

# Email Address Internationalization & Test bed

TWNIC

June3-6, 2007

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APTLD Meeting - Dubai

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# Outlines

- The Problem
- Solution
- TWNIC'S Role
- EAI Test Bed

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# Why I-Email Necessary

- Format of Email address
  - [local-part@domain-part](#)
  - domain-part has internationalized by IDNA
- Required I-Email Format
  - [snw@台網中心.tw](#)
  - [許乃文@台網中心.tw](#)
  - [snw許@台網中心.tw](#)
  - [許乃文@台網中心.台灣](#)
- Require Email Address Internationalization
  - not standardized on local-part



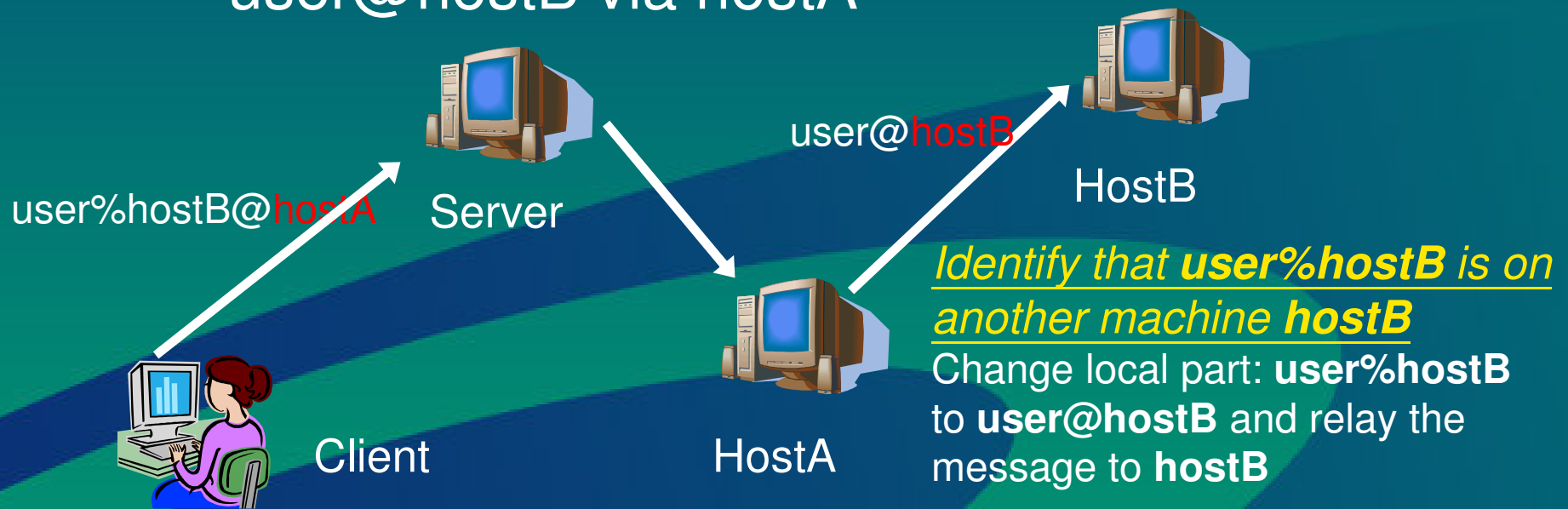
# What's the Issues?

- Extended complexities
  - 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

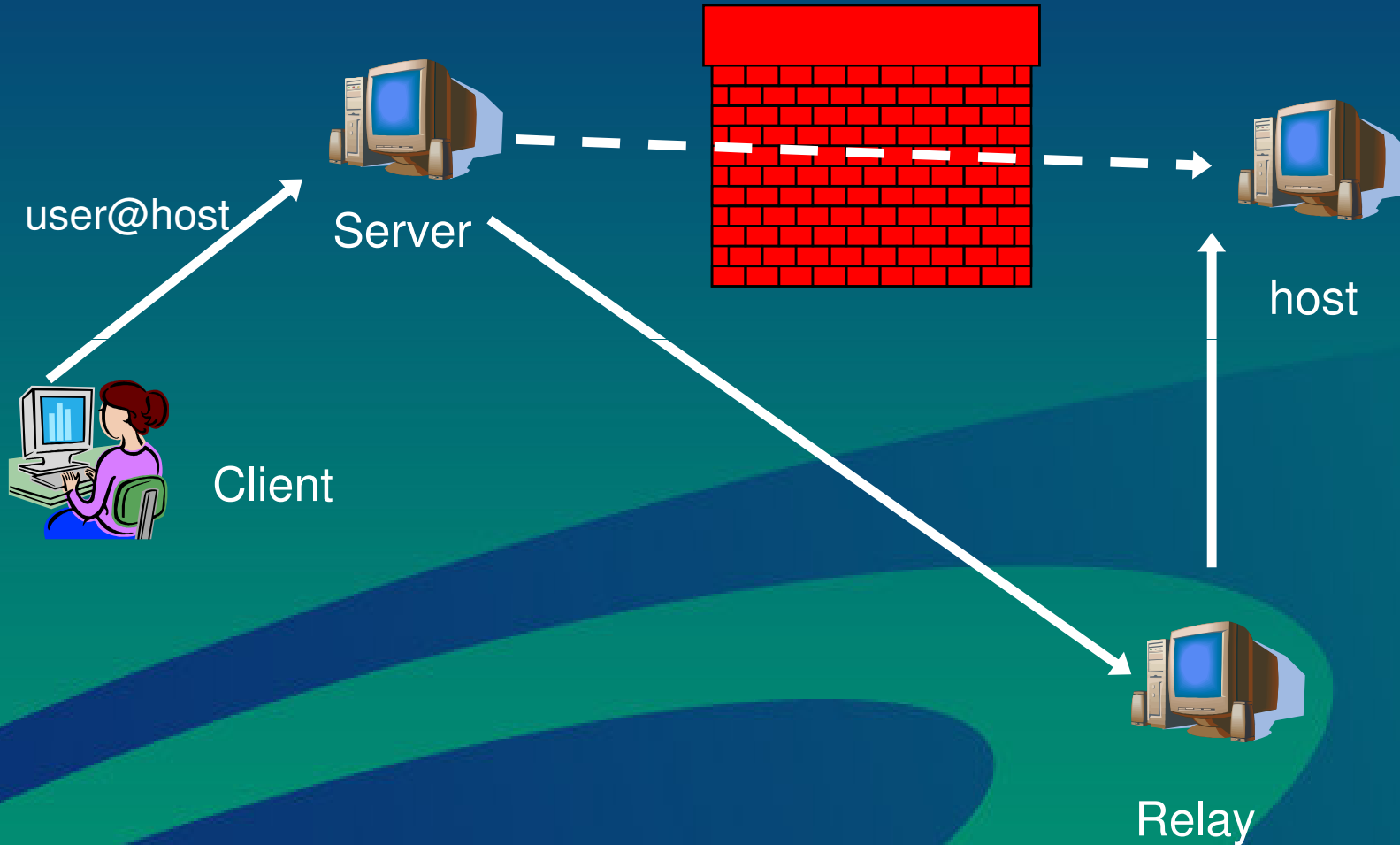


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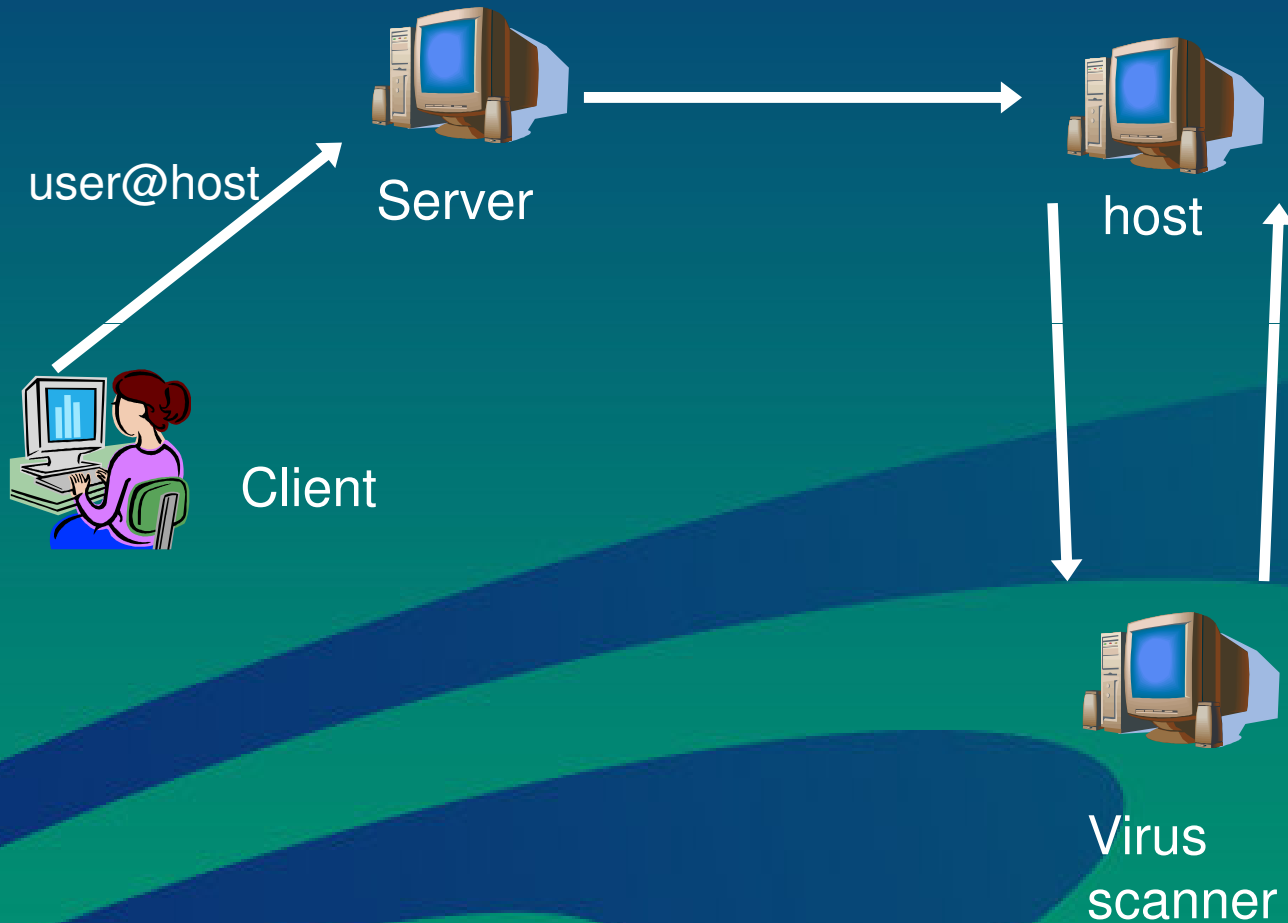
# Administrator may change the mail routing (Scenario I)



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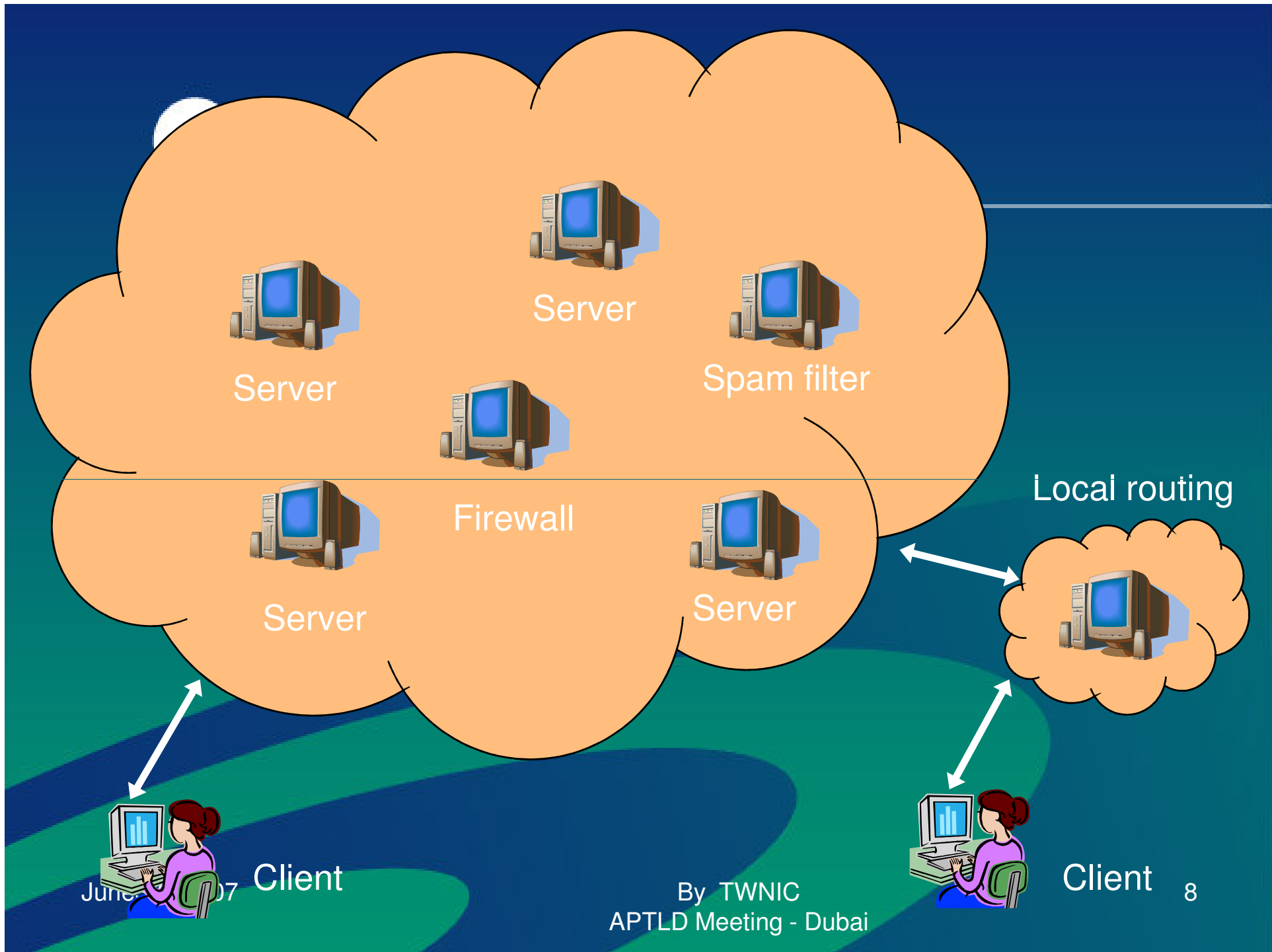
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# Administrator may change the mail routing (Scenario II)



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# User Requirement for i-Email

- An i-Email user is able to enter and display the characters of his language in email address.
- An i-Email user is able to store i-Email addresses in an address book, and use "reply" without destroy the address.
- If the i-Email solution requires keeping extra information around for an address in some cases, the i-Email user is capable of manipulating that information, including storing that information in his address book.

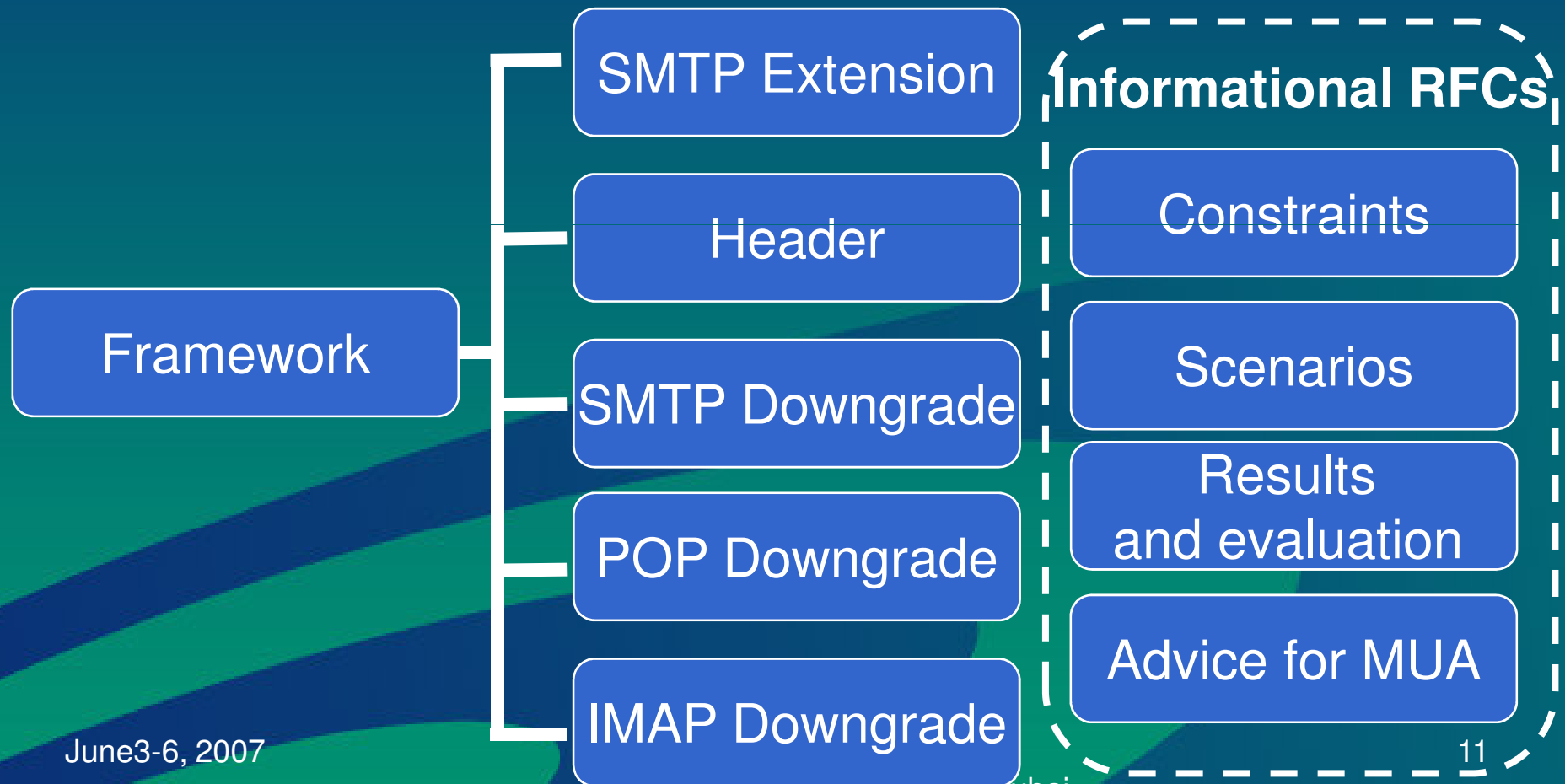


# Overview of Solution

- 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)

# EAI Document Roadmap

## Experimental RFCs





# TWNIC role

- Draft header document
  - Internationalized Email Headers
    - draft-ietf-eai-utf8headers-06
- 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



# i-email address

- EAI drafts:
  - i-email address must come with an alt-address for backward compatibility
  - Ex:
    - 許乃文@台網中心.tw
    - alt-address: snw@twnic.net.tw
- draft-ietf-eai-utf8headers-06
  - “DISPLAY\_NAME” <non-ASCII@non-ASCII<ASCII@ASCII>>

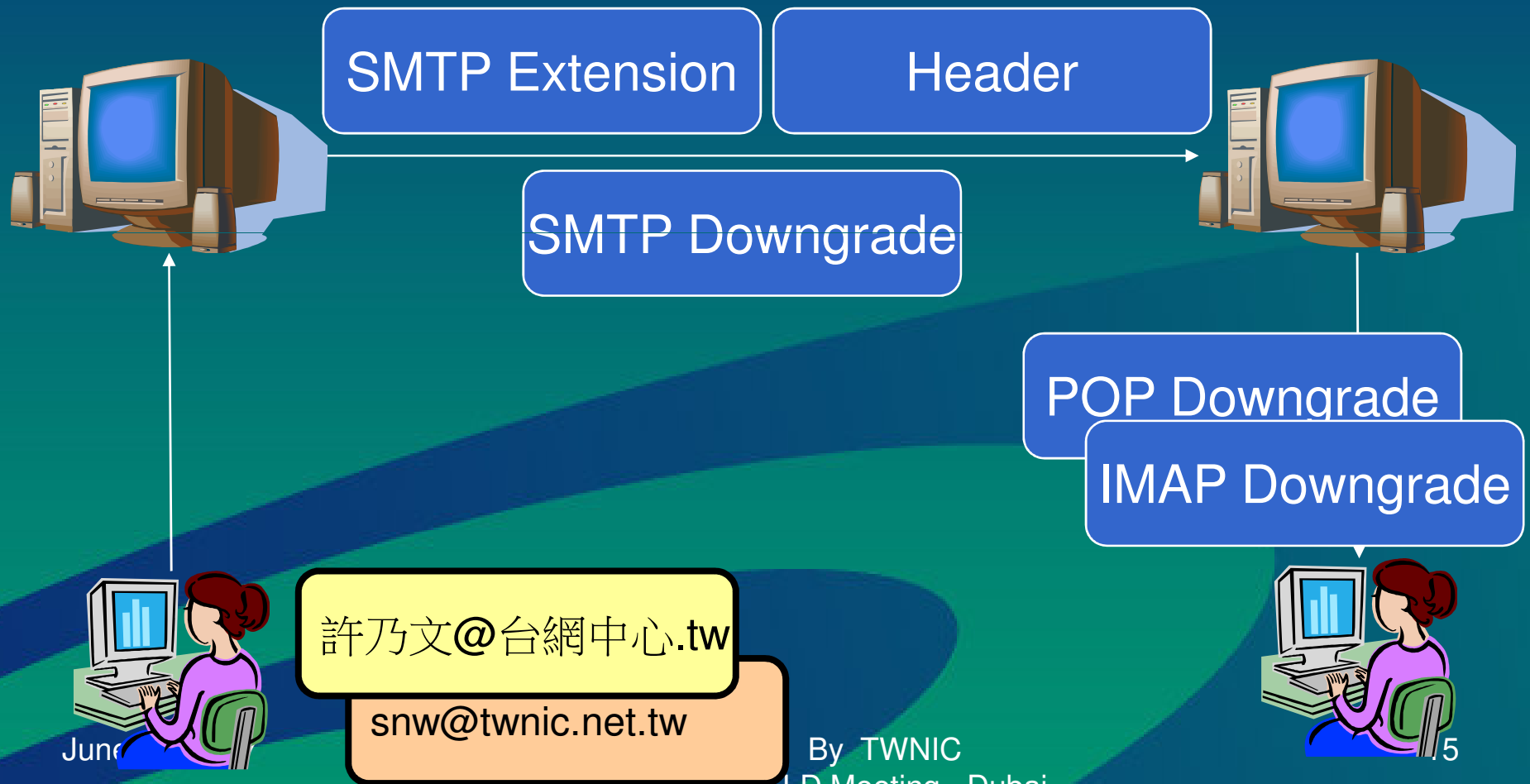


# Downgrade

- Downgrade is need if next SMTP server is not EAI aware
  - From: <許乃文@台網中心.tw<snw@twnic.net.tw>>
  - →
  - From: <snw@twnic.net.tw>
  - Downgrade From: <許乃文@台網中心.tw<snw@twnic.net.tw>>



# EAI Test Bed Demonstration

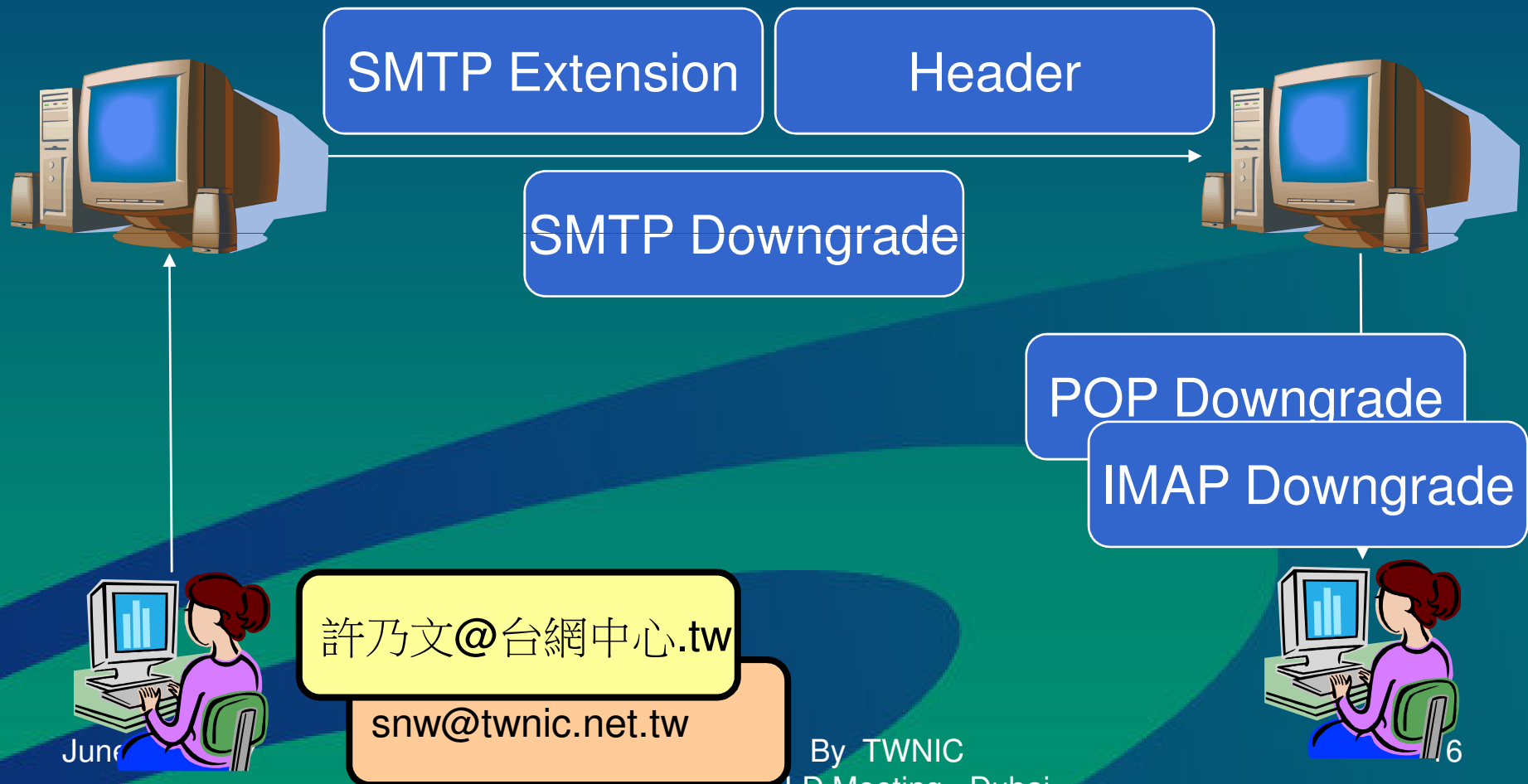


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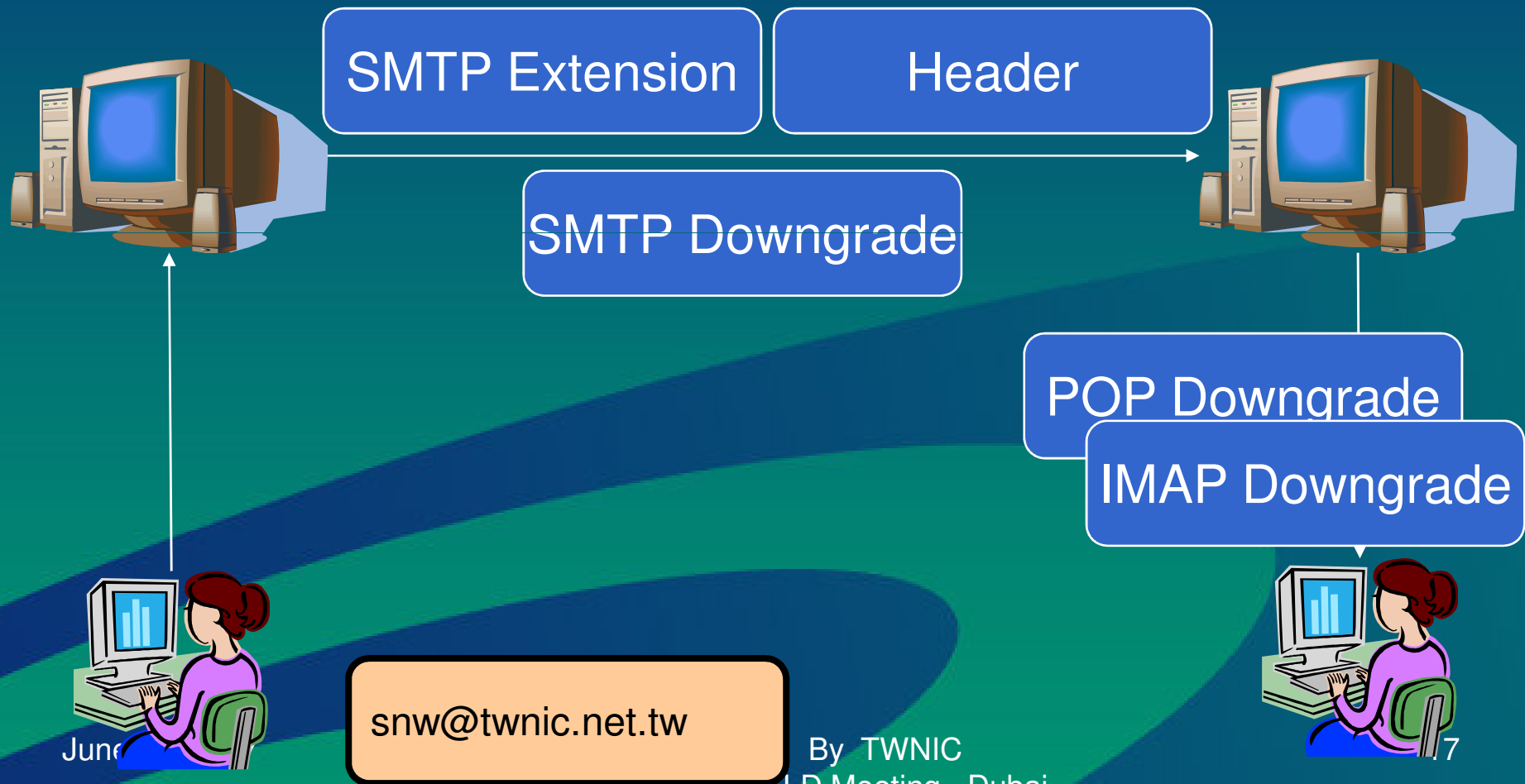


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# EAI Test Bed Demonstration



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# EAI Demonstration

## via Network

## Experience

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# Thank You

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