ACTION!

THE MOST POPULAR SCREEN RECORDER
AND GAME RECORDING SOFTWARE

User Manual

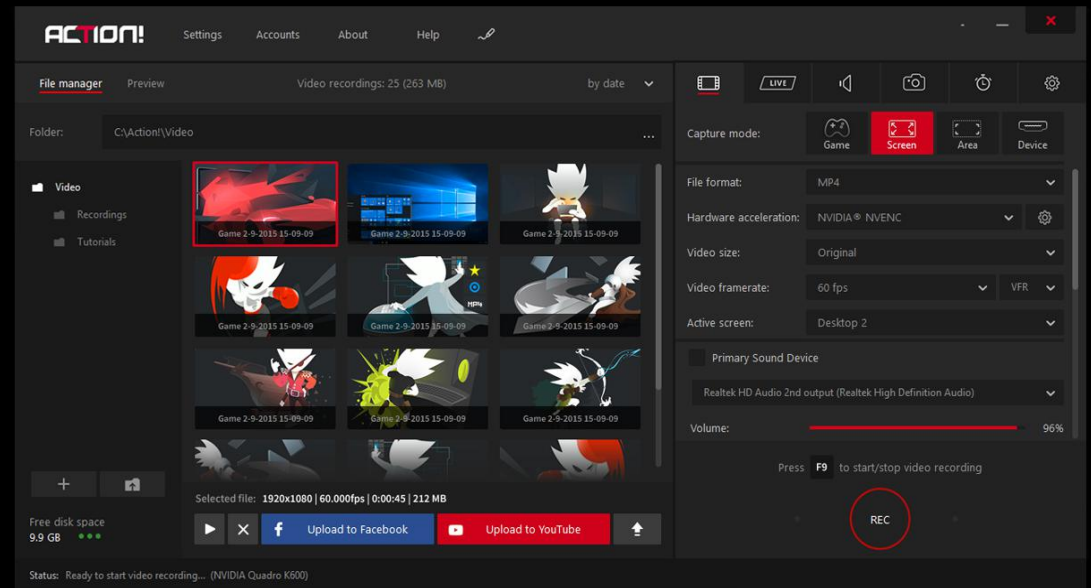# Action!

Gameplay and screen recorder

Thank you for choosing Action! product.
Action! allows real-time recording/capture and live streaming of Windows desktop in a superb HD video quality. With Action! you can benchmark and display game framerates, record or stream your gameplay, add live audio commentary to create high quality tutorials, add webcams and more!

Action! is compact, stylish and user friendly.
With outstanding performance and sleek design Action! defines a new standard of user experience for real-time gameplay and desktop recording and streaming software. Enjoy!

Visit Action! home page:

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MINIMUM SYSTEM REQUIREMENTS

OPERATING SYSTEM
Windows Vista®, Windows 7, Windows 8, Windows 8.1, Windows 10
DirectX® and latest graphics card drivers

Running Action! requires administrator rights.
Action! LIVE Streaming requires internet connection.

RAM MEMORY
512MB

GRAPHICS CARD REQUIREMENTS
Direct3D 9.0 compatible with Pixel Shader 2.0 support

SOUND CARD
DirectX® compatible

CPU
Intel® Celeron® 1.4GHz or equivalent processor
(SSE2 required)

RECOMMENDED SYSTEM REQUIREMENTS

OPERATING SYSTEM
Windows Vista®, Windows 7, Windows 8, Windows 8.1, Windows 10
DirectX® and latest graphics card drivers

Windows Aero enabled for high quality desktop recording on Windows Vista and Windows 7

Running Action! requires administrator rights.
Action! LIVE Streaming and Remote Action! require internet connection.

RAM MEMORY
1024MB (1GB)

GRAPHICS CARD REQUIREMENTS
Full Direct3D 10.0 compatible with Pixel Shader 4.0 support

SOUND CARD
DirectX® compatible

CPU
Intel® Core™ 2 Duo 2.0GHz or equivalent processor

HARDWARE ACCELERATED VIDEO RECORDING DIRECTLY TO MP4 FILE FORMAT / HD STREAMING
Intel® processor with Intel® Quick Sync Video support.
NVIDIA® graphics card with NVENC support.
AMD Radeon™ with AMD Video Codec Engine (VCE) support.

The latest graphics drivers.

HARDWARE ACCELERATED VIDEO ENCODING FOR EXPORT PROCESS
Intel® Sandy Bridge processor with Intel® Quick Sync Video support.
NVIDIA® graphics card with NVENC support.
NVIDIA® graphics card with NVIDIA® CUDA support.
AMD Radeon™ with AMD Video Codec Engine (VCE) support

H.265/HEVC hardware acceleration for video recording directly to MP4 file format and for AVI recordings exporting
NVIDIA® GeForce® GTX 960, GTX 965M or higher with NVIDIA NVENC support (up to 4K). NVIDIA GPU driver R358 or above is required

The latest graphics drivers.

USER INTERFACE - ACTION! HUD

About Action! HUD

The Action! user interface consists of 2 parts: **Action! window** and **HUD**. HUD is displayed when Action! is connected to your desktop, games or applications and provides following information:

1) current framerate

2) average framerate

3) 3D engine detected

4) status icon

5) progress bar (available for time limited recordings)

6) free disk space left

7) recording time

8) microphone volume indicator
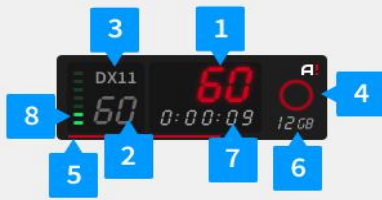
HUD display position

When Action! is running you can adjust HUD display position to your needs with **F7** hotkey. Please note that changing HUD display position with a hotkey does not change "HUD Startup Position" setting. To change "HUD Startup Position" please check HUD display settings.

You can hide/show Action! HUD with **F6** hotkey.

Reset average framerate

Average framerate value can be easily reset with **F5** hotkey.

Status icons

Action! HUD status icons:

Normal status for active screen, game or application

Normal status for not active screen, game or application

Recording in progress

Recording paused

Time-Shift recording

Saving recording to a file

Benchmarking in progress

Capturing screenshot

Live streaming in progress

USER INTERFACE - ACTION! WINDOW OVERVIEW
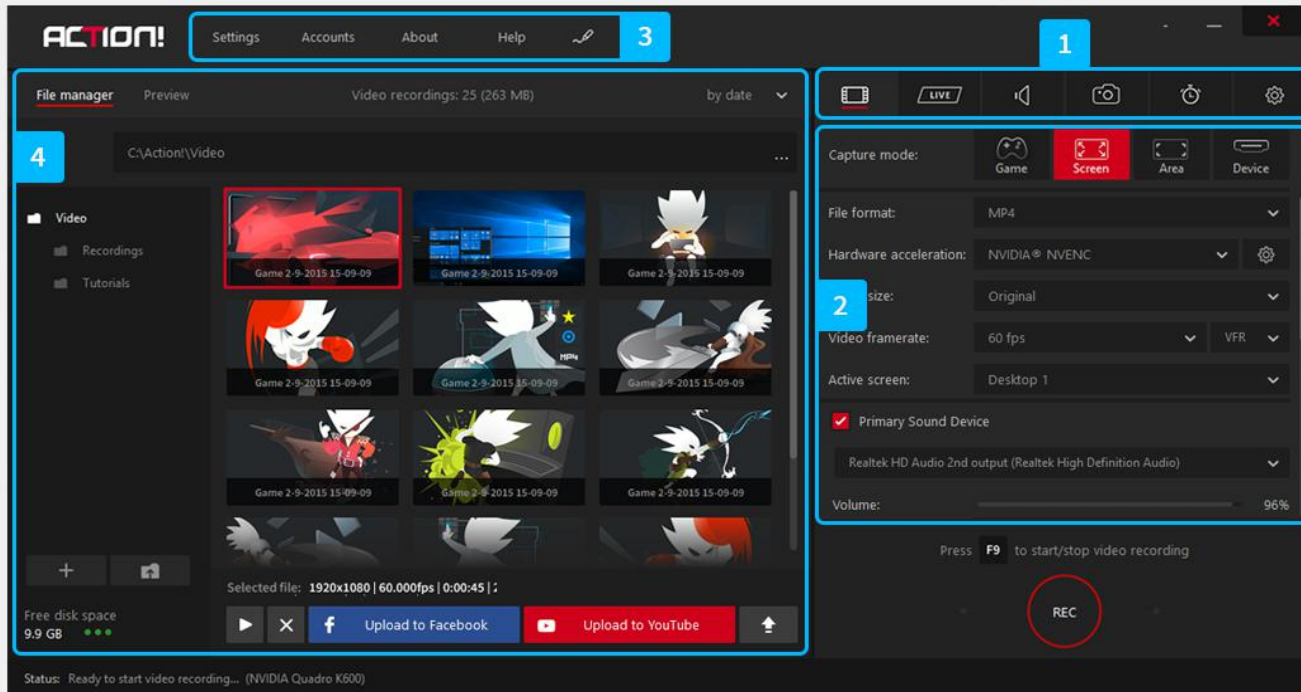
1. Action! tabs panel
Action! tabs provide access to all Action! features: video recording, live streaming, benchmarking, capturing screenshots and Action! settings.

2. Options panel
All options available for selected tab.

3. Top menu
Provides quick access to Action! settings, Accounts manager, drawing panel etc.

4. File manager and Preview area
Use file manager to manage all your recordings and screenshots or switch to Preview mode to check your recordings and streamings setup.

USER INTERFACE - ACTION! TABS

Video Recording

Video Recording tab provides all basic options for desktop, gameplay and applications recording. Use the manager to play, delete or export your recordings.

Live Streaming

Live Streaming tab provides all options for Action! Live Streaming functionality.
You can check streaming status and setup all streaming options using this tab.

Audio Recording

Audio Recording tab provides all options for audio recording functionality. With audio recordings manager you can play and delete your recordings.

Capture Screenshots

Capture Screenshots tab provides options for capturing screenshots. Use the manager to preview and delete screenshots saved on your hard disk

Benchmarking

Benchmarking tab provides options for games and applications benchmarking. With the manager you can preview and delete benchmarks saved on your hard disk.

Settings

Settings tab provides access to several Action! settings categories.

About button

This button is available after product activation and provides basic information about activation status and current product version.
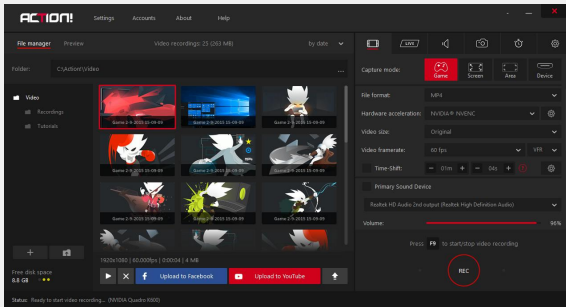
VIDEO RECORDING - INTRODUCTION

Video recording

With Action! you can record your gameplay, desktop and applications in a superb HD video quality.

For recorded video playback instructions please see chapter **Video and audio recordings playback**.

Action! window
Video recording tab

Recordings manager

List of video recordings
List of recordings contains thumbnail view of all Action! video recordings from selected folder.
Use mouse double click on a thumbnail to start selected video playback.

Manager buttons
The manager contains several buttons providing access to following actions:
- Delete selected recording(s)
- Start playback of selected video
- Open output folder
- Export selected video
- Export selected video to Facebook
- Export video to YouTube

Video recording options

File format
 AVI - very high video quality, using Mirillis proprietary FICV video codec
 MP4 - small file size, ready to upload to YouTube

Video size
This option allows to select output video recording resolution.

Video scaling does not work for DirectX 8 games and applications recording in AVI file format. In this cases video is recorded in **Original** game or application resolution.

VIDEO RECORDING - INTRODUCTION

Video framerate

Allows to select video recording framerate.

Recording mode

Recording modes available:

Icon	Mode
Game	*Games & applications*
Screen	*Active screen*
Area	*Active desktop region*
Device	*Device recording*

Game view with Action! HUD
Games & applications mode

Duration

Allows to limit your recording time to a specific duration.

Time-Shift

With Time-Shift you will not lose any spectacular video game action! Please see **Time-Shift Recording** chapter page for more information.

Microphone

Allows to enable or disable microphone recording. More settings for microphone are available in Settings tab - Microphone Settings.

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Action! HUD on desktop
Active screen mode

Webcam

Allows to selected webcam device and enable or disable webcam recording. Advanced webcam settings are available in Settings tab – Webcam Settings.

Application

Option available only for **Selected** application recording mode. This option allows to select one application that will be recorded.

**Primary/Secondary Sound Device**

These options allow you to manage audio in your video recordings. Please read **Audio Recording** chapter page for more information.

GAMES & APPLICATIONS RECORDING

Introduction

Games & applications recording mode is dedicated to record gameplay and other DirectX or OpenGL applications.

This recording mode provides exclusive **Time-Shift** option. Please see next page to read more about **Time-Shift Recording.**
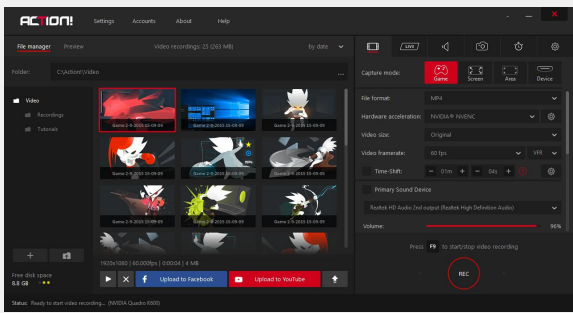
Action! window
Games and applications recording mode

Recordings options

Select **Games & applications** recording mode to let Action! automatically select DirectX and OpenGL games and applications for recording. When this mode is selected Action! HUD will be displayed in all supported games and applications, showing that Action! Is ready to start recording.

Game view with Action! HUD
Gameplay recording in progress

Start recording

Application recording button is not available for Games & applications recording mode. Use **F9** hotkey to start recording, stop video recording by pressing **F9** hotkey again. Please note that game or application must be active to start or stop video recording.

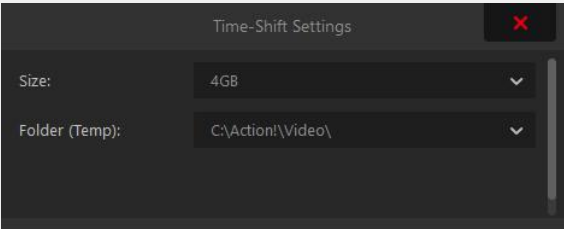To pause / resume video recording use **Shift+F9** hotkey.

Action! HUD

If you do not want to include HUD in recordings please check *Do not record HUD in games and applications* option in Settings/HUD or hide HUD before recording start with **F6** hotkey.

TIME-SHIFT RECORDING
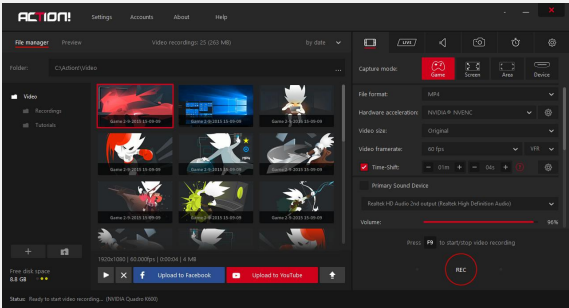
Action! Window with
Time-Shift option enabled

Time-Shift settings window

Introduction

Time-Shift option keeps recording all your current gameplay action in a short loop buffer providing possibility to instantly save your last gameplay actions to a file with a single hotkey.
With *Time-Shift* you will not lose any spectacular video game action!

Time-Shift settings

Size - You can set maximum size of the time-shift file.
Folder (Temp) - select folder where temporary time-shift files will be stored.
Please note that those settings are not available when Time-Shift option is enabled.

*Please note that **Time-Shift** duration is limited, minimum duration is **10 seconds** and maximum duration is limited to **13 minutes**.*

Time-Shift recording

To use **Time-Shift**, switch Action! to *Games & applications* recording mode, enable **Time-Shift** option and select your preferred Time-Shift duration.

Run a game and check the Action! HUD status. **Time-Shift** recording is Indicated with the following icon:

To save **Time-Shift** recording to a file press a hotkey (**Left ALT + F9**).

*Please note that saving **Time-Shift** takes more time than saving standard video recording.*

ACTIVE SCREEN RECORDING

Introduction

Active screen recording mode allows to record everything that happens on your screen: all applications, games, all windows and user actions. You can record live audio commentary and create tutorials with ease.

Desktop view with
Active screen recording in progress

Recordings options

To record your screen please select **Active screen** recording mode.

Select active screen

For multi-display setup Action! allows to select which screen will be recorded. Use **F8** hotkey to change active desktop.

Action! HUD

If you do not want to include Action! HUD in recordings please check
Hide HUD during desktop recording option in Settings/HUD or hide HUD manually before recording start with **F6** hotkey.
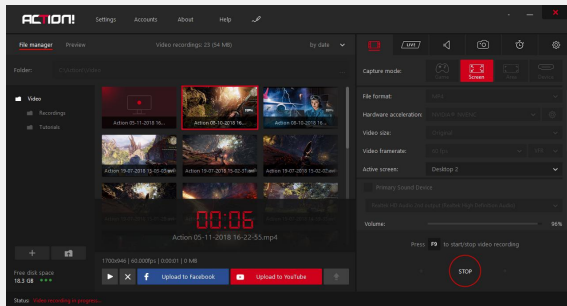
Start recording

Press start recording icon or press **F9** on keyboard to start screen recording. You can stop video recording by pressing recording icon or **F9** hotkey again.

To pause / resume video recording use **Shift+F9** hotkey.

SELECTED APPLICATIONS WINDOW RECORDING WITH REGION MODE

Introduction

With **Active desktop region** recording mode you can easily record selected applications windows.

Recordings options

To record selected application window area please select **Active desktop region** [Area] recording mode.

This mode switches Action! window to region recording mode. If you wish to switch back to main Action! window press **Close region recording mode** button [×] .

Selecting window

In region recording mode please enable **Snap to windows** [⊏] option (hotkey: **S**) to easily fit region to applications windows.

Move mouse cursor over applications windows and region will automatically match application window area. If you need to adjust your region size or position click mouse button or press **S** hotkey to disable **Snap to windows** and adjust your region using mouse or keyboard.

Start recording

Press start recording icon [●] or press **F9** on keyboard to start active desktop region video recording. Region frame turns red during recording process. You can stop video recording by pressing recording icon or **F9** hotkey again.

Selecting application window
wtih **Snap to window** option enabled

WEB VIDEOS RECORDING IN 60FPS

Introduction

With Action! you can record videos from websites and other applications in real-time. Action! allows to record videos from defined display region, selected application window or in fullscreen mode.

For the best results it is recommended to record videos in following ways:
• with **Video framerate** set to 60 in Action! **Video Recording** settings
• with **Video framerate** set to original source video framerate

Recordings options

Video framerate
To record videos with 60fps please set **Video framerate** value to 60.
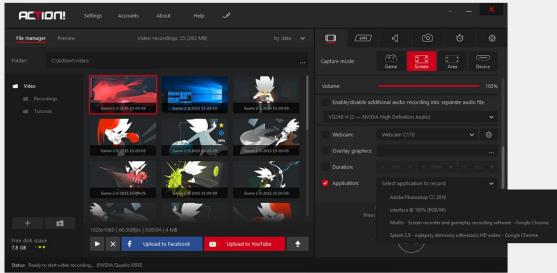
Recording mode
For fullscreen video recording it is recommended to set **Active screen** mode.

If source video is not played in fullscreen please change recording mode to **Active desktop region** and adjust your region size and position to fit the source video picture. Enable **Snap to windows** option (hotkey: **S**) to easily fit your region to source video area.

Start recording

Start source video playback and press start recording icon or press **F9** on keyboard to start desktop video recording. You can stop video recording by pressing recording icon or **F9** hotkey again.

SELECTED APPLICATION RECORDING MODE

Selected application recording

Introduction

Selected application recording mode allows to record video only from one, selected by user, application. This mode guarantees that no other application will be included in your final video recording. All screen area outside your selected application will be recorded as black area.

To use Selected application recording mode press [Screen] button to switch Action! to Active screen recording mode and enable **Application** option at the bottom of the screen.

You may find this recording mode very useful for LIVE Streaming, as it guarantees that no other than desired information will be live streamed and shared online.

Selecting application

Click **Select application to record** dropdown to show list of all applications available for recording and find and select application that you would like to record.

Start recording

Press start recording button or press **F9** on your keyboard to start video recording. You can stop video recording by pressing recording button or **F9** hotkey again.

DEVICE RECORDING MODE
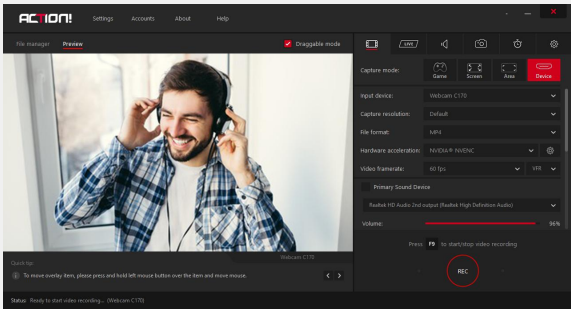
Device recording mode with preview window

Connection diagram showing example use of device recording mode.

Introduction

Select device recording mode to capture video from various video devices. Add your own logo, webcam, microphone commentary and record video to your local disk or live stream to popular services.

Example external video devices that can be recorded with Action! device recording mode:
- Game consoles
- Webcams
- Other PCs
- Camcorders
- TV devices
- Tablets and smartphones

Setup

To record video devices press [Device] button to switch Action! to device recording mode. Now select your device from **Input device** dropdown and set your preferred capture resolution.
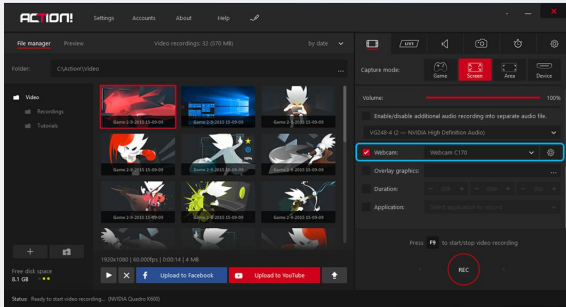
Device preview

To check video preview for selected Input device switch Action! to preview mode.

Start recording

Press start recording button or press **F9** on your keyboard to start video recording. You can stop video recording by pressing recording button or **F9** hotkey again.

ADDING WEBCAMS TO VIDEO RECORDINGS


Action! Webcam Settings

Action! allows to add picture from webcams and other capturing devices to all real-time gameplay and desktop/screen recordings.

Open **Webcam Settings** to setup webcam recording. Video recording tab allows to select webcam device and enable webcam recording. More settings are available in Webcam settings.

Adding webcam is very easy with user friendly options and webcam preview screen.

Use **Webcam Preview** tick available at the top-left Action! window to enable webcam preview showing webcam position and size in video recording.

LIVE STREAMING INTRODUCTION
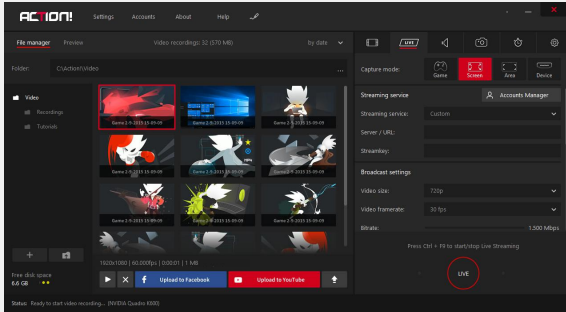
Action! Live Streaming tab

Introduction

You can not only record everything on your PC, but you can also share it online with LIVE Streaming functionality. With Action! you can easily live stream your gameplays or desktop activity to streaming services like Twitch.TV, hitbox, Facebook or YouTube.
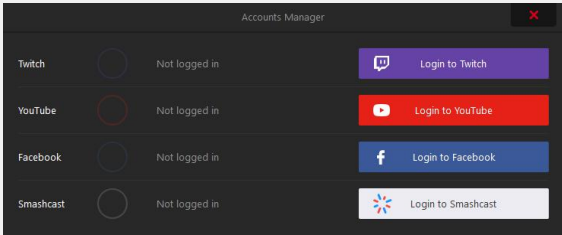
Trial version lets you test LIVE Streaming functionality for free, but Action! watermark will be added to all streamed videos.

Watermark will be removed after activating Action! with activation key.
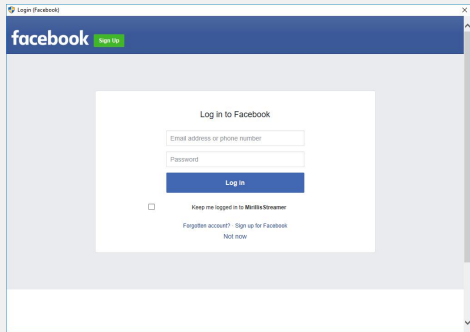
Enable Action! LIVE Streaming
To enable LIVE Streaming open Action! LIVE tab and check Enable Action! LIVE Streaming option.

LIVE STREAMING - BROADCAST SETTINGS

Action! Live Streaming Account Manager

Login with Facebook window

Record streamed video to disk
This option allows to save streamed videos to the local hard disk in MP4 format.

Auto-reconnect
Allows to automatically restore lost connection with streaming service.

Video size
You can select broadcasted video size. To stream in resolution higher than 1080p please select original video size.

Framerate & Bitrate
Options allow to select video framerate and bitrate.

Streaming service
This option allows to setup streaming service where your live stream videos will be published.
You can select one from several popular predefined streaming services or setup your custom service.

Twitch.tv, **YouTube**, **hitbox** and **Facebook** services require to log in to your account before starting live streaming. You may be also asked to allow Action! application to publish to your account when using Action! for the first time.

*Please note, that you must use **Custom** settings if you want to live stream to selected Facebook page/channel and provide a stream key. Using **Facebook** service settings your live stream will be published on your wall.*

LIVE STREAMING
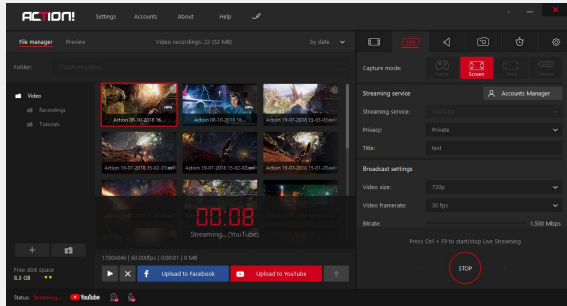
Action! Live Streaming in progress

Start streaming

Setup all streaming options and make sure that "Enable Action! Live Streaming" option is checked.

To start LIVE streaming use **Start/Stop streaming button** or **CTRL+F9** hotkey. You can stop streaming by pressing **Ctrl+F9** hotkey or a button again.

Please note that game or application must be active to start or stop video streaming using Games & applications recording mode.
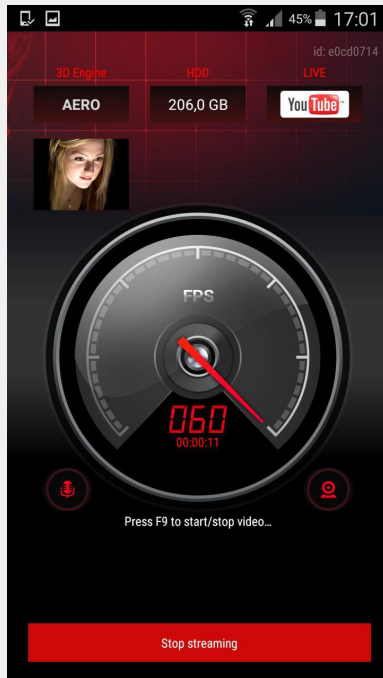
Action! HUD

After live streaming start HUD status changes showing that live streaming is in progress:

HUD displays LIVE status, 3D engine detected, current framerate and streaming duration and current number of your live stream viewers (available for selected services only).

Action! RCU

Action! RCU mobile app

Introduction

Free Action! RCU app allows to control your Action! gameplay and screen recordings with Android mobile devices! Start, stop, pause video recordings, display framerate statistics, webcams preview and video recording time.

To install Action! RCU on your mobile device search for "Action! RCU" on Google Play.

Please note that your mobile device and PC must be connected to the same local network.

Enable Action! RCU
To enable Action! RCU please open Action! General settings, enable Action! RCU and restart Action!

Run Action! RCU app on your mobile device and select your PC from Action! RCU computer list.

Action! RCU app features:
• Start,stop and pause recordings
• Start and stop LIVE Streaming
• Display recorded webcams preview
• Display FPS information
• Display video recording time
• Display 3D engine
• Display free disk space

AUDIO RECORDING

Introduction
Action! can record everything you hear on your PC. Audio recording function allows to record music and audio sounds from games, applications or videos. Using microphone you can easily create podcasts.
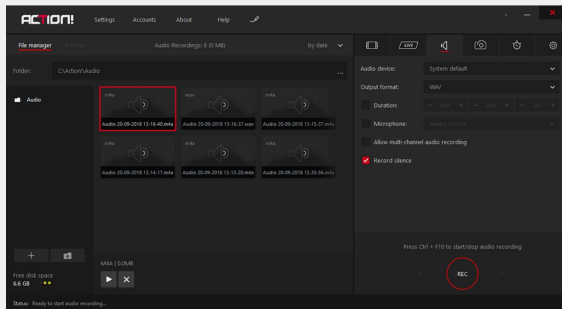
Action! window
Audio recording tab

Recording options

Duration
Enable this option when you want to record audio for a specific time duration.

Output format
You can select **WAV** or **MP4 Audio** output format. **MP4 Audio** format makes your recordings compact and ready to playback with modern audio playback devices.

Allow multi-channel audio recording
When enabled allows multi-channel audio recording (i.e. 5.1 audio).

Record silence
Activate this option to let Action! record audio even when there is no system sound playing.

Microphone
Enable microphone to add live audio commentary to your audio recordings.

Start recording
Press start recording icon REC or press **Crtl + F10** on keyboard to start audio recording. You can stop audio recording by pressing recording icon or **Crtl + F10** hotkey again.

ACTION! ALLOWS TO RECORD AUDIO IN A SEVERAL DIFFERENT WAYS:

1. Recording video and audio into one file - choose this option if you want to have your video and all audio (microphone and system sounds/audio from a game) included into one recording.

2. Recording audio to the separate track but the same file as video - you might find this option useful for further video editing in Sony Vegas or other video editor.

3. Recording audio and video to two separate files - select this option if you don't want to record microphone in the same file as video and system sounds/audio from a game, but you want to have your microphone recorded separately to another file for further editing.

4. Recording audio and video to three separate files, e.g. video, microphone and system sounds - select this option if you want to have a video, microphone and system sounds recorded to

three separate files. In this case you will have no sound in your video.

5. Recording up to 4 audio tracks simultaneously: microphone to the same file as video and system sounds but separate track and additionally including up to two more audio devices recorded to two other separate audio files - select this option if you have more audio devices you want to record for further editing in a video editor.

Recording video and audio into one file.

The basic audio track is included in a video, you can record e.g. video, microphone and system sounds into one file. Go to main Video Recording tab and enable "**Primary Sound Device**" option and set audio device to "**System default**". "**System default**" allows you to record the device selected in your operating system. If you want to record e.g. audio from a game, it is highly

recommended to set audio device to "**System default**". If you change this option to any other device e.g. a microphone, the system sounds (e.g. audio from a game) will not be included in a video. Use "**Volume**" slider to adjust device's volume. To record system sounds and microphone, set "**Primary Sound Device**" to "**System default**" enable microphone and select the microphone you want to record. Again, use "**Volume**" slider below "**Microphone**" option to adjust microphone's volume. If you don't want to include any audio in your video disable the option "**Record system sounds**" in main Audio settings. Please remember that if you disable the option "**Record system sounds**", your microphone will also not be included in the recording, so there will be no sound in your video.
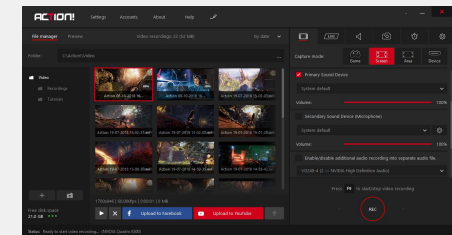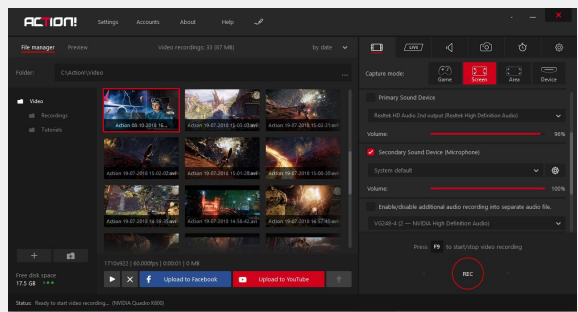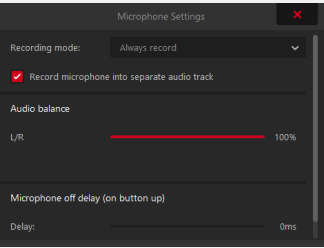
AUDIO RECORDING

Recording audio to the separate track but the same file as video

To record microphone to the same file as video but separate audio track, go to main Video Recording tab, enable microphone and open microphone settings.


In "**Microphone**" settings, enable the option "**Record microphone into separate audio track**". You are not able to see a separate track in the interface when the recording is finished, but after uploading your recording to video editor, the separate audio track will be visible and editable. "**Microphone**" settings allow you also to set the volume balance between left and right channel of your microphone. We strongly recommend leaving this option set to 100% and adjust it only when there is a problem with recording microphone on one channel only. If your system sounds/audio from a game is too loud, then simple adjust volume levels for primary sound device and microphone. Please remember to enable the option "**Record system sound**" in main Audio settings - if this option is disabled no microphone sound will be recorded.

Recording audio and video to two separate files

To record your audio device (e.g. a microphone) to separate audio file go to main Video Recording tab, select "**Enable/disable additional audio recording into separate audio file**" option and select audio device you want to record. In this way, you will record your video and system sound to one file and your microphone to other separate file.
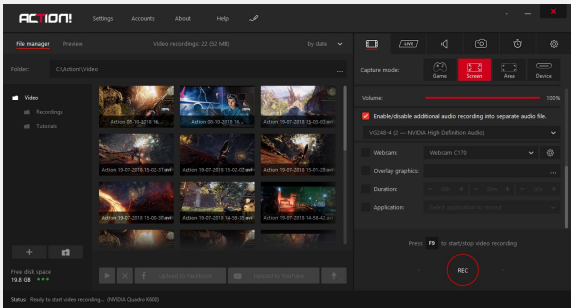
AUDIO RECORDING

Recording audio and video to three separate files

To record your video, system sounds and microphone to three separate files follow the instruction below: To add first separate audio file to your recording, open Audio Recording tab (speaker icon), select audio device (e.g. microphone) and file format.
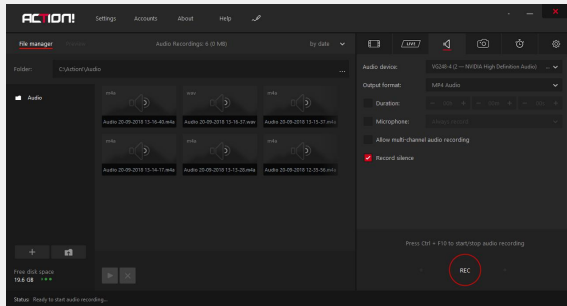
To record system sound to separate audio file (not include in a video), go to main Audio settings, disable the option "**Record system sounds**", then go to main Video Recording tab, select "**Enable/disable additional audio recording into separate audio file**" option and select "**System default**".

Next make sure that "**Microphone**" option in main Video Recording tab is disabled.

Now if you want to record your microphone, system sounds and video simultaneously, you will need to set one hotkey (e.g. F10) for all these options. Go to "**Settings**" and open "**Hotkeys**" tab. Choose one hotkey (e.g. F10) for "**Record Video**" and "**Record Audio**" options.

Now after pressing **F10** hotkey, in the main Video Recording view you will see two active thumbnails: one for video and the second for system sounds. To see active microphone thumbnail go to Audio Recording tab.

However, if you want to have three separate files located in the main Video Recording view, change the microphone file location to the same as video .

To do this, open Audio Recording tab (speaker icon) and on the left side of user interface change the "**Folder**", selecting the same folder you have selected for recording your Video.

VIDEO & AUDIO RECORDINGS PLAYBACK
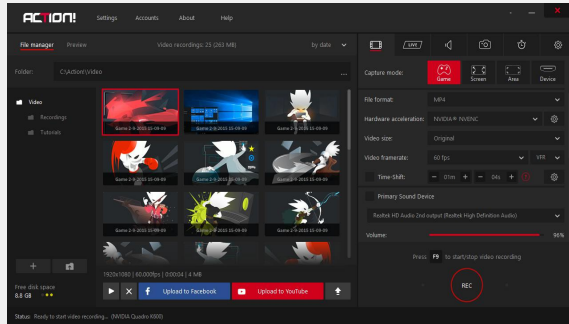
Video tab manager

Video recording playback

Video recordings playback

Action! includes internal fast player dedicated for video recordings playback. Select a video recording and click play icon ▶ or use mouse double click on a thumbnail to start video recording playback.

To playback all Action! video recordings in AVI and MP4 format you can also use Splash media player. Splash provides additional features like SmartSeek, Audio boost, Screen capture and more.

Splash player is available for download at Mirillis website.

Audio recordings playback

Select an audio recording and click play icon ▶ or use mouse double click on a thumbnail to start recording playback.

Audio recording will be played using system default application for WAV/M4A audio file format.

Introduction

Action! allows to benchmark desktop and all supported DirectX or OpenGL games and applications performance. Benchmark results are saved in popular CSV or HMTL file format.
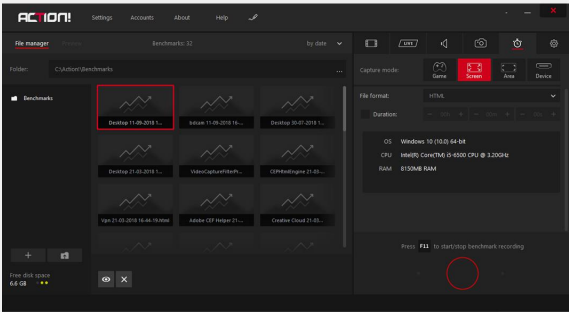
Action! window
Benchmarking in progress...

Benchmark files

Select a benchmark file in manager list and click open icon or use mouse double click on a thumbnail to view selected benchmark results.

Benchmark file will be opened using system default application for CSV file format or a default web browser for HTML files.

Benchmarking options

Duration
Enable this option when you want to record benchmark results for a specific duration.

Start benchmarking

Press start benchmarking icon or press **F11** on keyboard to start recording benchmark results. You can stop benchmarking by pressing icon or **F11** hotkey again.

Benchmark button is not available for *Games & applications* recording mode selected in Video recordings tab. Please note that in this mode game or application must be active to start or stop benchmarking using a hotkey.

CAPTURE SCREENSHOTS

Introduction

Action! allows to capture screenshots of your desktop and all supported DirectX or OpenGL games and applications.
Select a screenshot in manager list and click open icon 👁 or use mouse double click on a thumbnail to view selected screenshot.
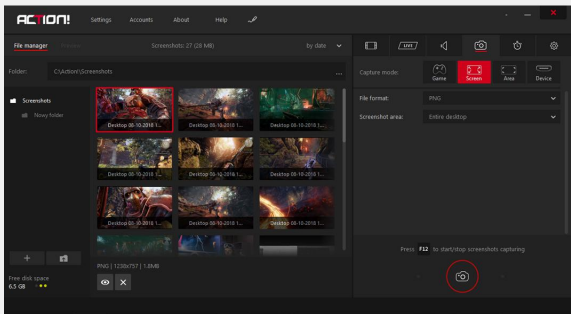

Action! window
Capture screenshots tab

Capture options

File format
Allows to select one of available output file formats: BMP, PNG, JPG.

Screenshot area
For multi-display setups it is possible to select to capture a screenshot from all screens or from a single screen only. This option is available for *Active screen* recording mode selected in Video Recording tab.

Capture screenshot

Press capture screenshot button 📷 or press **F12** on your keyboard to capture a screenshot.

Capture screenshot button is not available for *Games & applications* recording mode selected in Video recordings tab. Use **F12** hotkey to capture screenshots of your active games and applications.

EXPORT RECORDINGS - INTRODUCTION
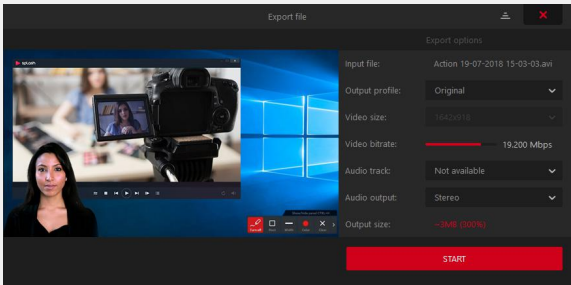
Export window - Export settings

Introduction

Action! allows to export your AVI video recordings to all popular formats and devices. Your video recordings are exported to **MP4** file format and the exported video is coded using **H.264/AVC or H.265/HEVC** video compression standard, exported audio is coded using **AAC** compression standard (supported outputs are Stereo or 5.1).

All your MP4 video recordings can be uploaded directly to YouTube or Facebook.

Export window

To start exporting, select a recording on your recordings list and click **Export** button   . To hide all Action! windows click "hide" icon in the top right corner of the Export window. Use "close" icon to close the window, using "close" icon will stop all exporting or uploading processes.

Exporting to YouTube and Facebook

YouTube and Facebook export profiles contain 2 settings pages (export and upload settings) and automatically upload the exported file after export process is completed. Use   buttons to navigate through YouTube and Facebook profile settings pages.

EXPORT RECORDINGS - SETTINGS

Export window - Export in progress

Output profile
Action! output profiles contain popular video resolutions and predefined profiles for popular devices providing fast and easy exporting setup.

Video size
With Video size list you can easily set your output video size and framerate.

Please note, that Action! Export does not offer video upscaling and only lower or equal resolutions to your input resolution are available.

Video bitrate
Action! default video bitrate setting provides high quality video. You can lower the video bitrate setting to create smaller files or set higher bitrate for better video quality.

Audio Track and Output
With audio settings you can disable audio output.

Output size
Shows the estimated size of exported file. Green color indicates that the exported file will be smaller than the input file, red color indicates that the exported file will be larger than the input file.
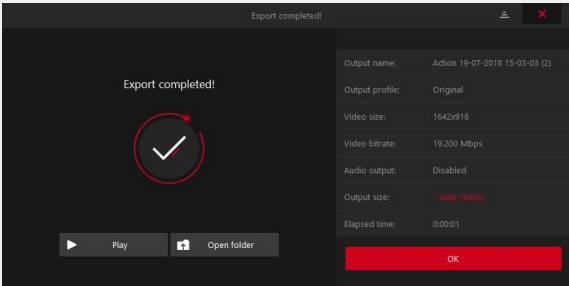
Export completed

Hardware acceleration

The GPU icon is displayed whenever hardware acceleration for video encoding is used during exporting.

 AMD video encoding acceleration

 Intel video encoding acceleration

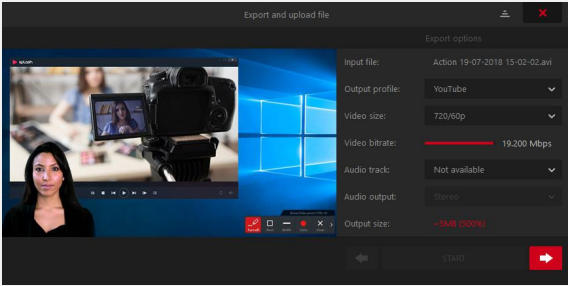 Nvidia video encoding acceleration

Export completed

Export completed view contains short information about exported file and icons providing fast access to popular actions:

 PLAY
Starts playback of the exported file.

 OPEN FOLDER
Opens the folder where the exported file has been saved.

EXPORTING TO YOUTUBE

YouTube upload setup

YouTube profile
To export AVI recording or upload MP4 video recording to YouTube please select a recording in main Action! window and click **Upload to YouTube** button. In Export window YouTube profile will be automatically selected. Now, click **Login with Google** button to continue.

Login with Google
Login window appears after pressing **Login with Google** button. Login to your Google account and select your target channel

For AVI recordings, please setup all exporting options and click next button ➡ to show YouTube settings page.

Privacy settings

• **Public** (anyone can search for and view - recommended)
• **Unlisted** - means that only people who know the link to the video can view it. The video will not appear in any of YouTube's public spaces, such as search results, your channel, or the Browse page, but the link can be shared with anyone.
• **Private** (only specific YouTube users can view)

Start exporting to YouTube

Please read the Terms of Use displayed at the top of the window and press **START** button to upload a file to the selected service. Please remember that you must be logged in to access START button.

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EXPORTING TO FACEBOOK
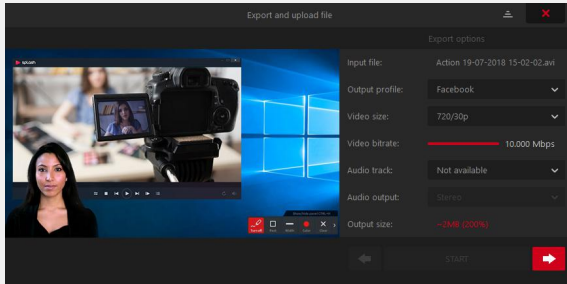
Facebook upload setup

Facebook profile

To export AVI recording or upload MP4 video recording to Facebook please select a recording in main Action! window and click [f Upload to Facebook] button. In Export window Facebook profile will be automatically selected. Now, use **Login with Facebook** button to continue.

Login with Facebook

Login window appears after pressing **Login with Facebook** button. Login to your Facebook account.

You may be asked for Mirillis Streamer application authorization when using Action! for the first time.

For AVI recordings, please setup all exporting options and click next button [➡] to show Facebook settings page.

Privacy controls:
• Public (Everyone)
• Private
• Friends Only
• Friends of Friends

Start exporting to Facebook

Please read the Terms of Use displayed at the top of the window and press **START** button. Please remember that you must be logged in to access START button.

GENERAL SETTINGS
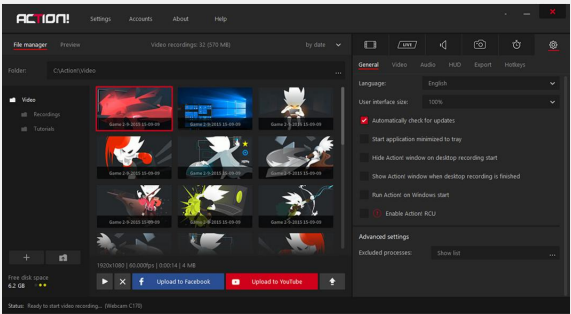
Action! General settings

LANGUAGE
Allows to change Action! user interface language.

START APPLICATION MINIMIZED TO TRAY
When you are familiar with hotkeys you can select this option to start Action! minimized to tray. To show Action! window double click Action! tray icon.

HIDE ACTION! WINDOW ON DESKTOP RECORDING START
Select this option to hide Action! window to tray mode before desktop recording starts.

SHOW ACTION! WINDOW WHEN DESKTOP RECORDING IS FINISHED
This option shows Action! window when desktop recording is finished. You can immediately start playback, delete recordings or export and upload recordings to YouTube or Facebook.

HIDE PREVIEW ON RECORDING.STREAMING START (FOR BETTER PERFORMANCE)
This option automatically closes preview when starting recording/streaming.

RUN ACTION! ON WINDOWS START
This option allows to automatically run Action! on system startup.

ENABLE ACTION! RCU
Enable this option to remotely control recordings with free Action! RCU app

EXCLUDED PROCESSES
This option allows you to exclude selected application, so Action! won't detect this application.
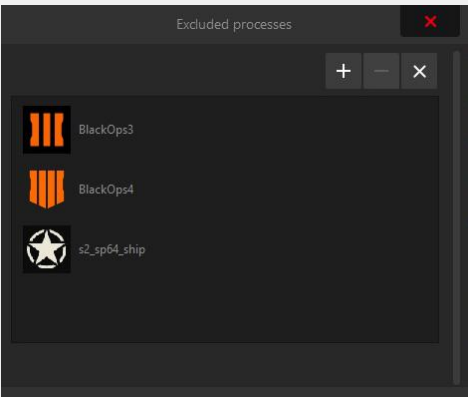
Action! Exclude processes window

VIDEO RECORDING SETTINGS
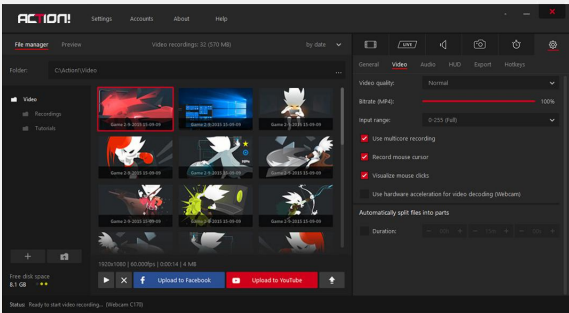
Action! Video recording settings

VIDEO QUALITY
Allows to select output video quality for your recordings. Select "Low" quality to reduce output file size and increase recording performance.

BITRATE (MP4)
Allows to control output MP4 recordings video bitrate. Set lower bitrate values to reduce MP4 output file size.

INPUT RANGE
For most video recordings it is recommended to use wide input range (0-255). However in some cases (in example web videos or fullscreen videos recording) narrow input range (16-235) may give a better result.

USE MULTICORE RECORDING
Action! uses an optimized, multicore video encoding algorithm for video recording. In some cases single core encoding may result in better performance. Disable this option to let Action! encode video (during recording) utilizing only a single CPU core.

RECORD MOUSE CURSOR
This option adds mouse cursor to recorded video.

VISUALIZE MOUSE CLICKS
This option helps to create fantastic and clear tutorials by adding animated mouse clicks visualizations to recorded video.
Mouse click visualizations are only available for desktop recordings in original video size.

USE HARDWARE ACCELERATION FOR VIDEO DECODING (WEBCAM)

This option allows to use the power of the integrated Intel graphics card for decoding video from a webcam operating in mjpeg format. This option requires an Intel processor with an integrated graphics processor supporting Intel Quick Sync technology.

AUTOMATICALLY SPLITS FILES INTO PARTS
This option allows you to automatically split the recording into separate files. The recording automatically ends after the set time has elapsed and the new recording is started.

VIDEO RECORDING SETTINGS
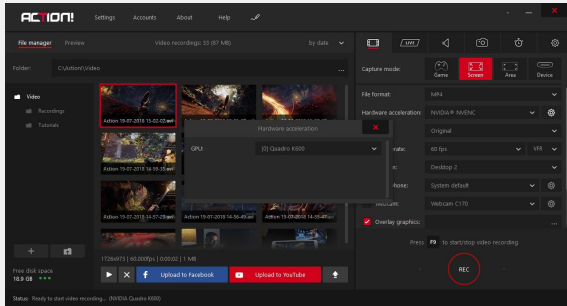
Hardware acceleration settings

HARDWARE ACCELERATION

Hardware acceleration allows to utilize the computing power of graphics card to video encoding.
Leveraging the computing power of graphics card offloads CPU. This leads to better utilizing of individual PC components and more efficient work of operating system.

Action! allows to utilize four different hardware accelerations: NVIDIA NVENC,
NVIDIA NVENC HEVC, Intel Quick Sync, AMD AMF.

If you have two or more NVIDIA graphics cards supporting hardware acceleration, you can additionally decide which one will be used to record the video.
To do so, please click the settings button that is located next to hardware acceleration options and select a card from the list.
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Variable and Constant framerates

VFR - variable framerate - it means that the frame rate might change actively during video recording. Action! encodes the video with a chosen framerate, however, if a PC is not able to sustain the constant framerate, the framerate will change to keep the optimal performance.

CFR - constant framerate - in this mode Action! does not change the framerate trying to keep constant framerate. However, if the encoder performance is not enough Action! will ultimately switch to VFR mode.

The choice of either VFR or CFR is available only for MP4 format. In AVI format the encoder works only in CFR mode.

WEBCAM SETTINGS
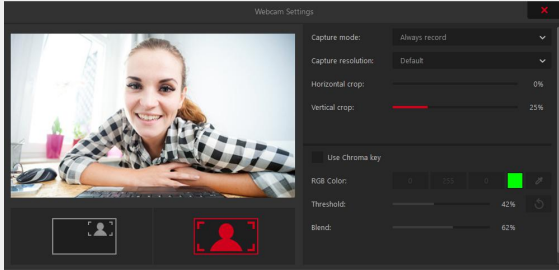
Action! Webcam Settings

Webcam settings allow to include picture from webcam in gameplay and desktop recordings.

RECORDING MODE
This setting allows to set recording mode:
- enable continuous webcam recording
- enable option to record webcam on button down (default hotkey: **F4**)
- enable and disable webcam recording using a hotkey (default hotkey: **F4**)
- record webcam to separate video file. The video is recorded in .avi extension

WEBCAM CROP SETTINGS
Allows you to crop webcam's video vertically and horizontally.

Please note that crop settings can be seen when in Detailed Webcam preview.

CAPTURE RESOLUTION
Allows to change webcam capture quality. Please note that higher resolution may impact overall recording performance. Using resolution Higher than 1280x720 is not recommended.

VIDEO SIZE
This option allows to control size of the webcam picture in final video recording.

POSITION
Allows to set webcam horizontal and vertical position.

CHROMA KEY
With chroma key you can setup Action! To record your webcam with automatic background removal. You can additionally use alpha mask to make your webcam picture fit even better to your video recording.

WEBCAM SETTINGS – GREEN SCREEN

1. Run Action! and open webcam settings.
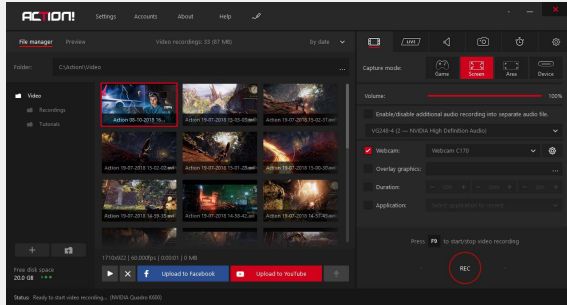
2. Maximize the camera view.
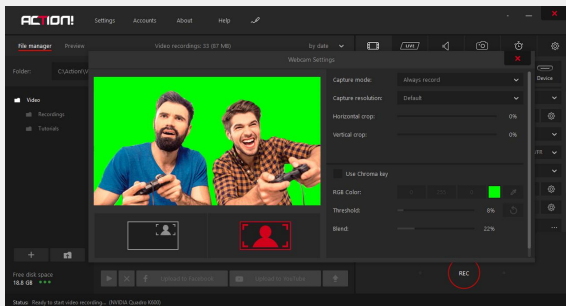
3. Make sure that the background behind you has a uniform color (e.g. green).

4. Enable the option „**Chroma Key**".

5. Click the tool „color picker" and then click the background to adjust the color of your green screen.
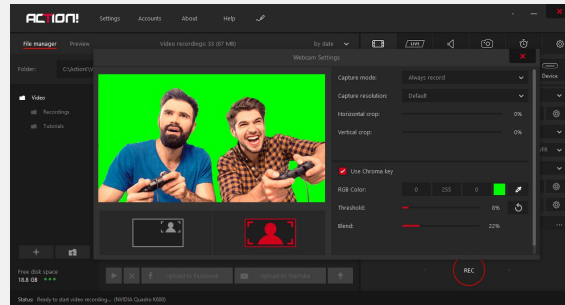
6. Drag the „**Treshold**" and „**Blend**" sliders to get the best result.
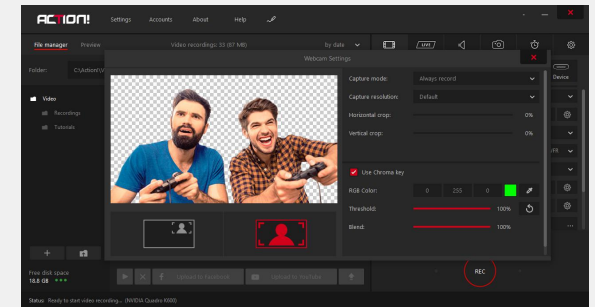
WEBCAM SETTINGS – How to record webcam into a separate file
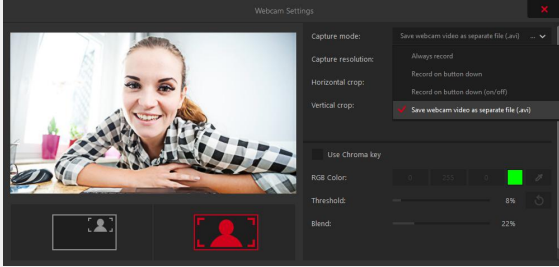
"Save webcam as separate file" option

Follow steps below to record webcam into separate file.

1. Go to Video Recording tab and enable Webcam option.

2. Open Webcam Settings. Webcam Settings button is right next to selected Webcam device.

3. In Webcam Settings window extend "**Capture mode**" list and select "**Save webcam video as a separate file (.avi)**" option.

Please note that webcam is saved in avi file. Recorded file can be exported to MP4 using Export feature in Action!

AUDIO SETTINGS
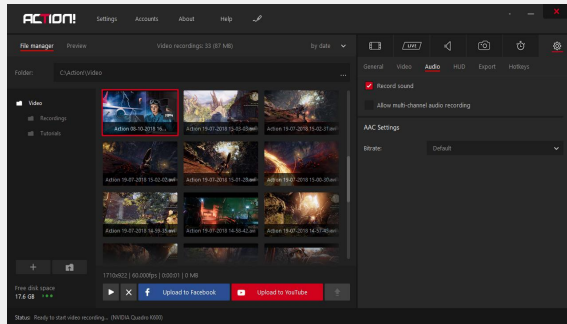
Action! Audio settings

RECORD SYSTEM SOUNDS
This setting allows to disable audio recording.
No audio will be added to your video recordings.

ALLOW MULTI-CHANNEL AUDIO RECORDING
This setting allows to record multi-channel
audio. When option is disabled all audio will be
recorded in stereo format.

AAC BITRATE
This option is used for M4A audio recordings,
MP4 video recordings and video recordings
export.

MICROPHONE SETTINGS
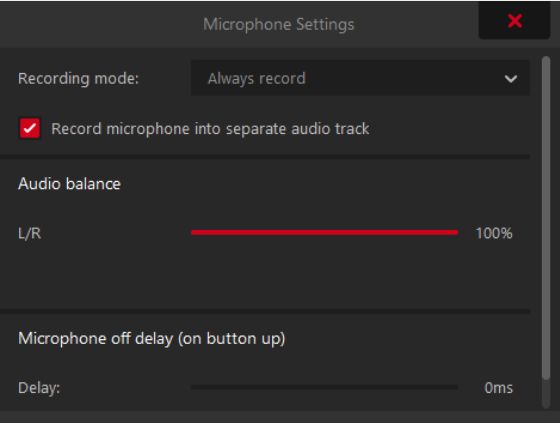
Action! Microphone settings

MICROPHONE RECORDING MODE

This setting allows to set recording mode:
- enable continuous microphone recording
- enable option to record microphone on button down (default hotkey: **F4**)
- enable and disable microphone recording using a hotkey (default hotkey: **F4**)

MICROPHONE VOLUME

This setting controls the microphone input volume.

RECORD MICROPHONE INTO SEPARATE AUDIO TRACK

This setting allows to record microphone commentary to separate audio track.

Recording microphone to separate audio track won't have any effect while Action! LIVE Streaming

AUDIO BALANCE

Audio balance controls the balance between microphone and system sounds. Adjust this option to record clear live audio commentary.

Click **Reset to default** icon to reset microphone volume and audio balance to default settings.

MICROPHONE OFF DELAY

This option allows to add additional delay to switching microphone recording off using record on button down microphone recording mode.

HUD SETTINGS
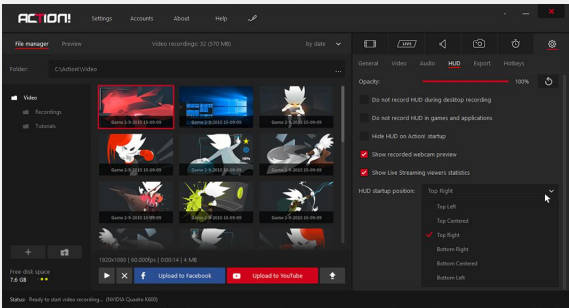
Action! HUD settings

OPACITY
This setting lets you control Action! HUD opacity.

(available for Windows 7/8/8.1/10 Desktop, D3D9, D3D10, D3D11, D3D12 and OpenGL)

DO NOT RECORD HUD DURING DESKTOP RECORDING
Enable this option when you do not want HUD to be included in your desktop recordings.

**DO NOT RECORD HUD
IN GAMES & APPLICATIONS**
With this option enabled Action! will display HUD in games and applications, but HUD will not be included in your recordings.

HIDE HUD ON ACTION! STARTUP
Enable this option to automatically hide HUD on every Action! Startup.

SHOW RECORDED WEBCAMS PREVIEW
With this option you can enable recorded webcam preview in Action! HUD and Action! RCU app.

SHOW LIVE STREAMING VIEWERS STATISTICS
With this option you can display the current number of your LIVE stream viewers.

HUD STARTUP POSITION
This setting lets you decide where Action! displays HUD on startup.

When Action! is running you can change HUD display position with a hotkey (default hotkey: **F7**). Please note that changing HUD display position with a hotkey does not change "HUD Startup Position" setting.

EXPORT SETTINGS
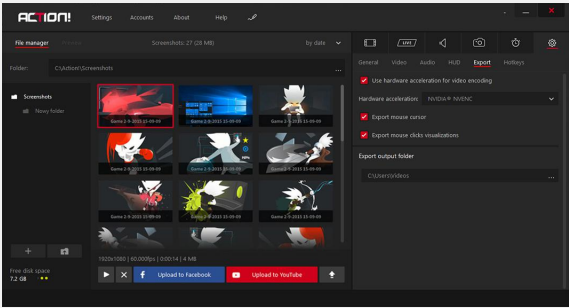
Action! Export settings

HARDWARE ACCELERATION
Use hardware acceleration for video encoding to speed up exporting process and lower CPU consumption.

EXPORT MOUSE CURSOR AND MOUSE CLICKS VISUALIZATIONS
With this option enabled Action! will include recorded mouse cursor in exported video and additionally can export mouse clicks visualizations.

EXPORT OUTPUT FOLDER
This option lets you change the destination folder for exported files.

OVERLAY GRAPHICS SETTINGS
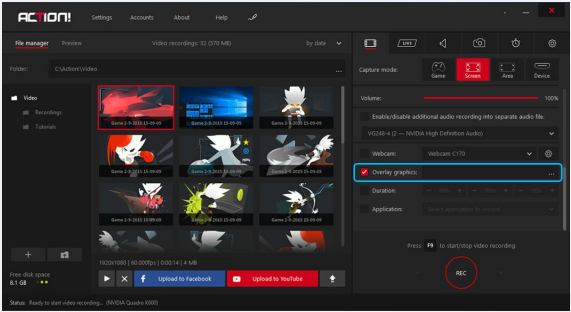
OVERLAY GRAPHICS SETTINGS

Overlay graphics settings allow to add custom logo and other overlay graphics to recorded video.
Using overlay graphics you can brand videos with your own logo or watermark, add frames around the video etc.

Supported file formats are:
- **BMP**
- **JPG**
- **PNG (with alpha channel)**

Maximum supported input graphics resolution is **3840x2160**.

OVERLAY GRAPHICS SCALING

Next to „Overlay graphics" options there is a path to currently selected file. Click on it to select the right graphics.
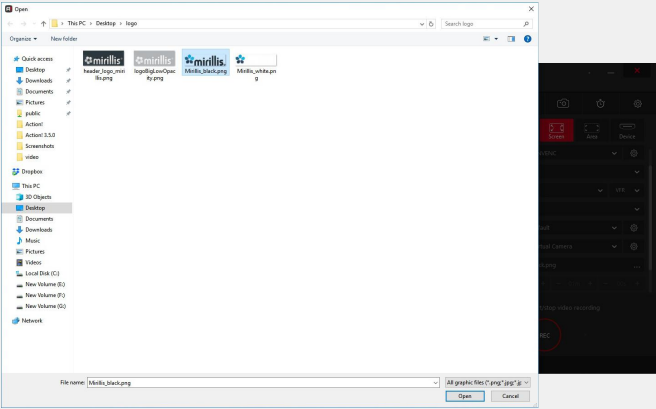
To resize and reposition your logo overlay go to **preview mode**.
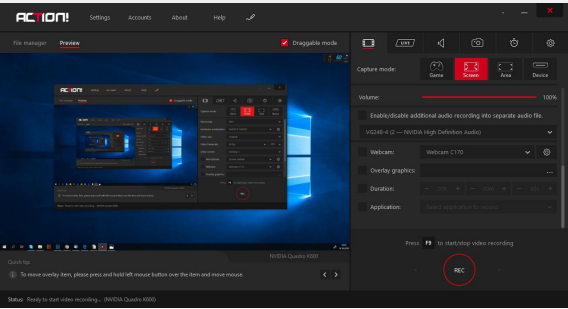
Enable the option „**Overlay graphics**" and make sure that „**Draggable mode**" option is also enabled. You can easily change the position of the graphics by clicking on it and dragging with a mouse cursor in the preview mode.

To change the size of your graphics overlay or logo in a preview mode, click on the bottom right corner of the overlay and move it.

HOW TO ADD CHAT OVERLAY

1. Go to **player.me**
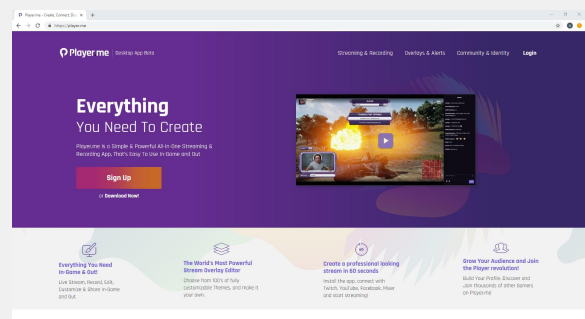
2. Log in using your Twitch/YouTube or other streaming service account.
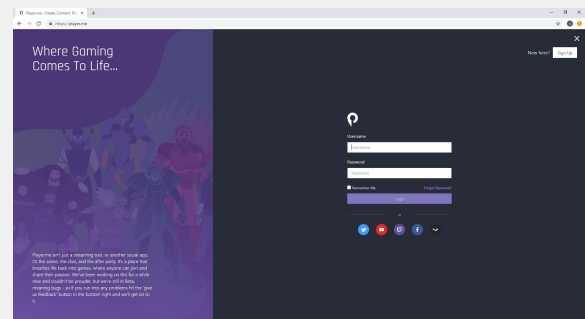
3. Go to the left, click "**My overlays**" tab. Click "**Add overlay**" button to create a new overlay.
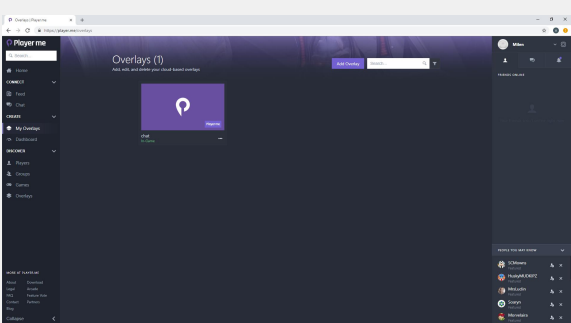
4. Click on the three dots icon and select edit. The editor will open in a new tab.
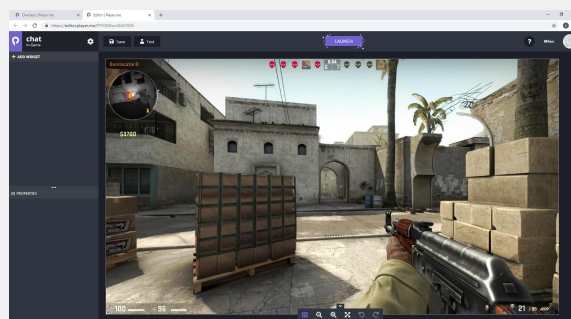
5. Click "**ADD WIDGET**", go to "**Miscellaneous**" and select **Chat**.
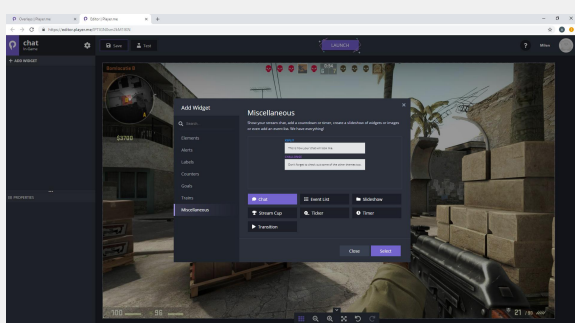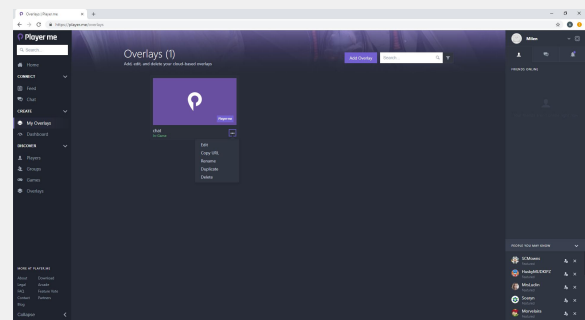

6. Adjust the size and position of your widget.
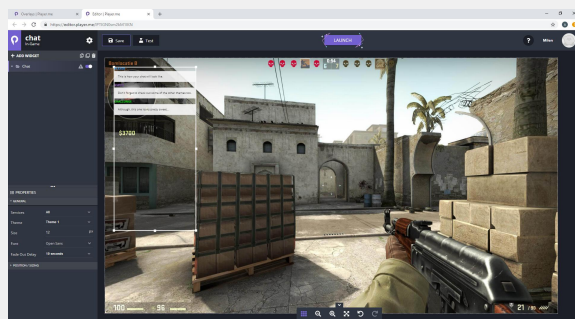
HOW TO ADD CHAT OVERLAY

7. Click the "**Save**" button above to save the overlay
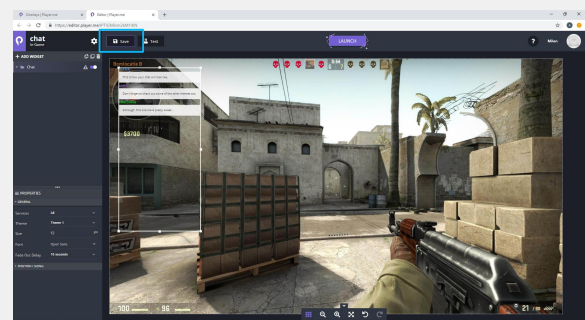
8. Close editor. Go to your overlay list, hover over your new chat overlay and select "**Copy link to clipboard**"

9. Run Action!, go to LIVE tab and scroll down to Overlay sources.

10. Paste the URL address into "**Url 1**" and select "**Output mode**". Select "**Video**" if you want to include chat in your video. Select "**Video + HUD**" option if you want to include chat in your video and see chat on HUD during streaming. "**Video**" and "**Video + HUD**" output modes allow to display chat on a stream making it visible for viewers. Select "**HUD**" if you want to see chat during streaming but you don't want to include chat in your video and streaming. If "**HUD**" output mode is selected, chat is visible only for you, your viewers will not see the chat on your stream.
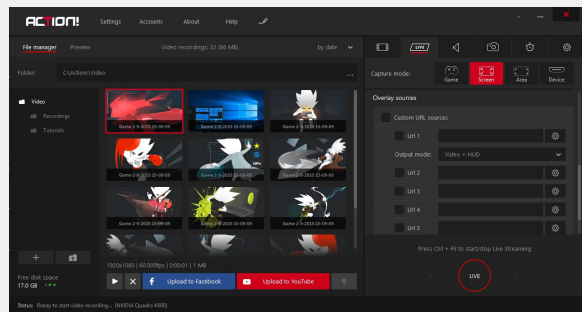
11. Remember to enable "**Custom URL sources**" and "**Url 1**" options to add your chat to your video and/or display chat on your screen.
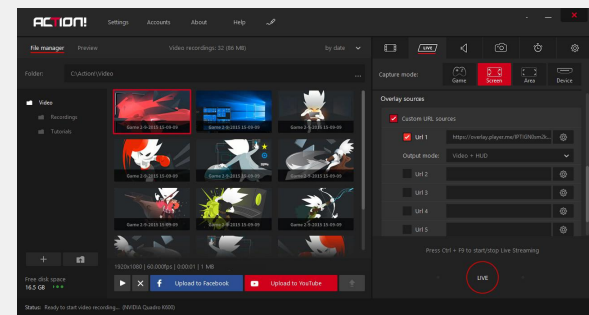
12. Go to "**Preview**" mode to resize and reposition
chat on your screen
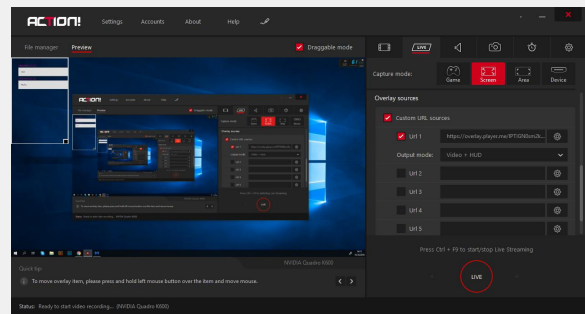
ADDITIONAL INFORMATION
You can use chat overlays from other websites.
Create an overlay, and follow steps 9-12 in order   .
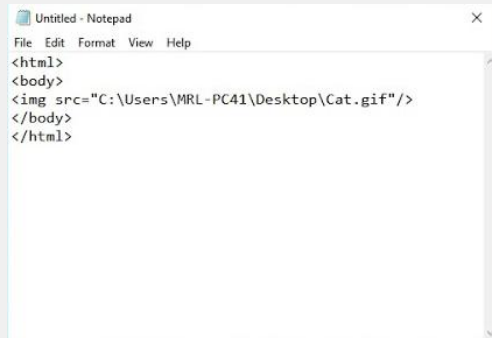to properly add the chat overlay to Mirillis Action!

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HOW TO ADD ANIMATED LOGO (.gif, .png)
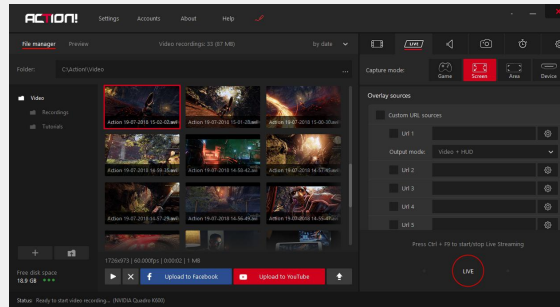
1. Open a new notepad document and type
<html><body></body></html>

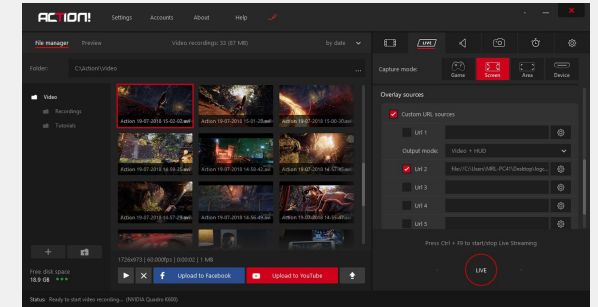2. In img quotation marks paste the url address or path to the gif file you want to use.

3. Save the file with .html extention, e.g. Logo.html.

4. Run Action!, go to LIVE tab and scroll down to Overlay sources section.

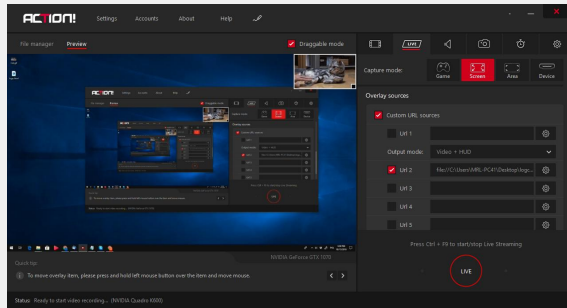5. Paste the path to the gif file in any of the URL field.

6. Remember to enable "**Custom URL source**" and the URL field with the path.

7. Open the settings of added source to crop the graphic overlay.
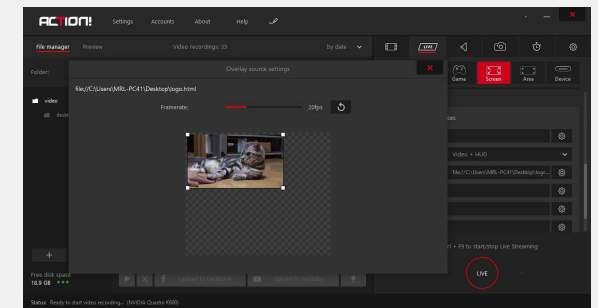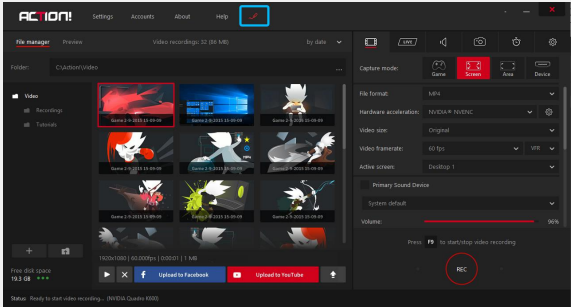
HOW TO ADD ANIMATED LOGO (.gif, .png)

8. If the gif doesn't have alpha channel (the background is transparent), you can skip the first three points and paste url address or path location directly to Action!

9. You can change the position of your animated logo in a **Preview mode**.

DRAWING PANEL

Action! Drawing Panel icon

Action! Drawing Panel settings

Drawing panel allows to easily add graphic elements and text in any place on the screen.

Click „**Drawing panel**" icon to open the tool.

Drawing panel displays few different buttons. The first button on the left enables/disables the drawing mode. If the drawing mode is on, you cannot interact with application winows or icons on the screen.

Under the second button, there is a list of available drawing tools you can use: marking tool, text, arrow, line, square, ellipse and pencil.

The third button allows you to choose the lineweight and font size.

The fourth icon opens color palette.

The „**x**" button allows you to clear the screen from all annotations and drawings. The last button is used to hide the panel.

Drawing panel can be opened either by using **Ctrl + H** hotkeys or by clicking the pencil icon localized at the top bar of Action! interface.

You can easily and quickly undo or redo changes by using popular shortcuts **Ctrl + Z** and **Ctrl + Y**.
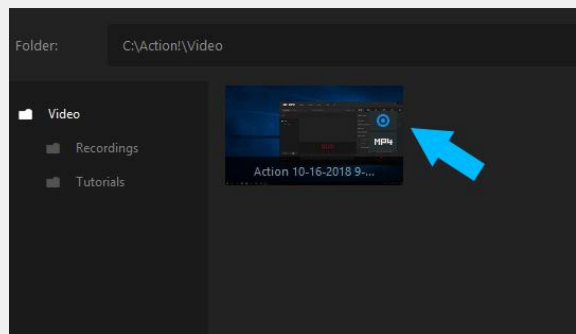
HOW TO ADD BOOKMARKS

To mark an interesting moment in the recording, add a bookmark by pressing **Ctrl + B** shortcuts. Such a bookmark will also help you quickly localize the interesting part of the recording in a video editor.

You can easily change the shortcuts configuration. To do so, go to **Settings → Hotkeys**.
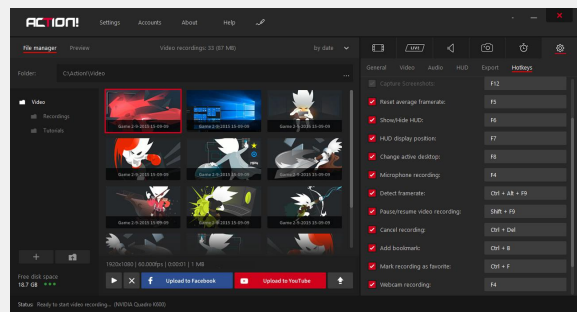
You can add many bookmarks to your video recording.

The recording that includes bookmarks is marked with a **blue bookmark symbol**.

Action! File manager

After the recording is finished, in the recording catalogue you will find a text file that indicates all interesting (bookmarked) moments in your video.
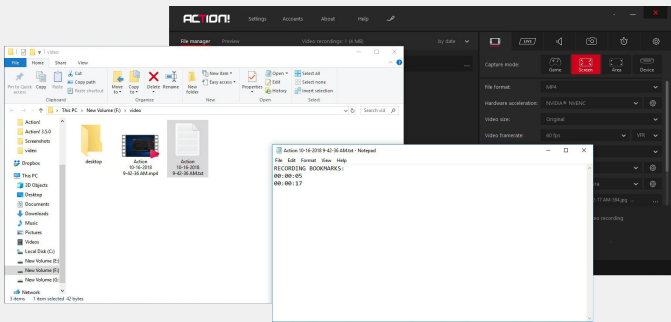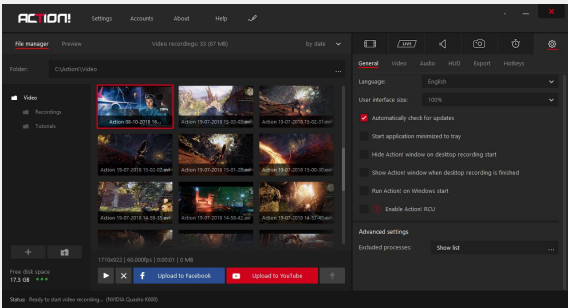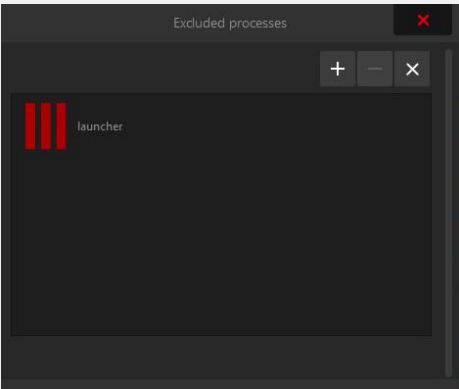

Notepad with saved bookmarks

HOW TO ADD TO EXCLUDE PROCESSES

If you don't want Action! to connect with a selected application e.g. game launcher, you can add this application to the list of excluded processes.
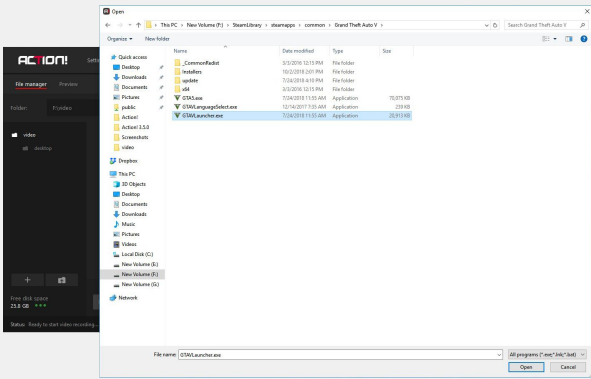
1. Run Action! and go to **Settings → General** tab.

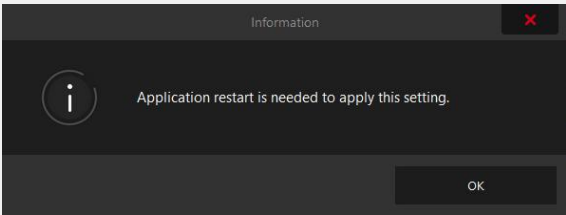2. At the bottom of the tab you will find a list of excluded processes. Click „**Show list**" to drop down the list.

3. Click „**+**" symbol to add proces to the list..

4. Next, open the catalogue that contains the program you want to exclude and select this program. (file with .exe extension).
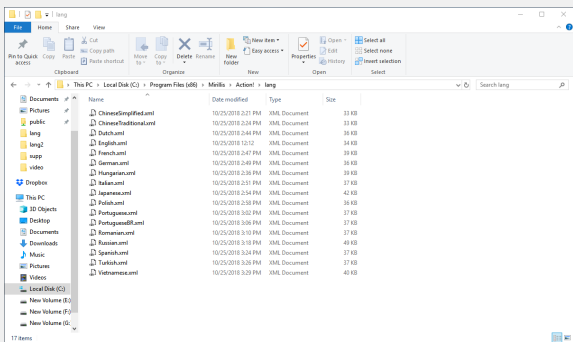

5. After selecting the process, restart the application to save changes.

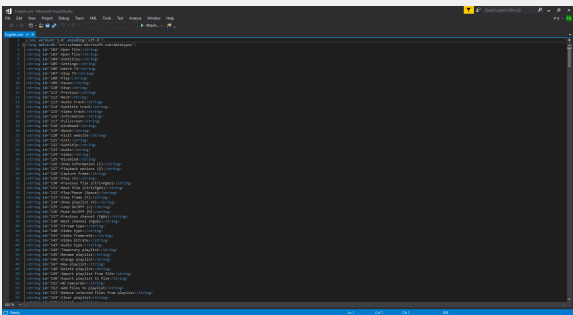6. From now on, Action! will not hook up with the excluded processes.

HOW TO ADD TRANSLATION TO ACTION!

1. Open Action! catalogue and go to „**lang**" folder.

2. Select .xml file in the language you want to translate from, e.g. English.xml.

3. Open the file in Notepad++ or Visual Studio or any other program that does not change the coding and allows easy editing of .xml files.


4. Translate all lines and don't forget to enter your name as the author of the translation in a dedicated for that purpose place in the file

5. As you translate the file, click „**File**" → „**Save as**" and save the file to an area you can easily access (for example the Desktop). Name the file using English name of the translation e.g. Swedish.xml. To save the file directly to Action! catalogue, open the editing program with administrator's rights.
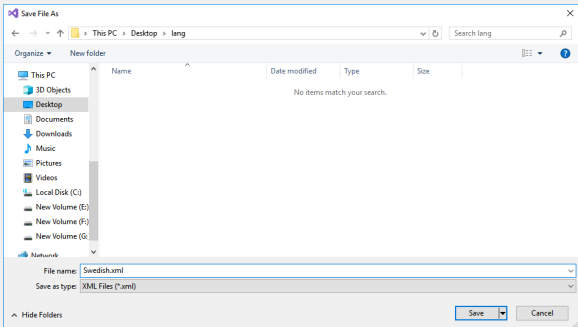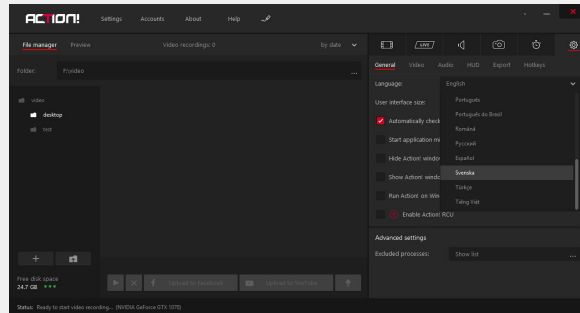

6. Copy the saved file to „**lang**" catalogue.

HOW TO ADD TRANSLATION TO ACTION!
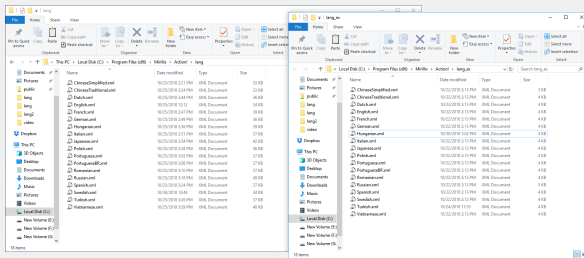
7. In the same way translate one file from lang_ex catalogue. To make translaion available in Action! You need to translate files from both lang and lang-ex catalogue.

8. Your translation should appear in Action! **Settings** → **General** → **Language**. Choose the translation and run Action! again to change the language.

DEFAULT HOTKEYS

BASIC ACTIONS

Start / Stop video recording	F9
Start / Stop audio recording	Ctrl + F10
Start / Stop benchmarking	F11
Capture Screenshots	F12
Change active desktop	F8
Start / Stop Live streaming	Ctrl+F9
Pause/resume video recording	Shift+F9
Save Time-Shift to a file	Left_Alt + F9
Cancel video recording	Ctrl+Del
Add bookmark	Ctrl+B
Mark video recording as favorite	Ctrl+F

ACTION! HUD

Reset average framerate	F5
Show / Hide FPS panel	F6
Change FPS panel position	F7

REGION CONTROL

Move region	Arrows
Resize region	Shift+Arrows
Snap to windows ON / OFF	S
Default region position and size	0

ACTION! PLAYER SHORTCUTS

Play/Pause	Space
Stop	S
Open Next File	PageDown, Ctrl+ArrowDown
Open Previous File	PageUp, Ctrl+ArrowUp
Frame by frame	F
Jump Forward	ArrowRight
Jump Backward	ArrowLeft
Jump Forward (x2)	Shift + ArrowRight
Jump Backward (x2)	Shift + ArrowLeft
Loop On/Off	L
Volume Up	+
Volume Down	-
Mute On/Off	M
Next audio track	A
Enter Full-screen	Enter
Exit Full-screen	Enter, Esc
Default Window Size	0
50%,100%, 200% Video Size	~,1,2
Show file information	i
Exit	Alt+F4, Shift+X

MICROPHONE / WEBCAM

Enable microphone / webcam recording	F4

OPERATING SYSTEMS RESTRICTIONS

Operating systems and hardware configurations restrictions.

Windows Vista®, Windows 7, Windows 8 / 8.1 / 10

DESKTOP RECORDING

Windows Aero is required for high quality recording on Windows Vista and Windows 7.

RECORDING WEB AND MEDIA PLAYERS VIDEOS

May not be available for copy protected HD content.

Windows® XP

Action! is not available for Windows® XP.

TROUBLESHOOTING

Performance

PERFORMANCE

If you experience any performance problems during recording or your recorded video is not smooth please try one of the following solutions:
• change recording file format to AVI if MP4 is selected
• disable graphics overlay and/or webcam recording
• reduce output video size
• reduce output video framerate
• try with "Use multicore encoding" enabled and disabled
• make sure that Aero is enabled for Windows Vista and Windows 7 desktop recording

MULTIDISPLAY PERFORMANCE

If you experience any performance problems on multidisplay setup and the above general performance solutions do not work please try the following solution:
• disable/disconnect one (or more) display device(s).

Recording

GAMES & APPLICATIONS RECORDING

If you experience any problems with games and applications recording please try to run a game or application in windowed mode and try recording with ***Active desktop region*** mode.