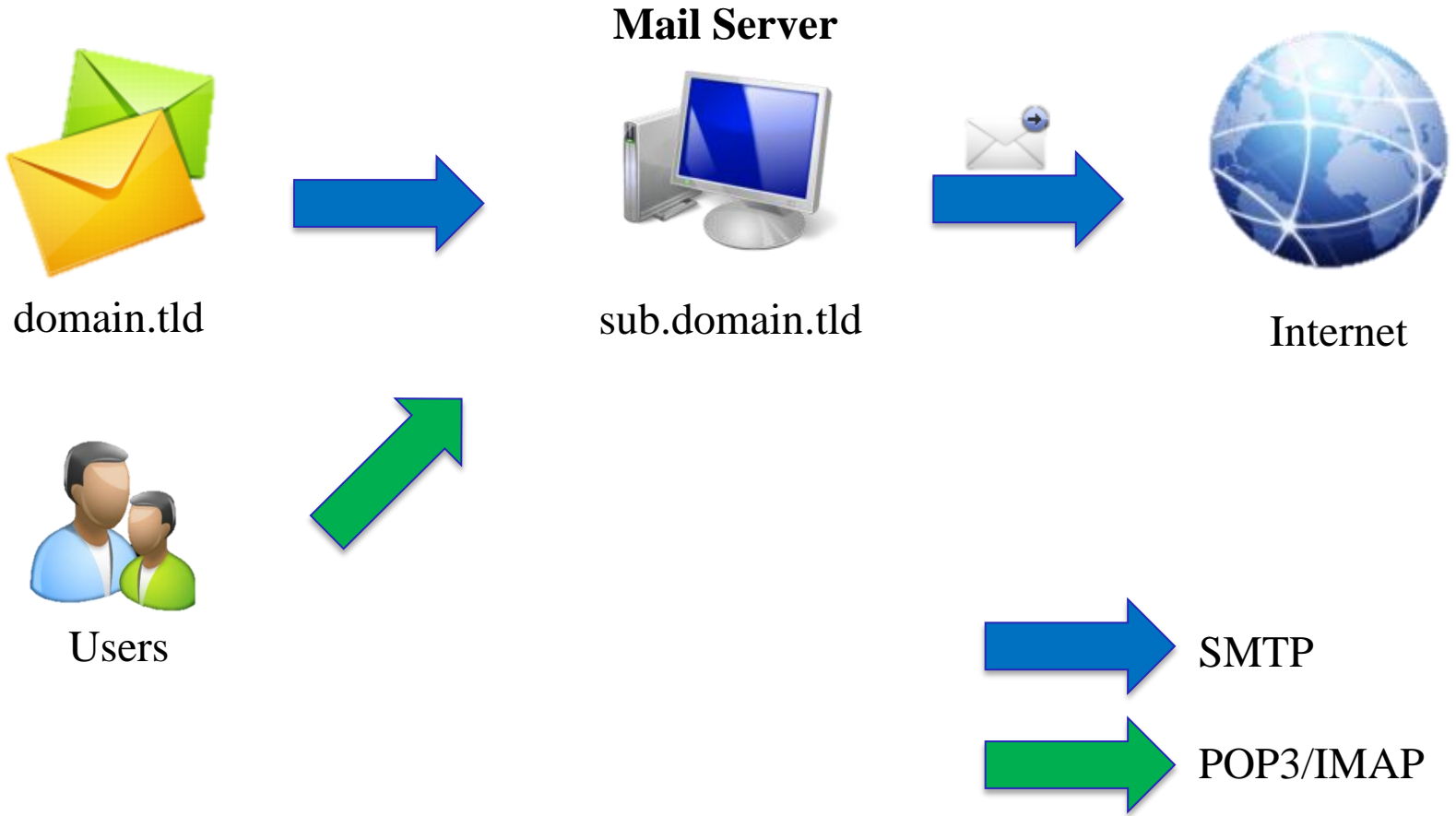


# Homework 04

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Mail System

# Architecture



# Requirement (1/4)

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- ❑ Get you own domain
  - <http://nctucs.net>
  - Add a MX record for your mail server
- ❑ Build a mail system
  - Anti-spam
  - Anti-virus
- ❑ SMTP Server
  - Postfix
  - SASL Authentication
  - SSL and TLS support
    - SMTPs

# Requirement (2/4)

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## ❑ POP3/IMAP Server

- Dovecot
- SSL and TLS support
  - POP3s/IMAPs

## ❑ MTA filter

- Amavisd-new
  - SpamAssassin
  - ClamAV

## ❑ MDA filter

- Procmail
- Record all log to `/var/log/procmail.log`
- Drop the mail whose subject contains keyword “安安你好”

# Requirement (3/4)

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- ❑ Greylisting
  - An anti-spam measure
  - Postgrey
- ❑ Transport
  - The next-hop destination of nasa.cs.nctu.edu.tw would be nahw4.nctucs.net
- ❑ Alias
  - demo → demo@nasa.cs.nctu.edu.tw
- ❑ Rewriting
  - Redirect **user+XYZ@domain.tld** to **user@domain.tld**
- ❑ Address masquerading
  - From **user@domain.tld** instead of **user@sub.domain.tld**
  - All users except root

# Requirement (4/4)

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## ❑ Sender address verification

- Disconnect suspicious SMTP clients
- Deny from dynamic host
  - For example, 211-76-240-234.dynamic.ntcu.net
- Real-time Blackhole List (RBL)
  - <http://www.spamhaus.org/>
- Whitelist
  - <http://www.spamhauswhitelist.com>
  - <http://www.dnswl.org/>

## ❑ DKIM signature and verification

## ❑ SPF record and check

- sid-milter
- A SPF record for your server
  - <http://www.mailradar.com/spf/>

# Bonus – Web-based interface

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## ❑ Webmail

- Horde
- Roundcube
- Squirrelmail

# Hand-in

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- Due
  - 6/12
- Demo
  - TBA