## Is there a way to add a task to the windows task scheduler via python 3?

Asked 8 years, 3 months ago Modified 4 months ago Viewed 17k times



I have a main python script that generates a GUI, and through that GUI I want the user to be able to create, amend, and delete schedules managed by the windows task scheduler.

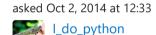
16



python python-3.x



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Is using either WMI or schtasks.exe an option? – FredP Oct 2, 2014 at 12:43

Ahem... quick google results: blog.ziade.org/2007/11/01/... sourceforge.net/projects/pytaskscheduler Have a nice day:-) - FredP Oct 2, 2014 at 13:01

This looks like it was written for Python 2.3, so not exactly what I was looking for. Will see if I can scavenge from it though. – I\_do\_python Oct 2, 2014 at 13:48

- 1 With subprocess you could do: <a href="mailto:stackoverflow.com/a/2725908/660921">stackoverflow.com/a/2725908/660921</a> Martin Tournoij Oct 2, 2014 at 14:02
- 1 @FredP, your solution is incompatible with 3.x. I\_do\_python Oct 2, 2014 at 14:05

## 4 Answers

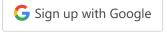
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This code creates a task which will run in 5 minutes (uses <a href="mailto:pywin32">pywin32</a>):

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**(1)** 

```
scheduler.Connect()
root folder = scheduler.GetFolder('\\')
task def = scheduler.NewTask(⊘)
# Create trigger
start time = datetime.datetime.now() + datetime.timedelta(minutes=5)
TASK TRIGGER TIME = 1
trigger = task def.Triggers.Create(TASK TRIGGER TIME)
trigger.StartBoundary = start time.isoformat()
# Create action
TASK ACTION EXEC = 0
action = task def.Actions.Create(TASK ACTION EXEC)
action.ID = 'DO NOTHING'
action.Path = 'cmd.exe'
action.Arguments = '/c "exit"'
# Set parameters
task def.RegistrationInfo.Description = 'Test Task'
task def.Settings.Enabled = True
task def.Settings.StopIfGoingOnBatteries = False
# Register task
# If task already exists, it will be updated
TASK CREATE OR UPDATE = 6
TASK LOGON NONE = ∅
root folder.RegisterTaskDefinition(
    'Test Task', # Task name
   task def,
   TASK CREATE OR UPDATE,
    '', # No user
    '', # No password
   TASK LOGON NONE)
```

More info on tasks and their properties here: <a href="https://learn.microsoft.com/en-us/windows/desktop/taskschd/task-scheduler-objects">https://learn.microsoft.com/en-us/windows/desktop/taskschd/task-scheduler-objects</a>

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answered Oct 6, 2018 at 10:08

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PyWin32 provides an interface to the Task Scheduler in win32com.taskscheduler. You can see an example of it's use here:

9

• <a href="https://github.com/SublimeText/Pywin32/blob/master/lib/x32/win32comext/taskscheduler/test/test addtask 1.py">https://github.com/SublimeText/Pywin32/blob/master/lib/x32/win32comext/taskscheduler/test/test addtask 1.py</a>



Also @FredP linked to a good example that's much simpler:



• <a href="http://blog.ziade.org/2007/11/01/scheduling-tasks-in-windows-with-pywin32/">http://blog.ziade.org/2007/11/01/scheduling-tasks-in-windows-with-pywin32/</a>



There is also an interesting tidbit in the wmi module's cookbook about scheduling a job, although it doesn't appear to use the Task Scheduler:

• <a href="http://timgolden.me.uk/python/wmi/cookbook.html#schedule-a-job">http://timgolden.me.uk/python/wmi/cookbook.html#schedule-a-job</a>

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answered Oct 2, 2014 at 14:00



Warning: Do not use the WMI method. The service which it depends on seems to be deprecated and not enabled by default (Though you can enable it via registry) since Windows 8: <a href="learn.microsoft.com/en-us/windows/win32/cimwin32prov/...">learn.microsoft.com/en-us/windows/win32/cimwin32prov/...</a> – xendi Sep 12, 2020 at 22:43 \*

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Just to round out the option list here... How about just calling the windows command line?

9

import os



os.system(r'SchTasks /Create /SC DAILY /TN "My Task" /TR "C:mytask.bat" /ST 09:00')



1

You can launch any executable, batch file, or even another python script - assuming the system is set to execute python...

schtasks has a rich list of options and capabilities...https://learn.microsoft.com/en-us/windows/win32/taskschd/schtasks

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answered Feb 1, 2021 at 21:30





I also needed a way to use Python to schedule a task in Windows 10. I discovered something simpler, using only <u>subprocess</u> and PowerShell's <u>Scheduled Tasks cmdlets</u>, which is more powerful as it gives you finer control over the task to schedule.

2

And there's no need for a third-party module for this one.



import subprocess



# Use triple quotes string literal to span PowerShell command multiline
STR\_CMD = """
\$action = New-ScheduledTaskAction -Execute "powershell.exe" -Argument
"C:\\path\\to\\file.ps1"
\$description = "Using PowerShell's Scheduled Tasks in Python"
\$settings = New-ScheduledTaskSettingsSet -DeleteExpiredTaskAfter (New-TimeSpan -Seconds 2)
\$taskName = "Test Script"
\$trigger = New-ScheduledTaskTrigger -Once -At (Get-Date).AddSeconds(10)
\$trigger = New-ScheduledTaskTrigger -Once -At (Get-Date).AddSeconds(10)

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```
listProcess = [
    "powershell.exe",
    "-NoExit",
    "-NoProfile",
    "-Command",
    STR_CMD
]

# Enjoy the magic
subprocess.run(listProcess, check=True)
```

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answered Sep 3, 2022 at 23:52



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