IDENTIFY YOUR CUSTOMERS BEYOND A SHADOW OF A DOUBT



AUTHENTICATE WITH CONFIDENCE

Reduce losses due to identity theft and fraud

Combine biometrics and other methods for highest levels of security

Customize security levels based on transaction risk

Harness mobile devices to increase security across all channels

Meet and exceed federal guidelines for authentication



RECOGNIZE YOUR CUSTOMERS AND YOUR RISKS

The rapid rise of mobile and online banking is changing the face of the industry. With users numbering in the hundreds of millions worldwide, mobile banking presents unprecedented opportunities for increased convenience and accessibility. At the same time, it introduces new threats from identity theft and fraud, as the majority of transactions are conducted with no face-to-face customer contact.

Financial institutions worldwide are experiencing significant threats from hackers, viruses, spyware and malware. A single attack can result in millions of dollars of losses and damage your institution's reputation and brand. Meanwhile, customers are juggling a series of complex, ever-changing passwords to keep their identities from being stolen.

Some banks have viewed losses from identity theft as a cost of doing business, but as these attacks increase in frequency and amount, the need to address cyberthreats has become apparent.

A powerful defensive weapon now available to banks is CSC's ConfidentID™ Mobile User Authentication, a biometric-enabled authentication solution that helps you verify your customers' identity beyond a shadow of a doubt. Powered by Daon's IdentityX engine, this offering is part of the ConfidentID Mobile Security Portfolio, CSC's flexible, many-layered approach to security in the online banking environment.

ConfidentID Mobile — CSC's Full-Featured Portfolio for Banking Security

Offerings

- User authentication
- Device management
- Mobile application protection
- Location intelligence
- Network services
- Data protection

Services

- Cybersecurity
- Mobile consulting
- Development and integration
- Testing and certification

BALANCE CONVENIENCE WITH SECURITY

CSC introduced ConfidentID Mobile to help you significantly reduce identity management risks and improve the bottom line while allowing your customers to conduct their transactions with confidence — anytime, anywhere.

ConfidentID Mobile User Authentication provides efficient, reliable identity authentication for mobile, online and other banking transactions using a powerful combination of biometrics, passwords and other techniques. This multifactor authentication provides higher levels of certainty than other alternatives that rely on a single factor such as a password, PIN or Public Key Infrastructure (PKI). The software employs dynamic security levels, allowing you to customize the level of authentication based on a transaction's value and your organization's risk management strategies.

ConfidentID Mobile harnesses the convenience, power and ubiquitous nature of smartphones and tablets to put advanced security measures in the hands of your customers. It uses the built-in capabilities of the devices they already have and requires no additional hardware.

ConfidentID Mobile User Authentication benefits include:

- Provides robust security with the highest authentication fidelity available
- Unites banks and customers in protecting common interests
- Positions organization as security leader
- Scales easily and adapts to changing technologies
- Takes advantage of mobile device portability and convenience
- Does not require costly hardware or systems integration.

MOBILE BANKING EXPANSION

Worldwide mobile banking users will reach 530 million by 2013 and 894 million users worldwide by 2015. Mobile payment transactions will surpass \$171 billion in 2012.

In 2011, worldwide smartphone shipments from the top five vendors totaled 491.4 million. The average person has access to a mobile device for 14 hours per day.

Between 3 percent and 15 percent of international money transfers handled by agent networks will be performed on mobile handsets by 2015, generating up to \$6.2 billion in service revenues.



IDENTIFY PROBLEMS BEFORE THEY BECOME YOURS

POSITIVELY IDENTIFY CUSTOMERS WITH MULTIFACTOR AUTHENTICATION

ConfidentID Mobile comprises two applications, one securely located within your datacenter and one on your customer's mobile device. When a customer visits your website, uses your mobile app, or calls the help desk to perform a transaction, a request is made from the bank's server to the customer's mobile device for verification.

The type of verification required depends on the type and monetary amounts of the transaction and your institution's risk policies. It might include some combination of biometrics and passwords that can be used in conjunction with basic possession of the device itself and even the customer's GPS location. The ConfidentID Mobile server assesses the information and, if authentication is successful, allows the requested transaction to complete without further action from the customer.

ConfidentID Mobile supports a range of authentication techniques based on:

- Something your customer has, such as a smartphone or tablet
- Something your customer knows, such as a password or PIN
- Something your customer is, utilizing biometrics that measure distinctive physiological characteristics (such as face, voice or palm recognition)
- Your customer's location, which can be verified by global positioning system (GPS), IP address and cellular triangulation.

By tying all these methods together, you can achieve truly robust authentication capabilities to ensure the integrity of all customer transactions.

RISE OF IDENTITY THEFT AND FRAUD

Each year, millions of personal identities are stolen, many from stolen PCs or mobile devices. Malicious cyberattacks are on the rise with consumers losing an estimated \$3.4 billion in 2011 alone (CyberSource).

In fact, one employee of a large bank leaked confidential account information to scammers that resulted in more than \$10 million in losses.

Even mobile banking applications are under attack as cybercriminals exploit security flaws, including storage of sensitive user details in hidden files on smartphones. Crimeware kits such as Zeus and Spyware have used mobile apps as helpers to bypass two-factor authentication and gain access to victims' money.

GAIN CERTAINTY AND FLEXIBILITY

SEE THE WHOLE PICTURE BIOMETRIC ANALYSIS

FACE RECOGNITION AND FACE LIVENESS:

The ability to recognize people by their facial characteristics, Including the ability to tell the difference between a static photo and a live face being presented to the camera





VOICE RECOGNITION: The ability to recognize a person by his or her spoken voice, including the ability to do both voice detection and voice liveness





PALM RECOGNITION: Analysis of the lines in the palm, which are sufficiently unique to be combined with another biometric method to provide a strong tool for authentication scoring





OTHER BIOMETRICS: Other methods such as fingerprint and iris identification as they become available on mobile devices without needing alterations or attachments





ConfidentID Mobile offers multiple forms of biometric analysis. The authentication process is set by users and can vary based on the type and monetary amounts of transactions. ConfidentID Mobile far exceeds the authentication measures recommended by the Federal Financial Institutions Examination Council (FFIEC), which in 2011 warned that reliance on single-factor authentication as the only control mechanism is "inadequate for high-risk transactions involving access to customer information or the movement of funds to other parties."

The solution's technology captures voice, face and palm biometrics through a smartphone or tablet, encrypts them, and forwards the encrypted data over the data channel. ConfidentID Mobile also provides a positive confirmation of the transaction details to your users, which means they can tell if the transaction has been modified between the transaction request and the server.

CUSTOMIZE SECURITY LEVELS TO MATCH RISK

CSC's ConfidentID Mobile lets you customize the level of security for different types and values of transactions in order to manage risk accurately and appropriately. You can give customers added flexibility with the option to adjust their security levels as long as they meet your minimum requirements.

This balance between customer convenience and rock-solid security provides a key point of brand differentiation for your organization in today's security-conscious market. ConfidentID Mobile appeals to tech-savvy early adopters as well as security-focused businesses and customers.

The available levels of security cover all types of transaction scenarios. For example, a customer transferring \$500 from one account to another would be required to complete a lower level of authentication than a CFO performing a payroll transaction or a commercial banker moving large funds for clients. The flexibility accommodates high-dollar, high-risk transactions or low-risk, low-value transactions, with the ability to adjust settings based upon your security and risk policies.

SHINE A LIGHT ON FRAUD

STOP HACKERS IN THEIR TRACKS

ConfidentID Mobile User Authentication defeats growing threats to online security such as "manin-the-middle" (MitM) and "man-in-the-browser" (MitB) attacks, in which an attacker intercepts a communication between the bank server application and the customer's device. These attacks are increasingly used to steal financial information and change transaction values without the customer even recognizing it.

ConfidentID Mobile stops such attacks in their tracks. It provides both in- and out-of-band transactional authentication options for different security levels. At lower levels, a simple click of an "OK" button may suffice. As the transactional level increases, the user might be asked for additional forms of authentication such as a PIN or password and a face, voice or palm image, based upon the risk polices you have set in place.

These additional options can also be randomized, making it impossible for playback repetition tools to be used against your customers. At the same time, behind the scenes, mutual PKI authentication between the device and the ConfidentID Mobile Server is being performed. Finally, location intelligence can provide one additional corroboration.

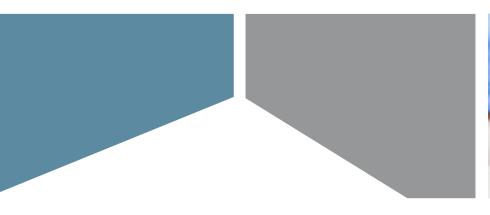
This is one area in which mobile technology facilitates security. Because so many consumers already have a smartphone available, they can easily access it to provide identity confirmation for transactions — effectively defeating MitM and MitB attacks.

TAKE ADVANTAGE OF EMERGING TECHNOLOGIES

ConfidentID Mobile User Authentication is hardware-agnostic and designed to run on virtually any mobile device that provides basic image and voice capture capabilities. Both your customers and employees can take advantage of its security capabilities using the devices they already own. There's no need to invest in specialized biometric equipment. And the software is based upon a service-oriented architecture using Web services, so it can easily accommodate and integrate new technologies as they emerge.

CSC gives you multiple choices for implementing the ConfidentID Mobile portfolio. You can install and manage the software at your data center and let your customers download the application from an app store, or you may elect to let CSC's expert personnel manage the software at your location or your third-party service center. Other options are planned for the future to provide further flexibility and cost effectiveness.







DISCOVER CSC'S BANKING, IDENTITY MANAGEMENT AND CYBERSECURITY EXPERTISE

With decades of experience in supporting banks and a wide range of other organizations, CSC is a leader in the fields of financial transaction processing and cybersecurity risk management. We work closely with government security agencies and large commercial organizations to deliver a practical, comprehensive approach to keep pace with today's dynamic risk landscape. Our suite of IT security solutions includes:

- Managed security services
- Identity management and privacy assurance solutions
- CSC StrikeForce vulnerability and penetration testing services
- Common criteria compliance and IT security testing.

CHOOSE FROM A FULL RANGE OF BANKING SOLUTIONS

ConfidentID Mobile is one part of the complete range of banking, lending and credit services solutions provided by CSC:

- Expert consulting services based on decades of industry experience
- Industry-leading software applications
- · Application services such as systems integration, upgrades, development and testing
- · Infrastructure services including managed hosting, cloud computing, virtualization and security
- Business process services to support core processing.



Find out how CSC can help you identify customers beyond a shadow of a doubt. Visit www.csc.com/confidentIDmobile, call **1.800.345.7672** (+1.469.499.9981 if outside the U.S.A.) or send an email to **inforequests@csc.com**.





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About CSC

The mission of CSC is to be a global leader in providing technology-enabled business solutions and services.

With the broadest range of capabilities, CSC offers clients the solutions they need to manage complexity, focus on core businesses, collaborate with partners and clients and improve operations.

CSC makes a special point of understanding its clients and provides experts with real-world experience to work with them. CSC leads with an informed point of view while still offering client choice.

For more than 50 years, clients in industries and governments worldwide have trusted CSC with their business process and information systems outsourcing, systems integration and consulting needs.

The company trades on the New York Stock Exchange under the symbol "CSC."

About CSC in Financial Services

CSC provides mission-critical business solutions, consulting and outsourcing services to leading financial services firms around the world.

We bring more choices to the industry. We help clients plan for business and technology change. We create software, tools and processes to address specific business needs, and we continually enhance those solutions by collaborating with an extensive network of client communities and technology partners.

Our global outsourcing operations give us real-world insight into business and IT processes that deliver the best results for our clients. More than 1,200 major banks, insurers, and investment management and securities firms rely on the experience, ingenuity and leadership of more than 10,000 CSC employees focused on financial services.

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