Kill Windows a process with Tskill and Taskkill

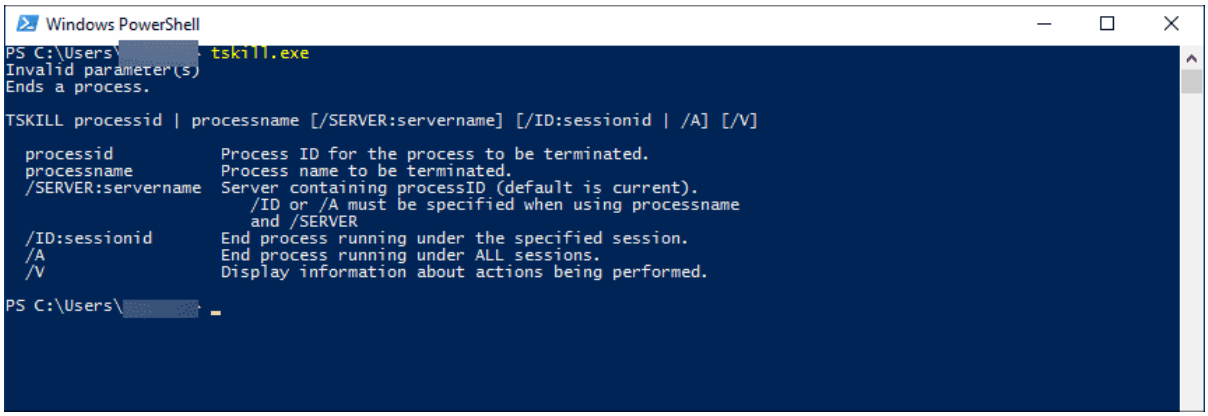
https://4sysops.com/archives/kill-windows-process-with-tskill-and-taskkill/

In my previous post, Terminate Windows processes with PsKill, I explained how to use PsKill to kill Windows processes on local or remote systems. As mentioned in the post, PsKill is a rather old tool with just a few options. Today, I will explain how to use two built-in tools: Tskill and Taskkill.
Contents

Both Tskill and Taskkill have been available since Windows XP as built-in tools. As with PsKill, they can both kill a Windows process locally or remotely. Administrative privileges are required if you want to terminate a process from another user or with a higher security context. Let's have a closer look at how you can kill Windows processes with these tools.

Kill a Windows process with Tskill

Tskill is a simple tool with only a few options. It can terminate a process based on process ID (PID) or process name. Wildcard characters are accepted as well. Tskill can be used locally or remotely.



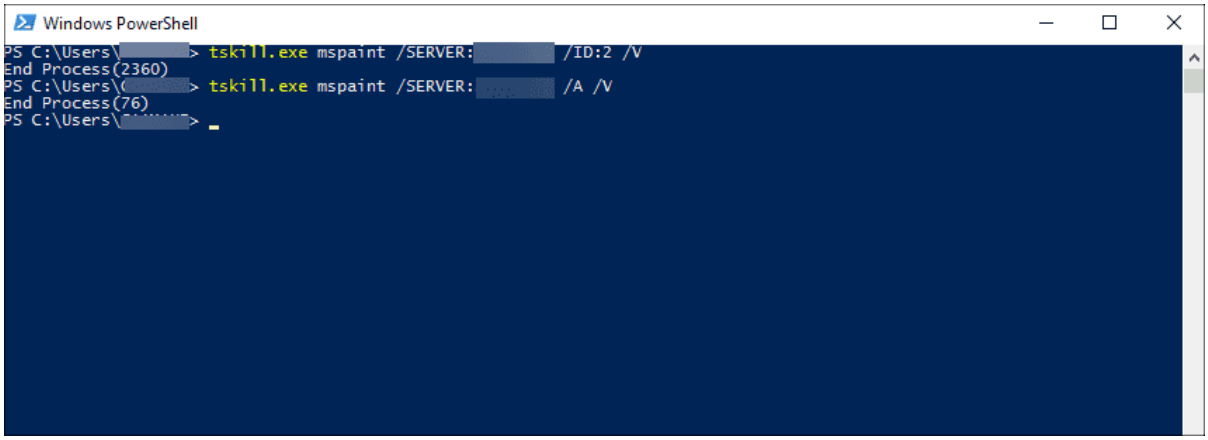
Tskill command line options

The basic syntax is as follows:

```
tskill 5564
tskill mspaint
tskill mspa*
```

The Tskill documentation on the Microsoft website tells you that the tool ends a process running in a session on a Remote Desktop Services (RDS) host server. This can be useful when terminating processes by wildcard or from remote servers.

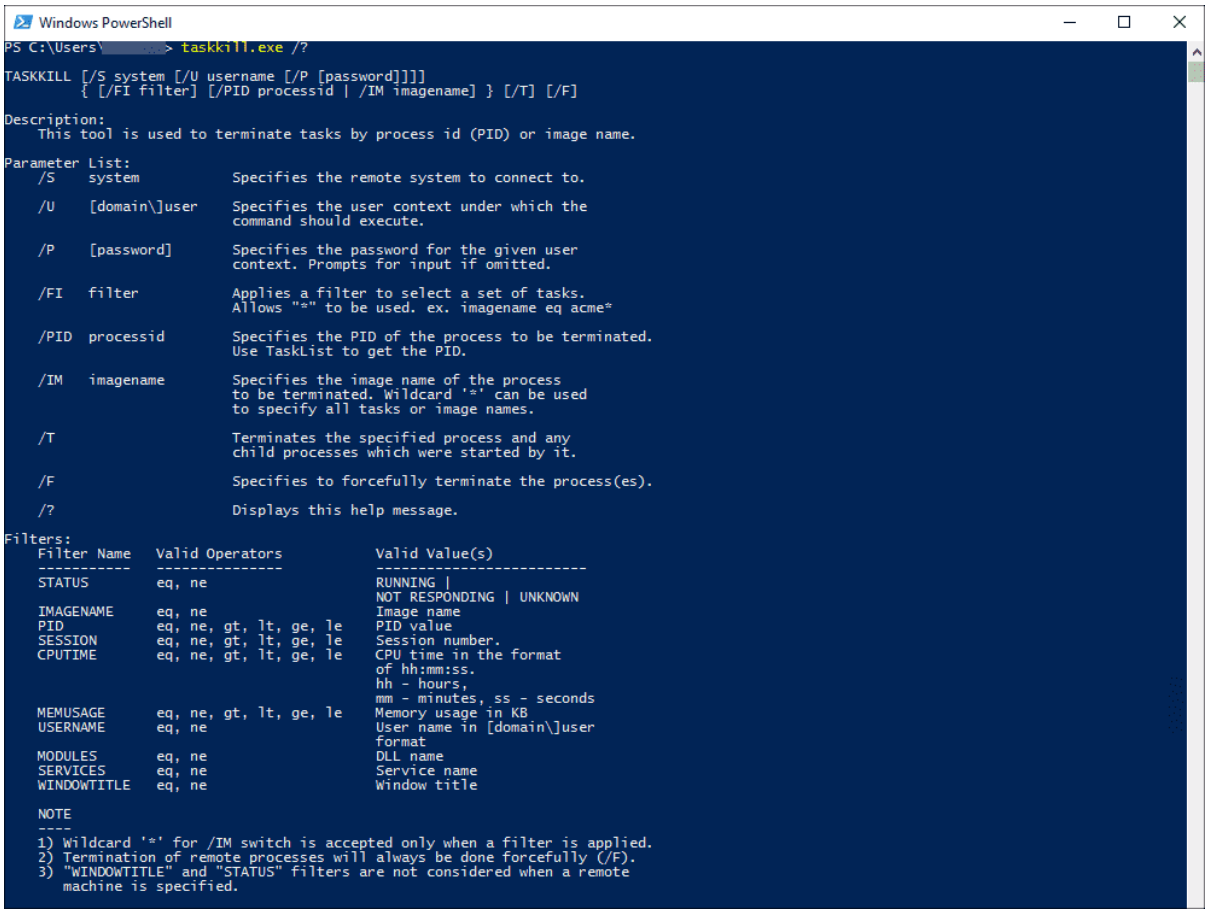
You can specify the session in which you want to kill the remote process. Use **/ID:sessionid** to specify a session or **/A** to kill the Windows process under all sessions. These options are only required when you kill a process by its name or a wildcard, as multiple users may run the same process name on an RDS server. Terminating a remote process by its PID does not require these options, as the PID is always unique. By default, Tskill does not produce any output. This can be changed using the **/V** switch. I recommend using this switch for such operations so that you can see the output.



Terminating remote processes with Tskill

Kill a Windows process with Taskkill

Compared to Tskill, Taskkill has many more features, as can be seen in the help message. It allows you to kill a Windows process from a local or remote system, use different credentials, filter to select a set of tasks, or terminate a process tree.



Taskkill command line options

The basic syntax is as follows:

```
taskkill /IM mspaint.exe
taskkill /IM mspa*
taskkill /PID 1258
taskkill /PID 5589 /T
```

Note that the .exe suffix is required if you don't use a wildcard. Typing only mspaint will return "ERROR: The process mspaint not found." The help message also says that wildcards in the **/IM** option can only be used together with the filter (**/FI** option), which is not true. The **/T** option is used to kill the entire process tree.

Taskkill can also kill a Windows process softly. It sends a kill signal to the application, allowing it to save its data and end properly. For example, if you use Taskkill to terminate a Word process that has unsaved changes, Word will ask you if you want to save the data. To forcefully kill a Windows process, use the **/F** option. Note that terminating a process on a remote system is always done forcefully.

Killing a process on a remote system requires administrative rights on the target system. Taskkill allows you to specify alternate credentials for such actions using the **/U** and **/P** options. If you don't add the **/P** option, you will be prompted for the password. The syntax is as follows:

```
taskkill /S myserver /IM mspaint.exe
taskkill /S myserver /U LAB\admin /P Passw0rd /PID 1234
```

Taskkill also allows you to use filters to specify a set of processes to be terminated. For example, you may want to kill all processes that have higher memory usage than 100 MB. Or you may want to kill all processes running under a specific user. This is done using the following syntax:

```
taskkill /F /FI "MEMUSAGE gt 102400"
taskkill /F /FI "USERNAME eq LAB\Admin"
```

You can also combine both conditions and kill all Windows processes for the Admin user that use more than 100 MB of memory. Simply specify the **/FI** option twice.

```
taskkill /F /FI "MEMUSAGE gt 102400"/FI "USERNAME eq LAB\Admin"
```

Use the help message to see all filtering options. Note that using filters incorrectly may result in the termination of critical system processes or processes you don't want terminated.

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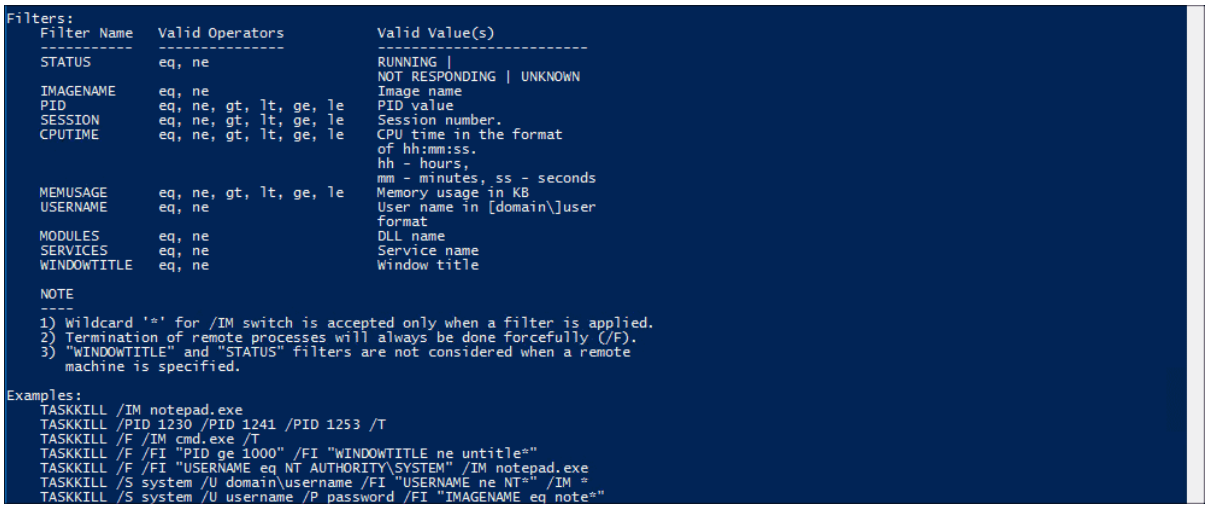

```
Filters:
    Filter Name   Valid Operators           Valid Value(s)
    -----------   ---------------           -------------------------
    STATUS        eq, ne                    RUNNING |
                                            NOT RESPONDING | UNKNOWN
    IMAGENAME     eq, ne                    Image name
    PID           eq, ne, gt, lt, ge, le    PID value
    SESSION       eq, ne, gt, lt, ge, le    Session number.
    CPUTIME       eq, ne, gt, lt, ge, le    CPU time in the format
                                            of hh:mm:ss.
                                            hh - hours,
                                            mm - minutes, ss - seconds
    MEMUSAGE      eq, ne, gt, lt, ge, le    Memory usage in KB
    USERNAME      eq, ne                    User name in [domain\]user
                                            format
    MODULES       eq, ne                    DLL name
    SERVICES      eq, ne                    Service name
    WINDOWTITLE   eq, ne                    Window title

    NOTE
    ----
    1) Wildcard '*' for /IM switch is accepted only when a filter is applied.
    2) Termination of remote processes will always be done forcefully (/F).
    3) "WINDOWTITLE" and "STATUS" filters are not considered when a remote
       machine is specified.

Examples:
    TASKKILL /IM notepad.exe
    TASKKILL /PID 1230 /PID 1241 /PID 1253 /T
    TASKKILL /F /IM cmd.exe /T
    TASKKILL /F /FI "PID ge 1000" /FI "WINDOWTITLE ne untitle*"
    TASKKILL /F /FI "USERNAME eq NT AUTHORITY\SYSTEM" /IM notepad.exe
    TASKKILL /S system /U domain\username /FI "USERNAME ne NT*" /IM *
    TASKKILL /S system /U username /P password /FI "IMAGENAME eq note*"
```

Taskkill filtering options

Final words

In this post, you have learned how to use Tskill and Taskkill to kill a Windows process on local or remote systems. As you have seen, both tools offer more features than Sysinternals PsKill. In addition, they are built into Windows, so no download is required. As always, be careful with the process you are killing. Inappropriate actions might lead to data loss or system crash.