

BC-isit442 Class Overview And Structure

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Part I

Mail Transition Requirements And Assumptions

1 Mail System Transition Execution Plan (Overview)

The deliverables are two papers that provide a high level description of steps involved in and an **execution plan** for:

- Transition From Some-Mail-Server To ByStar-Mail-Server
- Transition From ByStar-Mail-Server To Cloud Office-365 Mail Service

The papers can be in any format and at any length. The two papers can refer to one another. No need to duplicate.

The goals are:

- not to have any mail service interruptions
- not to have any lost email
- minimize possibility of any bounced messages
- minimize impact on user base and correspondents

1.1 Included In The Scope Of Transition Plans

- Enumeration Of Steps Involved
- Details and description of each step
- Communications with user base (before, during, after)
- Assumptions and clarifications – if/when the requirements are not clear point the topics out and make assumptions.
- Point out your thoughts/opinions on the merits of the transition.
- What should happen to the old system, when?

1.2 General Assumptions

- Assume User Base of 500. 1000 Mailboxes total.
- Primary goals for the transition are:
 - increased reliability
 - ease of maintenance
 - reduced on-going costs
 - visibility and monitoring
 - privacy and autonomy
- One-time costs are not a major concern
- 6 hour Window to implement the transition.
- Old and New DNS is under your control.

1.3 Transition From MS-Exchange-Server To ByStar-Mail-Server

Old MS-Exchange-Server Assumptions:

- Everything was under your control
- Mail was not in maildir format
- You have access to all user and mailbox credentials

New ByStar-Mail-Server Assumptions:

- Everything Is Under Your Control
- You have 2 very beefed up servers and one large network file server with lots of available disk space

1.4 Transition From ByStar-Mail-Server To Cloud Office-365 Mail Service

Old ByStar-Mail-Server Assumptions:

- You are In Control Of Everything
- You have access to all user and mailbox credentials

New Office-365 Assumptions:

- Cost Is No Problem. You can spend as much as possible. Get the best that is offered.
- If possible, we want to remain in full control of our own DNS domains.
- If possible, you want the exact set of mail addresses to remain active – To external users, the transition should be mostly transparent.

Part II

Merits Of The Proposed Transition

2 Costs And Benefits MS-Exchange Vs ByStar-Mail (qmail++)

- If you are in the Windows (Proprietary) camp, you go with MS-Exchange.
- If you are in the Gnu/Linux (Libre-Halaal) camp, you go with ByStar-Mail (qmail++).

It is a belief system question.

3 Costs And Benefits Of In-House Vs Hosted Mail System

- When Your MTA and Mbox is physically at your premise, it is called “In-House”.
- When Your MTA and Mbox is not physically at your premise, it is called “Hosted”.
- A Hosted Mail Service may be easier to manage and maintain.
- If you have the know-how, an In-House Mail Service can provide you full control. Consider the “delete test”.
- A Hosted Mail Service approach compromises your autonomy and privacy.

Part III

Transition Steps

4 Mail System Transition Stages

- Preparations For The Move
- During The Transition
- After The Transition

5 Preparations For The Move

- Make sure that all relevant MUAs will work with the new system Mail Service.
- Maintain Control Of Your DNS Service. Do not delegate your full domain to the hosted service.
- Reduce your DNS TTL for IMAP, Submit and SMTP to 10 minutes (600 seconds).
- Backup user mboxes.
- Backup user address books and other info.
- Communicate With Users. Let users know when and how they need to re-configure their MUA and submit-servers.
- Small Scale test and verifications of the new system and transition plan

6 During The Move – MS-Exchange to ByStar-Mail

- Turn off imap-server. Turn off smtp-submit server. Leave smtp running.
- Change smtp-submit DNS record to ByStar-Mail
- Change SPF and DKIM records to point to ByStar-Mail
- Change MX records to point to ByStar-Mail

- Lock down mail-delivery for mailboxes being synced (See “Safe Qmail Editing”)
- imap sych MS-Exchange with ByStar-Mail – extract all mail.
- For each locked mailbox setup a forward line to ByStar-Mail
- Un-Lock mail-delivery (See “Safe Qmail Editing”)
- Change imap-server DNS record to ByStar-Mail
- Test new imap-server and smtp-submit servers
- Test old server forwarding
- Test new server smtp deliveries

7 During The Move – ByStar-Mail to Office-360

- Turn off imap-server. Turn off smtp-submit server. Leave smtp running.
- Change smtp-submit DNS record to Office 365
- Change MX records to point to Office 365
- Lock down mail-delivery for mailboxes being synced (See “Safe Qmail Editing”)
- Follow instructions in “Migrate other types of IMAP mailboxes to Office 365”
- <https://support.office.com/en-us/article/Migrate-other-types-of-IMAP-mailboxes-to-Office-365-5889>
- Stop email synchronization, after the initial sync. No need to run it continously. Floaters will be dealt with forwarding.

7.1 During The Move – ByStar-Mail to Office-360 (2 of 2)

- For each locked mailbox setup a forward line to ByStar-Mail
- Un-Lock mail-delivery (See “Safe Qmail Editing”)
- Change imap-server DNS record to Office 365
- Test new imap-server and smtp-submit servers
- Test old server forwarding
- Test new server smtp deliveries
- Communicate with user base that the transition has occurred.

8 After The Move

- Turn off your old SMTP-Submit-Server and your old IMAP-Server.
- Monitor old mail server forwarding until you see no forwarding for a period of 72 hours.
- Turn off your old MTAs.
- After a few months, you can re-purpose your old old SMTP-Submit-Server and your old IMAP-Server.
- Setup a nagios style mail ping against the Hosted service.
- Monitor the logs regularly – not just when problems arise.

References