

Command line utility SHTASKS

SHTASKS /parameter [arguments]

Description:

Enables an administrator to create, delete, query, change, run and end scheduled tasks on a local or remote system.

Parameter List:

- /Create Creates a new scheduled task.
- /Delete Deletes the scheduled task(s).
- /Query Displays all scheduled tasks.
- /Change Changes the properties of scheduled task.
- /Run Runs the scheduled task on demand.
- /End Stops the currently running scheduled task.
- /ShowSid Shows the security identifier corresponding to a scheduled task name.
- /? Displays this help message.

Examples:

```
SHTASKS
SHTASKS /?
SHTASKS /Run /?
SHTASKS /End /?
SHTASKS /Create /?
SHTASKS /Delete /?
SHTASKS /Query /?
SHTASKS /Change /?
SHTASKS /ShowSid /?
```

SHTASKS /Run [/S system [/U username [/P [password]]]] [/I] /TN taskname

Description:

Runs a scheduled task on demand.

Parameter List:

- /S system Specifies the remote system to connect to.
- /U username Specifies the user context under which the schtasks.exe should execute.
- /P [password] Specifies the password for the given user context. Prompts for input if omitted.
- /I Runs the task immediately by ignoring any constraint.
- /TN taskname Identifies the scheduled task to run now.
- /? Displays this help message.

Examples:

```
SHTASKS /Run /?
```

```
SCHTASKS /Run /TN "Start Backup"  
SCHTASKS /Run /S system /U user /P password /I /TN "Backup and Restore"
```

```
SCHTASKS /End [/S system [/U username [/P [password]]]] /TN taskname
```

Description:

Stops a running scheduled task.

Parameter List:

/S system Specifies the remote system to connect to.

/U username Specifies the user context under which the schtasks.exe should execute.

/P [password] Specifies the password for the given user context. Prompts for input if omitted.

/TN taskname Specifies the scheduled task to terminate.

/? Displays this help message.

Examples:

```
SCHTASKS /End /?
```

```
SCHTASKS /End /TN "Start Backup"
```

```
SCHTASKS /End /S system /U user /P password /TN "Backup and Restore"
```

```
SCHTASKS /Create [/S system [/U username [/P [password]]]]  
[/RU username [/RP password]] /SC schedule [/MO modifier] [/D day]  
[/M months] [/I idletime] /TN taskname /TR taskrun [/ST starttime]  
[/RI interval] [ {/ET endtime | /DU duration} [/K] [/XML xmlfile] [/V1]]  
[/SD startdate] [/ED enddate] [/IT | /NP] [/Z] [/F]
```

Description:

Enables an administrator to create scheduled tasks on a local or remote system.

Parameter List:

/S system Specifies the remote system to connect to. If omitted the system parameter defaults to the local system.

/U username Specifies the user context under which SchTasks.exe should execute.

/P [password] Specifies the password for the given user context. Prompts for input if omitted.

/RU username Specifies the "run as" user account (user context) under which the task runs. For the system account, valid values are "", "NT AUTHORITY\SYSTEM" or "SYSTEM".
For v2 tasks, "NT AUTHORITY\LOCALSERVICE" and "NT AUTHORITY\NETWORKSERVICE" are also available as well as the well known SIDs for all three.

/RP [password] Specifies the password for the "run as" user. To prompt for the password, the value must be either "*" or none. This password is ignored for the system account. Must be combined with either /RU or

/XML switch.

/SC schedule Specifies the schedule frequency.

Valid schedule types: MINUTE, HOURLY, DAILY, WEEKLY, MONTHLY, ONCE, ONSTART, ONLOGON, ONIDLE, ONEVENT.

/MO modifier Refines the schedule type to allow finer control over schedule recurrence. Valid values are listed in the "Modifiers" section below.

/D days Specifies the day of the week to run the task. Valid values: MON, TUE, WED, THU, FRI, SAT, SUN and for MONTHLY schedules 1 - 31 (days of the month). Wildcard "*" specifies all days.

/M months Specifies month(s) of the year. Defaults to the first day of the month. Valid values: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC. Wildcard "*" specifies all months.

/I idletime Specifies the amount of idle time to wait before running a scheduled ONIDLE task. Valid range: 1 - 999 minutes.

/TN taskname Specifies a name which uniquely identifies this scheduled task.

/TR taskrun Specifies the path and file name of the program to be run at the scheduled time. Example: C:\windows\system32\calc.exe

/ST starttime Specifies the start time to run the task. The time format is HH:mm (24 hour time) for example, 14:30 for 2:30 PM. Defaults to current time if /ST is not specified. This option is required with /SC ONCE.

/RI interval Specifies the repetition interval in minutes. This is not applicable for schedule types: MINUTE, HOURLY, ONSTART, ONLOGON, ONIDLE, ONEVENT. Valid range: 1 - 599940 minutes. If either /ET or /DU is specified, then it defaults to 10 minutes.

/ET endtime Specifies the end time to run the task. The time format is HH:mm (24 hour time) for example, 14:50 for 2:50 PM. This is not applicable for schedule types: ONSTART, ONLOGON, ONIDLE, ONEVENT.

/DU duration Specifies the duration to run the task. The time format is HH:mm. This is not applicable with /ET and for schedule types: ONSTART, ONLOGON, ONIDLE, ONEVENT. For /V1 tasks, if /RI is specified, duration defaults to 1 hour.

/K Terminates the task at the endtime or duration time. This is not applicable for schedule types: ONSTART, ONLOGON, ONIDLE, ONEVENT. Either /ET or /DU must be specified.

- `/SD startdate` Specifies the first date on which the task runs. The format is dd/mm/yyyy. Defaults to the current date. This is not applicable for schedule types: ONCE, ONSTART, ONLOGON, ONIDLE, ONEVENT.
- `/ED enddate` Specifies the last date when the task should run. The format is dd/mm/yyyy. This is not applicable for schedule types: ONCE, ONSTART, ONLOGON, ONIDLE, ONEVENT.
- `/EC ChannelName` Specifies the event channel for OnEvent triggers.
- `/IT` Enables the task to run interactively only if the `/RU` user is currently logged on at the time the job runs. This task runs only if the user is logged in.
- `/NP` No password is stored. The task runs non-interactively as the given user. Only local resources are available.
- `/Z` Marks the task for deletion after its final run.
- `/XML xmlfile` Creates a task from the task XML specified in a file. Can be combined with `/RU` and `/RP` switches, or with `/RP` alone, when task XML already contains the principal.
- `/V1` Creates a task visible to pre-Vista platforms. Not compatible with `/XML`.
- `/F` Forcefully creates the task and suppresses warnings if the specified task already exists.
- `/RL level` Sets the Run Level for the job. Valid values are LIMITED and HIGHEST. The default is LIMITED.
- `/DELAY delaytime` Specifies the wait time to delay the running of the task after the trigger is fired. The time format is mmmm:ss. This option is only valid for schedule types ONSTART, ONLOGON, ONEVENT.
- `/?` Displays this help message.

Modifiers: Valid values for the `/MO` switch per schedule type:

MINUTE: 1 - 1439 minutes.

HOURLY: 1 - 23 hours.

DAILY: 1 - 365 days.

WEEKLY: weeks 1 - 52.

ONCE: No modifiers.

ONSTART: No modifiers.

ONLOGON: No modifiers.

ONIDLE: No modifiers.

MONTHLY: 1 - 12, or

FIRST, SECOND, THIRD, FOURTH, LAST, LASTDAY.

ONEVENT: XPath event query string.

Examples:

`==>` Creates a scheduled task "doc" on the remote machine "ABC" which runs notepad.exe every hour under user "runasuser".

```
SCHTASKS /Create /S ABC /U user /P password /RU runasuser  
/RP runaspassword /SC HOURLY /TN doc /TR notepad
```

==> Creates a scheduled task "accountant" on the remote machine "ABC" to run calc.exe every five minutes from the specified start time to end time between the start date and end date.

```
SCHTASKS /Create /S ABC /U domain\user /P password /SC MINUTE  
/MO 5 /TN accountant /TR calc.exe /ST 12:00 /ET 14:00  
/SD 06/06/2006 /ED 06/06/2006 /RU runasuser /RP userpassword
```

==> Creates a scheduled task "gametime" to run freecell on the first Sunday of every month.

```
SCHTASKS /Create /SC MONTHLY /MO first /D SUN /TN gametime  
/TR c:\windows\system32\freecell
```

==> Creates a scheduled task "report" on remote machine "ABC" to run notepad.exe every week.

```
SCHTASKS /Create /S ABC /U user /P password /RU runasuser  
/RP runaspassword /SC WEEKLY /TN report /TR notepad.exe
```

==> Creates a scheduled task "logtracker" on remote machine "ABC" to run notepad.exe every five minutes starting from the specified start time with no end time. The /RP password will be prompted for.

```
SCHTASKS /Create /S ABC /U domain\user /P password /SC MINUTE  
/MO 5 /TN logtracker  
/TR c:\windows\system32\notepad.exe /ST 18:30  
/RU runasuser /RP
```

==> Creates a scheduled task "gaming" to run freecell.exe starting at 12:00 and automatically terminating at 14:00 hours every day

```
SCHTASKS /Create /SC DAILY /TN gaming /TR c:\freecell /ST 12:00  
/ET 14:00 /K
```

==> Creates a scheduled task "EventLog" to run wevtvwr.msc starting whenever event 101 is published in the System channel

```
SCHTASKS /Create /TN EventLog /TR wevtvwr.msc /SC ONEVENT  
/EC System /MO *[System/EventID=101]
```

==> Spaces in file paths can be used by using two sets of quotes, one set for CMD.EXE and one for SchTasks.exe. The outer quotes for CMD need to be double quotes; the inner quotes can be single quotes or escaped double quotes:

```
SCHTASKS /Create  
/tr "'c:\program files\internet explorer\iexplorer.exe'  
\'c:\log data\today.xml\'" ...
```

```
SCHTASKS /Delete [/S system [/U username [/P [password]]]]  
/TN taskname [/F]
```

Description:

Deletes one or more scheduled tasks.

Parameter List:

- `/S system` Specifies the remote system to connect to.
- `/U username` Specifies the user context under which `schtasks.exe` should execute.
- `/P [password]` Specifies the password for the given user context. Prompts for input if omitted.
- `/TN taskname` Specifies the name of the scheduled task to delete. Wildcard "*" may be used to delete all tasks.
- `/F` Forcefully deletes the task and suppresses warnings if the specified task is currently running.
- `/?` Displays this help message.

Examples:

```

SCHTASKS /Delete /TN * /F
SCHTASKS /Delete /TN "Backup and Restore"
SCHTASKS /Delete /S system /U user /P password /TN "Start Restore"
SCHTASKS /Delete /S system /U user /P password /TN "Start Backup" /F

```

```

SCHTASKS /Query [/S system [/U username [/P [password]]]]
[/FO format | /XML [xml_type]] [/NH] [/V] [/TN taskname] [/?]

```

Description:

Enables an administrator to display the scheduled tasks on the local or remote system.

Parameter List:

- `/S system` Specifies the remote system to connect to.
- `/U username` Specifies the user context under which `schtasks.exe` should execute.
- `/P [password]` Specifies the password for the given user context. Prompts for input if omitted.
- `/FO format` Specifies the format for the output. Valid values: TABLE, LIST, CSV.
- `/NH` Specifies that the column header should not be displayed in the output. This is valid only for TABLE format.
- `/V` Displays verbose task output.
- `/TN taskname` Specifies the task name for which to retrieve the information, else all of them.
- `/XML [xml_type]` Displays task definitions in XML format.
 - If `xml_type` is ONE then the output will be one valid XML file.
 - If `xml_type` is not present then the output will be the concatenation of all XML task definitions.

/? Displays this help message.

Examples:

```
SCHTASKS /Query
SCHTASKS /Query /?
SCHTASKS /Query /S system /U user /P password
SCHTASKS /Query /FO LIST /V /S system /U user /P password
SCHTASKS /Query /FO TABLE /NH /V
```

```
SCHTASKS /Change [/S system [/U username [/P [password]]]] /TN taskname
{ [/RU runasuser] [/RP runaspassword] [/TR taskrun] [/ST starttime]
[/RI interval] [ {/ET endtime | /DU duration} [/K] ]
[/SD startdate] [/ED enddate] [/ENABLE | /DISABLE] [/IT] [/Z] }
```

Description:

Changes the program to run, or user account and password used by a scheduled task.

Parameter List:

- /S system Specifies the remote system to connect to.
- /U username Specifies the user context under which schtasks.exe should execute.
- /P [password] Specifies the password for the given user context. Prompts for input if omitted.
- /TN taskname Specifies which scheduled task to change.
- /RU username Changes the user name (user context) under which the scheduled task has to run. For the system account, valid values are "", "NT AUTHORITY\SYSTEM" or "SYSTEM". For v2 tasks, "NT AUTHORITY\LOCALSERVICE" and "NT AUTHORITY\NETWORKSERVICE" are also available as well as the well known SIDs for all three.
- /RP password Specifies a new password for the existing user context or the password for a new user account. This password is ignored for the system account.
- /TR taskrun Specifies the new program that the scheduled task will run.
- /ST starttime Specifies the start time to run the task. The time format is HH:mm (24 hour time) for example, 14:30 for 2:30 PM.
- /RI interval Specifies the repetition interval in minutes. Valid range: 1 - 599940 minutes.
- /ET endtime Specifies the end time to run the task. The time format is HH:mm (24 hour time) for example, 14:50 for 2:50 PM.
- /DU duration Specifies the duration to run the task. The time format is HH:mm. This is not applicable with /ET.
- /K Terminates the task at the endtime or duration time.

- `/SD startdate` Specifies the first date on which the task runs.
The format is dd/mm/yyyy.
- `/ED enddate` Specifies the last date when the task should run.
The format is dd/mm/yyyy.
- `/IT` Enables the task to run interactively only if the
`/RU` user is currently logged on at the time the job
runs. This task runs only if the user is logged in.
- `/RL level` Sets the Run Level for the job. Valid values are
LIMITED and HIGHEST. The default is to not change it.
- `/ENABLE` Enables the scheduled task.
- `/DISABLE` Disables the scheduled task.
- `/Z` Marks the task for deletion after its final run.
- `/DELAY delaytime` Specifies the wait time to delay the running of the
task after the trigger is fired. The time format is
mmmm:ss. This option is only valid for schedule types
ONSTART, ONLOGON, ONEVENT.
- `/?` Displays this help message.

Examples:

```
SCHTASKS /Change /RP password /TN "Backup and Restore"  
SCHTASKS /Change /TR restore.exe /TN "Start Restore"  
SCHTASKS /Change /S system /U user /P password /RU newuser  
/TN "Start Backup" /IT
```

```
SCHTASKS /ShowSid /TN taskname
```

Description:

Shows the SID for the task's dedicated user.

Parameter List:

`/TN taskname` Specifies the scheduled task name. Dashes are not allowed in the name.

`/?` Displays this help message.

Examples:

```
SCHTASKS /ShowSid /?  
SCHTASKS /ShowSid /TN "\\Microsoft\Windows\RAC\RACTask"
```