netmail

Policy-Based Email Encryption

The Business Case for Email Encryption

While email encryption is nothing new, encryption technologies have not been widely adopted by many organizations and corporations. Email encryption addresses three main business risks: It reduces the risk of data loss, it helps organizations comply with legal requirements, and it builds trust by demonstrating an organization's commitment to data security. Integrated with Netmail Secure, Netmail Encrypt is an easy-to-use email encryption solution that ensures secure delivery of incoming and outgoing mail. Encryption policies can be managed and enforced at an enterprise level through Netmail Secure from the Netmail Administration Console. All users in the Netmail Encrypt system, across multiple organizations, can thus send and receive email in a secure manner while the key exchange and encryption/decryption process is transparently handled by Netmail Encrypt.

Automatic Encryption

If it is configured to always encrypt, Netmail Encrypt uses standard S/MIME encryption to automatically encrypt messages for all recipients who have certificates that it can discover, as well as those recipients who exist in its list of encryption clients. When Netmail Encrypt encounters a recipient who does not meet either of these criteria, it prompts the sender to set up a hint and passphrase to retrieve their secure message and any future messages.

Simple Installation

Netmail Encrypt is available as a virtual appliance and is installed in the network near Netmail Secure. When email comes into your organization from the outside world, messages are first scanned by Netmail Secure. Encrypted messages are then decrypted by Netmail Encrypt and re-scanned by Netmail Secure before being delivered to recipients. When email leaves your organization, messages are first scanned by Netmail Secure prior to being encrypted by Netmail Encrypt and released to the Internet. Netmail Encrypt requires very little work to both install and configure, and can be installed without having to make a single change to a user's desktop computer. No software is needed, no settings are altered, and no email addresses are changed.

Multiple Encryption Options

1. Universal Secure Delivery:

For recipients who only have an email address and browser and do not have Netmail Secure, Netmail Encrypt works as a secure, web-based message delivery system that allows these recipients to easily view and reply to encrypted email messages. Netmail Encrypt requires no user training.

1. The sender sends an encrypted message (either by including a designated keyword in the Subject line or via the application of a policy aimed at protecting sensitive content).
2. Netmail Encrypt checks whether the recipient exists in its list of encryption clients. In this example, the recipient is not found.
3. Netmail Encrypt notifies the recipient that they have a secure message waiting for them via a simple email message with a private web link to a secure web page.
4. The recipient clicks on the private web link, establishing a secure web connection (using SSL) and are invited to set up a hint and passphrase to retrieve this secure message and any future secured messages.
5. After registering, the recipient receives an email notification that their secure message is available for retrieving. All future secure email from that sender will use the same hint and passphrase.

2. Secure Gateway-to-Gateway Delivery:

| Email Server | | Netmail Secure with Encrypt | | | | Netmail Secure with Encrypt | | Email Server |
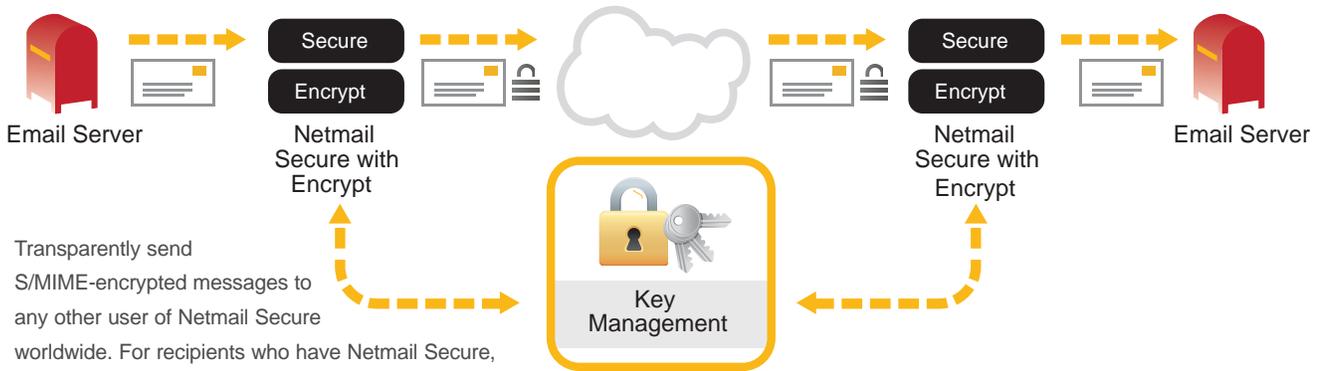
Transparently send S/MIME-encrypted messages to any other user of Netmail Secure worldwide. For recipients who have Netmail Secure, Netmail Encrypt automatically encrypts and decrypts email messages for all recipients.

3. Secure Gateway-to-Desktop Delivery:

Netmail Encrypt can encrypt messages using public keys harvested from incoming email messages. The first time an email that is digitally signed with a certificate from another PKI (Public Key Infrastructure) vendor is received, Netmail Encrypt harvests the certificate for validation. If successfully validated, the certificate is stored for future use. The next time an email is sent to that person, Netmail Encrypt automatically finds their certificate and uses it to encrypt the outgoing message.

Policy-Based Encryption

Like Netmail Secure's anti-spam, anti-virus, and data leak prevention policies, encryption policies can be managed and enforced at an enterprise level from the Netmail Administration Console. Email that matches a pre-defined policy is encrypted and securely transmitted, allowing users to easily and automatically encrypt email messages. Netmail Secure can also be configured to send all messages securely, or to only send certain email messages, as requested by users, securely. The following parameters can trigger encryption:

- The presence of protected healthcare of financial information, such as HIPAA codes, ABA routing numbers, credit card numbers, social security numbers, and more.

- The presence of confidential information through advanced document fingerprinting.

- The presence of sensitive information in the subject line and body of messages defined by keywords and regular expressions.

- The destination or recipient (such as a specific business partner or supplier), the sender, or message attributes (such as attachment type).

Standards Compatibility

Netmail Encrypt is standards based: Each Netmail Encrypt virtual appliance generates X.509 v.3 compliant digital certificates for its users. Netmail Encrypt manages these X.509 compatible public key certificates for each email user to perform its automatic encryption and decryption. Both public and private keys are securely stored inside the Netmail Encrypt virtual appliance.

Key Features

- Integrates seamlessly with Netmail Secure
- Allows for automated, policy-based email encryption
- Transparent operation and key management
- Communicates securely with virtually anyone
- Supports both S/MIME and SSL email links
- Each user is provided with a separate X.509 certificate
- Compatible with standard email clients
- No user training required

To learn more visit: **www.netmail.com/encrypt**