

Campus Days  
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# UE3 Upgrade to Exchange 2010

Steve Sall

[Steve.sall@avanade.com](mailto:Steve.sall@avanade.com)

# Purpose

- The purpose of this session is to describe an early experience migrating from Exchange 2007 to Exchange 2010
- Technical design details and execution
- Agenda changed slightly from print, not covering migration from Exchange 2003 in depth

# Speaker intro

- Avanade Information & Technology Svcs
- ITIL v3 Structured IT Org
- Service Architect for ITS Communications:  
Exchange, OCS, Telephony and Desktop  
Client.

# Early Adopter for Technology

- 200 EA users on Exchange 2010 builds for 7 months (Feb 09)
- Same AD Forest as Production
- EA environment all virtual and different data center location
- Be our first, best customer
- Internal webinars for knowledge sharing

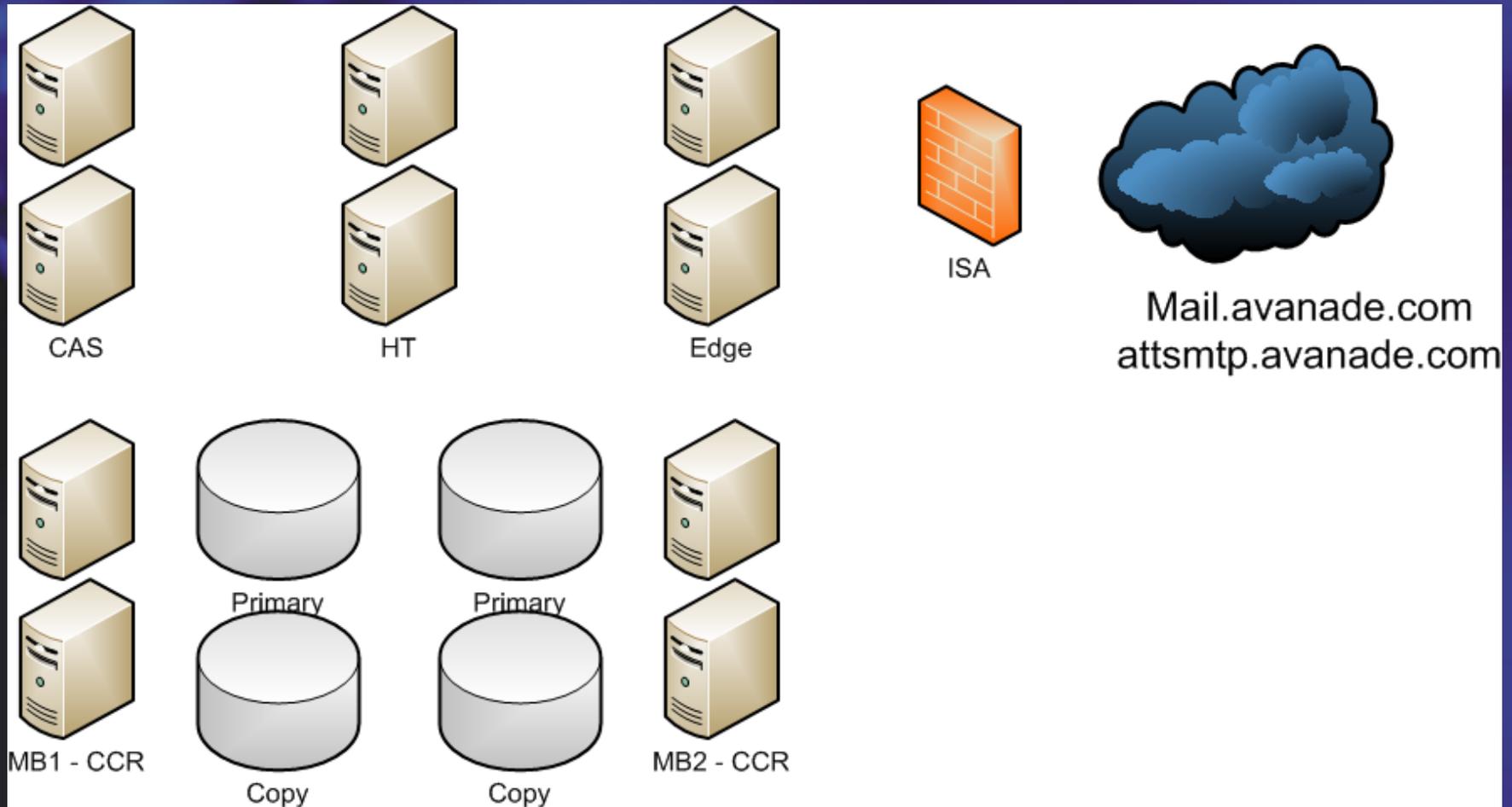
# Caveat for Exchange 2003

- If Exchange Organization is Exchange 2003, introduce Exchange 2007 by running setup once (no role necessary) prior to Exchange 2010. If 2007 is skipped, it can not be introduced post 2010.

# 2010 Migration Process

- Cannot in place upgrade
- Mailbox Move
- Parallel system for CAS/MB/HT/PF
  - Legacy URL
  - Leverage Outlook 2007 Auto Discover (update clients & O2003 encrypt)
  - Mobile Proxy or Redirect
  - Replicate Public Folders
- Convert Edge
- Decommission/restructure when complete

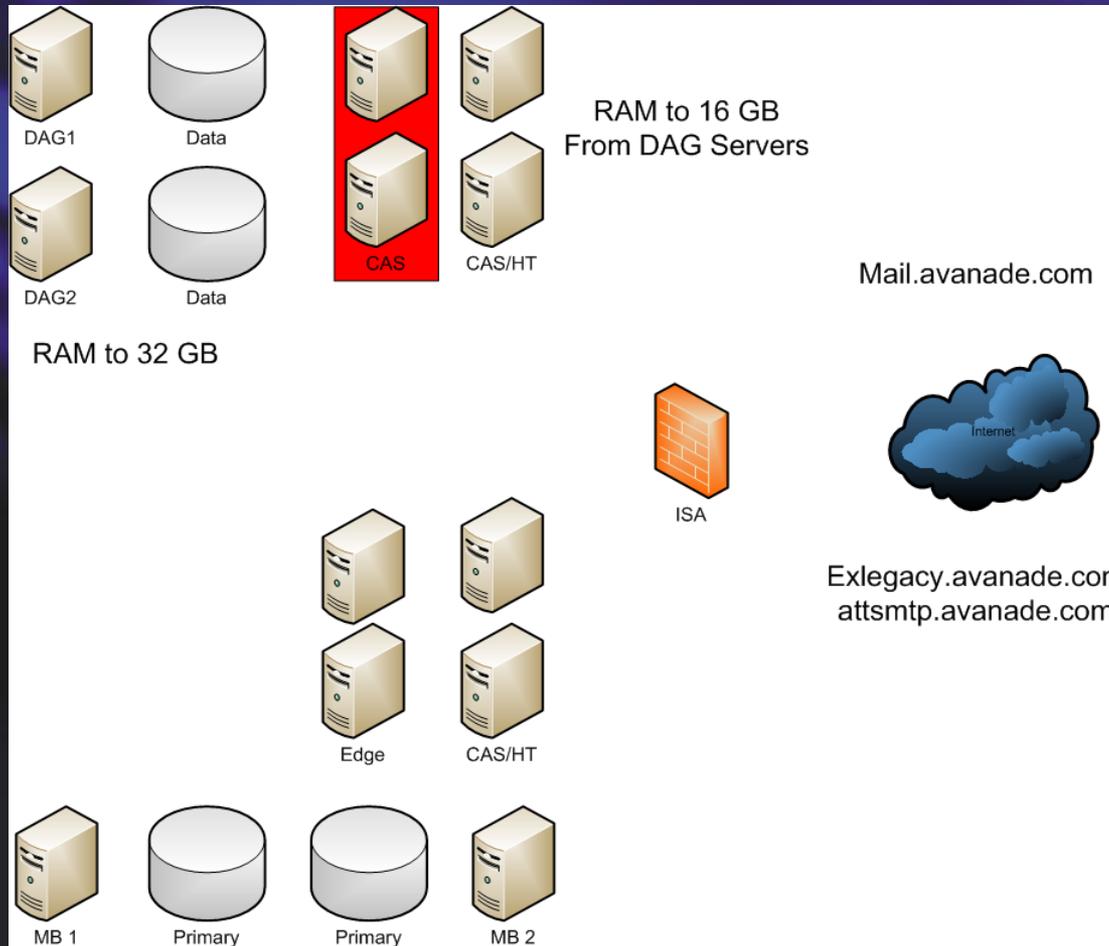
# Avanade Exchange 2007



# Avanade Migration Concerns

- Quick time frame - 2 weeks in Sept 09 for 11k users
- Migrate prior to Exchange 2010 events
- Business accepted risks
  - Running without redundancy on MB data
  - Lower capacity with role combinations
  - Escrow build used (RTM was 1 build higher)
  - DPM (TAP) support would be 2-3 weeks post Exchange 2010 migration
  - Installed base Outlook 2007 – auto discover will configure users
- No mobile user impacts – 90% remote
  - iPhone, Symbian, Nokia, Palm do not support redirection
  - Use Proxy method
- Minimize new assets
  - RAM purchased for \$4000 USD
  - Temp CAS to raise mailbox move threads (virtual)

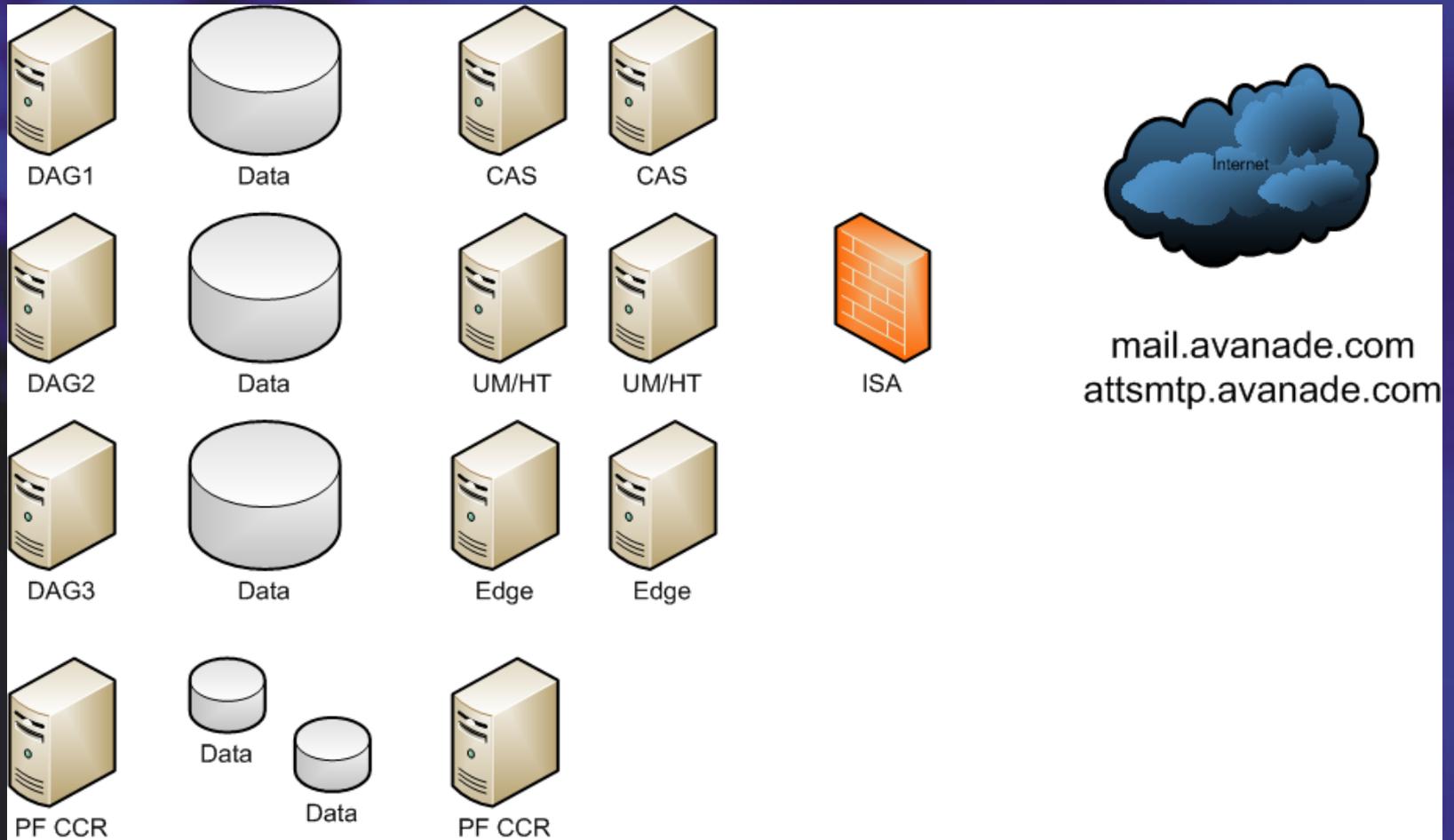
# System During Migration



# Exchange 2010 System

- Eliminated 1 CCR Node
  - Repurposed storage/server to DPM capacity
- Meshed replication on DAG
  - A copied to B, B copied to C, C copied to A
- Role based quotas
- 46 Databases

# Exchange 2010 Architecture



# Exchange 2010 Storage Design

- Direct attached storage
  - Transitioned to RAID5
  - Recovered multiple terabytes of space lost in RAID1+0
- Not using JBOD
  - We don't have 3 copies
  - No budget to purchase new disks
- Remain operationally thin – copy a set of DBs vs. a server replica set

# How we did it

- Two temporary CAS to increase threads
  - 8 per CAS server
  - 32 simultaneous mailbox moves
- Intern time
  - Moved ~50% of our users
- Temporary Project Manager
  - Processed user notifications
  - Tracked team tasks

# How we did it continued...

- Excel extract of user list
  - Users given 2 weeks, 1 week and 24 hour notice prior to move time
  - Executive Assistances and Execs in bundles
- PowerShell script
  - Alias list processed at move time
  - Follow the sun (8 AM PST for Asia, 2 PM PST for EU, 8 PM PST for Amer)
  - Submits moves to queue and processes
- CAS processes queue (8 per server)
- 11,242 mailboxes moved Sept 20-27 '09
- Finished Exchange 2010 TAP in top 3 in mailboxes migrated

# Post migration actions

- Most Exchange 2007 decommissioned Sept 29<sup>th</sup> to Oct 3<sup>rd</sup>
  - PF primary for users remains on Exchange 2007 CCR (Hyper-V)
- DAG replicas added
- Moved Execs with zero downtime/impact
- DPM support Oct 10<sup>th</sup>
- Beat project wrap up deadline by 7 days

# User Support Issues

- Office Communicator Client
  - Prevents Outlook from properly updating profile via Auto Discover
  - “Do the MOC dance” in user communications
    - Close MOC, close Outlook, open Outlook, accept update, close Outlook, open Outlook, open MOC
- Corrupt Calendar entries
- 105 support tickets ~1%

# Known Issues

- Edge transport filtering agent may corrupt double-byte attachments.
  - Mitigate by using Forefront's agent if possible
  - Hotfix in discussion with Product Group

# Open floor

- Questions?

# Next session tomorrow

- Enjoy the evening activities

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**THANK YOU!**