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# Introduction

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## Installation

### How to Install Advanced Task Scheduler:

- 1) Download the latest version of Advanced Task Scheduler from our web site;
- 2) Run the installation program. The installer will guide you through the installation process;
- 3) After installation, Advanced Task Scheduler will initially execute with the default settings. The default settings are enough to realize the basic functions of task scheduling.

### Updating and reinstalling Advanced Task Scheduler:

If you want to upgrade your Advanced Task Scheduler version, download the latest version from our web site and start the installation program. During the installation process all system changes will be made automatically. Program will be upgraded but your preferences, scheduled tasks and registration information will be kept.

### Uninstalling Advanced Task Scheduler:

If you want to uninstall Advanced Task Scheduler, open **Uninstall or change a program** section from your Control Panel, select **Advanced Task Scheduler** item and click the **Uninstall** or **Remove** button.

### How to Install Advanced Task Scheduler Network:

Advanced Task Scheduler Network consists of two parts: client and server. Server part is designed to run scheduled tasks. Client part is used for viewing and configuring scheduled tasks with server. Both parts are installed from the same installation package, which you can download from our web site.

#### To install server part:

- 1) Run the installation program;
- 2) On the "Custom Setup" page, click the "Server" button and click "This feature, and all subfeatures, will be installed on local hard drive", then click the "Client" button and click "Entire feature will be unavailable";
- 3) Click "Next", and then click "Install" to install selected features.

#### To install client part:

- 1) Run the installation program;
- 2) On the "Custom Setup" page, click the "Client" button and click "This feature, and all subfeatures, will be installed on local hard drive", then click the "Server" button and click "Entire feature will be unavailable";
- 3) Click "Next", and then click "Install" to install selected features.

#### To install both parts on the same machine:

- 1) Run the installation program;
- 2) On the "Custom Setup" page, click the "Client" button and click "This feature, and all subfeatures, will be installed on local hard drive", then click the "Server" button and click "This feature, and all subfeatures, will be installed on local hard drive";
- 3) Click "Next", and then click "Install" to install selected features.

## System requirements

<i>Operating Systems</i>	<i>Processors</i>	<i>Disk Space</i>	<i>RAM</i>	<i>Graphics</i>
Windows Server 2016	Any Intel or AMD x86 processor	Under 30 MB	Minimum required by operating system	No specific graphics card is required
Windows 10				
Windows 8.1	Any Intel® EM64T or AMD64 processor			

Windows 8				
Windows Server 2012				
Windows 7				
Windows Vista				
Windows Server 2008				
Windows Server 2003				
Windows XP				
Windows 2000				

## Hints and Tips

The "Tip of the Day" dialog box is normally displayed when you start Advanced Task Scheduler. You can turn "Tip of the Day" off by the check box bellow and later want see the tips, select **Tip of the Day** from the **Help** pull-down menu.

Total number of tasks started by Advanced Task Scheduler you can always find in **Stats** section of the preferences screen.


For your convenience Advanced Task Scheduler documentation is available online. You can read it at any time [here](#). If you wish to read documentation offline, you can download it in PDF format [here](#).

When Advanced Task Scheduler is minimized to an icon in the system tray, its icon may be added to the Alt-Tab dialog by **Add icon to Alt-Tab dialog when minimized** option on the **Run** tab of the preferences screen.

For answers to Frequently Asked Questions (FAQs), select **Frequently Asked Questions** from the Advanced Task Scheduler **Help** pull-down menu or click [here](#) now.

For a complete Tip of the Day list, select **Hints and Tips** from the Advanced Task Scheduler **Help** pull-down menu.

You can temporarily suspend scheduling a task, not deleting it, by **Disable task(s)** command from the **Tasks** menu. To enable task select the **Enable task(s)** command.

Advanced Task Scheduler window does not close by  button on its caption. It just minimizes to the system tray icon. To close Advanced Task Scheduler, select **Exit Advanced Task Scheduler** command from window menu, which appears by mouse click on the icon in the left side of window caption, or by Alt-Space keystroke.

You can enable Advanced Task Scheduler to show current time in the status bar of its main window by **Show time in Status Bar** option on the **Run** tab of preferences screen. This option may be useful when you testing or exploring Advanced Task Scheduler's schedule types.

To change properties of scheduled task, select it from the list on main window and press ENTER key, or double click scheduled task by left mouse button. The dialog window with scheduled task's properties will appear.

To avoid unsolicited closing the Advanced Task Scheduler, you can select **Ask before exit** option on the **Run** tab of the preferences screen. By this option Advanced Task Scheduler will ask for confirmation before the closing.

You can add programs to the list of scheduled tasks by dragging and dropping it from explorer window.





Advanced Task Scheduler's main window can be restored by pressing the hotkey selected in the **Run** tab of the preferences screen. Advanced Task Scheduler's main window will appear when you press the hotkey even when you are working in another application.

Advanced Task Scheduler can record all executed tasks to the event log. With this log, you will always be informed which task and at what time was executed.












## Frequently Asked Questions

Please read the FAQ and use [support form](#) to contact our Support Service if you have additional questions or problems.




### General Questions





-  [1. What is Advanced Task Scheduler?](#)
-  [2. What Advanced Task Scheduler edition is right for me?](#)
-  [3. Where can I get it?](#)
-  [4. How do I register?](#)

### Technical Questions

-  [5. How do I backup Advanced Task Scheduler settings and/or copy them to another computer?](#)
-  [6. Why Advanced Task Scheduler doesn't display help correctly?](#)
-  [7. Why program does not start with message "Cannot find import; DLL may be missing, corrupt or wrong version. File: WS2\\_32.dll"?](#)
-  [8. Why program does not start with message "Your system has old version of Common Controls Library \(ComCtl32.dll\)."?](#)
-  [9. How do I correctly reinstall or update Advanced Task Scheduler?](#)
-  [10. Is there any way to capture output from say a batch file to the scheduler log file?](#)
-  [11. I need to schedule a task which uses network resources but all runs end up either "Access Denied" or "File Not Found" error message?](#)
-  [12. How can I store log file or Advanced Task Scheduler settings and task list on a remote machine?](#)
-  [13. Can I start Advanced Task Scheduler service under a predefined user account?](#)
-  [14. Can Advanced Task Scheduler close a running application?](#)
-  [15. Can Advanced Task Scheduler wake up my computer from standby/hibernation before starting a task?](#)
-  [16. Can I run Advanced Task Scheduler hidden so user has no access to it?](#)
-  [17. Does Advanced Task Scheduler support Remote Desktop sessions?](#)
-  [18. How do I import my task list from Advanced Task Scheduler 1.x to newer versions of Advanced Task Scheduler?](#)
-  [19. When my computer wakes up to start a scheduled task it goes back to sleep a few minutes later. How can I prevent this behavior?](#)
-  [20. Does Advanced Task Scheduler support Windows x64 Editions?](#)
-  [21. Does Advanced Task Scheduler support virtual environment?](#)
-  [22. What if I need a custom feature that I can't find in Advanced Task Scheduler? Can you develop a special version for our environment?](#)

### Purchase Questions

-  [23. Is it safe to order online?](#)
-  [24. Can I buy Advanced Task Scheduler with PayPal?](#)
-  [25. How to purchase your product and how long will I receive the license code after I complete the purchase?](#)

-  [26. How many times can I activate Advanced Task Scheduler license?](#)
-  [27. How to reactivate Advanced Task Scheduler, if computer hardware configuration changes?](#)
-  [28. What happens when my Updates and Support subscription expires?](#)
-  [29. How to renew Updates and Support subscription?](#)

# Getting started

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## Main window

The main program window consists of two tabs: **Current User** and **All Users**.

The Current User tab contains the tasks that are only used when Advanced Task Scheduler is running and the user is logged on. This tab enables users to create their own individual tasks. If you are the system administrator, use this tab to create and manage your own personal tasks or tasks that do not require OS privileges. If you are not the administrator or are using Windows 9x/ME, you can use this tab only.

The All Users tab contains the tasks that are always active, regardless of the user that is currently logged on and even when no users are logged on at all. To schedule tasks for all users, you need to install the Advanced Task Scheduler Service. It can be installed by pressing the **Install Service** button on the **Service** tab of the **Preferences** window. Only system administrators can create and modify tasks for all users. Use this tab for tasks that require OS privileges or in cases when you want these tasks to be active regardless of the users currently working in the system.

Each tab contains the list of groups and the list of scheduled tasks from the selected group, which can be viewed as one of the following: Large Icons, Small Icons, List and Details. When the Details view mode is selected, each item appears in its own line with advanced information spread out by the columns. The advanced information includes the following six columns:

<b>Name</b>	Task name.
<b>Task type</b>	Task type (Launch application, Display message, etc.)
<b>Schedule type</b>	Detailed description of schedule type.
<b>Schedule period</b>	Period of time, when the task is allowed to be scheduled.
<b>Last start time</b>	Date and time when the task was last run.
<b>Last start status</b>	Status of the last task was start.
<b>Next start time</b>	Date and time when the task will be run next time.

This window enables you to print, export and import task lists, create new groups and tasks, as well as to modify, copy, duplicate, delete and run existing tasks.

### Related Topics

[Working with groups](#)

[Working with tasks](#)

## Working with groups

### Creating new group

To create new group: select the **Add group** command from the **Groups** menu. In the appeared window enter a name for the new group and click **OK**.

### Removing group

To delete group: select the **Remove group** command from the **Groups** menu. You will be prompted for confirmation of the deletion and, if confirmed, the group with all enclosed tasks and groups will be removed.

### Modifying a group

To rename group: select the **Rename group** command from the **Groups** menu. In the appeared window enter a new name for the group and click **OK**.

### Copying a group

You can duplicate, copy to clipboard, cut to clipboard and paste from clipboard groups using the appropriate commands from the **Groups** menu.

### Exporting a group

To export a group: select the **Export** command from the **File** menu in the appeared window select the **Export selected group** option and click **OK**.



### Related Topics

[Main window](#)


[Working with tasks](#)

## Working with tasks



### Creating new task

To create new scheduled task: select the **Add Task Wizard** command from the **Tasks** menu or click the button  on the toolbar. This opens the wizard that helps you to set up a scheduled task. Alternatively, you can select the **Add Task** command from the **Tasks** menu or click the button  on the toolbar. This opens the dialog window with properties of the new task to be scheduled. Select the task type and its automatic start time, and then click the **OK** button to save the task or click the **Cancel** button to cancel creating new task.


### Removing scheduled tasks

To delete scheduled task: select the **Remove task(s)** command from the **Tasks** menu or click the button  on the toolbar. You will be prompted for confirmation of the deletion and, if confirmed, the task will be removed from the list. Scheduled tasks can also be removed automatically after their schedule time has expired. To activate this feature: in the task properties window select the options **Do not schedule task after this date** and **Remove task if it must no longer be run** and enter the date, after which the task should no longer be run. The task will be deleted from the list automatically once its schedule period has expired.

### Modifying task properties

To modify scheduled task's properties: select the **Task properties** command from the **Tasks** menu or click the button  on the toolbar. Also, to open scheduled task properties, you can simply press **ENTER** on the selected task. The dialog window with scheduled task's properties can be opened directly on the **Schedule** tab if you select the **Task schedule properties** command from the **Tasks** menu or click the button  on the toolbar.

### Executing scheduled tasks

To execute a scheduled task: select the **Run task(s) now** command from the **Tasks** menu or click the button  on the toolbar.

### Copying scheduled tasks



You can duplicate, copy to clipboard, cut to clipboard and paste from clipboard scheduled tasks using the appropriate commands from the **Tasks** menu.

### Exporting scheduled tasks

To export scheduled tasks: select the **Export** command from the **File** menu in the appeared window select the **Export scheduled task(s)** option and click **OK**.

### Related Topics

[Main window](#)

[Working with groups](#)

[Task properties](#)

[Shortcut properties](#)

[Schedule properties](#)

[User account options](#)

[Standby/hibernate options](#)

[Execution log](#)

# Task Types

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## Statement

Control statements allow evaluating a sequence of shortcuts when condition is true and evaluating a different sequence of shortcuts when condition is not true.

### IF

The IF statement is one of the most useful control structures. It enables you to evaluate a sequence of commands if a condition is true and evaluate a different sequence of commands if it is not true.

### ELSEIF

The ELSEIF statement enables you to evaluate a sequence of commands if a condition is true and evaluate a different sequence of commands if it is not true.

### ELSE

The ELSE enables you to evaluate a sequence of commands if none of the IF or ELSEIF conditions are true. Note: There is a maximum of one ELSE per IF statement.

### ENDIF

The ENDIF statement finishes the IF..ELSEIF..ELSE sequence.

### DELAY

The DELAY statement suspends execution of the task for a specified time period.

<b>Conditions</b>
-------------------

### LastErrorCode

The code of the error of the last command execution (0 means command executed successfully).

### LastExitCode

The code returned by the command (for example, Kill Process command returns number of killed processes).

### FILE EXISTS

Test if the specified file or folder exists. The **File name** is a folder or path and file name, which can contain wildcard characters (\* and ?).

### FILE NOT EXISTS

Test if the specified file or folder not exists. The **File name** is a folder or path and file name, which can contain wildcard characters (\* and ?).

### FILE LOCKED

Test if the specified file is locked. The **File name** is the file that will be tested.

### FILE NOT LOCKED

Test if the specified file is not locked. The **File name** is the file that will be tested.

### IDLE TIME

Test the user idle time.

**SYSTEM UPTIME**



Test the time elapsed since the last system boot.

**Terminal Services:** All these checks are performed taking into account the session/user under which the task is being executed.

## Launch application

This task type allows launching application, script, batch file, opening document or Internet page.

**Executable file name**

Enter the application's executable file name in the **Executable file name** field. You can also click the  button to find the application's executable file on your computer disks or click the  button to select application from the list of applications installed on your computer.

To open document, enter its path and file name in the field **Executable file name**. Documents, types of which are registered in your system, will open automatically. If document type is not registered in the system, but you know, which application should open it - you can enter the application's executable file name in the **Executable file name** field and specify the document's path and file name in the **Command line arguments** field.

To open Internet page: in the field **Executable file name** enter the page's URL (like this: <http://www.southsoftware.com/>).

If you need to launch some Windows Explorer features such as My Computer, Recycle Bin, etc. please read the following topics:

[Start tasks with Explorer](#)

[Start tasks with RunDLL](#)

**Command line arguments**

Command line arguments for selected executable file. **Professional and Network Editions:** command line may include any combination of the following arguments:

<i>Argument</i>	<i>Description</i>
%tempfile% (can be used with indexes: %tempfile1%, %tempfile2%, etc.)	Will be replaced by name of a temporary file.
%tempfiledel% (can be used with indexes: %tempfiledel1%, %tempfiledel2%, etc.)	Will be replaced by name of a temporary file. The temporary file will be deleted when task execution is complete.
%tempfilelog% (can be used with indexes: %tempfilelog1%, %tempfilelog2%, etc.)	Will be replaced by name of a temporary file. The temporary file content will be added to the log file when task execution is complete.
%tempfilelogdel% (can be used with indexes: %tempfilelogdel1%, %tempfilelogdel2%, etc.)	Will be replaced by name of a temporary file. The temporary file content will be added to the log file and the temporary will be deleted when task execution is complete.
%actionschedule%	Will be replaced by name of the action that caused task execution.
%actiontime%	Will be replaced by time of start of task execution.
%actionsource%	Will be replaced by action source information.
%actionsourceextra%	Will be replaced by action source extra information.

%lasterrorcode%	Will be replaced by LastErrorCode.
%lastexitcode%	Will be replaced by LastExitCode.

**Start in this folder**

The folder, which is set as the start folder for the running task. Many programs search for their auxiliary files in the start folder. To make sure that your scheduled program finds its auxiliary files, specify the correct path in this field.

**Initial window state**

Application's initial window state. Scheduled application's new window will be open in the state specified here (Normal, Minimized, Maximized, Normal and no active, Minimized and no active).

**Run the application in the hidden state**

Application will be launched in hidden window.

**Do not wait for the application terminated**

Application will be launched without waiting for its termination. If this option is checked the value of **Exit code** is unknown (**Professional and Network Editions** only).

**Save the stdout to the log**

Save application's stdout and stderr outputs to the log file (**Professional and Network Editions** only).

**Terminate the application if it is running for**

Terminate application if it is running for the specified time (**Professional and Network Editions** only).

**Returning codes**

**Error code:** Error code of launching the application

**Exit code:** Exit code returned by the launched application

## Display message

With this type of scheduled task selected, Advanced Task Scheduler displays popup messages on the screen. Popup messages will help you not forget about the important things, which you have planned to get done.

**Message text**

Text of the message to be displayed.

**Sound file**

When message appears, this sound will be played. If you want to be sure that you will be notified of some event, select a sound file here. Thus, you will not only see the message, but will also hear the message sound.

**Show message as popup window**

Popup message window consists of task name, text message and control button.

**Show message as transparent window near Task Bar**

Transparent window will be displayed near your task bar. This option is only available in Windows 2000, XP and later.

**Show message as balloon near task bar**

Standard balloon will be displayed near your task bar. You can close it by clicking anywhere on the balloon area by left mouse button. Note that balloon will disappear after some time of inactivity. This option is only available in Windows XP and later.

**Background image**

If you select the **Show message as popup window** option, you can specify a background image for the popup window.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Error code of displaying the message

### Related Topics

[Ask message](#)

## Ask message

This shortcut type allows asking user for a choice. You can select which buttons will appear in the message window and, optionally, the timeout period. The **IF** statement can be used to analyze user's choice by evaluating the **LastExitCode** variable. This shortcut type available in Professional and Network Editions only.

### Message text

Text of the message to be displayed.

### Sound file

When message appears, this sound will be played.

### Select buttons

Popup message will contain the specified buttons.

### Close message in

The message will be closed when the specified time has elapsed.

### Background image

Background image for the popup window.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** User's choice code:

- 0 - Cancel
- 1 - OK
- 2 - Yes
- 3 - No
- 4 - Timeout

### Related Topics

[Display message](#)

## Service

This scheduled task type allows starting, stopping, pausing, continuing and checking service.

### Service name

Name of the service.

## Start

Start the specified service with the specified arguments.

## Stop

Stop the specified service.

## Pause

Pause the specified service.

## Continue

Continue the specified service.

## Check

Checks the specified service and put its status to the Exit code.

## Returning codes

**Error code:** Error code of starting the command

**Exit code:** Error code of the service operation

If service operation is Check, then the Exit code can be one of the following values:

0 - Service not exists or a error occurred

1 - Service is running

2 - Service is start pending

3 - Service is stopped

4 - Service is stop pending

5 - Service is paused

6 - Service is pause pending

7 - Service is continue pending

## Kill process

This scheduled task type allows terminating process.

### Process file name

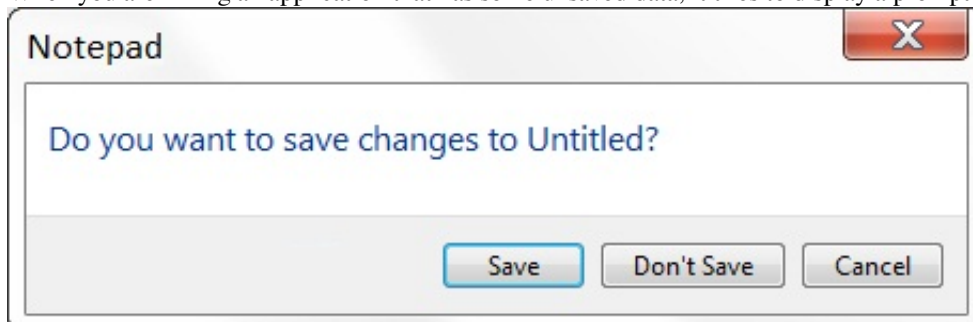
Name of the process to be killed. You can specify either full path to the executable file of the process, or executable file name without path. Wildcards \* and ? are supported for filenames.

### User name whose processes may be killed

Only processes running in the security context of the selected user will be killed. If you want to kill processes running under current user context, leave this field blank. You can also specify \* to kill processes from all users.


### Restore minimized window before closing

When you are killing an application that has some unsaved data, it tries to display a prompt for confirmation similar to this:



Which causes the application's button on the taskbar to blink. When the option is selected, the application window will be restored, and the prompt for saving unsaved data will be sent to foreground.

### **Kill process without giving it chance to save data**

If this option is selected, Advanced Task Scheduler will kill the process without giving it a chance to save data. If the option is not selected, Advanced Task Scheduler will send window the same message as Windows sends when user clicks the  button on the window title.

Advanced Task Scheduler can terminate only those processes, which have their own windows. If a process does not have its own window, it can be terminated only when the option **Kill process without giving it chance to save data** is selected.

### **IMPORTANT:**

**USE CAREFULLY THE KILL PROCESS FUNCTION. BE SURE THAT BEFORE USING THIS FUNCTION KILLING PROCESS HAS NO UNSAVED INFORMATION. THE PROCESS WILL NOT BE GIVEN THE CHANCE TO SAVE ITS STATE OR DATA BEFORE IT IS TERMINATED. ADVANCED TASK SCHEDULER WILL NOT ASK YOU TO CONFIRM THE PROCESS KILLING.**

### **List all found processes to the log file**

Save list of all found processes to the log file.

### **Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Number of killed processes

## **Destroy window**

This scheduled task type allows destroying window.

### **Window title**

Title of the window to be destroyed.

### **User name whose processes may be killed**

Only processes running in the security context of the selected user will be killed. If you want to kill processes running under current user context, leave this field blank. You can also specify \* to kill processes from all users.

### **All windows whose title begins with the specified text**

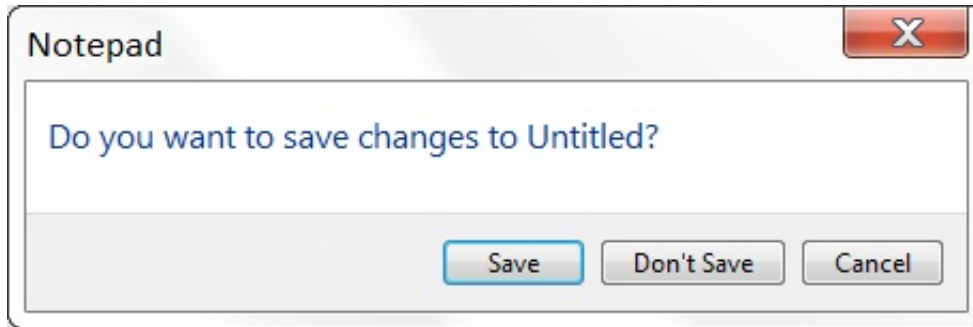
Destroy all windows whose title begins with the text specified under Window title.

### **All windows whose title contains the specified text**

Destroy all windows whose title contains the text specified under Window title.


### **Restore minimized window before closing**

When you are killing an application that has some unsaved data, it tries to display a prompt for confirmation similar to this:



Which causes the application's button on the taskbar to blink. When the option is selected, the application window will be restored, and the prompt for saving unsaved data will be sent to foreground.

### **Kill process without giving it chance to save data**

If this option is selected, Advanced Task Scheduler will kill the process without giving it a chance to save data. If the option is not selected, Advanced Task Scheduler will send window the same message as Windows sends when user clicks the  button on the window title.

Advanced Task Scheduler can terminate only those processes, which have their own windows. If a process does not have its own window, it can be terminated only when the option **Kill process without giving it chance to save data** is selected.

### **IMPORTANT:**

**USE CAREFULLY THE KILL PROCESS FUNCTION. BE SURE THAT BEFORE USING THIS FUNCTION KILLING PROCESS HAS NO UNSAVED INFORMATION. THE PROCESS WILL NOT BE GIVEN THE CHANCE TO SAVE ITS STATE OR DATA BEFORE IT IS TERMINATED. ADVANCED TASK SCHEDULER WILL NOT ASK YOU TO CONFIRM THE PROCESS KILLING.**

### **List all found processes to the log file**

Save list of all found processes to the log file.

### **Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Number of destroyed windows

## **Connect**

Advanced Task Scheduler can automatically establish Remote Access Service and Wireless Network connections. In the task settings, you can specify how many times the program should attempt establishing the connection in case errors occur.

### **Remote Access Service**

Establish a Remote Access Service (VPN, Dial-up, SLIP, PPP, PPPoE, L2TP) connection from your phone book.

**Version 4.5 and later:** If the connection with the specified phone book entry is already connected, this command simply returns success and does nothing.

If establishing Remote Access Service connection returns "Invalid parameter" error, you still can view extended error information on the "Execution log" tag of the "Task Properties" window. If Execution log shows only an error number, you can find error description by its number in the [Routing and Remote Access Error Codes](#).

### **Wireless Network**

**Version 4.5 and later:** Establish a Wireless (Wi-fi) connection on the the specified interface with the specified profile.



If the specified interface is already connected to a wireless network, this command will first disconnect from the currently connected network, then attempt to connect to the new network. However, if these two networks are the same this command simply returns success and does nothing.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of connections established

## Disconnect

### Remote Access Service

Advanced Task Scheduler can terminate either all active Remote Access Service (VPN, Dial-up, SLIP, PPP, PPPoE, L2TP) connections or just specified connection, which corresponds with selected phone book entry.

### Wireless Network

**Version 4.5 and later:** Advanced Task Scheduler can disconnect either all active Wireless (Wi-fi) connections or just specified connection on either all interfaces or just specified interface.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of connections terminated

## Play sound

This task type plays sound file at scheduled time. This Task Type may be used as an alarm.

### Sound file

Select sound file to be played when scheduled time is reached. Sound file can be an audio file in any format for which a valid and fully functional Windows codec is present on your computer.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Error code of playing the sound

## Turn off/reboot/log off

The Turn off/reboot/log off Task Type allows turning off or rebooting the computer or log off from the system.

### Turn off computer

Turn off computer when scheduled time is reached.

### Standby

Put computer to standby mode when scheduled time is reached.

### Hibernate

Put computer to hibernate mode when scheduled time is reached.

### **Reboot computer**

Reboot computer when scheduled time is reached.

### **Log off**

Log off when scheduled time is reached.

### **Turn off monitor only**

Turn off monitor only when scheduled time is reached.

### **Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Error code of the turn off operation

## Send network message

With this type of scheduled task selected, Advanced Task Scheduler sends a network message.

Network message is sent to a computer in your Local Area Network. Such messages are displayed by installed messaging software on the remote computer.

### **Messenger service for Windows 2000, Windows XP and Windows Server 2003**

Messenger service has been designed to receive short text messages over local network. It's easy, useful and free tool to receive messages from the other computers, network administrator or management team in your LAN etc. Since Windows XP Service Pack 2, messenger service is disabled due to spam vulnerability in the message delivery mechanism.

To enable Messenger service go to **Control Panel > Administrative Tools > Services**, double-click the **Messenger** service and click on the **Properties** button on the Services panel toolbar, the service properties box will appear. Set the **Startup type** to enabled, click on the **Start** button and finish it by the **Apply** button.

### **Messenger service for Windows Vista and later**

Microsoft has decided to remove Messenger service from Windows Vista and all newer systems. However Messenger service has been replaced by msg.exe command, but not in all Windows editions - only professional and business versions are able to send network messages via msg.exe command.


### **Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Error code of the mailslot operation

## Send e-mail message

With this type of scheduled task selected, Advanced Task Scheduler sends an e-mail message.

Click the  button to open the properties window where you can define one or more e-mail addresses separated by comma or semicolon, SMTP server address and port number. Also you can define sender address and message subject.

An attachment can be added to the message. **Professional and Network Editions:** Several attachments can be added to a

single message.

**Professional and Network Editions:** Since version 4.0 you can include the return code of the previous action in an email body. To do so, the following arguments can be used in the email body:

%actionschedule%	Will be replaced by name of the action that caused task execution.
%actiontime%	Will be replaced by time of start of task execution.
%actionsource%	Will be replaced by action source information.
%actionsourceextra%	Will be replaced by action source extra information.
%lasterrorcode%	Will be replaced by LastErrorCode.
%lastexitcode%	Will be replaced by LastExitCode.

The %lasterrorcode% and %lastexitcode% arguments depend on the previous shortcut type and you can find their meanings in the corresponding shortcut description.

**Using Gmail to send e-mail messages:**

E-Mail Address: your email address (username@gmail.com or username@your\_domain.com)

SMTP server: smtp.gmail.com

SMTP port number: 587

Authorization: checked

User name: your full email address (including @gmail.com or @your\_domain.com)

Password: your Gmail password

Connection security: STARTTLS

**Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Error code of sending the e-mail

## Send key sequence

This type of scheduled task is designed for sending a combination of keys (or a text fragment) to the selected application.

**Window title**

Title of a window where the keys pressings (or the text) should be sent to.

**All windows whose title begins with the specified text**

Send keys to all windows whose title begins with the text specified under **Window title**.

**All windows whose title contains the specified text**

Send keys to all windows whose title begins with the text specified under **Window title**.

**Keys sequence to send**

A string to be sent. This string can be formatted using the following rules:

**Keys sequence formatting rules**

Text	Keys

[ascii characters]	One or more characters represent each key. To specify a single keyboard character, use the character itself.
+	SHIFT key
^	CTRL key
%	ALT key
\$	<b>Version 4.5 and later:</b> WIN key
()	To specify that Shift, Ctrl, and/or Alt should be held down while several other keys are pressed, enclose the keys in parentheses.
[]	To specify text where all format characters are represented as keys.
{}	Special format.

To specify one of special characters (+^%\$()[]{}), enclose it inside square brackets. For example, to specify the plus sign, use [+].

The following commands can be enclosed in the braces ({}):

{[Key]}	[Key] - keyboard characters or not displayed character code.
{[Key] n}	Repeat [Key] n times.
{DELAY n}	Pause before sending next keystrokes for n milliseconds.
{ACTIVATE [Window title]}	Activate [Window title].
{LOCALE [Locale name]}	Activate keyboard locale [Locale name].
{DATETIME [Format]}	Insert current date and/or time.

To specify characters that are not displayed when you press a key (such as Enter or Tab) and keys that represent actions rather than characters, use the following key codes:

BACKSPACE	BACKSPACE key
BREAK	PAUSE/BREAK key
CAPSLOCK	CAPS LOCK key
CLEAR	CLEAR key
DELETE	DELETE key
ENTER	ENTER key
ESCAPE	ESCAPE key
EXECUTE	EXECUTE key
HELP	HELP key
INSERT	INSERT key
NUM LOCK	NUM LOCK key
PRINT SCREEN	PRINT SCREEN key
SCROLL LOCK	SCROLL LOCK key

SELECT	SELECT key
SPACEBAR	SPACEBAR
TAB	TAB key
HOME	HOME key
END	END key
PAGE DOWN	PAGE DOWN key
PAGE UP	PAGE UP key
DOWN ARROW	DOWN ARROW key
LEFT ARROW	LEFT ARROW key
RIGHT ARROW	RIGHT ARROW key
UP ARROW	UP ARROW key
LEFT ALT	Left ALT key
LEFT CTRL	Left CTRL key
LEFT SHIFT	Left SHIFT key
LEFT WIN	Left Win key
RIGHT ALT	Right ALT key
RIGHT CTRL	Right CTRL key
RIGHT SHIFT	Right SHIFT key
RIGHT WIN	Right WIN key
APPS	Applications key
Numeric keypad 0	Numeric keypad 0 Key
Numeric keypad 1	Numeric keypad 1 Key
Numeric keypad 2	Numeric keypad 2 Key
Numeric keypad 3	Numeric keypad 3 Key
Numeric keypad 4	Numeric keypad 4 Key
Numeric keypad 5	Numeric keypad 5 Key
Numeric keypad 6	Numeric keypad 6 Key
Numeric keypad 7	Numeric keypad 7 Key
Numeric keypad 8	Numeric keypad 8 Key
Numeric keypad 9	Numeric keypad 9 Key
Numeric Multiply	Numeric keypad Multiply key
Numeric Add	Numeric keypad Add key
Numeric Separator	Numeric keypad Separator key
Numeric Subtract	Numeric keypad Subtract key
Numeric Decimal	Numeric keypad Decimal key
Numeric Divide	Numeric keypad Divide key
F1 key	F1 key

F2 key	F2 key
F3 key	F3 key
F4 key	F4 key
F5 key	F5 key
F6 key	F6 key
F7 key	F7 key
F8 key	F8 key
F9 key	F9 key
F10 key	F10 key
F11 key	F11 key
F12 key	F12 key
F13 key	F13 key
F14 key	F14 key
F15 key	F15 key
F16 key	F16 key
F17 key	F17 key
F18 key	F18 key
F19 key	F19 key
F20 key	F20 key
F21 key	F21 key
F22 key	F22 key
F23 key	F23 key
F24 key	F24 key

The following format specifiers can be used to define DATETIME format:

space or underscore	space
%d	day in month
%w	weekday (three letter abbreviation)
%W	full weekday
%o	month number 1..12
%m	month (three letter abbreviation)
%M	full month
%y	two digit year number
%Y	full year number
%h	hour
%n	minutes

%s	seconds
%a	am/pm
%A	AM/PM
%z	time zone abbreviation (default: current zone) %z=±hh:mm - use time in specified time zone, but not add abbreviation %z!±hh:mm - use time in specified time zone and add its abbreviation ±hh:mm - time zone, for example, "+3:00" or "-9:30".

**Examples:**

abc+(abc){BACKSPACE}	key: 0x61 (a) key: 0x62 (b) key: 0x63 (c) key: SHIFT 0x61 (a) key: SHIFT 0x62 (b) key: SHIFT 0x63 (c) key: 0x08 (.)
{a{+(o)}{+}}	key: 0x61 (a) key: SHIFT 0x6f (o) key: 0x2b (+)
abc^(ab%(cd+ef))g	key: 0x61 (a) key: 0x62 (b) key: 0x63 (c) key: CTRL 0x61 (a) key: CTRL 0x62 (b) key: CTRL ALT 0x63 (c) key: CTRL ALT 0x64 (d) key: CTRL ALT SHIFT 0x65 (e) key: CTRL ALT 0x66 (f) key: 0x67 (g)
abc{BACKSPACE}{CLEAR[+] 5}[^]{\$ 8}	key: 0x61 (a) key: 0x62 (b) key: 0x63 (c) key: 0x08 (.) key: 0x0c (.) key: 0x2b (+) key: 0x0c (.) key: 0x2b (+) key: 0x0c (.) key: 0x2b (+) key: 0x0c (.) key: 0x2b (+) key: 0x0c (.) key: 0x2b (+) key: 0x5e (^) key: 0x24 (\$) key: 0x24 (\$) key: 0x24 (\$) key: 0x24 (\$)

	<p>key: 0x24 (\$)  key: 0x24 (\$)  key: 0x24 (\$)  key: 0x24 (\$)</p>
<p>{a{b 2} 5}{ENTER}[%[^]{ENTER}text{ENTER}</p>	<p>key: 0x61 (a)  key: 0x62 (b)  key: 0x62 (b)  key: 0x61 (a)  key: 0x62 (b)  key: 0x62 (b)  key: 0x61 (a)  key: 0x62 (b)  key: 0x62 (b)  key: 0x61 (a)  key: 0x62 (b)  key: 0x62 (b)  key: 0x61 (a)  key: 0x62 (b)  key: 0x62 (b)  key: 0x61 (a)  key: 0x62 (b)  key: 0x0d (.)  key: 0x25 (%)  key: 0x5b (l)  key: 0x5d (j)  key: 0x5e (^)  key: 0x0d (.)  key: 0x74 (t)  key: 0x65 (e)  key: 0x78 (x)  key: 0x74 (t)  key: 0x0d (.)</p>
<p>{LOCALE English (United States)}English  text{ENTER}{LOCALE German}German text{ENTER}</p>	<p>command LOCALE(English)  key: 0x45 (E)  key: 0x6e (n)  key: 0x67 (g)  key: 0x6c (l)  key: 0x69 (i)  key: 0x73 (s)  key: 0x68 (h)  key: 0x20 ( )  key: 0x74 (t)  key: 0x65 (e)  key: 0x78 (x)  key: 0x74 (t)  key: 0x0d (.)  command LOCALE(German)  key: 0x47 (G)  key: 0x65 (e)  key: 0x72 (r)  key: 0x6d (m)  key: 0x61 (a)  key: 0x7e (n)  key: 0x20 ( )  key: 0x74 (t)  key: 0x65 (e)</p>



	key: 0x78 (x) key: 0x74 (t) key: 0x0d (.)
{DATETIME %d %w %W %o %m %M %y %Y %h:%n:%s %a %A %z}{ENTER}	command DATETIME(%d %w %W %o %m %M %y %Y %h:%n:%s %a %A %z) key: 0x0d (.)
TEXT1{DELAY 1000}TEXT2	key: 0x54 (T) key: 0x45 (E) key: 0x58 (X) key: 0x54 (T) key: 0x31 (1) command DELAY(1000) key: 0x54 (T) key: 0x45 (E) key: 0x58 (X) key: 0x54 (T) key: 0x32 (2)
{ACTIVATE Untitled - Notepad}{LEFT ALT}{DOWN ARROW}{DOWN ARROW}{DOWN ARROW}{DOWN ARROW}{ENTER}c:\filename.txt{ENTER}	Activate "Untitled - Notepad" and perform "Save as..." command.

**Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Error code of sending the keys

## HTTP download

This scheduled task type allows downloading files via HTTP or HTTPS protocol.

**URL**

Address of the file to download (e.g. <http://www.southsoftware.com/>).

**Local file**

File on the local machine where the URL is to be downloaded. If the **If destination file already exists** option is set to **Overwrite file** the file will be overwritten each time the URL is downloaded, otherwise the index will be added to the original file name (for example, home.html becomes home [1].html, then home [2].html, and so on).

**GET POST HEAD**

Type of HTTP request. **GET** - retrieve the file content, **POST** - send post data from **Post data** field and retrieve the server response, **HEAD** - retrieve only file header.

**Post data**

In this field you can specify the full data to post in an HTTP POST operation (for example, "postvar1=value1&postvar2=value2&postvar3=value3"). You must make sure that the data is formatted the way you want the server to receive it. Most web servers will assume this data to be url-encoded. This POST is a normal application/xwww-form-urlencoded kind, which is the most commonly used one by HTML forms.

**Use password authentication**

Use HTTP authentication.

### Use SSL Certificate and Private key

HTTPS SSL Certificate and Private key in pem format. Read more here: [Public key and Certificate authentication](#).

### Proxy

Connect to the URL via HTTP or SOCKS5 proxy server.

### User Agent

User agent name (for example, Internet Explorer 6.0 on Windows XP sends this: "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)").

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Error code of the data transfer

### Related Articles

[Public key and Certificate authentication](#)

## FTP download

This scheduled task type allows downloading files and folders via FTP, FTPS or SFTP protocol.

### Remote dir

Remote directory to download files. The directory must include protocol type, server address and path. Optionally, it can include user name and password, and port number. For example,

`ftp://example.com/Documents` - This specifies the FTP protocol and the Documents directory under the user's home directory.

`ftp://example.com:221/Documents` - This specifies the FTP protocol, FTP server's port 221, and the Documents directory under the user's home directory.

`ftps://user:password@example.com/Documents` - This specifies the FTPS protocol, user name and password, and the Documents directory under the user's home directory.

`sftp://user:password@example.com/etc/issue` - This specifies the SFTP protocol, user name and password, and /etc/issue directory.

`sftp://user@example.com/~/Documents/` - This specifies the SFTP protocol, user name, and the Documents directory under the user's home directory.

### Local dir

Local directory to download files.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

`"1.txt"` - include 1.txt file only

`"sf\1.txt"` - include 1.txt file from "sf" subdirectory only

`"*.txt"` - include .txt files from all subdirectories

`"sf\*.txt"` - include .txt files from "sf" and all its subdirectories

`"*\*.txt"` - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only

"sf\1.txt" - exclude 1.txt file from "sf" subdirectory only

"\*.txt" - exclude .txt files from all subdirectories

"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories

"\*\\*.\*" - exclude all subdirectories

### Passive

Use passive mode like WWW browsers.

### SSL/TLS

Use FTP over SSL/TLS (FTPES)

### Force UTF8 for file names

Use UTF8 file names even if UTF8 is not enabled on the server. This option is useful if your FTP server understands UTF8 encoded file names but does not report that it has UTF8 support.

**FTP servers:** Advanced Task Scheduler detects UTF8 support in the following way:

If the FEAT command reports UTF8 support, it sends the "OPTS UTF8 ON" command and assumes that UTF8 is enabled.

If the FEAT command does not report UTF8 support, it sends the "OPTS UTF8 ON" command and assumes that UTF8 is enabled only if server reports a success code.

**SFTP servers:** use this option if file system on the server machine is UTF8 encoded.

### Use password authentication

Use FTP authentication.

### Use public key authentication (SFTP) or SSL Certificate (FTPS)

SFTP Public key or SSL Certificate and Private key in pem format. Read more here: [Public key and Certificate authentication](#)

### Tunneling proxy

Use tunneling proxy.

### Notes:

- To download a single file, specify its remote and local folders, then specify its file name separately, in the **Include files** field.
- To download files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of files downloaded

### Related Articles

[Automate FTP transfers with Advanced Task Scheduler](#)

[Public key and Certificate authentication](#)

## FTP upload

This scheduled task type allows uploading files and folders via FTP, FTPS or SFTP protocol.

### Local dir

Local directory to upload files.

### Remote dir

Remote directory to upload files. The directory must include protocol type, server address and path. Optionally, it can include user name and password, and port number. For example,

`ftp://example.com/Documents` – This specifies the FTP protocol and the Documents directory under the user's home directory.

`ftp://example.com:221/Documents` – This specifies the FTP protocol, FTP server's port 221, and the Documents directory under the user's home directory.

`ftps://user:password@example.com/Documents` – This specifies the FTPS protocol, user name and password, and the Documents directory under the user's home directory.

`sftp://user:password@example.com/etc/issue` – This specifies the SFTP protocol, user name and password, and /etc/issue directory.

`sftp://user@example.com/~/Documents/` – This specifies the SFTP protocol, user name, and the Documents directory under the user's home directory.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

`"1.txt"` - include 1.txt file only

`"sf\1.txt"` - include 1.txt file from "sf" subdirectory only

`"*.txt"` - include .txt files from all subdirectories

`"sf\*.txt"` - include .txt files from "sf" and all its subdirectories

`"*\*.txt"` - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

`"1.txt"` - exclude 1.txt file only

`"sf\1.txt"` - exclude 1.txt file from "sf" subdirectory only

`"*.txt"` - exclude .txt files from all subdirectories

`"sf\*.txt"` - exclude .txt files from "sf" and all its subdirectories

`"*\*.*"` - exclude all subdirectories

### Passive

Use passive mode like WWW browsers.

### SSL/TLS

Use FTP over SSL/TLS (FTPES)

### Force UTF8 for file names

Use UTF8 file names even if UTF8 is not enabled on the server. This option is useful if your FTP server understands UTF8 encoded file names but does not report that it has UTF8 support.

**FTP servers:** Advanced Task Scheduler detects UTF8 support in the following way:

If the FEAT command reports UTF8 support, it sends the "OPTS UTF8 ON" command and assumes that UTF8 is enabled.

If the FEAT command does not report UTF8 support, it sends the "OPTS UTF8 ON" command and assumes that UTF8 is enabled only if server reports a success code.

**SFTP servers:** use this option if file system on the server machine is UTF8 encoded.

### Use password authentication

Use FTP authentication.

### Use public key authentication (SFTP) or SSL Certificate (FTPS)

SFTP Public key or SSL Certificate and Private key in pem format. Read more here: [Public key and Certificate authentication](#)

### Tunneling proxy

Use tunneling proxy.

### Notes:

- To upload a single file, specify its remote and local folders, then specify its file name separately, in the **Include files** field.
- To upload files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of files uploaded

### Related Articles

[Automate FTP transfers with Advanced Task Scheduler](#)

[Public key and Certificate authentication](#)

## FTP delete

This scheduled task type allows deleting files and folders via FTP, FTPS or SFTP protocol.

### Remote dir

Remote directory to delete files. If a subdirectory of this directory becomes empty after removal of the files, it is also removed. The directory must include protocol type, server address and path. Optionally, it can include user name and password, and port number. For example,

ftp://example.com/Documents – This specifies the FTP protocol and the Documents directory under the user's home directory.

ftp://example.com:221/Documents – This specifies the FTP protocol, FTP server's port 221, and the Documents directory under the user's home directory.

ftps://user:password@example.com/Documents – This specifies the FTPS protocol, user name and password, and the Documents directory under the user's home directory.

sftp://user:password@example.com/etc/issue – This specifies the SFTP protocol, user name and password, and /etc/issue directory.

sftp://user@example.com/~/Documents/ – This specifies the SFTP protocol, user name, and the Documents directory under the user's home directory.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

"1.txt" - include 1.txt file only

"sf\1.txt" - include 1.txt file from "sf" subdirectory only

"\*.txt" - include .txt files from all subdirectories  
"sf\\*.txt" - include .txt files from "sf" and all its subdirectories  
"\*\\*.txt" - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only  
"s\1.txt" - exclude 1.txt file from "sf" subdirectory only  
"\*.\*" - exclude .txt files from all subdirectories  
"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories  
"\*\\*.\*" - exclude all subdirectories

### Passive

Use passive mode like WWW browsers.

### SSL/TLS

Use FTP over SSL/TLS (FTPES)

### Force UTF8 for file names

Use UTF8 file names even if UTF8 is not enabled on the server. This option is useful if your FTP server understands UTF8 encoded file names but does not report that it has UTF8 support.

**FTP servers:** Advanced Task Scheduler detects UTF8 support in the following way:

If the FEAT command reports UTF8 support, it sends the "OPTS UTF8 ON" command and assumes that UTF8 is enabled. If the FEAT command does not report UTF8 support, it sends the "OPTS UTF8 ON" command and assumes that UTF8 is enabled only if server reports a success code.

**SFTP servers:** use this option if file system on the server machine is UTF8 encoded.

### Use password authentication

Use FTP authentication.

### Use public key authentication (SFTP) or SSL Certificate (FTPS)

SFTP Public key or SSL Certificate and Private key in pem format. Read more here: [Public key and Certificate authentication](#)

### Tunneling proxy

Use tunneling proxy.

### Notes:

- To delete a single file, specify its remote and local folders, then specify its file name separately, in the **Include files** field.
- To delete files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of files deleted

### Related Articles

[Automate FTP transfers with Advanced Task Scheduler](#)  
[Public key and Certificate authentication](#)

## Copy files

This scheduled task type allows copying files and folders.

### Source folder

Source folder to copy files.

### Destination folder

Destination folder to copy files.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

"1.txt" - include 1.txt file only

"sf\1.txt" - include 1.txt file from "sf" subdirectory only

"\*.txt" - include .txt files from all subdirectories

"sf\\*.txt" - include .txt files from "sf" and all its subdirectories

"\*\\*.txt" - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only

"sf\1.txt" - exclude 1.txt file from "sf" subdirectory only

"\*.txt" - exclude .txt files from all subdirectories

"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories

"\*\\*.\*" - exclude all subdirectories

### Notes:

- To copy a single file, specify its source and destination folders, then specify its file name separately, in the **Include files** field.
- To copy files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of files copied

## Move files

This scheduled task type allows moving files and folders.

### Source folder

Source folder to move files from.

### Destination folder

Destination folder to move files to.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

"1.txt" - include 1.txt file only

"sf\1.txt" - include 1.txt file from "sf" subdirectory only

"\*.txt" - include .txt files from all subdirectories

"sf\\*.txt" - include .txt files from "sf" and all its subdirectories

"\*\\*.txt" - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only

"sf\1.txt" - exclude 1.txt file from "sf" subdirectory only

"\*.txt" - exclude .txt files from all subdirectories

"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories

"\*\\*.\*" - exclude all subdirectories

### Notes:

- To move a single file, specify its source and destination folders, then specify its file name separately, in the **Include files** field.
- To move files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of files moved

## Delete files

This scheduled task type allows deleting files and folders.

### Source folder

Source folder to delete files from. If a subdirectory of this directory becomes empty after removal of the files, it is also removed.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

"1.txt" - include 1.txt file only

"sf\1.txt" - include 1.txt file from "sf" subdirectory only

"\*.txt" - include .txt files from all subdirectories

"sf\\*.txt" - include .txt files from "sf" and all its subdirectories

"\*\\*.txt" - include .txt files from all subdirectories (not from main directory)



### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only

"sf\1.txt" - exclude 1.txt file from "sf" subdirectory only

"\*.txt" - exclude .txt files from all subdirectories

"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories

"\*\\*.\*" - exclude all subdirectories

### Notes:

- To delete a single file, specify its folder, then specify its file name separately, in the **Include files** field.
- To delete files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of files deleted

## Zip archive

This scheduled task type allows archiving files and folders.

### Source folder

Source folder to archive files.

### Zip file

Name of zip file.

### Additional info for file name

Select additional info that can be appended to the file name.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

"1.txt" - include 1.txt file only

"sf\1.txt" - include 1.txt file from "sf" subdirectory only

"\*.txt" - include .txt files from all subdirectories

"sf\\*.txt" - include .txt files from "sf" and all its subdirectories

"\*\\*.txt" - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only

"sf\1.txt" - exclude 1.txt file from "sf" subdirectory only

"\*.txt" - exclude .txt files from all subdirectories

"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories

"\*\\*.\*" - exclude all subdirectories

### Compression level

Compression level from 0 (fastest) to 9 (best).

### Password

Set password to zip file.

### Notes:

- To zip a single file, specify its folder, then specify its file name separately, in the **Include files** field.
- To zip files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.
- The produced Zip file can include files larger than 4 GB.
- The produced Zip file uses UTF-8 paths where possible.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Error code of the operation

Can be one of the following values:

- 0 - Success
- 2 - Unexpected end of zip file
- 3 - Zip file structure error
- 4 - Out of memory
- 5 - Internal logic error
- 6 - Entry too large to split, read, or write
- 10 - Error using a temp file
- 11 - Read or seek error
- 12 - Nothing to do
- 13 - Missing or empty zip file
- 14 - Error writing to a file
- 15 - Couldn't open to write
- 18 - Could not open a specified file to read
- 19 - Error in compilation options
- 20 - Zip64 not supported

## Unzip archive

This scheduled task type allows unarchiving files and folders.

### Zip file

Name of zip file.

### Destination folder

Destination folder to unarchive files to.

### Include files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally

match directory separators ("\"), this option may be used to include any files that are in subdirectories. For example,

"1.txt" - include 1.txt file only

"sf\1.txt" - include 1.txt file from "sf" subdirectory only

"\*.txt" - include .txt files from all subdirectories

"sf\\*.txt" - include .txt files from "sf" and all its subdirectories

"\*\\*.txt" - include .txt files from all subdirectories (not from main directory)

### Exclude files

One or more file names separated by semicolon. Wildcards ("\*" and "?") are accepted. Since wildcard characters normally match directory separators ("\"), this option may be used to exclude any files that are in subdirectories. For example,

"1.txt" - exclude 1.txt file only

"sf\1.txt" - exclude 1.txt file from "sf" subdirectory only

"\*.txt" - exclude .txt files from all subdirectories

"sf\\*.txt" - exclude .txt files from "sf" and all its subdirectories

"\*\\*.\*" - exclude all subdirectories

### Notes:

- To unzip a single file, specify its folder, then specify its file name separately, in the **Include files** field.
- To unzip files without recursing down directories in the file system, specify "\*\\*.\*" in the **Exclude files** field.
- Zip file can include files larger than 4 GB.
- Zip file can use UTF-8 paths.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Error code of the operation

Can be one of the following values:

0 - No error

1 - Warning error

2 - Error in zipfile

3 - Severe error in zipfile

4..8 - Insufficient memory

9 - Zipfile not found

10 - Bad or illegal parameters specified

11 - No files found

50 - Disk full

51 - Unexpected EOF

## Perl script

This shortcut type allows executing a Perl script. You can find Perl documentation and learn it on the official site:

<http://www.perl.org/>.

Perl can be executed in two ways in Advanced Task Scheduler:

- **Internal portable Perl:** you do not need to install and configure Perl to run Perl scripts from Advanced Task Scheduler.
- **Installed Perl:** binary Perl installation is required.

### Portable Perl

When the option **Use internal Perl interpreter** in the **Scripts** section of the **Preferences** window is selected, internal portable Perl interpreter is used to run Perl scripts. Portable Perl in Advanced Task Scheduler is built from original sources and packed into a single executable (advscheduler\_perl.exe). It includes all standard modules, excluding CPAN module, which can't work with this portable Perl. For more information how to add modules, please see the **Additional libraries** section.

### Installed Perl

When the option **Use internal Perl interpreter** in the **Scripts** section of the **Preferences** window is not selected, Advanced Task Scheduler searches for Perl executable (perl.exe) in the directories listed in the PATH environment variable. You can download and install Perl from its official site: <http://www.perl.org/>.

### Arguments

The arguments are passed to the Perl scripts through the %advscheduler variable. The following keys are passed: actionschedule, actiontime, actionsource, actionsourceextra, lasterrorcode, lastexitcode. **Professional and Network Editions:** all defined tempfile variables are also passed. These arguments are described in the [Launch application](#) topic.

### Additional libraries

This portable Perl can load modules in binary form from a directory listed in the **Additional library path** option in the **Scripts** section of the **Preferences** window. If you need a specific module and you are a registered user, please let us know and we'll add that module to this portable Perl.

### Script length

Although, the maximal length of the script is 32,768 characters, you can use the "require "filename.pl";" construction to load another Perl script file. Such files do not have length limitations.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Exit code from the script

### Related Articles

[Perl scripting in Advanced Task Scheduler](#)

## Python script

This shortcut type allows executing a Python script. You can find Python documentation and learn it on the official site: <http://www.python.org/>.

Python can be executed in two ways in Advanced Task Scheduler:

- **Internal portable Python:** you do not need to install and configure Python to run Python scripts from Advanced Task Scheduler.
- **Installed Python:** binary Python installation is required.

### Portable Python

When the option **Use internal Python interpreter** in the **Scripts** section of the **Preferences** window is selected, internal portable Python interpreter is used to run Python scripts. Portable Python in Advanced Task Scheduler is built from original sources and packed into a single executable (advscheduler\_python.exe). It includes all standard modules, excluding Tkinter and

Distutils modules. For more information how to add modules, please see the **Additional libraries** section.

## Installed Python

When the option **Use internal Python interpreter** in the **Scripts** section of the **Preferences** window is not selected, Advanced Task Scheduler searches for Python executable (python.exe) in the directories listed in the PATH environment variable. You can download and install Python from its official site: <http://www.python.org/>.

## Arguments

The arguments are passed to the Python scripts through the advscheduler dictionary. The following keys are passed: actionschedule, actiontime, actionsource, actionsourceextra, lasterrorcode, lastexitcode. **Professional and Network Editions:** all defined tempfile variables are also passed. These arguments are described in the [Launch application](#) topic.

## Additional libraries

This portable Python can load modules in binary form from a directory listed in the **Additional library path** option in the **Scripts** section of the **Preferences** window. If you need a specific module and you are a registered user, please let us know and we'll add that module to this portable Python.

## Script length

Although, the maximal length of the script is 32,768 characters, you can use the "import filename.py" construction to load another Python script file. Such files do not have length limitations.

## Returning codes

**Error code:** Error code of starting the command

**Exit code:** Exit code from the script

## Related Articles

[Python scripting in Advanced Task Scheduler](#)

# IE Automation

This shortcut type allows automating Internet Explorer (**Professional and Network Editions** only). The automation is performed by executing series of commands against the document opened in the Internet Explorer.

## Edit

Edit selected command.

## Insert

Insert a new command.

## Up

Move selected command up.

## Down

Move selected command down.

## Delete

Delete selected command.

## Options

Display options window.

<b>IE Automation Options</b>
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**Show browser window**

Show the browser window during executing the commands.

**Do not close browser window when finished**

Do not close the browser window when execution is finished.

**Use timeout**

Timeout of the operation, in seconds.

**IE Automation Command**

The table below describes IE Automation commands and their arguments.

Command	Argument	Value	Parameter
GotoURL	url	URL, full path, or UNC location of the resource to display.	Optional: destination file name. If specified, the URL will be downloaded to the destination location rather than opened in the browser.
GoBack	-	-	-
GoForward	-	-	-
RefreshPage	-	-	-
SetTextBox	id	The value of the "id" attribute that will be used to find the text box.	Text to set to the text box field.
	class	The value of the "class" attribute that will be used to find the text box.	
	name	The value of the "name" attribute that will be used to find the text box.	
	value	The value of the "value" attribute that will be used to find the text box.	
	beforetext	The text before the text box that will be used to find the text box.	
	aftertext	The text after the text box that will be used to find the text box.	
SetTextArea	id	The value of the "id" attribute that will be used to find the text area.	Text to set to the text area field.
	class	The value of the "class" attribute that will be used to find the text area.	
	name	The value of the "name"	

		attribute that will be used to find the text area.	
	value	The value of the "value" attribute that will be used to find the text area.	
	beforetext	The text before the text area that will be used to find the text area.	
	aftertext	The text after the text area that will be used to find the text area.	
ClickLink	id	The value of the "id" attribute that will be used to find the link.	Optional: destination file name. If specified, the target link will be downloaded to the destination location rather than opened in the browser.
	class	The value of the "class" attribute that will be used to find the link.	
	name	The value of the "name" attribute that will be used to find the link.	
	linkurl	The link URL that will be used to find the link.	
	linktext	The link text that will be used to find the link.	
ClickImage	id	The value of the "id" attribute that will be used to find the image.	Optional: destination file name. If specified, the target link will be downloaded to the destination location rather than opened in the browser.
	class	The value of the "class" attribute that will be used to find the image.	
	name	The value of the "name" attribute that will be used to find the image.	
	imgurl	The image URL that will be used to find the image.	
	alt	The value of the "alt" attribute that will be used to find the image.	
ClickButton	id	The value of the "id" attribute that will be used to find the button.	Optional: destination file name. If specified, the target link will be downloaded to the destination location rather than opened in the browser.
	class	The value of the "class" attribute that will be used to find the button.	
	name	The value of the "name" attribute that will be used to find the button.	

	value	The value of the "value" attribute that will be used to find the button.	
	beforetext	The text before the button that will be used to find the button.	
	aftertext	The text after the button that will be used to find the button.	
SelectButton	id	The value of the "id" attribute that will be used to find the button.	The Parameter can be one of the following values: <b>check</b> : check the checkbox or radio button. <b>uncheck</b> : uncheck the checkbox or radio button.
	class	The value of the "class" attribute that will be used to find the button.	
	name	The value of the "name" attribute that will be used to find the button.	
	value	The value of the "value" attribute that will be used to find the button.	
	beforetext	The text before the button that will be used to find the button.	
	aftertext	The text after the button that will be used to find the button.	
SelectOption	id	The value of the "id" attribute that will be used to find the select list.	The Argument and Value identifies the <select> list. The Parameter is the "value" attribute of the <option> within the <select> list that will be selected.
	class	The value of the "class" attribute that will be used to find the select list.	
	name	The value of the "name" attribute that will be used to find the select list.	
	beforetext	The text before the select list that will be used to find the select list.	
	aftertext	The text after the select list that will be used to find the select list.	
UnselectOption	id	The value of the "id" attribute that will be used to find the select list.	The Argument and Value identifies the <select> list. The Parameter is the "value" attribute of the <option> within the <select> list that will be unselected.
	class	The value of the "class" attribute that will be used to	



		find the select list.	
	name	The value of the "name" attribute that will be used to find the select list.	
	beforetext	The text before the select list that will be used to find the select list.	
	aftertext	The text after the select list that will be used to find the select list.	
WithFrame	id	The value of the "id" attribute that will be used to find the frame.	-
	class	The value of the "class" attribute that will be used to find the frame.	
	name	The value of the "name" attribute that will be used to find the frame.	
	framesrc	The value of the "src" attribute that will be used to find the frame.	
EndWithFrame	-	-	-
IfExists	id	The value of the "id" attribute that will be used to find the element.	Type of the element to check its existence. The following values can be specified: TextBox, TextArea, Link, Image, Button, Select, Frame.
	class	The value of the "class" attribute that will be used to find the element.	
	name	The value of the "name" attribute that will be used to find the element.	
	beforetext	The text before the element that will be used to find the element.	
	aftertext	The text after the element that will be used to find the element.	
EndIfExists	-	-	-
Wait	-	-	Number of seconds to wait.

Internet Explorer 8 is recommended for this shortcut type. Internet Explorer 5.5 is the minimum required browser for this shortcut type in Advanced Task Scheduler 4.3. There are known issues with Internet Explorer versions prior version 8, such as error 800C0008 on GotoURL.

**Returning codes**

**Error code:** Error code of starting the command

**Exit code:** Number of commands executed

## Related Articles

[IE Automation with Task Scheduler](#)

## ODBC SQL

This shortcut type allows executing a SQL Query via ODBC data source (**Professional and Network Editions** only).

If a query is a SELECT statement that returns a set of rows as output, the output will be saved in the execution log. The number of rows will be returned in the Exit code. The number of rows is the sum of number of rows affected by each query, if no rows are affected, then the number of rows in the output.

### Connection string

An ODBC data source or ODBC driver connection string. ODBC connection string varies for different ODBC drivers. Please consult with your ODBC driver manual for ODBC connection string format.

### SQL queries

A set of SQL queries that will be executed one by one. Queries must be properly escaped according to the database rules. Each query will be passed to the driver in Unicode. It is the driver's responsibility to encode and collate the query.

<b>SQL Options</b>
--------------------

### Treat output charset as

Character set of the output data. This option does not affect SQL query. For example, you can pass the "Charset=UTF8;" attribute to MySQL ODBC Driver to receive output in UTF8.

### Use maximum length of field

If the field data is longer than the specified length, then the data will be truncated.

### Use timeout

Timeout of the operation, in seconds.

### Returning codes

**Error code:** Error code of starting the command

**Exit code:** Number of rows

## Related Articles

[SQL Automation with Task Scheduler](#)

## Schedule Types

[Table Of Content](#)

### Do not run

The task will not be run automatically. Use this schedule type if you wish to run the task manually (by the **Run task(s) now** command from the **Tasks** menu).

### Run once

This schedule type allows you to run tasks once at a specific time of a specific day. As any scheduled task will only be launched if Advanced Task Scheduler is started, use the **Start task during startup if overdue, but on the specified day** option to launch an overdue task when Advanced Task Scheduler is started later the same day.

### Run secondly

This schedule type can be useful for automatic running of tasks at the most precise moments of time. The maximum range is 9 hours, 6 minutes, and 7 seconds (32767 seconds).

### Run minutely

This schedule type can be useful for automatic running of tasks at the more precise moments of time. The maximum range is 22 days, 18 hours, and 7 minutes (32767 minutes).

### Run hourly

This schedule type allows running tasks every hour or every number of hours. You should specify the minutes and seconds of the hour when the task is to be run.

### Run daily

If you would like to run tasks automatically every day - for example, to be reminded of the lunch time - simply add the reminder to the Advanced Task Scheduler task list with this schedule type selected.

**Professional and Network Editions:** Run daily can include specified time as well as hourly, minutely or secondly schedule

and randomized time.

## Run weekly

This schedule type allows running tasks on specified days of week. You can select the days when you wish the task to be run or select "first..last", "Monday..Sunday" to specify day of the month, which appears on different date every other month.

**Professional and Network Editions:** Run weekly can include specified time as well as hourly, minutely or secondly schedule and randomized time. Public holidays are respected when you select work days or non-work days options.

### Related Topics

[Holiday Properties](#)

## Run monthly

This schedule type allows running tasks every month on selected date and time. You can also select running task once every few months or select months of the year when the task is to be run.

**Professional and Network Editions:** Run monthly can include specified time and day as well as weekly, daily, hourly, minutely or secondly schedule and randomized time.

## Run yearly

For this schedule type you must select the month, date and time when task is to be run. This schedule type is useful, for example, for reminding of whatever anniversaries. You can also schedule tasks to be run once every number of years.

**Professional and Network Editions:** Run monthly can include specified time and day as well as monthly, weekly, daily, hourly, minutely or secondly schedule and randomized time.

## Run on startup

The task can be run on specified time after starting the computer. Maximally this time may be 49 days and 16:59.

## Run on hot key

This schedule type allows running tasks when user pressed a specified hot key. When Advanced Task Scheduler is started as a service this schedule type works when any user pressed the specified hot key, so if many users are logged on using Fast User Switching then the specified hot key will work for all logged on users.

## Run on computer idle

This schedule type allows running tasks when the computer has been idle (no mouse and keyboard activity) for some time or when the computer has been idle (no mouse and keyboard activity) for some time and then ceases to be idle (activity starts again). When Advanced Task Scheduler is started as a service and many users are logged on using Fast User Switching, the idle time means that there is no mouse and keyboard activity in the active user session.

**Note:** This schedule type does not work in Windows NT 4.

## Run on Internet connection

This schedule type allows running tasks when network connection has been connected, disconnected or connected for the specified time.

### Remote Access Service

Watch Remote Access Service (RAS) connections.

### Network List Manager

**Version 4.5 and later, requires Windows Server 2008 or Windows Vista and later:** Watch Network List Manager (NLM) connections. Network List Manager allows watching all available network connections including Ethernet, RAS, Wi-fi.

## Logon watch

This schedule type allows running tasks when some user has been logged on into the system or logged off from the system (**Professional and Network Editions** only).

## Window watch

This schedule type allows running tasks when some window has been created, destroyed, activated, deactivated or running for the specified time (**Professional and Network Editions** only).

## Process watch

This schedule type allows running tasks when some process has been started, terminated or running for the specified time (**Professional and Network Editions** only).

## File watch

This schedule type allows running tasks when a file in the specified folder has been added, deleted, renamed or modified (**Professional and Network Editions** only).

## Run on holiday

This schedule type allows running tasks on the specified holiday (**Professional and Network Editions** only).

Run on holiday can include specified time as well as secondly, minutely or hourly schedule and randomized time.

### Related Articles

[Holiday Aware Task Scheduler](#)

[Holiday Properties](#)

# Reference

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## Preferences

### Run

Configuration of the scheduler's startup properties.

#### Start on system logon

When this option is selected, Advanced Task Scheduler starts automatically when you logon to Windows. If Advanced Task Scheduler is not running - scheduled tasks from the current user tab will not be run either (scheduled tasks from the all users tab will run as long as the Advanced Task Scheduler Service is running).

#### Add icon to Alt-Tab dialog when minimized

Normally, windows that are minimized to system tray do not appear in the dialog window, which appears when you press Alt-Tab, and they cannot be opened without the mouse. If this option is selected, the Advanced Task Scheduler icon will be added to the Alt-Tab dialog even when the program is minimized to system tray.

#### Show time in Status Bar

This option allows displaying current time in the status bar of Advanced Task Scheduler's main window.

#### Show "Tip of the Day" window at startup

If this option is selected, every time Advanced Task Scheduler starts it will display the "Tip of The Day" window.

#### Ask before exit

With this option selected, Advanced Task Scheduler asks for confirmation before the closing.

### Hot key

Configuration of the scheduler's startup properties.

#### Use this hotkey for easy access to the program

Advanced Task Scheduler's main window can be restored by pressing the selected hotkey. Select this option and in the hotkey entry field press the hotkey, which you will use for restoring Advanced Task Scheduler. Advanced Task Scheduler's main window will appear when you press the hotkey even when you are working in another application.

### Language

Language group allows you to change language interface of the program. If you want to translate this program on your language please read the [Translation](#) topic.

## Service settings

### Service

Click the **Install service** button to install the Advanced Task Scheduler Service. The service will be started and set up to start automatically every time the computer starts up.

To uninstall service click the **Uninstall service** button. Scheduled tasks from the all users tab will not run if the Advanced Task Scheduler Service is not running.

## User settings

### Storage

Select the way Advanced Task Scheduler's setting and task list are stored.

**Professional and Network Editions:** You can choose between system registry and local disk folder. Also you can encrypt your settings and task list if you are running Professional or Network Edition.

**Note:** If you are using encryption, you will need to enter your password each time you start this program to manage your tasks.

### Options

Scheduling service options.

#### Disable scheduler

This option disables running scheduled tasks.

#### Write Log File

If this option is checked, Advanced Task Scheduler stores information on all tasks that have been run automatically to the event log.

#### Split Log File to

You can split your log file to the multiple files which do not exceed the specified size in kilobytes.

#### Send Logs to EMail

If this option is checked, Advanced Task Scheduler send logs to an e-mail address.

#### Send one Log Entry per Email

Each log entry will be sent as a separate e-mail.

#### Send Logs once per

Several log entries will be sent once a day, week or month.

#### Send Logs as attachment

Send logs in the e-mail attachment.

#### Log extended data

Save full data to the log.

#### Log failed tasks only

Only failed tasks will be logged. Failed tasks are tasks whose execution ends with an error. **Professional and Network Editions:** Only the error code for the last entry in the shortcut list is considered.

### Scripts

Scripting options.

#### Use internal Perl interpreter

If this option is selected, you can run Perl scripts from Advanced Task Scheduler without installing Perl. If this option is not selected, Perl installation is required to run Perl scripts.

#### Additional library path



List of paths, separated by semicolon, where internal Perl interpreter searches for additional libraries.

### Use internal Python interpreter

If this option is selected, you can run Python scripts from Advanced Task Scheduler without installing Python. If this option is not selected, Python installation is required to run Python scripts.

### Additional library path

List of paths, separated by semicolon, where internal Python interpreter searches for additional libraries.

## Users

Scheduling service user options (All users only).

### Run scheduled tasks when any user is logged on

Run scheduled tasks when any user is logged on into the system and active.

### Run tasks when only one of the following users is logged on and active

Run tasks when only one of the specified users is logged on into the system and active.

**Professional and Network Editions:** This is default option for all tasks that is configured for all users. This option can be overridden in the properties of any task.

## Holidays

Work days and holidays definition (**Professional and Network Editions** only).

### Work days

Select which week days are work days.

### First day of week

Select which week day is the first day of week.

### Holidays

Select list of holidays. Use Preset button to find predefined holidays.

## Stats

Advanced Task Scheduler counts how many times each shortcut type is executed. Here you can view this statistics information.

### Related Topics

[User Account Options](#)

[Holiday Properties](#)

## Holiday Properties

In Advanced Task Scheduler Professional and Network Editions it is possible to run a task on work days, non-work days or holidays.

Generally, there are two ways no define a holiday in Advanced Task Scheduler: specify fixed dates or allow Advanced Task Scheduler to calculate date of a holiday using common techniques such as first/second/etc. weekday on or preceding/after the

day of the month, weekday nearest to the day of the month, Western/Orthodox/Julian Easter, and so on.

A holiday can belong to one of three predefined categories: Public Holiday, Non-holiday Observance or User Event. The categories can be used to run different tasks with different holiday sets.

Public holidays are respected when you select work days or non-work days options in other schedule types.

#### Related Articles

[Holiday Aware Task Scheduler](#)

## Task properties

#### Task name

Name of the task. This name will appear by the task icon on the task list in Advanced Task Scheduler's main window.

#### Schedule options

Starting scheduled tasks is defined by the following options:

Schedule task starting on this date	Task will be scheduled starting on specified date. With this option, you can delay running scheduled task until the date entered.
Do not schedule task after this date	This option disables running scheduled task after the date entered.
Start task during startup if overdue, but on the specified day	If Advanced Task Scheduler will start later than the task's run time on the specified date, the task will be started upon Advanced Task Scheduler startup. Example: if your scheduled task is to be run at 2pm, but you turned your computer on only at 3pm on that day with this option selected, your scheduled task will be run on Advanced Task Scheduler startup.
Remove task if it must no longer be run	When task must no longer be run, (when the option <b>Do not schedule task after this date</b> is selected and current date is greater than specified in this option) the task will be removed from the list of scheduled tasks.

## Shortcut properties

Configuration of scheduled task shortcuts.

At this time, Advanced Task Scheduler supports the following shortcut types:

[Statement](#);

[Launch application](#);

[Display message](#);

[Ask message](#);

[Service](#);

[Kill process](#);

[Destroy window](#);

[Establish Dial-up connection](#);  
[Hangup Dial-up connection](#);  
[Play sound](#);  
[Turn off/reboot/log off](#);  
[Send network message](#);  
[Send e-mail message](#);  
[Send key sequence](#);  
[HTTP download](#);  
[FTP download](#);  
[FTP upload](#);  
[FTP delete](#);  
[Copy files](#);  
[Move files](#);  
[Delete files](#);  
[Zip archive](#);  
[Unzip archive](#);  
[Perl script](#);  
[Python script](#);  
[IE Automation](#);  
[ODBC SQL](#).

Please click a shortcut type from the list above to read its description.

## Schedule properties

Configuration of scheduled task schedules.

At this time, Advanced Task Scheduler supports the following schedule types:

[Do not run](#);  
[Run once](#);  
[Run secondly](#);  
[Run minutely](#);  
[Run hourly](#);  
[Run daily](#);  
[Run weekly](#);  
[Run monthly](#);  
[Run yearly](#);  
[Run on startup](#);  
[Run on hot key](#);  
[Run on computer idle](#);  
[Run on Internet connection](#);  
[Logon watch](#);  
[Window watch](#);  
[Process watch](#);  
[File watch](#);  
[Run on holiday](#).

Please click a schedule type from the list above to read its description.

## User account options

### User accounts (All users only)

#### Start this task only if one of the following users is logged on and active

If this option is selected, the task will only be started if the active user is on the list. If the user is not on the list, the task will not be started.

If this option is not selected, the task will be started regardless of the currently active user. The task will not be started if no users are active. If you want your task to be started even if no users are active, check the **Start task on the hidden desktop** option.

#### Start this task for each logged on and valid user (even those who are logged on but not active at the time)

If this option is selected, a copy of the task will be created for each logged user. If the **Start this task only if one of the following users is logged on and active** option is enabled, the task will be launched only for users on the list.

If this option is disabled, only one copy of the task will be created for the user that is active at the task start.

**Note:** These User account options override global values from the Options | Parameters | [Username] | Users tab.

### Task execution account

#### Active user

The task will be executed on behalf of the active user. An active user is a user who had been logged on and had been working with the system when the task started.

#### Local system

The task will be executed on behalf of Local System. Local System is a system account. To execute tasks on behalf of Local System, Advanced Task Scheduler must be started under the system or administrator account.

#### Service user

The task will be executed on behalf of a scheduling service user. A scheduling service user is a user on whose behalf the scheduling service is working. For All users this is the account under which the Advanced Task Scheduler Service runs. The account can be viewed and modified in Control Panel | Administrative Tools | Services | Service properties | Log On.

#### User account

The specified username and password will be used for executing the task. To run tasks on behalf of the specified user, Advanced Task Scheduler must be started under the system or administrator account. The account must have the following privileges: "Act as part of the operating system" (SeTcbPrivilege), "Replace a process-level token" (SeAssignPrimaryTokenPrivilege), "Adjust memory quotas for a process" (SeIncreaseQuotaPrivilege, may be named "Increase memory quotas" or "Increase quotas" in Windows 2000 and NT 4.0), "Bypass traversy checking" (SeChangeNotifyPrivilege) and "Debug programs" (SeDebugPrivilege). You can modify user privileges in Control Panel | Administrative tools | Local Security Policy | User Rights Assignment.

**Note:** Your password will be saved in a secure location, but you can use additional encryption on the Options | Parameters | [Username] | Storage tab.

#### Passwordless user authorization

You can use passwordless authorization, but you must make sure that Advanced Task Scheduler is running under the system or administrator account. The account must have the following privileges: "Act as part of the operating system" (SeTcbPrivilege), "Replace a process-level token" (SeAssignPrimaryTokenPrivilege), "Adjust memory quotas for a process" (SeIncreaseQuotaPrivilege, may be named "Increase memory quotas" or "Increase quotas" in Windows 2000 and NT 4.0), "Bypass traversy checking" (SeChangeNotifyPrivilege), "Debug programs" (SeDebugPrivilege) and "Create a token object" (SeCreateTokenPrivilege). You can modify user privileges in Control Panel | Administrative tools | Local Security Policy | User Rights Assignment. Windows Vista and later: Advanced Task Scheduler must be running only under administrator account. Starting from this Windows version, the system account doesn't have the SeCreateTokenPrivilege privilege.

**Note:** Windows XP Home and Windows Vista Home do not contain secpol.msc snapin, which provides User Rights Assignment section to the Control Panel, so if that is your case, you need some third-party tool to modify your account privileges. You can download our Polsedit tool from <http://www.southsoftware.com/>. It will let you modify your account privileges and it is completely free to use.

### Start task on the hidden desktop

Use this option only if your task does not require user's input. As the task is executed on the hidden desktop, no user will be able to communicate with it.

When this option is selected, the task will be executed regardless of the currently active user.

### Related Topics

[User settings](#)

## Standby/hibernate options

### Wake up computer if it is in the standby or hibernate mode when task shall start

Because computer does not do any operations in the standby or hibernate mode, it is only possible to wake up computer at a specified time. Therefore, you should use time-based schedule types.

**Tip:** Some computers go back to sleep automatically after they wake up and you do not touch the mouse or keyboard within a few minutes. If that is your case, please read the [System automatically enters sleep after waking from sleep](#) topic.

### Turn on monitor before executing this task

You can use this option to be sure that the monitor is turned on when the task is being executed.

### Related Topics

[System automatically enters sleep after waking from sleep](#)

## Execution log

Task execution extended log. If you have any problems with your scheduled task, please send this log to our Support Service. There is much more chance that we solve your problem if you send us this log.

To copy execution log to another application: right click anywhere on the log text, select the **Select all** command from the appeared menu, then right click again and select the **Copy** command from the appeared menu. Switch to another application and use **Paste** command to paste text from the clipboard.

## Service control

### Configuration

Advanced Task Scheduler Service configuration. These options are available in Network Edition only.

### Language

Language group allows you to change language interface of the program. If you want to translate this program to your language please read the [Translation](#) topic.

### Connection

Connection group allows you to change connection settings.

To connect to the service you can use the **Connect** command from the **File** menu in the Advanced Task Scheduler Network application.

You can set password on the appropriate tab of the preferences window of the Advanced Task Scheduler Network application.

Service should be restarted before the new settings become active.

### Service

Click the **Install service** button to install the Advanced Task Scheduler Service. The service will be started and set up to start automatically every time the computer starts up.

To uninstall service click the **Uninstall service** button. Scheduled tasks from the all users tab will not run if the Advanced Task Scheduler Service is not running.

### Activation

Advanced Task Scheduler Service activation. These options are available in Network Edition only. Click the **Activate/Register** button to activate Advanced Task Scheduler Network.

# Troubleshooting

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## All users tasks

You have to be logged on as an administrator to configure tasks for all users. If you are not administrator, please use the current user tab to configure your personal tasks.

## Service is not connected

Advanced Task Scheduler fails to connect its scheduling service.

If the Current user tab displays this message, then a error occurred during initialization of the scheduling thread. Please try to restart Advanced Task Scheduler.

If the All users tab displays this message, then please review **Events Log** form **Control Panel | Administrative Tools**. If service failed to start due to error, the error will be described there.

Advanced Task Scheduler service will not start when your trial period is expired.

If you still experiencing troubles please contact our [Support Service](#).

Please review [Frequently Asked Questions](#) for more troubleshooting tips.

## Service is not started

Advanced Task Scheduler service is not started.

If the Current user tab displays this message, then an error occurred during initialization of the scheduling thread. Please try to restart Advanced Task Scheduler.

If the All users tab displays this message, then either Advanced Task Scheduler Service is not started or an error occurred during initialization of Advanced Task Scheduler Service.

To start Advanced Task Scheduler Service: select the **Preferences** command from the **Options** menu, then click **Install service** button on the **Service** tab of the appeared window.

If service is still not started after that, please review **Events Log** form **Control Panel | Administrative Tools**. If service failed to start due to error, the error will be described there.

Advanced Task Scheduler service will not start when your trial period is expired.

If you still experiencing troubles please contact our [Support Service](#).

Please review [Frequently Asked Questions](#) for more troubleshooting tips.

## Service is disabled

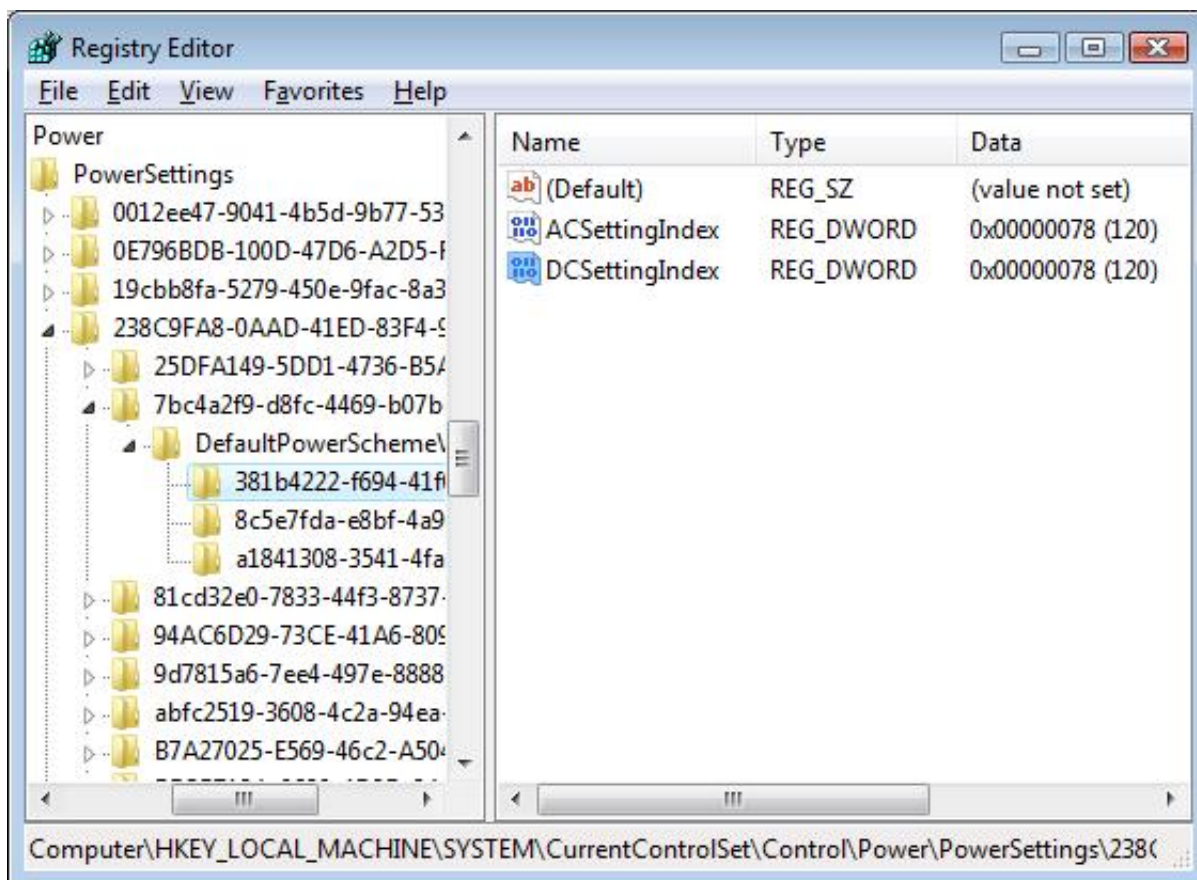
Scheduling service is disabled in the Options section of the [Username] tab of the preferences window.

If service is enabled, but some scheduled tasks do not work, please make sure all additional files such as shutdown.dll, zip32z64.dll, unzip32.dll, advscheduler\_broker.exe, advscheduler\_commander.exe, advscheduler\_procmd.exe (Professional Edition) or advscheduler\_netcmd.exe (Network Edition) and advscheduler\_service.exe, advscheduler\_prosvc.exe (Professional Edition) or advscheduler\_netsvc.exe (Network Edition) are located in the same folder as advscheduler\_admin.exe, advscheduler\_proadm.exe (Professional Edition) or advscheduler\_netadm.exe (Network Edition) file. If Advanced Task Scheduler is started as service the reason why some scheduled tasks are not working should be recorded in the **Events Log**.

## System automatically enters sleep after waking from sleep

Windows Vista and later versions of Windows go back to sleep or hibernate automatically after a specified period of time if you do not touch the mouse or keyboard. The default time is set to 120 seconds.

To change that value, open the REGEDIT tool, then select the following key: HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\Power\PowerSettings\238C9FA8-0AAD-41ED-83F4-97BE242C8F20\7bc4a2f9-d8fc-4469-b07b-33eb785aaca0\DefaultPowerSchemeValues



The DefaultPowerSchemeValues key contains three subkeys, which correspond to Balanced, High Performance, and Power



Saver options. You need to change the ACSettingIndex and DCSettingIndex values in all three keys. You can either set a period longer than the maximum anticipated duration of the run of the scheduled task (in seconds) or set 0 to turn off this feature.

## References

[Power Policy Configuration and Deployment in Windows](#)

## Service Running as System Account Fails Accessing Network

By default, Advanced Task Scheduler service is registered to run as the system user (the LOCAL SYSTEM account). Generally, the default service account, LOCAL SYSTEM, has full privilege on the local machine but NO PRIVILEGE on a remote system. So any request to access a remote resource like your files will fail.

If you need Advanced Task Scheduler to be able to access network resources, change user account for Advanced Task Scheduler Service from LOCAL SYSTEM to an administrator account. To change service account go to **Control Panel | Administrative Tools | Services**, double click **Advanced Task Scheduler Service** and specify user account on the **Log On** tab of the **Service Properties** window.

## Public key and Certificate authentication

Advanced Task Scheduler 4.2 and later supports public key and SSL Certificate authentication in HTTPS, FTPS and SFTP operations. You can enable these options when you are editing an HTTP or FTP shortcut type in the [Task properties](#) window. This section describes the format of the key files.

### SFTP public key

The key file should contain SFTP Public key in pem format. Usually this file is named id\_rsa and it is in pem format by default.

The pem file should look like this:

```
-----BEGIN RSA PRIVATE KEY-----Proc-Type: 4, ENCRYPTEDDEK-Info: AES-128-CBC, 7F0160D277DEC3E60A921E9C8AF1E324gBhh8JELjeXFcpFfzpfFeAuTBI3t7XJpmJbArH7BZnfBJKb4FEnstr6pf72UF1RMSnsBPn00aQfX611Lom5F1Jyk82etFbJoS3RgrW2na7HXTqsCGdkoh4E1Mwv0XDhohlKO6T0kh9u5wIaQmIqSTZD5hqTavK6dboAKO8ftdQSuNLJIussYT7Lps7ciVIFh-----END RSA PRIVATE KEY-----
```

### HTTPS and FTP SSL Certificate and Private key

The key file should contain SSL Certificate and Private key in pem format.

The pem file should look like this:

```
-----BEGIN RSA PRIVATE KEY-----OmutTanxlrkczvfrkKOpGEdqTrJEP0bt5B3Lzw8IDq8Je8B8AzUwm tKTKY7cFK7QAhW9BGT0o7wdlFUBRh5EnK5CLkJa0cQWLua3ibfum4mBe8itIPZnrQlM4elVtPeGHE7bsWg62 pS9x59U1WPkeBwQygpYgo4znpW7slslAgTTYON5FeYWTFu9SuRrSncx-----END RSA PRIVATE KEY-----
-----BEGIN CERTIFICATE-----wXO5hfuNcwsK4rqGhMIWJGRtKW7uJwzi58nSGZKZw6Qhjl2OZORWQoqS7 z6po4Loa3YZXcW5DMKZXiaV37TXAMiQNYnBQEsrsq4FCOGCatoEoP5ZN2vfeCf7CaeRaSokm8ecNwShlUoaQ xAhlzlsAJRvcnJcyPRsnG6vBXWOGvPyZwyiuTJXcdh-----END CERTIFICATE-----
```

### Key Password

Password for the SFTP Public key or SSL Private key. Leave this field blank if password is not required.

## Scheduled Tasks location and upgrade compatibility

Advanced Task Scheduler 5.0 and later stores its settings and scheduled tasks in the SQLite database file. You can find storage location, files and upgrade compatibility in the table below:

Product	Edition	User	Registry key	Directory	File	Upgrade compatibility
Advanced Task Scheduler version 5.0 and later	Basic	Current User	HKEY_CURRENT_USER\Software\Southsoftware\AdvScheduler	Value of "SettingsDir" of the <i>Registry key</i> .	tasks.sqlite	-
		All Users	HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvScheduler		allusers.sqlite	
	Professional	Current User	HKEY_CURRENT_USER\Software\Southsoftware\AdvSchedulerPro		tasks.sqlite	
		All Users	HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerPro		allusers.sqlite	
	Network	All Users	HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerNet		allusers.sqlite	
Advanced Task Scheduler version 2.0 - 4.5	Basic	Current User	HKEY_CURRENT_USER\Software\AdvScheduler	There are no <i>Directory</i> and <i>File</i> as everything is stored inside the <i>Registry key</i> .		Advanced Task Scheduler 5.0 and later automatically converts settings and tasks to SQLite database file. Either backup.reg.bak or settings.ini.bak, tasklist.ini.bak, templog.ini.bak files are created in the <i>Directory</i> with full backup of all settings and tasks before they

Product	Edition	User	Registry key	Directory	File	Upgrade compatibility
		All Users	HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvScheduler			are removed from the system.
	Professional	Current User	HKEY_CURRENT_USER\Software\Southsoftware\AdvSchedulerPro	Value of "SettingsDir" of the <i>Registry key</i> .	If <i>Directory</i> value is empty string or it does not exist then there are no <i>File</i> as everything is stored inside the <i>Registry key</i> . Otherwise the files are: settings.ini, tasklist.ini, templog ini.	
		All Users	HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerPro			
	Network	All Users	HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerNet			

Advanced Task Scheduler - versions 1.0 - 1.5

Current User and All Users

HKEY\_CURRENT\_USER\Software\Southsoftware\Scheduler and if you are running Advanced Task Scheduler as service: HKEY\_USERS\DEFAULT\Software\Southsoftware\Scheduler

There are no *Directory* and *File* as everything is stored inside the *Registry key*.

Advanced Task Scheduler 2.0 and later does not import task list from Advanced Task Scheduler 1.x automatically. You have to use the "Export tasks" command from the "File" menu of Advanced Task Scheduler 1.x to export task list to a file, then use the "Import" command from the "File" menu of Advanced Task Scheduler 2.0 and later to import task list from that file.

**Related Articles**

[Advanced Task Scheduler's SQLite database](#)

**Advanced Task Scheduler's SQLite database**

From version 5.0 and later Advanced Task Scheduler uses SQLite database file to store its settings and scheduled tasks.

You can find location and file name of SQLite database file in this topic: [Scheduled Tasks location and upgrade compatibility](#).

For your convenience we have published SQLite Shell, which was built with the same options as Advanced Task Scheduler uses internally. You can download the shell here: [sqlite.zip](#).

This topic covers a few examples of SQLite Shell commands that can be used to tune up Advanced Task Scheduler's functionality.

Do not forget to exit Advanced Task Scheduler and stop it's service before modifying database.

## Dump history

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidstring.dll"SELECT datetime(actiontime, 'unixepoch', 'localtime'), errorcode, exitcode, (select name from tasks where tasks.guid=task_guid), actionschedule, actionsource, actionsourceextra, exelog FROM history ORDER BY actiontime DESC;
```

## Clear history

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidstring.dll"DELETE FROM history;
```

## Dump root groups

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidstring.dll"SELECT GuidToString(guid), type, name, icon, datetime(last_modified, 'unixepoch', 'localtime') FROM root;
```

## Insert another local tasks group

This may be useful as root groups use their own settings such as log file and user account options.

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidstring.dll"INSERT INTO root(guid, type, name, icon, last_modified) VALUES (GuidCreate(), 0, 'Another local tasks', '', strftime('%s','now'));
```

## Insert another replicated tasks group

This may be useful as root groups use their own settings such as log file, user account and replication options (Network Edition only).

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidstring.dll"SELECT GuidToString(GuidCreate());
```

The new GUID will be displayed. Use the following commands to create new replicated tasks group on the all machines where you want to use the same replicated group. The "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" should be replaced with the actual GUID that was returned on the previous step.

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidstring.dll"INSERT INTO root(guid, type, name, icon, last_modified) VALUES (GuidFromString("XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"), 1, 'Another replicated tasks', '', strftime('%s','now'));
```

In these examples "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite" should be replaced with your actual

file name and path; "guidstring.dll" is an SQLite Extension that is available from the package listed above.

### **Related Articles**

[Scheduled Tasks location and upgrade compatibility](#)

# Command line tool

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## Command line tool

Advanced Task Scheduler comes with a command line task execution tool. You can create tasks in the "Shortcut properties" window as well as use this tool.

The command line tool is located in the Advanced Task Scheduler installation folder and is named `advscheduler_commander.exe`, `advscheduler_procmd.exe` (Professional Edition) or `advscheduler_netcmd.exe` (Network Edition). It is recommended to run the command line tool from this folder only (do not copy it to other folders).

## Command line

`--Execute [-lang langid] [-type [logstdout | processuser | currentuser | localsystem | logonuser [-username user_name] [-password password] | passwordless [-username user_name]] [-stdin stdin] [-exefile exe_file] [-cmdline cmd_line] [-cmdshow [hidden | normal | maximized | minimized | normalnoactive | minimizednoactive]] [-startin path] [-terminate sec] [-desktop desktop_name]]`

`--Message [-lang langid] [-type [ask | popup | layered | balloon]] [-title title] [-text message] [-timer seconds] [-buttons [ok | okcancel | yesno | yesnocancel]] [-snd sound_file] [-bg background_image_file]]`

`--Service [-lang langid] [-type [start | stop | pause | continue | check]] [-name name] [-startargs startargs]]`

`--KillProcess [-lang langid] [-user user_name] [-image image_file] [-anyway] [-restore] [-list]]`

`--KillWindow [-lang langid] [-user user_name] [-caption window_caption] [-begins] [-contains] [-anyway] [-restore] [-list]]`

`--RasDial [-lang langid] [-name entry_name] [-auth username password] [-authbase64 username_password] [-attempts number_of_attempts]]`

`--RasHangUp [-lang langid] [-name entry_name] [-allnames]]`

`--PlaySound [-lang langid] [-device device_name] [-sound sound_file]]`

`--TurnOff [-lang langid] [-type [turnoff | standby | hibernate | reboot | logoff | monitor]] [-logoff [user_name]]]`

`--SendMessage [-lang langid] [-computer computer_name] [-msg message]]`

`--SendEMail [-lang langid] [-email email_address] [-server server[:port]] [-secure [starttls/smtps]] [-auth username password] [-authbase64 username_password] [-sender sender_address] [-subject subject] [-msg message] [-ctype content-type] [-charset charset] [-attach attach_file] [-attachmsg message]]`

`--SendKeys [-lang langid] [-caption window_caption] [-begins] [-contains] [-sequence sequence]]`

`--HTTP [-lang langid] [-url url] [-file file_name] [-overwrite] [-head] [-auth username password] [-authbase64 username_password] [-POST post_data] [-proxy server[:port]] [-proxytype [HTTP | SOCKS5]] [-proxyauth username password] [-proxyauthbase64 username_password] [-useragent useragent] [-certauth [-certfile file] [-certpasswd password]]]`

`--FTP [-lang langid] [-upload | -download | -delete] [-remote remote_dir] [-local local_dir] [-include file_masks] [-exclude file_masks] [-overwrite] [-passive] [-forceutf8] [-usessl] [-auth username password] [-authbase64 username_password]`

[-proxytunnel server[:port]] [-proxyauth username password] [-proxyauthbase64 username\_password] [-certauth [-certfile file] [-certpasswd password]]

[-FileSystem [-lang langid] [-copy | -move | -delete] [-source source\_dir] [-dest destination\_dir] [-include file\_masks] [-exclude file\_masks] [-overwrite]]

[-Zip [-lang langid] [-compress | -uncompress] [-archive archive\_file] [-folder uncompressed\_folder] [-include file\_masks] [-exclude file\_masks] [-overwrite] [-level level] [-password password]]

[-IEAutomation [-lang langid] [-show] [-noclose] [-timeout sec] [-command [argument:value] [param:value]]]

[-ODBCSQL [-lang langid] [-timeout sec] [-fieldmaxlen field\_max\_len] [-codepage code\_page] [-connstr connection\_string] [-sql sql\_query]]

[-FileCheck [-lang langid] [-exists | -locked] [-file file\_name]]

[-IdleTime [-lang langid]]

[-WlanConnect [-lang langid] [-interface interface] [-profile profile] [-attempts number\_of\_attempts]]

[-WlanDisconnect [-lang langid] [-interface interface] [-allinterfaces] [-profile profile] [-allprofiles]]

[-File [filename]] [-Pipe [pipename]] [-StdIn] - read command line from a file, a pipe or standard input.

### **--Execute**

-lang - langid (see below);

-type - type of execution:

logstdout - the application will be started with redirected stdin and application's stdout and stderr will be captured. If application is a 16-bit DOS application or a batch file, it will be executed via the command processor;

processuser - run application as the same user as command line tool (default);

currentuser - run application as currently logged on user;

localsystem - run application under LocalSystem account. To run an application under LocalSystem account, the command line tool must be started under the system or administrator account;

logonuser - logon user (-username and -password are required). The specified username and password will be used for executing the application. To run an application on behalf of the specified user, the command line tool must be started under the system or administrator account. The account must have the following privileges: "Act as part of the operating system" (SeTcbPrivilege), "Replace a process-level token" (SeAssignPrimaryTokenPrivilege), "Adjust memory quotas for a process" (SeIncreaseQuotaPrivilege, may be named "Increase memory quotas" or "Increase quotas" in Windows 2000 and NT 4.0), "Bypass traversy checking" (SeChangeNotifyPrivilege) and "Debug programs" (SeDebugPrivilege). You can modify user privileges in Control Panel | Administrative tools | Local Security Policy | User Rights Assignment;

passwordless - use passwordless authorization (-username is required). You can use passwordless authorization, but you must make sure that the command line tool is running under the system or administrator account. The account must have the

following privileges: "Act as part of the operating system" (SeTcbPrivilege), "Replace a process-level token" (SeAssignPrimaryTokenPrivilege), "Adjust memory quotas for a process" (SeIncreaseQuotaPrivilege, may be named "Increase memory quotas" or "Increase quotas" in Windows 2000 and NT 4.0), "Bypass traversy checking" (SeChangeNotifyPrivilege), "Debug programs" (SeDebugPrivilege) and "Create a token object" (SeCreateTokenPrivilege). You can modify user privileges in Control Panel | Administrative tools | Local Security Policy | User Rights Assignment. Windows Vista and later: the command line tool must be running only under administrator account. Starting from this Windows version, the system account doesn't have the SeCreateTokenPrivilege privilege. This option is available only in Professional and Network Editions;

-username - SAM-Account-Name or textual SID;

-password - account password;

-stdin - standard input data (logstdout only);

-exefile - the name of the module to be executed;

-cmdline - the command line to be executed;

-startin - the starting directory;

-cmdshow - the window show state;  
-terminate - number of seconds to terminate started application;  
-desktop - the name of the desktop (Default: WinSta0\Default).

### --Message

-lang - langid (see below);  
-type - type of the message window:  
ask - ask message window;  
popup - popup window;  
layered - transparent window near task bar;  
balloon - balloon tooltip;  
-title - title of the message window;  
-text - message text;  
-timer - number of second before the message disappears (ask message only);  
-buttons - buttons for the message window (ask message only);  
-snd - sound file to play when message window is displayed;  
-bg - image file (.bmp, .gif or .jpg ) for the window background (only for the popup window message).

### --Service

-lang - langid (see below);  
-type - type of operation with service (start, stop, pause, continue or check);  
-name - name of the service;  
-startargs - argument strings passed to a service (start only).

### --KillProcess

-lang - langid (see below);  
-user - SAM-Account-Name or textual SID of the user whose processes may be killed. Use "\*" for all users. If omitted, current user's name will be used. This option is available only on the NT based platforms;  
-image - process image file (name of the executable file of the process or full path and executable file name). Wildcards ("\*" and "?") are accepted);  
-anyway - kill process without giving it chance to save data;  
-restore - if the window is minimized, restore it before process is killed. If the window is displaying the prompt for saving unsaved data and the option "-restore" is not selected, the application's button on the taskbar will blink. When the option is selected, the application window will be restored, and the prompt for saving unsaved data will be sent to foreground;  
-list - list all found processes.

Note: If the option "-anyway" is not selected, Advanced Task Scheduler can terminate only those processes, which have their own windows. If a process does not have its own window, it can be terminated only when the option "-anyway" is selected.

### --KillWindow

-lang - langid (see below);  
-user - SAM-Account-Name or textual SID of the user whose windows may be killed. Use "\*" for all users. If omitted, current user's name will be used. This option is available only on the NT based platforms;  
-caption - window caption text;  
-begins - window caption must begin with the specified text;  
-contains - window caption must contain the specified text;  
-anyway - kill process without giving it chance to save data;  
-restore - if the window is minimized, restore it before process is killed. If the window is displaying the prompt for saving unsaved data and the option "-restore" is not selected, the application's button on the taskbar will blink. When the option is selected, the application window will be restored, and the prompt for saving unsaved data will be sent to foreground;  
-list - list all found processes.

Terminal Services: only windows that are running on the same terminal session as this program will be killed.

### --RasDial

-lang - langid (see below);  
-name - name of the phone book entry;



-auth - username and password for the specified connection. If omitted, the connection information saved by the last successful connection will be used;

-authbase64 - base64 encoded username and password, tab delimited;

-attempts - number of attempts to establish the connection.

Note: If the connection with the specified phone book entry is already connected, this command simply returns success and does nothing.

### --RasHangUp

-lang - langid (see below);

-name - name of the phone book entry;

-allnames - Version 4.5 and later: terminate all established connections. In earlier versions all connections can be terminated by entering "\*" in the "-name" parameter.

### --PlaySound

-lang - langid (see below);

-device - name of the sound device. If omitted, the default device will be used;

-sound - sound file.

### --TurnOff

-lang - langid (see below);

-type - type of operation (turnoff, standby, hibernate, reboot, logoff or monitor);

-logoff - SAM-Account-Name of the user to log off. "\*" means all users. If omitted, current user's name will be used. This option is available only on the NT based platforms.

Terminal Services: To be able to log off another user's session, you need to have the Query Information and Reset permissions. To modify permissions on a session, use the Terminal Services Configuration administrative tool.

### --SendMessage

-lang - langid (see below);

-computer - name of the computer;

-msg - message text.

### --SendEMail

-lang - langid (see below);

-email - email address. Several email addresses can be separated by comma or semicolon;

-server - SMTP server name and port number;

-secure - Connection security (starttls - STARTTLS; smtps - SSL/TLS);

-auth - username and password for SMTP server;

-authbase64 - base64 encoded username and password, tab delimited;

-sender - email address of the sender;

-subject - message subject;

-ctype - Content-Type of the message;

-charset - Charset of the message. If charset is omitted, the message is sent in utf-8 format;

-msg - message text;

-attach - file to send as attachment;

-attachmsg - message to send as attachment.

Professional and Network Editions: Several files and messages can be attached.

### --SendKeys

-lang - langid (see below);

-caption - window caption text;

-begins - window caption must begin with the specified text;

-contains - window caption must contain the specified text;

-sequence - keys sequence to send.

Terminal Services: keys may be send only to the windows that are running on the same terminal session as this program.

Windows Vista and later: keys cannot be send to the windows that are running with higher privileges than this program.

### --HTTP

- lang - langid (see below);
- url - URL to download (examples: <http://www.advscheduler.com/index.html>, <http://user:passwd@domain.name/index.php3>);
- file - file name to store downloaded file;
- overwrite - overwrite already existing file;
- head - use HEAD method to get only HTTP headers;
- auth - username and password for HTTP authorization;
- authbase64 - base64 encoded username and password, tab delimited;
- POST - the full data to post in an HTTP POST operation (for example, "postvar1=value1&postvar2=value2&postvar3=value3"). You must make sure that the data is formatted the way you want the server to receive it. Most web servers will assume this data to be url-encoded. This POST is a normal application/x-www-form-urlencoded kind, which is the most commonly used one by HTML forms;
- proxy - proxy server address and port number;
- proxytype - type of the proxy server (HTTP or SOCKS4);
- proxyauth - username and password for the proxy server;
- proxyauthbase64 - base64 encoded username and password, tab delimited;
- useragent - user-agent name;
- certauth - use SSL certificate authentication (HTTPS);
- certfile - SSL Certificate and Private key in pem format;
- certpasswd - password for Private key, if required.

### --FTP

- lang - langid (see below);
- upload - upload file(s) to remote directory;
- download - download file(s) from remote directory;
- delete - delete file(s) from remote directory;
- remote - URL and remote directory to upload, download or delete (examples: <ftp://ftp.domain.name/>, <ftps://user:pwd@ftp.com>, <sftp://ftp.com>);
- local - local directory to upload or download;
- include - include file mask(s) (semicolon separated);
- exclude - exclude file mask(s) (semicolon separated);
- overwrite - overwrite already existing file(s);
- passive - use passive mode (like WWW browsers);
- forceutf8 - use UTF8 file names even if UTF8 is not enabled on the server;
- usessl - use FTP over SSL/TLS (FTPES);
- auth - username and password for FTP authorization;
- authbase64 - base64 encoded username and password, tab delimited;
- proxytunnel - tunneling proxy server address and port number;
- proxyauth - username and password for the proxy server;
- proxyauthbase64 - base64 encoded username and password, tab delimited;
- certauth - Use public key authentication (SFTP) or SSL Certificate (FTPS);
- certfile - SFTP Public key or SSL Certificate and Private key in pem format;
- certpasswd - password for Public key or Private key, if required.

### --Filesystem

- lang - langid (see below);
- copy - copy file(s);
- move - move file(s);
- delete - delete file(s);
- source - source directory;
- dest- destination directory;
- include - include file mask(s) (semicolon separated);
- exclude - exclude file mask(s) (semicolon separated);

-overwrite - overwrite already existing file(s).

### **--Zip**

-lang - langid (see below);  
-compress - compress file(s) to archive;  
-uncompress - uncompress file(s) from archive;  
-archive - archive file name;  
-folder - directory of uncompressed files;  
-include - include file mask(s) (semicolon separated);  
-exclude - exclude file mask(s) (semicolon separated);  
-overwrite - overwrite already existing file(s);  
-level - compression level (compress only);  
-password - encrypt archive with password.

### **--IEAutomation**

-lang - langid (see below);  
-show - show browser window;  
-noclose - do not close browser window when finished;  
-timeout - timeout in seconds;  
-command - IE Automation commands;  
Several IE Automation commands can be executed one by one.

### **--ODBCSQL**

-lang - langid (see below);  
-timeout - timeout in seconds;  
-fieldmaxlen - maximum field length;  
-codepage - output code page (0-ACP, 1-OEM, 65001-UTF8);  
-connstr - ODBC connection string;  
-sql - SQL query string;  
Several SQL queries can be executed one by one.

### **--FileCheck**

-lang - langid (see below);  
-exists - check if file exists;  
-locked - check if file locked;  
-file - file name to check.

### **--IdleTime**

-lang - langid (see below).

### **--WlanConnect**

-lang - langid (see below);  
-interface - name of the WLAN interface;  
-profile - name of the profile;  
-attempts - number of attempts to establish the connection.

Note: If the specified interface is already connected to a wireless network, this command will first disconnect from the currently connected network, then attempt to connect to the new network. However, if these two networks are the same this command simply returns success and does nothing.

### **--WlanDisconnect**

-lang - langid (see below).  
-interface - name of the WLAN interface;  
-allinterfaces - disconnect the specified profile (or all profiles) on all interfaces;  
-profile - name of the profile;  
-allprofiles - disconnect all profiles on the specified interface (or all interfaces).

### **--File**

Command line will be read from the specified file. Output will be sent to stdout. If command line is in Unicode Little Endian charset, the file must begin with "0xFF 0xFE".

### **--Pipe**

Command line will be read from the specified named pipe (for example, \\pipe\mypipename). Output will be sent to the same named pipe. Command line must be terminated with the new line character "\n" (0x0A). If command line is in Unicode Little Endian charset, it must begin with "0xFF 0xFE".

### **--StdIn**

Command line will be read from stdin. Output will be sent to stdout. Command line must be terminated with the new line character "\n" (0x0A). If command line is in Unicode Little Endian charset, it must begin with "0xFF 0xFE".

If an argument contains spaces it must be enclosed in the quotes ("").

Formats like "&0xhhh;" are accepted, so to pass a quote mark, use "&0x22;". Note that "hhh" is a hexadecimal value of a Unicode character.

Use -h or --help option to display help information.

Use -l or --lang option to display language identifiers (langid).