

**BIOID**<sup>®</sup>  
be recognized

**MY** **BIOID**<sup>®</sup>  
be recognized

The easiest, most secure way to log in  
and manage identities online

Product Information

November 2011

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## Passwords don't work!

Traditionally a person logs into an online service by claiming to have a certain identity. This usually means entering a username (the claimed identity) and password (the proof that you really are who you claim to be).

Unfortunately, this model just doesn't work anymore. Since most people have dozens of online accounts, users should create and remember dozens of usernames and complicated passwords. But the human brain can't handle this. So instead they use simple passwords, use the same password for everything, write them down or save them in a file on their computer. This increases the risk of identity theft and data theft.

There must be a better way.



One person can have dozens of digital identities.

## The easiest, most secure way to log in and manage identities online

Strong authentication doesn't have to be complicated - for online service providers or their users. As a matter of fact, we've found that by making it **easier** for users to log in, we actually make it **more secure**. So we ask for as little information as possible from the user; instead, we recognize users the same way people recognize each other.

MyBioID offers the easiest and most secure way for users to log into their online accounts, authorize transactions and manage their online identities, without remembering dozens of usernames and passwords or carrying tokens. By recognizing the user's presence with a webcam, the MyBioID service helps reduce the chances of online identity theft and data theft without client software installation or special hardware.

Online service providers who support MyBioID improve the user experience with greater security and convenience and gain increased membership rates and conversions to paid memberships, as well as opportunities for additional revenue streams.

End users gain a better online experience with easier login, one-stop identity management and the peace of mind that only they can access their online services.

And all of this comes as a service. No client software to install, no special hardware. Users only need a standard webcam and for service providers it only takes a simple integration.

## Benefits

### End user benefits:

- Greater security: recognize user's presence
- More convenient user experience: no usernames and passwords to remember, no tokens to carry, just look at the camera
- Simplified registration with new websites and services using pre-defined personas
- Reduced chance of identity theft and data theft
- Platform-independent: works on the most common operating systems and browsers

### Service provider benefits:

- Increased user trust
- Competitive advantage
- Increased membership
- Additional revenue streams (resell or join our affiliate program)
- Easy deployment: no client software installation or special hardware
- Flexible configuration
- Reduced cost: subscription-based, no maintenance costs; no subscription costs with affiliate model

## Applications

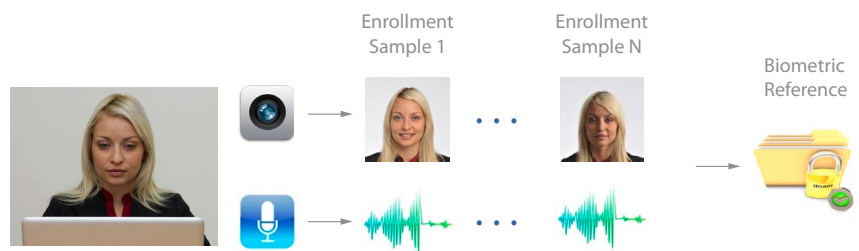
By recognizing the physical presence of the user, MyBioID can be used in a number of applications:

- Login for applications, sites and services that you maintain
- Login for hundreds of thousands of third party websites and online services that already support MyBioID or OpenID
- Login for single sign-on (SSO) or password manager solutions to eliminate the weak security of master passwords
- More secure transaction authorization (financial transactions, account configuration changes, approval workflows, etc.)
- Session management to ensure user's presence throughout an online session
- Protection of digital content from unauthorized sharing
- Simpler, automated password reset process (if used as an alternate authentication method)
- Assured digital identities to verify user's legal identity or characteristics such as age or gender

## How MyBioID recognition works

### Be recognized and log in

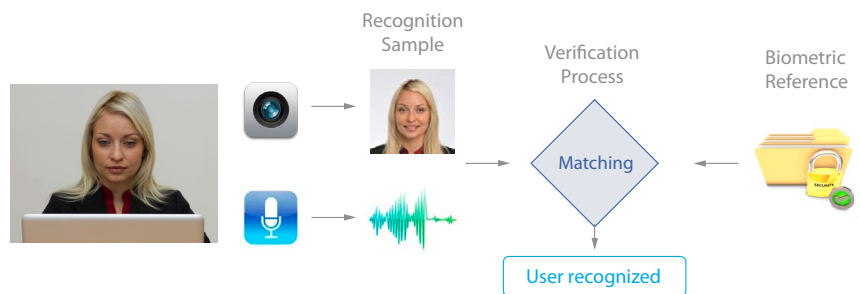
People recognize each other by how they look and sound, primarily by their face and voice. MyBioID allows people to identify themselves online in the same natural way they do in real life. When a user first signs up for MyBioID, they take a few pictures with their webcam. These are called enrollment pictures - they teach MyBioID how to recognize the user.



Enrollment process: When the user enrolls with MyBioID, face, iris, and/or voice are captured several times, combined into an encrypted biometric reference file, and stored in a secure database.

Then the user can test the login process with another picture. This is called verification. We compare this with the enrollment pictures. If the pictures match, the enrollment is successful. If not, the user simply takes a few more pictures until it works. Typically it works just fine the first time.

After that, whenever the user logs into MyBioID, we repeat the verification. We take another picture and compare it to the enrollment pictures. That way we know it's really the authorized user logging in. If the user has already logged into MyBioID from that computer or device, we simply recognize them without the need to enter a username.



Recognition process: When the user wants to be recognized (e.g. logging in), face, iris and/or voice are captured again and compared to the biometric reference created at enrollment. If the samples match, the user is recognized.

The same thing happens whenever the user accesses any of the websites that accept their MyBioID login. In that case, when they log into one of these sites they'll be sent to the MyBioID verification page, they are recognized, and if it matches then they'll be immediately sent back to where they came from. No fuss.

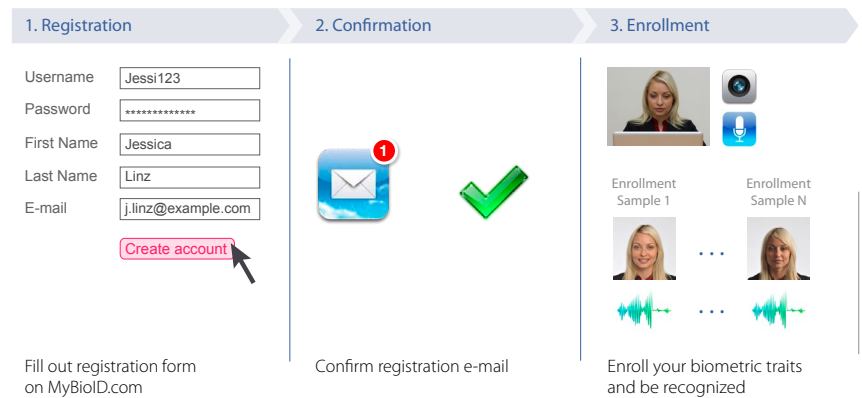
Service providers and end users can count on MyBioID: whenever you need it, it just works. It recognizes users, and it recognizes when someone else is pretending to be one of them. It takes top-notch technology to make MyBioID so secure and yet so easy and reliable. If you want to dig deeper, feel free to read on about our technology on our website [www.bioid.com/technology](http://www.bioid.com/technology).

## Getting started with MyBioID

It's easy to start using MyBioID:

1. Go to MyBioID.com, fill out form and create account
2. Confirm registration e-mail
3. Enroll your biometric traits and be recognized

Done!



## MyBioID subscriptions

MyBioID subscriptions are available in three packages:

### MyBioID Basic

Free to consumers, this subscription allows users to access multiple online accounts with facial recognition as well as limited additional features.

### MyBioID Pro

The Pro subscription, available on a yearly basis, is best for security-cautious consumers, families, and small businesses, and for web services that cater to such users. It offers unlimited use and group subscriptions with central administration.

### MyBioID Premium (coming soon)

The Premium subscription, available on a yearly basis, offers the advanced security and identity assurance features that enterprises and financial institutions require.

## Subscription packages and features

Features	Basic	Pro	Premium
Face Recognition	✓	✓	✓
Iris, Voice Recognition	✗	✗	✓
User-Centric Identity Management	✓	✓	✓
Premium Security Features	✗	✗	✓
Account Sleep	✗	✓	✓
Group Management	✗	✓	✓
Custom Domain Support	✗	✓	✓
Enterprise Protocol Support	✗	✗	✓
Usage	30 recognitions/ month	unlimited	unlimited

## Features and benefits

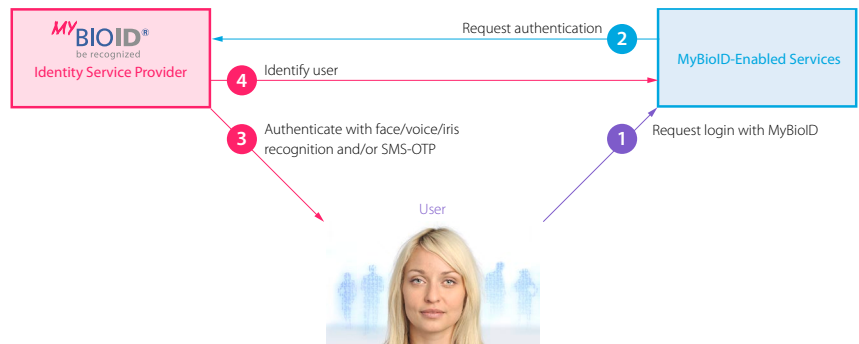
MyBioID offers many features, yet is easy to understand and easy to use.

### Being recognized



MyBioID hides the complexity of advanced authentication behind an ease-to-use graphical user interface.

**Biometric single sign-on:** Log into multiple websites and online services without passwords, with the only method that recognizes your actual presence. Works with any of hundreds of thousands of websites or identity and access management solutions that accept OpenID or MyBioID login.



**Login with MyBioID:** When a user logs into a MyBioID-enabled website, the site forwards the user to MyBioID and requests authentication. MyBioID returns the recognized user and identifies the user to the site.

**Face recognition:** Log in simply by looking at the camera. Highly accurate face recognition verifies that you're really there.

**Iris recognition:** Log in by looking at the camera. Can be combined with face and/or voice recognition. Because the iris is as unique as a fingerprint, it's even more secure than face-voice or face alone, but just as easy. Advanced super-resolution technology means you don't need a high-resolution camera to get reliable results. Available with Premium subscription only.

**Voice recognition:** Log in just by saying a pass phrase. Or combined with face and/or iris, look in the camera and say a pass phrase. Advanced speaker recognition recognizes it's you by the sound of your voice AND the choice of pass phrase. You can "reset" your login at any time simply by changing your pass phrase. Available with Premium subscription only.

**SMS one-time password:** Add the extra security of optional multi-factor authentication, to access all or only your most sensitive accounts (such as online banking). At authentication, a one-time password is sent to your mobile phone via SMS. Because the authentication occurs "out of band" (through a separate channel), it provides very strong protection against man-in-the-middle attacks. Additional SMS fees apply.

**Dynamic risk-based multifactor authentication:** MyBioID can also recognize the devices and locations from which you usually log in. Then if you choose, for even stronger protection MyBioID can require additional measures such as SMS OTP when you log in from a different device or location.

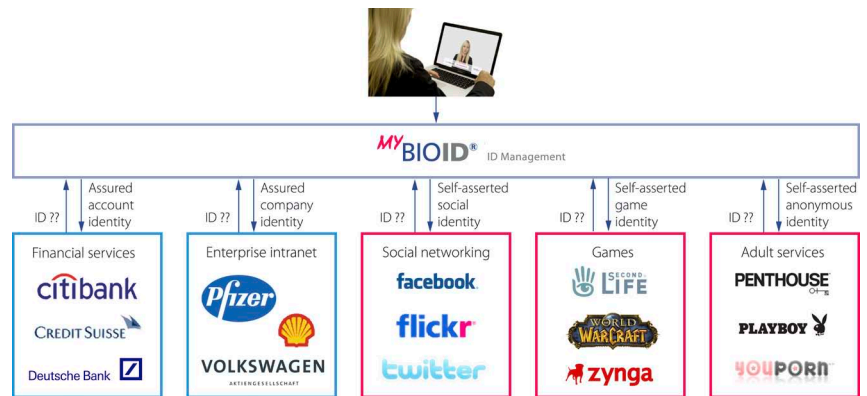


OpenID is an internet-scale identity standard used for over one billion user accounts and widely supported by IT industry leaders such as Google, Facebook, Yahoo!, Microsoft, AOL, MySpace, Sears, Universal Music Group, France Telecom, Novell, Sun, Telecom Italia, and many more.

**OpenID:** MyBioID supports the OpenID authentication protocol, so you can use MyBioID for any site that supports OpenID login. Service providers and companies can give their users and employees the benefits of MyBioID with a very simple integration based on the OpenID protocol. They can choose to allow all OpenID logins or restrict access to only MyBioID users.

## Identity management

**User-defined personas:** Define several personas to reflect the different ways you present yourself online, and assign different personas to different online services: for instance a basic, anonymous persona with very little information for when you really want to protect your privacy, another persona with your business contact information for work-related services, and a third with limited personal information for social networks. Each persona can have different authentication settings: so for instance your work and financial services personas could require stronger authentication than your social network or gaming personas. Available with Pro or Premium subscription only.



With MyBioID you can define multiple personas to reflect the different ways you present yourself online. Some identities may be assured (verified by a third party), while others may be self-asserted or even completely anonymous.

**OpenID federation:** Conveniently register with new websites and services using your pre-defined personas without the need to type in your credentials. Log in quickly and easily, without yet another username and password, to any of the vast and growing number of websites and services that support the OpenID standard.

**Password bank:** For your accounts with sites that don't support OpenID or MyBioID, assign strong passwords that you don't have to remember, store them securely, and log into these sites easily through your MyBioID portal.

**Identity assurance:** Some types of services (banks, e-commerce sites, social networks, dating services, gambling sites) require verification of your real identity, or of certain facts such as your age. This can have legal grounds or can simply be a way for the service to ensure greater trust within its community. MyBioID will support multiple assurance levels in the future.

Any level can also be handled anonymously – that is, the service provider does not need to know your real name or other personally identifying information, but can for instance simply be assured that you are really over 18.

## Privacy and data protection

**SSL/TLS secured communication:** Your information is safe, because all communication between you & MyBioID is encrypted using state-of-the-art SSL/TLS protocols.

**User-owned biometric data:** You own your biometric data (enrollment and recognition samples) and can review, download or delete them at any time.

**User-controlled data sharing:** When you register with a new online service through MyBioID, we share only the profile data you decided to share. You can choose to remain anonymous or share only limited details.

**Anonymized management of biometric data:** To protect your privacy, your biometric data (enrollment and recognition samples) is stored separately from any personally identifying information (profile data, etc.), linked only through an anonymous index.

**Sign-in seal:** Avoid phishing attacks by using a personal sign-in seal. You provide an image that will always be displayed on your MyBioID site before you log in, so you can be sure it's really us and not a copy meant to steal your information.

**User-selectable data storage:** By default your data is stored with us in secure Amazon EC2 or Microsoft Azure hosting facilities using military-grade encryption and following IT security best practices. However, you can choose to store your data (biometric information, profile data, history, etc.) in your own account with one of several online storage services. After all, it's your data.

**Secure access to online storage services:** Link your accounts on online storage services such to your MyBioID account. Then you can assign the storage service account a strong password that you don't have to remember, and access your files conveniently and securely through your MyBioID portal.

## Account management

**Event log:** Keep track of your account history and find out if someone is trying to access your accounts. MyBioID shows you every login attempt, successful or failed, to each of your accounts. It even includes a picture of failed login attempts – so you can see if someone else is trying to access your accounts. You can also see a list of each account you access through MyBioID, and disable an individual account if you no longer trust the service provider.

**Multiple sign-on restriction:** Optional feature prevents login on multiple computers/devices at the same time.

**Account sleep:** Protect your accounts while you're travelling, by temporarily blocking access. Requires SMS notification. Additional SMS fees apply. (Available with Pro or Premium subscription only.)

**SMS event notification:** Know right away if there is a threat to one of your accounts. Receive notification via SMS for specific events, such as when someone unsuccessfully tries to access to one of your accounts. Additional SMS fees apply.

### System management

**Custom domain support:** MyBioID supports custom domains, so service providers and businesses can offer a consistent user experience. With a custom domain, service providers can also freely define the formatting of usernames. Available with Pro or Premium subscription only.

**Anonymized user accounts:** To protect the identities of their users, service providers and businesses can identify their users to MyBioID using anonymous indexes. Available with Pro or Premium subscription only.

**Group subscription:** With MyBioID, families, companies and service providers can manage their users with a group subscription. Benefit from group subscription discounts, single payment, central administration, bulk upload of user information, automated administration via API, and custom branding. Available with Pro or Premium subscription only.

**Referral program:** Earn free MyBioID services by referring your friends; they get rewards too. We make it easy for you to invite them.

	If your referred friend signs up as		
	Basic User	Pro User	Premium User
as Basic User you will get	2 additional face authentications/month	5 additional face authentications/month	10 additional face authentications/month
as Pro User you will get	1 free week Pro subscription	1 free month Pro subscription	1 free month Premium subscription
as Premium User you will get	1 free week Premium subscription	2 free weeks Premium subscription	1 free month Premium subscription
and your friend will get	2 additional face authentications/month	1 free month Pro subscription	1 free month Premium subscription

## About BioID

BioID is guided by the vision that camera-based recognition services will replace traditional username/password-based authentication to greatly enhance the convenience, user experience, privacy and security of internet and mobile users and help protect them from identity theft and data theft. BioID is a leader in multi-modal biometric recognition and IT security.

With the increasing use of the internet as well as mobile IT and communication services, people have a growing number of internet accounts and digital identities, which are typically protected only by a password or the combination of a token (card, key, USB stick, etc.) and a password. In contrast, BioID offers the easiest and most secure way to log into online accounts, authorize transactions and manage online identities, without remembering dozens of passwords. By recognizing the user's presence with a webcam or mobile phone camera, BioID helps reduce the chances of online identity theft and data theft without software installation or special hardware.

BioID's recognition solutions recognize a person reliably by their face, iris and voice, and thus prevents fraudulent use of digital identities. BioID's solutions have been proven through many years of use at enterprises, banks and government organizations, and can be integrated flexibly into existing IT and communication environments.

Privately held, BioID's development facilities are located in Nuremberg, Germany. For more information, please visit [www.bioid.com](http://www.bioid.com).

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