



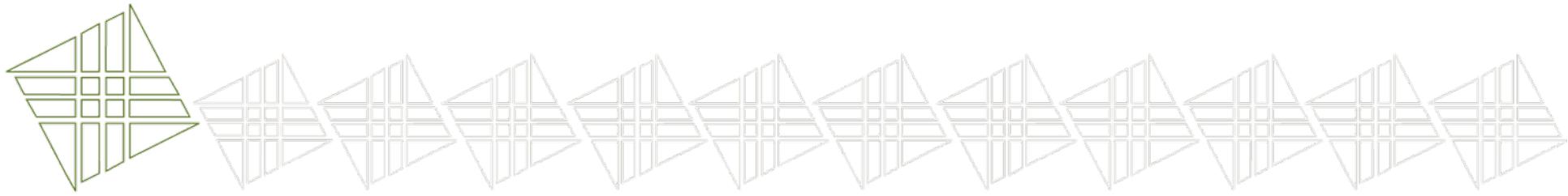
Washington State Department of
Information Services

Exchange 2010 Project Presentation/Discussion April 5, 2011

Project Team:

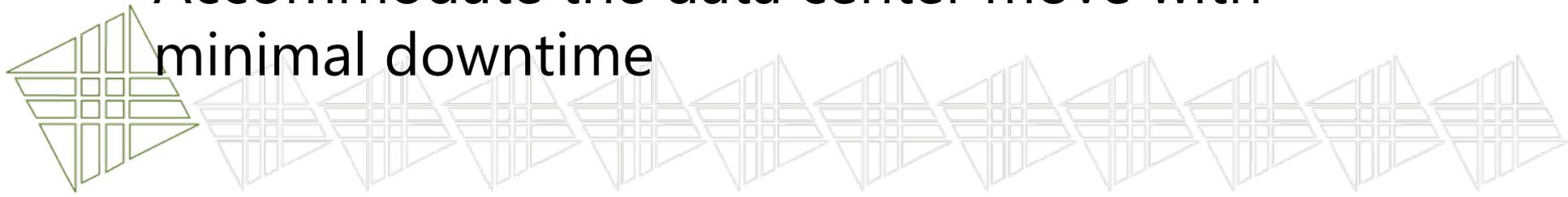
Mark Dougherty – Design
John Ditto – Project Manager
Joel Eussen – Project Support
Karen McLaughlin – Design

Major Goals Exchange 2010 Project

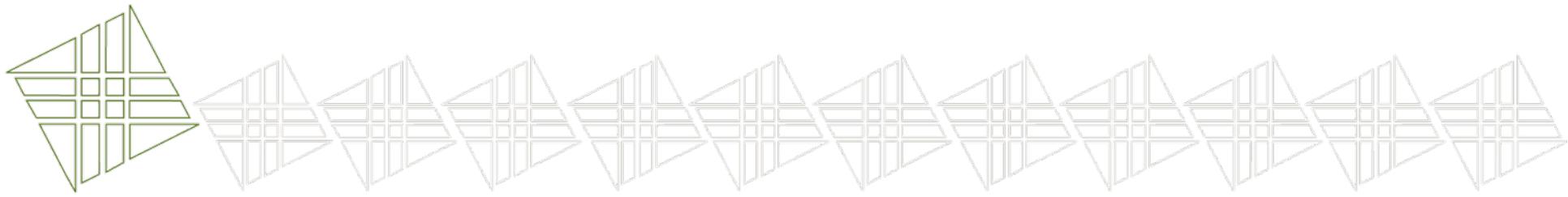


Major Goals

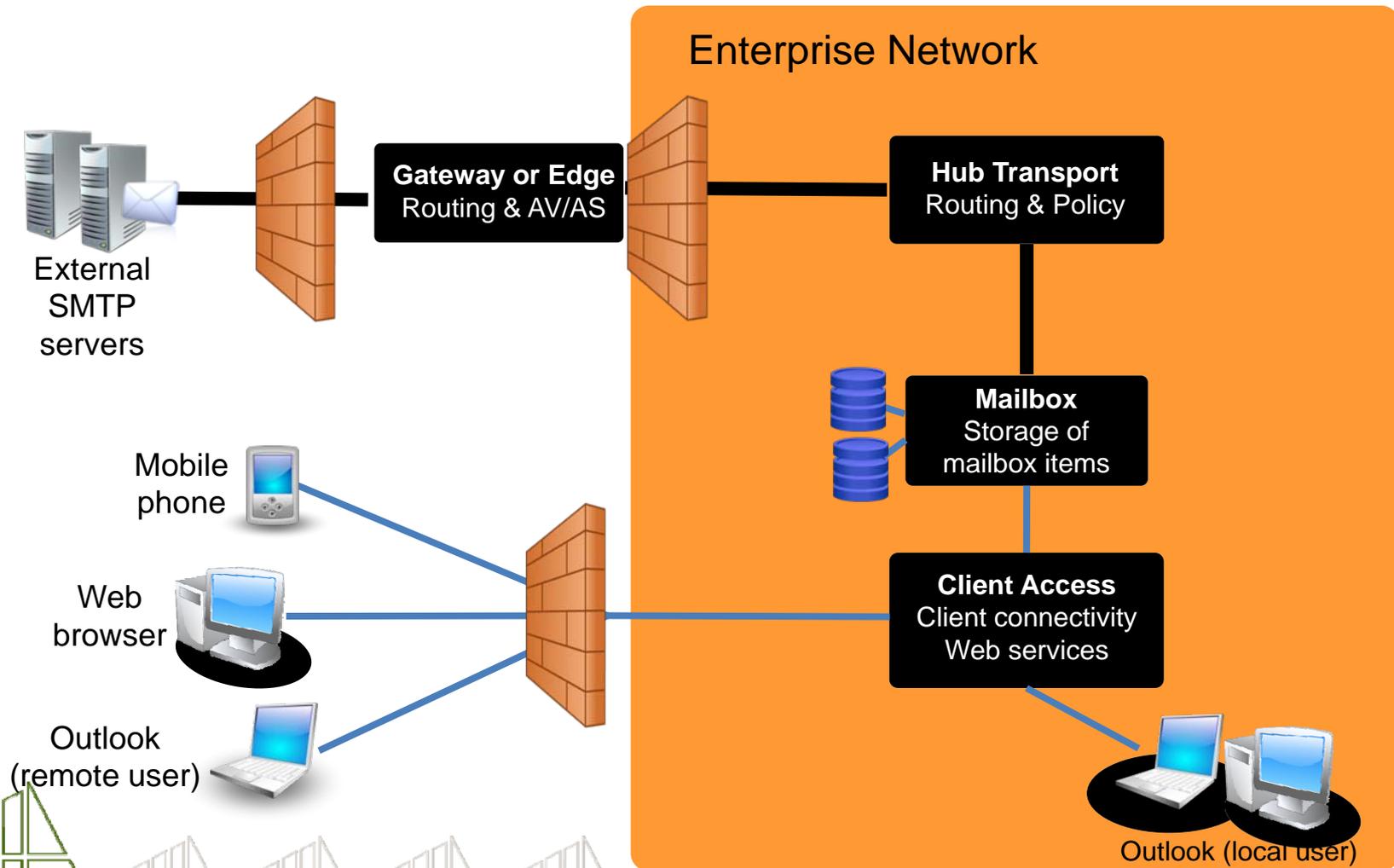
- Bring down statewide total cost of ownership:
 - Reduce server count
 - Reduce hardware costs
 - Reduce administration & support costs
 - Reduce power & real estate consumption
- Provide higher availability of email service and data statewide, with a focus on quick recovery
- Support flexible delegation model
- Accommodate the data center move with minimal downtime



Overview of Exchange 2010



Exchange Enterprise Topology

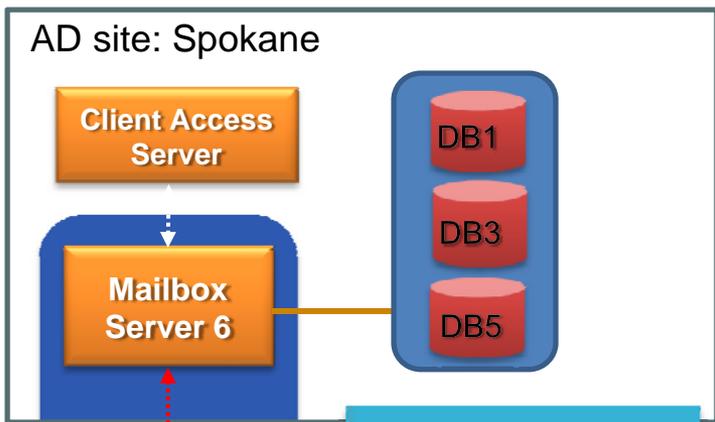


Exchange 2010 High Availability Overview



Client

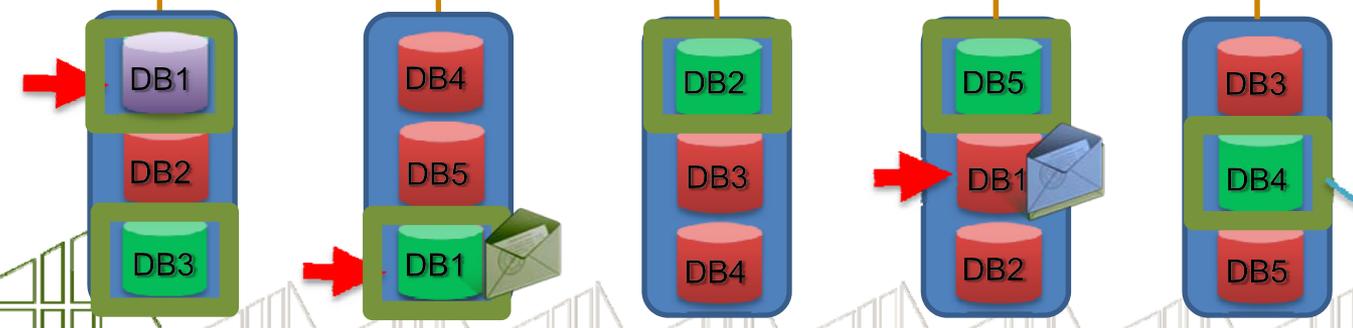
All clients connect via CAS servers



Easy to stretch across sites



Failover managed within Exchange



Database Availability Group

Database centric failover

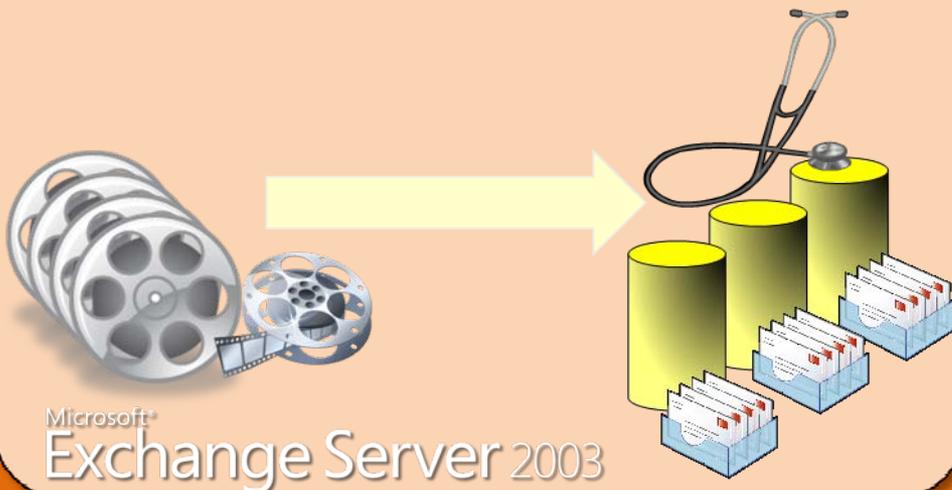
Databases Corruption and 1018s

Best case scenario:

- > Move mailboxes to new database.
- > ECC checksum automatically fixes issues 40% of the time

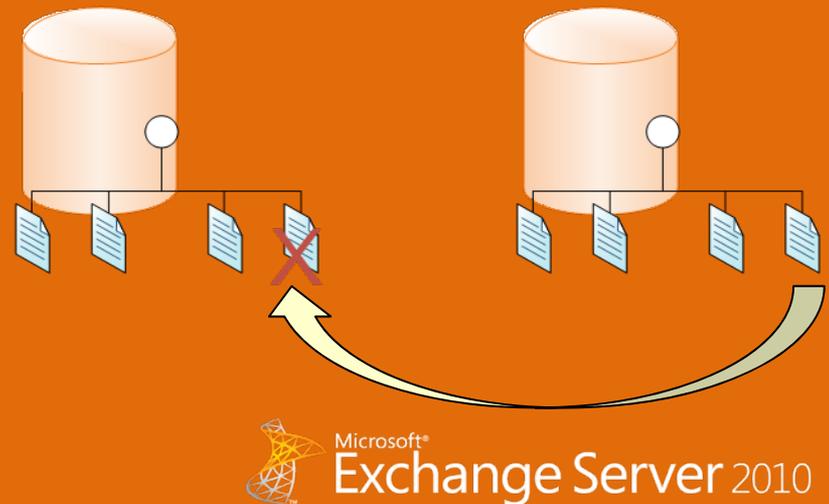
Worst case scenario:

- > Backups cease
- > Must take database offline
- > Eseutil or isinteg to fix
- > May require restoring and log replay



Page patching process works constantly in the background to detect problems.

When found, bad pages are repaired automatically, taking information from all valid copies (using an arbitration algorithm).

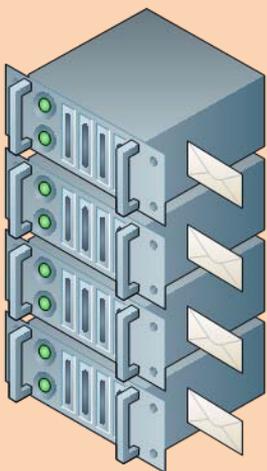


Hard Drives & Servers Failures



Drive failures covered by RAID on SAN enclosure

Recovery Window = Instant



Server Failures require rebuilding the server, restoring Exchange Service, and restoring Exchange data from tape.

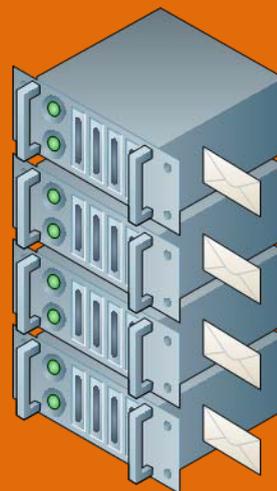
Recovery window = 8-12 hours.

Microsoft Exchange Server 2003



Drive failures covered by RAID on DAS enclosure

Recovery Window = Instant



Server failures automatically transfer load to other servers in the DAG.

Recovery window = 30 seconds.

Microsoft Exchange Server 2010

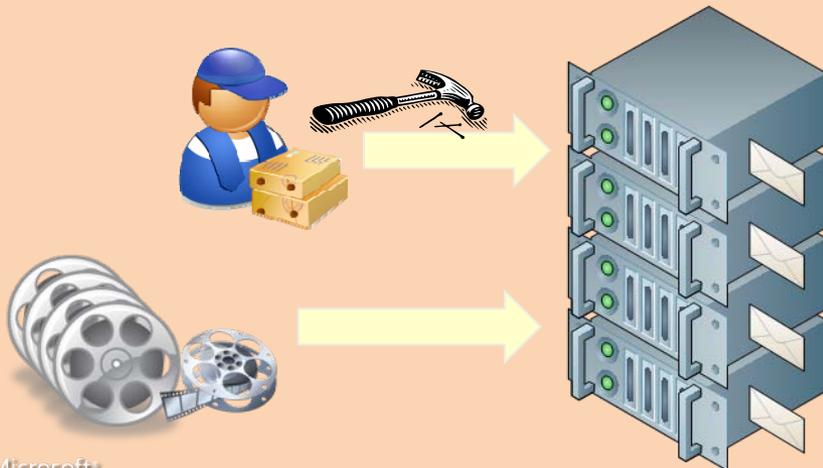
Site Failures

Once site is rebuilt or relocated, all servers must be rebuilt or fixed and backup tapes for all servers must be restored from offsite location. Data restored to the point of most recent backup.

Recovery Window

8-40 hours for service restoration

Up to 300 hours for data restoration

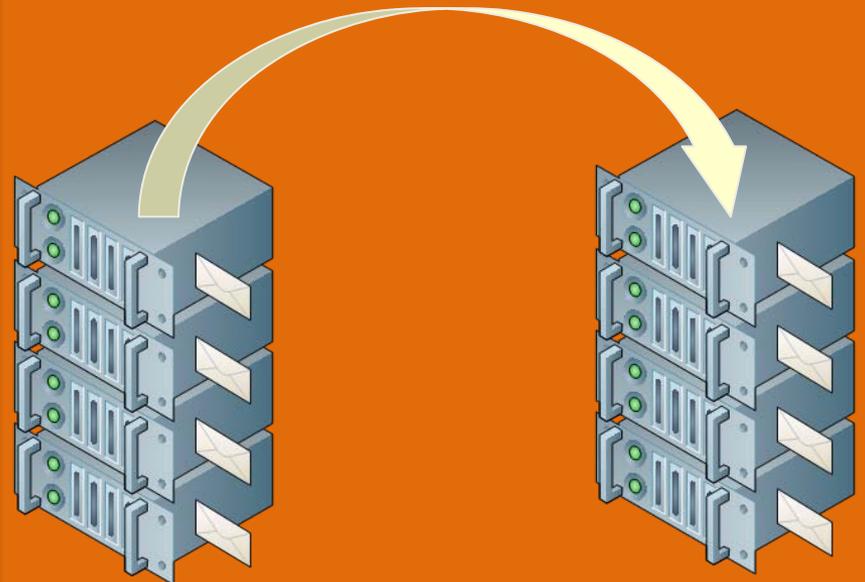


Microsoft®
Exchange Server 2003

Manual failover must be activated at the Spokane node site. Log files are replayed forward to restore the database up to the point of failure.

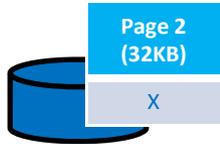
Recovery Window

About 4 hours for service and data restoration.



Microsoft®
Exchange Server 2010

High Availability & Quick Recovery Summary



2003

DB Corruption: Unknown

2010

Immediate



Hard drives: Immediate

Same



Databases: 4-8hrs

30sec



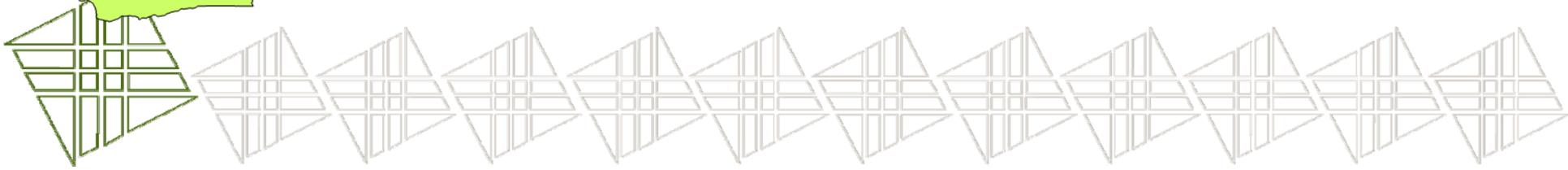
Server: 8-12hrs

30secs



Site: 2wks

4-8hrs



Deleted Item Retention



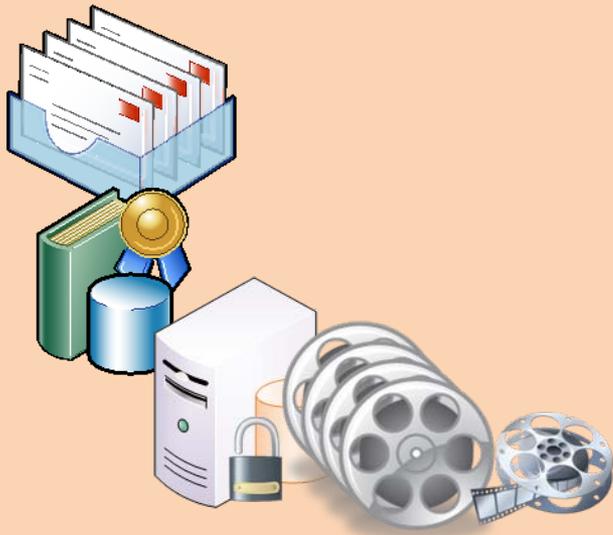
Microsoft®
Exchange Server 2003



Microsoft®
Exchange Server 2010

Enhanced Legal Discovery

1. Discoverable mail is stored in multiple places
2. Delegation only on the vault store
3. Cannot guarantee completeness



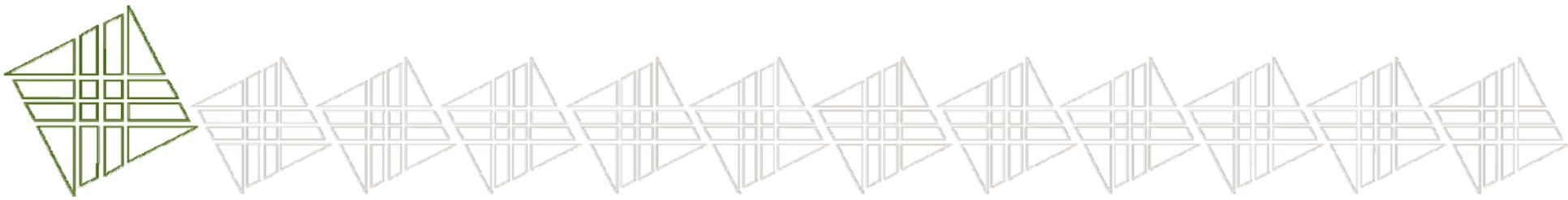
Microsoft®
Exchange Server 2003

1. Fewer discoverable sources
2. Delegation on **both** the mailbox and vault
3. 2010 guarantees mailbox completeness

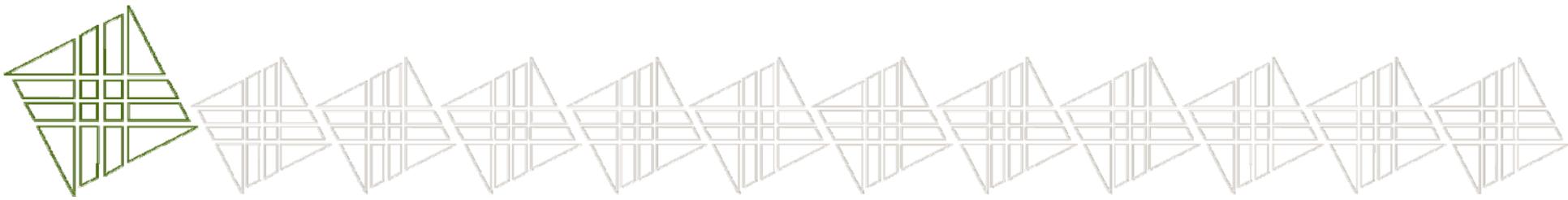
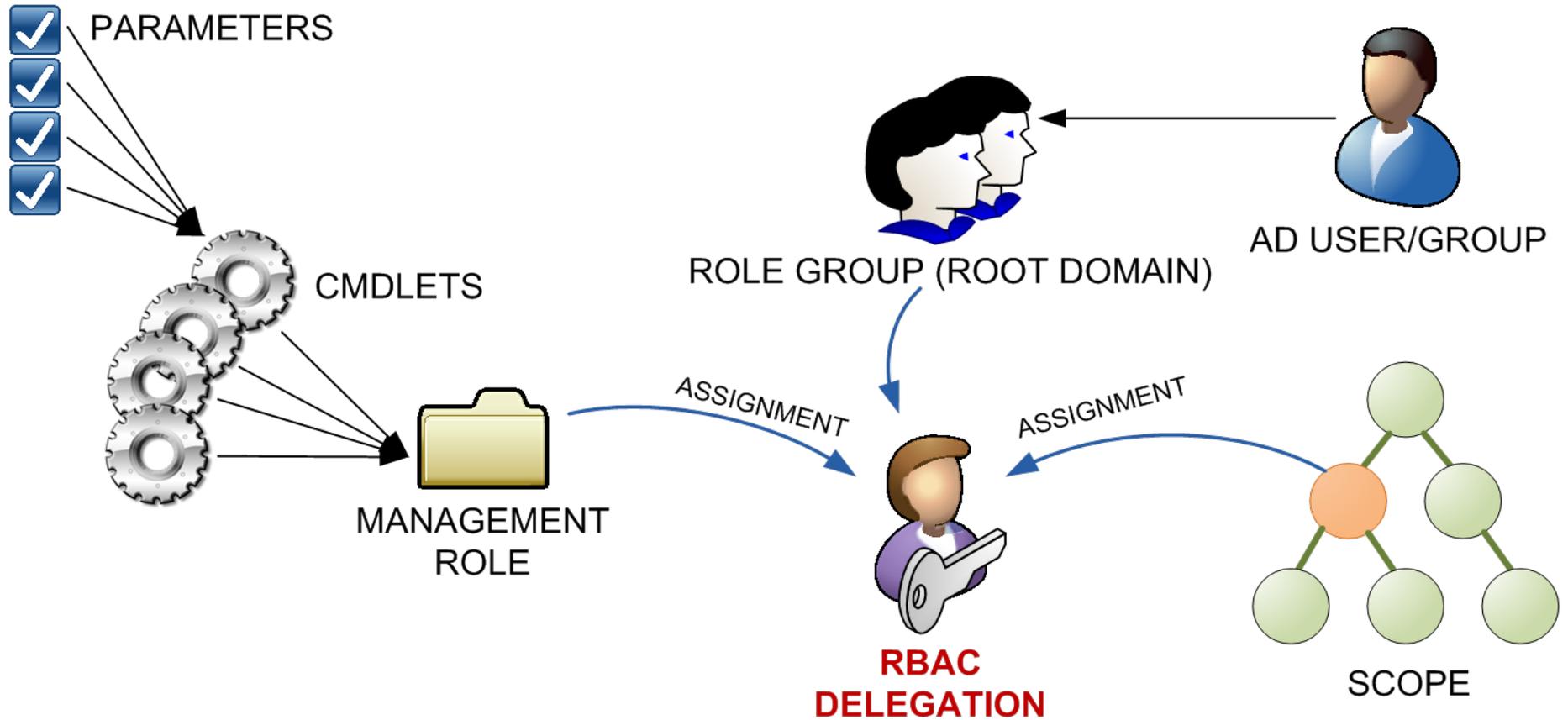


Microsoft®
Exchange Server 2010

Delegation



Role Based Access Control (RBAC)

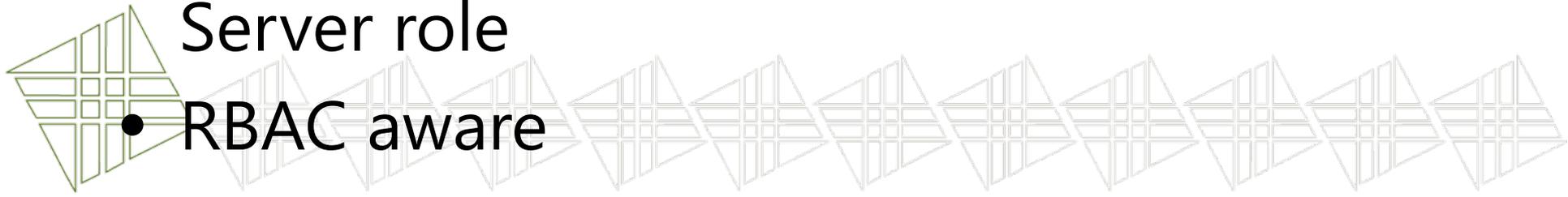


Exchange Control Panel (ECP)

What is it?

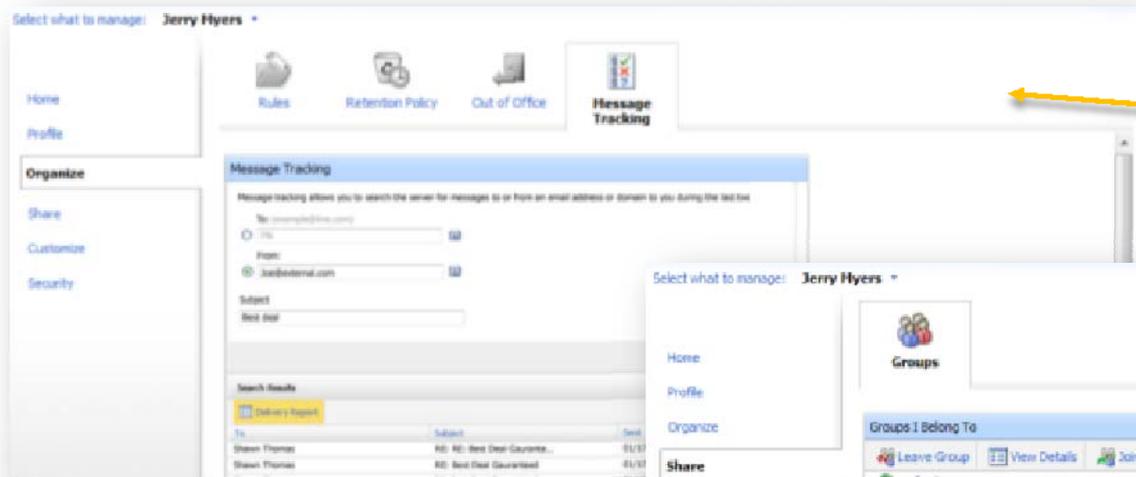
- A browser based Management client for end users, administrators, and specialists
- Simplified user experience for common management tasks
- Accessible directly via URL, OWA & Outlook 14
- Deployed as a part of the Client Access Server role

- RBAC aware

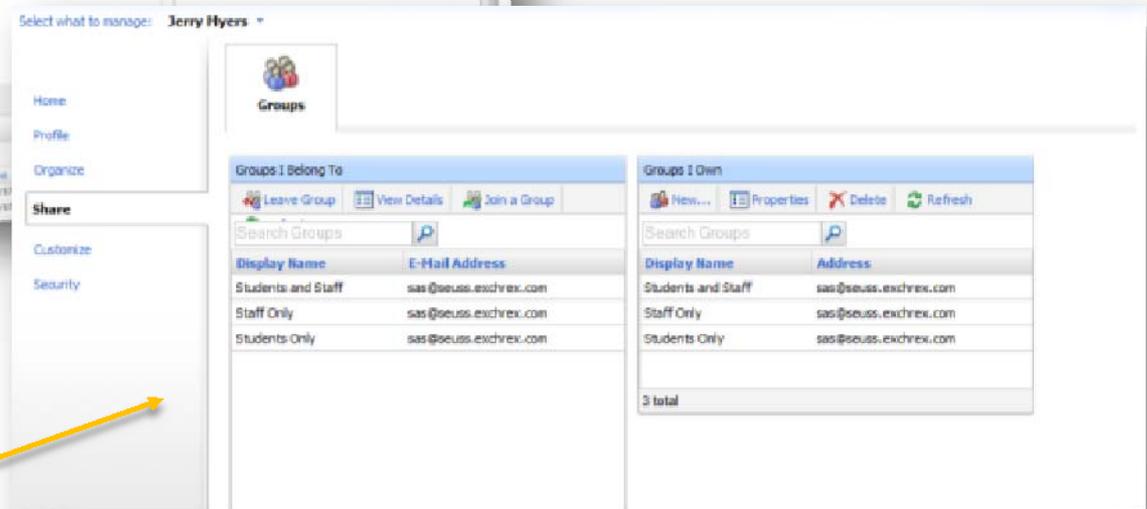


Simplify Administration

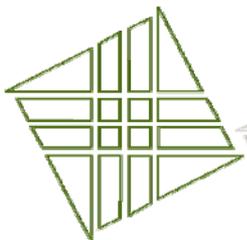
Lower Support Costs Through New User Self-Service Options



Track the status of sent messages



Create and manage distribution groups



Questions

