Mail Transition Considerations

Lift and Shift: Moving From An Onsite Mail Server To A Hosted Solution

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

http://mohsen.banan.1.byname.net/PLPC/120061

Winter 2016 – March 22, 2016
Varbatim Copying Permitted

Part I

Mail Transition Requirements And Assumptions

1. Mail System Transition Execution Plan (Overview)
   - Included In The Scope Of Transition Plans
   - General Assumptions
   - Transition From MS-Exchange-Server To ByStar-Mail-Server
   - Transition From ByStar-Mail-Server To Cloud Office-365 Mail Service

Mail System Transition Execution Plan (Overview)

Included In The Scope Of Transition Plans
General Assumptions
Transition From MS-Exchange-Server To ByStar-Mail-Server
Transition From ByStar-Mail-Server To Cloud Office-365 Mail Service

Mail System Transition Considerations

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

Mail System Transition Execution Plan (Overview)

Included In The Scope Of Transition Plans
General Assumptions
Transition From MS-Exchange-Server To ByStar-Mail-Server
Transition From ByStar-Mail-Server To Cloud Office-365 Mail Service

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?

Mail System Transition Execution Plan (Overview)

Included In The Scope Of Transition Plans
General Assumptions
Transition From MS-Exchange-Server To ByStar-Mail-Server
Transition From ByStar-Mail-Server To Cloud Office-365 Mail Service

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.

Transition From MS-Exchange-Server (old) To ByStar-Mail-Server (new)

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

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++)

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

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.

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

Part 3: Transition Steps

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

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 deligate 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

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

Mail System Transition Stages
Preparations For The Move
During The Move – MS-Exchange to ByStar-Mail
During The Move – ByStar-Mail to Office-360
After The Move

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

During The Move – ByStar-Mail to Office-360 (1 of 2)

- 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-365-58890ccd-ce
- Stop email synchronization, after the initial sync. No need to run it continously. Floaters will be dealt with forwarding.

Mail System Transition Stages
Preparations For The Move
During The Move – MS-Exchange to ByStar-Mail
During The Move – ByStar-Mail to Office-360
After The Move

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

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 occured.

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.