

Preparation and Planning for a GroupWise Migration or Upgrade

Cathy D. Schaefer, Engineer



Cathy D. Schaefer, CNE/CNI/SCE

- WordPerfect 2.0 first installed version
- WordPerfect 3.1 Certified System Engineer
- Novell Master CNE/CNI, now CNE/CNI
- Sniffer Certified Expert (SCE0)
- Novacoast Engineer specializing in SLES/OES, NetWare, GroupWise, GWAVA, Reload, Retain, Reveal, etc.
Migrations and Upgrades

Preparing and Planning a Migration or Upgrade

- Proper Preparation and Planning is essential
 - Document the existing system
 - Plan the migration including expected growth and document
 - What is your Game Plan/Schedule
- Other sessions cover migration, upgrade options, and the process
- Session compares two migrations with upgrade performed in 2009
 - Large School District (3 ½ weeks including Reload and Retain)
 - Large Hospital (9 weeks)
- Both migrated from NetWare to Linux and upgraded to GroupWise 8.0.1

Existing System Documentation

Customer Name

GroupWise System Name:									
Object	GroupWise Object Name	Directory Path	Server Name	Server IP Address	MTP	C/S	Ports HTTP	WebAcc	SMTP
SDD									
Primary Domain	GWPRIDOM			192.168.x.x	7100		7180		
2nd Domain	DOM2			192.168.x.x	7100		7180		
Post Office	POST1				7101	1677	7181		
WebAccess	WEBAC80a						7211	7205	
2nd Domain	DOM2			192.168.x.x	7100		7180		
Post Office	POST2				7101	1677	7181		
WebAccess							7211	7205	
Post Office	POST3			192.168.x.x	7101	1677	7181		
Post Office	POST4			192.168.x.x	7101	1677	7181		
2nd Domain	DOM3			192.168.x.x	7100		7180		
GWIA	GWIA						9850		25

Comparing the Two Systems

School District

- 2004 installed by Cathy D. Schaefer
- 2004 GW System 6.5
- GroupWise 7.0.2 HP
- Mailbox Maintenance and Restrictions
- Hardware – standalone
- NetWare 6.5.4
- OS patched regularly
- 7 AM – 5 PM operation
- Minimal project implementation restrictions
- Backup Exec + Reload and Retain (2007)
- Blackberry Enterprise Server
- Migrating to VMware ESX/HA

Hospital

- Installed by Hospital
- Original GW System 4.1
- Last Upgrade 2004 to GW 6.5.3
- Mailbox Maintenance and no Restrictions
- Hardware – standalone/rack
- NetWare 5.1 - end of life, not supported
- OS not currently patched
- 24/7 operation
- Strict project implementation restrictions
- Tivoli, no archiving solution, Wasp
- Blackberry Enterprise Server
- Migrating to VMware ESX/HA

Preparing and Planning a Migration or Upgrade

- Involves three major components
 - Server – Physical vs. Virtual
 - Operating System
 - GroupWise

- Documentation is vital

- Does not matter which migration process is selected
 - GroupWise Migration Utility
 - Manually with dbcopy
 - GWAVA Reload Migration

Physical Components

- Source
 - Server: Physical vs. Virtual
 - Document Connectivity – Server Name, IP Address, Subnet, DNS
 - Document data location and size

- Target
 - In place Upgrade
 - Migrate to new Server: Physical vs. Virtual
 - Determine Connectivity – Server Name, IP Address, Subnet, DNS
 - Determine drives/SAN, partitions, and volumes, file system (Linux or NSS)

Physical Comparison

School District

- Source
 - 8 Servers
 - Standalone – end of life
 - Server stability issues
- Target
 - 3 VMware ESX/HA
 - 8 Virtual Servers

Hospital

- Source
 - 3 GW Servers + 1 Archive
 - Rack mounted – end of life
 - Server stability issues
- Target
 - 3 VMware ESX/HA +1 ESX
 - 12 Virtual Servers

Physical Issues

- School District
 - Servers do not have multiple agents (domains/post offices) per server
 - Two servers have resource issues - manually restarted each morning
 - Manageable data migration times

- Hospital
 - Three servers with multiple GroupWise agents per server
 - Server1 – two domains, 5 post offices, backup WebAccess (disabled)
 - Server2 – two domains, 4 post offices, gwia
 - Server3 – one domain, WebAccess Application and Web Agent
 - Server4 – User Archives
 - Excessive data migration times

Plan for Drives, Partitions, and Volumes

- Both implemented ESX/HA and virtual servers
- Both implemented SLES 10 SP2, OES SP1 (no replicas)
- Both had SAN Storage – Two Logical Drives per virtual server
 - vHD1 = 30 GB
 - swap partition
 - /boot partition – ext2
 - / (root) partition – ext3
 - /var partition – ext3 (14 GB)
 - vHD2 = GW storage Requirements
 - /Mail – ext3
 - NCP Volume

Operating System Comparison

School District

- Source
 - NetWare 6.5.4
 - eDirectory 8.7.3.7
 - Patched/regular dsrepair
- Target
 - VMware ESX/HA
 - SLES10 SP2/OES2 SP1
 - eDirectory 8.8 SP4

Hospital

- Source
 - NetWare 5.1
 - eDirectory 8.6.2
 - Patch/dsrepair required
- Target
 - VMware ESX/HA
 - SLES10 SP2/OES2 SP1
 - eDirectory 8.8 SP4

Operating System Issues

- School District
 - Existing SLES/OES server in eDirectory tree
 - No issues that would hinder the migration/upgrade

- Hospital
 - Current eDirectory version did not support SLES/OES2
 - Required NW5.1 SP8e, NW5.1OS8a and multiple module updates
 - Required eDirectory Upgrade to version 8.7.3
 - One NFS server in tree required eDirectory and NFS upgrades

GroupWise Components

- Administrators
- Software Distribution Directory (SDD)
- Agents
 - Domains
 - Post Offices
 - Gateways
 - GWIA
 - WebAccess
 - Apache2/SSL/Security
- Client
- User Archives
- 3rd Party Applications/Services

GroupWise Admins, Rights and LUM

- Who will administer GroupWise
- GroupWise on SLES/OES2 – ext3/NCP volume or NSS
 - Remote Manager – mount /mail volume as NCP
 - File System rights configured in eDirectory (C1 or iManager)
 - Create Symbolic link for server: `cd /mnt, ln -s / <servername>`
- Administrators/eDirectory users
 - Workstation OS and ConsoleOne
 - Require eDirectory and file system rights with mapping to NCP volume
 - Administrators must be LUM enabled
 - Linux User Management (LUM) must be installed
 - eDirectory users must have UniqueID to be LUM enabled
 - SLES/OES2 server and ConsoleOne

GW Software Distribution Directory

- One or more
 - How are they defined at each Post Office
- Location/User Access
 - NetWare vs. Linux
- Migrating from NetWare to Linux
 - Install new SDD
- Used to update the client
 - Create SDD on NetWare server during initial upgrade

GroupWise Domains

- Domains
 - Primary Domain
 - Are there Post Offices or Gateways
 - Create a new secondary domain and promote to Primary
 - How many Secondary domains
 - How many Post Offices/Gateways per domain
 - HTTP Monitor for Agent Configuration Documentation
 - Consolidate or Expand the GroupWise system

Domain Comparison

School District

- Dedicated Primary Domain
- 6 Original Secondary Domains
 - 2 with post offices
 - 1 GWIA (inbound)
 - 1 GWIA (outbound)
 - 2 WebAccess App.
- 5 Remaining Secondary Domains
 - 1 removed WebAccess App.

Hospital

- Primary Domain with 1 post office
 - Users moved to another PO
 - Post Office deleted
- 4 Original Secondary Domains
 - 2 with post offices and WebAccess
 - 1 with post offices and GWIA
 - 1 with WebAccess App.
- 6 Remaining secondary Domains
 - Added 1 GWIA (outbound)
 - Added 1 WebAccess App.

GroupWise Post Offices

- Post Offices
 - How many
 - HTTP Monitor for Agent Configuration Documentation
 - How many mailboxes per Post Office
 - Message Store Size
 - Trusted Applications
 - Restore Area Defined
 - iMAP4 direct access and or Proxy POA
 - Mailbox Maintenance/Scheduled Events
 - Consolidate or Expand number of Post Offices

Post Office Comparison

School District

- 4 Post Offices
 - 2 WebAccess only
 - 2 online client
 - defined default web agent
 - defined alternate outbound GWIA

Hospital

- 7 Original Post Offices
 - 2 WebAccess only
 - 5 Online client
 - defined default web agent
 - defined alternate outbound GWIA

- 9 Remaining Post Offices
 - added 1 WebAccess only
 - added 1 inactive users

GroupWise GWIA

- GWIA
 - How Many - Inbound and Outbound?
 - Services supported: SMTP, POP3, IMAP4, LDAP
 - HTTP Monitor for Agent Configuration Documentation
 - Define Default outbound GWIA for Domain/Post Office
 - Relay Host
 - GWIA.cfg
 - Route.cfg
 - Access Control database
 - Virus/Spam Implementation – Software/Appliance

GWIA Comparison

School District

- Originally 2 GWIAs
 - 1 GWIA (Inbound)
 - 1 GWIA (outbound)
- Configured alternate outbound
 - Assigned to Post Offices

Hospital

- Originally 1 GWIA
 - Configured as (inbound)
- Added second GWIA (outbound)
 - Configured alternate outbound
 - Assigned to Post Offices

GroupWise WebAccess

- WebAccess
 - Web Server location – Internal vs. DMZ
 - How many WebAccess agents
 - Multiple Agents for load balance and fault tolerance
 - Define Default WebAccess Agent for Domain/Post Office
- Apache2 security configuration
 - Use external CA and define SSL
 - Disable weak ciphers and restrict to SSLv3/TLS only
 - Disable HTTP Trace
 - Redirect requests to port 443

WebAccess Comparison

School District

- Originally
 - 2 WebAccess Application
 - removed 1 WebAccess
 - 2 WebAccess Agents
 - added 2 WebAcc Agents
- Remaining
 - 1 WebAccess Application
 - 4 WebAccess Agents
 - Added Monitor
- Apache2 – no SSL

Hospital

- Originally
 - 1 WebAccess Application
 - added 1 WebAccess
 - 1 WebAccess Agent
 - added 3 WebAcc Agents
- Remaining
 - 2 WebAccess Applications
 - 4 WebAccess Agents
 - Added Monitor
- Apache2 – SSLv3 required, high security

GroupWise WebAccess Issues

- GroupWise v8.0.1 WebAccess Agent
 - seg fault causing the agent to unload with status: dead
see /var/log/messages
 - download and apply FTF
 - 8.0.1HP released January 2010

- After Upgrade to 8.0.1, WebAccess Error: “Unable to Process Request: Please Contact Your System Administrator”
 - TID 7004593
 - Speller issue
 - Modify the webacc.cfg file

GroupWise Client

- Client
 - Client Modes
 - Confirm existing version compatible with new upgrade version
 - Determine client upgrade options

- User Archives
 - Server vs. Local
 - Archiving Solution: Retain

Client Comparison

School District

- Current Client Version 7.0.2 HP
 - Online and WebAccess
- Compatible with Version 8.0.1 views
- Deployment Options:
 - SetupIP
 - Schools Reimaged
 - Login Script
 - Manual Deployment
 - No ZEN/ZCM

Hospital

- Current Client Version 6.5.3
 - Online and WebAccess
- Not compatible with Version 8.0.1
 - Multiple View Issues
 - Required custom views at PO
 - Caused issues with 8.0.1 client
 - Win2000 – 7.0.3 client
- Deployment Options:
 - User rights restricted, encryption
 - Manual Deployment
 - No ZEN/ZCM

Archive Comparison

School District

- Retain
 - Retain Archive Utility
 - Archive user archives

Hospital

- User Archives
- Stored on NetWare 5.1 Server
- Plan for Future:
 - Retain
 - Retain Archive Utility
 - Archive user archives

Third Party Applications/Services

- Third Party Applications/Services
 - Blackberry Enterprise Server – client version installed
 - Spam/Virus: GWAVA4
 - Spam/Virus Appliance/SMTP Relay: Iron Port, SonicWall, Barracuda
 - Backup/DR: Reload, BackupExec/Tivoil/etc with no DR
 - Archive Solution: Retain

Third Party Applications Comparison

School District

- Blackberry – client compatible
- Iron Port – Relay Host/SPAM
- Reload
 - Upgraded to latest version
 - Redefined Profiles/Tar
- Retain
 - Upgraded to latest version

Hospital

- Blackberry – client not compatible
 - Installed 7.0.2 client
- Relay Host/SPAM Appliance

Planning Documents/Templates

Demo sample documents

Question and Answer

Thank you for attending!

Cathy D. Schaefer, Engineer
cschaefer@novacoast.com