



Information Gathering

<i>ACE-voip</i>	Detect and analyze voice over IP traffic
<i>Amap</i>	Identify open ports and services on a remote system
<i>APT2</i>	Automatic penetration testing and renerating reports
<i>arp-scan</i>	Discover hosts on a network
<i>Automater</i>	Automatic OSINT gathering
<i>bing-ip2hosts</i>	Enumerate hostnames from Bing search result
<i>braa</i>	Detect and analyze broadcast radio signals
<i>CaseFile</i>	Create and manage threat intelligence reports
<i>CDPSnarf</i>	Extract CDP information from a network
<i>copy-router-config</i>	Backing up router configurations or transderring configurations to a new router
<i>DMitry</i>	Gather target network information including port scanning and WHOIS lookups
<i>dnmap</i>	Identify host and services on a network
<i>dnsenum</i>	Gather information about Dns records including subdomains
<i>dnsmap</i>	Identify active DNS servers and associated hostnames
<i>DNSRecon</i>	DNS reconnaissance tool to gather information about servers, zone transfer and IP addresses
<i>dnstracer</i>	Trace DNS queries to identify problems and misconfigurations
<i>dnswalk</i>	Check common DNS misconfiguration
<i>DotDotPwn</i>	Exploit directory traversal vulnerabilities
<i>enum4linux</i>	Gather information from Windows and Samba system including shares, users and passwords
<i>enumIAX</i>	Gather information from IAX-based VoIP systems
<i>EyeWitness</i>	Generate screenshots of web applications
<i>Faraday</i>	Manage and collaborate on vulnerabiity scans and security assessment
<i>Fierce</i>	Identify non-contiguous IP space and map network infrastructure
<i>Firewalk</i>	Determine specific traffic blocking by firewall and by analyzing TTI values

Vulnerability Analysis

<i>BBQSQL</i>	A blind SQL injection and exploitation tool
<i>BED</i>	A network protocol fuzzing tool
<i>cisco-global-exploiter</i>	Exploit vulnerabilities in Cisco devices
<i>cisco-ocs</i>	Scan and exploit Cisco devices
<i>cisco-torch</i>	Test and scan the security of Cisco devices
<i>copy-router-config</i>	Back up and restore Cisco router configurations
<i>Doona</i>	Test the security of network devices and protocols
<i>DotDotPwn</i>	Exploit directory traversal vulnerabilities
<i>HexorBase</i>	A database management and exploitation tool
<i>jSQL Injection</i>	A SQL injection exploitation tool
<i>Lynis</i>	A security auditing and hardening tool for Linux and Unix-based systems
<i>Nmap</i>	Network exploration and security auditing tool
<i>ohrwurm</i>	A local root exploitation tool
<i>openvas</i>	A vulnerability scanner and management tool
<i>Oscanner</i>	Scan Oracle databases for vulnerabilities
<i>Powerfuzzer</i>	A web application fuzzing and discovery tool
<i>sfuzz</i>	A protocol fuzzer and and vulnerability scanner
<i>SidGuesser</i>	Identify valid user accounts in Windows domains
<i>SIPArmyKnife</i>	Test the security of VoIP systems
<i>sqlmap</i>	A SQL injection exploitation tool
<i>Sqlninja</i>	A SQL server injection and takeover tool
<i>sqlsus</i>	Identify and exploit SQL injection vulnerabilities
<i>tncsmd10g</i>	Test and exploit Oracle TNS Listener vulnerabilities
<i>unix-privesc-check</i>	Identify privilege escalation vulnerabilities in Unix-based systems



<i>fragroute/fragrouter</i>	Intercept and modify network traffic at IP fragmentation level
<i>Ghost Phisher</i>	Security testing for phishing attacks
<i>GoLismero</i>	Web security testing tool
<i>goofile</i>	Search specific file types on a target domain
<i>hping3</i>	
<i>ident-user-enum</i>	Identify user accounts on systems that use the Ident protocol
<i>InSpy</i>	LinkedIn reconnaissance tool to gather information about employees, companies and job postings
<i>InTrace</i>	Trace the route of TCP packets through a network
<i>iSMTP</i>	Test the security of SMTP servers
<i>lbd</i>	Identify load balancers and web application firewalls
<i>Maltego Teeth</i>	Identify connections and relationships between entities
<i>masscan</i>	A fast port scanner used for vulnerability assessment
<i>Metagoofil</i>	Gather information and extract metadata from public documents
<i>Miranda</i>	Tool for exploiting UPnP devices
<i>Metagoofil</i>	Gather information and extract metadata from public documents
<i>Nikto</i>	Web server scanner
<i>SMBMap</i>	Enumerate and scan SMB shares
<i>ntop</i>	Network traffic monitoring and analysis
<i>OSRFramework</i>	Intelligence gathering framework used for data mining
<i>p0f</i>	Passive network traffic analysis for identifying the operating systems and applications used on networked devices
<i>Parsero</i>	Identify input validation related vulnerabilities of web applications
<i>SET</i>	Tool for performing social engineering attacks, password attacks etc.
<i>smtp-user-enum</i>	Enumerate usernames on a target SMTP server
<i>snmp-check</i>	Enumerate and check the security of SNMP devices
<i>SPARTA</i>	Graphical interface for network infrastructure penetration testing

<i>Yersinia</i>	Network protocol analyzer and attack tool for testing network security
Wireless Attacks	
<i>Airbase-ng</i>	Configure and attack wireless access points
<i>Aircrack-ng</i>	Audit and test wireless network
<i>Airdecap-ng and Airdecloak-ng</i>	Decrypt and deobfuscate captured wireless traffic
<i>Aireplay-ng</i>	Inject traffic to wireless networks to test their security
<i>airgraph-ng</i>	Generate graphs from wireless network data
<i>Airmon-ng</i>	Enable and Disable monitor mode on wireless interfaces
<i>Airodump-ng</i>	Capture wireless traffic and analyze it
<i>airodump-ng-oui-update</i>	Update the OUI databases used by airodump-ng
<i>Airolib-ng</i>	Manage and crack password hashes for WPA and WPA2
<i>Airserv-ng</i>	Run a wireless access point on a Linux system
<i>Airtun-ng</i>	Create encrypted tunnels over wireless networks
<i>Asleep</i>	Crack MS-CHAPv1 and MS-CHAPv2 authentication protocols
<i>Besside-ng</i>	Capture and crack WEP and WPA encrypted wireless traffic
<i>Bluelog</i>	Scan and log Bluetooth devices
<i>BlueMaho</i>	Discover and attack Bluetooth devices
<i>Bluepot</i>	Simulate Bluetooth honeypots to detect and track attackers
<i>BlueRanger</i>	Control Bluetooth devices remotely
<i>Bluesnarfer</i>	Exploit Bluetooth vulnerabilities and gaining unauthorized access to devices
<i>Bully</i>	Brute-forcing WPS pins to gain access to wireless networks
<i>coWPAtty</i>	Crack pre-shared keys for WPA-PSK networks
<i>crackle</i>	Crack encrypted Bluetooth traffic
<i>eapmd5pass</i>	Crack MD5 hashes of EAP passwords
<i>Easside-ng</i>	Crack WEP and WPA encrypted wireless traffic



<i>ssllcaudit</i>	Audit SSL/Tls certificates on a web server
<i>SSLsplit</i>	Intercept and decrypt SSL/TLS traffic
<i>sslstrip</i>	Tool for performing man in the middle attacks on SSL/TLS encrypted connections
<i>SSLyze</i>	Test SSL/TLS servers and clients
<i>Sublist3r</i>	Enumerate subdomains of a target domain using search engines
<i>THC-IPV6</i>	Attack and test IPv6 networks
<i>theHarvester</i>	Gather information of a target domain from various public sources
<i>TLSSLed</i>	Evaluate the security of SSL/TLS connections
<i>twofi</i>	Find potential usernames and passwords from Twitter
<i>UnicornsCan</i>	A fast and powerful network scanning tool
<i>URLCrazy</i>	Generate and test domain typos and variations
<i>Wireshark</i>	Network protocol analyzer for capturing and analyzing network traffic
<i>WOL-E</i>	Tool for Wake-On-LAN attacks and network discovery
<i>Xplico</i>	Extract application data from network traffic

Forensics Tools

<i>Binwalk</i>	Analyze and extract firmware images
<i>bulk-extractor</i>	<i>Extract artifacts from binary files</i>
<i>Capstone</i>	A multi-platform, multi-architecture disassembly framework
<i>chntpw</i>	<i>Reset passwords on Windows systems</i>
<i>Cuckoo</i>	An automated malware analysis system
<i>dc3dd</i>	<i>A tool for imaging and wiping hard drives</i>
<i>ddrescue</i>	Rescuing data from damaged disks
<i>DFF</i>	<i>A forensic framework for analyzing digital evidence</i>
<i>diStorm3</i>	A disassembler library for x86/AMD64
<i>Dumpzilla</i>	<i>Analyze Mozilla browser history</i>

<i>Fern Wifi Cracker</i>	Audit and crack wireless networks
<i>FreeRADIUS-WPE</i>	Exploit weak credentials in the FreeRADIUS server
<i>Ghost Phisher</i>	Create phishing attacks on wireless networks
<i>GISKismet</i>	Map and analyze wireless networks using GPS data
<i>Gqrx</i>	A receiver for exploring wireless signals
<i>gr-scan</i>	scan and decode various radio signals
<i>hostapd-wpe</i>	Test and exploit the WPE feature in hostapd
<i>ivstools</i>	Convert and manipulate IVs for WEP cracking
<i>kalibrate-rtl</i>	Calibrate the frequency offset of RTL-SDR dongles
<i>KillerBee</i>	Explore and exploit ZigBee and IEEE 802.15.4 networks
<i>Kismet</i>	Detect and analyze wireless networks
<i>makeivs-ng</i>	Generate and inject fake IVs for WEP cracking
<i>mdk3</i>	Attack wireless networks by flooding them with deauthentication, disassociation, and other packets
<i>mfcut</i>	Crack Mifare Classic RFID cards
<i>mfoc</i>	Crack Mifare Classic RFID cards
<i>mfterm</i>	Interact with RFID cards
<i>Multimon-NG</i>	Decode various radio signals
<i>Packetforge-ng</i>	Create and inject custom packets into wireless networks
<i>PixieWPS</i>	Exploit the WPS design flaw to recover WPA/WPA2 passwords
<i>Pyrit</i>	Perform advanced WPA/WPA2 password cracking using GPU power
<i>Reaver</i>	A tool for brute-forcing WPS
<i>redfang</i>	A Bluetooth scanner and vulnerability assessment tool
<i>RTLSDR Scanner</i>	A radio scanner for spectrum analysis and monitoring
<i>SpoofTooth</i>	A tool for Bluetooth device spoofing and cloning
<i>Tkiptun-ng</i>	WPA encryption key recovery using TKIP vulnerabilities
<i>Wesside-ng</i>	Automated wireless network hacking for WEP, WPA and WPA2 encryption



<i>extundelete</i>	Recover deleted files from ext3/ext4 partitions
<i>Foremost</i>	Extract files from disk images
<i>Galleta</i>	Analyze browser cookies
<i>Guymager</i>	Create forensic images
<i>iPhone Backup Analyzer</i>	Analyze iPhone backups.
<i>p0f</i>	A tool for passive OS fingerprinting and network analysis
<i>pdf-parser</i>	A tool for analyzing PDF files
<i>pdfid</i>	Analyze and detect malicious PDF files
<i>pdgmail</i>	Analyze Gmail artifacts
<i>peepdf</i>	Analyze and explor PDF files
<i>RegRipper</i>	Analyze Windows registry hives
<i>Volatility</i>	Analyze memory dumps

Exploitation Tools

<i>Armitage</i>	A graphical cyber attack management tool
<i>Backdoor Factory</i>	Add backdoors to binaries
<i>BeEF</i>	Penetration testing focuses on browser-based attacks
<i>Commix</i>	A command injection exploitation tool
<i>crackle</i>	Break Bluetooth Smart encryption
<i>exploitdb</i>	A database of known exploits and vulnerable software
<i>jboss-autopwn</i>	Exploit vulnerabilities in JBoss servers
<i>MSFPC</i>	Create Metasploit payloads
<i>RouterSploit</i>	Test vulnerabilities in routers and other embedded devices
<i>ShellNoob</i>	Generate shellcode and convert shellcode to assembly

Sniffing & Spoofing

<i>SIPp</i>	Test and benchmark SIP-based VoIP systems
<i>rtpbreak</i>	Detect, reconstruct, and analyze RTP sessions
<i>SIPVicious</i>	Audit SIP-based VoIP systems
<i>rtpmixsound</i>	Mix audio into RTP streams

<i>Wifi Honey</i>	Perform honey spot attacks on wireless networks
<i>wifiphisher</i>	Steal credential of wireless network
<i>Wifitap</i>	Create virtual wireless access points and monitor network traffic
<i>Wifite</i>	Audit and attack automated wireless network
<i>wpaclean</i>	Filter and clean WPA/WPA2 handshake capture file

Hardware Hacking

<i>android-sdk</i>	A software development kit for developing Android applications
<i>Arduino</i>	An open-source electronics platform for creating interactive projects
<i>dex2jar</i>	Convert Android DEX files to Java JAR files
<i>Sakis3G</i>	Connect to 3G mobile networks
<i>smali</i>	An assembler/disassembler for Android's dex format

Reverse Engineering

<i>apktool</i>	Reverse engineer and modify Android APK files
<i>diStorm3</i>	A disassembler library used for binary analysis
<i>edb-debugger</i>	A cross-platform debugger for x86, ARM, MIPS, and PowerPC executables
<i>jad</i>	Analyze and reverse engineer Java bytecode
<i>javasnoop</i>	Intercept and analyze Java method calls
<i>JD-GUI</i>	Decompile and analyze Java bytecode
<i>OllyDbg</i>	A 32-bit assembler-level analyzing debugger
<i>Valgrind</i>	Debug and profile Linux programs
<i>YARA</i>	Match pattern and identify malware and other suspicious files

Web Applications

<i>apache-users</i>	Find usernames on an Apache web server
<i>Arachni</i>	A feature-rich web application security scanner
<i>BlindElephant</i>	Identify web applications version number
<i>Burp Suite</i>	Web application testing framework
<i>CutyCapt</i>	Capture website screenshots
<i>DAVTest</i>	Test the security of WebDAV servers
<i>DIRB</i>	A tool used for web content discovery



<i>bettercap</i>	A Swiss Army knife for network attacks and monitoring, including sniffing, spoofing, and MITM attacks	<i>deblaze</i>	Discover hidden files and directories on a web server
<i>DNSChef</i>	A DNS proxy that can be used to forge DNS responses and redirect traffic to malicious sites	<i>DirBuster</i>	A multi-threaded web application scanner
<i>fiked</i>	A fake IKE daemon used for launching MITM attacks against IKEv1-encrypted connections	<i>FunkLoad</i>	A web functional testing and load testing tool
<i>hamster-sidejack</i>	Perform session hijacking attacks against web applications	<i>Gobuster</i>	Brute forcing directories and files on web servers
<i>HexInject</i>	Craft and inject packets into a network	<i>Grabber</i>	Detect security vulnerabilities of web applications
<i>iSMTP</i>	Test the security of SMTP servers by sending a large number of emails	<i>hURL</i>	A tool used for web application testing and discovery
<i>isr-evilgrade</i>	Exploit software vulnerabilities and perform automatic updates of malicious software	<i>jboss-autopwn</i>	Exploit vulnerable JBoss application servers
<i>mitmproxy</i>	A SSL-capable intercepting proxy used for intercepting, modifying, and replaying traffic between clients and servers	<i>joomscan</i>	Identify vulnerabilities in Joomla! CMS
<i>ohrwurm</i>	Generate payloads and test the detection capabilities of antivirus software	<i>PadBuster</i>	Test Padding Oracle vulnerabilities in web applications
<i>protos-sip</i>	Test the security of SIP-based VoIP systems	<i>Paros</i>	A web application testing proxy used to intercept and analyze web traffic
<i>rebind</i>	Perform DNS rebinding attacks against web applications	<i>Parseo</i>	A tool used for web application fingerprinting and directory discovery
<i>responder</i>	Steal NTLMv1/v2 hashes and perform LLMNR/NBT-NS poisoning	<i>plecost</i>	A WordPress vulnerability scanner
<i>rtpinsertsound</i>	Insert audio into RTP streams	<i>Powerfuzzer</i>	A highly automated web application vulnerability scanner
<i>sctpscan</i>	Perform SCTP network scanning and fingerprinting	<i>ProxyStrike</i>	Attack web applications through proxies
<i>SIPArmyKnife</i>	A tool used for testing the security of SIP-based VoIP systems	<i>Recon-ng</i>	A web reconnaissance framework
<i>SniffJoke</i>	Manipulate network traffic in real-time	<i>Skipfish</i>	A web application security scanner used for reconnaissance and discovery
<i>VoIPHopper</i>	Detect and exploit VoIP security vulnerabilities	<i>ua-tester</i>	Test user-agent strings in web applications
<i>xspy</i>	Monitor and analyze X11 traffic	<i>Uniscan</i>	Security scanner used for finding vulnerabilities
<i>zaproxy</i>	Test security of web applications by scanning	<i>w3af</i>	A framework used for web application security testing
		<i>WebScarab</i>	A Java-based web application testing proxy used for intercepting and analyzing web traffic
		<i>Webshag</i>	A multi-threaded, multi-platform web application vulnerability scanner
		<i>WebSlayer</i>	Find vulnerabilities in web applications



Password Attacks

<i>BruteSpray</i>	Automate password spraying attacks against multiple hosts simultaneously
<i>CeWL</i>	Generate custom wordlists for password cracking and other security assessments
<i>chntpw</i>	Reset passwords on Windows systems by modifying the Windows registry
<i>CmosPwd</i>	Recover CMOS passwords on Windows systems
<i>creddump</i>	Extract password hashes and other credentials from Windows systems
<i>crowbar</i>	Brute-force attacks against remote authentication services
<i>crunch</i>	Generate custom wordlists for password cracking and other security assessments
<i>findmyhash</i>	Identify the hash algorithm used to encrypt password hashes
<i>gpp-decrypt</i>	Decrypt Group Policy Preferences (GPP) passwords on Windows systems
<i>hash-identifier</i>	Identify the type of hash used to encrypt password hashes
<i>Hashcat</i>	A tool used for advanced password cracking and recovery
<i>HexorBase</i>	A tool used for database management and exploitation
<i>THC-Hydra</i>	Brute-force attacks against remote authentication services
<i>John the Ripper</i>	A tool used for password cracking and recovery
<i>Johnny</i>	A graphical user interface for John the Ripper password cracking tool
<i>keimpx</i>	Exploit vulnerabilities in Microsoft Windows systems
<i>Maskprocessor</i>	Generate custom wordlists based on specified criteria
<i>Ncrack</i>	Brute-force attacks against remote authentication services
<i>oclgausscrack</i>	Advanced password cracking and recovery on systems with OpenCL-compatible hardware
<i>ophcrack</i>	Password cracking and recovery on Windows systems
<i>PACK</i>	Advanced password cracking and recovery

<i>WebSploit</i>	A web application security testing framework
<i>Wfuzz</i>	A web application fuzzer used for brute forcing directories and files on web servers
<i>WhatWeb</i>	Fingerprint web servers and identify vulnerabilities
<i>WPScan</i>	A WordPress vulnerability scanner
<i>XSSer</i>	Find and exploit XSS vulnerabilities
<i>fimap</i>	Automate web application attacks and vulnerability scanning

Stress Testing

<i>DHCPig</i>	Flood DHCP servers with requests, causing them to crash or become unavailable
<i>iaxflood</i>	Flood SIP servers with requests, causing them to crash or become unavailable
<i>Inundator</i>	Flood a network with random packets, causing network congestion and slowdowns
<i>inviteflood</i>	Flood SIP servers with INVITE requests, causing them to crash or become unavailable
<i>ipv6-toolkit</i>	Collection of tools for testing and exploiting IPv6 networks
<i>rtpflood</i>	Flood VoIP servers with RTP packets, causing them to crash or become unavailable
<i>SlowHTTPTest</i>	Test the vulnerability of web servers to Slow HTTP
<i>t50</i>	Generate network traffic and test the performance of network devices under heavy loads
<i>Termineter</i>	Test the security of Smart Grid devices and protocols
<i>THC-SSL-DOS</i>	Flood SSL servers with SSL handshake requests, causing them to crash or become unavailable

Maintaining Access

<i>CryptCat</i>	Create encrypted and authenticated connections between two hosts
<i>Cymothoa</i>	Inject shellcode into a running process in order to gain remote access



<i>patator</i>	<i>Brute-force attacks against multiple protocols and services</i>
<i>phrasendrescher</i>	<i>Generate custom wordlists based on natural language patterns</i>
<i>polenum</i>	<i>Retrieve password policy information from Windows systems</i>
<i>RainbowCrack</i>	<i>Advanced password cracking and recovery using rainbow tables</i>
<i>SecLists</i>	<i>A collection of various security-related wordlists for password cracking and other security assessments</i>
<i>SQLdict</i>	<i>Generate custom wordlists based on SQL queries</i>
<i>Statsprocessor</i>	<i>Generate custom wordlists based on statistical analysis of existing passwords</i>
<i>THC-pptp-bruter</i>	<i>Brute-force attacks against PPTP VPNs</i>
<i>TrueCrack</i>	<i>A tool used for advanced password cracking and recovery</i>
<i>wordlists</i>	<i>Collection of various wordlists for password cracking</i>

Reporting Tools

<i>CaseFile</i>	<i>Create diagrams and charts to aid in the organization and visualization of data during investigations</i>
<i>cherrytree</i>	<i>A hierarchical note-taking application that allows the creation and organization of notes and code snippets</i>
<i>CutyCapt</i>	<i>Capture screenshots of web pages from the command line</i>
<i>dos2unix</i>	<i>Convert DOS-style line endings to Unix-style line endings in text files</i>
<i>Dradis</i>	<i>A collaboration and reporting platform for security testing professionals</i>
<i>MagicTree</i>	<i>Visualize and analyze data from different sources, such as file systems, network traffic, and databases</i>
<i>Nipper-ng</i>	<i>A tool used for auditing network device security configurations</i>
<i>pipal</i>	<i>A password analyzer and cracking tool used to identify weak passwords</i>
<i>RDPY</i>	<i>Perform remote desktop protocol operations, such as screen capture and input injection</i>

<i>dbd</i>	<i>A backdoor daemon that allows remote access to a system via a network connection</i>
<i>dns2tcp</i>	<i>A tool used to tunnel TCP traffic over DNS protocols</i>
<i>HTTPTunnel</i>	<i>A tool used to tunnel traffic over HTTP protocols</i>
<i>Intersect</i>	<i>Generate payloads for exploitation of vulnerabilities</i>
<i>Nishang</i>	<i>Create and execute PowerShell scripts for penetration testing</i>
<i>PowerSploit</i>	<i>Collection of PowerShell scripts for penetration testing and other security assessments</i>
<i>pwnat</i>	<i>Bypass NAT firewalls and establish direct connections between two hosts</i>
<i>RidEnum</i>	<i>Enumerate user accounts and groups on Windows systems</i>
<i>sbdk</i>	<i>Create a secure backdoor connection between two hosts</i>
<i>shellter</i>	<i>Bypass antivirus software and other security mechanisms</i>
<i>U3-Pwn</i>	<i>Exploit security vulnerabilities in U3 USB smart drives</i>
<i>Webshells</i>	<i>Collection of scripts and tools used for remote access and exploitation of web servers</i>
<i>Weeveily</i>	<i>A webshell used to gain remote access to web servers and execute commands</i>
<i>Winexe</i>	<i>Remotely execute commands on Windows systems from a Linux or Unix host</i>