

EMAIL-SIG

SERVICE UPDATE
JUNE 15, 2010



Format

Forward-Only

SMTP-Relay

PennNet Mailing Lists

Exchange

Clients and Mobile Devices

Zimbra



Forward-Only

GA on July 6, 2009

Leverages existing infrastructure for mail routing

MessageLabs AV/AS

Over 2000 accounts (up 37% since Q2)

Internal tools to streamline Zimbra-to-FO account migrations

Rates drop from \$1.50/month to \$0.75/month in FY11



SMTP-Relay

Use cases: printers, faxes, control systems that need to send email w/o user auth, or to external addresses

Separate service to avoid dependencies on Exchange and Zimbra

Migrated to modern hardware on November 4

Currently used by 48 hosts (up 14% since Q2)

\$10/IP address/month; No charge for mail within ISC service



PennNet Mailing Lists

Migrated to LISTSERV 15.5 and modern hardware on November 4

Working toward LISTSERV 16 this summer; no UI changes

Rate structure changes to \$0.50/list/month in FY11



EXCHANGE



Agenda

Overview of Service
Availability Report
Rates
Roadmap
Q&A



Overview

In production since July 2007

10 Windows servers in 3 campus data centers

2 TB of mailbox storage

Data replicated in Levy and Nichols campus data centers

Vendor contracts: Microsoft, RIM, Dell



Overview

Over 3,500 accounts (up 18% over FY09)

About 365 BlackBerry handhelds (up 33% over FY09)

Almost 500 ActiveSync handhelds (up 44% over FY09)

Almost 900 users purchased higher quota (down, then up, equal to FY09)



Service Review

Availability for FY10 YTD

Incidents

Maintenance

Remedy Cases

Accomplishments

Rates



Availability

Target: 99.5% (43 hours, 48 minutes)

Exchange: 99.93% (3 hours, 44 minutes)

BlackBerry: 100%

Averaged across multiple servers/services



Incidents

February 2, 2010, 7:00 - 9:00 a.m. - Mail delayed; inbound mail transport hangs

April 19, 2010 - Slowness; new release of backup software backs up active node rather than passive

May 10, 2010, 11:50 a.m. - 1:20 p.m. - OWA, CAS problems; early morning group policy change to software firewall propagates to Exchange cluster

May 21, 2010, 4:00 - 4:30 p.m. - Disk controller failure



Monitoring

Nagios polls services, reports availability

Logcaster examines event logs

Spectrum pings, sends alarms

Oncall service 24x7x365



Maintenance

December 7, 2009 - Moved iPhone pre-3G S devices to new security policy to allow 3.1.2+ upgrades

January 31, 2010, 12:00 - 3:00 a.m. - Rolling upgrade to Exchange 2007 SP2 RU 1

February 9, 2010, 5:00 p.m. - Installed critical security patches released by Microsoft

April 12, 2010, 6:00 p.m. - Rebuilt two SG indexes

May 8, 2010, 12:00 a.m. - Added more disk to accommodate indexes and backups



Maintenance

Periodic targeted user moves between SGs

As agreed, unadvertised, disruptive maintenance of up to 15 minutes may be performed:

Mon-Fri: 1am-3am

Sat-Sun: 6am-7am



Remedy Cases

SLA: 24 hour response

Over Dec-May, ~23 cases/month;
(down 15% from FY09)



Accomplishments

Clean up of iPhone security policy

Added storage

Exchange Risk Assessment and
Health Check Program



Rates

First rate change since service introduction in July 2007

Exchange @ \$7.75/month (from \$7.50);
BlackBerry @ \$14/month (from \$13.50)

Additional storage: \$1.25/250MB/month
(unchanged)

Default quota: 500MB; Auto-quota up to 2GB;
Max quota up to 5 GB



Exchange Roadmap

Short-term (0-3 months)

Medium-term (4-12 months)

Long-term (>1 year)



Short-term

Test Outlook 2010 (PC) and 2011
(Mac)

Hub transport capacity

Keep pace with mobile device
landscape



Medium-term

Investigate mailbox level restores

Test Exchange 2010



Long-term

Production Exchange 2010

R&D into off-campus DR

Contain costs

Look for consolidation opportunities



Q&A - Customers

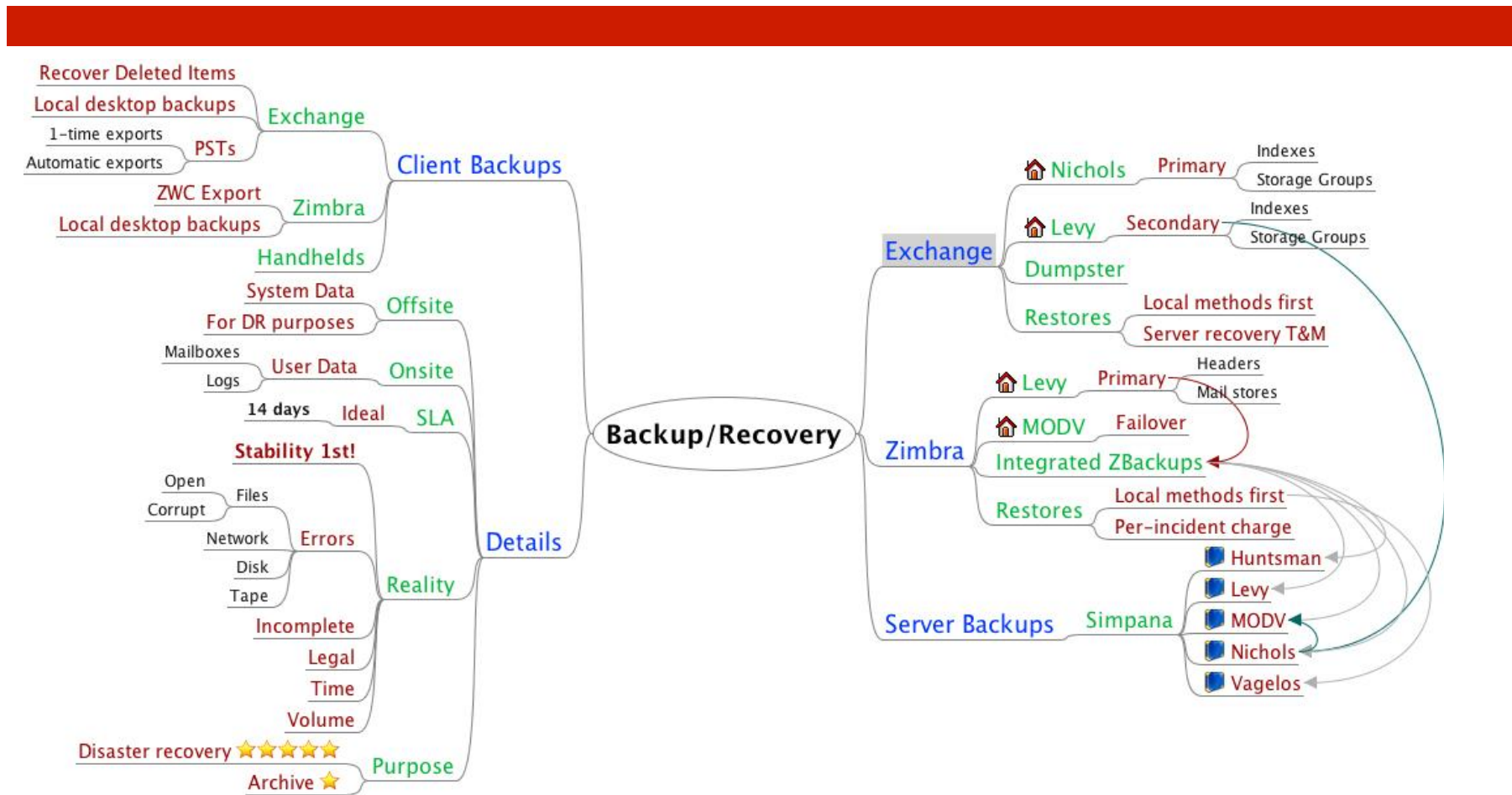
SharePoint

Backups

Exchange 2010



Backups





Exchange 2010

More automatic failover features

Transport resiliency

Smarter about using cheap disk

Outlook Web App

ActiveSync – free/busy lookup, push

Outlook updates to Windows handhelds



Q&A – Your topics

Version - Exchange 2007 SP2 Update Rollup 1

Snow Leopard Mail/iCal problems with Exchange,
including delegation

Preventing the sending of mail from resource
accounts

Near or over quota notices - 9 a.m., noon, or any
time other than midnight



References

<http://www.upenn.edu/computing/email/>

<http://www.upenn.edu/computing/email/exchange/sig-meetings/>

<https://zimbra.upenn.edu/home/nt-dtime/Calendar?fmt=html>



Clients and Mobile Devices



Exchange Clients

Eliminating support for Outlook 2003, Entourage 2004

Outlook 2007 & Entourage 2008 support to be SP2 only

Outlook 2010 works, documentation forthcoming

Entourage users should consider upgrading to EWS



Zimbra Clients

Thunderbird is supported and recommended Zimbra client

Moving forward with transitioning from 2.0.0.x to 3.0.x for FY11

Outlook 2003/SP3, Outlook 2007/SP2, Apple Mail still supported

Outlook 2010 support on the way, still needs ZCO testing

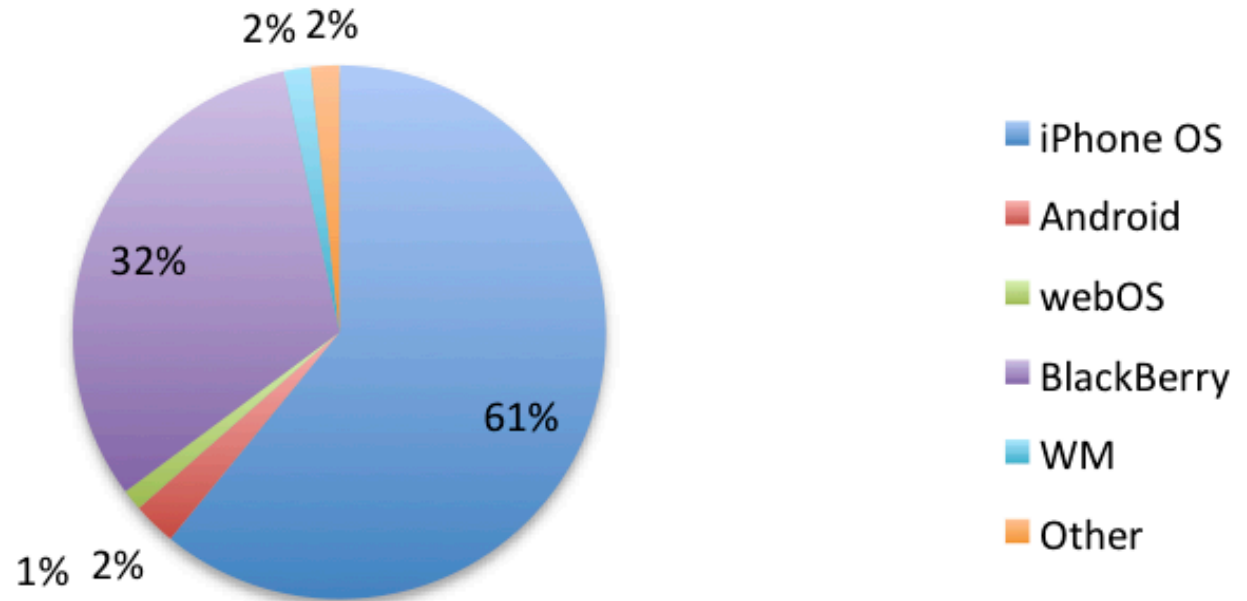


Mobile Devices

Supported platforms:

- ▣ BlackBerry OS 4.5+
- ▣ iPhone OS 3.x
- ▣ webOS 1.2+
- ▣ Windows Mobile 6.1+

Mobile Devices on Exchange & Zimbra



Device Prevalence



iOS 4

Should be available 6/23

Increased Exchange/ActiveSync
friendliness

Some security issues

Some reliability issues



Android

2.2 (FroYo) will likely be supported

Brings full ActiveSync connector

Devices not branded "with Google"
supported on a device- by- device basis

Still no encryption



Windows Phone 7

Coming this Fall/Winter

Likely to be supported

Not as Exchange-friendly as WM
6.5



ZIMBRA



Overview

Production on July 26, 2008

10 Linux servers in 2 campus data centers

2.5 TB of mailbox storage

Data replicated in Levy and MODV campus data centers

About 13,450 accounts (down about 1% from FY09)

Almost 200 with Mobile Sync enabled (up 214% over FY09)

About 230 users purchased higher quota (up 16% since Q2)



Service Review

Availability for FY10 YTD

Incidents

Maintenance

Remedy Cases

Accomplishments

Rates



Availability

Target: 99.9% (<9 hours)

Zimbra: 99.97 % (2 hours, 24 minutes)

Will begin tracking BlackBerry

Averaged across multiple servers/
services



Incidents

January 4, 2010 - 10:15 - 3:00 p.m. - WebLogin affects ZWC logins

February 10, 2010, 10:10 - 10:45 a.m. - Slow performance in ZWC due to high # of IMAP connections

February 17, 2010 - Periodic slowness, again due to load

March 29, 2010 - Slowness; corrected with tuning

June 14, 2010 - SMTP connectivity errors for Microsoft clients due to certificate issues



Maintenance

January 31, 2010, 12 p.m. - Contact Cleaner Zimlet (non-disruptive)

January 24, 2010, 1:00 - 2:00 a.m. - Upgrade from 5.0.15 to 5.0.21; Mac client, calendaring, ZCO fixes

May 7, 2010 - 5:00 - 6:00 a.m. - Added more disk

June 6, 2010 - 5:00 - 6:00 a.m. - Adding more disk, continues on to ...

June 13, 2010 - 5:00 - 6:00 a.m. - ... when work is completed; also, partially disruptive SSL certificate update



Maintenance

As agreed, unadvertised, disruptive maintenance of up to 15 minutes may be performed:

Mon-Fri: 1am-3am

Sat-Sun: 6am-7am



Remedy Cases

SLA: 24 hour response

Over Dec-May, ~17 cases/month;
(down 40% from FY09)



Accomplishments

Winter Feature Release:

Zimbra 5.0.21

Tuning to perform better under very heavy load

BlackBerry for Zimbra



Rates

First change to base price in four years

Enhanced @ \$3.10/month (from \$3.00) and Basic @ \$3.60/month (from \$3.50) for FY11

BlackBerry service to line up with Exchange at up to \$14.00/month for FY11

Additional storage: \$1.25/250MB/month (unchanged)

Quota: 500MB; Auto-quota up to 4GB; Max quota up to 10GB



Zimbra Roadmap

Short-term (0-3 months)

Medium-term (4-12 months)

Long-term (>1 year)



Short-term

Performance monitoring - round trip
and delivery delays

Scaling - 2nd Mailbox Server and
Kerberos Proxy

Calendering interoperability



Medium-term

Zimbra 6.0 - better admin tools, social networking, better mobile UI, filter existing messages, read receipt, three-pane view, enterprise management of handhelds, and more

Unified Communications - Integration opportunities between Zimbra, IM, and/or PennNet Phone

More traction for an XMPP proxy



Long-term

What's going on at VMWare/Zimbra:

Increased headcount; messaging platform for their enterprise; focus on stability and performance over new features

Focus on ZDesktop as Outlook replacement

ZCO that works with Outlook 2010

iPhone 4.0 and iPad support

Remove dependency on ZCB middleware



Q&A - Customers

Some Zimbra bugs we track:

6062 (Kerberos/SSO for CalDAV, web UI) - more votes (53) and comments from others (assigned)

15120 (Calendar templates) - more votes (55) and comments from others (assigned)

19398 (XMPP proxy) - more votes (66) and comments from others (assigned)

20882 (Kerberized ZDesktop) - mostly Penn and Stanford (only 6 votes)

Are there others important to you?



Q&A – Your topics

Roadmap for BlackBerry

Charges for other mobile handhelds



References

<http://www.upenn.edu/computing/email/>

<http://www.upenn.edu/computing/email/zimbra/sig-meetings/>

http://prowiki.isc.upenn.edu/wiki/ISC_Zimbra_documentation

<https://zimbra.upenn.edu/home/nt-dtime/Calendar?fmt=html>

Day Work Week Week Month Today June 2010

June 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5/30 <ul style="list-style-type: none"> 8:00 PM ININ Managed Services Automated Updates/IC Backup 	31	6/1	2	3	4	5
6 <ul style="list-style-type: none"> 5:00 AM Zimbra maintenance 8:00 PM ININ Managed Services Automated Updates/IC Backup 	7	8	9	10 <ul style="list-style-type: none"> 7:00 PM ACD Microsoft Security Patches 	11	12 <ul style="list-style-type: none"> 7:30 AM Scheduled power outage in SDH 8:00 AM Scheduled power outage in Law School
13 <ul style="list-style-type: none"> 6/12/10 Scheduled power outage in SDH 5:00 AM Zimbra maintenance 8:00 PM ININ Managed Services Automated Updates/IC Backup 	14	15 <ul style="list-style-type: none"> 10:00 AM Block SNMP traffic at the edge of PennNet 	16	17	18	19 <div style="background-color: #d9e1f2; padding: 2px;">3401 Data Center Power Outage</div>
20 <div style="background-color: #d9e1f2; padding: 2px;">3401 Data Center Power Outage</div> <ul style="list-style-type: none"> 2:30 AM Scheduled power outage at ANB, ASC, FKB, FBA, JAF, WAL, VPL 8:00 PM ININ Managed Services Automated Updates/IC Backup 8:00 PM ININ Monthly Maintenance 	21	22	23	24	25	26
27 <ul style="list-style-type: none"> 8:00 PM ININ Managed Services Automated Updates/IC Backup 	28	29	30	7/1	2	3

<https://zimbra.upenn.edu/home/nt-dtime/Calendar?fmt=html>



THANK YOU
