

# ValiCert Digital Receipt Solutions

Legal-grade proof management for electronic transactions "ValiCert's unique Digital Receipt Solutions enable our clients to conduct high-value business over the Internet with legal-grade proof of the transaction; saving time, money, and increasing accuracy."

Alastair MacWillson, Joint Global CEO, beTRUSTec (an e-security business of PricewaterhouseCoopers)

# Applications

#### ELECTRONIC COMMERCE

- Procurement and supply chain management
- Point-of-sale data processing (POS)
- Marketplace bid processing

#### FINANCIAL AND INSURANCE

- Equity trade confirmations
- Funds transfers
- Insurance claims processing
- Electronic bill payment and presentment (EBPP)

#### HEALTHCARE

- Non-repudiable document delivery
- Prescription management
- Patient records processing
- Lab results archival
- HIPAA complianceDrug submission compliance

# GOVERNMENT

- Non-repudiable document delivery
- Tax applications
- Permit processes

# **Benefits**

- Provides risk management for transactions
- Reduces likelihood of disputes
- Lowers cost of dispute resolution
- Eliminates need for paper-based proof
- Shortens time to resolution
- Reduces concern about tampering
- Extensible to multiple applications
- Integrates into existing environment
- Eases regulatory compliance

As companies increasingly migrate their business processes online they face the critical need to substantiate the details and circumstances of electronic transactions to their business partners, customers, and regulators. Yet many enterprises conducting e-Business, such as finance, healthcare, and government organizations, continue to rely on paper documents and wet-ink signatures. Constructing these paper trails lengthens transaction life cycles, raises the costs of managing and maintaining evidence, and increases the likelihood of costly errors. ValiCert Digital Receipt Solutions create and manage legal-grade digital proof, thus eliminating the need for traditional paper-based evidence.

# ValiCert Digital Receipt Solutions are available as a product or as a managed service, and provide:

- Reduced dispute-resolution, data-mining, and reconciliation costs.
- Adherence to corporate and regulatory policy.
- A legal-grade and tamper-evident trail of transaction events.
- Access to transaction records via a standard Web-browser.
- Proof that transaction archives have not been altered.

# **End-to-End Proof Management**

ValiCert Digital Receipt Solutions provide non-repudiation and dispute-resolution for electronic transactions by capturing transaction-specific information, and safeguarding these details in a tamper-evident digital vault. Transactions and documents can be digitally signed, time-stamped, verified, and audited in a standardized manner, and can be accessed via a standard Web browser. This array of digital evidence significantly reduces the legal risks associated with electronic commerce and dramatically increases the efficiency of tracking electronic transactions for auditing purposes.

Used by major banks, credit card, healthcare, and government institutions around the world, ValiCert Digital Receipt Solutions comprise an end-to-end solution for generating and managing legal-grade proof of electronic transactions.





# Overview

ValiCert Digital Receipt Solutions<sup>™</sup> provide end-to-end proof management for critical electronic business transactions, enabling companies to create, store, verify, and access legal-grade transaction evidence.

# **Flexible Deployment Options**

Although ValiCert Digital Receipt Solutions provide a complete framework for managing proof, the system is highly modular. The customer application can make a request for transaction evidence in the following ways:

- Outsourced—To the ValiCert Data Center or a ValiCert Affiliate.
- In-house—Installed in-house at the customer site.
- Hybrid—The Receipt Notary is located at the customer site, and the Receipt Vault and Receipt Center are outsourced to the ValiCert Data Center or a ValiCert Affiliate.

# **Easy Integration**

- ValiCert Receipt Toolkit<sup>™</sup> offers a set of clientside APIs to enable the easy integration of digital receipt functionality into existing applications.
- Receipt Toolkit allows the creation, endorsement, and verification of transaction evidence by connecting to the Receipt Notary.
- Seamless integration with other ValiCert products.
- Receipt Toolkit available in C/C++ and Java.

## Legal-Grade Electronic Transactions

■ The ValiCert Receipt Notary<sup>™</sup> generates, time-stamps, and digitally signs XML-based transaction confirmations.

- Individuals are bound to e-Transactions by captured digital signatures, time-stamps, and other transaction-specific data.
- Receipt Notary allows for certificate-based authentication of the client-side Toolkit connection to the Notary.
- Standards-based digital signatures based upon the current IETF XML-DSIG proposal.

# Tamper-Evident Storage

- ValiCert Receipt Vault<sup>™</sup> provides a secure, central repository for XML-based transaction confirmations.
- Receipt Vault converts XML transaction confirmations into relational database data.
- Receipt Vault stores integrity reports in a database through a JDBC interface.
- Hierarchy of Trust reports ensure tamper detection of the database contents.
- Receipt Vault can send integrity reports to Trusted Third Party service providers for future database verification.

## **Customizable, Web-Based Access**

- ValiCert Receipt Center<sup>™</sup> provides browserbased access to transaction data—no additional client-side software is needed.
- Receipt Center views are customizable so that different parties can have restricted views of the transaction evidence.
- Transaction confirmations can be viewed through the Receipt Center, or sent directly to clients, applications, and devices.
- Standard database reporting tools can be used to access and retrieve selected transaction confirmations.

#### ValiCert Digital Receipt Solutions<sup>™</sup> provide a complete solution for managing proof for electronic transactions.

*Initiate:* The customer application or server integrates with The ValiCert Receipt Toolkit<sup>™</sup> to initiate the transaction event capture, sending the requested transaction evidence to the ValiCert Receipt Notary<sup>™</sup>.

**Create:** The ValiCert Receipt Notary creates digitally signed and time-stamped transaction confirmations.

**Store:** The ValiCert Receipt Vault<sup>™</sup> acts as the archive for the transaction confirmations.

**Verify:** The ValiCert Receipt Notary and ValiCert Receipt Vault are both able to verify existing transaction confirmations.

**Access:** The ValiCert Receipt Center<sup>™</sup> provides Web-based access to the ValiCert Receipt Vault.

# **Technical Information**

## Supported Standards:

HTTPS, XML, LDAP, SSL, JDBC, and XML-DSIG.

#### Supported Security Components: RSA Crypto—J2.2, MD5, SHA, X.509, Java Security

Architecture, and Pluggable Java Crypto Extensions.

Supported e-Commerce Frameworks: co, cXML, BizTalk, IOTP, OBI, Fin XML, RosettaNet, and many others.

Supported Hardware Signing Modules: nCipher, Chrysalis (planned).

Supported Server Platforms: Solaris 2.6 and 2.7, Windows NT 4.0, and Windows 2000.

Supported Middleware and Commerce Servers:

SecureTransport, Tibco, Tuxedo, MQSeries, NSAPI, ApacheAPI, CORBA, BEA WebLogic, and Java.

Required Database: Oracle 8i.



#### **Worldwide Headquarters**

ValiCert, Inc. 339 N. Bernardo Avenue Mountain View, CA 94043 USA

Tel +1 650 567 5400 Fax +1 650 969 3554 Toll Free in U.S. 1 877 VALICERT Europe +31 20 3120 543 Japan +81 3 5651 0384 www.valicert.com

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