





<a href="#">Get Started</a>	<a href="#">Take a Tour</a>
<a href="#">Contribute</a>	<a href="#">Blog</a>

[FAQ](#)

[Random Page](#) |

MITRE ATT&CK® is a globally-accessible knowledge base of adversary tactics and techniques based on real-world observations. The ATT&CK knowledge base is used as a foundation for the development of specific threat models and methodologies in the private sector, in government, and in the cybersecurity product and service community.

With the creation of ATT&CK, MITRE is fulfilling its mission to solve problems for a safer world – by bringing communities together to develop more effective cybersecurity. ATT&CK is open and available to any person or organization for use at no charge.



ATT&CKcon 5.0 will be held on Oct 22-23 in Mclean, VA.  
Click [here](#) for more details and to register.

## ATT&CK Matrix for Enterprise

layout: side

show sub-techniques

hide sub-techniques

Reconnaissance	Resource Development	Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Command and Control
10 techniques	8 techniques	10 techniques	14 techniques	20 techniques	14 techniques	43 techniques	17 techniques	32 techniques	9 techniques	17 techniques	18 techniques
<div>Active Scanning<sub>(3)</sub></div> <div>Gather Victim Host Information<sub>(4)</sub></div> <div>Gather Victim Identity Information<sub>(3)</sub></div> <div>Gather Victim Network Information<sub>(6)</sub></div> <div>Gather Victim Org Information<sub>(4)</sub></div> <div>Phishing for Information<sub>(4)</sub></div> <div>Search Closed Sources<sub>(2)</sub></div> <div>Search Open Technical Databases<sub>(5)</sub></div> <div>Search Open Websites/Domains<sub>(3)</sub></div> <div>Search Victim-Owned Websites</div>	<div>Acquire Access</div> <div>Acquire Infrastructure<sub>(8)</sub></div> <div>Compromise Accounts<sub>(3)</sub></div> <div>Compromise Infrastructure<sub>(8)</sub></div> <div>Develop Capabilities<sub>(4)</sub></div> <div>Establish Accounts<sub>(3)</sub></div> <div>Obtain Capabilities<sub>(7)</sub></div> <div>Stage Capabilities<sub>(6)</sub></div>	<div>Content Injection</div> <div>Drive-by Compromise</div> <div>Exploit Public-Facing Application</div> <div>External Remote Services</div> <div>Hardware Additions</div> <div>Phishing<sub>(4)</sub></div> <div>Replication Through Removable Media</div> <div>Supply Chain Compromise<sub>(3)</sub></div> <div>Trusted Relationship</div> <div>Valid Accounts<sub>(4)</sub></div>	<div>Cloud Administration Command</div> <div>Command and Scripting Interpreter<sub>(10)</sub></div> <div>Container Administration Command</div> <div>Deploy Container</div> <div>Exploitation for Client Execution</div> <div>Inter-Process Communication<sub>(3)</sub></div> <div>Native API</div> <div>Scheduled Task/Job<sub>(5)</sub></div> <div>Serverless Execution</div> <div>Shared Modules</div> <div>Software Deployment Tools</div> <div>System Services<sub>(2)</sub></div> <div>User Execution<sub>(3)</sub></div> <div>Windows Management Instrumentation</div>	<div>Account Manipulation<sub>(6)</sub></div> <div>BITS Jobs</div> <div>Boot or Logon Autostart Execution<sub>(14)</sub></div> <div>Boot or Logon Initialization Scripts<sub>(5)</sub></div> <div>Browser Extensions</div> <div>Compromise Host Software Binary</div> <div>Create Account<sub>(3)</sub></div> <div>Create or Modify System Process<sub>(5)</sub></div> <div>Event Triggered Execution<sub>(16)</sub></div> <div>External Remote Services</div> <div>Hijack Execution Flow<sub>(13)</sub></div> <div>Implant Internal Image</div> <div>Modify Authentication Process<sub>(9)</sub></div> <div>Office Application Startup<sub>(6)</sub></div> <div>Power Settings</div> <div>Pre-OS Boot<sub>(5)</sub></div> <div>Scheduled Task/Job<sub>(5)</sub></div> <div>Server Software Component<sub>(5)</sub></div> <div>Traffic Signaling<sub>(2)</sub></div> <div>Valid Accounts<sub>(4)</sub></div>	<div>Abuse Elevation Control Mechanism<sub>(6)</sub></div> <div>Access Token Manipulation<sub>(5)</sub></div> <div>Account Manipulation<sub>(6)</sub></div> <div>Boot or Logon Autostart Execution<sub>(14)</sub></div> <div>Boot or Logon Initialization Scripts<sub>(5)</sub></div> <div>Create or Modify System Process<sub>(5)</sub></div> <div>Domain or Tenant Policy Modification<sub>(2)</sub></div> <div>Escape to Host</div> <div>Event Triggered Execution<sub>(16)</sub></div> <div>Exploitation for Privilege Escalation</div> <div>Hijack Execution Flow<sub>(13)</sub></div> <div>Process Injection<sub>(12)</sub></div> <div>Scheduled Task/Job<sub>(5)</sub></div> <div>Valid Accounts<sub>(4)</sub></div>	<div>Abuse Elevation Control Mechanism<sub>(6)</sub></div> <div>Access Token Manipulation<sub>(5)</sub></div> <div>BITS Jobs</div> <div>Build Image on Host</div> <div>Debugger Evasion</div> <div>Deobfuscate/Decode Files or Information</div> <div>Deploy Container</div> <div>Direct Volume Access</div> <div>Domain or Tenant Policy Modification<sub>(2)</sub></div> <div>Execution Guardrails<sub>(1)</sub></div> <div>Exploitation for Defense Evasion</div> <div>File and Directory Permissions Modification<sub>(2)</sub></div> <div>Hide Artifacts<sub>(12)</sub></div> <div>Hijack Execution Flow<sub>(13)</sub></div> <div>Impair Defenses<sub>(1,1)</sub></div> <div>Impersonation</div> <div>Indicator Removal<sub>(9)</sub></div> <div>Indirect Command Execution</div> <div>Masquerading<sub>(9)</sub></div> <div>Modify Authentication Process<sub>(9)</sub></div> <div>Modify Cloud Compute Infrastructure<sub>(5)</sub></div> <div>Modify Registry</div> <div>Modify System Image<sub>(2)</sub></div> <div>Network Boundary Bridging<sub>(1)</sub></div> <div>Obfuscated Files or Information<sub>(13)</sub></div> <div>Plist File Modification</div> <div>Pre-OS Boot<sub>(5)</sub></div> <div>Process Injection<sub>(12)</sub></div> <div>Reflective Code Loading</div> <div>Rogue Domain Controller</div> <div>Rootkit</div> <div>Subvert Trust Controls<sub>(6)</sub></div> <div>System Binary Proxy Execution<sub>(1,4)</sub></div> <div>System Script Proxy Execution<sub>(2)</sub></div> <div>Template Injection</div> <div>Traffic Signaling<sub>(2)</sub></div> <div>Trusted Developer Utilities Proxy Execution<sub>(1)</sub></div> <div>Unused/Unsupported Cloud Regions</div> <div>Use Alternate Authentication Material<sub>(4)</sub></div> <div>Valid Accounts<sub>(4)</sub></div> <div>Virtualization/Sandbox Evasion<sub>(3)</sub></div> <div>Weaken Encryption<sub>(2)</sub></div> <div>XSL Script Processing</div>	<div>Adversary-in-the-Middle<sub>(3)</sub></div> <div>Brute Force<sub>(4)</sub></div> <div>Credentials from Password Stores<sub>(6)</sub></div> <div>Exploitation for Credential Access</div> <div>Forced Authentication</div> <div>Forge Web Credentials<sub>(2)</sub></div> <div>Input Capture<sub>(4)</sub></div> <div>Modify Authentication Process<sub>(9)</sub></div> <div>Multi-Factor Authentication Interception</div> <div>Multi-Factor Authentication Request Generation</div> <div>Network Sniffing</div> <div>OS Credential Dumping<sub>(8)</sub></div> <div>Steal Application Access Token</div> <div>Steal or Forge Kerberos Tickets<sub>(4)</sub></div> <div>Steal Web Session Cookie</div> <div>Unsecured Credentials<sub>(8)</sub></div>	<div>Account Discovery<sub>(4)</sub></div> <div>Application Window Discovery</div> <div>Browser Information Discovery</div> <div>Cloud Infrastructure Discovery</div> <div>Cloud Service Dashboard</div> <div>Cloud Service Discovery</div> <div>Cloud Storage Object Discovery</div> <div>Container and Resource Discovery</div> <div>Debugger Evasion</div> <div>Device Driver Discovery</div> <div>Domain Trust Discovery</div> <div>File and Directory Discovery</div> <div>Group Policy Discovery</div> <div>Log Enumeration</div> <div>Network Service Discovery</div> <div>Network Share Discovery</div> <div>Network Sniffing</div> <div>Password Policy Discovery</div> <div>Peripheral Device Discovery</div> <div>Permission Groups Discovery<sub>(3)</sub></div> <div>Process Discovery</div> <div>Query Registry</div> <div>Remote System Discovery</div> <div>Software Discovery<sub>(1)</sub></div> <div>System Information Discovery</div> <div>System Location Discovery<sub>(1)</sub></div> <div>System Network Configuration Discovery<sub>(2)</sub></div> <div>System Network Connections Discovery</div> <div>System Owner/User Discovery</div> <div>System Service Discovery</div> <div>System Time Discovery</div> <div>Virtualization/Sandbox Evasion<sub>(3)</sub></div>	<div>Exploitation of Remote Services</div> <div>Internal Spearphishing</div> <div>Lateral Tool Transfer</div> <div>Remote Service Session Hijacking<sub>(2)</sub></div> <div>Remote Services<sub>(8)</sub></div> <div>Replication Through Removable Media</div> <div>Software Deployment Tools</div> <div>Taint Shared Content</div> <div>Use Alternate Authentication Material<sub>(4)</sub></div>	<div>Adversary-in-the-Middle<sub>(3)</sub></div> <div>Archive Collected Data<sub>(3)</sub></div> <div>Audio Capture</div> <div>Automated Collection</div> <div>Browser Session Hijacking</div> <div>Clipboard Data</div> <div>Data from Cloud Storage</div> <div>Data from Configuration Repository<sub>(2)</sub></div> <div>Data from Information Repositories<sub>(3)</sub></div> <div>Data from Local System</div> <div>Data from Network Shared Drive</div> <div>Data from Removable Media</div> <div>Data Staged<sub>(2)</sub></div> <div>Email Collection<sub>(3)</sub></div> <div>Input Capture<sub>(4)</sub></div> <div>Screen Capture</div> <div>Video Capture</div>	<div>Application Layer Protocol<sub>(4)</sub></div> <div>Communication Through Removable Media</div> <div>Content Injection</div> <div>Data Encoding<sub>(2)</sub></div> <div>Data Obfuscation<sub>(3)</sub></div> <div>Dynamic Resolution<sub>(3)</sub></div> <div>Encrypted Channel<sub>(2)</sub></div> <div>Fallback Channels</div> <div>Hide Infrastructure</div> <div>Ingress Tool Transfer</div> <div>Multi-Stage Channels</div> <div>Non-Application Layer Protocol</div> <div>Non-Standard Port</div> <div>Protocol Tunneling</div> <div>Proxy<sub>(4)</sub></div> <div>Remote Access Software</div> <div>Traffic Signaling<sub>(2)</sub></div> <div>Web Service<sub>(3)</sub></div>