

# EAI Status

## (Email Address Internationalization)

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# Summary of TWNIC Activities



- 10~15% increase in the number of DN
- Introduce IDN in .tw level
- Security enforcement for DN Server (pass ISMS-BS7799 security check)
- Deal with SPAM problem (80% reduction)
- VoIP DN Server Test
- APIRA-2006, August 9~10, Taipei Taiwan
- I-email testbed



# Why I-Email Necessary

- Format of Email address
  - local-part@domain-part
  - domain-part has internationalized by IDNA
- Desired I-Email Format
  - 葉士豪@臺網中心.tw
  - jeff@臺網中心.tw
  - 葉士豪@臺網中心.台灣
  - jeff葉@臺網中心.台灣
- Require Email Address Internationalization
  - *not standardized on local-part*



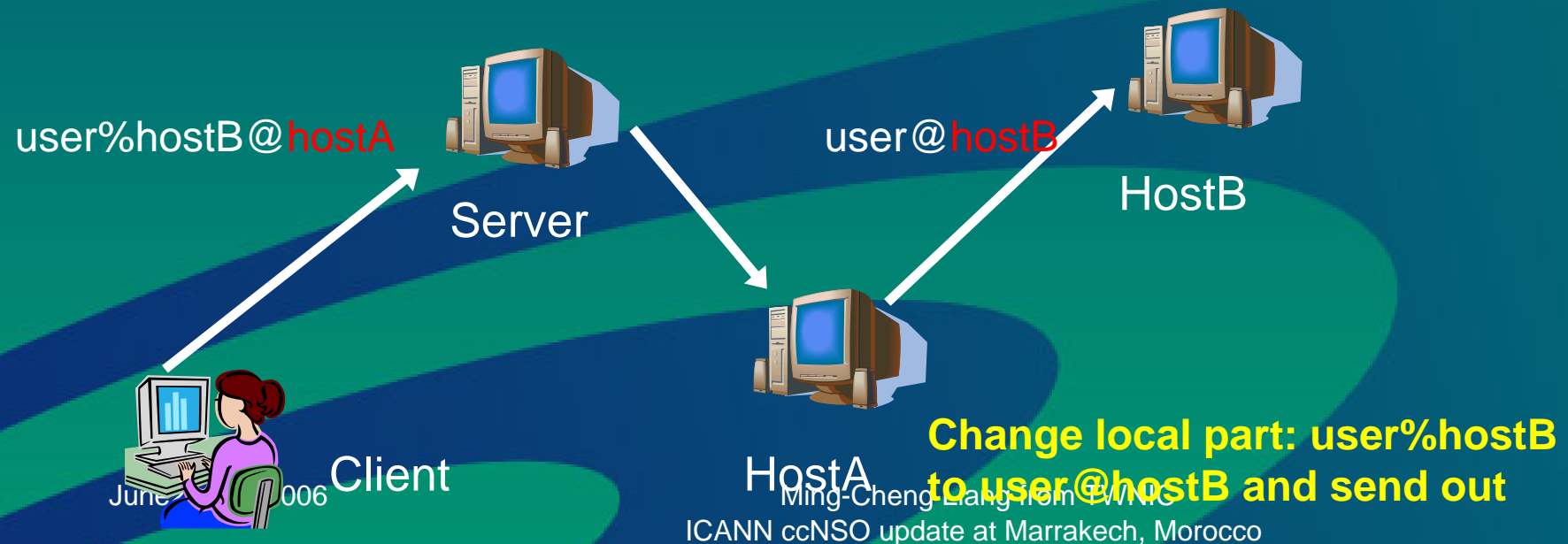
# What's the Issues?

- Extensively complexities (miss interpretation??)
  - Computer to computer communication
    - Store and forward
  - Embedded agent/command
    - Server/client
    - Firewall
    - Spam filter
- Mail routing control information on local-part
  - %, +, !, -, ...
  - Locally defined

# Mail routing information on local-part



- Ex: some mail servers implement relay function by using ‘%’ on local part
  - user%hostB@hostA → mail send to user@hostB via hostA

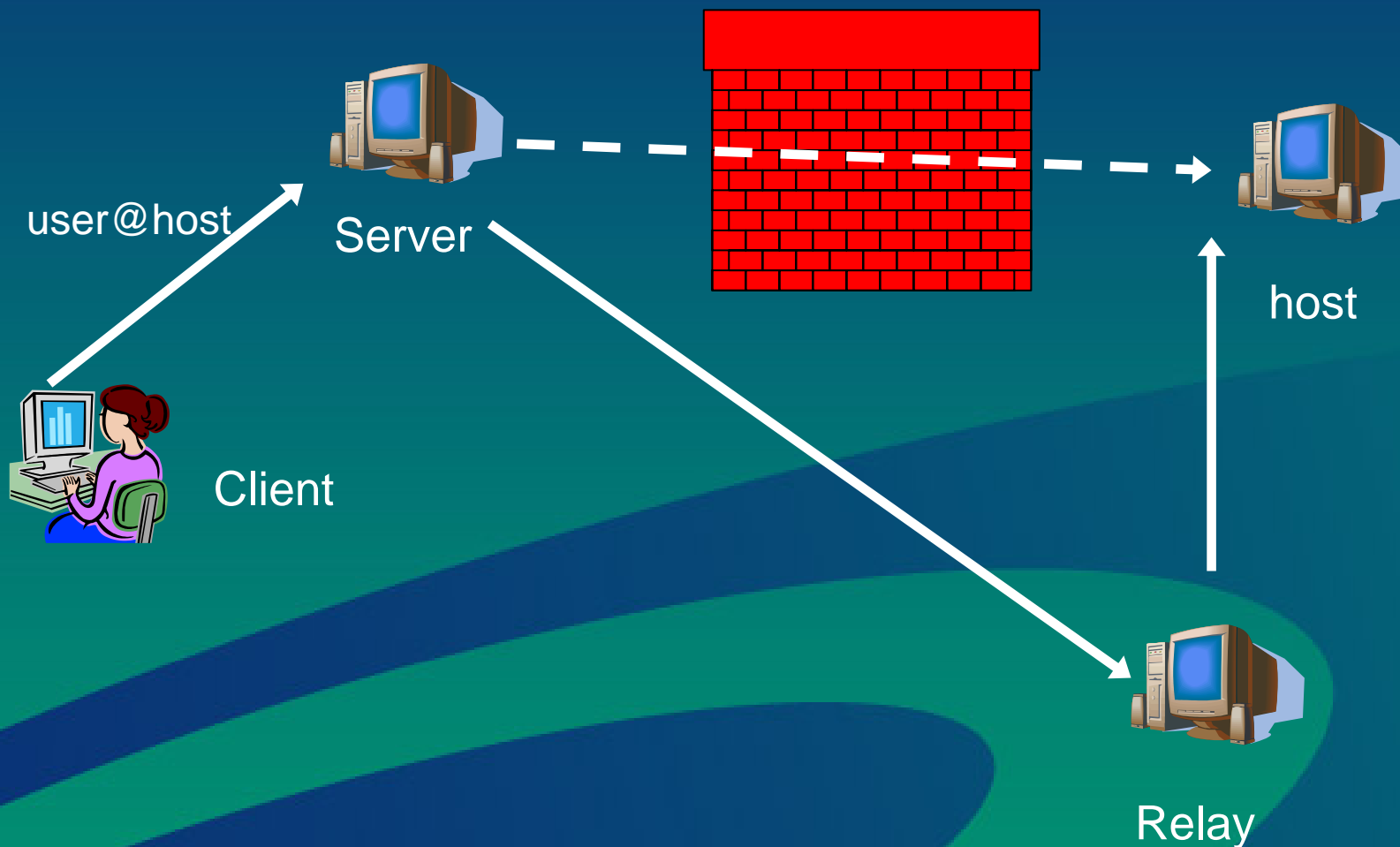


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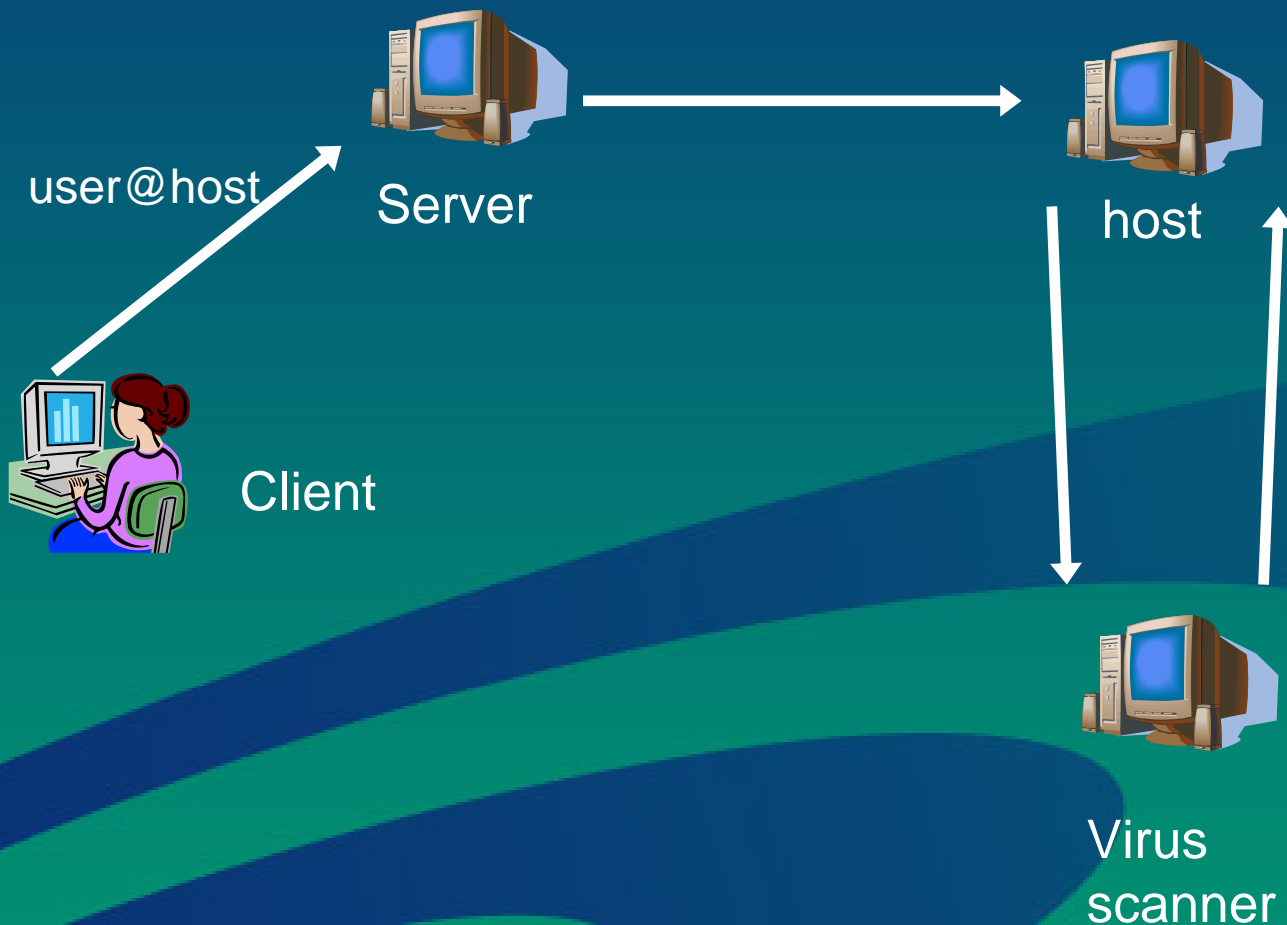
HostA

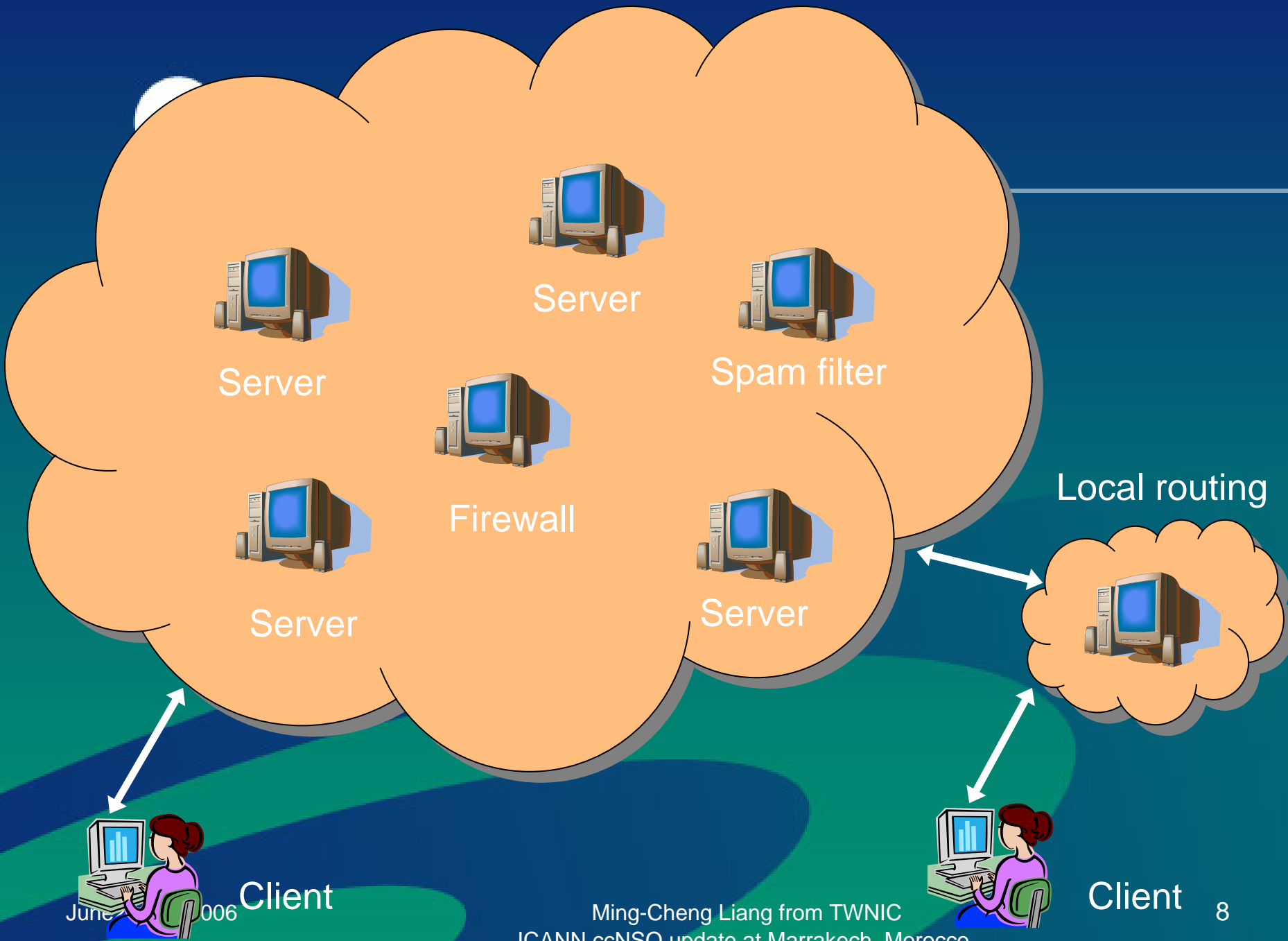
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ICANN ccNSO update at Marrakech, Morocco

# Administrator may change the mail routing (Scenario I)



# Administrator may change the mail routing (Scenario II)





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Client

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ICANN ccNSO update at Marrakech, Morocco

Client



# History

- Feb 2003 – IMAA
  - Start to talk about i-Email requirement and issues
- Aug 2004 – CDNC Meeting
  - Discuss about i-Email issues
- May 2005 – CDNC Meeting/ JET Meeting
  - Discuss possible solutions
- Sep 2005 – i-Email Beijing Meeting
  - Experimental RFC
  - Outline the solution framework
- Nov 2005 – IEE BoF on IETF 64
  - Discuss Internet drafts
  - Apply for WG
- Mar 2006 – EAI WG on IETF 65
  - WG established
  - More Internet drafts discussed



# EAI WG

- Chairs:
  - Harald Alvestrand
  - XiaoDong Lee
- Goal:
  - The initial target will be a set of experimental RFCs that specify the details of this approach and provide the basis for generating and testing interoperable implementations.
  - Once the Experimental RFCs are completed and implemented, the experience gathered will be evaluated.
  - If the approach is found to have been successful, the WG will be rechartered to update the documents for processing onto the standards track.
- WG page:  
<http://www.ietf.org/html.charters/eai-charter.html>
- Mailing List:  
<http://www1.ietf.org/mail-archive/web/ima/index.html>



# Goals and Milestones

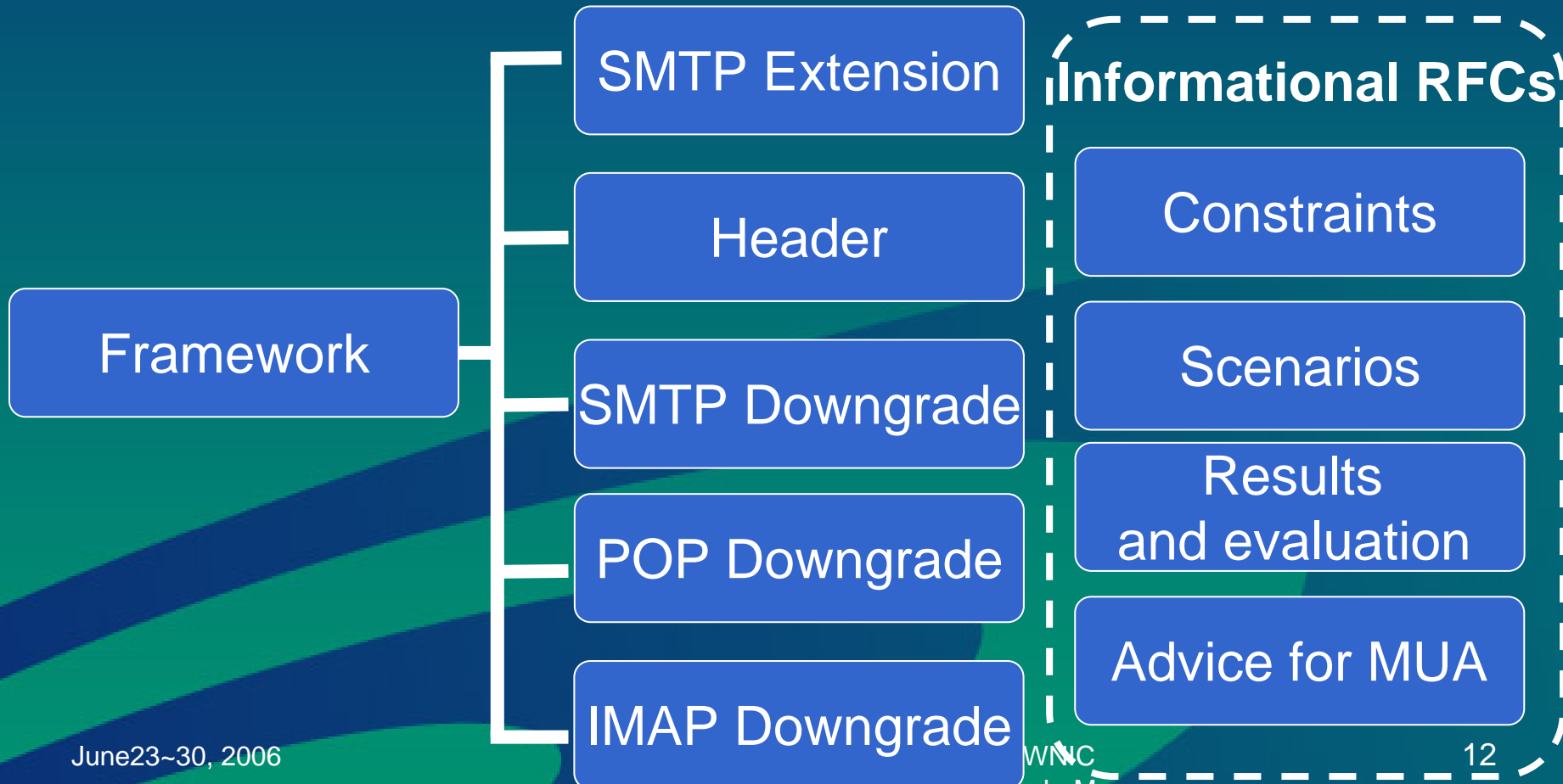
- Done Overview/architecture draft first
- Done Interworking scenarios first draft
- Done SMTP Extensions first draft
- Done Header format first draft
- Done Downgrading in SMTP first draft
- Done Downgrading in POP first draft
- Done Downgrading in IMAP first draft
- Jun 2006 Overview/architecture draft to IESG
- Jun 2006 Interworking scenarios to IESG
- Sep 2006 SMTP Extensions to IESG
- Sep 2006 Header format to IESG
- Sep 2006 Downgrading in SMTP to IESG
- Sep 2006 Downgrading in POP to IESG
- Sep 2006 Downgrading in IMAP to IESG
- Dec 2006 Results and evaluation first draft
- Mar 2007 Results and evaluation to IESG
- Mar 2007 Group recharter for standards track

June23~30, 2006

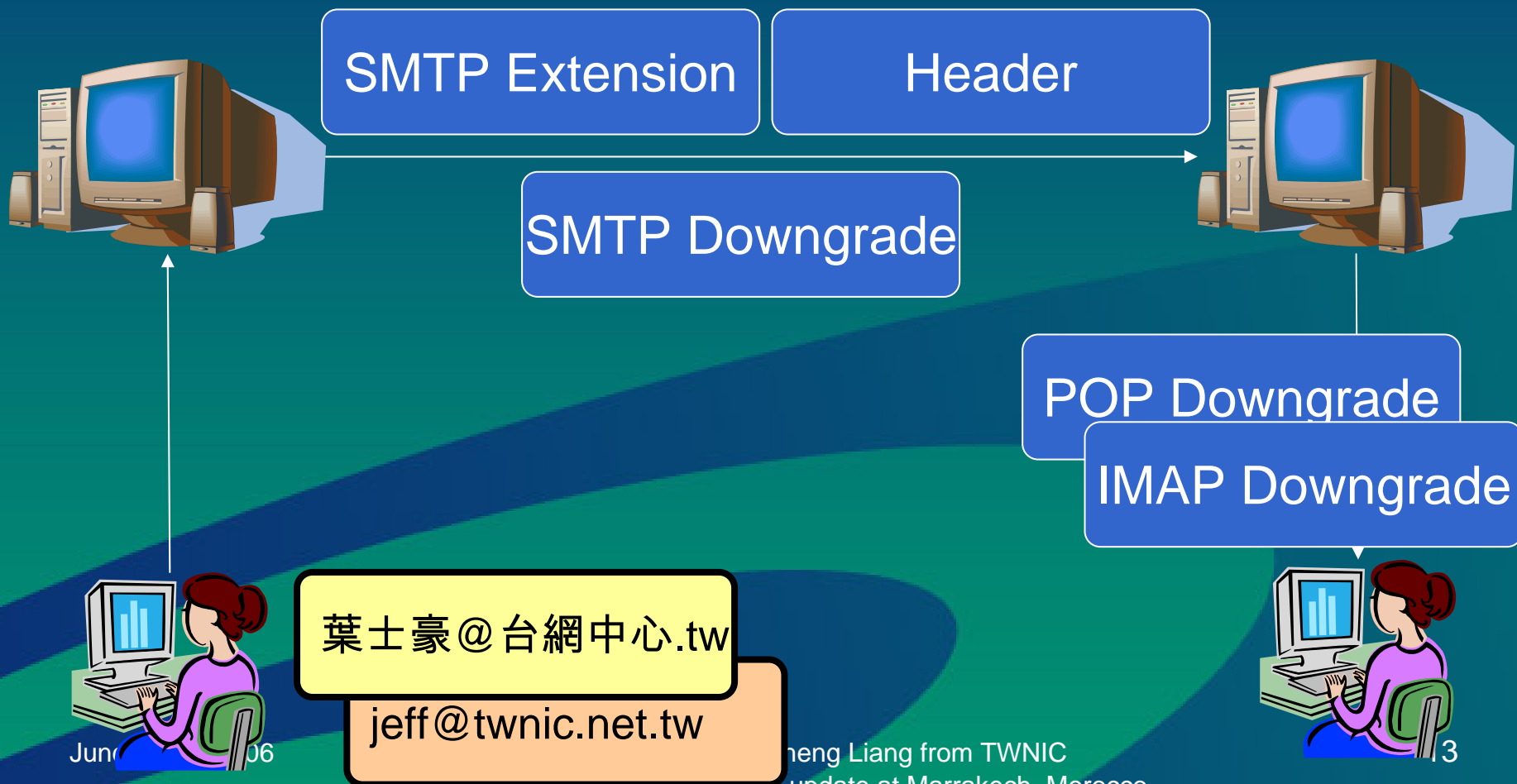
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# EAI Document Roadmap

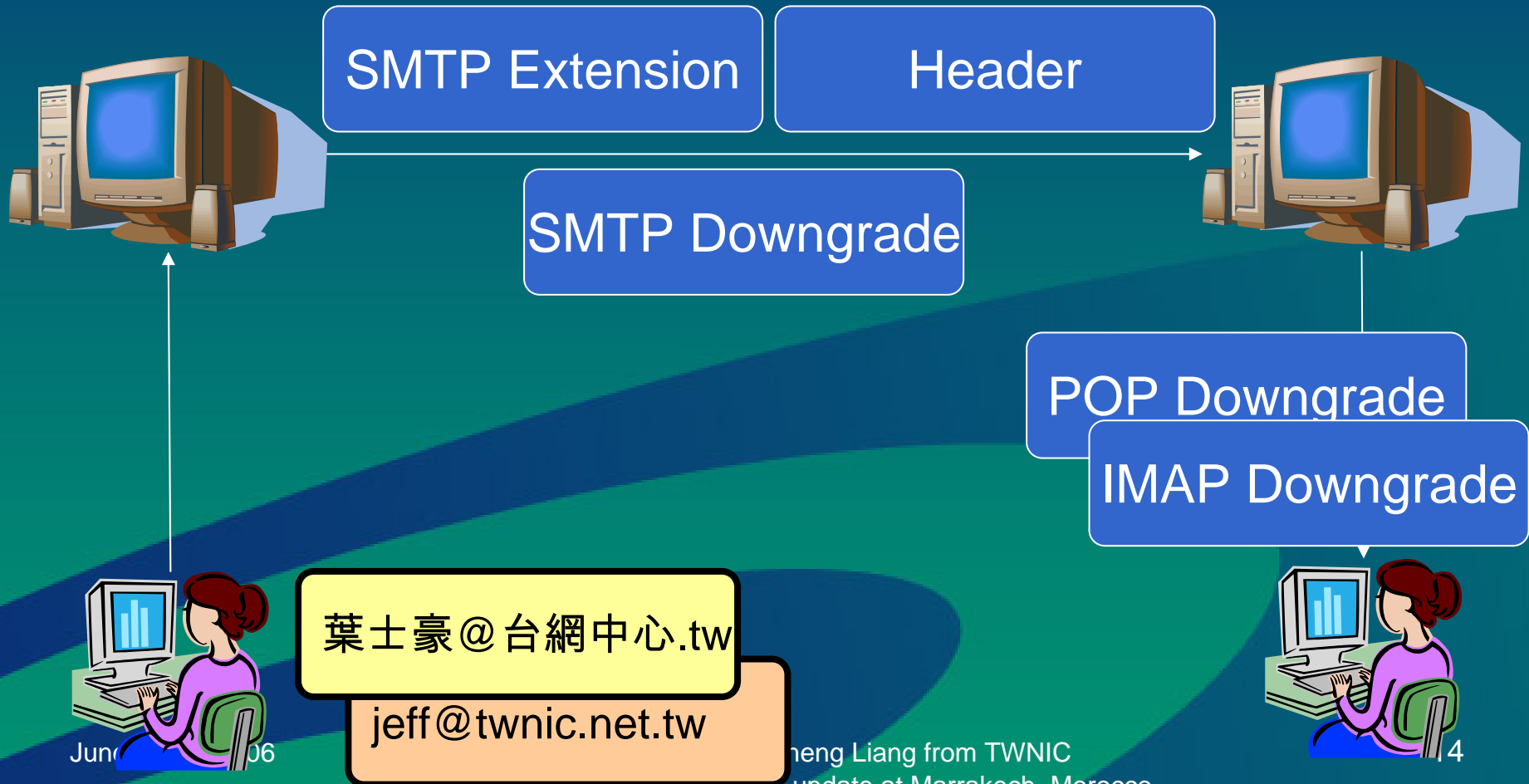
## Experimental RFCs



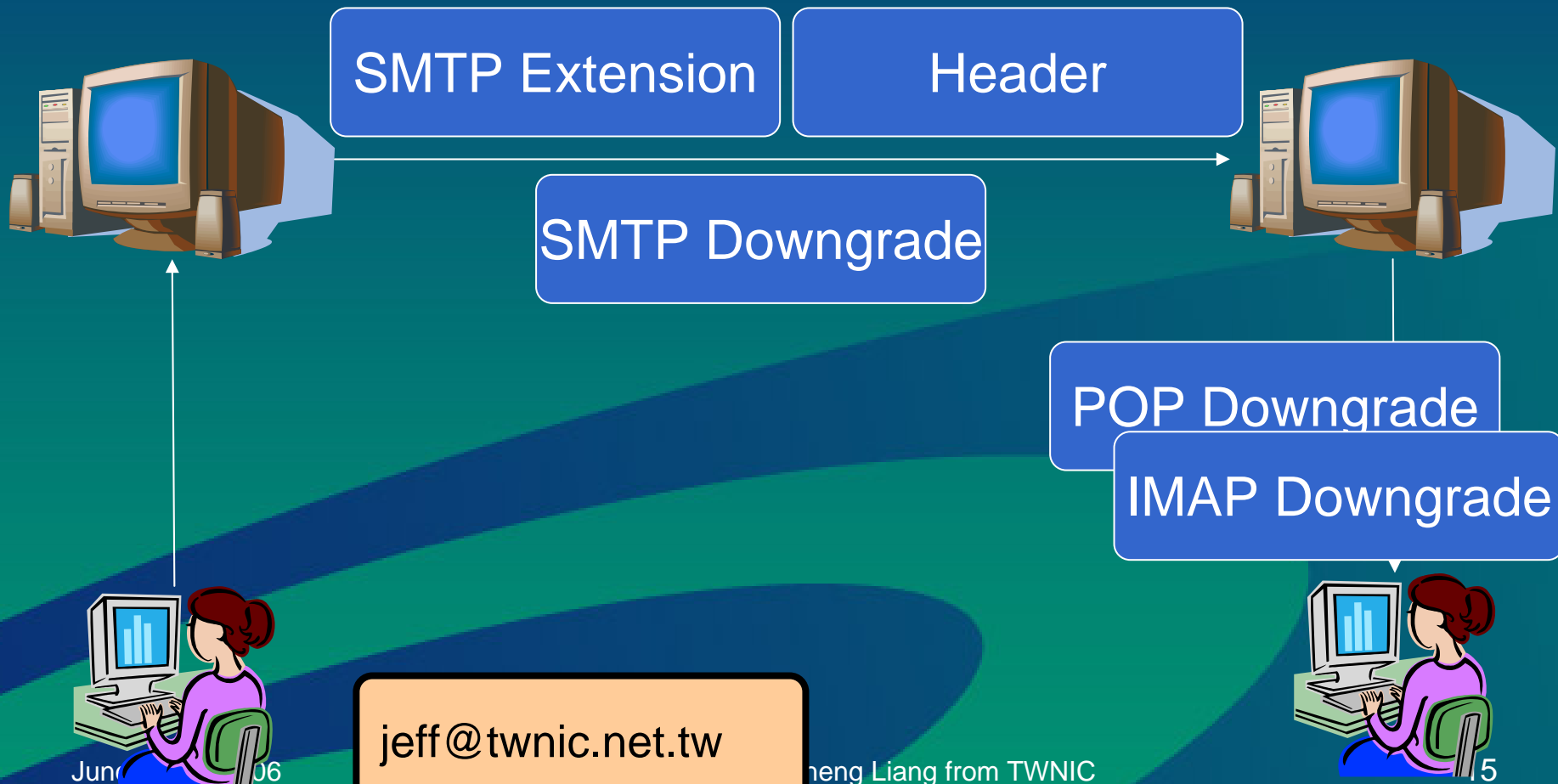
# EAI Structure



# EAI Structure



# EAI Structure





# Overview of Solution

- SMTP client handshake with next SMTP server check if SMTP extension is supported by the server
  - Yes:  
send internationalized email address and headers
  - No:  
downgrade the email to traditional one (ASCII email address, RFC2821/2822 compatible)





# TWNIC role

- Draft header document
  - Internationalized Email Headers
    - draft-yeh-ima-utf8headers-01
- Involve in testing plan
  - Modify sendmail software to implement EAI WG drafts
  - Develop plug-in for MUA to send, receive and display I-Email address



# Test bed

- Modify sendmail software to support i-Email specification
  - i-Email SMTP extension
    - <http://www.ietf.org/internet-drafts/draft-ietf-eai-smtpext-00.txt>
  - UTF8 header
    - <http://www.ietf.org/internet-drafts/draft-ietf-eai-utf8headers-00.txt>
  - Downgrade
    - <http://www.ietf.org/internet-drafts/draft-ietf-eai-downgrade-00.txt>



# More Information

- SMTP extension for internationalized email address
  - <http://www.ietf.org/internet-drafts/draft-ietf-eai-smtpext-00.txt>
- Internationalized Email Addresses: Scenarios
  - <http://www.ietf.org/internet-drafts/draft-ietf-eai-scenarios-00.txt>
- Downgrading mechanism for Internationalized eMail Address (IMA)
  - <http://www.ietf.org/internet-drafts/draft-ietf-eai-downgrade-00.txt>
- IMAP Support for UTF-8
  - <http://www.ietf.org/internet-drafts/draft-ietf-eai-imap-utf8-00.txt>
- Internationalized Email Headers
  - <http://www.ietf.org/internet-drafts/draft-ietf-eai-utf8headers-00.txt>