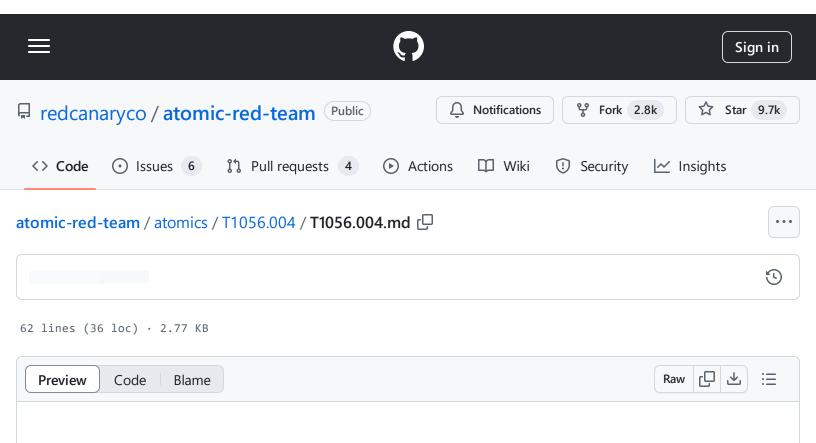
atomic-red-team/atomics/T1056.004/T1056.004.md at f339e7da7d05f6057fdfcdd3742bfcf365fee2a9 redcanaryco/atomic-red-team · GitHub - 31/10/2024 18:19 https://github.com/redcanaryco/atomic-red-team/blob/f339e7da7d05f6057fdfcdd3742bfcf365fee2a9/atomics/T1056.004/T1056.004.md



# T1056.004 - Credential API Hooking

## **Description from ATT&CK**

Adversaries may hook into Windows application programming interface (API) functions to collect user credentials. Malicious hooking mechanisms may capture API calls that include parameters that reveal user authentication credentials. (Citation: Microsoft TrojanSpy:Win32/Ursnif.gen!I Sept 2017) Unlike [Keylogging] (<a href="https://attack.mitre.org/techniques/T1056/001">https://attack.mitre.org/techniques/T1056/001</a>), this technique focuses specifically on API functions that include parameters that reveal user credentials. Hooking involves redirecting calls to these functions and can be implemented via:

- **Hooks procedures**, which intercept and execute designated code in response to events such as messages, keystrokes, and mouse inputs.(Citation: Microsoft Hook Overview)(Citation: Elastic Process Injection July 2017)
- Import address table (IAT) hooking, which use modifications to a process's IAT, where pointers to imported API functions are stored.(Citation: Elastic Process Injection July 2017) (Citation: Adlice Software IAT Hooks Oct 2014)(Citation: MWRInfoSecurity Dynamic Hooking 2015)

• Inline hooking, which overwrites the first bytes in an API function to redirect code flow. (Citation: Elastic Process Injection July 2017)(Citation: HighTech Bridge Inline Hooking Sept 2011)(Citation: MWRInfoSecurity Dynamic Hooking 2015)

#### **Atomic Tests**

Atomic Test #1 - Hook PowerShell TLS Encrypt/Decrypt Messages

### Atomic Test #1 - Hook PowerShell TLS Encrypt/Decrypt Messages

Hooks functions in PowerShell to read TLS Communications

Supported Platforms: Windows

auto\_generated\_guid: de1934ea-1fbf-425b-8795-65fb27dd7e33

#### Inputs:

Name	Description	Туре	Default Value
file_name	DII To Inject	Path	PathToAtomicsFolder\T1056.004\bin\T1056.004x64.dll
server_name	TLS Server To Test Get Request	Url	https://www.example.com

Attack Commands: Run with powershell! Elevation Required (e.g. root or admin)

mavinject \$pid /INJECTRUNNING #{file\_name}
Invoke-WebRequest #{server\_name} -UseBasicParsing

Dependencies: Run with powershell!

Description: T1056.004x64.dll must exist on disk at specified location (#{file\_name})

**Check Prereq Commands:** 

atomic-red-team/atomics/T1056.004/T1056.004.md at f339e7da7d05f6057fdfcdd3742bfcf365fee2a9 redcanaryco/atomic-red-team · GitHub - 31/10/2024 18:19 https://github.com/redcanaryco/atomic-red-team/blob/f339e7da7d05f6057fdfcdd3742bfcf365fee2a9/atomics/T1056.004/T1056.004.md

