



Biogy's *True Identity*[™] solution solves the computer security crisis.

True Identity authorization for adding ultra security to devices (smart cards, mobile phones, tablets, laptops, PCs, routers, etc.)

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A major crisis exists with the current state of cybersecurity technology.

The authorization of an action by users is not securely bound to the identity of an individual.

A digital identity (e.g., SSN or cryptography key) is a virtual identity; it is not a true identity of a living person.

RSA (rsa.com) was the gold standard for security. RSA recently disclosed that their marquee product, SecurID[®], suffered a catastrophic security breach.

Over 25,000 corporations and 40 million users worldwide are currently at risk because of this breach.

“RSA’s limited disclosures may have been driven by the desire to avoid creating a panic among its customers.”

– *Wall Street Journal*, 19 March 2011.

RSA SecurID[®] was breached because of fundamental security weaknesses.

RSA SecurID® weaknesses are shared by Symantec, Verisign & other companies offering similar products.

The reasons are:

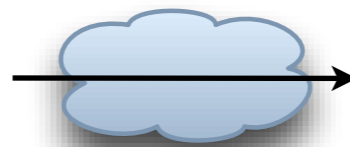
- **Centralization.** RSA seeds, which are used to create each one-time passcode, are generated and stored on the network.
- **Determinism.** RSA seeds and one-time passcodes are created by deterministic algorithms. A new number flashes every 60 seconds, which is calculated from two items, a ***secret seed*** unique to that device and the ***time of day***. **Reverse engineered RSA algorithms along with the secret seed breaks RSA SecurID.**
- **Untrusted Browser attacks.** RSA SecurID has been cracked.
<http://www.technologyreview.com/computing/23488/?a=f>
- **Digital Identity.** A digital identity using RSA type of security can be stolen or breached.

Current Cybersecurity

Current cybersecurity technology stores pins, keys, biometrics, credit card numbers and other user credentials on mobile devices and the network. This design is susceptible to many cyberattacks.



mobile devices



Internet

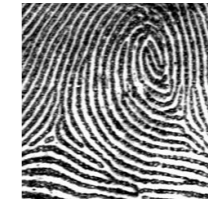


network devices

Common categories of possibly hundreds of types of cyberattacks:

1. DNS spoofing | Phishing schemes
2. Man in the middle attacks
3. Host-based I/O sniffers (i.e. keystroke logger)
4. Network | Kernel stack | Runtime analysis

Biogy *True Identity*[™]



- *True Identity*[™] identifies a person based on biometrics (e.g. fingerprint, iris, finger vein, face, hand).
- *True Identity*[™] is generated by a unique person on their personal mobile device, is never transmitted over any medium including the Internet, and never exists in any stored form.
- Individuals are identified based on *True Identity*[™], **NOT** digital keys or seeds on mobile phones and PCs.
- *True Identity*[™] cannot be altered or captured by hackers.



http://en.wikipedia.org/wiki/Global_Security_Challenge

Biogy competed against over 300 early-stage security companies. Biogy won the West Coast Finals of the Global Security Challenge. Head judge, Dr. John Morgan, Deputy for Science and Technology of the DoD Counter-Terrorism Technology Support Office, called *True Identity™* a disruptive solution to address cybercrime.

<http://www.info4security.com/story.asp?storyCode=4125998§ioncode=9>



Only Biogy offers a solution that overcomes inherent limitations of RSA-type technology.

True Identity[™] is the answer to the needs of 21st-century computer and network security.

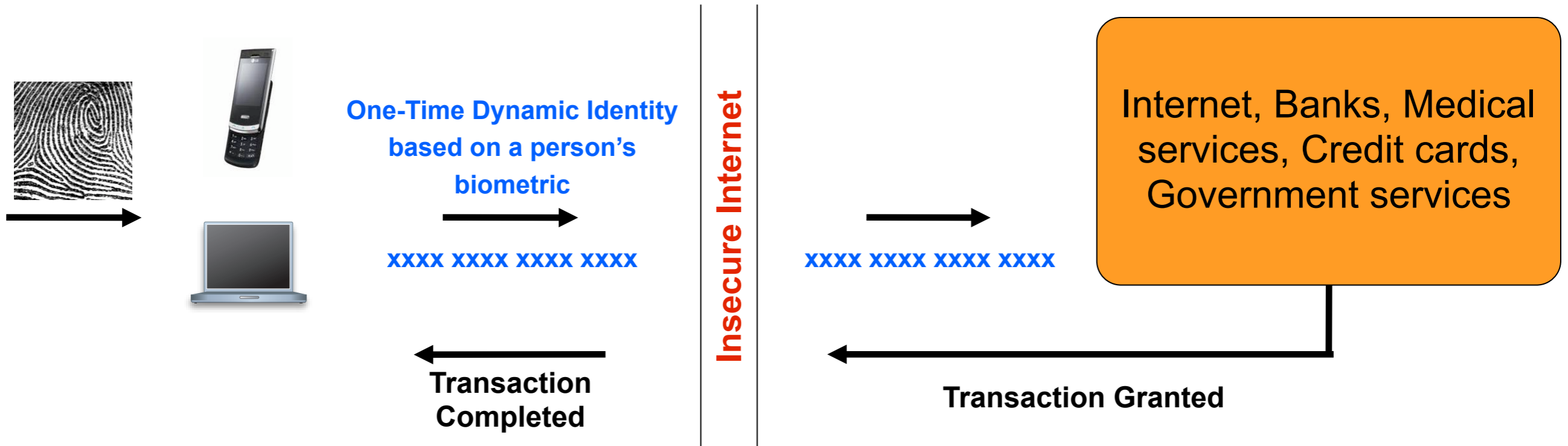
Disruptive Biogy Solution

- **Security.** *True Identity™* cannot be stolen.
- **Decentralization.** Passcode generators are created on the device. Generators cannot be stolen from the network because they do not exist on the network.
- **Unpredictability.** Biogy's solution does not require pseudo-random number algorithms to create unpredictability. Reverse engineering of Biogy algorithms does not reveal the passcode generator.
- **Stops untrusted browser attacks.** *Biogy has the solution with 16 patents (7 issued, 1 allowed and 7 pending) to back it up.*

Biometric *True Identity*TM inside sends unpredictable **One-Time Dynamic Identity**.

Biogy only sends a one-time use code (no biometric info) over the insecure Internet.

Biogy security technology can be incorporated into many platforms.



Biometrics and personal identification information exist only in the Biogy secure module. Personal data and biometrics are never transmitted over insecure lines.

Some applications of Biogy technology that can help stop fraud and theft

Estimated \$1 trillion annual loss from cybercrime

Fatal System Error by Joseph Menn;

<http://www.npr.org/templates/story/story.php?storyId=122958695>

- Payment Transactions
Bank to Bank (SWIFT); <http://en.wikipedia.org/wiki/SWIFT>
Internet & mobile phones, credit card
- Website access and online accounts
- Logical and physical access (e.g. VPN, building facilities)
- Digital Rights Management
http://en.wikipedia.org/wiki/Digital_rights_management
- Proving you are human (e.g. anti-spam, bots)
<http://en.wikipedia.org/wiki/Botnet>



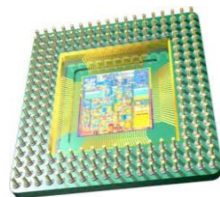
Biogy Multi-Platform *True Identity*[™] Solutions

Biogy solutions can be added at low cost to the current security infrastructure, primarily to secure payment transactions and critical infrastructure (e.g., the electrical grid).

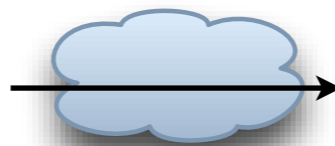
Biogy security technology can be integrated into both existing mobile devices (e.g., mobile phones, smart cards, laptops) and network devices (e.g., routers).



System-on-a-chip processors with a Biogy secure module can be integrated into a complete identity management system, protecting on the order of \$1 trillion in transactions annually.



Secure Module



Enterprise Authorization Server
(e.g., VISA[®], PayPal[®], Verizon[®])



Biogy Patents

Number	Title	Status
7,423,515	FPALM II Fingerprint authentication lock mechanism II	Issued 9/9/2008
7,565,548	Biometric print quality assurance	Issued 7/21/2009
EPO 05 849 368.5	Biometric print quality assurance	Pending
11/880,486	Biometric authentication lock mechanism	Pending
7,669,236	Determining whether to grant access to a passcode protected system	Issued 2/23/2010
12/383,561	Secure data storage with online data vault	Pending
11/104,357	System for generating requests to a passcode protected entity	Issued 2/08/2011
7,702,911	Interfacing with a system that includes a passcode authenticator	Issued 4/20/2010
7,707,622	An API for a system having a passcode authenticator	Issued 4/27/2010
11/131,652	Method of generating access keys	Allowed
12/214,883	Receiving an access key	Pending
11/136,851	Setting up a security access system	Issued 8/03/2010
Filed 6/18/09	Building a security access system	Pending
80/288,786	System with access keys	Pending
EPO 05 854 862.9	Access Keys	Pending
EPO 06 748 170.5	Passcodes	Pending



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