

scapp-watchdog

Description / Purpose

The basic task of scapp-watchdog is to control processes like game server process (e.g. mohaa.exe) and ensures that processes will be restarted if they exit e.g. when a game server crashes or exits.

scapp-watchdog is part of scapp-host but can be run as a standalone program (Here you get the standalone version).

But its not limited to game servers, it can run/control any application / process on the local machine.

Processes (game servers) can be run with different options like for example as a windowless process.

If the process produces a log file like typically game servers do, the admin can choose of different options to handle the logfile for example renaming it and adding a actual date time stamp and move it to a different folder.

Every watchdog controlled process can have one or more scheduled event items, these can be for example a restart of the game server each day at 5 in the morning.

System Requirements:

scapp-watchdog needs the .NET Framework 2.0 or higher to run.

Licence:

Totally free for non-commerce usage and non-profit organisations, if you like to use it for commerce usage (e.g. game server hoster or business company) you need to buy a commerce subscription.

Pricelist

If you intend to use scapp-watchdog in a commerce environment you need to purchase the commerce subscription or lifetime licence. The price for the annual subcription is 12 Euros per year / per machine. Discounts on request.

Downloads:

[Downloads](#)

Installation:

Execute the scapp-watchdog-setup.msi file, this will start the installer which will guide you through the installation process.

If you update from version 1.0.0.1 to 1.0.0.2 download the update version and replace the scapp-watchdog.exe file in your programs folder.

Beta Version:

This is a beta version, it will include bugs and errors, please don't use it if you are not sure about it. Please report any feedback or errors at www.scapp.net/forum or in the www.x-null.net forum. thanks very much.

Version History

1.0.0.0:

Initial version

1.0.0.1:

option added to limit the maximum autostart retries if process fails

option added to auto delete process generated log files after x days

bug fixed with timeout event if time was set from 0.00 to 0.00

1.0.0.2:

option added to execute the application / process with user credentials and domain

bug fixed with scheduled events, application first needs to be added.

watchdog debug log file is more detailed about processes now

doubleclick on watchdog item will open the edit window

Documentation

scapp-watchdog

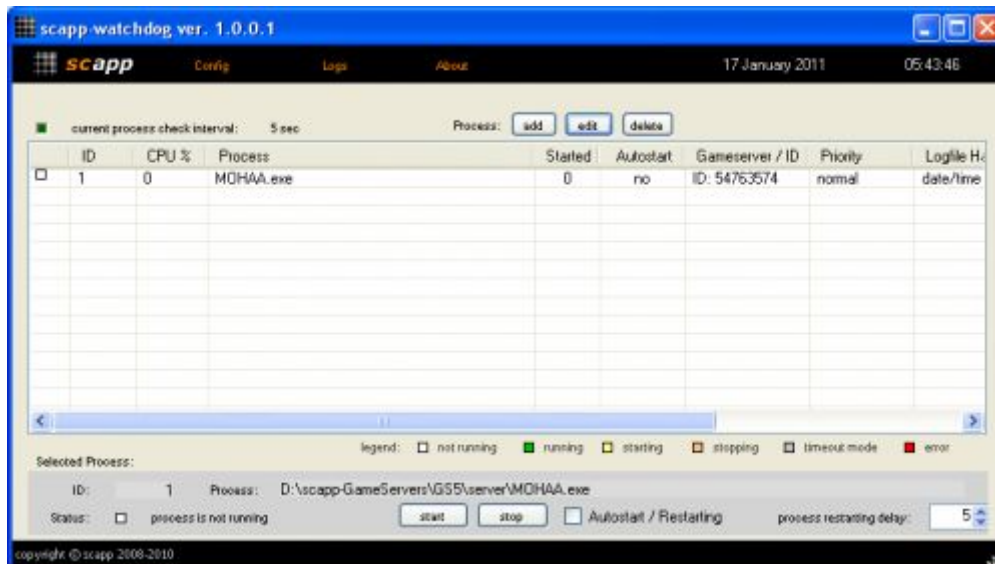


image: scapp-watchdog main window

The main window shows the list of watched processes / applications. Click add button to add a new application to the list. Select a process from the list to edit or delete from the list.

The Started value indicates how many times a application has been started since the watchdog program is running, the PID is the Process ID (can also be found in the Windows Taskmanager)

Details and status about the selected process are shown at the bottom of the window, here a process / application can be manually started or stopped. Autostart option and restarting delay can be changed, changes are saved permanently.



image: scapp-watchdog in the Windows traybar

If the watchdog is minimized an icon in the traybar is indicating that the watchdog program is running.

scapp-watchdog Basic Configuration

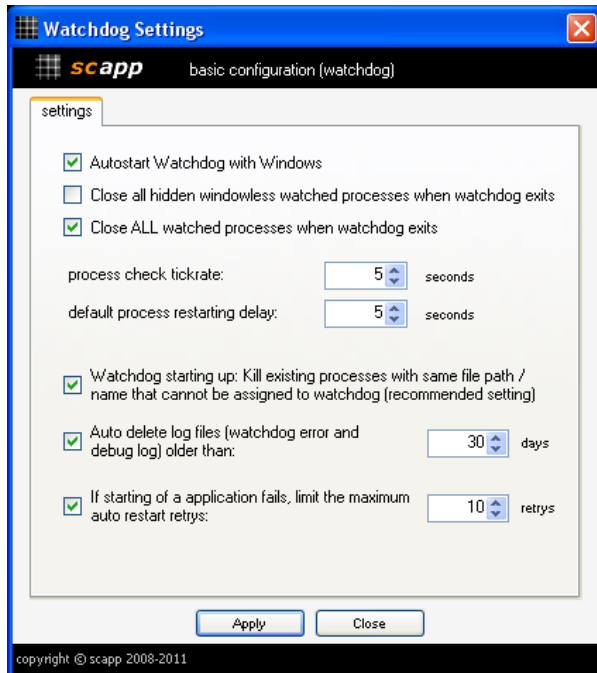


image: basic configuration window

Autostart Watchdog with Windows: If selected this will start scapp-watchdog on windows start.

Close all hidden windowless watched processes when watchdog exits: If selected and scapp-watchdog closes, processes that are watched by the watchdog and are chosen to be run windowless those processes will be stopped/killed when watchdog is closing.

Close ALL watched processes when watchdog exits: If selected this will stop / kill all watched processes when scapp-watchdog is closing.

process check tickrate: This is the period when the watched processes will be checked for their status and for example a restart is initiated if a process is not responding or running anymore. The default value is 5 seconds.

The list of watched processes in the main window however is updated every second with the status and details of watched processes.

default process restarting delay: If a watched process exits this is the default delay time between exit and the restart of the application. Each watched process can have its own defined delay.

Watchdog starting up: Kill existing processes with same file path / name that cannot be assigned to watchdog: Processes that are already running when scapp-watchdog starts and that are usually started with commandline arguments cannot be assigned to watchdog.

Enabling this option (recommended) will kill the existing process and restart it, this will ensure that a application is only run once. (e.g. having run two instances of a game server with the same arguments might cause problems)

Auto delete log files (watchdog error and debug log) older than: Enabling this option will auto delete the scapp-watchdog log files that are older than specified. This function is checking once a day.

If starting of a application fails, limit the maximum auto restart retrys: The starting of a application / process may fail, e.g. if user name or password are not correct, enabling this option will limit the

restarting retrys so that it is ensured that the restarting not continuously consumes resources. Manually starting the process will reset the error counter.

Adding a application

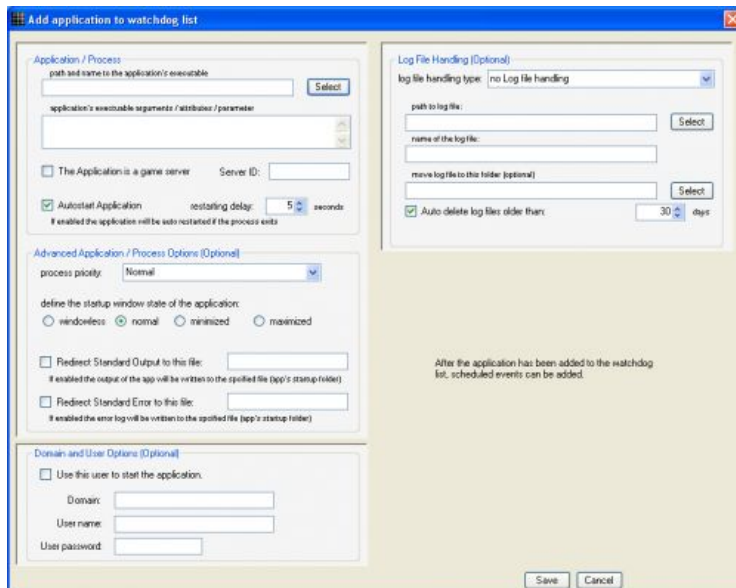


image: adding a application to watched processes list

Adding a application to the watched process list is as easy as selecting the path to the application's executable and click Save button. Thats it.

Description of optional features and settings for a watched application:

application's executables arguments / attributes / parameter: Many application's have the option to execute the app with additional attributes, most game servers require this, fill in the arguments you would like to run the application with.

The Application is a game server: This field and the Server ID field is for information purpose and if a game server is remotely added from scapp-host those fields are filled by scapp-host.

Autostart Application: If this option is enabled the application will be auto restarted if the application's process exits or isn't responding anymore. Restarting delay is the time in seconds between the exit and the re-starting of the application.

process priority: Select the priority the process should run with

define the startup window state of the application: Select the window state of the application, if windowless is choosen the application will be started without window and hidden.

Redirect Standard Output to this file: Some applications (typically console apps) are producing a standard output, this output can be written to the specified file. The file will be created in the app's folder.

Standard output is not to be confused with log files that game servers create.

Redirect Standard Error to this file: Same like Standard Output, but for Standard Error.

Domain and User Options

Use this user to start the application: This option allows you to run the application / process as a different user. If the local machine is connected to Active Directory you can specify the domain and user. If you want to choose a user from the local machine the domain is not needed. If the checkbox "Use this user to start the application" is activated and the user name or user password are incorrect the application cannot start and an error will occur.

Log File Handling

log file handling type: Optional log file handling can be activated for applications that produces a log file like game servers typically do.

Choose of the options for log file handling, for example "rename Log file when server restarts: Date / Time". Each time the server restarts an actual timestamp will be added to the produced log file.

path to log file: Select the path where the log file is produced.

name of the log file: Insert the name of the log file e.g. "qconsole.log".

Most times it is required that you activate the log file writing inside the configuration of the game server.

move log file to this folder: You can optional specify a special folder where the log file should be moved to. To disable this click the "Select" button and then choose "Cancel" this will empty the field.

Auto delete log files older than: If this option is enabled each time before a log file is handled a check for old log files is done which will be deleted if older than the specified days. Only files are deleted that contain the log file name in their file name.

Scheduled Events

You need first to add the application to the watched list before adding scheduled events to the application. (Re-open with the edit function from the main window)

Editing Application

Application / Process

path and name to the application's executable
D:\xapp\GameServers\GSS\server\MOHAA.exe Select

application's executable arguments / switches / parameter
+set dedicated 1 +set net_port 12203 +exec server.cfg

☒ The Application is a game server Server ID: 54763574

☐ Autostart Application restarting delay: 5 seconds
If enabled the application will be auto restarted if the process exits

Log File Handling (Optional)

log file handling type: (rename Log file when server restarts: Date / Time)

path to log file:
D:\xapp\GameServers\GSS\server\main Select

name of the log file:
qconsole.log

move log file to this folder (optional):
D:\xapp\GameServers\GSS\server\logs Select

☒ Auto delete log files older than: 30 days

Advanced Application / Process Options (Optional)

process priority: Normal

define the startup window state of the application:
☐ windowless ☐ normal ☒ minimized ☐ maximized

☐ Redirect Standard Output to this file:
If enabled the output of the app will be written to the specified file (app's startup folder)

☐ Redirect Standard Error to this file:
If enabled the error log will be written to the specified file (app's startup folder)

Domain and User Options (Optional)

☐ Use this user to start the application.

Domain:
User name:
User password:

List of scheduled items for this application:

Id	Type	Date Time	Day

Delete selected Schedule item: Delete

Add a Schedule Item

define the scheduled event item:

type of scheduled event: ☒ timeout ☐ restart ☐ start ☐ stop

Day: Everyday

Time from: 0 h 0 min Time to: 0 h 0 min
(timeout: define the time when the application should not run. (time span from 0.0 to 0.0 is equal 24 hours.)

add

Save Cancel

image: editing a application of the watched applications

Fields are same as the "add application to watchdog list" except that you can now add scheduled events to the application.

All settings can be changed, except the log file handling, scheduled events and autostart option they need a restart of the application to take effect.

Scheduled events

List of scheduled items for this application:

Id	Type	Date Time	Day
1	restart	restarting at: 05.00	everyday

Delete selected Schedule Item:

Add a Schedule Item

define a scheduled event item:

type of scheduled event: ☐ timeout ☒ restart ☐ start ☐ stop

Day:

Time: h min

restart: define when the application should restarting.

image: scheduled events for a application

define a scheduled event item: You can add "scheduled events" to your application. 4 types are available: timeout, restart, start, stop. Timeout means this is a period when the application is not running.

type of scheduled event: Select the type of event, the weekday and time (or time period) it should perform and add to the list.

There is no limit in the amount of scheduled items, however you need to take care that events don't overlap, only one event can be executed per minute (this is for restart, start, stop events).

Start and stop events will have no effect if the application is already running or already stopped.

Once added an event it will immediately take effect, no extra saving is necessary (same for deletion)

scapp-watchdog Log files

scapp-watchdog generates two log files in the scapp folder of your personal data folder:

watchdog_error.log and watchdog_debug.log

Please check those files if you experience any malicious behaviour.

All program errors will be written to the error log file, while information about "whats going on" is written to the debug log file.

Messages are buffered and not immediately written to the log files, it might take up to 20 seconds.

Known Issues:

Some applications are started with a launcher executable, this launcher will start then the application itself and after that exits. If added to watchdog list with the autostart option set to on watchdog will continuously start the application which will result in multiple instances of such application.

Known Bugs

no bugs reported yet