**Hidden exe in Downloader(part 2 of 2)**

Very sophisticated exe, will have to come back to it with advanced techniques

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| **BACKGROUND** | | |
| **Date:** | | 7/15/2018 |
| **Workstation:** | | VirtualBox: win xp unpatched 32bit intel |
| **File Name:** | | BIN 101 |
| **File Location:** | | .rsrc |
| **File Timestamps:** | | spoofed (2011/02/27 SUN 00:16:59 UTC) |
| **Notification Vector:** | |  |
| **STATIC ANALYSIS** | | |
| **File Size (bytes):** | 16KB | |
| **Icon Graphic:** |  | |
| **Signed?:** |  | |
| **File Hash:** | **MD5: 6a95c2f88e0c09a91d69ffb98bc6fce8** | |
| **Imp Hash:** |  | |
| **PE Section Hashes:** | | |
|  | | |
| **Compile Time** (pescanner, PEView)**:** | | |
|  | | |
| **File Properties** (PEStudio, PeView)**:** Description, version, file header characteristics | | |
| win 32 exe i386, GUI, obfuscated imports | | |
| **Strings** (strings, strings2, BinText)**:** Functions, domains, IP addresses, commands, error msgs | | |
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| **Packed** (pescanner, PEiD, ExeInfo)**:** | | |
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| **Entropy** (ByteHist, pescanner)**:** File, sections | | |
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| **Imported/Exported Functions** (PEStudio, Dependency Walker)**:** | | |
| URLDownloadToFile  urlmon.dll  \winup.exe  (reg editing functions)  mpr.dll (NetGetConnection) | | |
| **Open Source Research** (VirusTotal, search engines, malware repositories)**:** | | |
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| **BEHAVIORAL ANALYSIS** | | |
| **File System Artifacts** (Regshot, CaptureBAT, Process Monitor, Cuckoo)**:**  *Triggers:*Browser, mail client, specific web pages (google, bank), time, reboot, user/admin privs  *Dependencies:* DNS, HTTP, IRC, ARP | | |
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| **Network Artifacts** (SmartSniff, Fakedns, INetSim, NetworkMiner Wireshark)**:** C2 domains/IP addresses, protocols, user-agent | | |
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| **Memory Analysis** (Volatility, Rekall, Redline, Process Hacker)**:** rogue processes, code injection, rootkits, network artifacts | | |
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| **Open Source Research** (centralops, robtex, urlvoid, ipvoid, TrustedSource)**:** | | |
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| **CODE ANALYSIS** | | |
| **Static Analysis** (IDA Pro)**:** Strings, CALLs, program flow, loops | | |
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| **Debugging** (OllyDbg)**:** Function breakpoints, monitor stack, memory map, plugins for unpacking, find OEP | | |
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| **ANALYSIS SUMMARY** | | |
| **Key Host and Network Indicators of Compromise (IOCs):** | | |
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| **Key Functionality:** | | |
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| **Purpose:** | | |
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| **Persistence:** | | |
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| **Environment-specific Impact:** | | |
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| **Root Cause:** | | |
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| **Attribution:** | | |
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