

# Configuring a YubiKey for the YubiCloud

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With the YubiKey Cross-Platform  
Personalization Tool

October 8, 2013

## Introduction

Yubico is the leading provider of simple, open online identity protection. The company's flagship product, the YubiKey®, uniquely combines driverless USB hardware with open source software. More than a million users in 100 countries rely on YubiKey strong two-factor authentication for securing access to computers, mobile devices, networks and online services. Customers range from individual Internet users to e-governments and Fortune 500 companies. Founded in 2007, Yubico is privately held with offices in California, Sweden and UK.

## Disclaimer

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## Contact Information

**Yubico Inc**  
228 Hamilton Avenue, 3rd Floor  
Palo Alto, CA 94301  
USA  
[info@yubico.com](mailto:info@yubico.com)

## Configuring a YubiKey for the YubiCloud using the Cross-Platform Personalization Tool

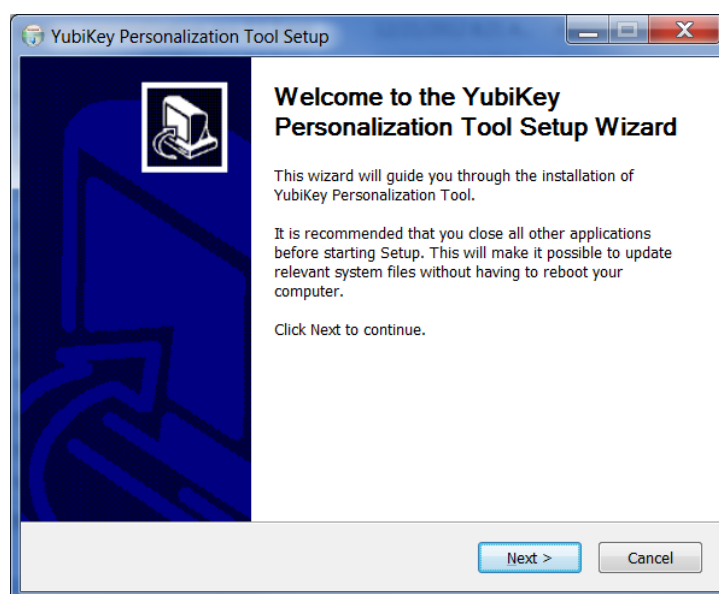
1. Download the latest Cross Platform Personalization Tool for Windows from the page: <http://www.yubico.com/personalization-tool>, under the section "Cross Platform Personalization Tool". Select the version for your OS and download the file or package. OS X users may also install the tool from the Mac App Store.

### Cross-Platform Personalization Tool

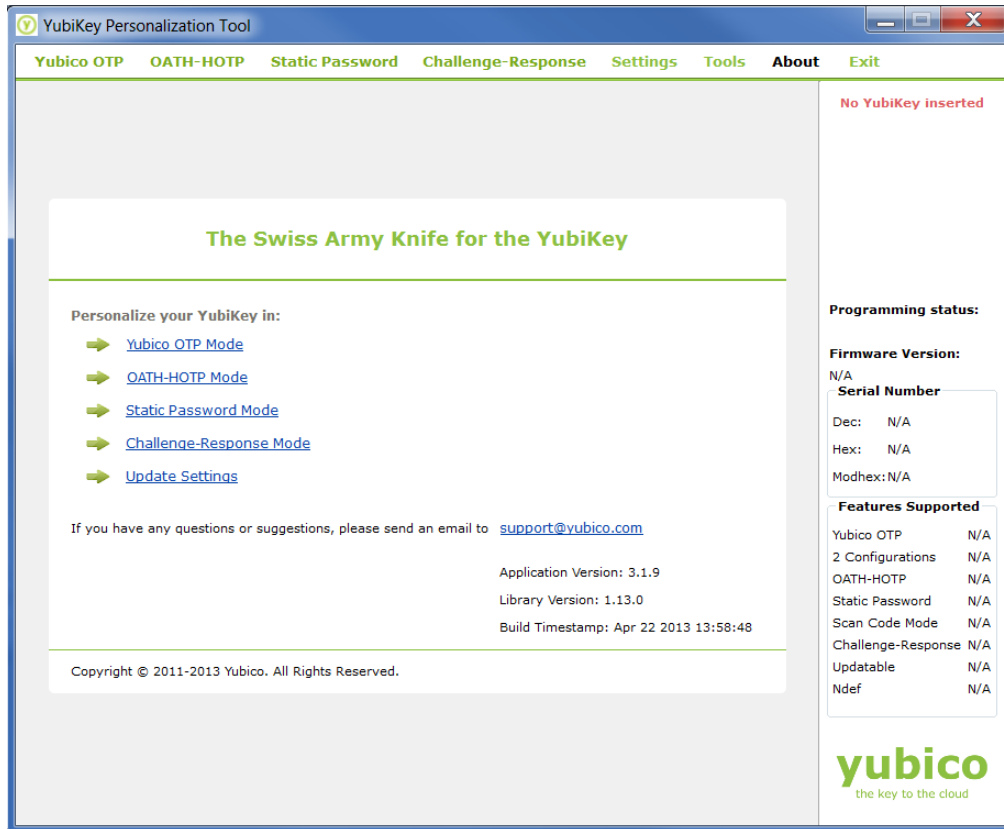
- Valid with any YubiKey
- Windows, Mac OS X and Linux
- Graphical user interface

- » User Guide
- » Release Notes
- » Windows: Binary installer
- » Mac OS X: Mac App Store Installer
- » Mac OS X: Binary installer
- » Ubuntu package
- » Fedora package
- » Source code on GitHub

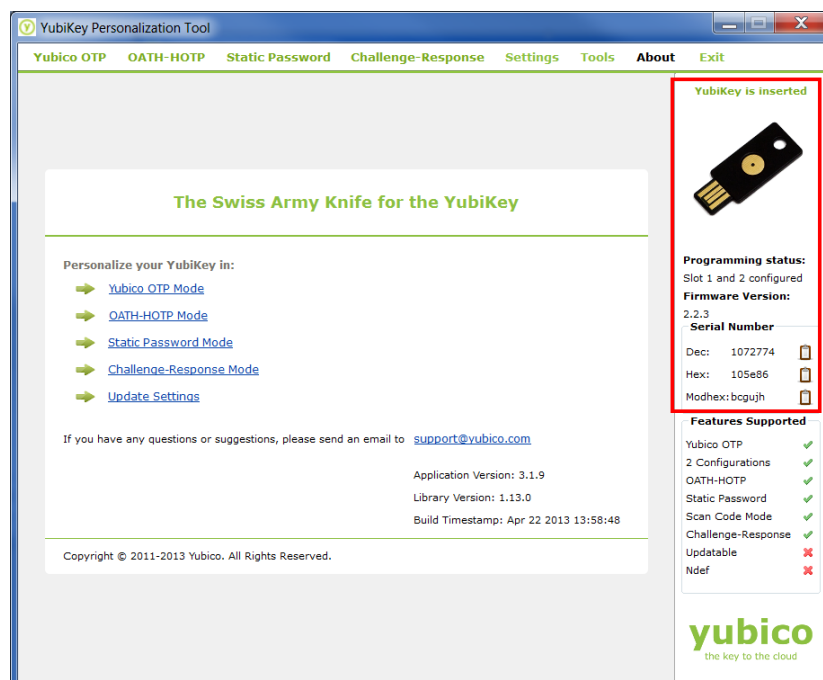
2. Run the downloaded installer to install the YubiKey Personalization Tool. The default values can be used unless there is a need specific to the computer the Tool is being installed on.



3. The YubiKey Personalization tool will be installed by default to "Start -> All Programs -> Yubico -> YubiKey Personalization Tool"
4. Once installed, start the YubiKey Personalization Tool. The Tool will open to the main page.



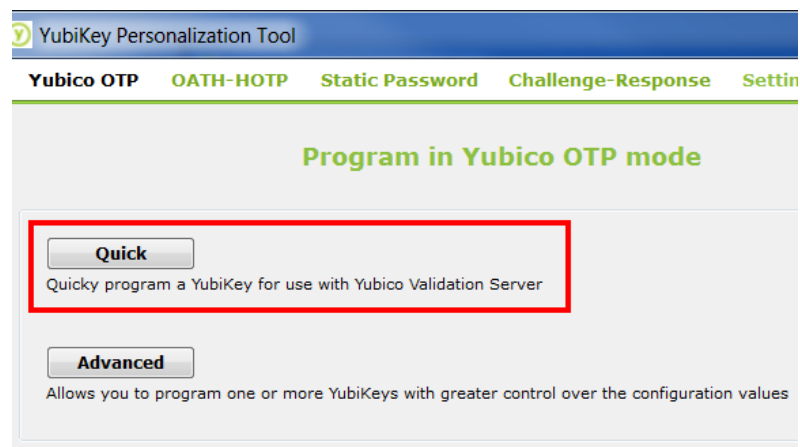
5. Insert your YubiKey in to the USB port. Once the YubiKey is inserted, the Personalization tool will display information about the YubiKey in the upper right corner.



- On the Main Menu, click the "Yubico OTP Mode" option to open the Program in Yubico OTP mode page.



- On the Program in Yubico OTP mode page, click on "Quick" button.



- In the Yubico OTP mode - Quick page, select the configuration slot 1 from the Configuration Slot section at the top.

**Program in Yubico OTP mode - Quick**

**Configuration Slot**

Select the configuration slot to be programmed

☒ Configuration Slot 1      ☐ Configuration Slot 2

**Yubico OTP Parameters (auto generated)**

Public Identity (6 bytes Modhex)

☒ Hide values

Private Identity (6 bytes Hex)

Secret Key (16 bytes Hex)

**Actions**

Press Write Configuration button to program your YubiKey's selected configuration slot

9. The Yubico OTP Parameters will automatically be randomly generated. If you want to generate the parameters again, you can do so by clicking on the "Regenerate" button.
10. Click on the "Write Configuration" button to configure your YubiKey. A Windows File browser window will open. Click "Cancel" to close this window, or "Save" to close the window and save a record of the YubiKey Configuration. Once the programming is completed, a message will automatically be displayed in the upper left corner indicating if the configuration was successful.

✔ YubiKey (Public ID: vveinhcruhlr) has been successfully configured

**Program in Yubico OTP mode - Quick**

**Configuration Slot**

Select the configuration slot to be programmed

☒ Configuration Slot 1      ☐ Configuration Slot 2

**Yubico OTP Parameters (auto generated)**

Public Identity (6 bytes Modhex)

☒ Hide values

Private Identity (6 bytes Hex)

Secret Key (16 bytes Hex)

**Actions**

Press Write Configuration button to program your YubiKey's selected configuration slot

11. Click on the "Upload to Yubico" button of the YubiKey personalization tool. This will open a web browser to the YubiKey AES key upload page for the YubiCloud.



## Yubico AES Key Upload

Please enter information about your newly personalized YubiKey.

**Please note: It takes up to 15 minutes for an uploaded identity to become valid on our validation servers. Please wait at least 15 minutes before testing an uploaded identity. 'vv' prefix credentials are not guaranteed to have the same availability as production 'cc' prefix credentials. Yubico reserves the right to invalidate any 'vv' prefix credential on the Yubico validation service (YubiCloud) at any time for any reason including if the credential appears as not loaded onto a genuine YubiKey.**

Your e-mail address:

Serial number:

YubiKey prefix:

Internal identity:

AES Key:

OTP from the YubiKey:



Type the two words

[Privacy & Terms](#)



Upload AES key

12. The following information needs to be entered on the AES Key upload page:
  - "Your e-mail address:" :- Enter your Email address
  - "Serial number:" :- This field should be automatically filled with the serial number of the YubiKey.
  - "YubiKey prefix:" :- This field should be automatically populated
  - "Internal identity:" :- This field should be automatically populated
  - "AES Key:" :- This field should be automatically populated
  - "OTP from the YubiKey:" :- Enter OTP (One Time Password) from the reprogrammed YubiKey. This can be done by placing the text cursor in this field and pressing the gold button on the YubiKey for 1~2 seconds. If the YubiKey does not generate the OTP, and you see the light on the gold button flashing, shut down the Personalization tool, then remove and plug back in the YubiKey.
  - Provide the Captcha text.
13. Once the Text is entered, click the "Upload AES Key" button. The Webpage will indicate if the upload was successful.



## Yubico AES Key Upload

### Success!

Key upload successful.

|                    |   |
|--------------------|---|
| E-mail address:    | test@test.test                              |
| Serial number:     | 1072774                                     |
| Yubikey prefix:    | vveinhcruhlr                                |
| Internal identity: | c1809df789cb                                |
| AES key:           | e9e817b6de211541cd01b3844c131864            |
| YubiKey OTP:       | vveinhcruhlrjbcvguttdkrrevvchekdiurtufejrgv |

Try our [online test service](#) to verify that your newly programmed YubiKey is working against our validation server.

This will upload the AES Key to the Yubico OTP validation server. Please note that, the AES Key upload functionality takes some time to update all the corresponding databases so please wait for 10-15 minutes before you try to validate the OTPs with the online Yubico OTP validation server. After waiting for 10-15 minutes, you can test working of your new YubiKey by using the link: [demo.yubico.com](https://demo.yubico.com) using the Single Factor Authentication field.

Once the YubiKey is working with the Demo server, the YubiKey will be ready to be added to any YubiCloud supporting service. Please contact the support for each application or service for instructions on adding the YubiKey.