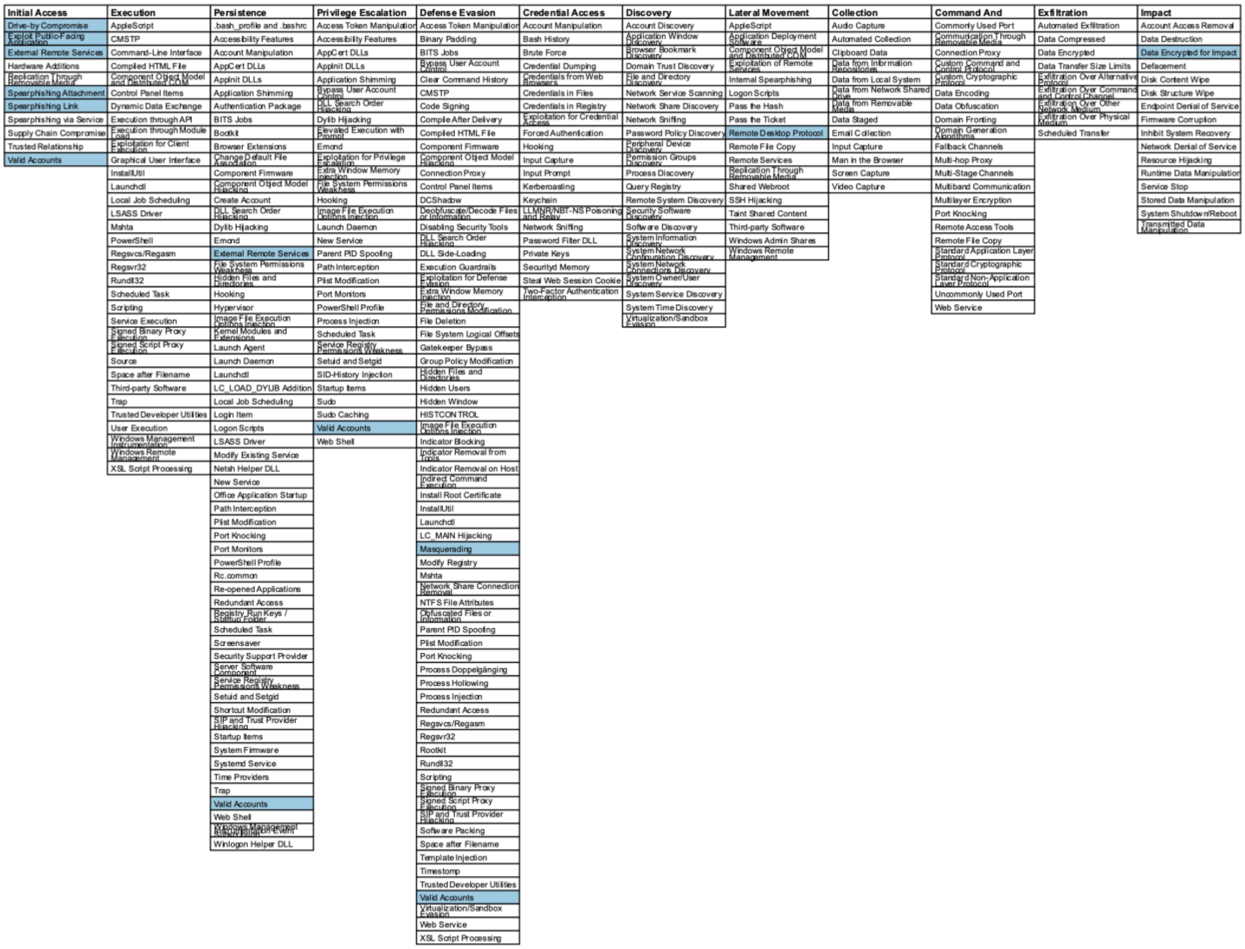
Adversary TTPs in the News

At the suggestion of FS-ISAC, the Center for Threat-Informed Defense worked with Jen Burns and the rest of the MITRE ATT&CK® team to brainstorm ways that we could help organizations that are suddenly faced with a massive increase in staff working from home and the attendant security risks. After careful consideration, we decided to take a relatively straightforward approach - highlighting a set of techniques we'd suggest paying particular attention to based on reporting we've seen on what adversaries are doing.

Some threat actors frequently use what's currently the hot topic in the news, and in that sense, COVID-19 isn't really that different. A lot of the publicly available threat intel states that threat actors are generally using the same techniques they normally would with different lures, so we didn't focus on those. Instead, we focused on techniques that seemed to be the most related to COVID-19 and the massive increase in teleworking. We've constructed a list of these techniques along with the publicly accessible threat intelligence where the techniques were referenced:

ID	*Name*	*References*
T1486	Data Encrypted for Impact	8 9
T1189	Drive-by Compromise	1
T1190	Exploit Public-Facing Application	2
T1133	External Remote Services	2 3 10
T1036	Masquerading	4
T1076	Remote Desktop Protocol	8
T1193	Spearphishing Attachment	4 5
T1192	Spearphishing Link	6 7
T1078	Valid Accounts	2

We've also created an ATT&CK Navigator layer that highlights the adversary techniques listed above and includes the references as comments on the technique. You can download the Navigator Layer JSON file here or click here to visit an instance of the Navigator preloaded with this layer file. Here's what the layer looks like:



Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Command And	Exfiltration	Impact
Drive-by Compromise	AppleScript	.bash_profile and .bashrc	Access Token Manipulation	Access Token Manipulation	Account Manipulation	Account Discovery	AppleScript	Audio Capture	Commonly Used Port	Automated Exfiltration	Account Access Removal
Exploit Public-Facing Application	CMSTP	Accessibility Features	Accessibility Features	Binary Padding	Bash History	Application Window Discovery	Application Deployment Software	Automated Collection	Communication Through Removable Media	Data Compressed	Data Destruction
External Remote Services	Command-Line Interface	Account Manipulation	AppCert DLLs	BITS Jobs	Brute Force	Browser Bookmark Discovery	Component Object Model and Distributed COM	Clipboard Data	Connection Proxy	Data Encrypted	Data Encrypted for Impact
Hardware Additions	Compiled HTML File	AppCert DLLs	AppInit DLLs	Bypass User Account Control	Credential Dumping	Domain Trust Discovery	Exploitation of Remote Services	Data from Information Repositories	Custom Command and Control Protocol	Data Transfer Size Limits	Defacement
Replication Through Removable Media	Component Object Model and Distributed COM	AppInit DLLs	Application Shimming	Clear Command History	Credentials from Web Browsers	File and Directory Discovery	Internal Spearphishing	Data from Local System	Custom Cryptographic Protocol	Exfiltration Over Alternative Protocol	Disk Content Wipe
Spearphishing Attachment	Control Panel Items	Application Shimming	Bypass User Account Control	CMSTP	Credentials in Files	Network Service Scanning	Logon Scripts	Data from Network Shared Drive	Data Encoding	Exfiltration Over Command and Control Channel	Disk Structure Wipe
Spearphishing Link	Dynamic Data Exchange	Authentication Package	DLL Search Order Hijacking	Code Signing	Credentials in Registry	Network Share Discovery	Pass the Hash	Data from Removable Media	Data Obfuscation	Exfiltration Over Other Network Medium	Endpoint Denial of Service
Spearphishing via Service	Execution through API	BITS Jobs	Dylib Hijacking	Compile After Delivery	Exploitation for Credential Access	Network Sniffing	Pass the Ticket	Data Staged	Domain Fronting	Exfiltration Over Physical Medium	Firmware Corruption
Supply Chain Compromise	Execution through Module Load	Bootkit	Elevated Execution with Prompt	Compiled HTML File	Forced Authentication	Password Policy Discovery	Remote Desktop Protocol	Email Collection	Domain Generation Algorithms	Scheduled Transfer	Inhibit System Recovery
Trusted Relationship	Exploitation for Client Execution	Browser Extensions	Emond	Component Firmware	Hooking	Peripheral Device Discovery	Remote File Copy	Input Capture	Fallback Channels		Network Denial of Service
Valid Accounts	Graphical User Interface	Change Default File Association	Exploitation for Privilege Escalation	Component Object Model Hijacking	Input Capture	Permission Groups Discovery	Remote Services	Man in the Browser	Multi-hop Proxy		Resource Hijacking
	InstallUtil	Component Firmware	Extra Window Memory Injection	Connection Proxy	Input Prompt	Process Discovery	Replication Through Removable Media	Screen Capture	Multi-Stage Channels		Runtime Data Manipulation
	Launchctl	Component Object Model Hijacking	File System Permissions Weakness	Control Panel Items	Kerberoasting	Query Registry	Shared Webroot	Video Capture	Multiband Communication		Service Stop
	Local Job Scheduling	Create Account	Hooking	DCShadow	Keychain	Remote System Discovery	SSH Hijacking		Multilayer Encryption		Stored Data Manipulation
	LSASS Driver	DLL Search Order Hijacking	Image File Execution Options Injection	Deobfuscate/Decode Files or Information	LLMNR/NBT-NS Poisoning and Relay	Security Software Discovery	Taint Shared Content		Port Knocking		System Shutdown/Reboot
	Mshta	Dylib Hijacking	Launch Daemon	Disabling Security Tools	Network Sniffing	Software Discovery	Third-party Software		Remote Access Tools		Transmitted Data Manipulation
	PowerShell	Emond	New Service	DLL Search Order Hijacking	Password Filter DLL	System Information Discovery	Windows Admin Shares		Remote File Copy		
	Regsvcs/Regasm	External Remote Services	Parent PID Spoofing	DLL Side-Loading	Private Keys	System Network Configuration Discovery	Windows Remote Management		Standard Application Layer Protocol		
	Regsvr32	File System Permissions Weakness	Path Interception	Execution Guardrails	Securityd Memory	System Network Connections Discovery			Standard Cryptographic Protocol		
	Rundll32	Hidden Files and Directories	Plist Modification	Exploitation for Defense Evasion	Steal Web Session Cookie	System Owner/User Discovery			Standard Non-Application Layer Protocol		
	Scheduled Task	Hooking	Port Monitors	Extra Window Memory Injection	Two-Factor Authentication Interception	System Service Discovery			Uncommonly Used Port		
	Scripting	Hypervisor	PowerShell Profile	File and Directory Permissions Modification		System Time Discovery			Web Service		
	Service Execution	Image File Execution Options Injection	Process Injection	File Deletion		Virtualization/Sandbox Evasion					
	Signed Binary Proxy Execution	Kernel Modules and Extensions	Scheduled Task	File System Logical Offsets							
	Signed Script Proxy Execution	Launch Agent	Service Registry Permissions Weakness	Gatekeeper Bypass							
	Source	Launch Daemon	Setuid and Setgid	Group Policy Modification							
	Space after Filename	Launchctl	SID-History Injection	Hidden Files and Directories							
	Third-party Software	LC_LOAD_DYLIB Addition	Startup Items	Hidden Users							
	Trap	Local Job Scheduling	Sudo	Hidden Window							
	Trusted Developer Utilities	Login Item	Sudo Caching	HISTCONTROL							
	User Execution	Logon Scripts	Valid Accounts	Image File Execution Options Injection							
	Windows Management Instrumentation	LSASS Driver	Web Shell	Indicator Blocking							
	Windows Remote Management	Modify Existing Service		Indicator Removal from Tools							
	XSL Script Processing	Netsh Helper DLL		Indicator Removal on Host							
		New Service		Indirect Command Execution							
		Office Application Startup		Install Root Certificate							
		Path Interception		InstallUtil							
		Plist Modification		Launchctl							
		Port Knocking		LC_MAIN Hijacking							
		Port Monitors		Masquerading							
		PowerShell Profile		Modify Registry							
		Rc.common		Mshta							
		Re-opened Applications		Network Share Connection Removal							
		Redundant Access		NTFS File Attributes							
		Registry Run Keys / Startup Folder		Obfuscated Files or Information							
		Scheduled Task		Parent PID Spoofing							
		Screensaver		Plist Modification							
		Security Support Provider		Port Knocking							
		Server Software Component		Process Doppelgänging							
		Service Registry Permissions Weakness		Process Hollowing							
		Setuid and Setgid		Process Injection							
		Shortcut Modification		Redundant Access							
		SIP and Trust Provider Hijacking		Regsvcs/Regasm							
		Startup Items		Regsvr32							
		System Firmware		Rootkit							
		Systemd Service		Rundll32							
		Time Providers		Scripting							
		Trap		Signed Binary Proxy Execution							
		Valid Accounts		Signed Script Proxy Execution							
		Web Shell		SIP and Trust Provider Hijacking							
		Windows Management Instrumentation Event Subscription		Software Packing							
		Winlogon Helper DLL		Space after Filename							
				Template Injection							
				Timestomp							
				Trusted Developer Utilities							
				Valid Accounts							
				Virtualization/Sandbox Evasion							
				Web Service							
				XSL Script Processing							

If we see any major changes over the next week or 2 (or 10), we'll update this list and make new layer files available. As always, please email us at attack@mitre.org to let us know if this is helpful and how we might improve it.

References:

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