

**USER'S GUIDE**  
**SignToLogin.com service**

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## General

To use the SignToLogin.com service you need a Wacom digital tablet or a tablet computer run under iOS (iPad) or Android OS (Samsung, Asus, Acer, Prestigio, Digma, 3Q and others). The list of basic compatible devices is given in the Table 1.

Table 1. A list of SignToLogin service compatible devices

<b>Pressure sensitive SignToLogin compatible devices (recommended)</b>		
<b>Model</b>	<b>Device ID</b>	<b>Driver version</b>
Bamboo	CTT-470, CTH-470, CTH-670	5.2.5 and higher
Volito, Volito2, Graphire2, Graphire3, Graphire4, Intuos4, Intuos3, Intuos2, Intuos1	Any	Any
<b>Non-pressure sensitive SignToLogin compatible devices (recommended)</b>		
<b>Model</b>	<b>Browser</b>	
iPad, iPad 2, iPad 3	Safari 3.1 and higher, iOS 3.0 and higher	
<b>Pressure sensitive SignToLogin partially compatible devices</b>		
Bamboo (other device IDs), Cintiq 12WX, Cintiq 21UX, Cintiq 22HD, Cintiq 24HD touch, Cintiq 18SX, Cintiq 15X, Cintiq 17SX, PL-720, PL-521, PL-900 and PL-2200		
<b>Non-pressure sensitive SignToLogin partially compatible devices</b>		
Tablet computers run under Android OS 2.1 and higher and digital tablets of other manufactures		

If you want to use a digital tablet as a signature input device it is necessary to have a tablet driver installed and a special plugin for your Web browser developed by Wacom that is available at

[www.wacomeng.com/web/fbWTPInstall.zip](http://www.wacomeng.com/web/fbWTPInstall.zip)

(for MS Windows browsers)

or:

[www.wacomeng.com/web/Wacom%20Mac%20Plug-in%20Installer.zip](http://www.wacomeng.com/web/Wacom%20Mac%20Plug-in%20Installer.zip)

(for Mac OS X browsers).

If this plugin is installed into your computer the signature recognition accuracy is higher as an additional characteristic – stylus pressure while writing - is processed by the SignToLogin algorithm.

SignToLogin security functions may be integrated into any Web site using our API. The signature writing module requires HTML and Javascript support (currently available in all wide spread browsers including IExplorer 9.0, Firefox, Google Chrome, Opera, Safari). To integrate SignToLogin into your Web site it is necessary your IT specialist to register your company at signtologin.com Web site and to add the API code to your company Web site code.

To integrate the service with other information systems (not Web sites) we propose individual solutions. We can develop a module for signature input compatible with your software.

## Part 1. User's Registration

To register a new user click the Registration link at <http://signtologin.com/>.

You will see the registration form. The registration process consists of 3 steps.

### **Step 1. Profile information entry fields (pic. 1.1)**

At this step you are asked to input the user's email, the user's name (Login), a special code from the picture (this code is to ensure the registration process is being performed by a human being).

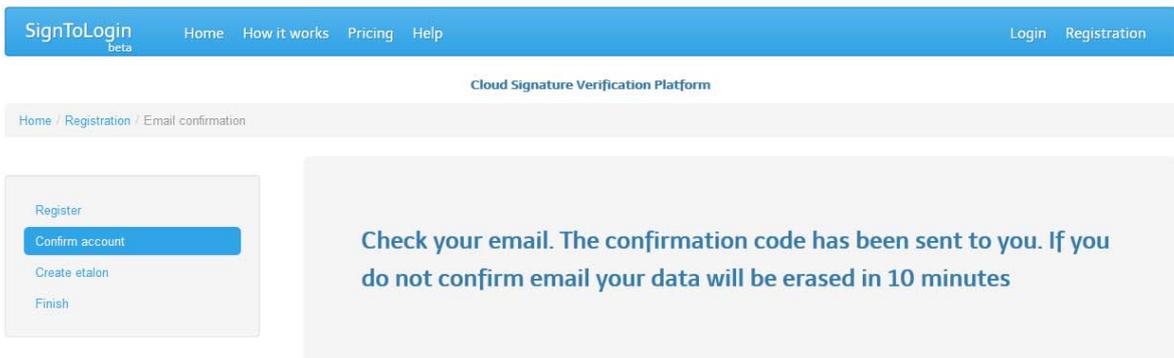
The screenshot shows the registration form for SignToLogin. The form is titled "Registration" and is part of the "Cloud Signature Verification Platform". It features a navigation bar with "SignToLogin beta", "Home", "How it works", "Pricing", "Help", "Login", and "Registration". The registration form includes fields for "Email \*", "Name \*", and "Verification Code \*". The "Email" field contains "new.user.of.the.system@gmail.com", the "Name" field contains "Alex", and the "Verification Code" field contains "newvded". A "Get a new code" link is visible next to the verification code field. A "Register" button is located at the bottom of the form. A sidebar on the left contains links for "Register", "Confirm your account", "Create a sample", and "Finish".

*Picture 1.1. Registration step 1*

Having filled in all fields you have to press the *Register* button. If any field is filled in with errors you will see an error message under this field. If everything is correct the service will send you an email with a link to confirm your registration and you will see the window shown at the picture 1.2. The link is active for 10 minutes.

### **Step 2. Registration confirmation (pic. 1.2)**

To confirm your registration please check your email account and open the email from the signtologin.com service (pic. 1.3). The email contains a link to confirm the registration (pic. 1.4). Click the link to go to the Step 3 of the registration.



*Picture 1.2. Registration step 2*



*Picture 1.3. Registration step 2. Email title*

Welcome to SIGNTOLOGIN!

 **Signtologin** noreply@signtologin.com

Welcome to SIGNTOLOGIN!

Thank you very much for selecting SIGNTOLOGIN as a tool for verifying computer users!

To activate your account please go to the following link by clicking on it or by copying and pasting it in the address line of the Internet browser window:  
<http://signtologin.com/user/emailConfirmation/160?code=6aec0371d24a71f86969b817885e3c32>

Regards,  
SIGNTOLOGIN Team  
SIGNTOLOGIN – a tool for verifying users by writing signature dynamics

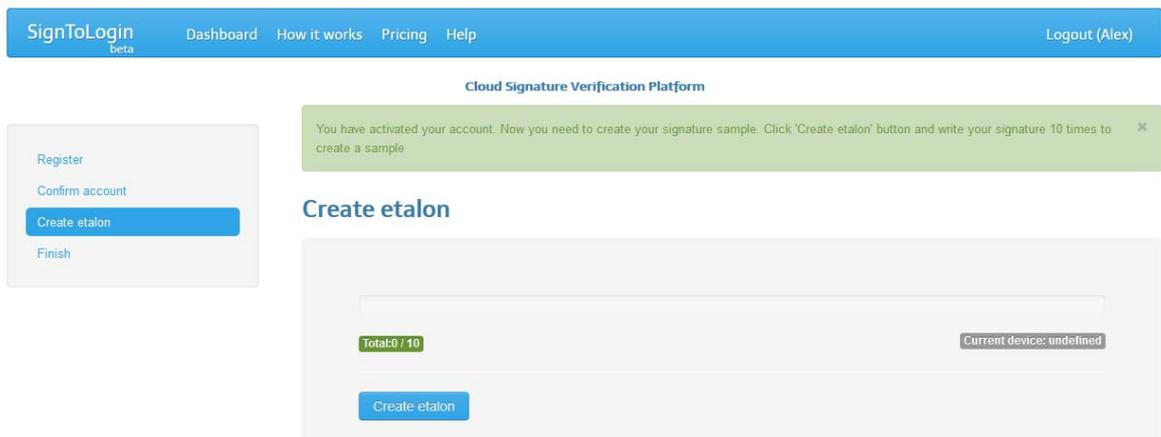
*Picture 1.4. Registration step 2. Email text*

### **Step 3. Sample creation**

After the registration confirmation your account will be activated (pic. 1.5).

At this step a user needs to create a sample for an active device (the device that was used during the registration)\*. For other devices you can create samples later (see Part 4). The active device model is shown in the field *Current Device*. To create a sample you should put your signature for 10 times. A number of signatures you have to input to create a sample is shown in the field *Total* (at the beginning of the sample creation process it shows 0/10).

To start putting your signatures press the *Create Etalon* button, having pressed the button you will see a signature entry window (pic. 1.6).

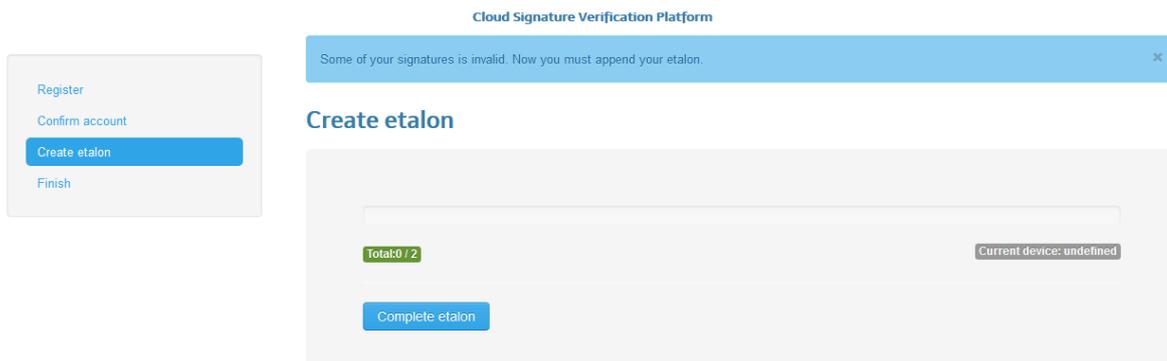


Picture 1.5. Registration step 3. The account has been activated



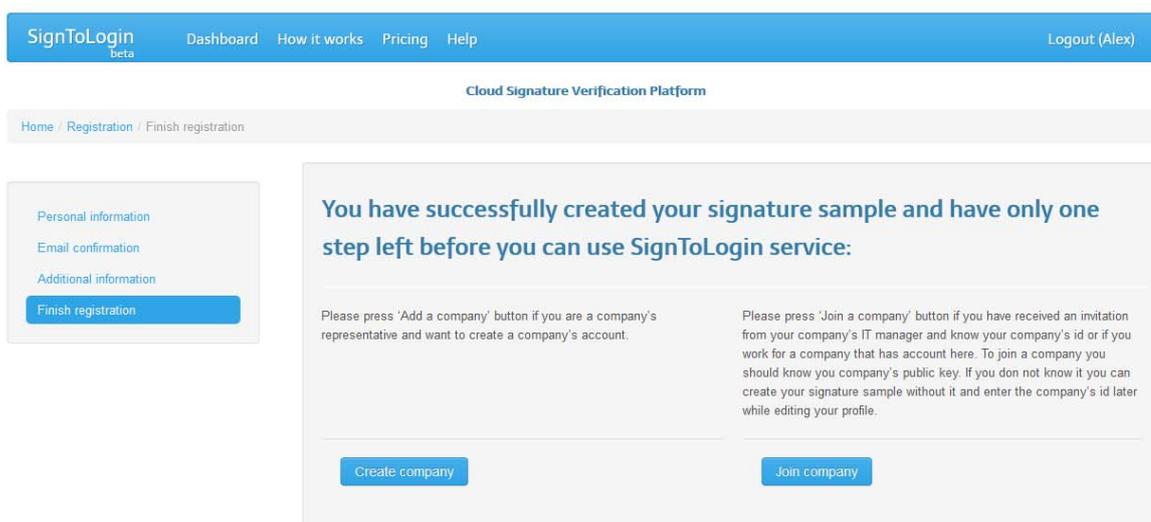
Picture 1.6. Registration step 3. Entry of signatures

In this window (pic 1.6) you can see a *Total* field, *Close* (cancel signatures entry) and *Undo* (cancel the last signature entry without including it into the signature sample) buttons and a signature entry space (it is bordered by a red dotted line at the picture 1.6). It is necessary to input signatures in the given space only, one by one with a short period of time. When you finished inputting one signature you should lift a stylus under the tablet plane for 1.5-3 sec. After this time the signature you have just entered will disappear and you can go on inputting signatures. If you make a mistake while writing a signature and do not press the *Undo* button you can correct it later – when 10 signatures are entered and analyzed incorrect signatures will be deleted from the sample. If it happens you will see the window shown on the picture 1.5 but the value of the *Total* field will differ, it will be *0/a number of failed signatures* (0/2 for example, pic. 1.7). Next press the *Complete Etalon* button. This step will be repeating until the total number of accepted (correct) signatures is 10.



Picture 1.7. Registration step 3. Signature re-entry is needed

If everything is right (when a number of correct signatures is 10) you will see a message about a successful sample creation (pic. 1.8). Press the *Create Company* button to start the company registration process. By pressing the *Join company* button you will start the process of joining a user to the existing company.



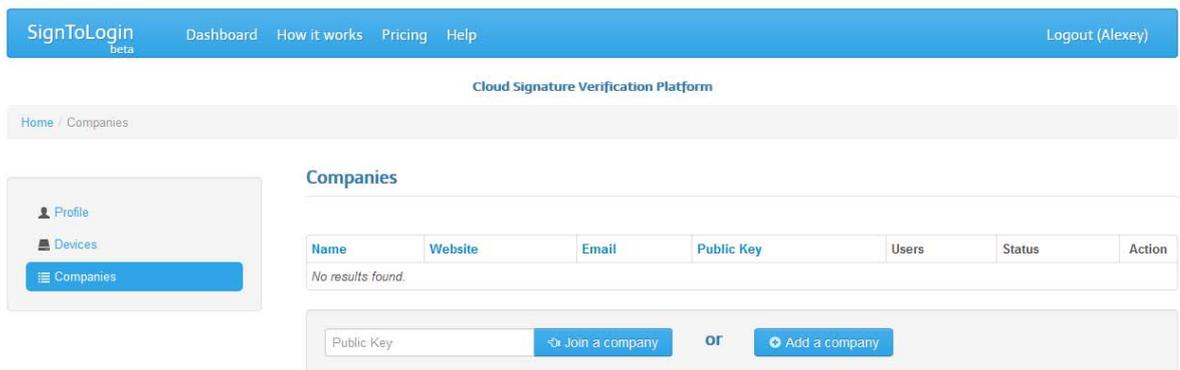
Picture 1.8. The registration process is completed

Attention! If you do not create your sample within 25 minutes after the registration confirmation then your profile data will be deleted and you will need to pass through the registration process again.

*\* It is recommended to create a sample for every device model. Comparing a sample and a signature obtained from different devices the correct recognition can probability significantly decrease. Activation of a function to use a standard sample for all new devices is described in the Part 4 "Adding new devices and creation of signature samples".*

## Part 2. Registration of a company. Company profile management

You can start registering a company immediately after you have finished the user registration by pressing the *Create Company* button. You can also register a company in the user's profile selecting the menu *Companies* (pic. 2.1). In this case a user needs to be authorized (a user needs to pass through the authentication process at signtologin.com Web site, see Part 3). This menu contains a table with brief information about companies a user is joined to: a title, a company Web site, a company email, a public invite code to join new users, a number of users joined to the company, a status (Admin – an administrator able to manage a company profile, Pending – an administrator is required to confirm that a user is joined to the company, Active – a user not able to manage a company profile).



Picture 2.1. Companies menu. User's profile

To create a company press an *Add a company* button. You will see a window shown at the picture 2.2. Fields that are necessary to be filled in are marked with a red asterix (\*).

Press the *Choose plan button* to go to the payment plan selection menu. Press the *Submit button* to register a company.

Having registered a company you will see it in a list of other companies a user is added to (pic. 2.3). The user's status in the created company will be *Admin* – that is an administrator of a company's profile. Press the *View* button (a green arrow in the picture 2.3) to see the information about the company. You will see a company's profile view menu that includes 3 submenus: Info, Account, Users. To update information about the company and/or the payment plan press the *Edit* button (pointed by a blue arrow at the picture 2.3).

Home / Companies / Add

- [Profile](#)
- [Devices](#)
- [Companies](#)

### Add a company

Legal Name \*

CEO's full name

Address \*

Phone Number

Email \*

Website

Callback Url

Company logo

Picture 2.2. Company registration window

Cloud Signature Verification Platform

Home / Companies

- [Profile](#)
- [Devices](#)
- [Companies](#)

### Companies

Displaying 1 of 1 results.

Name	Website	Email	Public Key	Users	Status	
Co 1	http://www.co_1.com	co_1@somemail.com		1	Admin	⋮

Public Key   **or**

Picture 2.3. A list of companies a user is added to

In the submenu *Info* you can view and change information about the company. To update information about the company press the *Edit company* button (pic. 2.4).

Home / Companies / Co 1

- [Profile](#)
- [Devices](#)
- [Companies](#)

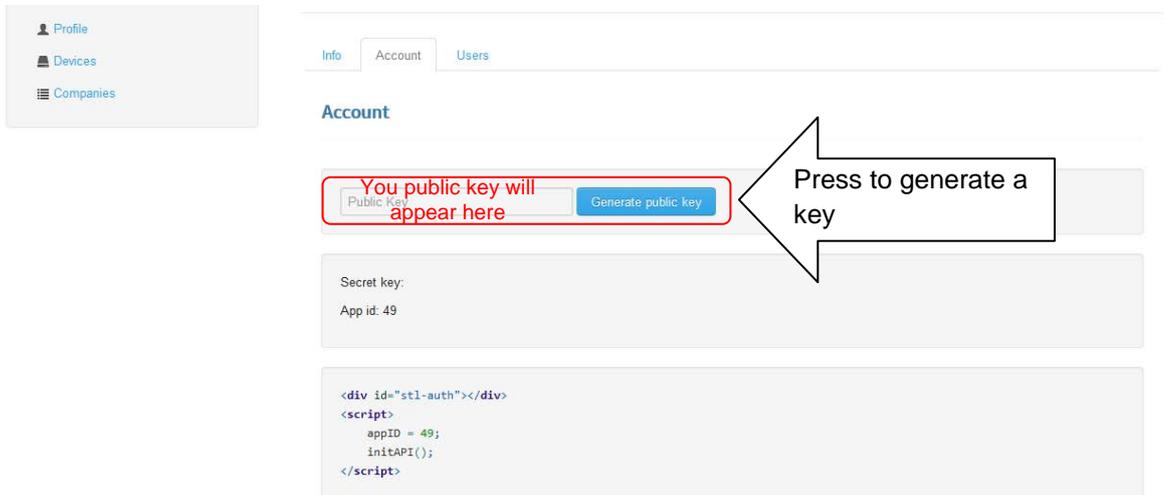
### Co 1

- Info
- Account
- Users

ID	49
Name	Co 1
CEO's full name	
Address	Country, City, Street
Phone Number	
Email	co_1@somemail.com
Website	http://www.co_1.com
Scope	Not set
Created	26.10.2012 08:52:51
Updated	never
Company logo	
Public Key	Not set
Status	Confirmed

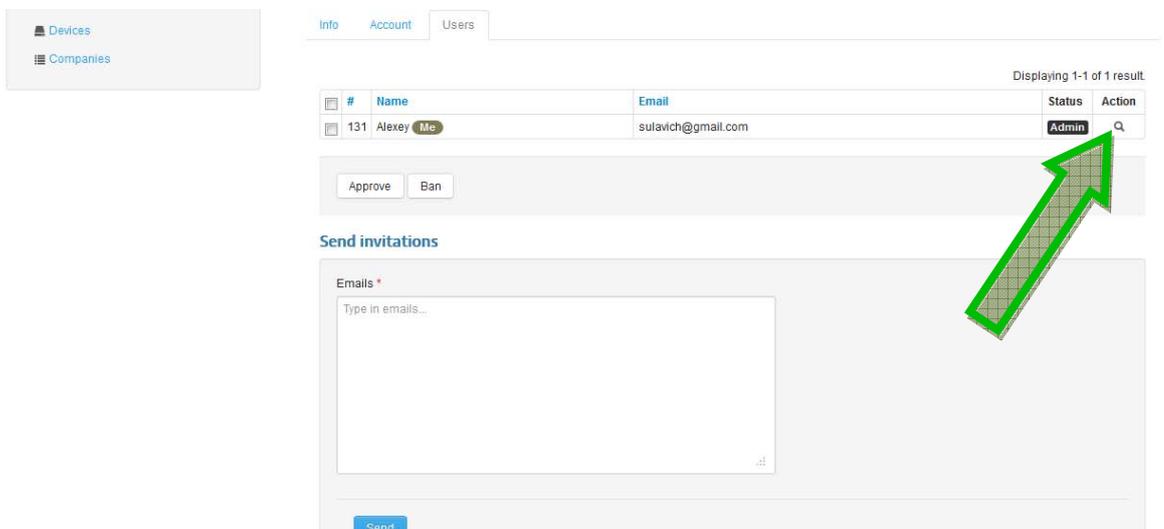
Picture 2.4. Company information view

The code that can be used to enable SignToLogin authentication functions at the customer's Web site with a secret company id\*\* is available in the *Account* menu (pic. 2.5). In this menu you can generate an open key (an invite code) for the customer's Web site that is necessary to add a user to the company. To generate an invite code press the *Generate public key* button. Copy the key generated by the service and paste it into the Web site.

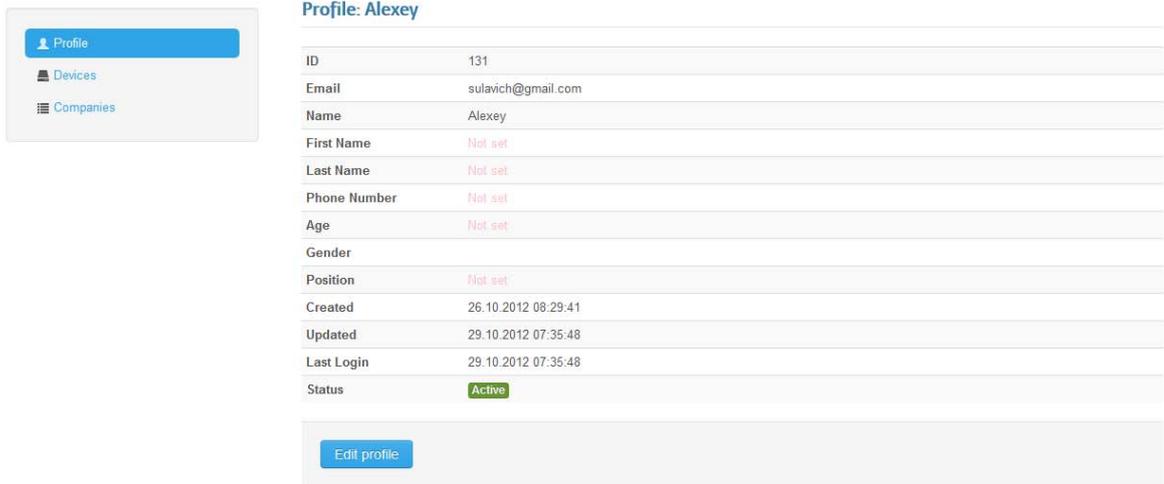


Picture 2.5. Account menu

In the Users menu (pic. 2.6) you will see a list and a number of users added to the company. The Status field shows whether the user is an administrator (Admin), an ordinary user (Active) or the administrator should confirm his/her belonging to the company (Pending). Press the *View* button (a green arrow at the picture 2.6) to open the user information view menu (pic. 2.7). To edit this information press the *Edit profile* button.

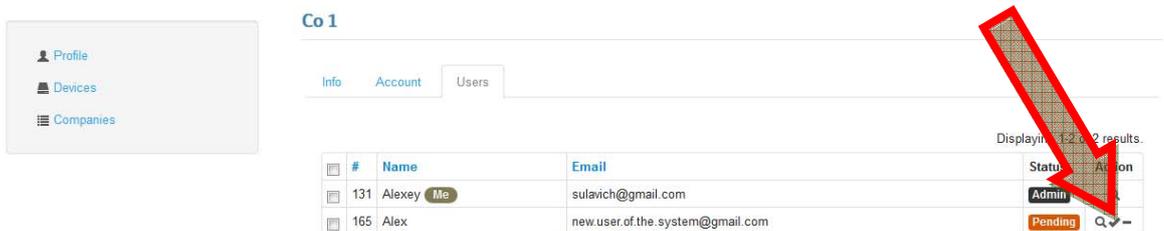


Picture 2.6. Users menu

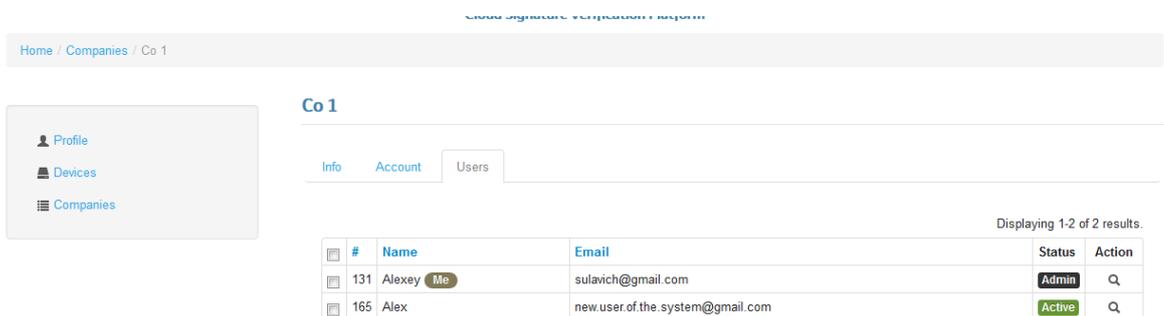


Picture 2.7. User information view menu

If a user tries to add the company the administrator has to confirm this action (otherwise the user will not be added). In this case in the *Status* field for this user in the *Users* menu you will see *Pending* (pic. 2.8). Press the *Approve* icon (a tick shown by a red arrow at the picture 2.8) to confirm the user. After that the users status will change to *Active* (pic. 2.9).



Picture 2.8. A confirmation is required to add a user

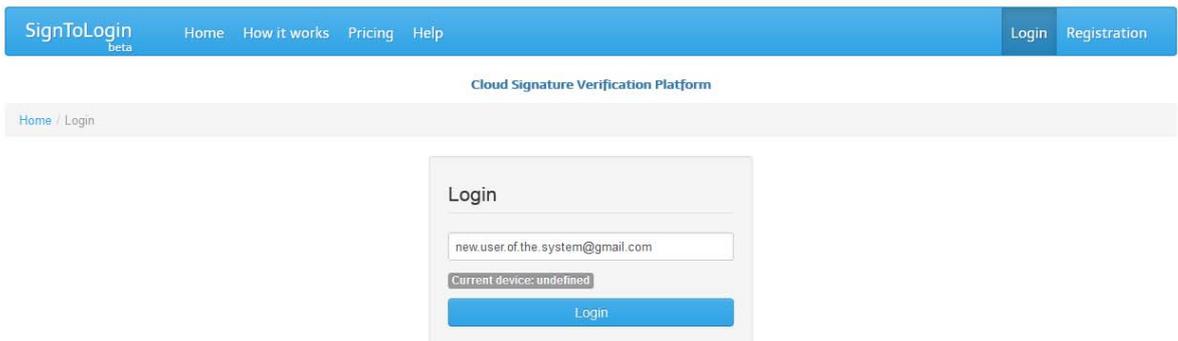


Picture 2.7. A user is confirmed to have been added

\*\* SignToLogin authentication API is described in the documentation that may be downloaded at [signtologin.com](http://signtologin.com) (the menu "Documentation")

### Part 3. Authentication at signtologin.com. User profile management

Click the Login link in the right upper corner of the <http://signtologin.com/> page to authenticate. You will see a dialog shown at the picture 3.1. In the *Current Device* field you will see a device model you are using now. Type your email and press the *Login* button. You will see a signature entry window (pic. 3.2). Attention: this window contains an entry field (shown by a red dashed line at the pic. 3.2), signatures should be written in this field only. When you stopped writing one signature it is required to lift a stylus for 1.5-3 seconds.

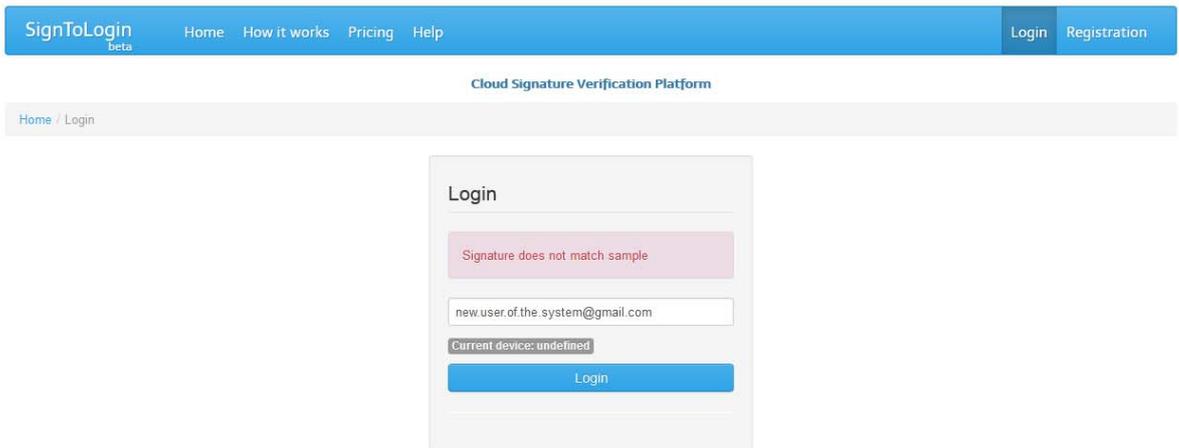


Picture 3.1. Email entry



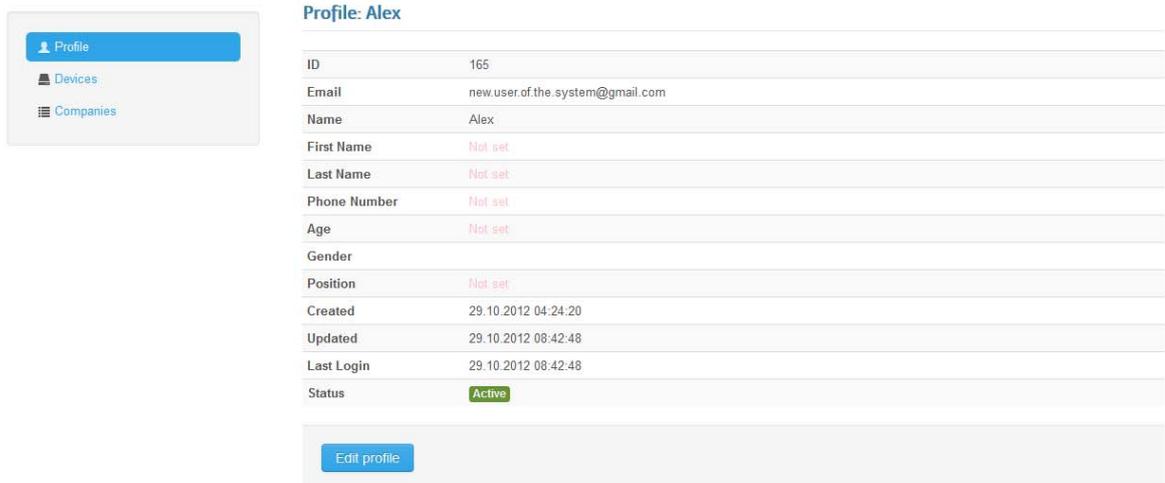
Picture 3.2. Signature writing

If the signature does not match a sample or if any situation occurs and a users cannot be authorised (a sample is absent, the email is wrong, etc.) you will see a window describing the error. In this case repeat the logging in by selecting the Login command. If you cannot access your profile because your signature does not match your sample (pic. 3.3.) calm down and try again. This situation may be caused by uncommon psychoemotional state. If it does not work try to authorise using another device and re-create a sample for a problematic device. If you do not have samples for other devices contact the Technical Support.



*Picture 3.3. Entry error (a signature does not match a sample)*

If the signature matches your sample you will be accepted to the SignToLogin system. In the window you will see the user's information (pic. 3.4). Press the *Edit profile* button to update the information. You will see a profile edit dialog (pic. 3.5). Change all necessary information and press the *Save* button or the *Cancel* button to cancel information update. All available options are located in 3 menus: Profile (view/edit user's information), Devices (sample creation using new devices) and Company (company registration, company management, adding to other companies).



*Picture 3.4. User's information view*

Cloud Signature Verification Platform

Home / Profile / Edit

- Profile
- Devices
- Companies

### Edit profile: Alex

First Name

Last Name

Phone Number

Age

Gender

Position

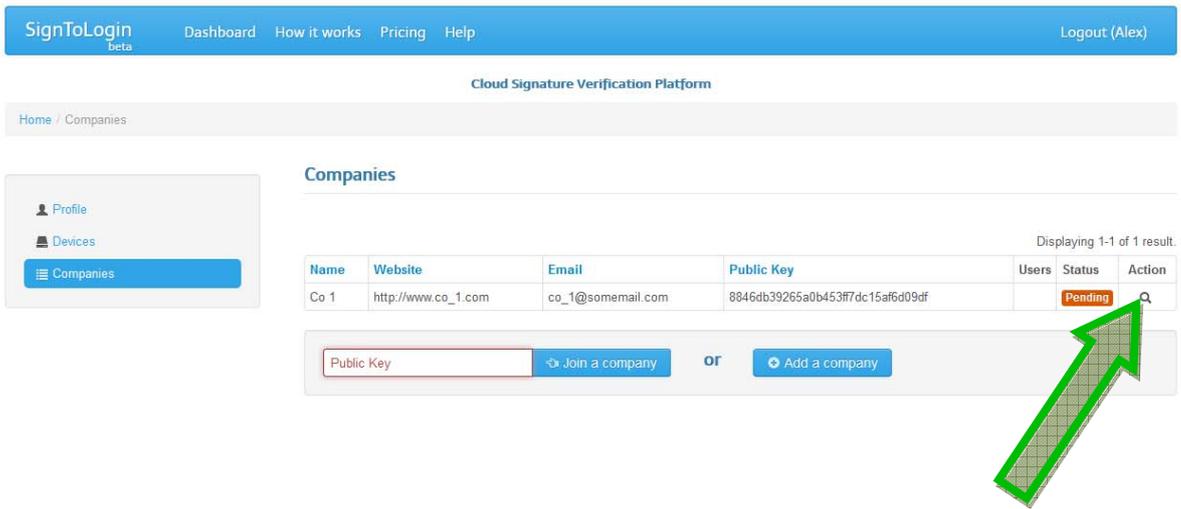
*Picture 3.5. User's information update*

Instructions how to add new devices and to create a new sample are given in the Part 4. Registration of a company and company profile management are described in the Part 2. In this part you will know how to join an existing company.

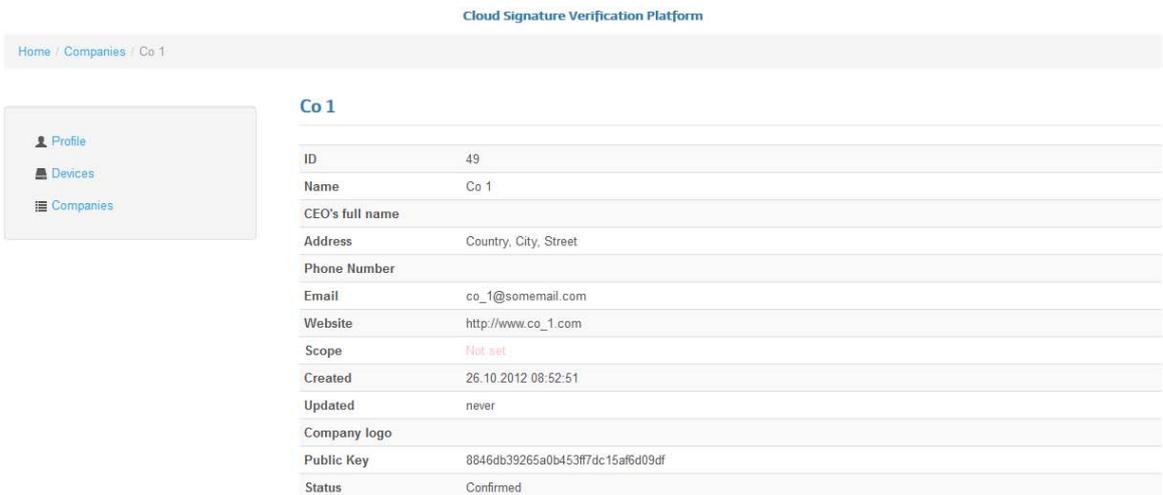
Open the Companies menu (pic. 3.6). In this menu you will see a table with brief information relating to the companies the users is joined to: a name, a company Web site, a company email, a public invite code to add new users, a number of users, your status (Admin – an administrator able to manage a company's profile, Active – a user not able to manage a company's profile). To join a company a users needs an invite code that is available at the company's Web site or was sent by the company's system administrator to the user's email. The public invite code is in the table as well.

Type the invite code into the field (shown by red color at the pic. 3.6) and press the *Join company* button. If the entered code is correct you will be joined to the company and your name will appear in the table with a Pending status (the administrator needs to confirm that your account is joined).

Press a View icon ( shown by a green arrow at the picture 3.6) to see the general information about the company. You will see a window shown at the picture 3.7.



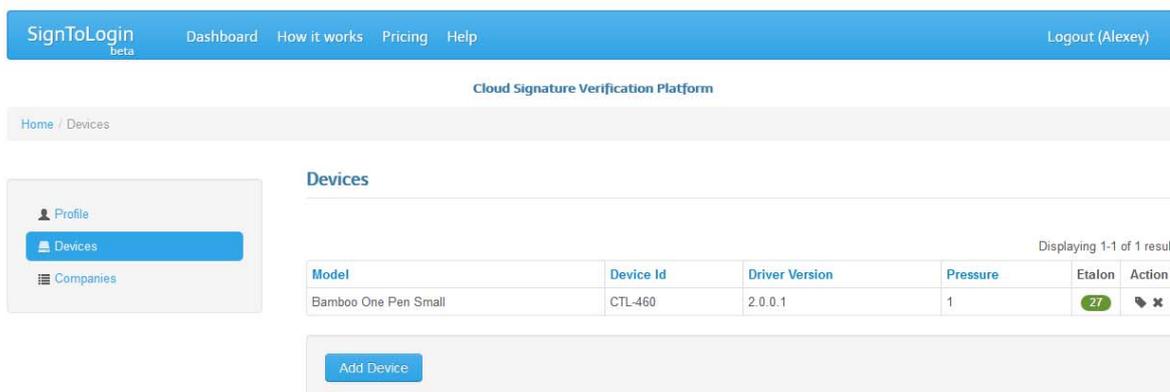
Picture 3.6. A list of companies you are joined to



Picture 3.7. Company's information view

## Part 4. Adding new devices and creation of signature samples

To add a new device go to the Devices menu of the users' profile (pic. 4.1). The user should be authorized (if not, please go through the authentication process at the signtologin.com Web site, see the Part 3).



Picture 4.1. User's devices and samples

In this menu you will see a list of devices you have got signatures or samples for. The list contains the following information:

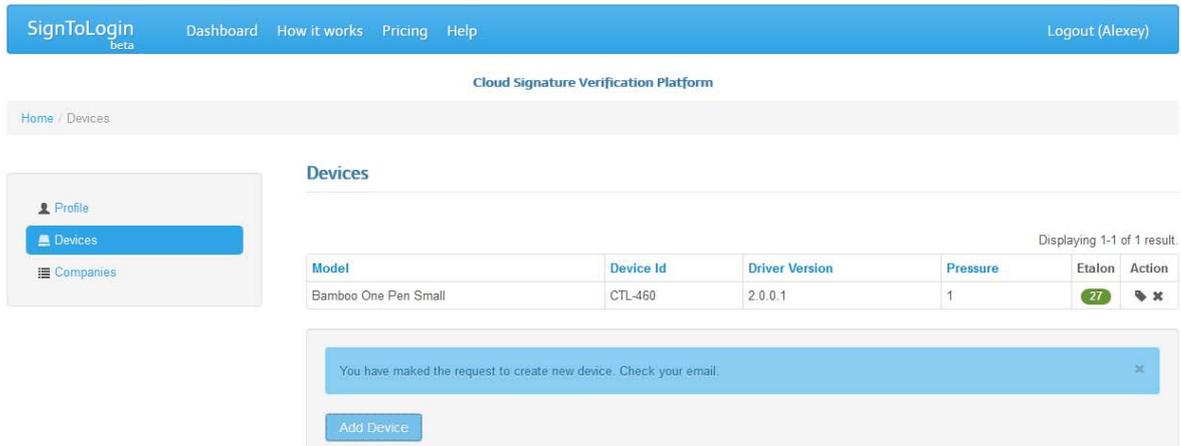
- ✓ Model, a device model (it is recommended to use its own sample for every model);
- ✓ Device id, a device identification;
- ✓ Driver version, a version of a device driver;
- ✓ Pressure, if this parameter value is 1 the device supports stylus pressure measurement for authentication purposes, otherwise the parameter value is 0 (stylus pressure characteristic enables the higher level of security);
- ✓ Etalon, a number of stored signatures for creating a sample, if the value is highlighted by a green color as shown at the picture 4.1 the number of signatures is sufficient for the authentication using this device, if it is highlighted by a red color then the creation of a sample for this device is not complete (this situation is described later);
- ✓ Action, actions a user can do with the device sample: re-create, make a default sample (described later).

Press the *Add device* button to add a new device. You will see a message shown at the picture 4.2 (highlighted by blue color). An email will be sent to your email address (pic. 4.3), in the email body you will see a link (pic. 4.4). Click this link and start creating a sample using a device you want to add.

**Attention:**

**If a new device is a graphical tablet it must be connected to the computer BEFORE you click the link. If a new device is a tablet computer (iPad or an Android**

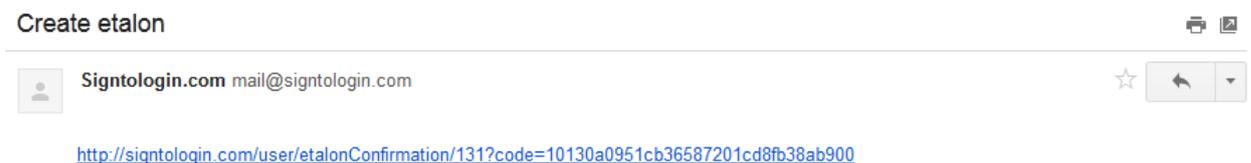
computer) you must read an email and click the link using this device (iPad or an Android tablet).



Picture 4.2. An email has been sent to the email address containing a link to create a sample



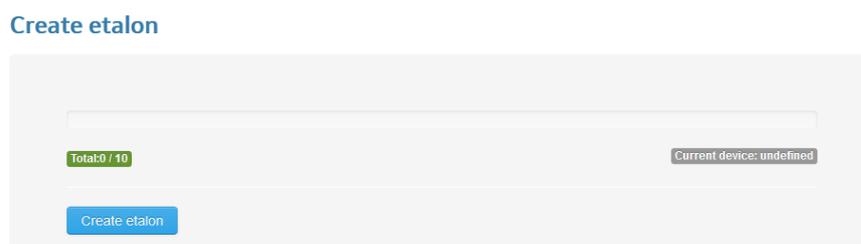
Picture 4.3. Email title



Picture 4.4. Email text

Following the link you will see a sample creation window (pic. 4.5). In the *Current Device* field you see a device model you are using at this moment. To create a sample you need to enter 10 signatures. In the *Total* field you will see a number of signatures you have to enter to complete the sample creation (at the beginning the value is 0/10).

To start writing signatures press the *Create Etalon* button, a window for writing signatures will appear in the Web browser window (pic. 4.6).

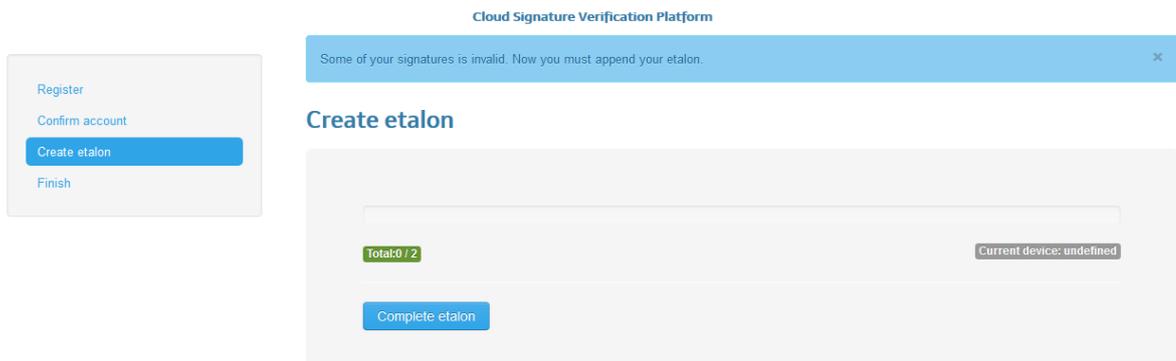


Picture 4.5. Adding a new device



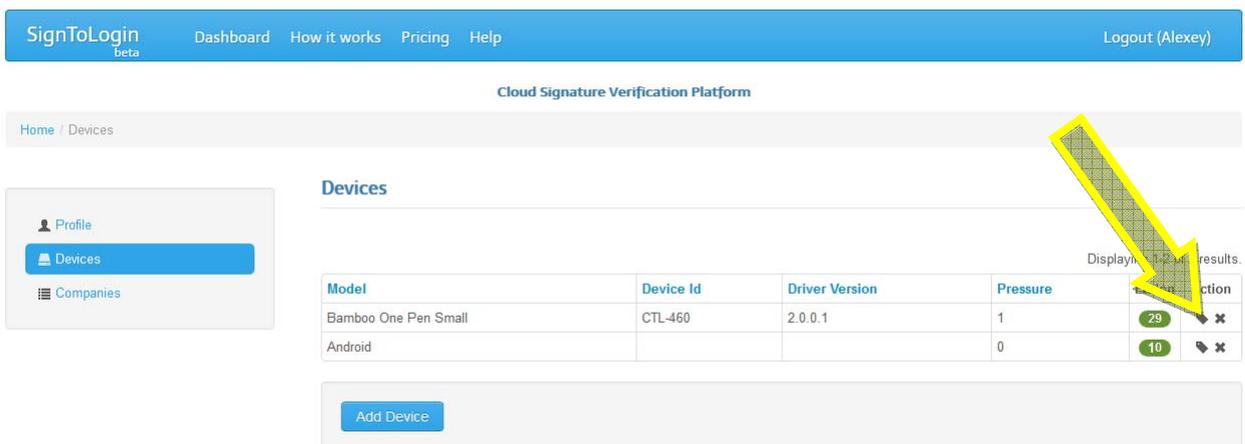
Picture 4.6. Signatures entry

In this window (pic. 4.6) you see the *Total* field, the *Close* (cancel signatures entry) and *Undo* (cancel the last signature entry excluding it from the sample) buttons and a signature writing field (bordered by a red dashed line at the pic. 4.6). Signatures entry must be performed in the given field only one by one separated by a little time. When you finish to write a signature you should lift a stylus under the tablet surface for 1.5-3 sec. When this time is over the entered signature will disappear and you can continue writing signatures. If you make a mistake while writing a signature and do not press *Undo* you can do it later – when all 10 signatures are entered they will be analyzed by the software algorithm and incorrect signatures will be deleted from the sample. If this situation occurs you will see a window shown at the picture 4.5 but the *Total* field value will be *0/a number of signatures to be entered* (for example 0/2, pic. 4.7). Press the *Complete Etalon* button. This step will repeat unless the total number of accepted (correct) signatures is 10.



Picture 4.7. Signatures must be re-written

When a number of correct signatures is 10 you will see a new device in the list of other devices (pic. 4.8). Now you can use this device for authentication.



Picture 4.8. A new device is added

For every device model it is recommended to create its own sample. But there is a way to use a certain sample with all unknown devices (devices for which you have not created a sample) – select the sample and make it standard by pressing the *Make default* icon (shown by a yellow arrow at the picture 4.8). In this case this sample will be used while authenticating using unknown devices (pic. 4.9). This function is necessary for those users who use signtologin.com service from different devices and have no time to register all devices.

**Attention! If you assign a default sample status to any sample the probability of correct recognition using unknown devices may decrease thus decreasing the security level!** This function is at your own risk. To decrease this tradeoff it is recommended to select a sample with Pressure=1 value as a default sample.



Picture 4.9. A standard sample is set

If you activate a default sample function and are successfully authenticated using a new unknown device then a sample containing 1 signature will be created for this device. After the next successful authentication using this device new signatures will be added to the sample unless their number is 10. After that a sample for this very device will be created automatically and this sample will be used for authentication using this device.