Country Templates

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Introduction

The Photomatic software supports you in making ID photos. There are many different kinds of ID photos: passport photos, ID photos for Visa, ID photos you need when applying for a license such as a taxi driver's license, hunting license etc etc.
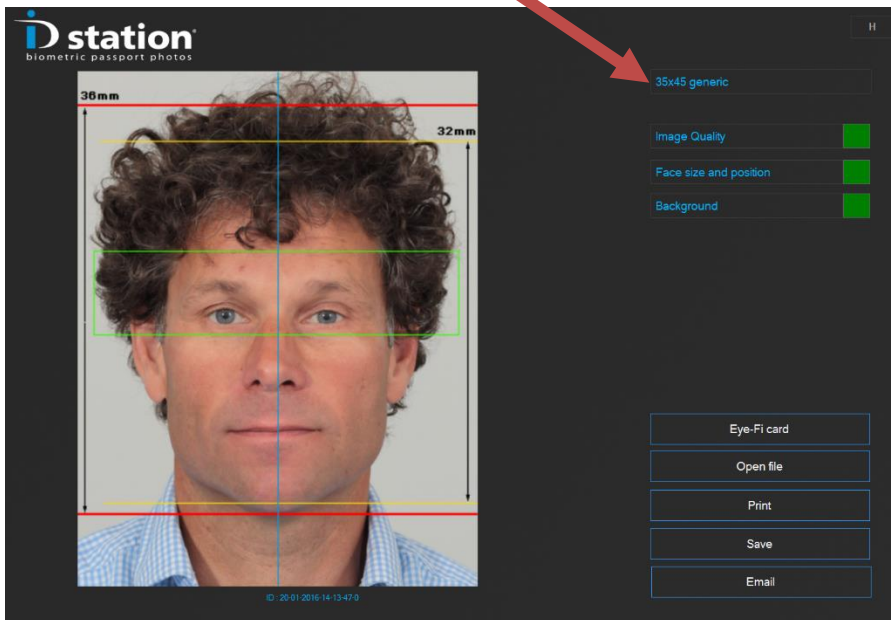
The *requirements* for an ID photo or passport photo are about format, specific face size and position, preferred background color and many other requirements to do with quality and lighting conditions. All these requirements are specified in one single file, called a *country template*. They are called country templates because they allow you to make a passport photo for a specific country and application. For example the file size of a digital passport photo is also related to the country template!

Country templates are very important for Photomatic software and products using the Photomatic software such as ID station, SelfieD and fastID.

In this manual we will explain how country templates are used, edited and how you can use country templates to configure you system to do exactly what you need it to do.

Default Template

Every system has a default country template. This is the template that is loaded when the system is started. You will see the name of the default country template on the country template button in the main window of Photomatic software:

In the example above the default country template is "35x45 generic". This indicates that the photo format is 35:45 (usually for passport photos that are 35mm x 45mm in size when printed) and not for one particular country but general purpose.

The default country template is selected during the installation process of the Photomatic software but can be changed at any time using the setup wizard (which is part of the system tools).

Selecting another country template

If you need to take passport photos for e.g. Germany than you would need to select that country template instead of the default template. For this click on the country template button. A selection window will open:

To select the template for making passport photos for a German passport just click on the "German Passport" button. Now the Photomatic software will process the current picture again, but now according to the specifications for a German Passport photo.

After the Photomatic software has finished processing the picture it will check the result if it matches the new requirements. It may very well be that a picture is fine for one country, but not for another. This can be because the face size is not correct, or the background color is not OK. German Passport photos usually have a light grey background, while passport photo for the US need a white background. For more information on background colors please read the How to Use the Background tool.

Template functions

A country template defines:

1. **The format of the ID photo**: Some ID photos are 35x45mm (most European countries), others are 51x51mm (2 inch by 2 inch used in the USA) and for example Canada uses 50x70mm. But there are many other formats.
2. **The size of the ID photo**: The size is not the same as the format. A photo may have a format of 51x51 but may be printed 38x38mm (Argentina).
3. **Requirements on face size and position in the ID photo**: This is an important part of the country template as it defines where the face will be positioned and the size of the face. The face size is usually specified as a percentage of the total size of the ID photo. Also, usually the face size and position is specified as a "minimum" and "maximum". For example the required face size for a France passport photo is specified to be at least 64% but not larger than 80% of the total ID photo size. To check if the ID photo is properly cropped and aligned an overlay will be drawn over the ID photo. The overlay is used to check the face size and position. Every country template has an overlay, but
4. **Quality requirements**: Most passport photos need to comply to the official ICAO specifications (International Civil Aviation Organization). Still, some countries have additional or some distinct requirements. Every country template has its own set requirements. And some ID photo application have not that many requirements, such as a taxi driver's license. The template for this ID photo will have lower or less requirements than a template for an official passport photo or for a Visa.
5. **Background requirements**: Some countries prefer a white background, others a gray or blue background. In a country template you specify the preferred background color as well as the min and max color that still is acceptable.
6. **Default print template**: This is the print template that will be used when you select to print the ID photos. Photomatic software usually has several print templates for every photo format and size. The default print template is the preview that you will see after clicking on the Print button.
7. **Requirements for saving the ID photo**: Some ID photos do not need to be printed but should be saved because the customer needs to upload it or needs to hand over a digital copy (JPEG file). Some applications have certain requirements on the size (in pixels) or in kBytes. A country template has a default save template in which these requirements are specified.

8. **Requirements for emailing the ID photo**: This is similar to saving the ID photo, but now you can email the ID photo directly to the customer. Settings such as size and resolution can be preset but also a default email address can be used. In case all ID photos should be sent to the same inbox (company card). Also the email template holds options for how the ID photo is to be emailed (account settings, usernames etc).

Print templates, Save templates and Email templates are similar to country templates but serve a different purpose. Please refer to other manuals for more info on them.

Furthermore you can use the country template to <u>start a special application</u> that will process the ID photo further after it has been processed and checked by the Photomatic software. This will be described in a following section.

First we'll have a look at the Photomatic workflow to see how it is controlled by a country template.
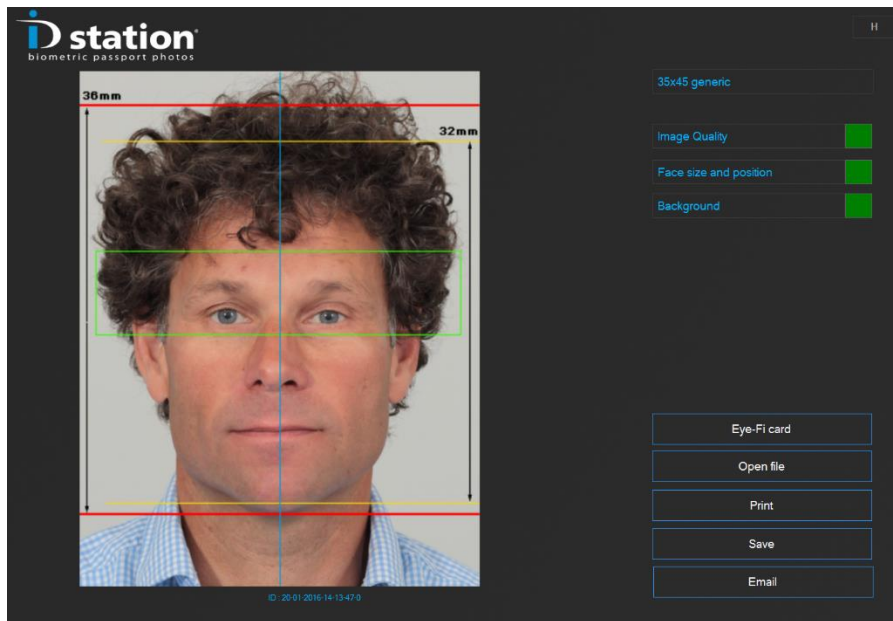
Workflow

When I open a file the Photomatic software will read it from disc and will start processing it. This processing is fully controlled by the country template! This is how it works:
First the Photomatic software will check if the file needs to be processed automatically. If not, it will just show it. (the free-style mode). However, nearly all country templates do require auto-processing. So the Photomatic software will check the country template for : required format, size and face size position. This information is used to automatically generate an ID photo of correct format, size and in which the face is perfectly cropped and positioned. For this the Photomatic software contains a biometric engine that uses biometric properties of the face inside the input image. After the ID photo is automatically processed it is shown on screen. An overlay is drawn on top of it so you can check if the face size and position is in fact 100%. The name of the overlay file is read from the country template.

Then the Photomatic software continues which the quality check procedure. It will check the ID photo on:
1. image quality (does the ID photo comply to the official ICAO specifications for example)
2. Face size and position (did the auto-processing result in a acceptable ID photo)
3. Background (is the background color within the range specified in the country template and are there no shadows or objects visible in the background)
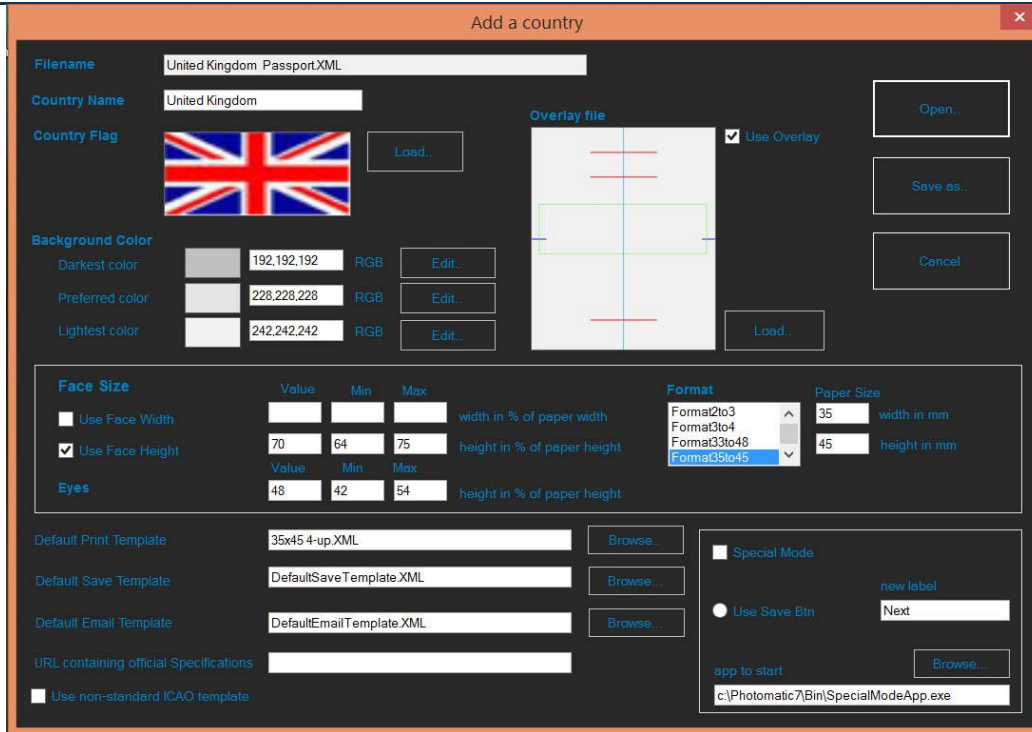
The results of the checks is shown on screen too:

In the above example the input file is automatically processed into a *35x45 generic* ID photo. The ID photo is displayed with an overlay. The min and max size of the face is shown in the overlay. (min 32mm max 36mm)

The image quality is accepted, as the Face size and position. The background is acceptable too.
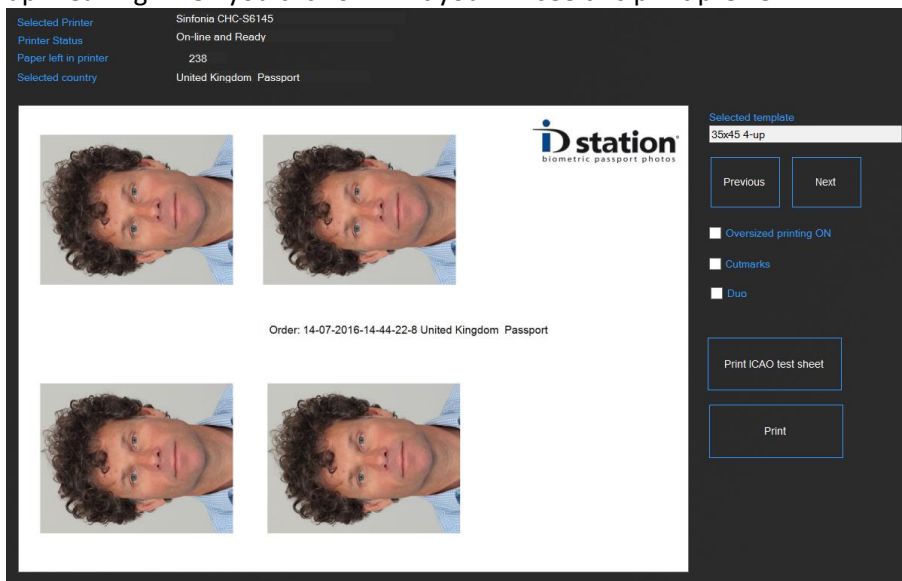
Create your own template

It's very easy to create your own country template. There is a tool which is part of the Photomatic system tools: The country template tool.

Start the tool (go to options, tools and click on the button). Open an existing template by clicking on Open. You will be redirected to the folder containing all the country templates. For example select the "United Kingdom Passport" template:
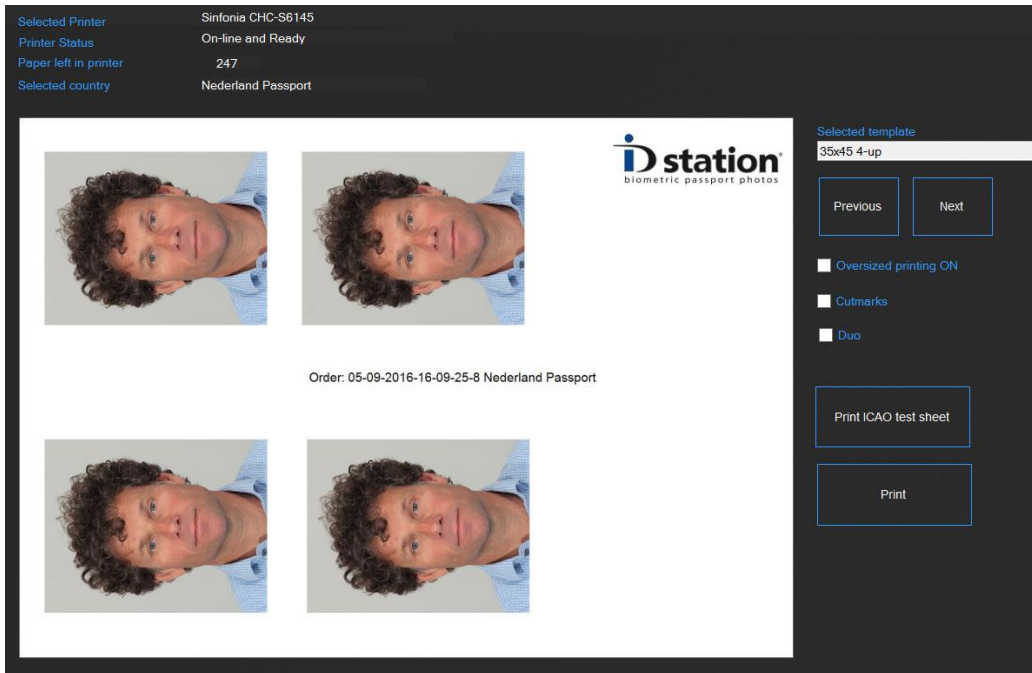
This template is made to take passport photos that can be used when applying for a United Kingdom passport. All specific requirements for such passport photos are in this template. Min and max face size and preferred face (eye) position, preferred background color et cetera.

The UK passport does not impose requirements for upload or emailing the ID photo so there are no specific templates for saving and emailing. The default print template is 4-up meaning when you click on Print you will see this print preview:
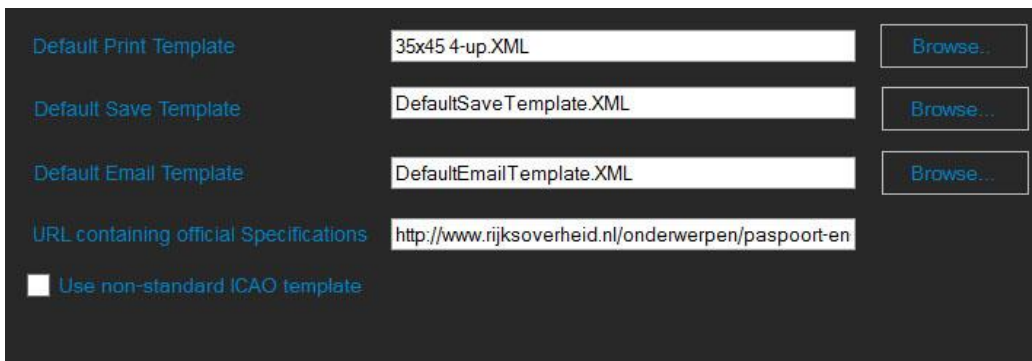
Print, Save and Email defaults

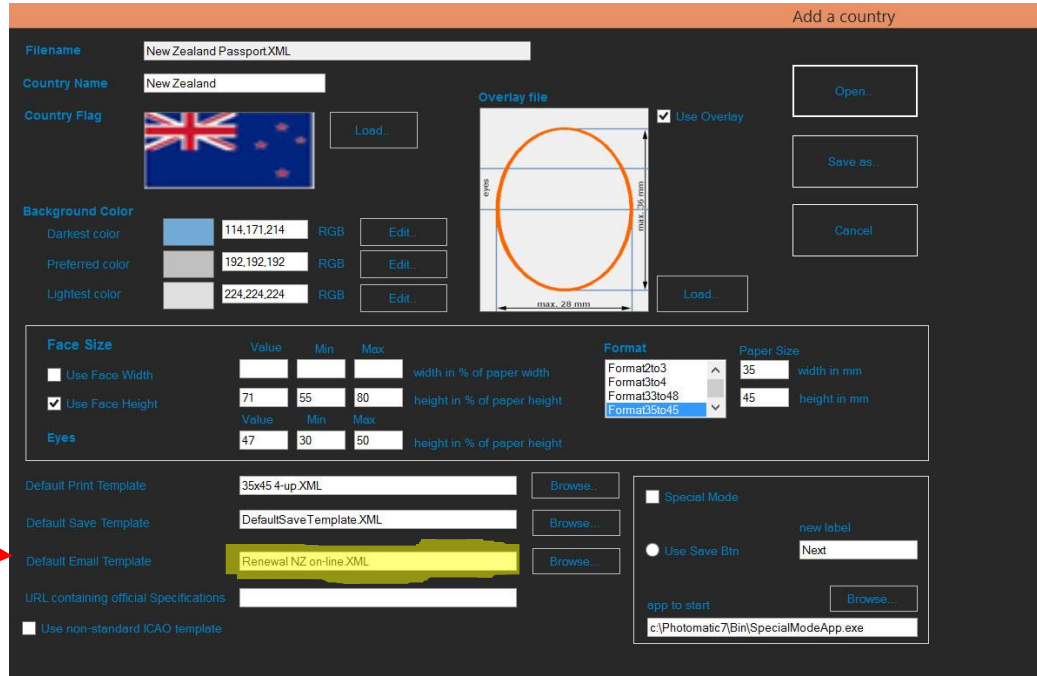If you click on "Print", the Photomatic software will show you the Print Window. See below:

The Print Window will show you the **default** print template for the selected country. In the example above the print template is called "34x45 4 up". So each country template has a default option for printing, saving and emailing! You can change these in the country template:
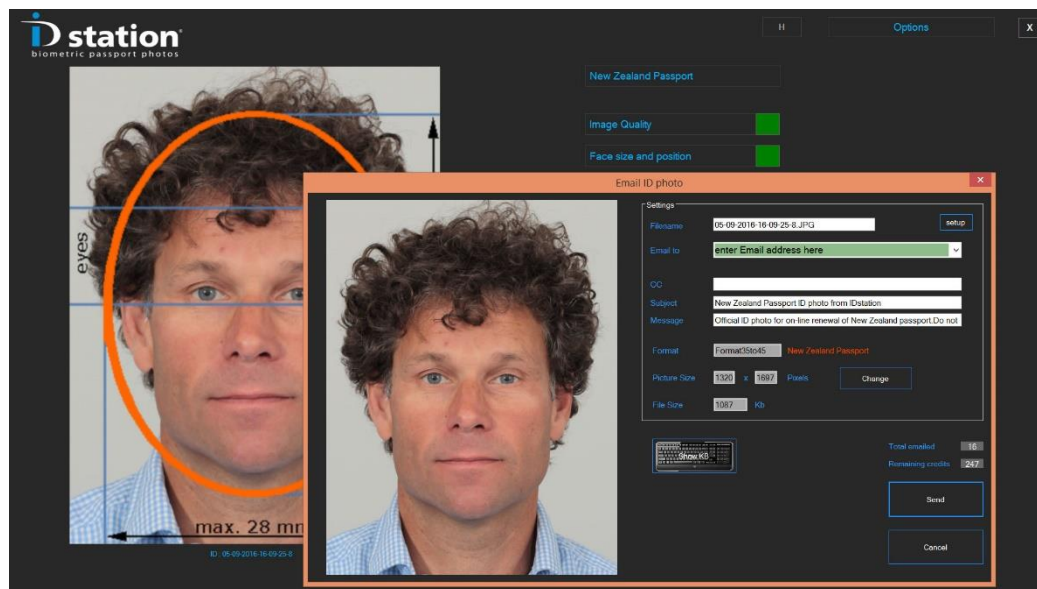

Above you see the default templates of the "Nederland Passport" country template. The default print template is "35x45 4up.xml" as we have seen on the top of this page. To change this just click on "Browse" next to the "35x45 4up.XML" field and you can select another print template. The same goes for Saving and Emailing.

It is very important to understand the consequences of these default templates. For example the "New Zealand Passport" country template requires an Email template

that is very specific. In New Zealand passport photos are mostly uploaded and the requirements for the digital passport photos for New Zealand are strict and deviate quite a bit from other countries. Therefore the default Email template of the "New Zealand Passport" template has its own email template:

When you have taken a picture and processed it for "New Zealand Passport" and click on Email you will see:

The Email function has prepared a JPEG file following the requirements in the "Renewal NZ on-line.XML" email template. You only need to enter the correct email
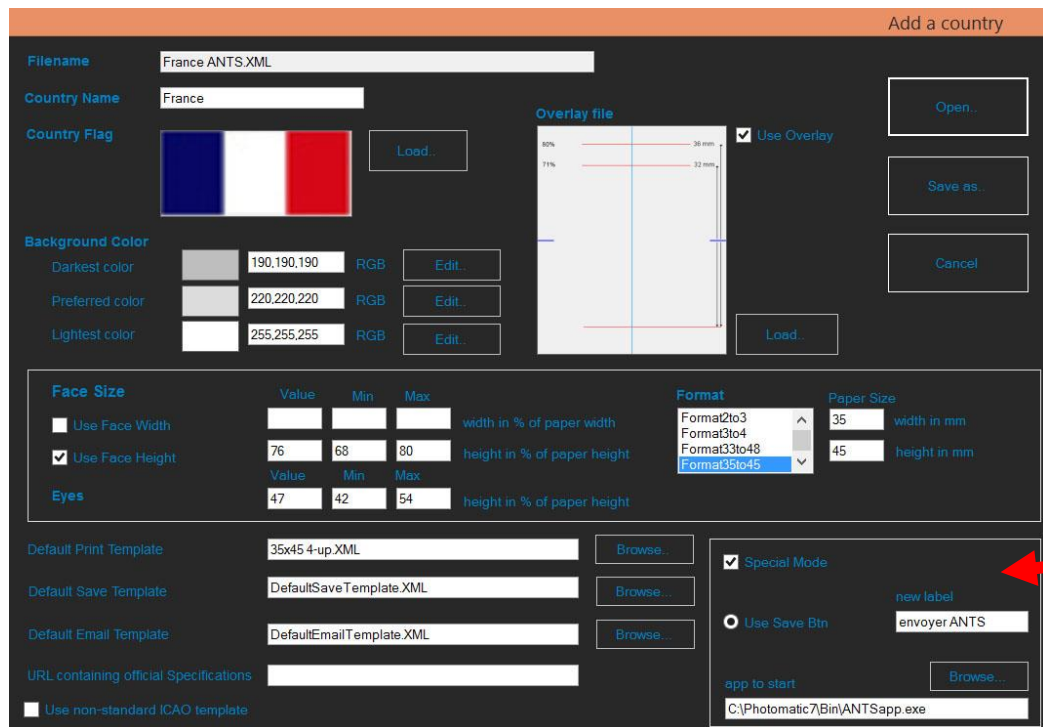
address and the digital passport photo is ready to be sent. File size and image dimension has been prepared in order for the JPEG file to be used for an on-line application (renewal for example) of a passport.

Any country that has specific requirements for its digital passport photos can be given its own email and save template so that when the user clicks on "Email" or "Save" the system will prepare the correct JPEG file. To create your own Email and Save templates please use the special tools that are inside the "Tools" menu of the "Options" in the Photomatic software.

Finally, it may be necessary to do something special with a digital ID photo. For example in France there is a new system for the renewal of a driver's license. To renew your driver's license you should go on-line and upload an ID photo and signature. In return you will get a unique ID that you need to take with you when go to the city hall. So instead of bringing a new set of (printed) ID photos you upload them along with a signature.

To allow such a special task to be executed after taking the photo and processing it the country template allows you to change the workflow and start a completely new application after the JPEG file has been created. Below you will see this special country template called "France ANTS.XML".

This country template will process a capture image and afterwards it will show only the Save button (and rename it to "envoyer ANTS"). When the user clicks on that button a new application will be started, called "c:\Photomatic7\Bin\ANTSapp.exe".

This sophisticated feature opens a whole new range of possibilities!

Please contact paul.visser@photomatic.nl if you need help in developing similar applications.