Who else is reading your email?

No one!

Are you sure?

Secure messaging from CipherTrust. Be sure.<sup>SM</sup>



#### **Presentation Outline**

#### Security

- Is security really an issue?
- What does CipherTrust offer?
- How does it work?
- Does that meet HIPAA/HCFA requirements?
- Message management
  - What are the issues?
  - Is CipherTrust's solution reliable and easy to use?
  - Is CipherTrust messaging scalable?
- ➤ The Bottom Line



### We Usually Protect What's Important



Vaults protect your money



Firewalls protect your networks and intellectual property



What's being done to protect your email?



"Golden handcuffs" protect your employees



Door locks protect your offices and homes







# What About Security?

When sent via the Internet, E-mail is like a postcard that can be read by hackers or copied in every "post office," or Internet computer, it passes through. E-mail confined to a private network isn't necessarily more secure: Tools for getting to it are readily available to hackers.

#### - Fortune

Secure email? Most organizations must securely send email over the internet to business partners, customers, or their employees. Many options currently exist, but a perfect solution remains elusive.

#### - The META Group



# The Need for Security Is Compelling



Fraudulent email used to bilk \$100,000 from Oracle in phony sexual harassment case.

- Source: www.employlaw.com



# 🔉 Merrill Lynch

"... Merrill Lynch will not be responsible for any loss or damage that could result from interception by third parties of any information made available to you ..."

- Source: www.merrilllynch.com

#### FBI's CARNIVORE

"... there is no substitute for electronic surveillance ..." - Source: www.fbi.gov

## **EMULEX**

"... The negative statements in the fraudulent press release resulted in unprecedented volatility in Emulex's stock, creating large losses for shareholders victimized by this hoax ..." - Source: www.emulex.com



"... Regular non-encrypted Internet e-mail is not secure ..." - Source: www.bofa.gov



### Currently, Secure Messaging Is Problematic

- Messaging systems are extremely vulnerable
  - Sensitive information is routinely sent through email
  - Email messages travel across the internet in plain text
  - Messages can be viewed, altered, deleted, and saved, with no evidence of tampering
  - Even when using S-MIME, reading email exposes the user name and password when logging in to POP3
  - "Sniffing" software is easy to get and use
  - Carnivore is being deployed
  - Existing certificate-based security solutions are cumbersome and costly to deploy and maintain
  - Most legacy messaging servers introduce significant network security risks



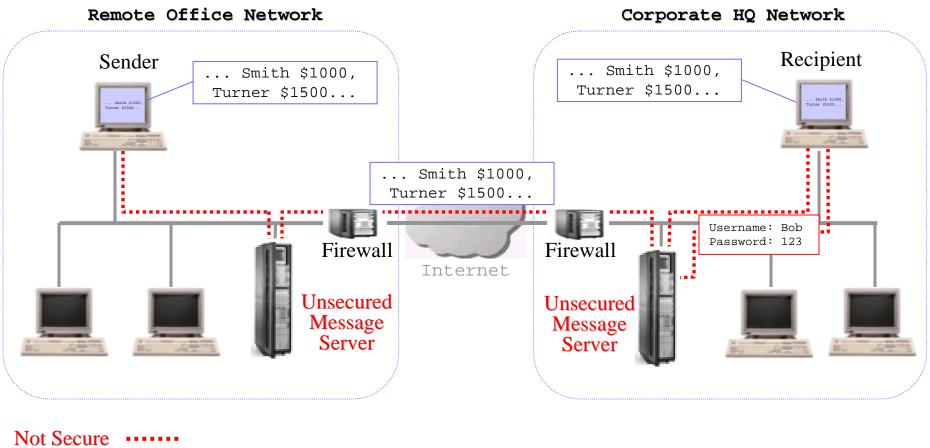
### **Analysts Agree**

66 By 2003, 60% of global 2000 organizations will have a formal structure to enable some form of secure e-mail delivery over the Internet. -The META group

### Our Comprehensive Secure Messaging Solution

- CipherTrust provides the only comprehensive secure messaging solution
  - Security both inside and outside the firewall
  - Flexible solution supports multiple encryption schemes, including S-MIME and Web mail
  - Vastly reduced certificate management
  - Secure remote management

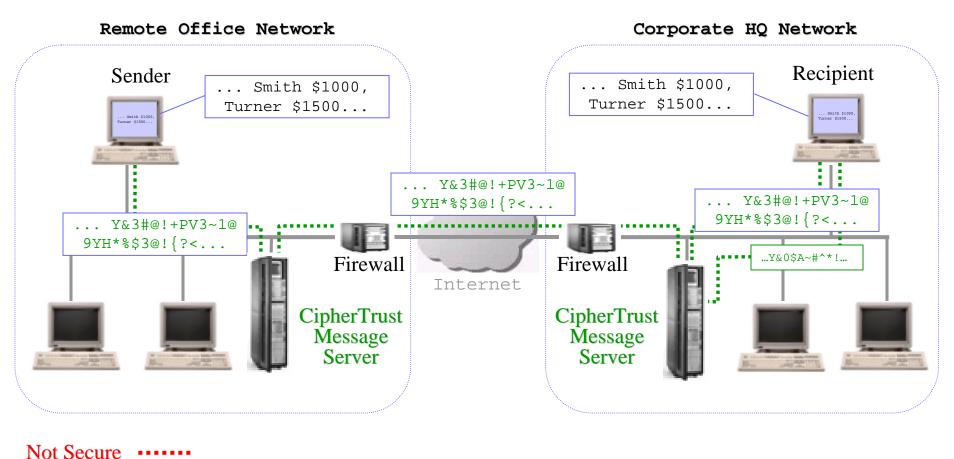
# Typical Messaging



Secure ·····



# CipherTrust Messaging



Secure ·····

#### **HCFA Encryption and Authentication Standards**

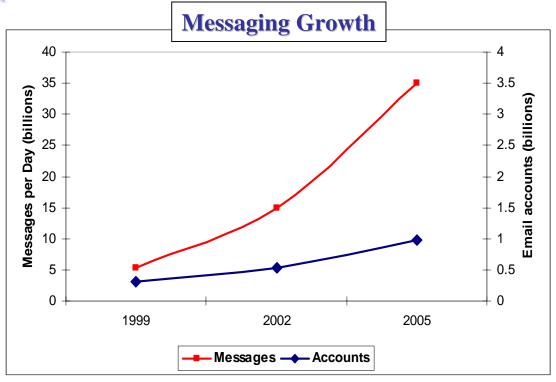
| Requirements:  | CipherTrust: |  |
|--|--------------|--|
| Triple 56 bit DES or equivalent for symmetric encryption |              |  |
| 1024 bit algorithms for RSA asymmetric encryption; or    | ✓            |  |
| 160 bits for elliptic curve asymmetric systems           |              |  |
| Hardware Encryptors; or                                  | <b>√</b>     |  |
| SSL 3.0; or  | $\checkmark$ |  |
| S-MIME; or   |              |  |
| In-stream; or  | $\checkmark$ |  |
| Offline  |              |  |
| Authentication or Identification                         | ✓            |  |



### **Explosive Growth in Messaging**

Messaging is THE killer app for the internet <sup>1</sup>

- Up to 75% of "knowledge exchange" in an enterprise happens using email <sup>3</sup>
- 46% of IT managers list email as "mission critical" 4
- By 2004, more than 1 billion wired and wireless devices will be used to access email 4



|          | 1999              | 2002               | 2005              |
|----------|-------------------|--------------------|-------------------|
| Messages | 5.3b <sup>1</sup> | 14.9b <sup>1</sup> | 35b <sup>2</sup>  |
| Accounts | 315m <sup>2</sup> | 530m <sup>2</sup>  | 983m <sup>2</sup> |

#### Sources:

- 1 SG Cowen
- 2 IDC
- 3 Gartner Group
- 4 Stategis Group



Reliable Appliance • Highly Scalable

#### Internet Messaging Is Exploding, So Are the Issues

- Message security is a huge issue, but its not the only issue!
- Server reliability and availability
  - Installation of message servers is time consuming and requires experts
  - E-mail infrastructure requires specialized staff to maintain systems
  - Server malfunctions create significant productivity headaches

#### Scalability

- Existing enterprise messaging products don't scale without introducing security or performance compromises
- Proprietary solutions prevent good security, scalability, manageability and outsourcing



### CipherTrust Offers a Scalable, Reliable Appliance

- > Appliance eases deployment and administration
- ➤ Mission critical reliability for the enterprise
- ➤ Highly scalable architecture supports millions of users
- > Accommodates tens of thousands of users per server
- Provides much greater message server performance

## Summary

- CipherTrust Provides:
  - Highest level of security and hacker resistance.
  - Secure, remote management saves time and money.
  - Implementation is fast, thus lower cost.
  - Fewer and lower cost personnel needed to install and maintain the servers and applications.
  - No need for lengthy administrator training.

# The cost of NOT securing your messages could be huge.



#### The Bottom Line

"CipherTrust is doing for Internet messaging what Cisco Systems did for Internet routing, ..."

"...we're putting secure messaging in a box."

# Internet messaging from CipherTrust.

Be sure.<sup>sm</sup>

