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Publishing pictures from EYE-02 camera on your website

EYE-02 GSM Security Camera - Application note

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2   Version History

Version	Date	Change Description
03.A	10.8.2012	Implementation of secure web camera, shorter link for publishing pictures

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3 Introduction

Security camera EYE-02 treats, as a standard, all records made as confidential. It enables access to the records to authorized persons only and it guards the records from the glimpse of those who are not intended to see them. However, there is a number of situations where you wish to publish the current pictures. Do you want to show your clients on your website the current state of construction site, free parking lots in front of your shop, traffic situation, weather or the length of a queue? We will offer you simple solution in this application note.

The proposed solution uses the JabloTool Application Web Camera. This is a service run by the company Jablocom. To put it simply, reports which you define will be handed over by your camera right at the moment when they become to exist directly to our server. The pictures will be safely stored here. The Web Camera interface will then enable you to insert these pictures into your web pages or applications via provided URL link. Web Camera is one of JabloTool applications. You can find more information on all JabloTool Applications on www.jablotool.com/applications.

Please note that publishing of camera pictures can be regulated by national legislation. Make sure you do not breach the law of your country.

4 Activation of the Web Camera application

First, it is necessary to activate Access & Back-up application which is a prerequisite for the described solution. Once this service has been activated, your camera will begin to send reports with pictures as you define to our server. To do so, the camera will use data connection, so we recommend considering the use of suitable data tariff from your GSM operator (because data transfers are usually paid). The service Access & Back-up is provided for a small monthly fee and it requires camera firmware 2.0 or higher. Application Web Camera is provided for free.
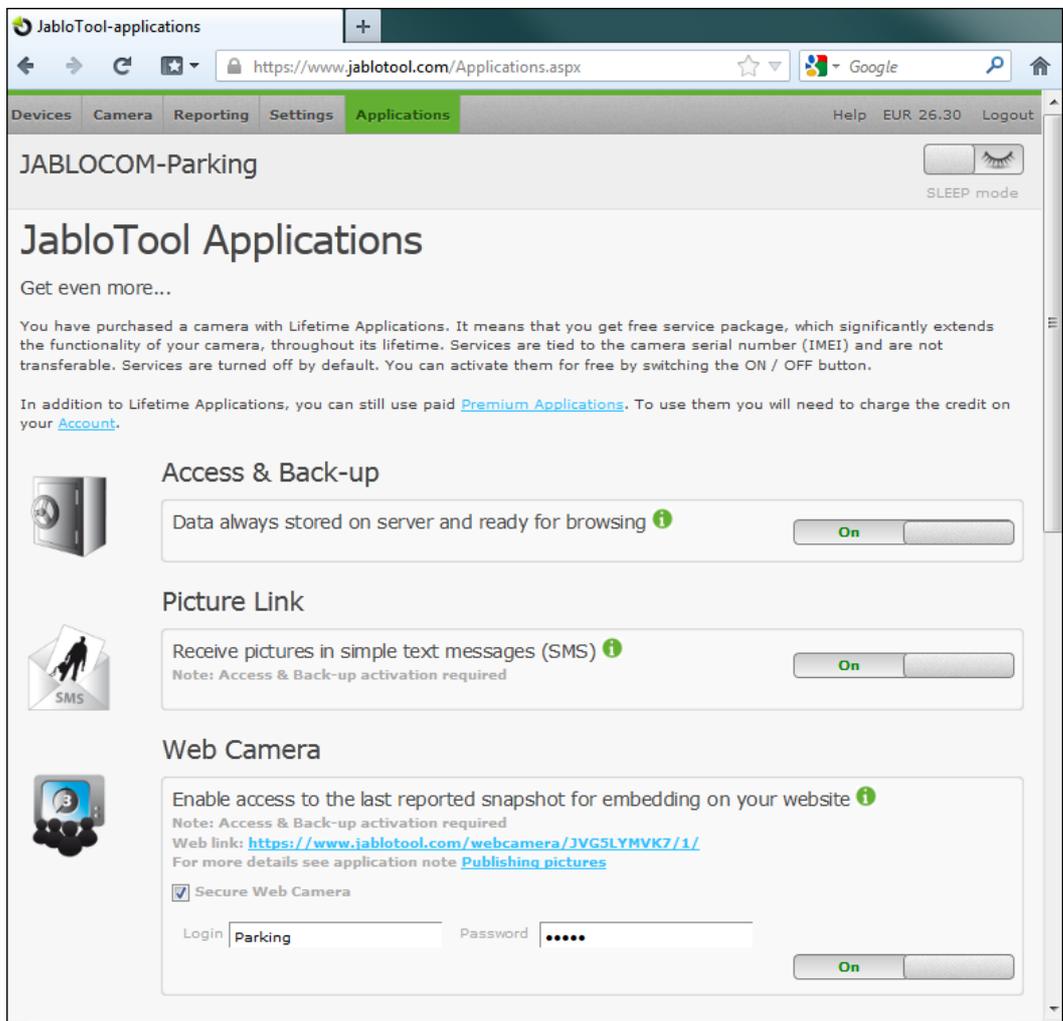
Picture 1: Screenshot from JabloTool Web showing applications Access & Back-up and Web Camera

The activation of the Access & Back-up service and Web Camera service can be done via the tool „JabloTool Web". Please, do the following steps:

1. Open the address http://www.jablotool.com in your web browser and log in to your user account.
   If you do not have an account yet, create a new one. It is for free. Press the button „New user" and follow the instructions.

2. In the Device list, choose the camera the pictures of which you wish to publish. With this camera, click on the button „Connect". The process of connecting can last, depending on the current workload of the camera and the strength of GSM signal, even several minutes. Please wait.
   If you do not have your camera registered in your JabloTool Web account yet, add it first by pressing the button „New camera".

3. Open the bookmark „Applications" and switch the application „Access & Back-up" to „ON" and confirm that you wish to activate the application. Access & Back-up will now receive and store pictures from you camera.

4. Now, switch the application Web Camera to „ON". Web Camera enables publishing of stored pictures. Under the field, you will find URL link to pictures. Please copy this now since we will use it in further steps. Click on the button „Save changes". You can protect the published pictures by your user name and password. Simply tick the option "Secure Web Camera" and fill in any user name and any password. Click on the button „Save changes". Remember your login, we will use it later.

Now, the setting of the applications Access & Back-up and Web Camera is finished. Let us go to your own website.

5   Inserting current pictures into your web

Now, we will work with the URL picture link which we saved in the previous chapter (in step 4). Your link will look like approximately as follows:

> https://www.jablotool.com/webcamera/JVG5LYMVK7/1/

The link contains three variable parts:

https://	It is secured communication protocol so no other person can wiretap the flow of data.
	You can also use an open protocol http:// simply by deleting the "s" letter. But we do not recommend it - even when you protect your pictures by the Secure Web Camera your login name and password will be sent without encryption.
JVG5LYMVK7/	It is a hash (sequence of characters) which uniquely identifies your camera. By this hash, the server will recognize from which account you request the picture.
1/	It is index number. It stands for the position of the picture which you request. Number 1 marks the most recent picture. So anytime the Web Camera will publish the most recent picture which arrived to the Access & Back-up service. Number 2 indicates the previous picture, and so on.
	As you can see we can easily use this parameter to go through pictures.

If you wish to insert always the newest picture available, the HTML code for your website will be:

```
<img src="https://www.jablotool.com/webcamera/JVG5LYMVK7/1/" name="eye02photo">
```

If you wish to insert two newest pictures available, your HTML code for your website will look the following way. Please note that particular links differ only in their id parameter.

```
<img src="https://www.jablotool.com/webcamera/JVG5LYMVK7/1/" name="eye02photo1">
<img src="https://www.jablotool.com/webcamera/JVG5LYMVK7/2/" name="eye02photo2">
```

For more advanced tasks, you can also use scripts on your website. For example, the following code in the JavaScript language will provide that the last ten pictures appear cyclically on the website. You will find example of file with HTML code in the file Web_camera_Example.html attached to this application note.

```
<script type="text/javascript">
    var images_count = 10;      // How many most recent images will be shown
    var interval = 1000;        // How long will be each picture shown? (in ms)
    var images = new Array();
    var index = 0;

// Preload images
    function load(){
for (i=0; i < images_count; i++) {
        images[i] = new Image();
        images[i].src = "https://www.jablotool.com/webcamera/JVG5LYMVK7/" +
((images_count - i) + 1);
}
show (images);
}
```

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```
// Loop preloaded images
    function show(images) {
document.images['eye02photo'].src = images[index].src;
index = (index + 1) % images_count;
timeout = (index == 0) ? interval * 5 : interval;
window.setTimeout('show(images)', timeout);
}

load();
</script>
```

Now you know how to implement images from Web Camera into your website. It is time to see the pictures. Simply open your browser and go to your website. You will see the pictures. If you activated the Secure Web Camera (Chapter 4, point 4) the browser will prompt you to enter your user name and password first.
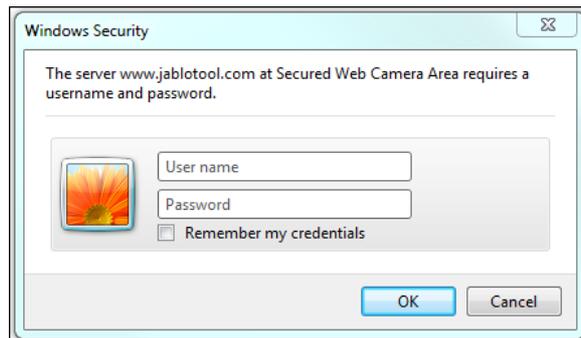
Picture 2: Web browser asks for your user name and password

6 Setting of messages sent from the camera

At this moment, you can already see recent camera pictures in your website. Now you have to consider which pictures you wish to publish. All of them? Some of them? Or do you wish to update the picture for example twice a day only?

A model situation will show you the way of setting the camera so that it meets your expectations. The principle of selecting the published pictures rests in the setting of reports which the camera will send to the Access & Back-up service.

6.1 Case study: Regular reports

Assignment: You use your camera as a security and monitoring device. During the day, the camera is in „SLEEP" mode, in the evening and at night it guards in the „WATCH" mode. You have set camera, its detectors and your reports (MMS, e-mail) and you are satisfied with it.

Now you wish to have on your website a regularly updated picture showing the progress on your construction site. Let say new picture every four hours is what you need. You are not interested in receiving these "web update" pictures on you mobile phone and in your e-mail.

Solution: This example can help you in the majority of situations. We will demonstrate the way of setting the camera using JabloTool Web. Now we assume that we are logged into our JabloTool Web account and connected with the camera (procedure described in points 1 and 2 in chapter "Activation of the Web Camera application").

1. Choose the Reporting tab. Here, you will find the block marked „Periodical report". In the item „Period", set the time how often the picture should be sent. On other words, how often you wish to update this picture on your web. In our case we choose „Once in 4 hour(s)". In the item „Time" set the required time when the reporting should begin. We enter for example 16:00. So, the picture will be updated every day at 16:00, 20:00, 00:00, 04:00, 08:00 and 12:00.
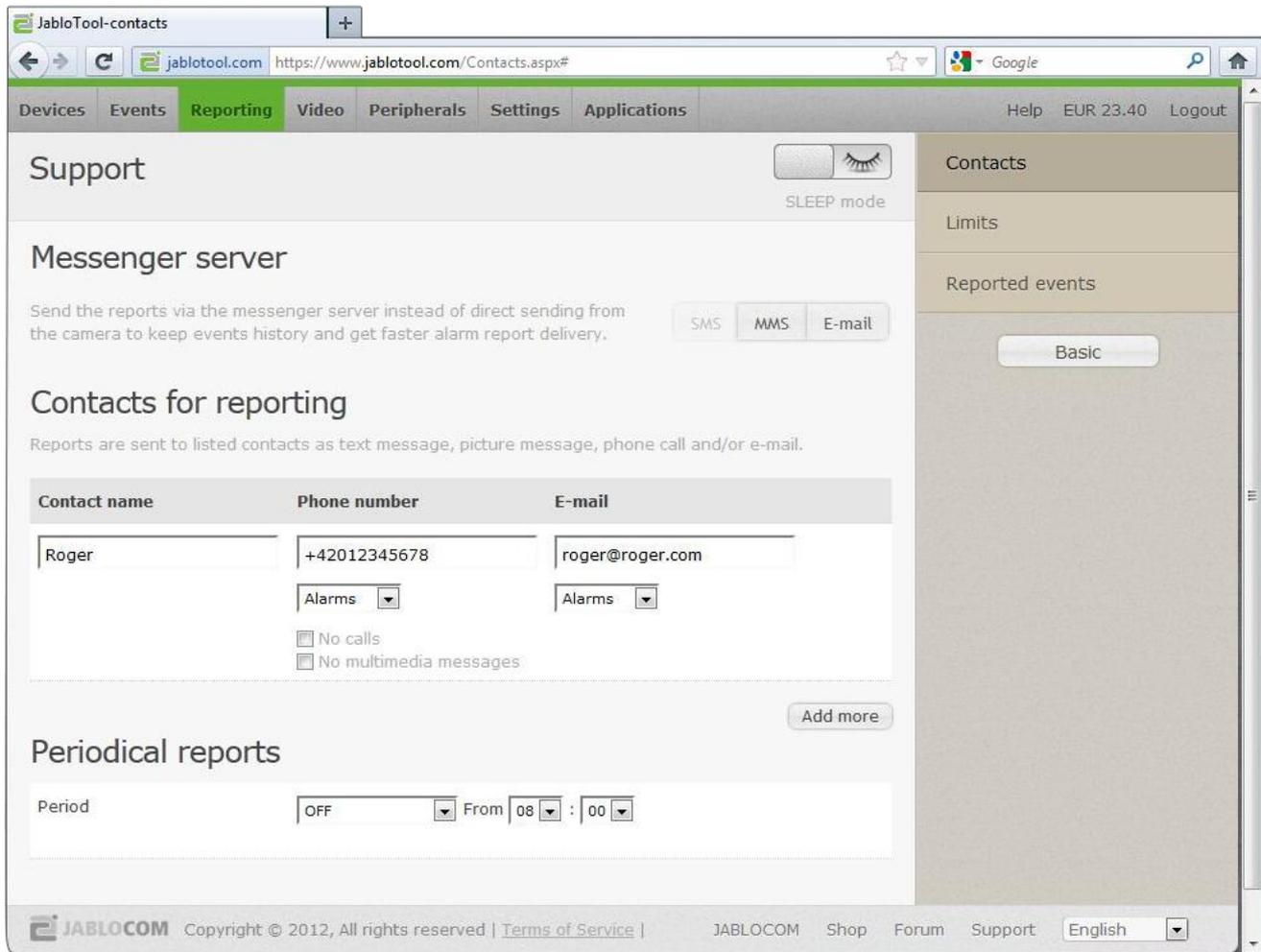
Picture 3: Screenshot from JabloTool Web showing Contacts in tab Reporting

2. As you are still on the Reporting tab in JabloTool, choose Advanced, Reported events and choose Others. A list of lines will unfold. On the last line you will see Periodical report. You select here how you wish to be informed about periodical reports. If you wish to send the reports only to the Access & Back-up you will unselect all the fields on the line Periodical report (see Picture 4 below). Periodical reports will now be sent to Access & Back-up but you will not be disturbed by them in your phone and e-mail box.

3. Now click on „Save changes". This makes the settings for our solution finished.
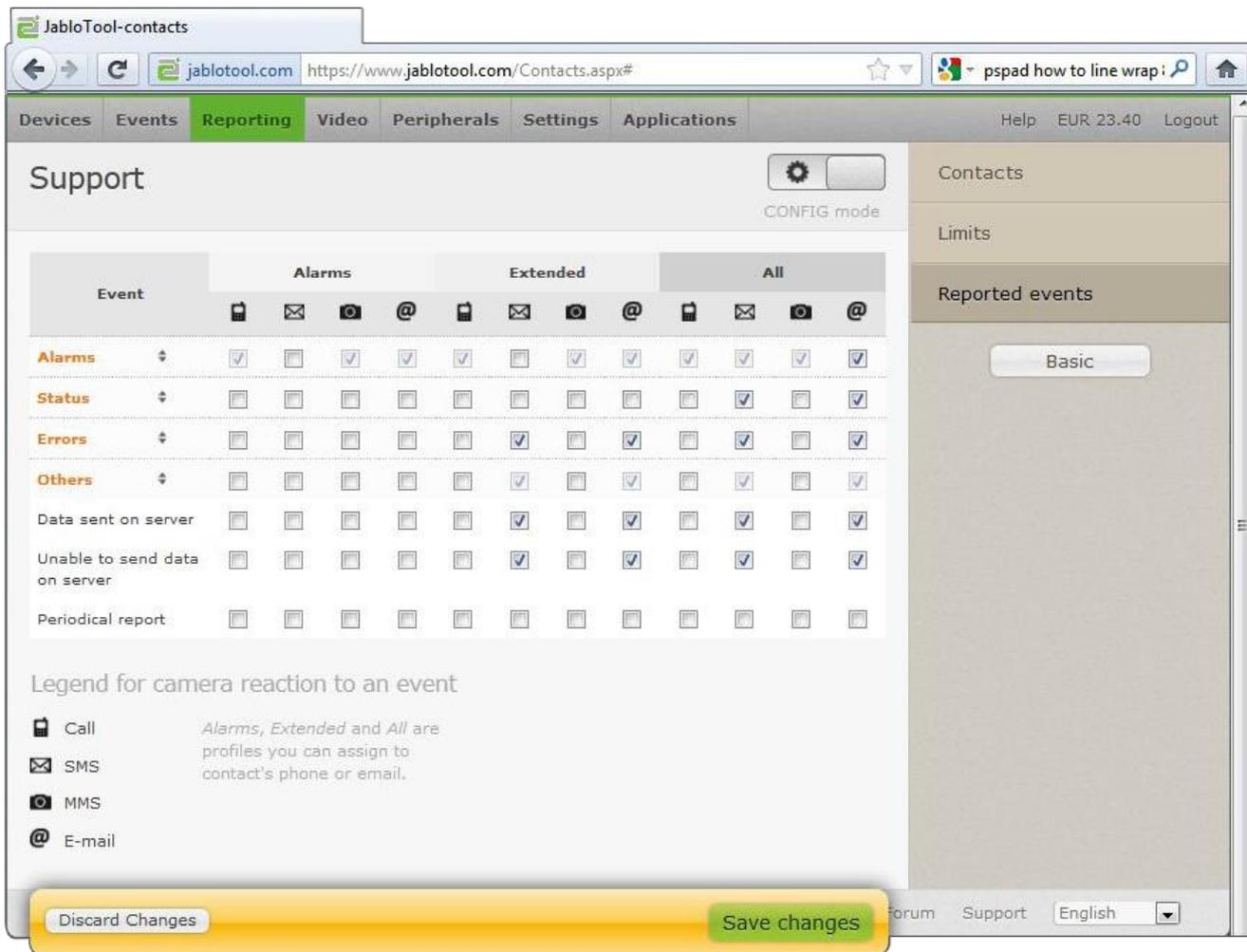
Picture 4: Screenshot from JabloTool Web showing Periodical report in tab Reporting

Your camera will now be publishing pictures from periodical reports every 4 hours. Camera will also be publishing pictures from alarms because these pictures will be also sent to Access & Back-up.