

Execute (DLL) AWL bypass (DLL)

Binary coregen.exe (Microsoft CoreCLR Native Image Generator) loads exported function GetCLRRuntimeHost from coreclr.dll or from .DLL in arbitrary path. Coregen is located within "C:\Program Files (x86)\Microsoft Silverlight\5.1.50918.0" or another version of Silverlight. Coregen is signed by Microsoft and bundled with Microsoft Silverlight.

#### Paths:

C:\Program Files\Microsoft Silverlight\5.1.50918.0\coregen.exe C:\Program Files (x86)\Microsoft Silverlight\5.1.50918.0\coregen.exe

## Resources:

- <a href="https://www.youtube.com/watch?v=75XlmxOOlnU">https://www.youtube.com/watch?v=75XlmxOOlnU</a>
- <a href="https://www.fireeye.com/blog/threat-research/2019/10/staying-hidden-on-the-endpoint-evading-detection-with-shellcode.html">https://www.fireeye.com/blog/threat-research/2019/10/staying-hidden-on-the-endpoint-evading-detection-with-shellcode.html</a>

### **Acknowledgements:**

- Nicky Tyrer
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#### **Detections:**

- Sigma: image\_load\_side\_load\_coregen.yml
- IOC: coregen.exe loading .dll file not in "C:\Program Files (x86)\Microsoft Silverlight\5.1.50918.0\"
- IOC: coregen.exe loading .dll file not named coreclr.dll
- IOC: coregen.exe command line containing -L or -l
- IOC: coregen.exe command line containing unexpected/invald assembly name
- IOC: coregen.exe application crash by invalid assembly name

## **Execute**

1. Loads the target .DLL in arbitrary path specified with /L.

coregen.exe /L C:\folder\evil.dll dummy\_assembly\_name

Use case: Execute DLL code

Privileges required: User
Operating systems: Windows

ATT&CK® technique: T1055: Process Injection

Tags: Execute: DLL

2. Loads the coreclr.dll in the corgen.exe directory (e.g. C:\Program Files\Microsoft Silverlight\5.1.50918.0).

coregen.exe dummy\_assembly\_name

**Use case:** Execute DLL code

Privileges required: User
Operating systems: Windows

ATT&CK® technique: T1055: Process Injection

# **AWL** bypass

Loads the target .DLL in arbitrary path specified with /L. Since binary is signed it can also be used to bypass application whitelisting solutions.

coregen.exe /L C:\folder\evil.dll dummy\_assembly\_name

**Use case:** Execute DLL code

Privileges required: User
Operating systems: Windows

ATT&CK® technique: T1218: System Binary Proxy Execution

Tags: Execute: DLL