Heinlein Mailserver Conference 2011

MailBridge

Zarafa Collaboration Platform

meets

Dovecot IMAP

MailBridge

- What is MailBridge
- Why MailBridge
- Requirements
- How does it work?
- Zarafa Incremental Change System
- Dovecot dsync
- Licence / Download

what is MailBridge?

- Depends on the perspective
- An IMAP cache for Zarafa
  Provide IMAP clients a scalable access to Zarafa message store
- A MAPI interface for dovecot
  Make dovecot mails available through MAPI to other systems (Z-Push and Blackberry Enterprise Server)
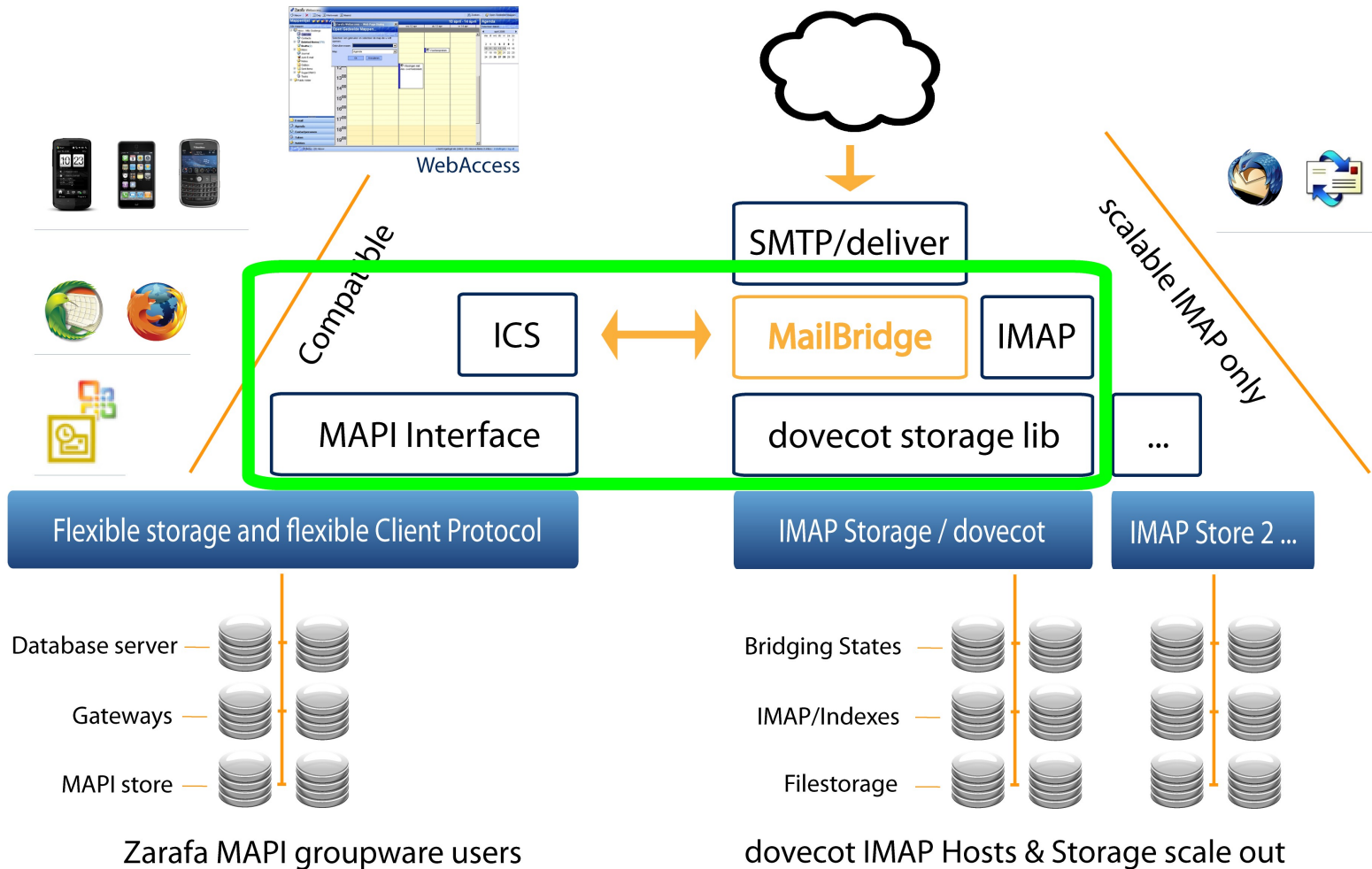
Why MailBridge?

- Why MailBridge? Zarafa has an IMAP Gateway?

- Zarafa was designed to be Groupware server not a primary IMAP server

- For mail clients requiring 100% compatibility

- Scaleout to massive amounts of IMAP mailboxes / subset using Groupware

MailBridge / requirements

- Zarafa 7.x
- Dovecot 2.0.12 and later
- Python >= 2.4
- redis
- threadpool.py

MailBridge architecture

WebAccess

SMTP/deliver

ICS ⟷ **MailBridge** IMAP

Compatible

scalable IMAP only

MAPI Interface

dovecot storage lib

...

Flexible storage and flexible Client Protocol

IMAP Storage / dovecot

IMAP Store 2 ...

Database server

Gateways

MAPI store

Bridging States

IMAP/Indexes

Filestorage

Zarafa MAPI groupware users

dovecot IMAP Hosts & Storage scale out

Storage access mechanisms

- Zarafa store is accessed through native MAPI and ICS Exporters and Importers
- Dovecot is accessed through dsync subprocess running in server mode

Zarafa Incremental Change System

- Logs each change in a folder
- Logs each change to the hierarchy
- SyncKey and SyncState pointer
- Importer and Exporter
- The same mechanism used by Z-Push

Incremental Change System Layer on top of Dovecot

- Logic implementation in mailbridge

- Retrieves changes based on MODSEQ

- Change Log stored in redis

- Hierarchy changes result in folder move/rename operations

Event triggered updater

- Zarafa Events are monitored through MAPI Advise Sinks

- Dovecot Events are monitored through the dovecot maillog plugin

- No changes results in zero activity

- Changes are instantly updated through the bridge

Mapping Features

- Supports dynamic mapping of MAPI/Outlook special folders to their respective IMAP folders

- Maps all important flag changes
Read/Unread
Flag/Red Flag
Answered/Forwarded
Priority

Performance aspects

- Bridging based on Zarafa's ICS
- Event triggered bridging
- Performance measured in message changes per time interval
- and message I/O per time interval

Intergration into your setup

- Default configuration supports account mapping definitions

- Customize the Updater setup script to add Updaters for your selected users (i.e. by performing an LDAP query)

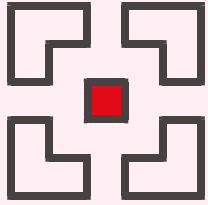- Setup dovecot to use the same authentication backend (LDAP, etc)

Licence / Download

- Licenced under the AGPL 3.0
- Project available at the Zarafa Community Hub http://community.zarafa.com
- Look for the project "mailbridge"

Future

- Public Folder support
- ACL support and ACL mapping

![Neuberger &Hughes www.n-h.com]

Thank You

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