# \*:96 Overheads

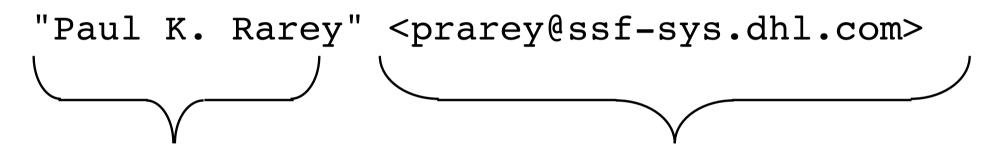
Part 3a: E-mail introduction

More about this course about Internet application protocols can be found at URL:

http://www.dsv.su.se/~jpalme/internet-course/Int-app-prot-kurs.html

Last update: 23 Dec 2005

#### Internet e-mail address format



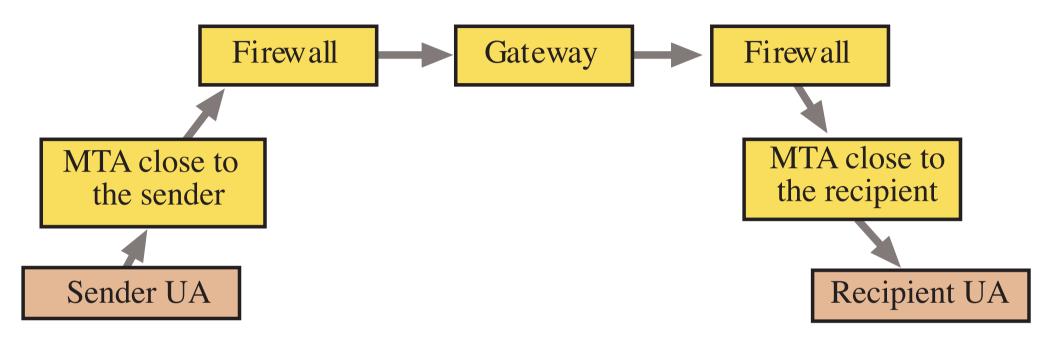
User friendly name

E-mail address

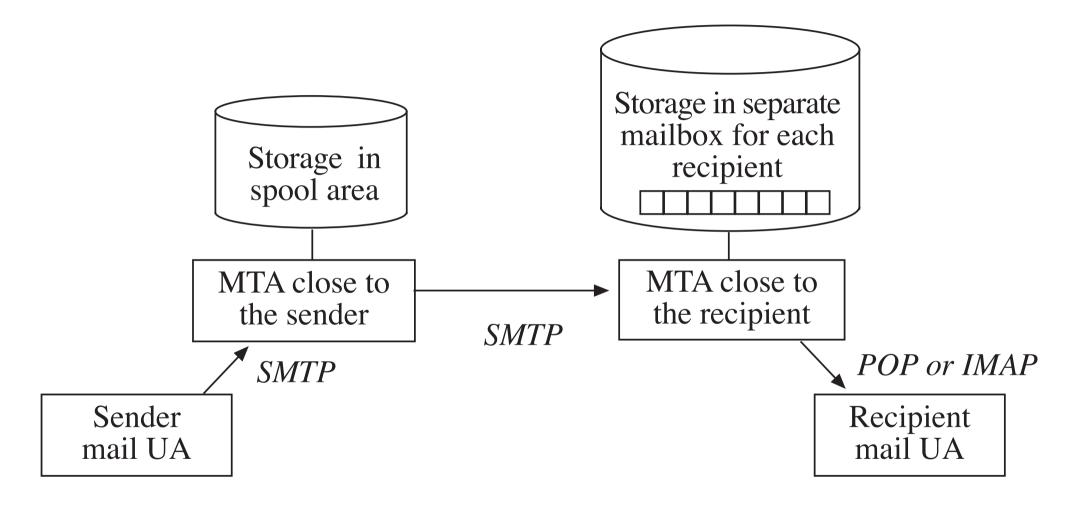
# Envelope, Content, Heading and Body

```
Subject: RE: Meetings
Date: Fri, 12 Jan 2001 09:34:09 -0800
                                               Heading
From: "Mary Smith" <marys@foo.net>
To: "James Thorn" <jamest@bar.net>
We met, we parted, we met again. We
                                               Body
did not know then, that what we had,
was the best that our life good give.
    MAIL FROM: <dduck@duckville.net>
                                                    Envelope
    RCPT TO:<jpalme@dsv.su.se>
```

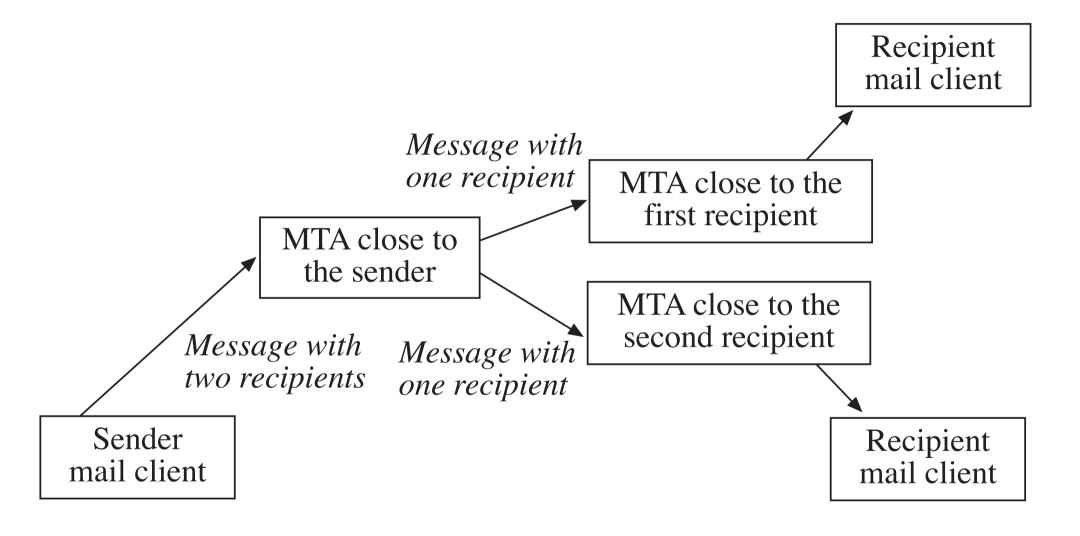
#### Multiple Relaying because of Firewalls



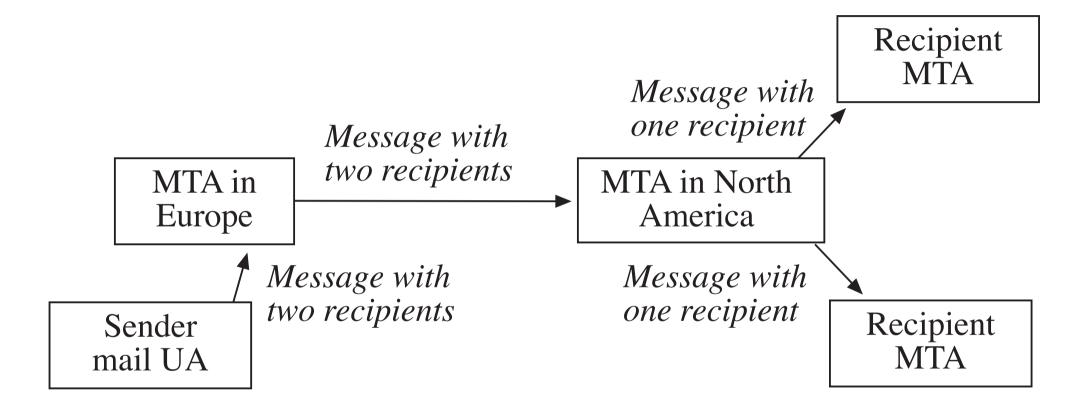
#### **Storage of Mail in MTAs**



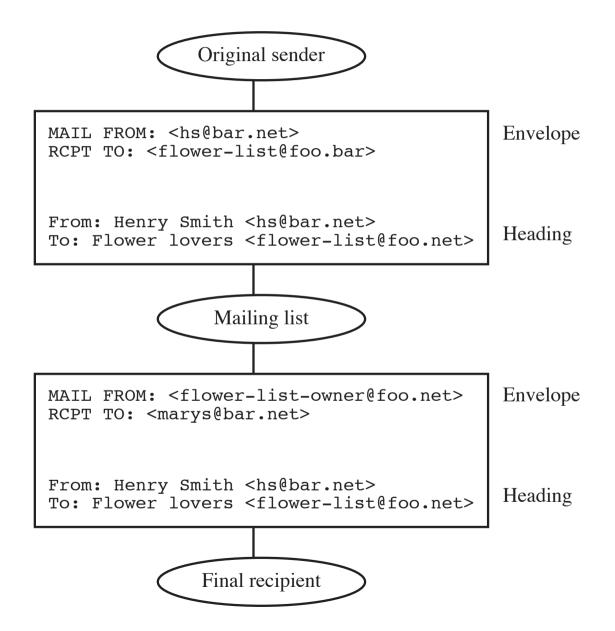
# **Split of Messages in MTAs**



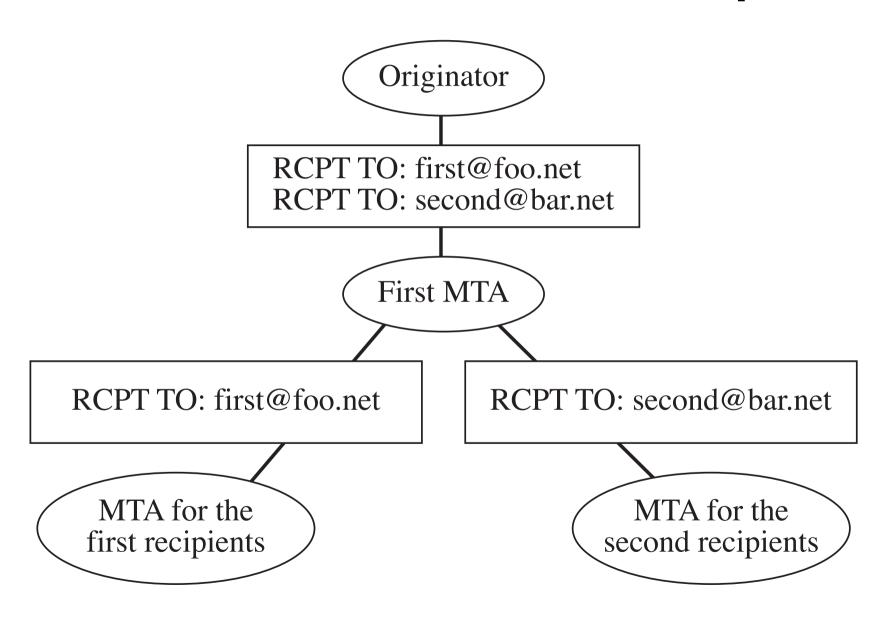
# Saving Netload by Split in MTAs



#### From and MAIL FROM for Mailing Lists



# RCPT TO versus To after Split

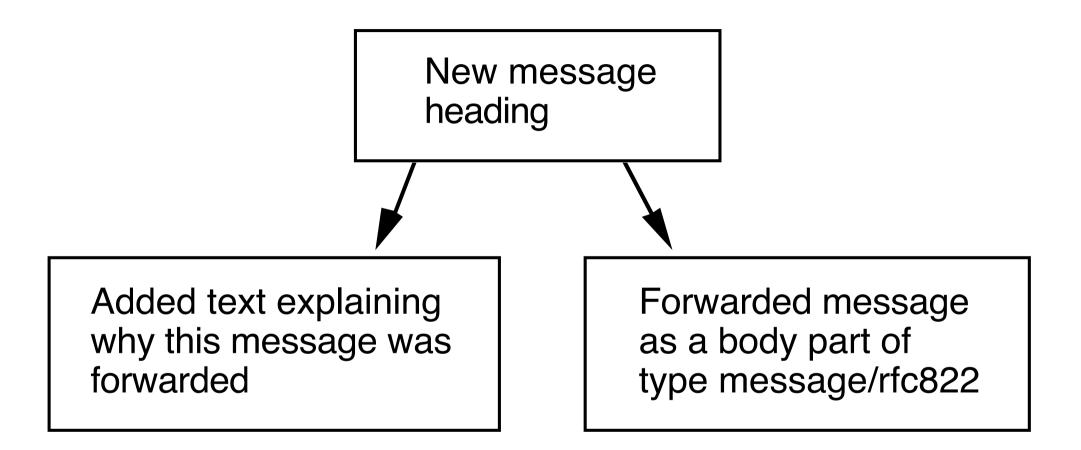


#### Forwarding with a MIME Message/rfc822

New message heading: Content-Type: message/rfc822

Original forwarded message heading and body

#### Forwarding with a MIME multipart message

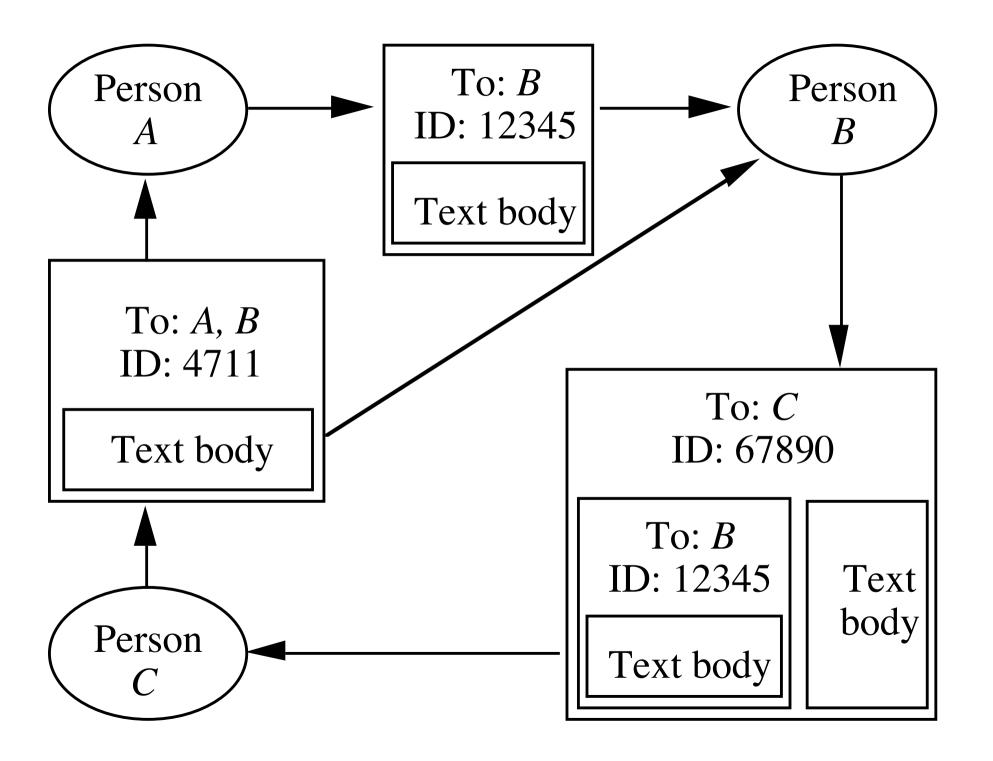


#### Resending and Forwarding

Original message	Date: 14 Jan 2005 09:35 From: Donald Duck <dduck@northpole.foo> To: Jacob Palme <jpalme@dsv.su.se></jpalme@dsv.su.se></dduck@northpole.foo>
Resent	Date: 14 Jan 2005 09:35  Resent-Date 14 Jan 2005 10:35  From: Donald Duck <dduck@northpole.foo>  Resent-From: Jacob Palme <jpalme@dsv.su.se>  To: Jacob Palme <jpalme@dsv.su.se>  Resent-To: Ducklovers <dlovers@dsv.su.se></dlovers@dsv.su.se></jpalme@dsv.su.se></jpalme@dsv.su.se></dduck@northpole.foo>
Forwarded message	Date: 14 Jan 2005 10:35 From: Jacob Palme < jpalme@dsv.su.se> To: Ducklovers < dlovers@dsv.su.se> > Header and body of original message

Original message	Date: 14 Jan 2005 09:35
	From: Donald Duck <dduck@northpole.foo></dduck@northpole.foo>
	To: Jacob Palme < jpalme@dsv.su.se>
Mime	Date: 14 Jan 2005 10:35
forwarding	From: Jacob Palme < jpalme@dsv.su.se>
variant 1	To: Ducklovers <dlovers@dsv.su.se></dlovers@dsv.su.se>
	Content-Type: message/rfc822
	Date: 14 Jan 2005 09:35
	From: Donald Duck <dduck@northpole.foo></dduck@northpole.foo>
	To: Jacob Palme <jpalme@dsv.su.se></jpalme@dsv.su.se>

Original message	Date: 14 Jan 2005 09:35
	From: Donald Duck <dduck@northpole.foo></dduck@northpole.foo>
	To: Jacob Palme < jpalme@dsv.su.se>
Mime forwarding variant 1	Date: 14 Jan 2005 10:35
	From: Jacob Palme < jpalme@dsv.su.se>
	To: Ducklovers <dlovers@dsv.su.se></dlovers@dsv.su.se>
	Content-Type: Multipart/mixed
	Content-Type: message/rfc822
	Date: 14 Jan 2005 09:35
	From: Donald Duck <dduck@northpole.foo></dduck@northpole.foo>
	To: Jacob Palme < jpalme@dsv.su.se>
	Content-Type: Text/plain
	Comment on forwarded message



# Methods of e-mail forwarding

- (a) Add new Resent-headers to the original message.
- (b) The forwarded message is made into a body part of type message/rfc822 in a new multipart message:
- (c) The text of the forwarded message is copied into the text of the new message with copy marks.

Which method is best if the forwarded message had a digital seal?

#### MAIL FROM (Envelope) versus From (Header)

Original message	RCPT TO: <cmclist@host.net></cmclist@host.net>
	MAIL FROM: <jpalme@dsv.su.se></jpalme@dsv.su.se>
	Date: 14 Jan 2005 09:35
	From: Jacob Palme < jpalme@dsv.su.se>
	To: CMC mailing list <cmclist@host.net></cmclist@host.net>
Forwarded	RCPT TO: <mary@host.net></mary@host.net>
message	MAIL FROM: < cmclist-owner@host.net>
	Date: 14 Jan 2005 09:35
	From: Jacob Palme < jpalme@dsv.su.se>
	To: CMC mailing list <cmclist@host.net></cmclist@host.net>