Topics	Nmap
Introduction and Information Gathering	Command Injection
Introduction and Information Gathering1-3-13	hping35–154-163
Defensible Network Architecture 1–14-53	Image Steganography
Protocols and Packet Analysis 1–54-107	GNU Privacy Guard (GPG) 5–184-203
Virtualization and Cloud Essentials 1–108-165	Snort
Securing Wireless Networks1–166-235	Process Hacker
	NTFS Permissions Reporter 5–245-258
Defense-in-Depth	SECEDIT.EXE5–259-266
Defense-in-Depth2-3-45	
Identity Access Management2–46-76	
Authentication and Password Secuirty 2–77-112	${f A}$
Security Frameworks2–113-141	
Data Loss Prevention	access control problems
Mobile Device Security	Acunetix Vulnerability Scanner
77 1 1 1 1 1 1 M	American Fuzzy Lop1–9
Vulnerability Management and Response	Application Security
Vulnerability Assessments	Dynamic Application Security Testing (DAST) 1–13, 1–17-18
Attacks and Malicious Software3–77-128	Interactive Application Security Testing (IAST)
Web Application Security3–129-162	1–13
Security Operations and Log Management .3–162-	Out-of-Band Application Security Testing
200	(OAST)1–13
Digital Forensics and Incident Response 3–201-239	Static Application Security Testing (SAST) .1–13,
	1–16
Data Security Technologies	Testing
Cryptography	Full Knowledge
Cryptography Algroithms and Deployment $$ . 4–53-	Zero-Knowledge
80	Arachni Scanner1–35
Applying Cryptography	ARPANET1–92
Network Security Devices4–130-184	Assessments
Endpoint Security 4–185-220	Automated
Windows and Azure Security	OWASP Web Security Testing Guide 1–22
Windows Security Infrastructure 5–3-43	Penetration Testing Execution Standard
Windows as a Service	(PTES)
Windows Access Controls5–71-119	Full-Knowledge
Enforcing Security Policy5–120-193	Manual1–20
Microsoft Cloud Computing $5-194-247$	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Automation, Logging, and Auditing5–248-296	Testing Techniques1–22
	Zero-Knowledge1–13, 1–21
Linux, AWS, and Mac Security	Attack Platform1–33-34
Linux Fundamentals	Attack platform
Linux Security Enhancements and Infrastructure 5–67-121	Auditing       1–54         Authentication (ATHN)       1–28
Containerized Security5–122-143	Authorization (ATHX)1–28 Authorization (ATHZ)1–28
AWS Fundamentals	Automated Scanning
AWS Security Controls5–162-178	1140044004 50444446
AWS Hardening5–179-200	В
macOS Security	D
	backdoors
Workbook	BApp Store
tcpdump	Best
Wireshark	Bing
Aircrack-ng	Browser
Cain and Abel	Bugtraq
AppLocker	BuprSuite Pro Active/Live Scan1–35
11	

Burp Suite	dig1–80
Infiltrator	Syntax1-81
Burp Suite Professional1–38, 1–42	DNSRecon
BApp Store1-53	Documentation
Comparer1-52	Domain Name System (DNS)1-74
Crawling/Auditing1-54	Brute Force Scans1–77
Dashboard	EDNS1-74
Decoder1–51	PTR1-76
Engagement Tools	Querying Directly1-75
Cenerage CSRF PoC1–55	Recon Tools1–78
Content Discovery	dig1-80-81
Find Commment / Find Scripts1–55	DNSRecon1–83-84
Search1–55	Nmap1–82
Simulate Manual Testing1–55	nslookup1-79
Target Analyzer 1–55	Repositories
Extender	Dnsdumpster.com 1–85
Heads-Up Dispaly1–43	Farsight Security's DNSDB1-85
Intruder	Reverse1–75
Proxy1–47	Zone Transfer
Repeater	Dorking1–67
Inspector	Dorks1–66
Sequencer1–50	DuckDuckGo1-65
Target	Dynamic Application Security Testing (DAST)1–13,
Scope1–44	1–17-18, 1–35
Site Map	Scanners1–35
Site Map - Filter	Tools1–17-18
business functionality testing1–10	Dynamic web application security scanners 1–32
Business Logic (BUSL)	V
	${f E}$
	$\mathbf{L}$
$\mathbf{C}$	Easter eggs
	EDNS
CERN1–91	Encoding
Certificate Authorities1–87	Error Handling (ERRH)
Certificate Transparency1–87	Exploit Database (EDB)
CHAOSNET1–81	Exploit Database (EDB)
Checklist	D
Client Side (CLNT)	${f F}$
Code review1–13	Ch bb.b. 1 CA
Command	filter bubble
HTTP/0.91–95	flawed business logic
Commands	Fortify WebInspect
dig (many)1–81	forward proxy
dig domain lookup1–80	Full-Knowledge1–13, 1–21
DNSRecon1-83-84	
full (AXFR) zone transfer1–75	${f G}$
reverse DNS1–76	
Common Name1–87	Generalized Markup Language (GML)1–91
concurrency problems1–15	Google
Configuration and Deployment Management (CONF)	Google Dorks1–66
1–28	Google Hacking Database (GHDB)1–66-67
cryptographic weaknesses	GHDB-ID 4804
Cryptography (CRYP)	Grep
<del>-</del> • • •	
<b></b>	$\mathbf{H}$
D	
	Hashing1–51
Decoding	Hashing       1-51         HCL AppScan       1-35         HTTPS Certificates       1-87

Hypertext Transfer Protocol (HTTP)	DNS NSE Scripts1–82
0.91–95	nslookup
1.01–95	
History1–9, 1–91	O
0.9	
Semantics	Offensive Security
Syntax1–93	Open-Source Intelligence (OSINT)1-60
2,	For Web Application Testers
т	Micah Hoffman's OSINT MindMap 1–61 Search Engines1–64
I	Dorking
Identity Management (IDNT) 1 28	Google Dorks
Identity Management (IDNT)	Key Search Operators 1–65
Information Gathering (INFO)	Social Media1–68
Interactive Application Security Testing (IAST) . 1–13	LinkedIn1–68
Interception Proxies1–38	SpiderFoot1-71
Configuring1–57	Suites1–70
Zed Attack Proxy (ZAP)	Operational Security (OPSEC)
Interception proxies1–32	Out-of-Band Application Security Testing1–13
Internet	OWASP1-24 Top 101-25-26
Invicti (formerly Netsparker)1–35	Web Application Penetration Testing Methodol-
$\mathbf{K}$	ogy
Kali1–33-34	Information Gathering1-59
$metapackages \dots 1-34$	Testing Categories1–27
Update Command	Web Application Penetration Testing Methodol-
Kerberos	ogy1–27
${f L}$	P
LinkedIn Open Networkers (LIONs)	p0f1–9
logic bombs	Paros Proxy1–39
	Penetration Testing1–17
N /I	Penetration Testing Execution Standard (PTES) .1–22
${f M}$	Post-exploitation1–22
Mailing Lists	Push Button Pen Testing1–18
Bugtraq	
Full Disclosure1–10	${f Q}$
Man-in-the-middle (MITM)1–38	0 1 7771 0
Manual Assessments1–20	Qualys WAS1–35
Manual Inspection and Reviews1–19	<u>_</u>
Methodology 1–22	${ m R}$
Micah Hoffman's OSINT MindMap1–61	D 115 1 0 11
Michal Zalewski	Rapid7 AppSpider1–35
Morris Worm1–92	Reconaissance         1–22           Reporting         1–22
75 T	Reverse DNS
N	RFC
Network Vulnerability Scanner1–35	19181–92
Nikto	19451–94-95
NIST	Runtime Application Self-Protection (RASP) 1–13
800-30	
Appendix D1–14	${f S}$
NICT N-4: 1 V-1 1:1:4 D-4-1 1 10	
NIST National Vulnerability Database1–10 Nmap	Scanning1–22

Security Posture         1–14           Semantics         1–93           Session Analysis         1–50           Session Management (SESS)         1–28           SOCMINT         1–68           Software Development Lifecycle (SDLC)         1–17, 1–19           Software Engineering Institute (SEI)         1–14           Source Code Review         1–15           Advantages         1–15           Disadvantages         1–15           SpiderFoot         1–71           Static Application Security Testing (SAST)         1–13, 1–16           Syntax         1–93	Virtual Host Discovery 1–73 DNS 1–74-75 HTTPS Certificate 1–87 Vulnerability assessment 1–22 vulnerability mailing lists 1–10  W  Web Application PenTester's Toolkit 1–32 Web Applications 1–8 Whitehat Sentinel 1–35 World Wide Web 1–91 World Wide Web (W3) 1–94
Testing Techniques       1-22         The Tangled Web       1-9         Threat Modeling       Advantages         Advantages       1-14         Disadvantages       1-14         NIST 800-30       1-14         Threat modeling       1-13         Tim Berners-Lee       1-9, 1-91         time bombs       1-15         Tookkit       1-32         Trojans       1-15	Z         ZAP Active Scan       1-35         Zed Attack Proxy (ZAP)       1-38, 39         Attack Menu       1-41         Functions       Active Scan       1-41         Forced browsing       1-41         Fuzzing       1-41         Spider and AJAX spider       1-41         Interface       1-40         Zero-Knowledge       1-13, 1-21         Zone Transfer       1-74-75