



dotnet.exe comes with .NET Framework

Paths:

C:\Program Files\dotnet\dotnet.exe

Resources:

- https://twitter.com/ felamos/status/1204705548668555264
- https://gist.github.com/bohops/3f645a7238d8022830ecf5511b3ecfbc
- https://bohops.com/2019/08/19/dotnet-core-a-vector-for-awl-by-pass-defense-evasion/
- https://learn.microsoft.com/en-us/dotnet/fsharp/tools/fsharp-interactive/

Acknowledgements:

- felamos (<u>@_felamos</u>)
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- yamalon (<u>@mavinject</u>)

Detections:

- Sigma: proc creation win lolbin dotnet.yml
- BlockRule: https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-defender-application-control/microsoft-recommended-block-rules
- IOC: dotnet.exe spawned an unknown process

AWL bypass

1. dotnet.exe will execute any dll even if applocker is enabled.

dotnet.exe [PATH_TO_DLL]

Use case: Execute code bypassing AWL

Privileges required: User

Operating systems: Windows 7 and up with .NET installed ATT&CK® technique: T1218: System Binary Proxy Execution

2. dotnet.exe with msbuild (SDK Version) will execute unsigned code

dotnet.exe msbuild [Path_TO_XML_CSPROJ]

Use case: Execute code bypassing AWL

Privileges required: User

Operating systems: Windows 10 and up with .NET Core installed ATT&CK® technique: T1218: System Binary Proxy Execution

Execute

1. dotnet.exe will execute any DLL.

dotnet.exe [PATH_TO_DLL]

Use case: Execute DLL Privileges required: User

Operating systems: Windows 7 and up with .NET installed ATT&CK® technique: T1218: System Binary Proxy Execution

2. dotnet.exe will open a console which allows for the execution of arbitrary F# commands

dotnet.exe fsi

Use case: Execute arbitrary F# code

Privileges required: User

Operating systems: Windows 10 and up with .NET SDK installed ATT&CK® technique: T1059: Command and Scripting Interpreter