEC Technical Committee 68
TCP Transmission Control Protocol

TCP/IP Transmission Control Protocol/Internet Protocol

TDEA Triple Data Encryption Algorithm
TDM time division multiplexing
TDMA time division multiple access

TEK traffic encryption key

TERENA Trans-European Research and Education Networking Association

TFT thin film transistor

TFTP Trivial File Transfer Protocol ticket-granting service

TIA® Telecommunications Industry Association

TID tag identifier TK temporal key

TKIP Temporal Key Integrity Protocol

TLD top-level domain

TLS Transport Layer Security

TMOVS Modes of Operation Validation System for the Triple DES Algorithm

TOE target of evaluation
TOS trusted operating system
ToS Type of Service

TPC transmission power control TPM trusted platform module

TR technical report

TRT transport relay translator
TS technical specification
TSA time stamping authority
TSC TKIP sequence counter

TSIG Secret Key Transaction Authentication for DNS

TSIG Transaction Signature
TSN transitional security network
TSP Time-Stamp Protocol
TT&E test, training, and exercise

TTF tag talks first time to live

TTLS Tunneled Transport Layer Security

TTP trusted third party
TXT text (record)

U

U.S. United StatesU.S.C. United States CodeUAC User Account Control

UART universal asynchronous receiver/transmitter

UBR Universal Description, Discovery and Integration (UDDI) Business Registry

UCC Uniform Code Council, Inc.
UCE unsolicited commercial email

UDDITM Uniform Description, Discovery, and IntegrationTM

UDF Universal Disk Format

UDP User Datagram Protocol
UFS UNIX File System
UHF ultra high frequency
UI user interface
UK United Kingdom

UL Underwriters' Laboratories®

ULA unique local address ULP upper layer protocol

UML® Unified Modeling Language™
UMPC ultra-mobile personal computer

UMTS Universal Mobile Telecommunications System
UNII Unlicensed National Information Infrastructure

UPC Universal Product Code
UPnP Universal Plug and Play
UPS uninterruptible power supply
URI Uniform Resource Identifier
URL Uniform Resource Locator
USB Universal Serial Bus

US-CERT United States Computer Emergency Readiness Team

USIM UMTS Subscriber Identity Module *or* Universal Subscriber Identity Module

UTM unified threat managementUUID Universally Unique Identifier

UWB ultrawideband

٧

VB.NET Visual Basic .NET

VBA Visual Basic for Applications

VBScript Visual Basic Script VFD variable frequency drive VHD virtual hard drive

VHD virtual hard drive
VHF very high frequency
VLAN virtual local area network

VM virtual machine

VMS vulnerability management system
VoIP Voice over Internet Protocol
VOIPSA Voice over IP Security Alliance

VPN virtual private network

VPNC Virtual Private Network Consortium VRRP Virtual Router Redundancy Protocol

W

W3C® World Wide Web Consortium

WAN wide area network WAP wireless access point

WAP Wireless Application ProtocolWaSP Web Standards Project

WAVE Wireless Access for Vehicular Environment

WAYF Where Are You From

WCCP Web Cache Coordination Protocol

W-CDMA Wideband Code Division Multiple Access

WDS wireless distribution system

WebDAV Web Distributed Authoring and Versioning

WEP Wired Equivalent Privacy
WfMC Workflow Management Coa

WfMC Workflow Management Coalition WfMS workflow management system

WG working group

WIDPS wireless intrusion detection and prevention system WiMAX Worldwide Interoperability for Microwave Access

WLAN wireless local area network

WMAN wireless metropolitan area network

WMM® Wi-Fi MultimediaTM
WORM write once, read many
WPA Wi-Fi Protected Access
WPA2® Wi-Fi Protected Access® 2
WPAN wireless personal area network

WS Web services

WSDL Web Services Description Language

WSH Windows Script Host

WS-I Web services interoperability

WS-I Web Services Interoperability Organization

WSS4J Web Services Security for Java

WS-Security Web Services Security

WSUS Windows Server Update Services
WVE Wireless Vulnerabilities and Exploits

WWAN wireless wide area network

WWW World Wide Web

XYZ

XACL XML Access Control Language

XACMLTM eXtensible Access Control Markup LanguageTM

XCBC XOR Cipher Block Chaining

XCCDF eXtensible Configuration Checklist Description Format

XHTML Extensible Hypertext Markup Language
XKMS XML Key Management Specification

XML Extensible Markup Language

XOR exclusive OR

XrML eXtensible Rights Markup Language

XSD XML Schema Definition
XSL Extensible Stylesheet Language

XSLT Extensible Stylesheet Language Transformation

XSS cross-site scripting

ZSK zone signing key

Appendix A—References

Sources used in the development of the list of system and network security acronyms and abbreviations in this document include the following:

National Institute of Standards and Technology Publications, NIST Computer Security Division Resource Center Web site, http://csrc.nist.gov/

Internet Engineering Task Force (IETF), http://www.ietf.org/

Microsoft Hardware Developer Central, Glossary of Acronyms for PC and Server Technologies, http://www.microsoft.com/whdc/resources/support/glossary.mspx

Organization for the Advancement of Structured Information Standards (OASIS), http://www.oasis-open.org/home/index.php

Appendix B—Former Acronyms

Over time, as organizations, technologies, or other entities change, some acronyms associated with them may lose their definitions and thus no longer be considered acronyms. This appendix presents selected former acronyms related to system and network security. As additional acronyms in this publication lose their definitions, readers are encouraged to send notification of these, along with references to authoritative sources of information, to securityacronyms@nist.gov for possible inclusion in future releases of this report.

IEEE Originally defined as "Institute of Electrical and Electronics Engineers, Inc."

Definition dropped by the organization

(http://www.ieee.org/web/aboutus/home/index.html).

SOAP Originally defined as "Simple Object Access Protocol." Definition dropped as of

April 2007 (http://www.w3.org/TR/soap12-part1/#intro).