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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.

How to connect the server from the client via TCP/IP protocol by IP address:
1) Start the Advanced Task Scheduler Network Client and select the "Connect" command from the "File" menu.
2) Enter the IP address and port number of the machine where Advanced Task Scheduler Network Server is installed.
2.1) You can find IP address and port number on the "Configuration" tab if you launch **Start menu | Advanced Task Scheduler Network | Server** on the server machine.
3) You may need to enable Advanced Task Scheduler Network in your firewall settings in case it is not enabled by default in firewall on either client or server machine.

Below are the most common reasons for the "Scheduling service is not connected" message:
1) Firewall blocks the connection.
2) The service is not started. You can check service status in the Services section in the Control Panel.

3) If you upgrade from version 4.5 or earlier, the new version converts all your tasks to the new format. This takes a few minutes and the service is not operable during this time.
4) You can check your event log in Control Panel | Event Viewer. The service reports its errors to that event log.
5) Also, there is restriction options on the "Configuration" tab of service configuration program. If enabled, these options can restrict access to the service by IP. Service configuration program can be opened from **Start menu | Advanced Task Scheduler Network | Server** on the server machine.

Silent installation:
Advanced Task Scheduler installation program uses Windows Installer internally. If you start the installation program with command line arguments, those arguments will be passed to the msiexec.exe making it is possible to automate installation process via command line.

Prerequisites:
Advanced Task Scheduler does not require and will not force you to install any additional components such as vcruntime or .NET framework.

Troubleshooting
Some computers may require DEP (Data Execution Prevention) settings turned off for Advanced Task Scheduler. The computer requires this if Advanced Task Scheduler application, service or installation program does not start without displaying any error alerts. Open this post for more information: How to turn off DEP in Windows.

If you install on a Windows version earlier than Windows 10 and get a warning message saying that the shortcut property could not be set, you can safely ignore it. That property is used since Windows 10 and has no effect on previous Windows versions.

Compare editions

Advanced Task Scheduler comes in three separate products: Advanced Task Scheduler, Advanced Task Scheduler Professional and Advanced Task Scheduler Network.

Compare features of all products and see which one suits your needs better:

Feature	*Advanced Task Scheduler*	*Professional Edition*	*Network Edition*
Schedule tasks for current user and for all users in the system	✔	✔	✔
Start task only if one of the users specified in the global settings is logged on and active	✔	✔	✔
Start task only if one of the users specified in the task settings is logged on and active		✔	✔
Do not run task when its another instance is being executed		✔	✔
Wake up computer from standby or hibernate mode		✔	✔

Start task as a user by passwordless authorization		✓	✓
Store settings and task list in the system registry	✓	✓	✓
Store settings and task list in a folder		✓	✓
Encrypt settings and task list		✓	✓
Write log to a file.	✓	✓	✓
Send log to email (one entry per email)	✓	✓	✓
Send log to email (once a day/week/month)		✓	✓
Schedule hidden tasks when no logged on users	✓	✓	✓
Shortcut types			
One shortcut for each task	✓		
Several shortcuts for each task. All shortcuts executed one by one.		✓	✓
Control statements which allows evaluating a sequence of shortcuts when condition is true and evaluating a different sequence of shortcuts when condition is not true.		✓	✓
Execute application	✓	✓	✓
Save stdout to the log		✓	✓
Terminate application if it is running for specified time		✓	✓
Display message	✓	✓	✓
Start/stop/pause/continue a service	✓	✓	✓
Kill process	✓	✓	✓
Destroy window	✓	✓	✓
Connect	✓	✓	✓
Disconnect	✓	✓	✓
Play audio	✓	✓	✓
Record video	✓	✓	✓
Take picture	✓	✓	✓
Take screenshot	✓	✓	✓
Turn off/reboot/log off	✓	✓	✓

computer			
Send network message	✓	✓	✓
Send e-mail message	✓	✓	✓
Send key sequence	✓	✓	✓
HTTP/HTTPS download	✓	✓	✓
FTP/FTPS/SFTP upload/download/delete	✓	✓	✓
Copy/move/delete files	✓	✓	✓
Zip/Unzip archive	✓	✓	✓
IE Automation		✓	✓
ODBC SQL		✓	✓
Schedule types			
One schedule for each task	✓		
Several schedules for each task. Task is executed when one of the schedule types is triggered.		✓	✓
Complex schedule types when each schedule type includes all previous schedule types. For example Daily schedule type includes Hourly schedule type which allows you to run your task hourly only in specified days.		✓	✓
Run once	✓	✓	✓
Run secondly	✓	✓	✓
Run minutely	✓	✓	✓
Run hourly	✓	✓	✓
Run daily	✓	✓	✓
Run weekly	✓	✓	✓
Run monthly	✓	✓	✓
Run yearly	✓	✓	✓
Run on startup	✓	✓	✓
Hot Key	✓	✓	✓
Computer idle	✓	✓	✓
Computer ceases idle	✓	✓	✓
Internet connection	✓	✓	✓
Logon watch		✓	✓
Window watch		✓	✓

Process watch		✔	✔
File watch		✔	✔
Run on holiday		✔	✔
Randomized time		✔	✔
Client/Server features			
Client and server on different computers			✔
Connect server via TCP/IP protocol			✔
Connect server by secure SSL connection			✔
Unlimited clients can connect to one server			✔
Can be used in remote environments			✔
Replicated tasks			✔
API to manage tasks via TCP/IP programmatically			✔

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FAQ & Support | View screenshot | Online manual

System requirements

Operating Systems	*Processors*	*Disk Space*	*RAM*	*Graphics*
Windows 11 Windows Server 2022 Windows Server 2019 Windows Server 2016 Windows 10 Windows 8.1 Windows 8 Windows Server 2012 Windows 7	Any Intel or AMD x86 processor Any Intel® EM64T or AMD64 processor	Under 50 MB	Minimum required by operating system	No specific graphics card is required

Windows Server 2008 Windows Vista Windows Server 2003 Windows XP Windows 2000				

Translation

The user interface of Advanced Task Scheduler can be displayed in different languages. The current language can be selected from the **Options / Language** menu.

If you did not find your language in the list of available translations, you can translate Advanced Task Scheduler by yourself.
You only need to translate a single file that contains all text strings that are used in the Advanced Task Scheduler.
In return for the translation that we don't yet have, we are offering you a free license of Advanced Task Scheduler.
Please send your translation to our Support Service.

All dialog box controls in Advanced Task Scheduler are automatically resized according to their text.
So it should not be the problem if the text in your language is longer than the same text in English.
In that case, all dialog box controls will be rearranged so the longer text will be fully visible.

Translation Guidelines

All strings used in Advanced Task Scheduler are located in gettext-compatible translation files in the "languages" subfolder in the folder where Advanced Task Scheduler is installed. When program is started it tries to load a language file, corresponding to the selected language. If it fails, then default (English) language file is used.

Creating a new translation:

1. Download and install a program called poedit.
2. Decompile the english.mo file into a english.po file from the command line with poedit:
   C:\Program files\poedit\bin\msgunfmt.exe english.mo > english.po
3. Rename english.po to standard name of your language according to the standard language file names from this table with .po extension.
4. Now open your .po file with poedit and translate everything you need to translate.
5. Save - make sure that beside the .po file also the binary .mo file is created (the application will use the .mo file to display the translations).
6. Send us the new .po file and claim your free license of the translated product.

Text strings may contain special format characters. Please keep formatting as close to the original as possible. Special characters and their meaning can be found in the following table:

Special Characters in Language File

Character	Meaning
&	Ampersand (&) is placed in front of the letter that is used as access key for menu or dialog items. For example, to use **F** as the access key for a menu named **File**, use **&File**. If the **F** in the menu name is underlined you can open the menu by pressing **ALT+F**.
\t	**TAB** character. For menu items **\t** is used to display the shortcut key combination for the menu item with right align.
\n	**Line break** character. You can add extra line breaks where you want to make some strings multilined so they fit better in their area.
%chars	**Character sequences beginning with %** will be replaced with some text when the string is displayed.
\\	Textfmt control: **"\"** character.
#9 (\t)	Textfmt control: soft break.
#13 (\n)	Textfmt control: line break.
\tn	Textfmt control: Set tab position in **n** pixels from the left margin.
\ln	Textfmt control: Set left margin in pixels.
\bn	Textfmt control: **\b1** turns on bold, **\b0** turns off bold.
\in	Textfmt control: **\i1** turns on italic, **\i0** turns off italic.
\wn	Textfmt control: **\w1** turns on word underline, **\w0** turns off word underline.
\un	Textfmt control: **\u1** turns on solid underline, **\u0** turns off solid underline.
\on	Textfmt control: **\o1** turns on strikeout, **\o0** turns off strikeout.
\sn	Textfmt control: Set font size to **n**.
\cn	Textfmt control: Set font color to **n**. For example **"#000000"** - black).
\hn,m	Textfmt control: Insert hyperlink (n - (1-begin, 0-end), m - id).
\pn,mk	Textfmt control: Insert bitmap (n-id, m-vert align {t(TOP),c(CENTER),b(BOTTOM)}, k-ROP2). ROP2 = {a(SRDAND), c(SRCCOPY), e(SRDERASE), i(SRCINVERT), p(SRCPAINT)}.

Standard Language File Names

Language	Language file

Afrikaans (Afrikaans)	afrikaans.mo
Shqip (Albanian)	albanian.mo
(Arabic) العربية	arabic.mo
Հայերեն (Armenian)	armenian.mo
অসমীয়া (Assamese)	assamese.mo
Azərbaycan (Azerbaijani)	azeri.mo
Euskara (Basque)	basque.mo
Беларуская (Belarusian)	belarusian.mo
বাংলা (Bengali)	bengali.mo
Български (Bulgarian)	bulgarian.mo
Català (Catalan)	catalan.mo
???? (Simplified Chinese)	schinese.mo
???? (Traditional Chinese)	tchinese.mo
Hrvatski (Croatian)	croatian.mo
Čeština (Czech)	czech.mo
Dansk (Danish)	danish.mo
Nederlands (Dutch)	dutch.mo
English (English)	english.mo
Eesti (Estonian)	estonian.mo
Føroyskt (Faroese)	faeroese.mo
Filipino (Filipino)	filipino.mo
(Persian) فارسی	farsi.mo
Suomi (Finnish)	finnish.mo
Français (French)	french.mo
ქართული (Georgian)	georgian.mo
Deutsch (German)	german.mo
Ελληνικά (Greek)	greek.mo
ગુજરાતી (Gujarati)	gujarati.mo
(Hebrew) עברית	hebrew.mo
हिन्दी (Hindi)	hindi.mo
Magyar (Hungarian)	hungarian.mo
Íslenska (Icelandic)	icelandic.mo
Indonesia (Indonesian)	indonesian.mo
Italiano (Italian)	italian.mo
??? (Japanese)	japanese.mo
????? (Kannada)	kannada.mo

Kashmiri كأشُر	kashmiri.mo
Қазақ тілі (Kazak)	kazak.mo
कोंकणी (Konkani)	konkani.mo
??? (Korean)	korean.mo
Latviešu (Latvian)	latvian.mo
Lietuvių (Lithuanian)	lithuanian.mo
Македонски (Macedonian)	macedonian.mo
Melayu (Malay)	malay.mo
മലയാളം (Malayalam)	malayalam.mo
মৈতৈলোন্ (Manipuri)	manipuri.mo
मराठी (Marathi)	marathi.mo
नेपाली (Nepali)	nepali.mo
Norsk (Norwegian)	norwegian.mo
ଓଡ଼ିଆ (Oriya)	oriya.mo
Polski (Polish)	polish.mo
Português (Portuguese)	portuguese.mo
ਪੰਜਾਬੀ (Punjabi)	punjabi.mo
Română (Romanian)	romanian.mo
Русский (Russian)	russian.mo
संस्कृत (Sanskrit)	sanskrit.mo
Srpski (Serbian)	serbian.mo
(Sindhi) سنڌي	sindhi.mo
Slovenčina (Slovak)	slovak.mo
Slovenščina (Slovenian)	slovenian.mo
Español (Spanish)	spanish.mo
Kiswahili (Swahili)	swahili.mo
Svenska (Swedish)	swedish.mo
தமிழ் (Tamil)	tamil.mo
Татар (Tatar)	tatar.mo
??????? (Telugu)	telugu.mo
ไทย (Thai)	thai.mo
Türkçe (Turkish)	turkish.mo
Українська (Ukrainian)	ukrainian.mo
(Urdu) اُردو	urdu.mo
O‘zbek (Uzbek)	uzbek.mo
Tiếng Việt (Vietnamese)	vietnamese.mo
Elsässisch (Alsatian)	alsatian.mo

አማርኛ (Amharic)	amharic.mo
Башҡорт (Bashkir)	bashkir.mo
Brezhoneg (Breton)	breton.mo
???? (Burmese)	burmese.mo
ᏣᎳᎩ (Cherokee)	cherokee.mo
Corsu (Corsican)	corsican.mo
(Dari) دری	dari.mo
(Divehi) ދިވެހިބަސް	divehi.mo
Ẹ̀dó (Edo)	edo.mo
Frysk (Frisian)	frisian.mo
Pulaar (Fulah)	fulah.mo
Galego (Galician)	galician.mo
Kalaallisut (Greenlandic)	greenlandic.mo
Avañe’ẽ (Guarani)	guarani.mo
Gaeilge (Irish)	irish.mo
Hausa (Hausa)	hausa.mo
ʻŌlelo Hawaiʻi (Hawaiian)	hawaiian.mo
Ibibio-Efik (Ibibio)	ibibio.mo
Asụsụ Igbo (Igbo)	igbo.mo
Inuktitut (Inuktitut)	inuktitut.mo
Kanuri (Kanuri)	kanuri.mo
????? (Khmer)	khmer.mo
K’iche' (Kiche)	kiche.mo
Kinyarwanda (Kinyarwanda)	kinyarwanda.mo
Кыргызча (Kyrgyz)	kyrgyz.mo
???? (Lao)	lao.mo
Latina (Latin)	latin.mo
Lëtzebuergesch (Luxembourgish)	luxembourgish.mo
Malti (Maltese)	maltese.mo
Māori (Maori)	maori.mo
Mapuche (Mapudungun)	mapudungun.mo
Kanien’kéha (Mohawk)	mohawk.mo
Монгол (Mongolian)	mongolian.mo
Occitan (Occitan)	occitan.mo
Oromoo (Oromo)	oromo.mo
Papiamentu (Papiamentu)	papiamentu.mo

Pashto پښتو	pashto.mo
Runasimi (Quechua)	quechua.mo
Rumantsch (Romansh)	romansh.mo
Sámi (Sami)	sami.mo
Gàidhlig (Scottish)	scottish.mo
සිංහල (Sinhala)	sinhalese.mo
Soomaali (Somali)	somali.mo
Serbšćina (Sorbian)	sorbian.mo
Sotho (Sotho)	sotho.mo
Sutu (Sutu)	sutu.mo
(Syriac) ????????	syriac.mo
Тоҷикӣ (Tajik)	tajik.mo
Tamaziɣt (Tamazight)	tamazight.mo
???????? (Tibetan)	tibetan.mo
ትግርኛ (Tigrinya)	tigrinya.mo
Xitsonga (Tsonga)	tsonga.mo
Setswana (Tswana)	tswana.mo
Türkmen dili (Turkmen)	turkmen.mo
(Uyghur) ئۇيغۇرچە	uyghur.mo
Tshivenḓa (Venda)	venda.mo
Cymraeg (Welsh)	welsh.mo
Wolof (Wolof)	wolof.mo
isiXhosa (Xhosa)	xhosa.mo
Саха тыла (Yakut)	yakut.mo
???? (Yi)	yi.mo
(Yiddish) יידיש	yiddish.mo
Èdè Yorùbá (Yoruba)	yoruba.mo
isiZulu (Zulu)	zulu.mo

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?

Advanced Task Scheduler is a powerful cost-effective tool to schedule running of applications, batch files, popup messages, alarms and much more. Tasks can be set to run once or every second, minute, hour, day, week, month, year, etc. or by such events as hot key, computer idle and so on.

2. What Advanced Task Scheduler edition is right for me?

Three versions of Advanced Task Scheduler are available. Advanced Task Scheduler is the simplest of the three and allows users to automate basic tasks. With Advanced Task Scheduler Professional, several actions can be executed one by one in a single task, control statements, such as IF, ELSE, ENDIF, can be used to control actions by conditions during execution. Advanced Task Scheduler Network is a client/server program suitable running tasks on a large-scale network, it can manage tasks on remote servers, running in the background without taking up valuable memory space. You can find feature comparison table here https://www.advscheduler.com/compare-editions.

3. Where can I get it?

You can download it from our web site: https://www.advscheduler.com/downloads.

4. How do I register?

Please read more information about Advanced Task Scheduler registration at https://www.advscheduler.com/purchase.

Technical Questions

5. How do I backup Advanced Task Scheduler settings and/or copy them to another computer?

You can backup your Advanced Task Scheduler settings and task list by **Export** and **Import** commands from **File** menu.

Alternatively, you can backup Advanced Task Scheduler settings and tasks by creating a backup copy of it's registry key and database files. The location of Advanced Task Scheduler's settings is described here: Scheduled Tasks location and upgrade compatibility. Do not forget to exit Advanced Task Scheduler and stop it's service before exporting/importing it's registry settings and copying files.

6. Why Advanced Task Scheduler doesn't display help correctly?

If you do not have Internet Explorer 5 or higher, you need to install Html Help. You can download it here: https://www.southsoftware.com/hhupd.exe.

7. Why program does not start with message "Cannot find import; DLL may be missing, corrupt or wrong version. File: WS2_32.dll"?

Windows Sockets 1.1 or later must be installed on your computer. You can download W95 Winsock Upgrade (963 KB) here: https://www.southsoftware.com/W95ws2setup.exe.

8. Why program does not start with message "Your system has old version of Common Controls Library (ComCtl32.dll)."?

ComCtl 5.80 or later must be installed on your computer. You can download Platform SDK Comctl32 Redistributables (499 KB) here: https://www.southsoftware.com/50comupd.exe.

9. How do I correctly reinstall or update Advanced Task Scheduler?

If you downloaded the installation program of latest version of Advanced Task Scheduler from our site, you need simply start it. It will detect that Advanced Task Scheduler is already installed and will update it, but your preferences, scheduled tasks and registration information will be kept.

Please read question 18 of this FAQ if you are upgrading from Advanced Task Scheduler 1.x to newer versions.

10. Is there any way to capture output from say a batch file to the scheduler log file?

Advanced Task Scheduler Professional and Network: Use "Launch application" schedule type with selected "Save stdout to the log" option.

All versions of Advanced Task Scheduler: You can redirect batch file output to a file by adding ">" or ">>" to shortcut.

Modify you task as follows:
Executable file name:
your_path\file.bat
Command line arguments:
>> output_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?

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.

12. How can I store log file or Advanced Task Scheduler settings and task list on a remote machine?

To store log file on a remote machine:
In the text field under "Write log file" in the **Options** section of the **Preferences** screen you need to specify a path to a shared folder on a remote machine (For example: "\\MACHINE\SharedFolder\logfile.log").

When you run Advanced Task Scheduler as service:
When Advanced Task Scheduler is running as service as the system user (the LOCAL SYSTEM account), it cannot write log file on a remote machine. You need to 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.

13. Can I start Advanced Task Scheduler service under a predefined user account?

Yes, you can. Simply 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.

Advanced Task Scheduler 1.x: Advanced Task Scheduler does not support running service under a predefined user account, because services are running under separate secured winstation/desktop, you will not have rights to connect to it if your service runs under any other account except of LOCAL SYSTEM. If you need to run scheduled task under a predefined user account, consider use of "Run as user" option.

14. Can Advanced Task Scheduler close a running application?

Yes. You can use the Destroy window or Kill process task type to close an application by sending it a close signal or kill an application without giving it a chance to save data.

15. Can Advanced Task Scheduler wake up my computer from standby/hibernation before starting a task?

Advanced Task Scheduler Professional and Network: Yes, you can select the "Wake up computer if it is in the standby or hibernate mode when task shall start" option on the **Standby/Hibernate Options** tab of the **Task Properties** window.

Other versions of Advanced Task Scheduler: This feature is not supported.

16. Can I run Advanced Task Scheduler hidden so user has no access to it?

To start Advanced Task Scheduler hidden:
1. Set "dontshowtray" 32-bit DWORD value to 1 in the HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvScheduler or HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerPro (Professional Edition) registry key.
2. Run advscheduler_admin.exe or advscheduler_proadm.exe (Professional Edition). If it is already running, it becomes hidden.

To start Advanced Task Scheduler normally:
1. Set "dontshowtray" 32-bit DWORD value to 0 in the HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvScheduler or HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerPro (Professional Edition) registry key.
2. Run advscheduler_admin.exe or advscheduler_proadm.exe (Professional Edition). If it is already running, it becomes visible.

17. Does Advanced Task Scheduler support Remote Desktop sessions?

Because of Remote Desktop session is not active console session, scheduled tasks may not execute successfully for the Remote Desktop user. If you want to execute task when Remote Desktop user is connected, try the following options:
1. **Run task on the hidden desktop** on the **User Account Options** tab on the **Task Properties** window - executes task on the hidden desktop regardless of the currently active user.
2. **Start task for each logged on and valid user** on the **User Account Options** tab on the **Task Properties** window - executes task for each logged on and valid user including Remote Desktop users (Professional and Network Editions only).
3. For more information refer: Terminal Server Aware Task Scheduler.

18. How do I import my task list from Advanced Task Scheduler 1.x to newer versions of Advanced Task Scheduler?

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

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?

Windows Vista and later versions of Windows goes back to sleep or hibernate automatically after a specified period of time if you do not touch the mouse or keyboard. This behavior can be changed as described in this topic: System automatically enters sleep after waking from sleep.

20. Can I use Advanced Task Scheduler for FTP upload/download?

Yes, you can. For detailed instructions, refer: Automate FTP transfers with Advanced Task Scheduler.

21. How do I run a task when no user is logged on?

This question is answered in this post: Run scheduled tasks when no user is logged on into the system.

22. How do I run Advanced Task Scheduler in Windows Safe Mode?

This question is answered in this post: Advanced Task Scheduler in Windows Safe Mode.

23. Does Advanced Task Scheduler support log files or other means, so I could be notified if a good working task begins to fail?

This question is answered in this post: Error handling in scheduled tasks.

24. What features does this program add that the built-in windows scheduler, on windows 10, doesn't already have?

Advanced Task Scheduler and Windows built-in Task Scheduler are different applications. Both run their own tasks. You can find comparison chart here: Advanced Task Scheduler vs. Windows Task Scheduler.

25. Can I automatically send SQL queries to an ODBC data source?

You can use the ODBC SQL schedule type. You can find more information here: SQL Automation with Task Scheduler.

26. I need to log on to a site with login/password, click a button and download the produced file. Can I automate this?

You can use the IE Automation schedule type. You can find more information here: IE Automation with Task Scheduler.

27. Can synchronize tasks between two or more computers so that the schedules would be the same on both?

In Advanced Task Scheduler Network, you can use the "Replicated tasks" feature. You can find more information here: Replicated Tasks with Advanced Task Scheduler Network.

28. The task finishes with "A required privilege is not held by the client" error. How do I fix this?

Usually, this error means that your task requires additional privileges that you can enable in Windows Settings. The required privileges are listed on the "Execution log" tab of the "Task Properties" window.
Read more in this post: Fix "A required privilege is not held by the client (1314)" error.

29. The task finishes with "An attempt was made to reference a token that does not exist" error. How do I fix this?

Usually, this error means that there was no active user at the moment when the start started.
Read more in this post: Fix "An attempt was made to reference a token that does not exist (1008)" error.

30. The task finishes with "The requested operation requires elevation" error. How do I fix this?

This error may indicate that you are trying to run a program that requires elevation (run as administrator) from the current user tab.
You can try to run your task from the "All Users" tab. Read more in this post: Fix "The requested operation requires elevation (740)" error.

31. What does the "The requested resource is in use" means in the "Last start status" column?

If this status is displayed in the "Last start status" column with arrow icon, then this is not actually an error, it means that the task is currently being executed.
Otherwise, see this post for more information: Fix "The requested resource is in use (170)" error.

32. If the task is hung, is there a way to kill the task and restart?

At present, the only way to stop a task that has hung is to kill it from the Task Manager. This is because the Advanced Task Scheduler is designed in such way that if a task fails, crashes or hangs than the whole scheduler keeps running. In other words, any problems with a task should not affect the scheduler itself.

33. Does Advanced Task Scheduler support Windows x64 Editions?

Windows XP, Windows Vista, Windows 7 and Windows 8 x64 Edition For Intel® EM64T and AMD64 Platform Architecture are fully supported by Advanced Task Scheduler.

34. Does Advanced Task Scheduler support virtual environment?

Advanced Task Scheduler should work fine in a virtual environment without any limitations.

35. 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?

We are always open for new feature requests. Please contact our Support Service for further discussion.

Task scheduling questions

36. What functionalities does Advanced Task Scheduler offer to schedule around holidays?

If you wish to start a task on all days except either a single holiday or all holidays, you can use the Run on holiday schedule type with the "Run on all days except holiday" option.

If you wish to start a task on work days only, excluding holidays and non-work days such as Saturday and Sunday, you can use the Run weekly schedule type with the "Work days only" option selected.

Additional information you can find in this post: Holiday Aware Task Scheduler.

37. I would like to run a task every day, starting at 8:00AM and run every 30 minutes until 5:00PM, and then stop. Then, the very next day I would like to repeat the above process.

You can use the Run daily schedule type. Select "Run minutely" in the "TIME IN DAY" options. There you can select "every 30 minutes" and period from 8:00AM to 5:00PM in the "Run in period" options.

38. Can Advanced Task Scheduler trigger a task at a user's login?

You can use the Logon watch schedule type.

39. Is it possible using your software to run task at random times (like I want to run some daily between 9 and 10, but not always at 9:15 for example)?

You can run a task at random times in Professional and Network versions. Select Run daily schedule type and "Randomized time" in the "Time in day" option.

40. If I create a "Run on startup" task, reboot and log in as soon as the log in screen appears, the scheduled task executes perfectly. However, If I restart and log in some time after the log in screen has appeared, the

scheduled tasks don't run.

The Run on startup schedule type is for system startup. Try the Logon watch schedule type to run a task when a user gets logged in.

41. Is there a way to keep Advanced Task Scheduler from triggering if the task is still running.

More than one instance of a task is not allowed with the "Do not start task when its another instance is being executed" option in the "Task Properties" window.

42. Can I use the "File watch" schedule type on network folder?

You can try the File watch schedule type with the "File added" option enabled. The "Directory name" can be set to a unc path or shared folder, however, some networks may not support file watching, in that case you'll see a error message in the "Next start time" column in the task list.

43. I want a job to run on file watch, however that file is located in a mapped drive. It turns out there is no option from file watch to select from a mapped drive.

Most likely, your mapped drive is not mapped for the user account under which the Advanced Task Scheduler Service runs.

44. I want to start a task 5 times per day at random time.

In Professional or Network version, you can create 5 schedules within a single task. Each schedule has to be "Run daily" schedule type and "Randomized time" in the "Time in day" option.

45. I have a task that I would like to run every Tuesday and Thursday and on the 15th of the month. However, if the 15th falls on a Tuesday or Thursday I want the program to only run once on those days and not twice.

If you create two schedules with the same time in day within one task, then the task will start only once. In other words, if schedules are within one task and their start times match, the task is started only once.

46. Why does the Advanced version not have a "Run on Shutdown" option?

We did not add a "Run on Shutdown" option because when Windows shuts down it allows a running program to cancel shutdown or terminates it unconditionally. So, if we start a task when Windows shuts down the system will terminate it without letting it a chance to finish or the system does not shut down.

Purchase Questions

47. Is it safe to order online?

By clicking a purchase link on our web site, you order from our authorized sales agent. They provide you with an order process that is protected via a secure connection so that the data sent to the recipient can only be read by the recipient. Important information such as credit card numbers, addresses, etc. is sent to the recipient securely via the Internet.

48. Can I buy Advanced Task Scheduler with PayPal?

Yes, now we accept PayPal. Please follow this link to buy Advanced Task Scheduler with PayPal: https://www.advscheduler.com/purchase.

49. How to purchase your product and how long will I receive the license code after I complete the purchase?

Normally, you will receive the activation code by e-mail immediately after your successful purchase. You will also receive a separate message with your login information for our registered user area. The registered user area allows registered users of Southsoftware.com products to download latest versions of our software, view order information and activation status. If you don't receive your registration information in a timely manner, or if you've lost it, please contact our Support Service.

50. How many times can I activate Advanced Task Scheduler license?

You can activate Advanced Task Scheduler as many times as you want on the same computer (with the same hardware fingerprint). The number of different computers where you can activate Advanced Task Scheduler is limited by the number of copies purchased.

51. How to reactivate Advanced Task Scheduler, if computer hardware configuration changes?

If you upgrade some significant parts on your computer, reactivation might be required. In that case please contact our Support Service. You will be able to reactivate your software automatically in 6 months after last activation.

52. What happens when my Updates and Support subscription expires?

When your Updates and Support subscription expires, your installed software will continue to work, you will be able to activate it in case of reinstallation, with your login information for our registered user area, you will be able to download the latest version that is available for your subscription (the version that was release before your Updates and Support subscription expired). However, you will not be able to upgrade to the newer version and you will receive only limited support.

53. How to renew Updates and Support subscription?

To renew your Updates and Support subscription, please login into our registered user area and click on one of the renew links. We provide a 50% renewal discount for registered users. If you are renewing a subscription that is not expired, new subscription will extended your existing subscription for the selected period, if your existing subscription is expired, your new subscription will start from the day of renewal. If you can't use our registered user area, please contact our Support Service.

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, 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, each item in the task list appears in its own line with advanced information spread out by the columns. The advanced information includes the following columns:

Name	Task name.
Task type	Task type (Launch application, Display message, etc.)
User logon sessions	**Version 10 and later:** User session or desktop on which the task will be executed.
User account	**Version 10 and later:** User account under which the task will be executed.
Schedule type	Detailed description of schedule type.
Schedule period	Period of time, when the task is allowed to be scheduled.
Last start time	Date and time when the task was last run.
Last start status	Status of the task. **Version 5.0 and later:** status includes status icon and human readable message. If arrow icon is displayed then the task is currently running. In this case the number of running instances is displayed in round brackets next to the icon.
Next start time	Date and time when the task will be run next time.
Comment	**Version 10 and later:** A user-defined task comment or description up to 1024 characters. To add or modify task comment, right-click the task in the task list and select the **Task comment** menu command.

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

Table Of Content

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.

SET VARIABLE
This statement creates a variable that can be used later during task execution.

Conditions

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.

PROCESS RUNNING
Test if the specified process is running. The **Process file name** is the executable file of the process that will be tested.

PROCESS NOT RUNNING
Test if the specified process is not running. The **Process file name** is the executable file of the process that will be tested.

WINDOW EXISTS
Test if the specified window exists. The **Window title** is the title of the window that will be tested.

WINDOW NOT EXISTS
Test if the specified window does not exists. The **Window title** is the title of the window that will be tested.

IDLE TIME
Test the user idle time.

SYSTEM UPTIME
Test the time elapsed since the last system boot.

HOST PINGS
Test if the specified host (or IP address) pings by means of ICMP protocol.

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://example.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. Command line may include any combination of variables. **Note**: if you want to pass an environment variable unexpanded, use double percent sign. For example, %%USERNAME%% will be passed as %USERNAME%.

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 appearance
User's default - **Version 9 and later:** User's default appearance as selected in the Message Center settings.
Toast notification - **Version 9 and later:** Toast notification will be displayed. User can change additional toast notification settings in the the Message Center. This option is only available in Windows 10 and later.
Popup message window - Popup window will be displayed with the message text. User can change additional popup message settings in the the Message Center.
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.
Balloon message 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. Since Windows 10 balloon notification is the same as toast notification.

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.

Background image
If you select the **Popup message 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
Message Center

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

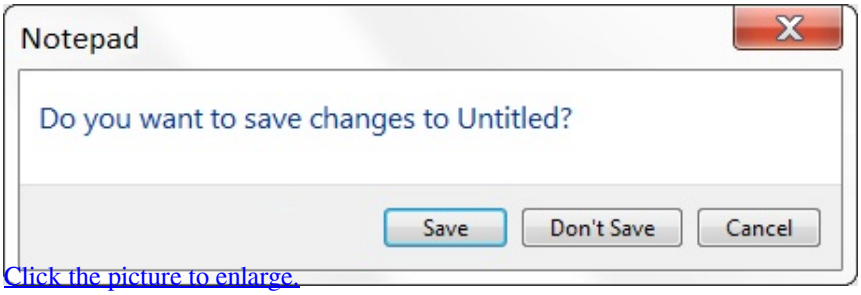
Kill process

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:



Click the picture to enlarge.

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.

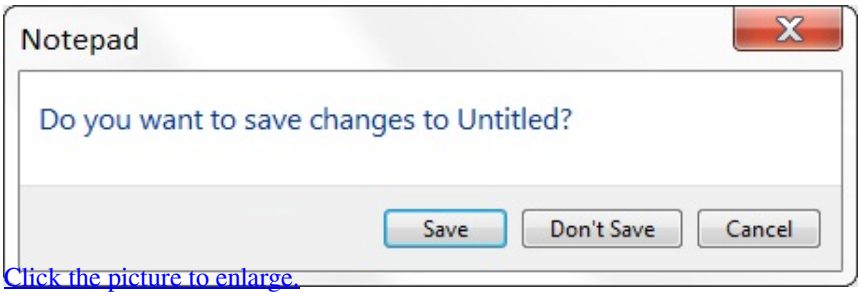
User name whose processes may be killed
Only processes running in the security context of the selected user will be killed. If you want to kill processes running under current user context, leave this field blank. You can also specify * to kill processes from all users.

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 ends with the specified text
Since version 6.0, destroy all windows whose title ends 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:



Click the picture to enlarge.

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" tab 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 audio

This task type plays an audio file at scheduled time. This task type was named "Play sound" before version 7.0.

Audio device
Select audio device that will play the audio file specified. Leave this field blank to play audio on the default audio device.

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

If this task ends up with the "Cannot complete this function" error, you still can view extended error information on the "Execution log" tab of the "Task Properties" window. If Execution log shows only an error number, you can find error description by its number in the DirectShow Error and Success Codes.

Returning codes
Error code: Error code of starting the command
Exit code: Error code of playing audio

Record video

This task type records video from the specified video and audio capturing devices.

Camera device
Use selected video device - select video capturing device. If this field is blank, the first device in the enumeration list will be used.
Do not record video - no video will be recorded.

Audio device
Use selected audio device - select audio capturing device. If this field is blank, the first device in the enumeration list will be used.
Do not record audio - no audio will be recorded.

Preferred resolution
Resolution of the video. The actual resolution will be the closest resolution that is supported by the video capturing device.

Duration
Duration of the video to be recorded.

Video file
The file where the video will be saved.

If this task ends up with the "Cannot complete this function" error, you still can view extended error information on the "Execution log" tab of the "Task Properties" window. If Execution log shows only an error number, you can find error description by its number in the DirectShow Error and Success Codes.

Returning codes
Error code: Error code of starting the command
Exit code: Error code of recording video

Take picture

This task type takes a picture from the specified video capturing device.

Camera device
Select video capturing device. If this field is blank, the first device in the enumeration list will be used.

Preferred resolution
Resolution of the video. The actual resolution will be the closest resolution that is supported by the video capturing device.

Image format
Format of the image (bmp, jpg or png).

Image quality
Quality of the image (jpg only).

Image file
The file where the image will be saved.

If this task ends up with the "Cannot complete this function" error, you still can view extended error information on the "Execution log" tab of the "Task Properties" window. If Execution log shows only an error number, you can find error description by its number in the DirectShow Error and Success Codes.

Returning codes
Error code: Error code of starting the command
Exit code: Error code of taking picture

Take screenshot

This task type takes a screenshot from the specified monitor.

Monitor
Specified monitor - Select monitor. If this field is blank, the primary monitor will be used.
Primary monitor - Use primary monitor.
All monitors - Use all monitors.

Image format
Format of the image (bmp, jpg or png).

Image quality
Quality of the image (jpg only).

Image file
The file where the image will be saved.

It's currently not possible to take screenshot on hidden desktop or inactive sessions, it will result the "Function failed" error.

Returning codes
Error code: Error code of starting the command
Exit code: Error code of taking screenshot

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.

Version 10 and later: The length of username and password fields is 256 characters. In version 9 and earlier their length was 64 characters.

Version 10 and later: One or more e-mail addresses separated by comma or semicolon can be specified in RFC 5322 format with an optional display name that indicates the name of the recipient that could be displayed to the user of a mail application,

and a mailbox address enclosed in angle brackets ("<" and ">"), for example, John Doe <john@example.com>. The simple form of a mailbox address without the recipient's name and the angle brackets is supported in all versions.

Version 10 and later: Non-ascii characters in the recipient's name and non-ascii domain names (International Domain Names) are now supported.

Professional and Network Editions: Since version 4.0, you can include the return code of the previous action in email body. To do so, you can add variables into email body. Since version 6.0, you can insert any combination of variables into email subject as well as email body.

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
Note: If you get an error like "Username and Password not accepted", you may need to change settings in your Google Account to allow less secure apps. Go to Google Account | Security | Less secure app access and change the "Allow less secure apps" to "Allow less secure apps: ON".

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 key 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 ends with the specified text
Since version 6.0, send keys to all windows whose title ends 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**.

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

Key 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
$	**Version 4.5 and later:** 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 ($) key: 0x24 ($) key: 0x24 ($) key: 0x24 ($) key: 0x24 ($) key: 0x24 ($)
{a{b 2} 5}{ENTER}[%[]^]{ENTER}text{ENTER}	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: 0x0d (.) key: 0x25 (%) key: 0x5b ([) key: 0x5d (]) key: 0x5e (^) key: 0x0d (.) key: 0x74 (t) key: 0x65 (e) key: 0x78 (x) key: 0x74 (t) key: 0x0d (.)
{LOCALE English (United States)}English text{ENTER}{LOCALE German}German text{ENTER}	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) 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://example.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.

HTTP authentication
Use HTTP authentication or HTTPS SSL Certificate and Private key in pem format. Read more here: Public key and Certificate authentication.

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").

Proxy
Connect to the URL via HTTP or SOCKS5 proxy server.

HTTP timeout
Version 10 and later: Timeout of the operation, in seconds.

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.

FTP folder download

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

Notes:

- To download a single file, specify its remote and local folders, then specify its file name separately, in the **Include files** filed.

- To download files without recursing down directories in the file system, specify "**.*" in the **Exclude files** field.

FTP file download

Remote file
Remote file name and path to download from the FTP server. The file name and path must include protocol type, server address and path. Optionally, it can include user name and password, and port number.

Local file
Local file name and path to store file downloaded from the FTP server.

FTP options

Implicit FTPS and Explicit FTPS
The implicit way is when you use ftps:// in your URL. Security is enabled with SSL as soon as the connection starts. The default FTPS port is 990.
The explicit way of doing FTPS (FTPES) is to keep using an ftp:// URL, but enable the **SSL/TLS** option to upgrade the connection into a secure one using the AUTH TLS FTP command.

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: Version 10 and later: SFTP always use UTF8 as filename encoding.

FTP authentication
Use FTP authentication or 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.

FTP timeout
Version 10 and later: Timeout of the operation, in seconds.

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.

FTP folder upload

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

Notes:

- To upload a single file, specify its remote and local folders, then specify its file name separately, in the **Include files** filed.

- To upload files without recursing down directories in the file system, specify "**.*" in the **Exclude files** field.

FTP file upload

Local file
Local file name and path to upload to the FTP server.

Remote file
Remote file name and path to store file on the FTP server. The file name and path must include protocol type, server address and path. Optionally, it can include user name and password, and port number.

FTP options

Implicit FTPS and Explicit FTPS
The implicit way is when you use ftps:// in your URL. Security is enabled with SSL as soon as the connection starts. The default FTPS port is 990.
The explicit way of doing FTPS (FTPES) is to keep using an ftp:// URL, but enable the **SSL/TLS** option to upgrade the connection into a secure one using the AUTH TLS FTP command.

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.

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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: Version 10 and later: SFTP always use UTF8 as filename encoding.

FTP authentication
Use FTP authentication or 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.

FTP timeout
Version 10 and later: Timeout of the operation, in seconds.

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.

FTP folder delete

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

Notes:

- To delete a single file, specify its remote and local folders, then specify its file name separately, in the **Include files** filed.

- To delete files without recursing down directories in the file system, specify "**.*" in the **Exclude files** field.

FTP file delete

Remote file
Remote file name and path to delete from the FTP server. The file name and path must include protocol type, server address and path. Optionally, it can include user name and password, and port number.

FTP options

Implicit FTPS and Explicit FTPS
The implicit way is when you use ftps:// in your URL. Security is enabled with SSL as soon as the connection starts. The default FTPS port is 990.
The explicit way of doing FTPS (FTPES) is to keep using an ftp:// URL, but enable the **SSL/TLS** option to upgrade the connection into a secure one using the AUTH TLS FTP command.

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: Version 10 and later: SFTP always use UTF8 as filename encoding.

FTP authentication
Use FTP authentication or 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.

FTP timeout
Version 10 and later: Timeout of the operation, in seconds.

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.

Copy folder

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** filed.

- To copy files without recursing down directories in the file system, specify "**.*" in the **Exclude files** field.

Copy file

Source file
Source file.

Destination file
Destination file.

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.

Move folder

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** filed.

- To move files without recursing down directories in the file system, specify "**.*" in the **Exclude files** field.

Move file

Source file
Source file.

Destination file

Destination file.

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.

Delete folder

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** filed.
- To delete files without recursing down directories in the file system, specify "**.*" in the **Exclude files** field.

Delete file

Source file
Source file to delete.

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** filed.
- 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** filed.

- 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, however, unzip is still non-Unicode, it supports UTF-8 filenames but only for the locale that is selected in the "Windows Control Panel\Clock, Language, and Region\Region\Administrative\Current language for non-Unicode programs" option.

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/.

Advanced Task Scheduler searches for Perl executable (perl.exe) in the directories listed in the PATH environment variable. You can also select Perl executable directly in the option **Use specific Perl executable** in the **Scripts** section of the **Preferences** window. 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: actionname, actiontime, actionschedule, actionsource, actionsourceextra, lasterrorcode, lastexitcode. **Professional and Network Editions**: all defined tempfile variables are also passed. These arguments are described in the Variables topic.

Script output
When a script completes execution, its output appears in the execution log.

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/.

Advanced Task Scheduler searches for Python executable (python.exe) in the directories listed in the PATH environment variable. You can also select Python executable directly in the option **Use specific Python executable** in the **Scripts** section of the **Preferences** window. 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: actionname, actiontime, actionschedule, actionsource, actionsourceextra, lasterrorcode, lastexitcode. **Professional and Network Editions**: all defined tempfile variables are also passed. These arguments are described in the Variables topic.

Script output
When a script completes execution, its output appears in the execution log.

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

Nodejs script

This shortcut type allows executing a Node.js script. You can find Node.js documentation and learn it on the official site: http://nodejs.org/.

Advanced Task Scheduler searches for Node.js executable (node.exe) in the directories listed in the PATH environment variable. You can also select Node.js executable directly in the option **Use specific Node.js executable** in the **Scripts** section of the **Preferences** window. You can download and install Node.js from its official site: http://nodejs.org/.

Arguments
The arguments are passed to the Node.js scripts through the advscheduler object. The following keys are passed: actionname, actiontime, actionschedule, actionsource, actionsourceextra, lasterrorcode, lastexitcode. **Professional and Network Editions**: all defined tempfile variables are also passed. These arguments are described in the Variables topic.

Script output

When a script completes execution, its output appears in the execution log.

Script length
Although, the maximal length of the script is 32,768 characters, you can avoid this limitation by including script from a file with an appropriate Node.js construction.

Returning codes
Error code: Error code of starting the command
Exit code: Exit code from the script

Ruby script

This shortcut type allows executing a Ruby script. You can find Ruby documentation and learn it on the official site: http://ruby-doc.org/.

Advanced Task Scheduler searches for Ruby executable (ruby.exe) in the directories listed in the PATH environment variable. You can also select Ruby executable directly in the option **Use specific Ruby executable** in the **Scripts** section of the **Preferences** window. You can download and install Ruby from its official site: http://www.ruby-lang.org/.

Arguments
The arguments are passed to the Ruby scripts through the advscheduler array. The following keys are passed: actionname, actiontime, actionschedule, actionsource, actionsourceextra, lasterrorcode, lastexitcode. **Professional and Network Editions**: all defined tempfile variables are also passed. These arguments are described in the Variables topic.

Script output
When a script completes execution, its output appears in the execution log.

Script length
Although, the maximal length of the script is 32,768 characters, you can avoid this limitation by including script from a file with an appropriate Ruby construction.

Returning codes
Error code: Error code of starting the command
Exit code: Exit code from the script

Task operations

Call task

Professional and Network Editions: This shortcut type allows executing one task from another. Recursive calls are not allowed (a task can't call itself directly or indirectly). The called task will run with the same session and desktop options as the current task.

Returning codes

Error code: Error code of the called task
Exit code: Exit code of the called task

Export task(s)

Professional and Network Editions: This shortcut type allows exporting a task or group to a file. This is the same operation as File/Export menu command.

Returning codes
Error code: Error code of starting the command
Exit code: Error code of the export operation

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.

IE Automation Options

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 that 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	Optional: destination file

		that will be used to find the link.	name. If specified, the target link will be downloaded to the destination location rather that 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 that 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 that 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: **check**: check the checkbox or

	class	The value of the "class" attribute that will be used to find the button.	radio button. **uncheck**: uncheck the checkbox or radio 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.
ExecScript	JScript	The code to be executed.	Optional: destination file name. If specified, the target link will be downloaded to the destination location rather that opened in the browser.
	VBScript		

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.

Save output to file
Since version 6.0, query results can be saved to the specified file.

SQL Options

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 Properties
Holiday Aware Task Scheduler

User guide

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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).

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.

Maximum number of history entries per task
Maximum number of history entries per task. Set to 0 to disable task history.

Scripts

Scripting options.

Use specific Perl executable
Use this option, if you want to use a specific Perl executable. Otherwise, Advanced Task Scheduler searches for Perl executable (perl.exe) in the directories listed in the PATH environment variable.

Use specific Python executable
Use this option, if you want to use a specific Python executable. Otherwise, Advanced Task Scheduler searches for Python executable (python.exe) in the directories listed in the PATH environment variable.

Use specific Node.js executable
Use this option, if you want to use a specific Node.js executable. Otherwise, Advanced Task Scheduler searches for Node.js executable (node.exe) in the directories listed in the PATH environment variable.

Use specific Ruby executable
Use this option, if you want to use a specific Ruby executable. Otherwise, Advanced Task Scheduler searches for Ruby executable (ruby.exe) in the directories listed in the PATH environment variable.

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 if 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 **Do not schedule task after this date** 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;
Connect;
Disconnect;
Play audio;
Record video;
Take picture;
Take screenshot;
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;
Nodejs script;
Ruby script;
Task operations;
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 on behalf of the currently active user. The task will not be started if no user is active. If you want your task to be started even if no user is 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 on 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.

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

User accounts and sessions

Tasks on the current user's tab run for the user who launched Advanced Task Scheduler application and it is required that the user is logged on and Advanced Task Scheduler application is running (except Network Edition).

Tasks on the All users tab run by Advanced Task Scheduler service and require that the service is instlled and running. For tasks on the All users tab Advanced Task Scheduler offers three options:

1. Tasks run on the session of the currently active user. This is the default option, such tasks will not run for remote desktop sessions.

2. There is the **Start this task for each logged on and valid user (even those who are logged on but not active at the time)** option. When enabled, the task will run for each session, including remote desktop sessions.

   The **Start this task only if one of the following users is logged and active** option allows running tasks on the sessions where only one of the specified users is logged on.

3. There is the **Run task on the hidden desktop** option. When enabled, the task will run on the hidden desktop when any user or even no user is logged on: Run scheduled tasks when no user is logged on into the system.

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.

Note: The **Active user** option has the following meanings depending on other options:

Task is on the All Users tab and **Start task on the hidden desktop** option is disabled	The user who is currently working on the computer
Task is on the All Users tab and **Start task on the hidden desktop** option is enabled	Local System
Task is on the current user's tab and **Start task on the hidden desktop** option is disabled (except Network Edition)	The user who launched Advanced Task Scheduler application

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.

Note: The **Local System** option has the following meanings depending on other options:

Task is on the All Users tab and **Start task on the hidden desktop** option is disabled	Local System
Task is on the All Users tab and **Start task on the hidden desktop** option is enabled	Local System
Task is on the current user's tab and **Start task on the hidden desktop** option is disabled (except Network Edition)	Local System

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.

Note: The **Service user** option has the following meanings depending on other options:

Task is on the All Users tab and **Start task on the hidden desktop** option is disabled	User account under which the service runs (can be set in the Services section of the Control Panel)
Task is on the All Users tab and **Start task on the hidden desktop** option is enabled	User account under which the service runs (can be set in the Services section of the Control Panel)
Task is on the current user's tab and **Start task on the hidden desktop** option is disabled (except Network Edition)	The user who launched Advanced Task Scheduler application

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 traverse 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 traverse 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 https://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 independently from logged on users, even when no user is logged on.

Related Topics
User settings

Related Articles
User Account Options and Privileges
Run scheduled tasks when no user is logged on into the system

Standby/hibernate options

Wake up computer if it is in the standby or hibernate mode when task shall start
You can use this option to wake up your computer from standby or hibernation mode before executing the task.

- Because computer does not do any operations in the standby or hibernation mode, it is only possible to wake up computer at a specified time. Therefore, you should use time-based schedule types.
- You may have to enable wake timers in the power settings on your PC: go to Control Panel \ System and Security \ Power Options, click the "Change plan settings", then "Change advanced power settings", then expand the "Sleep" section and enable the "Allow wake timers" option.
- You may have to enable a wake timer feature in the BIOS. Please check your hardware manual as this option has different names depending on the manufacturer.
- 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.

Note: Both of these features depend on the hardware configuration, so you need to test them in your environment to guarantee

that they work.

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.

Variables

Professional and Network editions

Variable definition	Introduced in version	Description
File variables		
%tempfile% (can be used with indexes: %tempfile1%, %tempfile2%, etc.)	2.0	Will be replaced by name of a temporary file.
%tempfiledel% (can be used with indexes: %tempfiledel1%, %tempfiledel2%, etc.)	2.0	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.)	2.0	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.)	2.0	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.
Standard variables		
%actionname%	6.0	Will be replaced by name of the task.
%actiontime%	2.0	Will be replaced by time of start of task execution.
%actionschedule%	2.0	Will be replaced by name of the action that caused task execution.
%actionsource%	2.0	Will be replaced by action source information.
%actionsourceextra%	2.0	Will be replaced by action source extra information.
%lasterrorcode%	2.0	Will be replaced by LastErrorCode. This value is the error code of the previous action. You can find its meanings in the corresponding shortcut type description.
%lastexitcode%	2.0	Will be replaced by LastExitCode. This value is the exit code of the previous action. You can find its meanings in the corresponding shortcut type description.
Definitions		
%datetime% (can be used with **%datetime% format specifiers**:	6.0	Will be replaced by current date or time.

Variable definition	Introduced in version	Description
%datetime:yyyy-MM-dd HH-mm-ss%, etc.)		
%random% (can be used with **%random% format specifiers**: %random:nnnnnn%, etc.)	6.0	Will be replaced by random text.
Variables		
Variable name defeined in a SET VARIABLE statement, enclosed in percent signs.	6.0	Will be replaced by variable value.

All editions

Variable definition	Introduced in version	Description
Environment variables		
Environment variable name enclosed in percent signs.	2.0	Will be replaced by variable value.
%% (can be used to pass environment variables to command line without their unwanted expansion. For example, %%USERNAME%% will be passed as %USERNAME%).	6.0	Will be replaced by percent sign.

%datetime% format specifiers

Format specifier	Meaning
longdate	Long date pattern in system format.
shortdate	Short date pattern in system format.
time	Time date pattern in system format.
zz	Name of current time zone.
z	GMT offset of current time zone.
dddd	Long day of week.
ddd	Short day of week.
dd	Day of week, two digits always.
d	Day of week, one or two digits.
MMMM	Long month name.
MMM	Short month name.
MM	Month, two digits always.
M	Month, one or two digits.

Format specifier	Meaning
yyyy	Year, four digits.
yyy	Year, four digits.
yy	Last two digits of the year, two digits always.
y	Last two digits of the year, one or two digits.
hh	Hour in 12-hour format, two digits always.
h	Hour in 12-hour format, one or two digits.
HH	Hour in 24-hour format, two digits always.
H	Hour in 24-hour format, one or two digits.
mm	Minutes, two digits always.
m	Minutes, one or two digits.
sss	Milliseconds, 1-3 digits.
ss	Seconds, two digits always.
s	Seconds, one or two digits.
tt	Long AM/PM.
t	Short AM/PM.
\	The subsequent character will be interpreted as "any text" (see below).
any text	Any characters that do not match to the above format specifiers. Will remain unchanged.

%random% format specifiers

Format specifier	Meaning
d	Random digit.
a	Ramdom alpha character.
A	Ramdom capital alpha character.
n	Ramdom alphanumeric character.
N	Ramdom capital character.
\	The subsequent character will be interpreted as "any text" (see below).
any text	Any characters that do not match to the above format specifiers. Will remain unchanged.

Message Center

Message Center is a small program made solely for the purpose of displaying messages due to Windows 10 toast notification requirements. In addition to displaying messages, Message Center allows per-user configuration of messages appearance and lists currently active toast notifications. Message Center is an integral part of Advanced Task Scheduler software version 9 and later.

A toast notifications provide simple feedback about an operation in a small popup. It only fills the amount of space required for the message and the current activity remains visible and interactive. Toasts automatically disappear after a timeout and stay in the Action Center until the expiration period ends. However, the Action Center is only able to keep up to 20 most recent toast messages. Toasts behave as configured in the Action Center and in the settings of this Message Center program. Toast notifications only supported in Windows 10 and later.

Settings

Defaults

Message appearance
Toast notification - Toast notification will be displayed. This option is only available in Windows 10 and later.
Popup message window - Popup window will be displayed with the message text.
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.
Balloon message 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. Since Windows 10 balloon notification is the same as toast notification.

Message title
Title of the message to be displayed.

Sound file
When message appears, this sound will be played.

Popup Defaults

Background image
You can specify a default background image for the popup window.

Show popup window always on top
When this option is enabled, the popup message will appear on the top of other windows.

Toast Defaults

Toast image
An image that will be displayed on the toast.

Expiration
Toast will be automatically removed from the Action Center when this expiration period ends.

Scenario
Default - The normal toast behavior.
Alarm - An alarm notification. This will be displayed pre-expanded and stay on the user's screen till dismissed. Audio will loop by default and will use alarm audio.
IncomingCall - An incoming call notification. This will be displayed pre-expanded in a special call format and stay on the

user's screen till dismissed. Audio will loop by default and will use ringtone audio.
Reminder - A reminder notification. This will be displayed pre-expanded and stay on the user's screen till dismissed.

Duration
Default - The default toast duration.
Short - The toast will be displayed for a short time.
Long - The toast will be displayed for a long time.

Audio option
Default - The default sound behavior.
Silent - Mute the sound.
Loop - Repeat the sound as long as the Toast is shown.

Show Message Center when toast clicked
When this option is enabled, the Message Center will appear when user clicks on the toast.

Troubleshooting

Table Of Content

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.

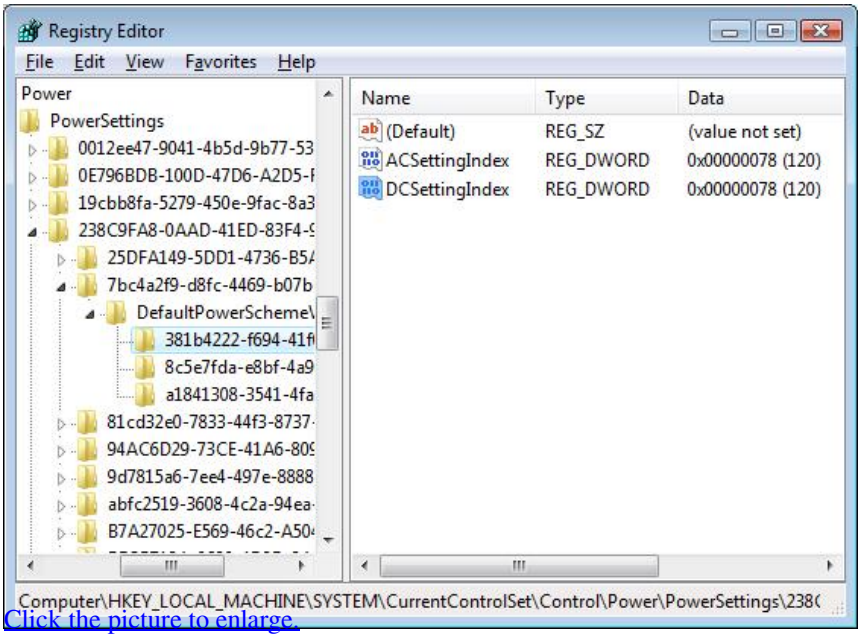
Service is disabled

Scheduling service is disabled. The service is paused in the Control Panel. You can resume the Advanced Task Scheduler service in the Control Panel | Administrative Tools | Services.

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



Click the picture to enlarge.

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,7F0160D2
77DECF3E6OA921E9C8AF1E324gBhh8JELjeXFcpFfzpFeAuTBI3t7XJpmJbArH7BZnfBJKb4FEnstr6pf72
UF1RMSnsBPn00aQfX61lLom5FlJyk82etFbJoS3RgrW2na7HXTqsCGdkoh4E1Mwv0XDhohlKO6T0kh9u5wI
aQmIqSTZD5hqTavK6dboAKO8ftdQSuNLJIusSYT7Lps7ciVIFh-----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-----OmutTanx1rkczvfrkKOpGEdqTrJEP0bT5B3Lzw8IDq8Je8B8AzUw
mtKTKY7cFK7QAhW9BGToO7wDlFUbRh5EnK5CLkJa0cQWLua3ibfum4mBe8itIPZnRQlM4elVtPeGHE7bsWg
62pS9x59U1WPkeBwQygpYgo4znpW7slslAgTTYON5FeYWTFu9SuRrSncx-----END RSA PRIVATE KEY--
--------BEGIN CERTIFICATE-----wXO5hfuNcwsK4rqGhMIWJGRtKW7uJwzi58nSGZKZw6QhjL2OZORWQ
oqS7z6po4Loa3YZXcW5DMKZXiaV37TXAMiQNYnBQEsrSq4FCOGCatoEoP5ZN2vfeCf7CaeRaSokm8ecNwSh
lUoaQxAhlz1sAJRvcnJcyPRsnG6vBXWOGvPyZwyiuTJXcDh-----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:

<table>
<tr><th>Product</th><th>Edition</th><th>User</th><th>Registry key</th><th>Directory</th><th>Default directory</th><th>File</th><th>Upgrade compatibility</th></tr>
<tr><td rowspan="5">Advanced Task Scheduler version 5.0 and later</td><td rowspan="2">Basic</td><td>Current User</td><td>HKEY_CURRENT_USER\Software\Southsoftware\AdvScheduler</td><td rowspan="5">Value of "SettingsDir" of the Registry key.</td><td>C:\Users\[Username]\AppData\Roaming\Advanced Task Scheduler</td><td>tasks.sqlite</td><td rowspan="5">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 Directory with full backup of all settings and tasks before they are removed from the system.</td></tr>
<tr><td>All Users</td><td>HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvScheduler</td><td>C:\ProgramData\Advanced Task Scheduler</td><td>allusers.sqlite</td></tr>
<tr><td rowspan="2">Professional</td><td>Current User</td><td>HKEY_CURRENT_USER\Software\Southsoftware\AdvSchedulerPro</td><td>C:\Users\[Username]\AppData\Roaming\Advanced Task Scheduler Professional</td><td>tasks.sqlite</td></tr>
<tr><td>All Users</td><td>HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerPro</td><td>C:\ProgramData\Advanced Task Scheduler Professional</td><td>allusers.sqlite</td></tr>
<tr><td>Network</td><td>All Users</td><td>HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerNet</td><td>C:\ProgramData\Advanced Task Scheduler Network</td><td>allusers.sqlite</td></tr>
<tr><td>Advanced Task Scheduler version 2.0 - 4.5</td><td>Basic</td><td>Current User</td><td>HKEY_CURRENT_USER\Software\Southsoftware\AdvScheduler</td><td colspan="3">There are no Directory and File as everything is stored inside the Registry key.</td><td>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</td></tr>
</table>

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<tr><td rowspan="4"></td><td></td><td>All Users</td><td>HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvScheduler</td><td colspan="3"></td><td rowspan="4">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.</td></tr>
<tr><td rowspan="2">Professional</td><td>Current User</td><td>HKEY_CURRENT_USER\Software\Southsoftware\AdvSchedulerPro</td><td rowspan="3">Value of "SettingsDir" of the Registry key.</td><td rowspan="3"></td><td rowspan="3">If Directory value is empty string or it does not exist then there are no File as everything is stored inside the Registry key. Otherwise the files are: settings.ini, tasklist.ini, templog ini.</td></tr>
<tr><td>All Users</td><td>HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerPro</td></tr>
<tr><td>Network</td><td>All Users</td><td>HKEY_LOCAL_MACHINE\Software\Southsoftware\AdvSchedulerNet</td></tr>
<tr><td>Advanced Task Scheduler versions 1.0 - 1.5</td><td>-</td><td>Current User and All Users</td><td>HKEY_CURRENT_USER\Software\Southsoftware\Scheduler and if you are running Advanced Task Scheduler as service: HKEY_USERS\.DEFAULT\Software\Southsoftware\Scheduler</td><td colspan="3">There are no Directory and File as everything is stored inside the Registry key.</td><td>-</td></tr>
</table>

The *[Username]* is a placeholder to your Windows user name.

To find value of a registry key, you need to start some registry editor such as REGEDIT and select the corresponding registry key.

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 "guidst
ring.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 "guidst
ring.dll"DELETE FROM history;
```

Dump root groups

```
.open "C:/ProgramData/Advanced Task Scheduler Network/allusers.sqlite".load "guidst
ring.dll"SELECT GuidToString(guid), type, name, icon, datetime(last_modified, 'unix
epoch', '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 "guidst
ring.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 "guidst
ring.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 "guidst
ring.dll"INSERT INTO root(guid, type, name, icon, last_modified) VALUES (GuidFromSt
ring("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

Table Of Content

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 | toast | default]] [-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] [-ends] [-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] [-attach attach_file] [-attachmsg message]]

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

[--HTTP [-lang langid] [-url url] [-file file_name] [-overwrite] [-head] [-auth username password] [-authbase64 username_password] [-post post_data] [-timeout sec] [-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 | -uploadfile | -downloadfile | -deletefile] [-remote remote_path] [-local local_path] [-include file_masks] [-exclude file_masks] [-overwrite] [-purgefile] [-passive] [-forceutf8] [-usessl] [-timeout sec] [-auth username password] [-authbase64 username_password] [-proxytunnel server[:port]] [-proxytype [HTTP | SOCKS5]] [-proxyauth username password] [-proxyauthbase64 username_password] [-certauth [-certfile file] [-certpasswd password]]]

[--Filesystem [-lang langid] [-copy | -move | -delete | -copyfile | -movefile | deletefile] [-source source_path] [-dest destination_path] [-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] [-outfile outfile]]

[--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]]

[--FindProcess [-lang langid] [-user user_name] [-image image_file]]

[--FindWindow [-lang langid] [-user user_name] [-caption window_caption] [-begins] [-ends] [-contains]]

[--Ping [-lang langid] [-hostname hostname] [-requests requests] [-length length] [-timeout sec] [-ipv4] [-ipv6]]

[--Screenshot [-lang langid] [-type [specified | primary | all]] [-monitor monitor_name] [-format [bmp | jpg | png]] [-destfile file_name] [-quality jpg_quality]]

[--Capture [-lang langid] [-type [image | video]] [-format [bmp | jpg | png]] [-cameratype [specified | none]] [-camera device_name] [-audiotype [specified | none]] [-audio device_name] [-defaultsize] [-size resolution] [-destfile file_name] [-duration seconds] [-quality jpg_quality] [-visible]]

[--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 traverse 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 traverse 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;
toast - Version 9 and later, toast notification;
default - Version 9 and later, user's default;
-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;
-ends - Version 6.0 and later, window caption must end 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;
-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;
-ends - Version 6.0 and later, window caption must end 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://example.com/, 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;
-timeout - timeout in seconds;
-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 folder to remote directory;
-download - download folder from remote directory;
-delete - delete folder from remote directory;
-uploadfile - Version 10 and later, upload file to remote directory;
-downloadfile - Version 10 and later, download file from remote directory;
-deletefile - Version 10 and later, delete file from remote directory;
-remote - URL and remote directory or file to upload, download or delete (examples: ftp://ftp.domain.name/, ftps://user:pwd@ftp.com, sftp://ftp.com);
-local - local directory or file to upload or download;
-include - include file mask(s) (semicolon separated);
-exclude - exclude file mask(s) (semicolon separated);
-overwrite - overwrite already existing file(s);

-purgefile - delete source file if operation succeeds;
-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);
-timeout - timeout in seconds;
-auth - username and password for FTP authorization;
-authbase64 - base64 encoded username and password, tab delimited;
-proxytunnel - tunneling proxy server address and port number;
-proxytype - Version 6.0 and later, type of the proxy server (HTTP or SOCKS4);
-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 folder;
-move - move folder;
-delete - delete folder;
-copyfile - Version 10 and later, copy file;
-movefile - Version 10 and later, move file;
-deletefile - Version 10 and later, delete file;
-source - source directory or file;
-dest- destination directory or file;
-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;
-outfile - Version 6.0 and later, query results can be saved to the specified file.

--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 specfied profie (or all profiles) on all interfaces;
-profile - name of the profile;
-allprofiles - disconnect all profiles on the specfied interface (or all interfaces).

--FindProcess
-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).

--FindWindow
-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;
-ends - window caption must end with the specified text;
-contains - window caption must contain the specified text.

--Ping
-lang - langid (see below);
-hostname - host name or IP address;
-requests - number of requests to send;
-length - Send buffer size;
-timeout - timeout in seconds;
-ipv4 - Force using IPv4;
-ipv6 - Force using IPv6.

--Screenshot

-lang - langid (see below);
-type - monitor type:
specified - specified monitor;
primary - primary monitor;
all - all monitors;
-monitor - monitor name;
-format - image format:
bmp - Windows Bitmap;
jpg - JPEG image;
png - PNG image;
-destfile - destination file;
-quality - JPEG image quality (0 to 100).

--Capture
-lang - langid (see below);
-type - capture type:
image - take picture;
video - record video and audio;
-format - image format:
bmp - Windows Bitmap;
jpg - JPEG image;
png - PNG image;
-cameratype - type of video capturing device:
specified - specified device;
none - no video will be recorded;
-camera - video capturing device name;
-audiotype - type of audio capturing device:
specified - specified device;
none - no audio will be recorded;
-audio - audio capturing device name;
-defaultsize - use default camera resolution;
-size - resolution (e.g. 640x480);
-destfile - destination file;
-duration - duration in seconds;
-quality - JPEG image quality (0 to 100);
-visible - show camera window.

--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 "&0xhhhh;" are accepted, so to pass a quote mark, use "&0x22;". Note that "hhhh" 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).