

# Email Miscellaneous Topics

Mohsen Banan: <http://mohsen.banan.1.byname.net/ContactMe>

<http://mohsen.banan.1.byname.net/PLPC/120060>

Winter 2016 – March 17, 2016  
Varbatim Copying Permitted

# Part I

## Email As A Service In The Cloud

# Part 1: Email As A Service In The Cloud

- 1 Concept Of Public Cloud Based Mail Services
- 2 Private Cloud Mail: A Good Web Interface Over Mail Management
- 3 Comparison of Webmail Providers
- 4 Overview Of Office-365 Cloud Email
- 5 Overview Of Google Cloud Email

# Concept Of Cloud Based Mail Services

Somebody else (A Service Provider):

- Somebody Else Has Developed and Configured Everything For You
- Somebody Else Is Operating Everything For You
- Economies Of Scale Makes It All Very Cheap

You Just Need To:

- Configure The Parameters That They Allow You To Configure
- You Have Access To The Logs And Information That The Service Provider Exposes

Ramifications Of This Arrangement:

- The Service Provider Is In Full Control Of Your Emails
- You Have To Do Very Little And It All Runs Reliably
- You Are Limited To What Is Provided – That Can Be More Than Adequate
- There Is Not Transparency and No Control

# Private Cloud Mail: A Good Web Interface Over Mail Management

- Similar To Public Cloud Based Mail Services Characteristic – But Your Own

# Comparison Of Mail Systems – (servers, clients, webmail providers)

- Comparison of mail servers - Wikipedia — [https://en.wikipedia.org/wiki/Comparison\\_of\\_mail\\_servers](https://en.wikipedia.org/wiki/Comparison_of_mail_servers)
- Comparison of email clients - Wikipedia — [https://en.wikipedia.org/wiki/Comparison\\_of\\_email\\_clients](https://en.wikipedia.org/wiki/Comparison_of_email_clients)
- Comparison of webmail providers - Wikipedia — [https://en.wikipedia.org/wiki/Comparison\\_of\\_webmail\\_providers](https://en.wikipedia.org/wiki/Comparison_of_webmail_providers)
- List of collaborative software - Wikipedia — [https://en.wikipedia.org/wiki/List\\_of\\_collaborative\\_software](https://en.wikipedia.org/wiki/List_of_collaborative_software)

# Overview Of Office-365 Cloud Email

[http://business.tutsplus.com/articles/  
setting-up-a-hosted-email-solution-with-microsoft-office-365--fsw-](http://business.tutsplus.com/articles/setting-up-a-hosted-email-solution-with-microsoft-office-365--fsw-)

# Google Cloud Email

[http://business.tutsplus.com/articles/  
setting-up-a-hosted-email-solution-with-microsoft-office-365--fsw-](http://business.tutsplus.com/articles/setting-up-a-hosted-email-solution-with-microsoft-office-365--fsw-)



## Part II

Topics We Did Not Cover In Enough Detail

## Part 2: Topics We Did Not Cover In Enough Detail

- 6 Spam Detection And Control
- 7 Virus Detection And Control
- 8 DomainKeys Identified Mail (DKIM) Creation and Verification
- 9 Sender Policy Framework (SPF) Creation and Verification
- 10 Qmail Mailing List Manager – Ezmlm

# Spam Detection And Control

Spam Detection And Control:

- At The Point Of Final Delivery Run SpamAssassin
- Let It Score Your Incoming Messages
- Decide On A Score For Ham/Spam
- Let The User Flag False Negatives
- Occasionally Look For False Positives and Flag Those

# Virus Detection And Control

## Virus Detection And Control:

- On Every Incoming Message Run A Virus Detector (Where In The Qmail Picture?)
- On Every Outgoing Message Run A Virus Detector (Where In The Qmail Picture?)
- Continually Update Virus Detector Signatures
- Choice Or Combinations Of Virus Scanners: ClamAV

# DomainKeys Identified Mail (DKIM) Creation and Verification

- Let's You Improve Your Delivery Rates
- Uses DNS
- Where To Add It In The Qmail Picture For Sending (before qmailsmtp)
- Where To Add It In The Qmail Picture For Incoming (mailfront add-on)
- <http://notes.sagredo.eu/node/92>

# Sender Policy Framework (SPF) Creation and Verification

- Let's You Improve Your Delivery Rates
- Uses DNS
- Where To Add It In The Qmail Picture For Sending (before qmailsmtp)
- Where To Add It In The Qmail Picture For Incoming (mailfront add-on)
- <http://wiki.qmailtoaster.com/index.php/SPF>

# Qmail Mailing List Manager – Ezmlm

- Qmail Oriented Alternative To Mailman or Majordomo
- Meant To Be A Layer Over Qmail
- Assigns long uniq mailaddresses that permit handling of bounces
- ezmlm-web is a web interface for the administration of ezmlm mailing lists.

## Part III

# Class Activities



- 11 Accessing Your Accounts On ByStar Mail Server
  - Your Domains, Your Account+Passwd
  - ByStar Mail Server Basic Tests
  
- 12 Bash Scripting – MailBot and MailInjector Exercise
  - MailInjector Evolution
  - MailBot Evolution

# Your Domains, Your Account+Passwd

- smtp.first.1.last.byname.net – imap.first.1.last.byname.net
- Your account is the first field in the /etc/passwd file that was emailed
- Your passwd was emailed to you

# ByStar Mail Server Basic Tests

- ping smtp.first.1.last.byname.net
- From Your Bellevue College Account Send Messages To main@first.1.last.byname.net
- Submit Server Tests Against smtp.first.1.last.byname.net

# MailInjector Evolution

- `cd /isit442`
- `mv mailInjector mailInjector.20160315`
- `cp -r -p /opt/public/osmt/bin/mailInjector .`

# MailBot Evolution

- `cd /isit442`
- `mv mailBot mailBot.20160315`
- `cp -r -p /opt/public/osmt/bin/mailBot .`

# Part IV

## Assignments

## 13 Next Set Of Assignments

# Next Set Of Assignments (Due 3/20)

Continue your work on Mail Transition Papers