

# Face Analyser plug-in

Set up Face Analyser in 8 steps

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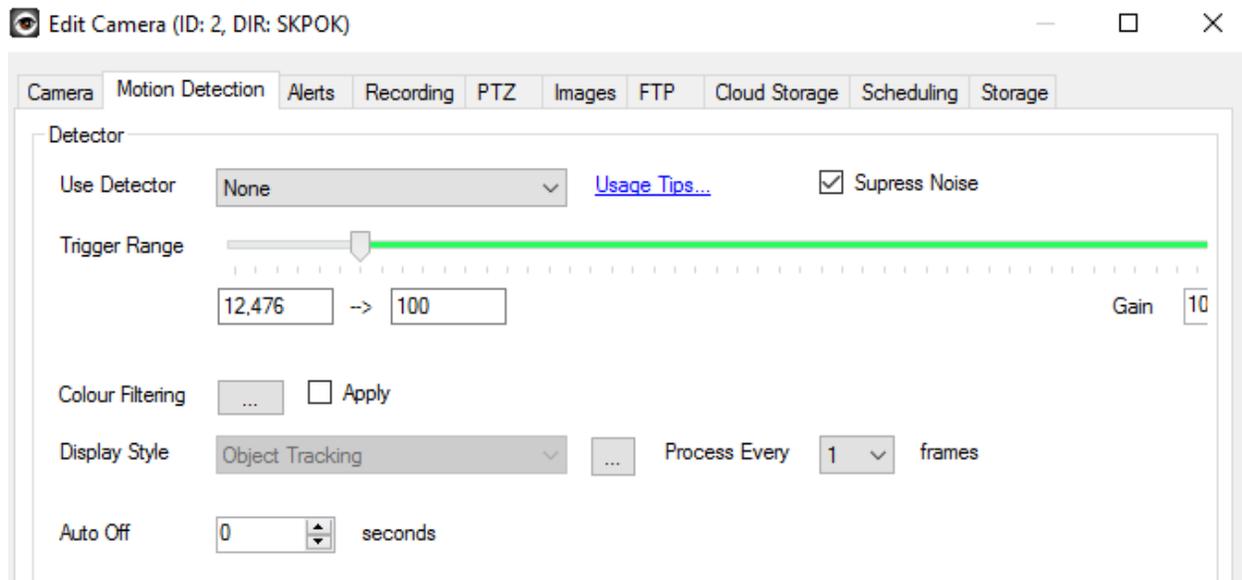
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# Install iSpy

Download iSpyconnect installers here <https://www.ispyconnect.com/>

User guide is here: [www.ispyconnect.com/userguide.aspx](http://www.ispyconnect.com/userguide.aspx)

Add your dedicated Face Analyser camera.

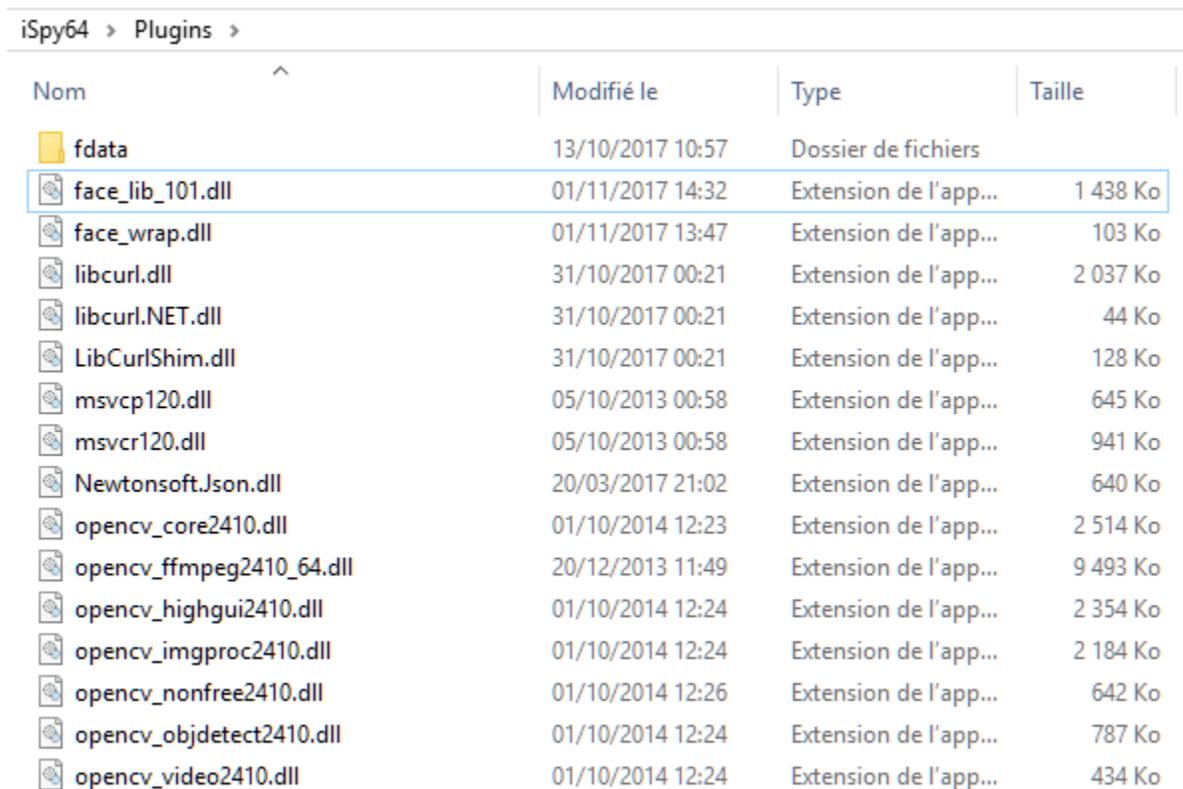


For performance reasons, unselect (None) motion detection and go to the Alerts tab to activate Face Analyser plug-in.

# Install plug-in

Download the plug-in .zip file at [http://www.iplugins.eu/pl\\_face.html](http://www.iplugins.eu/pl_face.html)

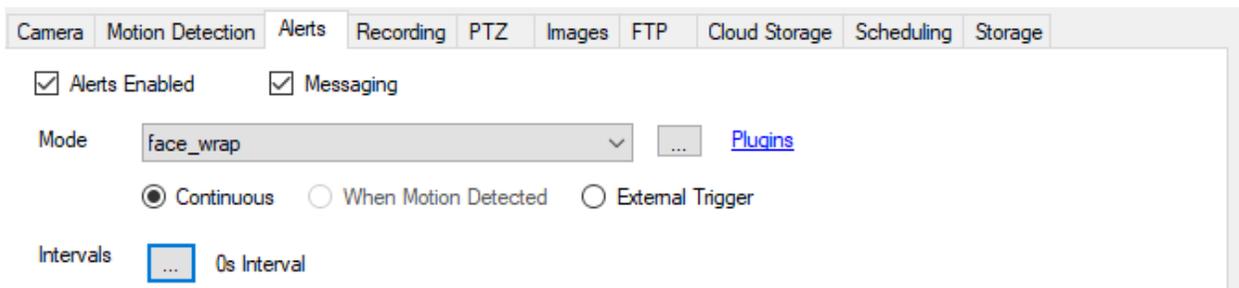
Unzip your files into iSpy plug-in directory (*no sub-directories*)



The screenshot shows the file explorer for the iSpy64 Plugins directory. The files listed are:

Nom	Modifié le	Type	Taille
fdata	13/10/2017 10:57	Dossier de fichiers	
face_lib_101.dll	01/11/2017 14:32	Extension de l'app...	1 438 Ko
face_wrap.dll	01/11/2017 13:47	Extension de l'app...	103 Ko
libcurl.dll	31/10/2017 00:21	Extension de l'app...	2 037 Ko
libcurl.NET.dll	31/10/2017 00:21	Extension de l'app...	44 Ko
LibCurlShim.dll	31/10/2017 00:21	Extension de l'app...	128 Ko
msvc120.dll	05/10/2013 00:58	Extension de l'app...	645 Ko
msvcr120.dll	05/10/2013 00:58	Extension de l'app...	941 Ko
Newtonsoft.Json.dll	20/03/2017 21:02	Extension de l'app...	640 Ko
opencv_core2410.dll	01/10/2014 12:23	Extension de l'app...	2 514 Ko
opencv_ffmpeg2410_64.dll	20/12/2013 11:49	Extension de l'app...	9 493 Ko
opencv_highgui2410.dll	01/10/2014 12:24	Extension de l'app...	2 354 Ko
opencv_imgproc2410.dll	01/10/2014 12:24	Extension de l'app...	2 184 Ko
opencv_nonfree2410.dll	01/10/2014 12:26	Extension de l'app...	642 Ko
opencv_objdetect2410.dll	01/10/2014 12:24	Extension de l'app...	787 Ko
opencv_video2410.dll	01/10/2014 12:24	Extension de l'app...	434 Ko

Launch iSpy again and go to Alerts tab:



Check “Alerts enabled”, Select face\_wrap, then click on the 3-dots button on the right to enter the plug-in configuration form.

There 3 tabs: Detection, Keywords, Alert and License.

Configure

Detection Keywords Alert License

03/11/2017 15:41

Gender	Male	92,6
AgeRange	35	52
Emotions	HAPPY	20,7
Smile	False	97,9
EyesOpen	True	74,0
Eyeglasses	False	100,0
Sunglasses	False	99,6
MouthOpen	False	69,1
Beard	False	100,0
Mustache	False	100,0

Enable face recognition Double click to start drawing the detection area Clear OK

## Set your license

On license tab, please copy/paste your license key.

Configure

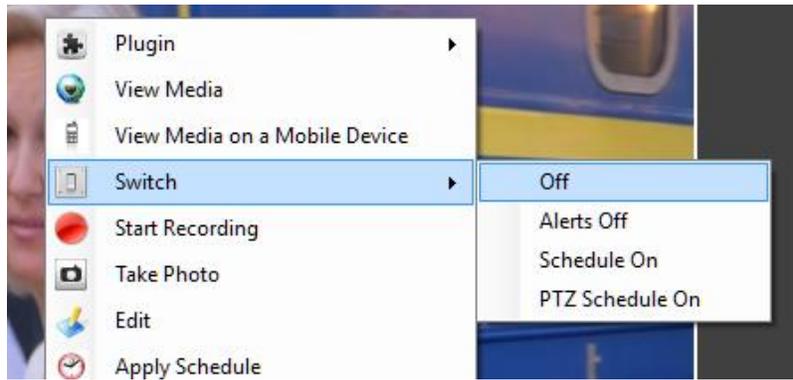
Detection Keywords Alert License

**License Key**

AQFLW GB5YF 2RAFZ QAAQZ

*Switch off/on live frame on iSpy to activate the license  
If you have a green letter L at the right top of your picture, your license is correctly set.  
You must be online.*

When your license key is filled, click OK and switch off / on your iSpy channel:



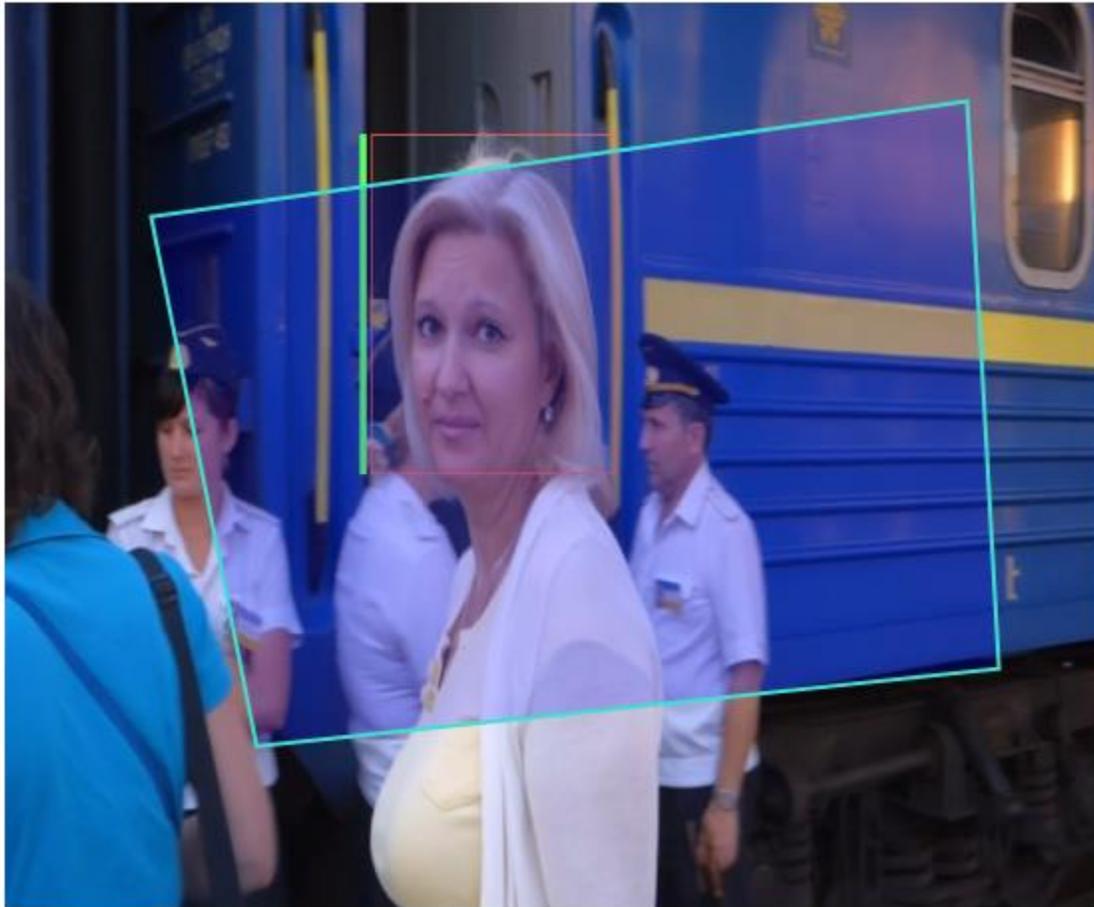
Then switch on, note that you have now a green L at the right top of your live video:



# Configuration

You can draw a **detection** area. Detections will occur in this area only.

Double click to set the first and last polygon vertex.



Enable face recognition    Double click to start drawing the detection area       

Click on Clear to clear the detection area. By default, the detection area is the whole frame.

## Features detection

Beard Eyeglasses EyesOpen Male Female MouthOpen Mustache Smile Sunglasses AgeRangeMin AgeRangeMax Emotions	<input type="checkbox"/> NOT <input type="checkbox"/> AND >> <<	Male AgeRangeMin=21	Male+AgeRangeMin=21
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Default mode is Features detection. Unless you have checked “enable face recognition”, you are in Features detection mode.

In this mode, you can detect all features from the left list above.

To trigger alerts on a given feature, add it to the right list.

Add features of your choice from left to right list, by clicking on >>.

Remove them with <<.

You can as well double click on each feature to add/remove it.

Boolean conditions are not supported yet.

For AgeRangeMin, AgeRangeMax and Emotions, you will need to edit manually their key value in the full feature’s list text box.

In this example, you will trigger an alert when Face analyser detects a man, younger than 21.

Available emotions are HAPPY, SAD, ANGRY, CONFUSED, DISGUSTED, SURPRISED, CALM.

# Face recognition

Enable face recognition

Faces list:

Face recognition is activated if “Enable face recognition” is checked.

As a first step, you would need to detect some faces in order to save (or index) them.

Once you get some recorded faces, enter the name of the detected people, and click on “Index face”. This will send a picture to AWS services, that will be processed to extract and store the facial features on their own.

Then the new indexed face is available in the Faces list.

Select someone in the list if you want to remove it.

Or remove all People with “Delete all” command.

# Vocal alerts

Detection Keywords **Alert** License

Alerts

voice      Audio device: "Haut parleur Ecouteurs Realtek"      Voice style: USEnglish (Ivy)      Speech: \$keyword is coming     

option      Interval (seconds): 10

Select your audio hardware.

Select your language and preferred speaker.

Edit the speech you want generate.

\$keyword will be replaced with detected people name in Face recognition mode or detected features in Features detection mode.

You can set a minimum interval in seconds between 2 speeches.

# Create an AWS account

Go to <https://aws.amazon.com/rekognition/>

Create a new account. You would need a credit card to achieve the subscription.

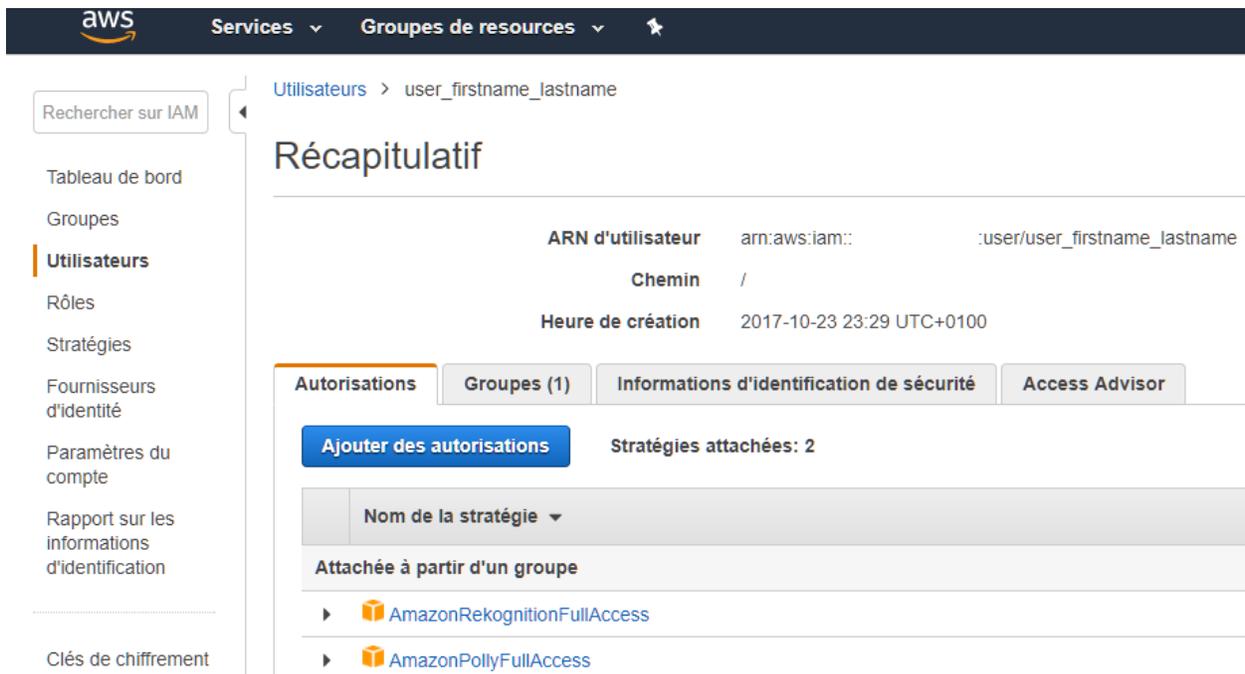
For security reasons, a good practice is to create a sub-account here `gp_admin` with administrator authorizations, that will be used for everyday account management.

And a sub-account for each user, here `user_firstname_lastname`.

<http://docs.aws.amazon.com/general/latest/gr/root-vs-iam.html>



Select `user_firstname_lastname`:



Add **strategies** (authorizations) for this user:

- AmazonRekognitionFullAccess (for faces recognition)
- AmazonPollyFullAccess (for voice synthesis)

You can as well add `user_firstname_lastname` in a group, with attached strategies.

Go to the third tab related to Security information:

The screenshot shows the AWS IAM console interface for a user. At the top, the user's ARN is displayed as `arn:aws:iam::06:iam:user/user_firstname_lastname`, with the account ID `06` highlighted in a red box. Below this, the path is `/` and the creation time is `2017-10-23 23:29 UTC+0100`. The main content area has four tabs: **Autorisations**, **Groupes (1)**, **Informations d'identification de sécurité** (which is selected and highlighted with an orange border), and **Access Advisor**. Under the selected tab, there is a section for **Informations d'identification de connexion** with the following details: **Mot de passe de la console** (Activated, with a link to [Gérer le mot de passe](#)), **lien de connexion de la console** (`https://068084116883.signin.aws.amazon.com/console`), **Dernière connexion** (`2017-11-17 09:39 UTC+0100`), **Appareil MFA attribué** (None), and **Certificats de signature** (None). Below this is a section for **Clés d'accès** with a sub-header and a paragraph explaining their use. A button labeled **Créez une clé d'accès** is highlighted with a red box. At the bottom, a table lists the access keys:

ID de clé d'accès	Créé	Dernière utilisation
AK	2017-10-23 23:29 UTC+0100	N/A

**Generate an access key** (i.e 1 public key and 1 secret key) for user `user_firstname_lastname`

**Enter your credentials in `face_cr.xml`** located in plug-in directory:

```
<publicKey>AK...</publicKey>
```

```
<secreteKey>rV..</secreteKey>
```

```
<region>us-east-2</region> // here we are in Ohio
```



<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html#concepts-available-regions>

### **Re-start iSpy.**

### **Extra notes**

If you want to sign-in later in your new *user\_firstname\_lastname* account, you will need to activate your password for this user, and remember:

- Your account ID, starting with o6 here
- Your user name: *user\_firstname\_lastname*
- Your password

If you want to sign-in with your root access, you will need:

- Your email address attached to your AWS account
- Password attached to this email address