

# Secure Email and PKI Certificate Management Made Easy By Comodo

## Overview

Business-sensitive information is often distributed by unsecured email, and in doing so it's placed at risk. The same ease and utility that allows internal users, partners and customers to effectively communicate can be allowing your confidential information to be in easy reach of those who want to profit from it. To a moderately skilled person, inside the organization or out, unsecured email is easy to read, impersonate and alter, and is not much different from a postcard written in pencil.

To date, many email security approaches have been cumbersome and expensive, often requiring users to pre-exchange their public key or message password. The most frequent cause for email security to be bypassed was when the originator couldn't be bothered with the added complexity and, as a result, the email system and transmission would proceed without necessary safeguards. Alternately, some secure email systems work at the gateway server level in an effort to relieve users of this "option" but they lack the end-to-end message security that ensures protection of internally communicated and stored email. And finally, none of these systems had a very cost effective solution for rapidly deploying secure messaging to customers and business partners.

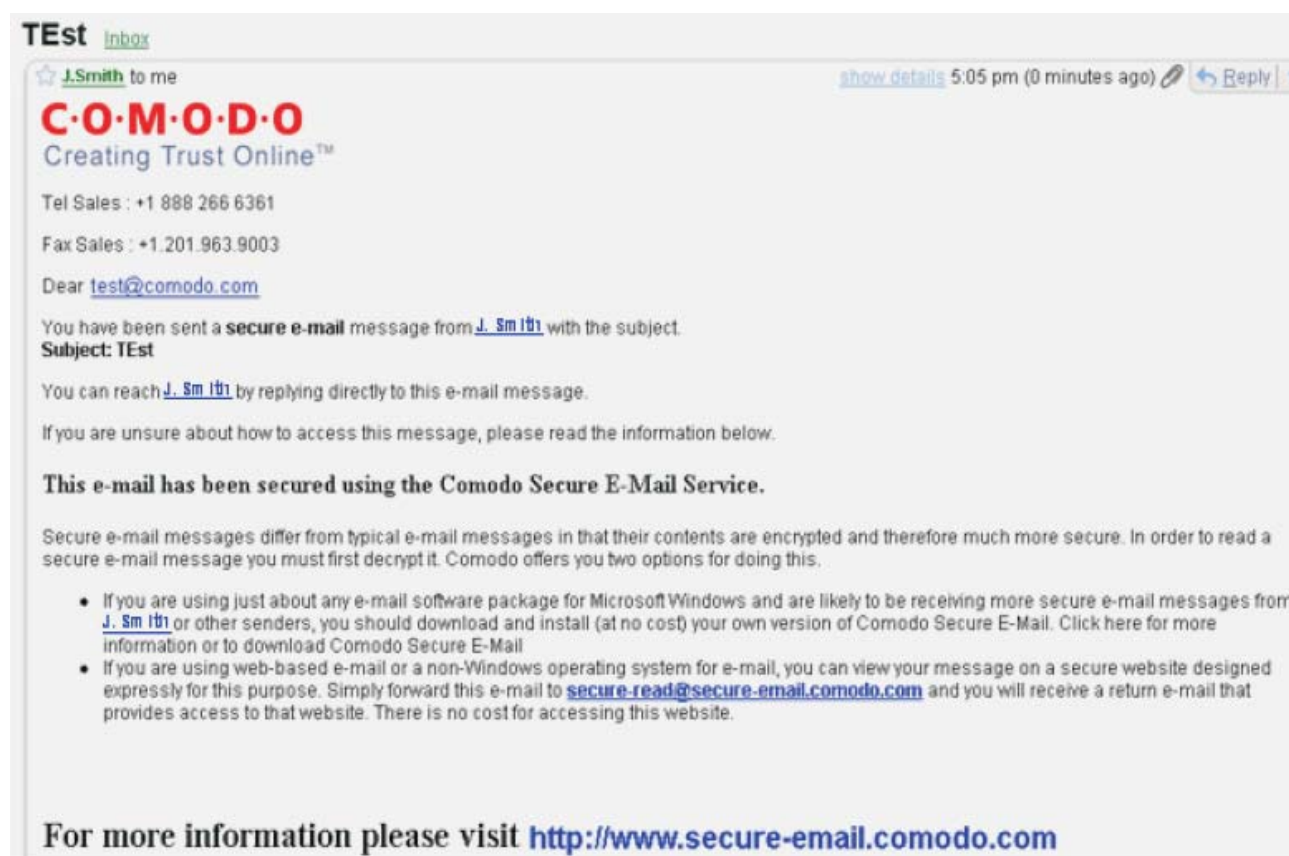
IT professionals work hard to balance the need to protect critical information with the cost and complexity of implementing any security solution. Until now, managers have had to make difficult tradeoffs to deploy and enforce email security, and have spent considerable time and money trying to make it useful.

## Things have changed!

Comodo secure email is now dramatically simpler, more effective and less costly than other contemporary solutions. IT managers and business users no longer need to make any tradeoff's to achieve state-of-the-art email security. Businesses can now implement secure messaging for their organizations, supply chains and customers using Comodo's secure email solution suite that includes:

- Comodo SecureEmail Pro; free email client software that works with most email programs
- Comodo Corporate S/MIME email certificates
- Comodo SecureEmail Web Reader Service; free online service

The Comodo SecureEmail Pro application contains a new, patent-pending technology that allows email originators to send secure email messages to recipients using a one-time-use digital certificate, for free. With the one-time-use certificate, recipients are authenticated and allowed to use the free online SecureEmail web service to decrypt and read their message. The recipients are also offered the ability to download their own digital certificate and/or the free Comodo SecureEmail software for future use as well.



Backed by Comodo's technical expertise and Certificate Authority operation, digital certificates are easy to deploy, easy to use, and make it easy to achieve significant security and cost benefits. When Comodo SecureEmail Pro is combined with Comodo's PKI Certificate Manager, all enterprise applications and users needing digital certificates can be automatically equipped and centrally managed. Email correspondents external to the organization can use the free web reader service or take advantage of the free SecureEmail software. Beyond securing just your internal business email, your external customer and partner email communications can be secured without being a cost obstacle. Further, with Comodo Certificate Manager, a PKI Certificate Administration utility, your business can have complete control over the issuance, expiration, renewal and revocation of all your digital certificates including those issued for user authentication access controls and SSL-enabled client-server communications.

## Comodo Email Security - SecureEmail Pro

SecureEmail Pro is an install-and-forget software application that can automatically encrypt and digitally sign all your outgoing messages without the need to pre-exchange passwords or public certificates. Featuring full compatibility with just about any S/MIME compatible email client (e.g. Outlook, Outlook Express, Windows Mail, Notes, Groupwise, Thunderbird, etc.), it features a built-in wizard that allows users to easily download and automatically setup a Comodo email certificate. Users will benefit from the security of automatically encrypting and digitally signing their email while the application handles difficult or hard to remember processes such as public-key exchange and management. Network administrators looking to implement total client-to-client email security can now consider Comodo end-to-end SecureEmail as a complement to gateway encryption applications which overlook the vulnerability of email being exchanged within the network or on the desktop. Faster and more secure communications are now available with less drain on IT resources. SecureEmail Pro offers unprecedented flexibility and control in averting the hazards that are always possible when users transmit or store confidential email and data anywhere in the world.

Comodo SecureEmail is based upon widely adopted S/MIME standards, and uses the same PKI technology that enables padlocked browser bars and SSL connections. Secure email allows a confidential exchange between an originator and a designated recipient that

- Encrypts the content (text and attachments) of originated messages so that it can only be read by the intended recipient. The strong encryption process requires no intervention on behalf of the originator.
- Digitally “SIGNS” the message, proving it came from the sender and that the contents have not been altered.

Organizations large and small are now free to communicate over the Internet without fear of email interception. SecureEmail Pro allows businesses to confidently transmit business contracts, plans, and sensitive data immediately, to anyone with a valid email address. Instead of entrusting vital communications to costly express mail services or the vagaries of a fax machine, SecureEmail Pro enhances productivity and business speed while significantly reducing costs. And, unlike postal mail and fax machines, the encrypted email can only be opened and read by the designated recipient.

When used in conjunction with Comodo’s PKI certificate management solution, the overall enterprise security and cost benefits increase even further as organizations can rapidly expand and dynamically manage all of their PKI certificates.

## PKI Certificate Management

PKI certificates protect digital information assets and identities by supporting data encryption while at rest or in-transport. Certificates enable user authentication and endpoint device access rights, and are employed to digitally sign and authenticate media objects such as web content, documents, files, email messages and software programs. PKI technologies help you to effectively meet these security and regulatory challenges by providing for the rapid deployment and reliable management of Enterprise Security, Trust and Compliance.

### Comodo Certificate Manager

Comodo has repeatedly helped businesses around the globe to address their unique requirements, and to achieve the benefits of sound PKI management solutions. By providing a capability to organize and streamline SSL certificate administration, Comodo enables significant cost savings in addition to important administrative

reporting, security, management and compliance improvements. Through its advanced certificate lifecycle management capability, Comodo Certificate Manager (CCM) provides your business the ability to self-administer, instantly provision and control all SSL certificates and certificate-enabled users or devices. CCM significantly reduces administrative obstacles and security deployment times, producing clear and immediate improvements to your security infrastructure and costs.

Large organizations may have thousands of digital certificates for all uses including email. At this scale, organizations realize significant benefits from Comodo's Certificate Manager because it's a turnkey system that automates and centralizes the installation, administration and renewal of all digital certificates.

Security managers who have administered their own PKI operation, or who have been frustrated trying to maintain an inventory of certificates in disparate departments and locations appreciate the benefits of Certificate Manager.

## Comodo Certificate Manager Feature Summary

- Administrative web interface to the Comodo Certificate Authority operation that offers a flexible alignment of administrative responsibilities and organizational domains.
- Two-Factor Authentication and/or IP address validation to protect administrative accounts.
- Local or Comodo secure site hosting options provide flexible security and reliability choices.
- Comodo secure site(s) meet the highest levels of "WebTrust" security and resiliency.
- Full administrative control over Comodo's extensive portfolio of SSL, S/MIME and Client Authentication certificates allows for rapid enrollment, approval, issuance, revocation and renewal of all certificates.
- Client Key Management Service for escrow and recovery of private keys allowing a protected (policy driven) restoration of user encrypted data.
- Auto-Enrollment & Self-Enrollment; Web Interfaces that allow corporate SSL and S/MIME email certificate requests from users (non-admins). Streamline deployments, reduce administrative time.
- Web-Interfaces can be branded to maintain your corporate image at all times.
- Configurable email alerts for pending certificate requests, approvals, expirations and revocations allows administrator and/or users to be externally notified in advance.
- Report sub-system produces detailed certificate and administrative status and activity logs.
- Real-Time Certificate Status Checking; Online Certificate Status Protocol (OCSP) allows the validity of certificates to be performed in real-time, increases response to urgent revocations.

## Combined Benefits

SecureEmail Pro is a powerful tool that keeps important email communications safe and useful for even the most critical information and transactions. Deploying and maintaining the distribution of digital certificates to dynamically support and protect your organization requires Comodo's full expertise in Internet security and digital certificates. SecureEmail Pro and Certificate Manager enable your business to business (B2B) and business to consumer (B2C) communications to remain safe, secure and easy. With an easy to use, easy to deploy and easy to manage solution, cost effective email security and PKI certificate management are here at last.

## Comodo Certification Authority Operations

More than 200,000 businesses use and rely upon Comodo for their Internet Identity, Security, Trust and Brand Assurance. On a day to day basis Comodo provides services which are certified to provide the highest possible levels of trust and integrity. To meet such requirements Comodo has invested heavily in providing both physical and logical security for the Certification Authority operations using high availability and redundant server systems deployed across diverse geographic locations.

## ***Comodo Secure Operations Overview***

Comodo employs policies and practices that have been designed to meet or exceed the requirements of the AICPA/CICA WebTrust Program for Certification Authorities, ANSI X9.79:2001 PKI Practices and Policy Framework, and other industry standards related to the operation of CAs. Comodo's global compliance with these stringent security and reliability standards has been repeatedly certified by KPMG.

To date, Comodo has issued hundreds of thousands of "validated" SSL and email digital certificates through our secure Certification Authority operation. The advanced physical and logical security and validation practices ensure that all Comodo certificates are highly trusted.

## **Use of Hardware Security Modules for Key Protection and Certificate Generation**

Comodo securely generates and protects its own private key(s), using a trustworthy system (IBM 4758 accredited to FIPS PUB 140-1 level 4), and takes necessary physical and logical precautions to prevent the compromise or unauthorized usage of such devices. All digital certificates issued are issued using IBM 4758 hardware security modules.

Access to the secure part of Comodo facilities is limited through the use of physical access control and is only accessible to appropriately authorized individuals (known as Trusted Personnel). Card access systems are in place to control, monitor and log access to all areas of the facility. Access to the Comodo CA physical machinery within the secure facility is protected with locked cabinets and logical access control.

The secure facilities are protected from fire and smoke damage (fire protection is made in compliance with local fire regulations) and flood and water damage. Comodo secure facilities have a primary and secondary power supply and ensure continuous, uninterrupted access to electric power. Heating / air ventilation systems are used to prevent overheating and to maintain a suitable humidity level. Comodo employs a redundant CA system to ensure uninterrupted service levels.

## About Comodo

Comodo is a leading global provider of Identity and Trust Assurance services on the Internet providing enterprises with a comprehensive array of PKI Digital Certificates, eCommerce Acceleration and Infrastructure Security solutions including Enterprise Endpoint Security software, UserAccessAuthentication (Two-Factor / Multi-Factor), Network Vulnerability Scanning and PCI compliance services.

Comodo secures and authenticates the online transactions, communications and endpoints for over 200,000 business customers and 3,000,000 users of our desktop software products.

Continual innovation, a core competence in PKI, and a commitment to reversing the growth of Internet-crime distinguish the Comodo companies as vital players in the Internet's ongoing development.

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