



## How it works



User  Location  Device Authentication  Risk Management

# Secure Authentication

*Trust your identity*

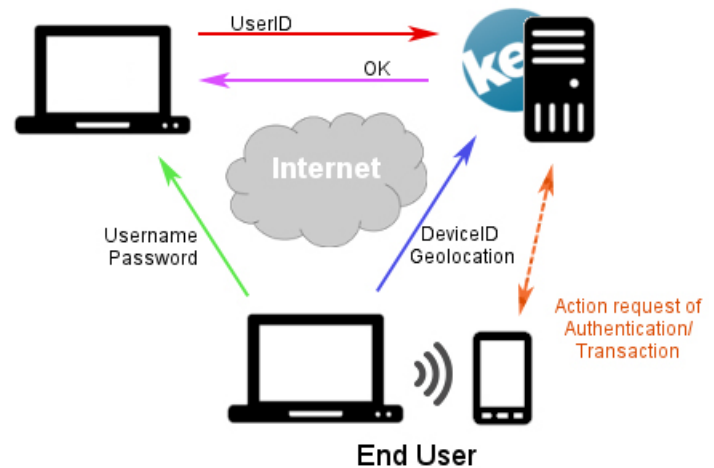
[www.keypasco.com](http://www.keypasco.com)

Keypasco offers a hardware-free, patent-approved and software-based authentication solution. The service combines factors like device authentication, geographical locations, a 2-channel structure, proximity of mobile devices, and a risk behaviour analysis to offer strong **multi-factor authentication**.

## How Does it Work?

The Keypasco technology is a strong authentication solution consisting of the Keypasco server (Borgen), one or several clients (Vakten), and a web channel.

The first channel sends information between the end user's device (client or browser) and the online Service Provider. The second channel sends information between the end user's device, Vakten client, and the authentication server. To verify the authentication and add the multi-factor levels of security the online Service Provider checks with the Keypasco server to verify the device authentication, geographical locations, device proximity and the risk management analysis.



The **Keypasco Service** is based on different components, the software clients: Vakten for Desktop, Smartphone, Tablet and Browser, and the back-end server Borgen. All versions of Vakten provide a two-channel structure for secure authentication and secure notifications.

## Vakten for Desktop

The Vakten client is installed on the end users desktop computer for identification of the device and location to provide secure authentication. Supported platforms are Windows, Mac and Linux. The Vakten for desktop also provides the functionality of secure notifications. These notifications is a secure Out of band confirmation and is distributed via a secure channel between the Vakten client and Borgen server. Vakten for Desktop can be used to secure web solutions as well as desktop applications.





### Vakten for Smartphone & Tablet

The Smartphone/Tablet client is installed on an end user's device to identify the device and location for secure authentication, and can confirm a secure notification through an Out-of-Band verification channel. Platforms supported are iOS and Android, Windows phone is to be announced.

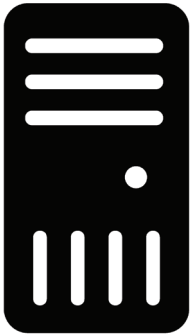
### Vakten for Browser

The Keypasco solution can verify device and location information without the end user installing a client by offering the Vakten for Browser option. Platforms supported are Chrome, Firefox, Internet Explorer, and Safari. We use JavaScript integration and a personalized cookie as the distribution channels.



### Borgen: Keypasco server

Keypasco authenticates the end user by identifying and associating their device and location to a anonymous userID within the Keypasco Borgen server. *No personal data is ever stored in either the client or server!* The server is located in the Cloud and self-scalable to handle any volume.

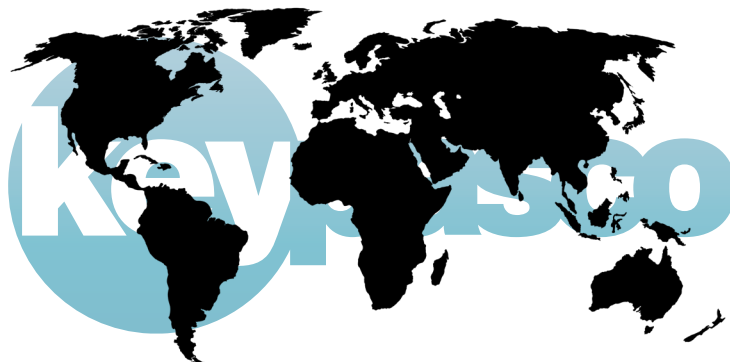


Keypasco also offers the **Keypasco Product**, a server licence where online Service Providers are able to host their own version of the Borgen server on their premises.

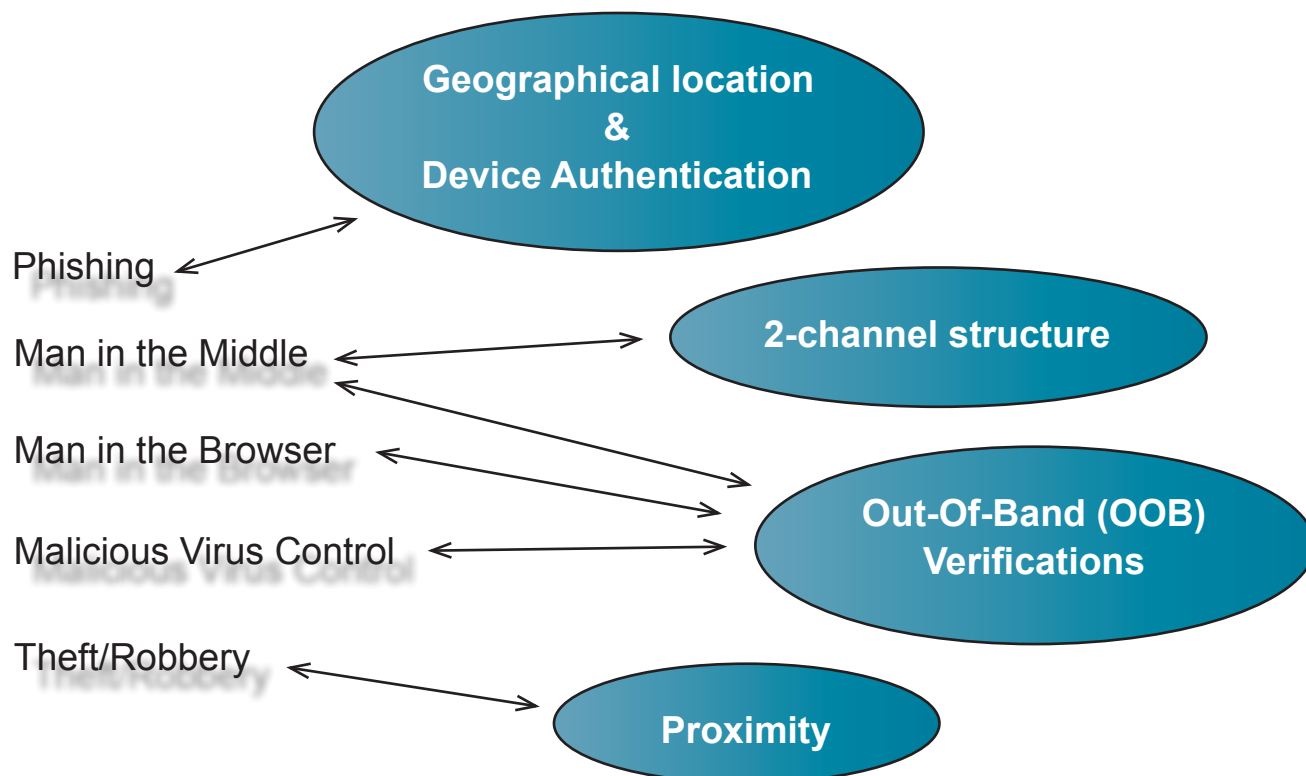
### Where does it work?

Keypasco offers the service to a global market and has established partners around the world. Support is offered 24/7, and we guarantee a 99.999% availability.

Headquartered in Gothenburg, Sweden, Keypasco has a second office in China and established partners in Brazil, Taiwan, Vietnam and Russia.



## How does it mitigate threats?



### *Phishing*

KeyPASCO mitigates phishing by linking the user with a geographical location and the device authentication. A user's username and password will not work from a wrong device or location.

### *Man in the Middle & Man in the Browser*

Man in the Middle (MitM) and Man in the Browser (MitB) attacks are mitigated by KeyPASCO's 2-channel structure and the Out of band secure notifications.

### *Malicious Virus Control*

*(Viruses, Trojans, etc)*

Viruses, Trojans, and other infections can control or replicate an end user's device. KeyPASCO mitigates these threats by offering Out of Band authentication, which enables a user to regain control of devices and accounts.

### *Theft/Robbery*

In addition to virtual threats, physical theft of a device can compromise a user's security. With KeyPASCO's proximity feature, a user's account is safe even if a device is stolen.

**Please contact us if you would like to try our official demo!**

#### **KeyPASCO**

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## What we offer

*The Keypasco multi-factor authentication solution is perfect for online Service Providers who: have a large quantity of users & a need to secure them against threats like phishing attacks, Man-in-the-Middle and Man-in-the-Browser attacks, etc.*

The solution enables providers to keep the investment and ongoing costs to a minimum while employing a solution that rapidly adjusts to new emerging threats.

- A very affordable solution, with a \$0 upfront fee for the Cloud deployment
- A low and fixed annual fee per active user, with unlimited devices, location and security updates
- A true chameleon - no change in established user behaviour
- Simple and quick integration
- Plays well with others as it can be offered as an add-on solution
- The Borgen Server can be deployed globally in the Amazon Clouds

Keypasco was awarded the Product Innovation Leadership Award for Secure Authentication by Frost & Sullivan, which describes Keypasco as *“a true pioneer of the 21st century for mobile security.”*

*“Recipients of this award represent the top ten percent of their industry: the other ninety percent just can’t keep up.”*



## Keypasco Service

Keypasco offers secure authentication and transaction verification with a multi-factor security solution. It is a patent-approved and software-based authentication solution. The service combines factors like device authentication, geographical locations, a 2-channel structure, proximity of mobile devices, and a risk behaviour analysis to offer strong multi-factor authentication. The Keypasco Service is hidden from the online Service Provider's end customers so the service provider can keep their established login procedure. The Keypasco Service can be offered with or without an installed client, and it can be offered both as a seamless addition to an existing solution or as a stand-alone.

### Secured by Keypasco with an installed Vakten Client

Keypasco secures all major platforms for PC, Tablet and Smartphone. We can authenticate these platforms through a 2-channel structure, which we guarantee to have a multi-factor strong security level. If you combined multiple platforms, Keypasco can offer authentication, secure BYOD (Bring your own device) and a Out Of Band channel to verify secure notifications via a detached device. When a end user has approved or denied the secure notification the response is reported to the online Service Provider with information of the Out of Band device and location in combination with the device and location information of the device that initiated the attempt.

We support Windows, Mac and Linux for desktop/PC and iOS and Android for Tablet & Smartphone applications.



Keypasco can even handle an offline theft situation! If the Smartphone or Tablet device is not in proximity with the PC secured by Keypasco and the Vakten client, the account cannot be accessed. We support Bluetooth, Wifi and NFC.

### Secured by Keypasco without an installed Vakten Client

Keypasco can offer strong, multi-factor security to the Service Providers without requiring an installed client. The difference between the Keypasco Service with the installed Vakten and the Vakten for Browser is how the device and location are identified and reported to the server. Keypasco can effortlessly offer the convenience of a non-installed client with secure Out of Band notifications when combining Vakten for Browser with Vakten for Smartphone or Tablet.

We support Chrome, Firefox, Internet Explorer, and Safari.



## Keypasco Product

The Keypasco Product resembles the Keypasco Service in functionality but allows the provider to host the Keypasco server by obtaining a product server license. The Product includes and supports the same Vakten clients, features and security updates as the Service does.

**Please contact us if you would like to try our official demo!**

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