

.. /FsiAnyCpu.exe

AWL bypass

32/64-bit FSharp (F#) Interpreter included with Visual Studio.

Paths:

c:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\Common7\IDE\CommonExtensions\Microsoft\FSharp\fsianycpu.exe

Resources:

- <https://bohops.com/2020/11/02/exploring-the-wdac-microsoft-recommended-block-rules-part-ii-wfc-fsi/>

Acknowledgements:

- Nick Tyrer ([@NickTyrer](#))
- Jimmy ([@bohops](#))

Detections:

- BlockRule: <https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-defender-application-control/microsoft-recommended-block-rules>

- IOC: FsiAnyCpu.exe execution may be suspicious on non-developer machines

- Sigma: https://github.com/SigmaHQ/sigma/blob/6b34764215b0e97e32cbc4c6325fc933d2695c3a/rules/windows/process_creation/proc_creation_win_lolbin_fsharp_interpreters.yml

AWL bypass

. Execute F# code via script file

```
fsianycpu.exe c:\path\to\test.fsscript
```

Use case: Execute payload with Microsoft signed binary to bypass WDAC policies

Privileges required: User

Operating systems: Windows 10 2004 (likely previous and newer versions as well)

ATT&CK® technique: T1059

. Execute F# code via interactive command line

```
fsianycpu.exe
```

Use case: Execute payload with Microsoft signed binary to bypass WDAC policies

Privileges required: User

Operating systems: Windows 10 2004 (likely previous and newer versions as well)

ATT&CK® technique: T1059