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[← Previous](#)[Next →](#)

# Beyond good ol’ Run key, Part 36

Last Updated 2023-02-25

Added xdbg32 from Trend Micro article.

Last Updated 2019-09-20

A few more updates thanks to [@bartblaze](#) !!!

Last Updated 2018-10-18

Updated mistake in tplcdclr.exe → wtsapi32.dll →wts.chm combo and added VeetlePlayer.exe → libvlc.dll →mtcReport.ktc; thanks to [@KyleHanslovan](#) !!!

Last Updated 2017-01-26

At the end of [last post](#) I mentioned PlugX. The idea used by this malware is pretty clever and relies on taking a legitimate signed .exe that is dependent on a DLL and swapping the DLL with the malicious replacement which – when loaded – decrypts/loads the final payload to memory. The trick used by PlugX is referred to as DLL Side-loading and I thought it will be nice to try summarizing various versions of this persistence trick described by various blogs.

The below are triplets describing the following PlugX components:

- legitimate .exe [‘Source’ refers to the article/blog/WP describing it]
  - DLL Side-loaded .dll
    - Payload

Here they are...

- AShld.exe [\[Source\]](#)
  - AShldRes.DLL
    - AShldRes.DLL.asr
- CamMute.exe [\[Source\]](#)
  - CommFunc.dll
    - CommFunc.jax
- chrome\_frame\_helper.exe [\[Source PDF\]](#) Thx to [@bartblaze](#)
  - chrome\_frame\_helper.dll
    - chrome\_frame\_helper.dll.rom
- dvcemumanager.exe [\[Source\]](#)
  - DESqmWrapper.dll
    - DESqmWrapper.wrapper
- fsguidll.exe [\[Source\]](#)
  - fslapi.dll
    - fslapi.dll.gui
- fsstm.exe [\[Source\]](#)
  - FSPMAPI.dll
    - FSPMAPI.dll.fsp

- Gadget.exe [\[Source\]](#)
  - Sidebar.dll
    - Sidebar.dll.doc
- hhc.exe [\[Source\]](#)
  - hha.dll
    - hha.dll.bak
- hkcmd.exe [\[Source\]](#)
  - hccutils.dll
    - hccutils.dll.res
- LoLTWLauncher.exe [\[Source\]](#) Thx to [@bartblaze](#)
  - NtUserEx.dll
    - NtUserEx.dat
- Mc.exe [\[Source\]](#)
  - McUtil.dll
    - McUtil.dll.url
- mcf.exe [\[Source\]](#)
  - mcutil.dll
    - mcf.ep
- mcupdui.exe [\[Source\]](#)
  - McUtil.dll
    - McUtil.dll.ping
- mcut.exe [\[Source\]](#)
  - McUtil.dll
    - mcutil.dll.bbc
- MsMpEng.exe [\[Source\]](#)
  - MpSvc.dll
    - MpSvc
- msseces.exe [\[Source\]](#) Thx to [@bartblaze](#)
  - mPclient.dll
    - msseces.asm
- NvSmart.exe [\[Source\]](#)
  - NvSmartMax.dll
    - boot.ldr
- OInfoP11.exe [\[Source\]](#)
  - OInfo11.ocx
    - OInfo11.ISO
- OleView.exe [\[Source\]](#)
  - ACLUI.DLL
    - ACLUI.DLL.UI
- OleView.exe [\[Source\]](#) Thx to [@KyleHanslovan](#)
  - iviewers.dll
    - <unknown>
- POETWLauncher.exe [\[Source\]](#) Thx to [@bartblaze](#)
  - NtUserEx.dll
    - NtUserEx.dat
- RasTls.exe [\[Source\]](#)
  - RasTls.dll
    - RasTls.dll.msc or RasTls.dll.config
- rc.exe [\[Source\]](#) Thx to [@KyleHanslovan](#)
  - rc.dll
    - rc.hlp
- RunHelp.exe [\[Source\]](#)
  - ssMUIDLL.dll
    - ssMUIDLL.dll.conf
- sep\_NE.exe [\[Source\]](#) Thx to [@KyleHanslovan](#)
  - winmm.dll
    - sep\_NE.slf
- Setup.exe [\[Source\]](#)
  - msi.dll
    - msi.dll.dat
- sx.exe [\[Source\]](#) Thx to [@bartblaze](#)

- SXLOC.DLL
  - SXLOC.ZAP
- tplcdclr.exe [\[Source\]](#) Thx to [@KyleHanslovan](#)
  - wtsapi32.dll
    - wts.chm
- Ushata.exe [\[Source\]](#)
  - Ushata.dll
    - Ushata.fox
- VeetlePlayer.exe [\[Source; PDF warning\]](#) Thx to [@KyleHanslovan](#)
  - libvlc.dll
    - mtcReport.ktc
- x32dbg.exe [\[Source\]](#)
  - x32bridge.dll
    - x32bridge.dat

There is also a potential combo:

- AFLogVw.exe [\[Source\]](#)
  - Ahnl2.dll
    - <unknown>

Now, a request – if you know any other combo that I have not included on the list, please let me know+provide a reference/source and I will add it to the list. Thanks!

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