

How can I figure out which object is being hosted in an instance of dllhost?

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We saw some time ago that the `dllhost.exe` process goes by the name *COM Surrogate* and is used when a COM object is configured to run in a separate process.

If you have found an instance of the `dllhost.exe` process, how can you figure out which COM object is running inside it? For example, maybe you are debugging an out-of-process COM object and you want to find the `dllhost.exe` that is hosting it, so you can debug further. Or you're studying a crash of `dllhost.exe` and you want to know what object the crashed `dllhost.exe` was working with.

Note that this information is for debugging purposes only.

The information is encoded in the `dllhost.exe` command line. From the debugger, you can use the `!peb` command to view the command line. You can also ask Task Manager to show the command line by going to the *Details* page and turning on the *Command line* column.

From the command line, extract the GUID. That is the AppId of the object loaded into the `dllhost.exe` process. You can look up this GUID in the registry under `HKEY_CLASSES_ROOT\AppData\{Guid}`. That will give you some information about what the object is. To obtain the CLSID that corresponds to the AppId, go to `HKEY_CLASSES_ROOT\CLSID` and search for the AppId GUID. It will be a value inside one of the CLSID entries. That's the object.

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