

# BC-isit442 Class Overview And Structure

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## Part I

# Email As A Service In The Cloud

## 1 Concept Of Public Cloud Based Mail Services

### 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

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

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

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

## 3 Comparison of Webmail Providers

### 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)

## 4 Overview Of Office-365 Cloud Email

### Overview Of Office-365 Cloud Email

<http://business.tutsplus.com/articles/setting-up-a-hosted-email-solution-with-microsoft-office-365--fs>

## 5 Overview Of Google Cloud Email

### Google Cloud Email

<http://business.tutsplus.com/articles/setting-up-a-hosted-email-solution-with-microsoft-office-365--fs>

## Part II

# Topics We Did Not Cover In Enough Detail

## 6 Spam Detection And Control

### 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

## 7 Virus Detection And Control

### 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

## 8 DomainKeys Identified Mail (DKIM) Creation and Verification

### 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>

## 9 Sender Policy Framework (SPF) Creation and Verification

### 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>

## 10 Qmail Mailing List Manager – Ezmlm

### 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

### 11.1 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

### 11.2 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

## 12 Bash Scripting – MailBot and MailInjector Exercise

### 12.1 MailInjector Evolution

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

## 12.2 MailBot Evolution

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

## Part IV

# Assignments

## 13 Next Set Of Assignments

Continue your work on Mail Transition Papers

## References