

The State of Idaho

Consolidated Messaging Project

August 21, 2008



Welcome



Greg Zickau



Office of the CIO



CONSOLIDATED MESSAGING PROJECT

Session Purpose



- Overview of project planning
- Implementation strategy
- Operations and maintenance of Consolidated Messaging
- Feedback from session participants
 - Policies
 - Technical architecture

Partnerships



- Agency partnerships
 - Over 3,100 state staff hours contributed
 - Eight agencies actively participating

The History



Steve Wilson



State Tax Commission

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The History



2001 – Consolidated Messaging Emerges

- ITRMC subcommittee
- Little support for the idea
- Didn't happen

The History



2004 – State Strategic IT Plan

- Goal 2 – Manage state IT from statewide, enterprise perspective
 - Action 1 – Identify common functions and create shared infrastructure to deliver common services to agencies
- Much discussion but few projects or action until now

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The History



2007 – Governor Otter Takes Office

- Requires effectiveness and efficiency in state government
- Directs ITRMC Chairman Gwartney to pursue efficiencies in statewide IT efforts
- Office of CIO directed to formulate plan for consolidated messaging

The History



2007 – Governor Otter Takes Office

- Governor announces plans for consolidated messaging in 2008 State of the State message
- 2008 Legislature provides first year funding
- Consolidated messaging is coming to the Executive Branch!

The History



Steering Committee Formed in March 2008

- Directed to study options for consolidated messaging
- Recommend best alternative for the state
- Focused on designing a system that meets or exceeds business needs of all agencies to greatest extent possible
- Plan and oversee project to implement consolidated messaging
- Oversee statewide operations

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The History



Steering Committee Efforts

- Early decisions driven by the calendar and budget
 - Select the model to recommend to CIO
 - Select a site to house the new system if we choose an “in-house” model
 - Develop timelines and a work plan to make it happen

The Project Plan



Shannon
Barnes



Idaho Transportation Department

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Project Objectives



- State agencies will derive operational and cost efficiencies
- State agencies will realize improved business benefits
- Advance ITRMC's goal to manage technology from a statewide perspective

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Critical Success Factors



- Active participation from senior executives
- Adequate project funding
- Availability of skilled resources
- Agencies must be confident that they will receive high quality, reliable and cost effective services
- Customer driven project

The Project Team

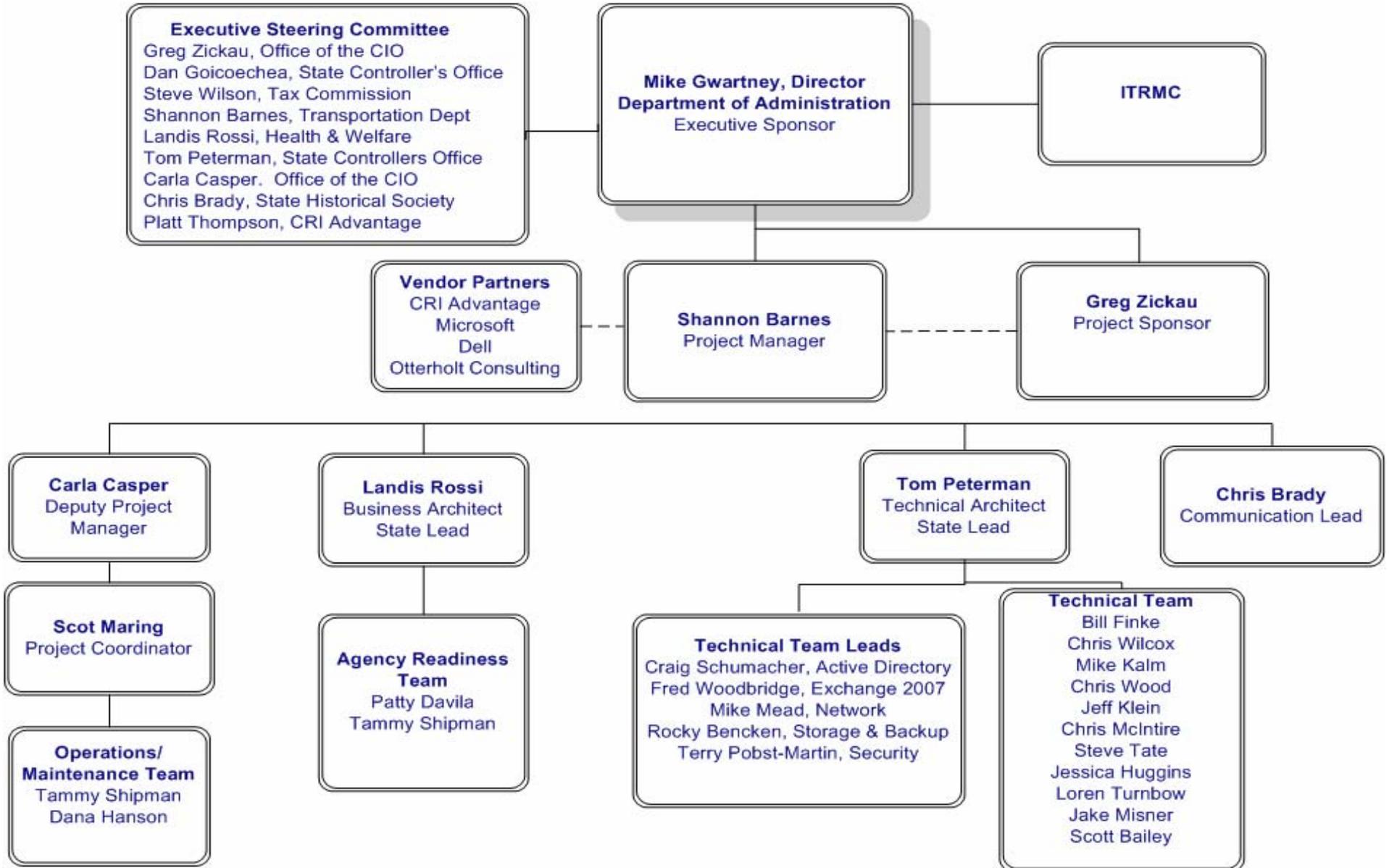


- Part – time team utilized for project planning
- Combination full-time/part- time for project execution
- Located at the State Controller’s Office & OCIO
- Start date 8/25/08



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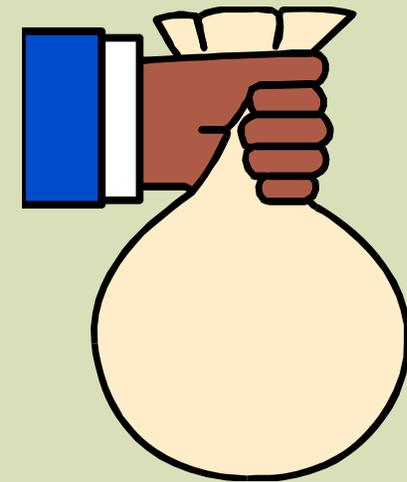
Team Chart



Vendor & Agency Contributions



- Dell – Bruce Armga
- Platt Thompson – CRI Advantage
- Barry Otterholt – Otterholt Consulting
- Department of Insurance
- State Controller's Office
- Department of Administration



Funding



Fiscal Year	Funding Source	Funding Allocation
2008	Office of the CIO. Dept of Insurance	\$130,300
2009	Office of the CIO & Legislative Appropriation	\$504,500
2010	Legislative Request	\$1.9M
Total		\$2,534,800

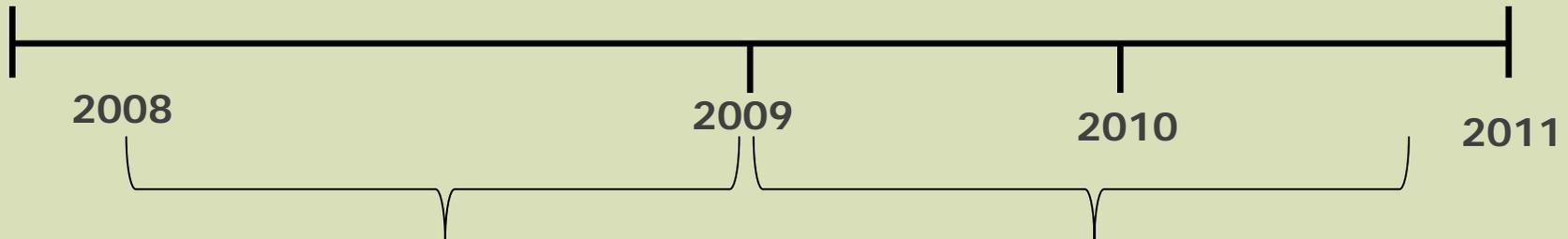
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Agency Costs



- No additional licensing costs in FY09 or FY10
- The project will provide additional resources to assist with implementation – no cost to agencies
- Any agency network upgrades are the responsibility of the agency

The Project Schedule



- Project Charter is complete - 4/08
- Messaging solution is defined - 6/08
- Schedule & budget defined - 8/08
- Enterprise architecture - 8/08
- Operation/Maintenance Plan -09/08
- Rate structure, Governance & Agency Readiness Plan - 9/30
- Initial Operating Capability 12/08

- Project funding is received - 7/09
- Agency rollout begins - 1/2010
- Agency rollout completed-7/31/2011
- Closeout project - 10/31/2011

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Determining the Solution



The Process...



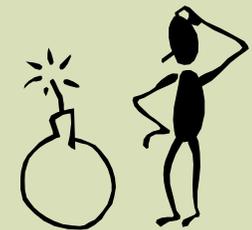
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The Research



Conducted extensive research

- Other States
- Interviewed 14 agencies – representing 65% of the state’s employees
- Sent surveys to remaining agencies – 12 responded – 16% of remaining employees
- Utilized Gartner, Microsoft, Dell, CRI Advantage & Otterholt Consulting recommendations



The Research



Analyzed three options

- State Hosted Exchange
- Third Party Hosted Solution- non Exchange
- Third Party Hosted – Exchange

The Solution



- Primary Decision Criteria
 - Technical risk
 - Organization risk
 - Project management risk
 - Cost
 - Security
 - Functionality
 - Early results



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The Decisions



- State-hosted Exchange 2007
- Housed at State Controller
- Managed by the Office of the CIO
- Dell hardware
- Microsoft software
- Active Directory – Designed to be the foundation for future consolidated services



The Solution



What is Active Directory (AD)?

- A directory where information about users and resources is stored
- Services that you let access those resources
- Potentially manages all elements of your network, computers groups, users, domains, security policies and any type of user defined object

The Solution



What we are ~~NOT~~ doing

- Exchange 2007 Unified Messaging- later phase
 - Voice messaging
 - Speech enabled access
 - Fax delivered to mailbox – unless the agency already has this functionality
 - Consolidated management for voice, email and fax
 - No paging

The Benefits



- A central global address book for all state employees
- Shared calendaring and resource scheduling
- Fewer server licenses and costs
- Smaller agencies being able to access better tools
- Enhanced emergency response communication

The Benefits



- Outlook Anywhere
 - Improved access – No VPN or tunnel required
 - Calendar & Scheduling Attendant
 - Configure and schedule “Out of Office Messaging”
- Self-Service of remote wipe on mobile devices

The Benefits



- Improved business continuity
 - Continuous protection through replication
- Disaster recovery
 - State Controllers Office to house and OCIO to support in FY10
- Backup
 - Tape back-up stored offsite
- Security
 - Improved anti-spam and antivirus

The Benefits



- Recovery
 - Individual users can restore deleted emails
 - Mailbox restore
- Reduced storage requirements
 - Single instance storage
 - Saves disk space and backup time

The Implementation Plan



- Initial Operating Capability (IOC)–Dec 2008
 - Limited budget
 - Contain scope
 - Low risk agencies
- Final Operating Capability (FOC)
 - Obtain funding
 - Transition remaining agencies
 - Non-Exchange agencies/special requirements will be last

IOC Implementation Plan



Criteria for participation in IOC

- No new licensing costs
- Have Software Assurance
- Accept time commitment
- Document conversion process



IOC Implementation Plan



Agencies participating

- State Tax Commission
- Dept of Administration
 - 30 agencies
- The Governor's Office
 - Division of Financial Management
 - Department of Human Resources
- Other agencies may transition in FY09 depending on funding and resource constraints

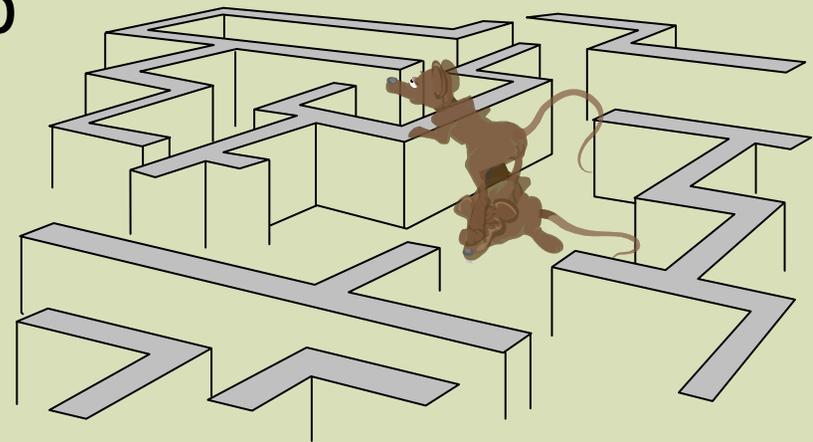
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IOC Implementation Plan



Core system installation – Aug-Oct 2008

- Hardware & software purchase
- Functional specifications
- Prepare facilities
- Create Development Lab

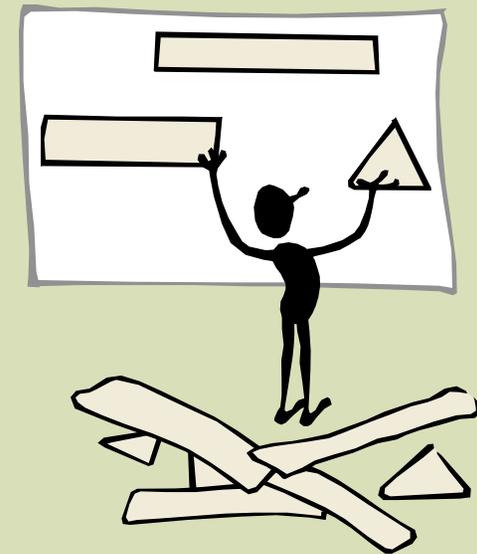


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IOC Implementation Plan



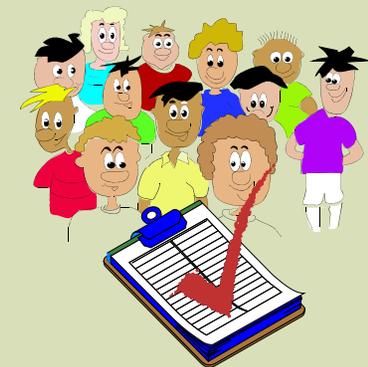
- Production environment
- Backup system Install
- Testing
- Security upgrade
- Network hardware
 - Monitor traffic



IOC Implementation Plan



- Agency migration-Aug-Dec 2008
 - Kickoff
 - Onsite assessments
 - Agency checklists
 - Develop an individual agency conversion plan
 - Assign resources
 - Data clean-up
 - Testing
 - Agency Readiness Certification
 - Go live



Implementation Plan



Final Operating Capability (FOC)

- Schedule will be determined as follows:
- Agency readiness and costs
- Conversion complexity
 - Non-Exchange environments
 - Integration issues



Final Operating Capability (FOC) Implementation Strategy



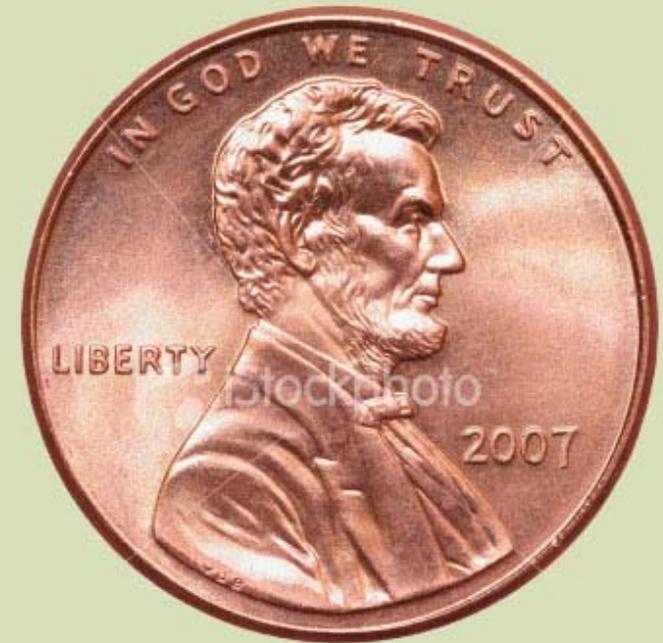
Schedule will be determined as follows:

- Agency volunteers
- Licensing costs
- Conversion Complexity
 - Non-Exchange environments
 - Integration issues

The Cost Model



Steve Wilson



State Tax Commission

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The Cost Model



- IOC Costs
- FY10 costs
- FY11 – Per mailbox fee
- Licensing overview
- Agency responsibilities

Policies and Agency Readiness



Landis Rossi

*Department of
Health & Welfare*



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E-mail Policies



Business Issue Highlights

- Standard 250 MB Mailbox Size
- Archiving responsibilities
 - Agency responsibility
- Attachment size
 - Limited to 10 MB
- E-mail Address requirements
 - Alias
 - ITRMC Standard naming convention

E-mail Policies



- Personal Folders (PST)
 - Individual Agencies set policy
- Transition of existing email, contacts, calendar
- Public Information Requests
- Public folders
 - Supported, with policy TBD
- Blackberries and Treos
- Restores and back-up

Service Level Agreements



- Roles and responsibilities
- Communication
- Service availability
- Service requests
- Cost

Service Level Agreements



- Based on tiered and levels of service
- Performance measures tracked and reported
- Executive Steering Committee will serve as on-going oversight

Agency Readiness



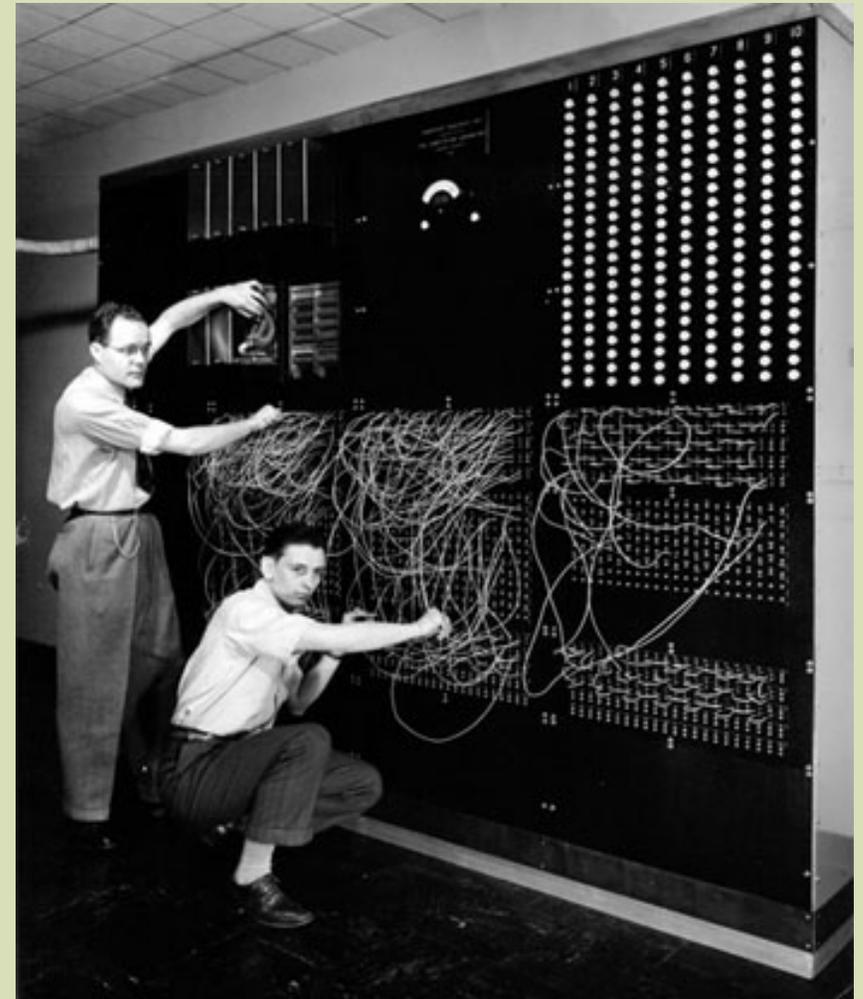
- Agency readiness assessments
- Resources
- Timeline
- SLA negotiation

Operations and Maintenance



Carla Casper

Office of the CIO



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Operations



- Larger agencies staffing responsibilities
 - Tier 1 Support Desk remains in your agency
 - Tier 2/3 Resides in the OCIO
 - Additional 4-5 staff to be added to OCIO
- Smaller agencies staffing responsibilities
 - Tier 1/2/3 – Resides in OCIO
- 24/7/365 – On call for system availability
 - 10X5 Live Support

Operations



- Hardware (housed by SCO)
 - Maintenance agreements
 - Technology refresh
- Software
 - MS software assurance

Operations



OCIO Responsibilities

- Incident Management
- Problem Management
- Configuration Management
- Change Management

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Operations



- Risk Management
- Capacity Management
- Service Management
(Including Performance Metrics)
- Communication Management

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Communications



Chris Brady



Idaho State

Historical Society

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Communication



Website



<http://cio.idaho.gov/messaging>

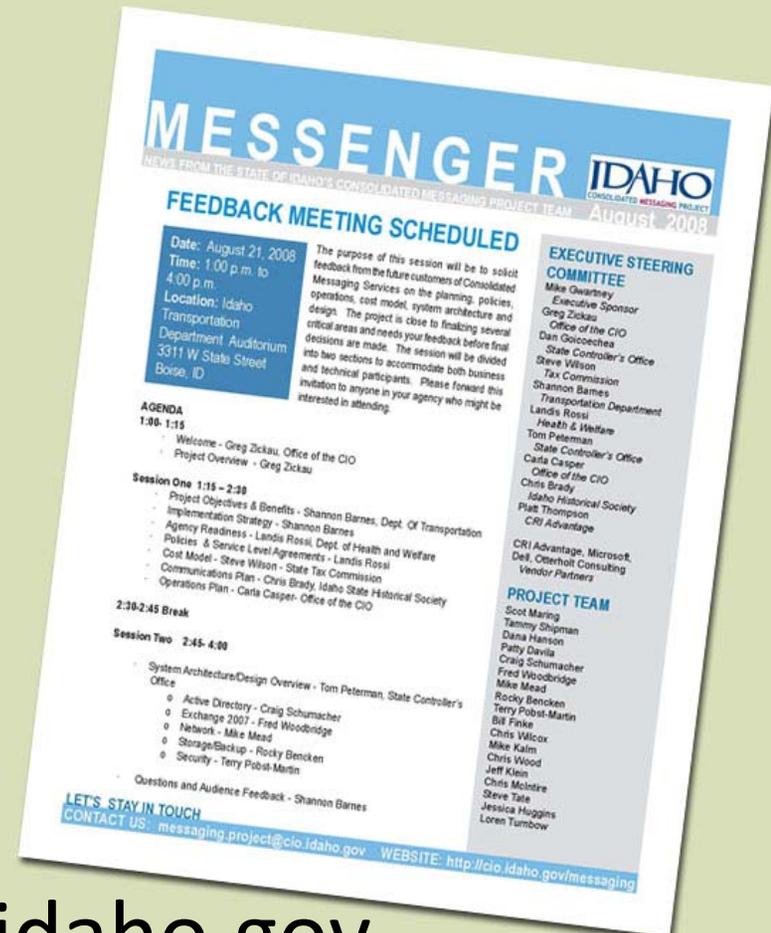
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Communications



The Messenger

- “eBlast” Newsletter



Contact us:

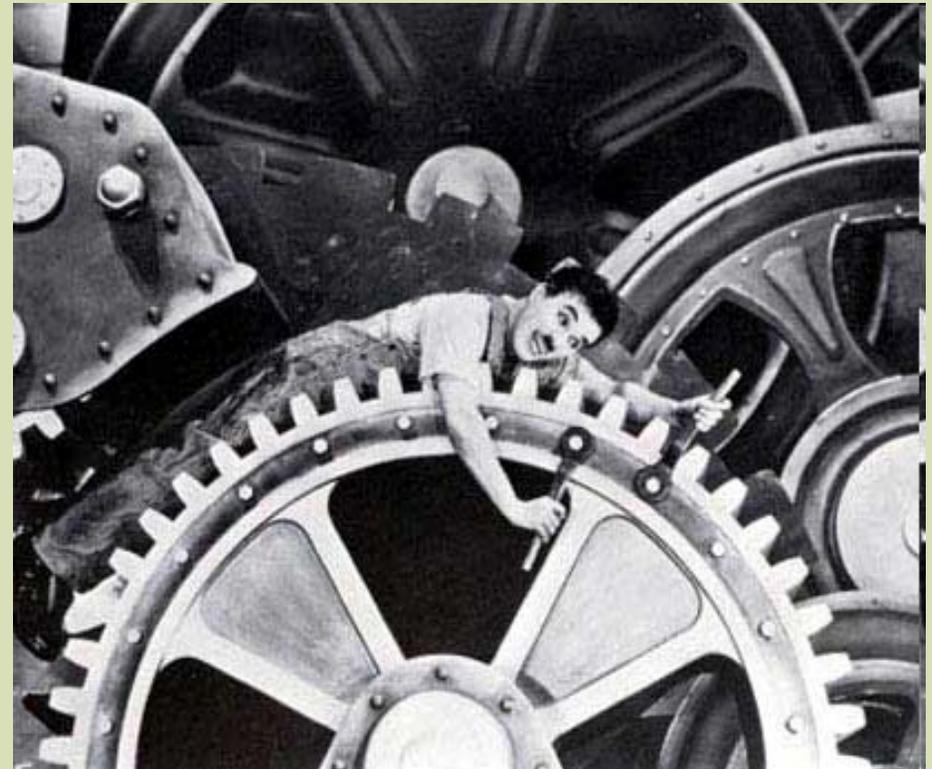
messaging.project@cio.idaho.gov

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Technical Overview



Tom
Peterman



State Controller's Office

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Technical Overview



Who is the in-house Technical Team?

- Over 20 technical staff and consultants from 10 different Agencies
- First met officially in late May
- Members have over 400 hours of “volunteer” time at more than 50 meetings and white boarding sessions
- They ride bicycles and motorcycles, not scooters
- Now transitioning to the Implementation Team

Technical Overview



Some of the tougher issues:

- Creating Uniformity across disparate infrastructures
- Is Mailbox size important?
- Naming conventions – Don't get us started...
- For the love of Blackberry's
- Learning to share
- Building a strong base for Unified Messaging

Technical Overview



The focus points going in:

- Messaging platform
- Housing
- Designing Active Directory correctly
- Sizing and configuring the technology
- Agency cooperation
- Who should QA the design
- Choosing Vendors
- How to best use State staff

Technical Overview



And the principal decisions were:

- Messaging based on an Exchange 2007 platform
- Housed at SCO and managed within the State
- A single forest domain model
- About half of the systems will be in a Virtual environment
- The Quest tools will be used for migration
- Direct Attached Storage will be used for Mail
- Microsoft and Dell will QA the design
- Implementation Team will utilize primarily State staff

Technical Overview



What is planned to come:

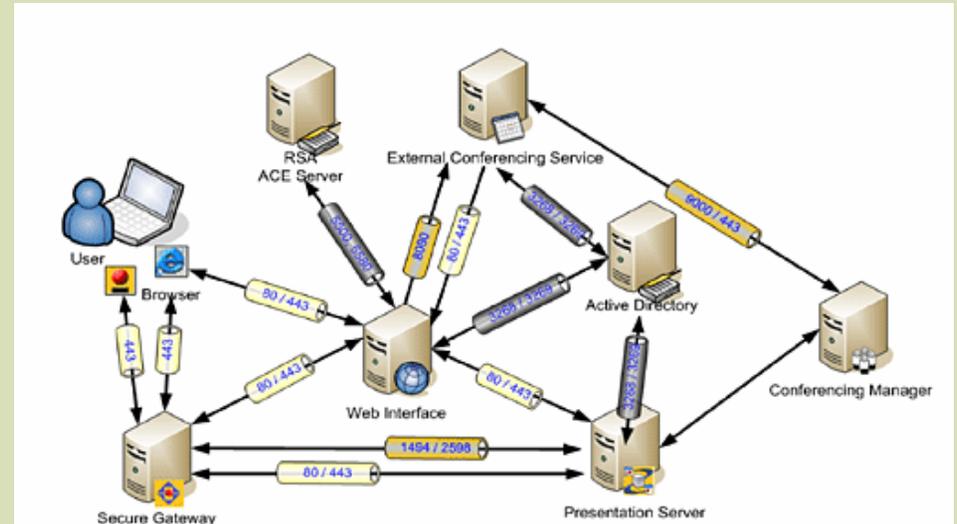
- A site survey questionnaire, pre-conversion guidance, and associated tools
- A best effort set of Technical Specifications
- Utilizing vendors to assist in the final design, certification, and implementation
- Ongoing site visits and reviews for agencies
- Knowledge transfer and training of State staff
- Plenty of highly caffeinated beverages

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Active Directory



Craig
Schumacher



Idaho Transportation Department

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Active Directory

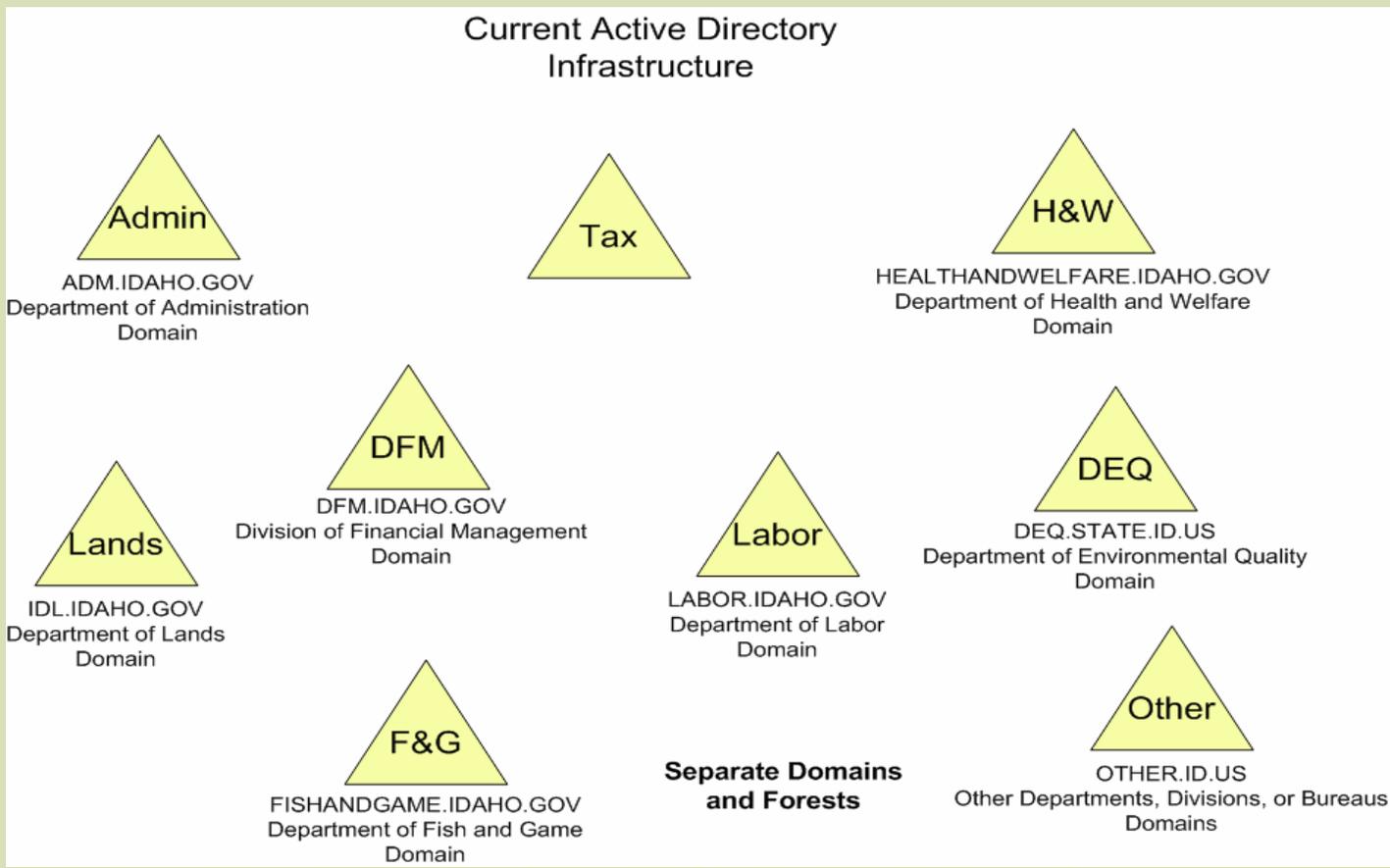


- What is Active Directory – for the non-technical people in the audience
- Technical people in the audience
 - What is your biggest concern about AD?
- Why is AD important?
- Why is it important to the State of Idaho's long term plan?

Active Directory



The “As Is” Active Directory in the state of Idaho



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Active Directory



The Solution

- The Requirements
- Single Forest Single Domain

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Active Directory



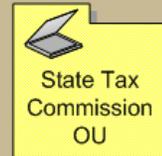
Active Directory Environment

Post-Consolidation

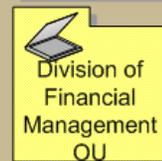
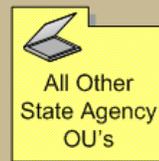
Single Domain and Single Forest with Managed Organizational Units



Group Policy Objects



Domain Controllers



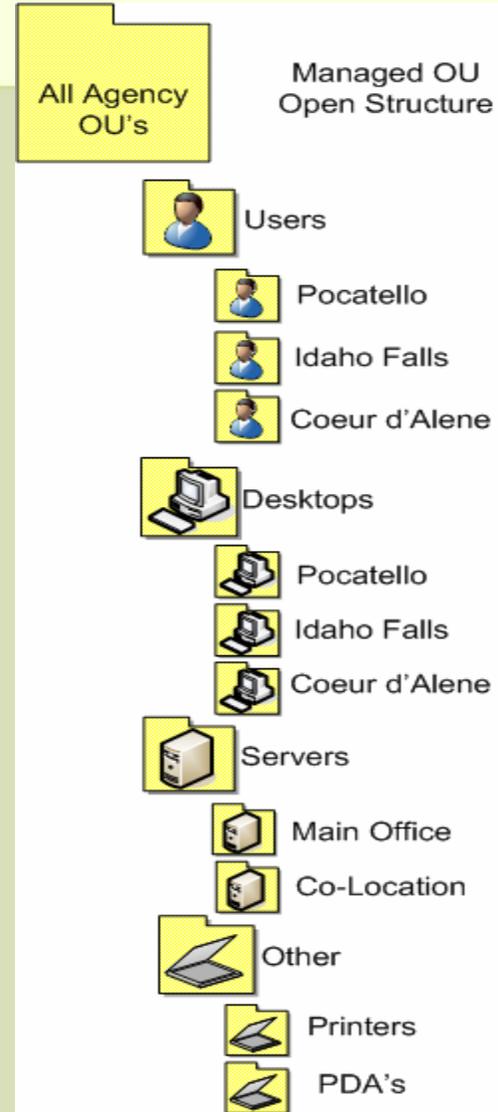
Exchange 2007

ICS.IDAHO.GOV

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Active Directory

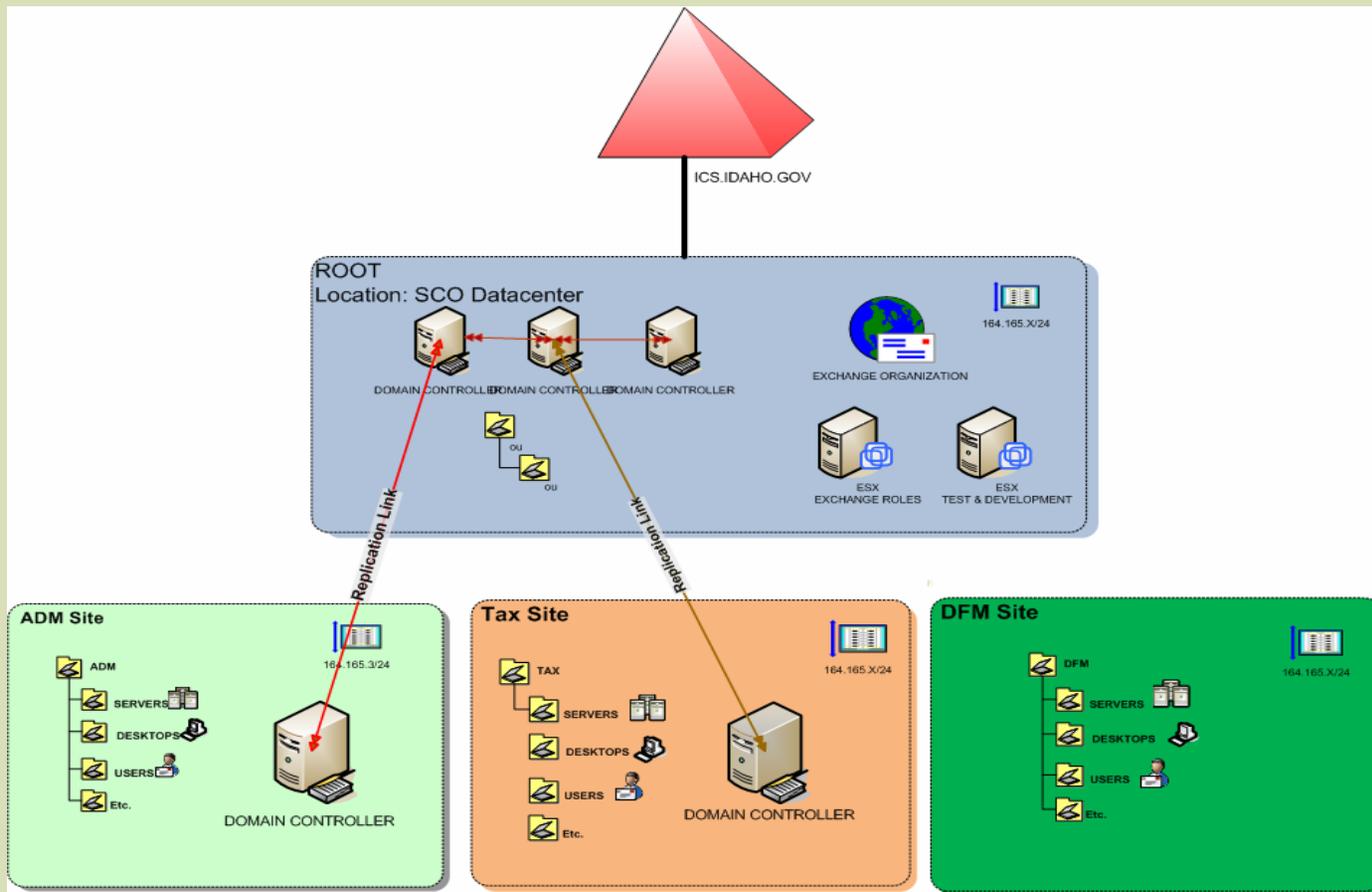
Organizational Units



Active Directory



The Plan



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Active Directory



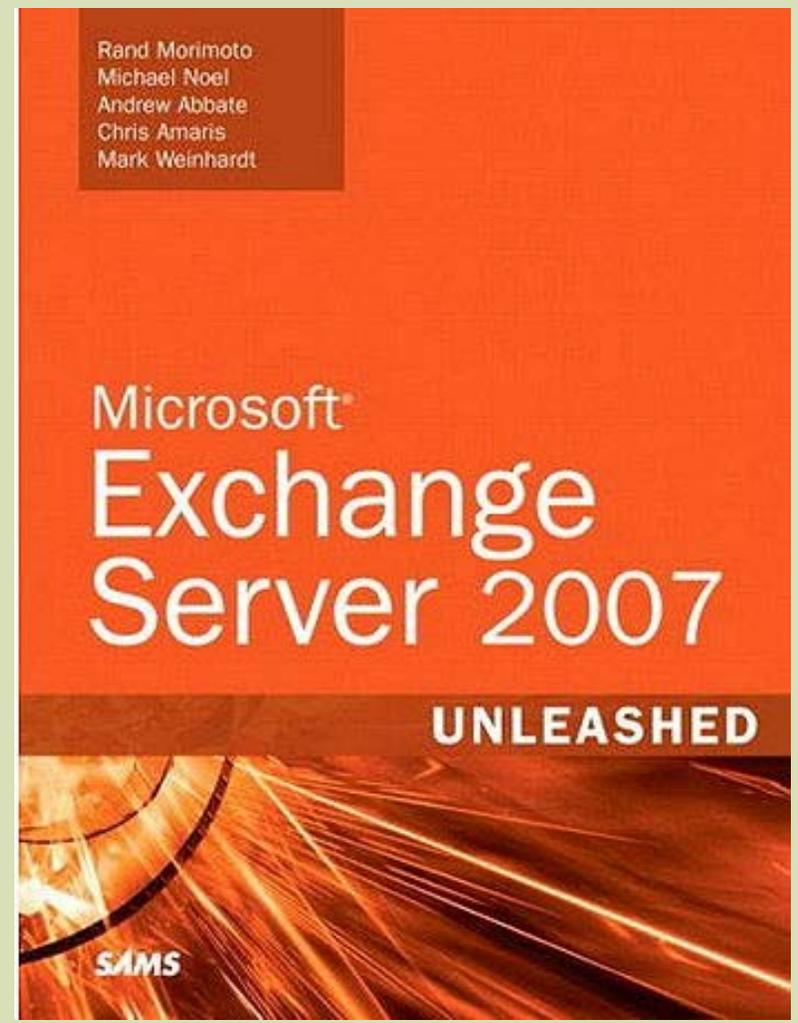
- The Risks
- Agency planning and conversion
- Standards
- Agency data clean-up

Exchange 2007



Fred
Woodbridge

Office of the CIO



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Exchange 2007



What you are about to see
is based on a true story ...

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Exchange 2007

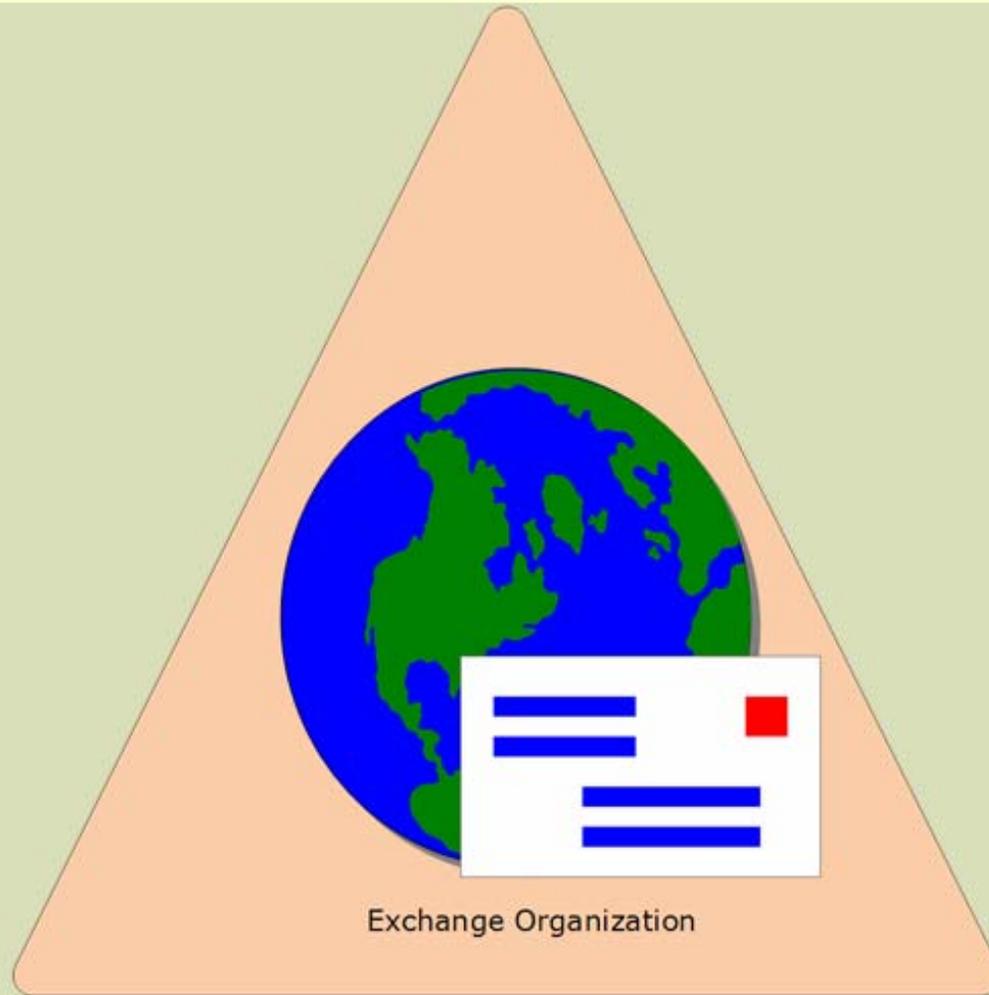


Once Upon A Time...

Some people met to design an
Exchange Organization

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Exchange 2007

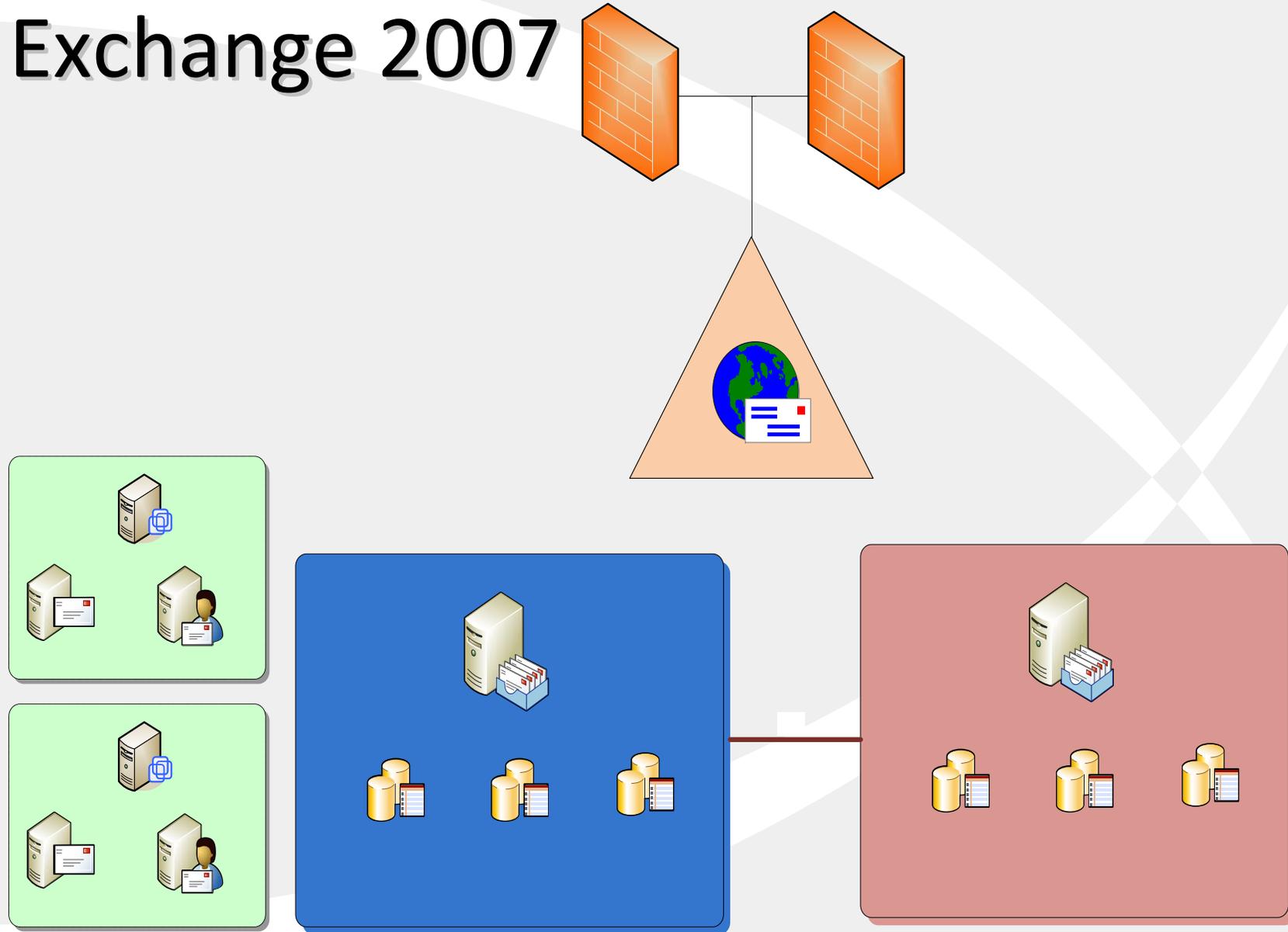


Exchange Organization

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Exchange 2007



ISA FIREWA

Exchange 2007

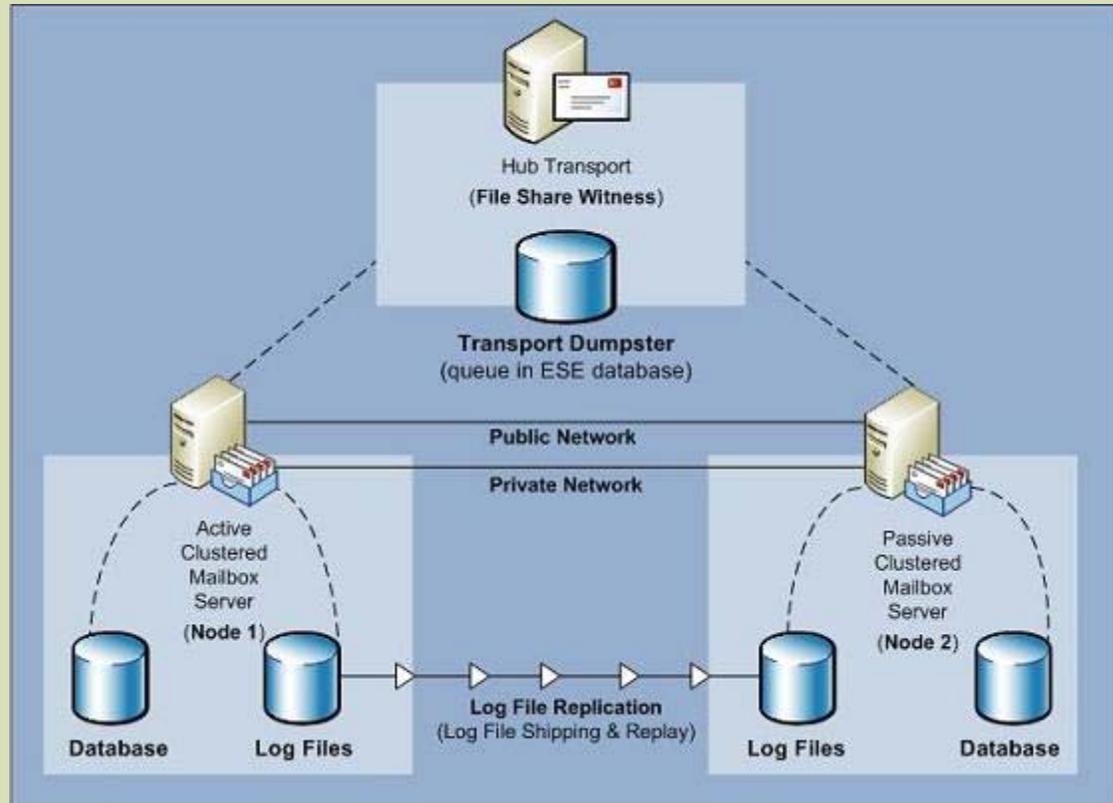


A closer look at CCR...

(Continuous Cluster Replication)

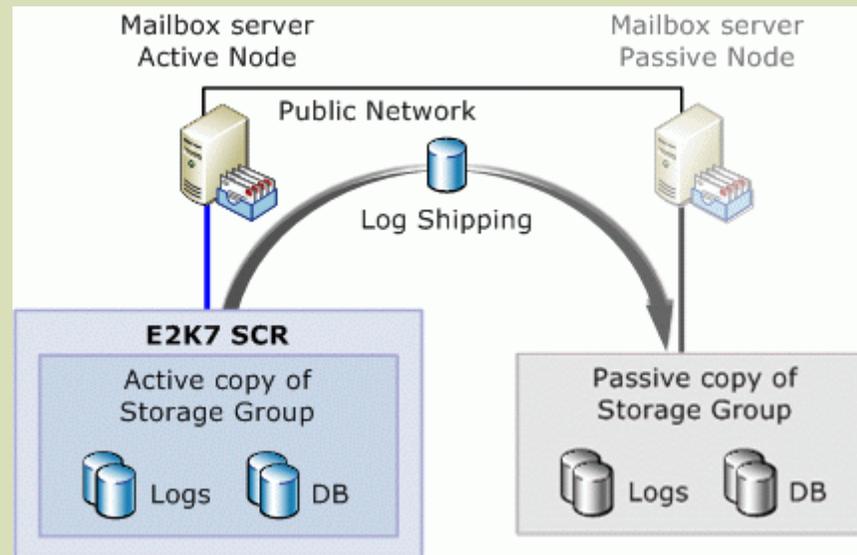
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Exchange 2007



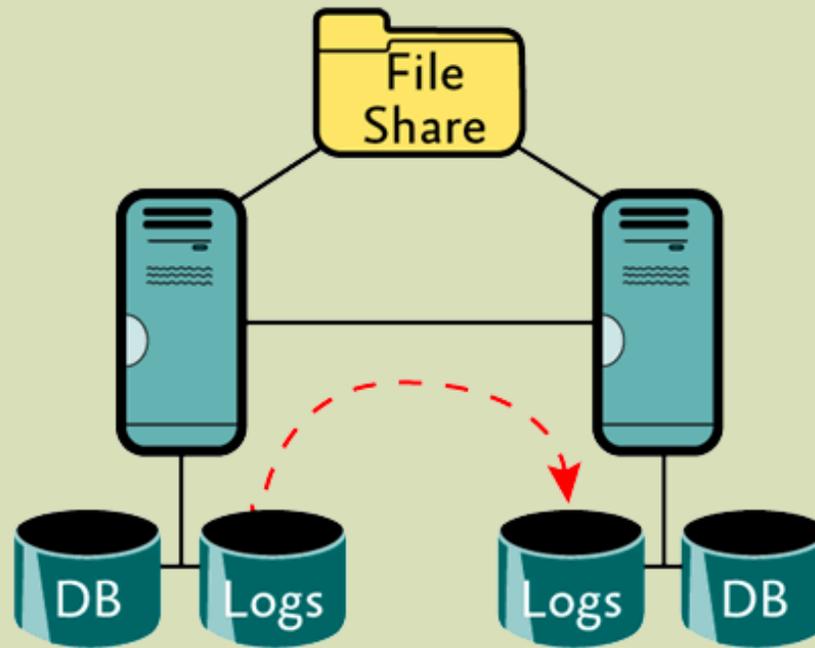
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Exchange 2007



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Exchange 2007



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Exchange 2007



Why?

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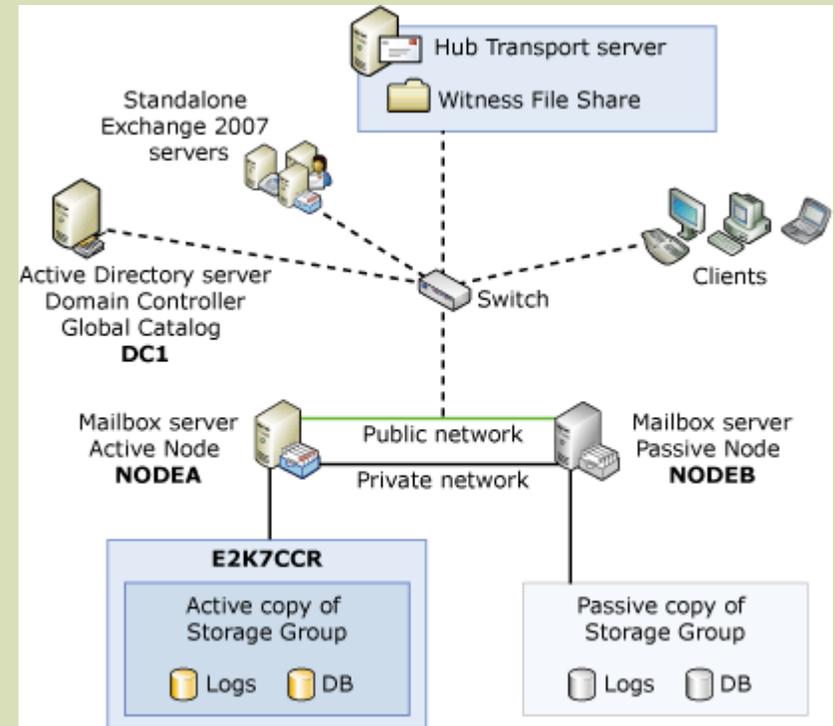
Exchange 2007



Because ...

Data Replication!

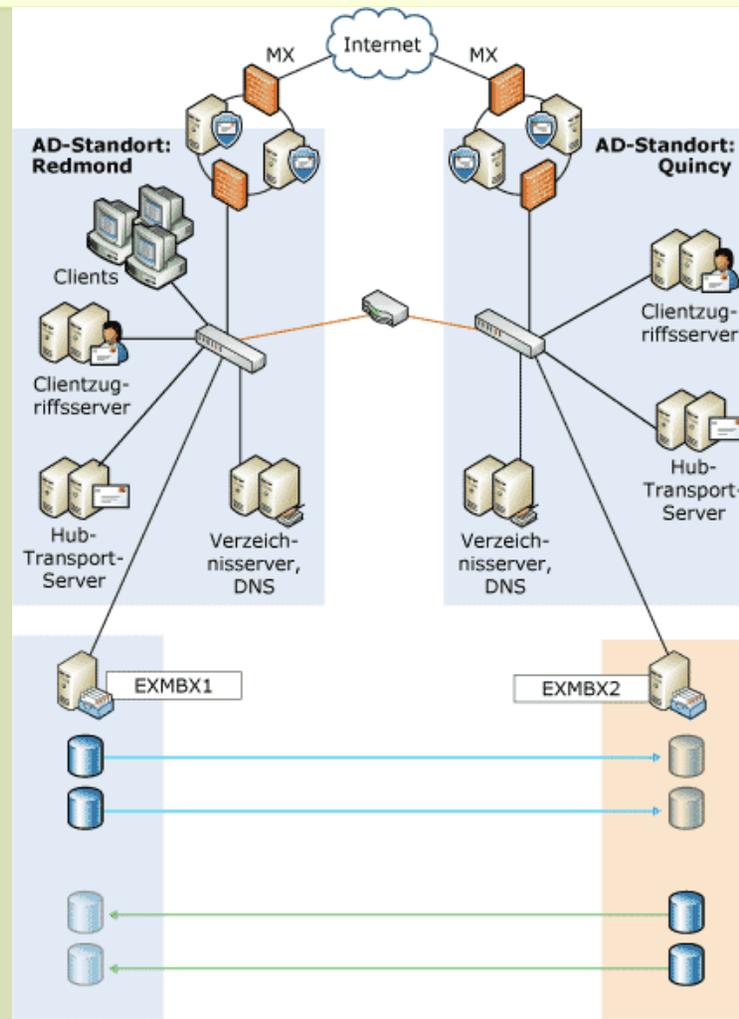
- Keep a copy, buddy!
- Keep *several* copies, pal!
- Keep them *separate*, friend!



(I'm not your friend, pal!)

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Exchange 2007



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Exchange 2007



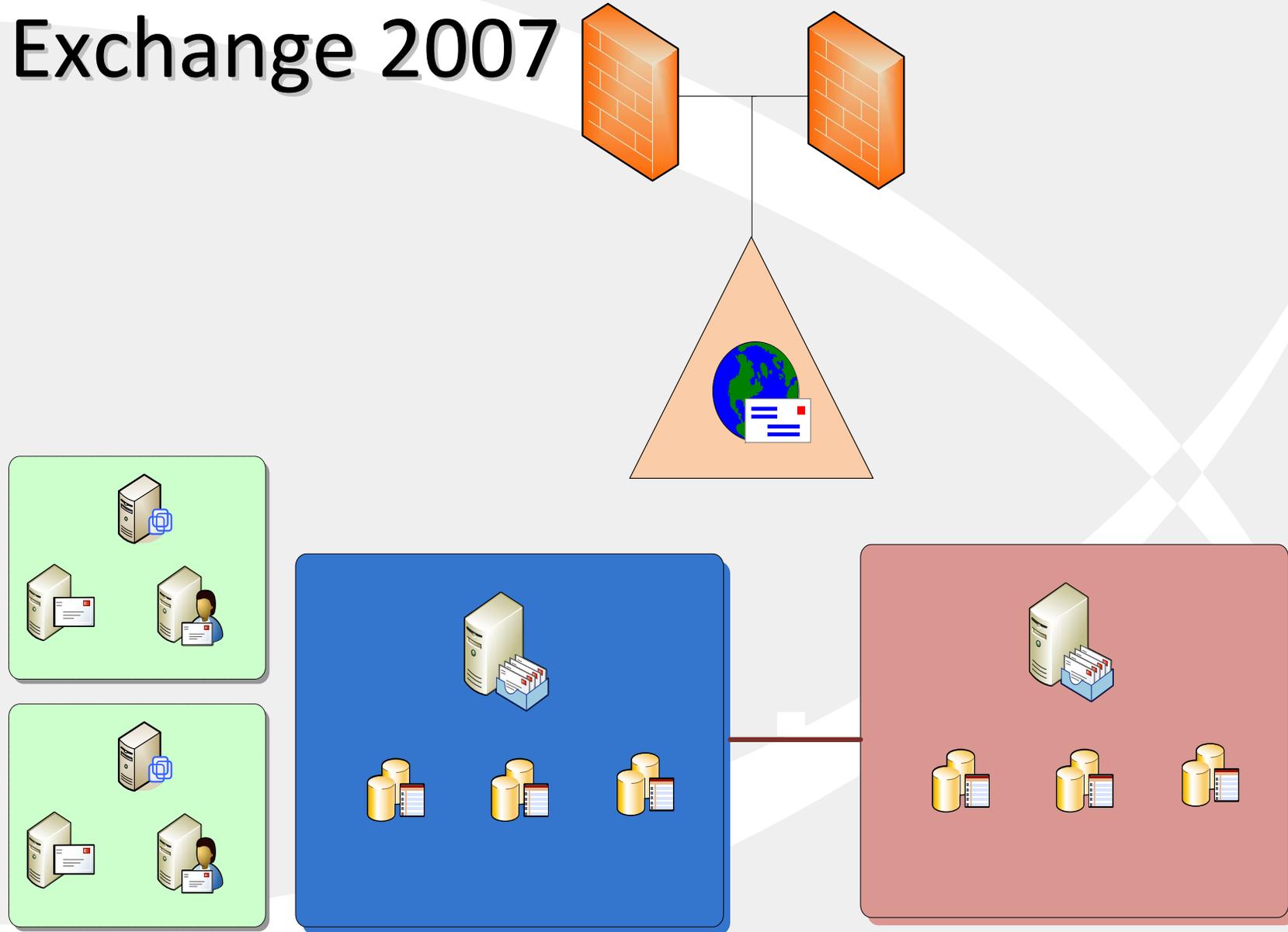
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Let's talk about ...
Exchange 2007 ...



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Exchange 2007



ISA FIREWA

Exchange 2007



So why?

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The End



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Security



Terry
Pobst-Martin

Office of the CIO



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Security



A highly available, reliable and scalable
secure solution

Each introduces a security challenge/opportunity

- Availability
 - Security threats will not deny our access
- Reliability
 - Security threats will not alter/slow our e-mail
- Scalability
 - We will provide security for many, diverse agencies



Security



- Exchange 2007 enhancements
- Anti-Spam/Anti-Virus
 - Iron Mail and beyond
- ISA 2006
 - Advanced firewall features
- Encryption
- IOC
- FOC

Network



Mike Mead

Office of the CIO



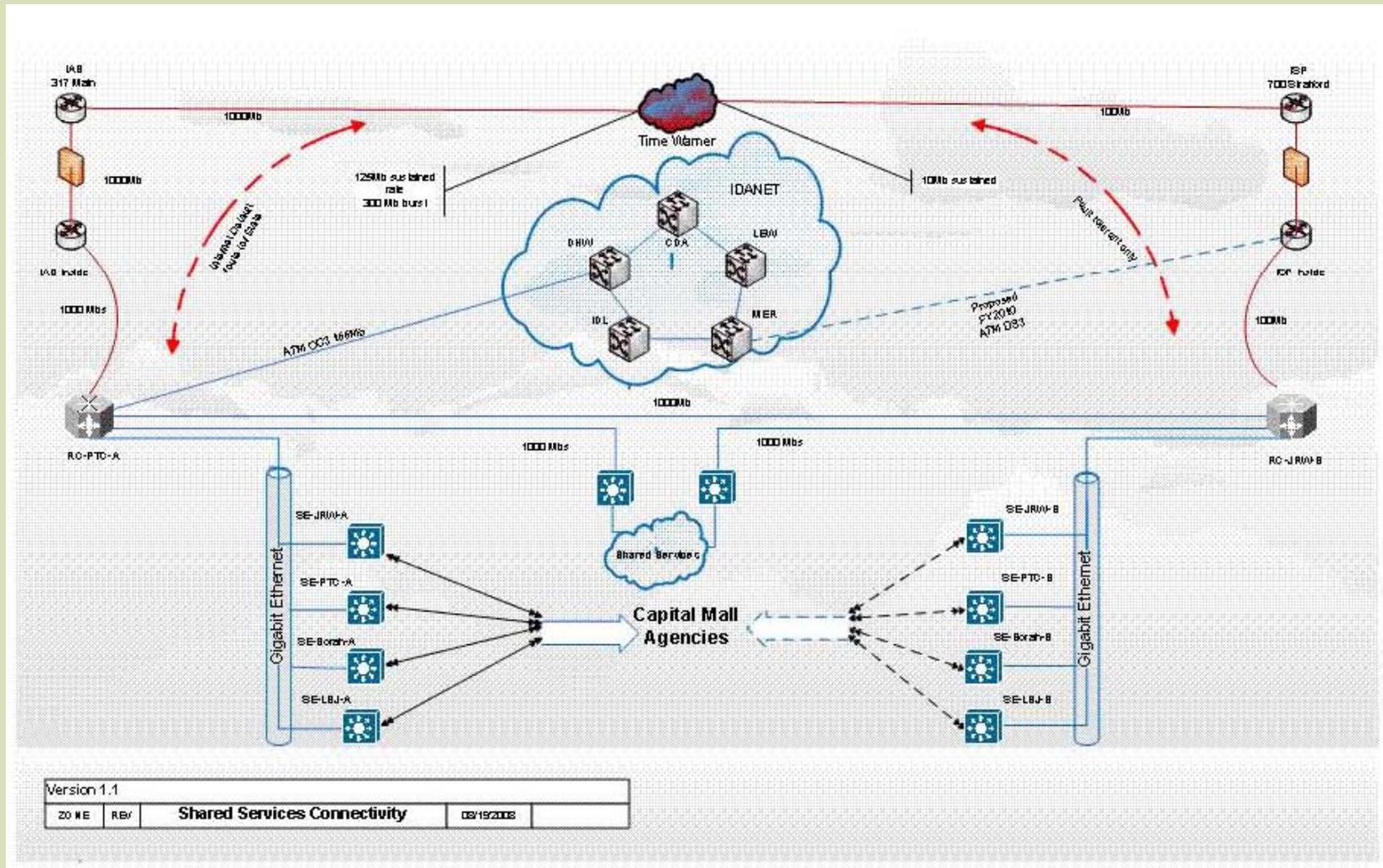
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Network



- Current Network Assessment process
- Baseline and future Monitoring
- Planned updates for IOC
- Planned updates for FOC
- Agency connectivity responsibilities

Network



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Storage & Disaster Recovery



Rocky
Bencken



State Controller's Office

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Storage & Disaster Recovery



Storage options – DAS vs SAN

- Common Differentiators
 - Cost
 - Performance
 - Flexibility
 - Complexity
 - Operational considerations

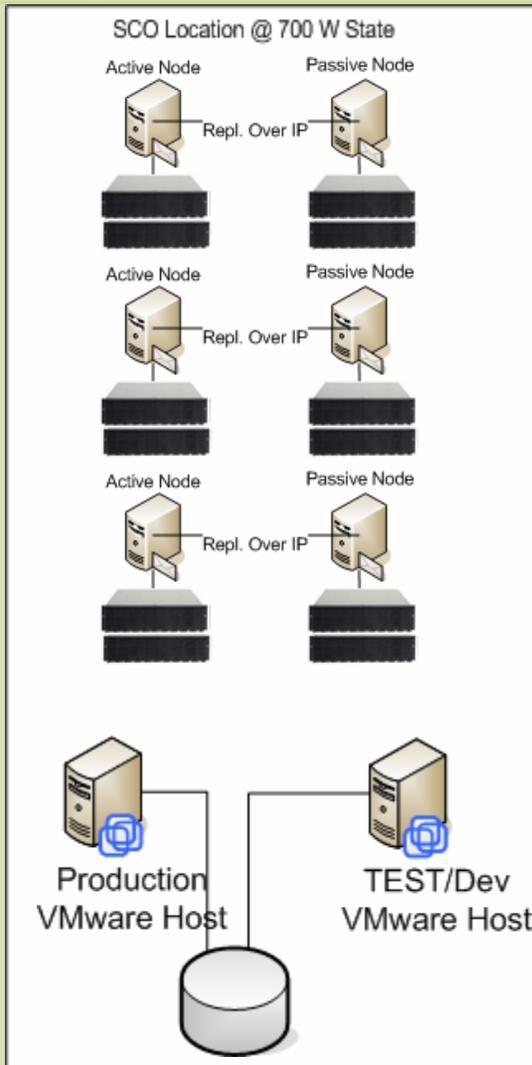
Storage & Disaster Recovery



Decisions

- IOC
 - SAN cost 40% higher than DAS
 - SAN flexibility offset by Microsoft Replication
 - DAS for Mailbox servers
 - SAN for Virtual Servers
- FOC
 - Same but scaled up based on building blocks

Storage & Disaster Recovery



IOC

3200 – 5000 Users

Phase 2

5000 – 10,000 Users

Phase 3

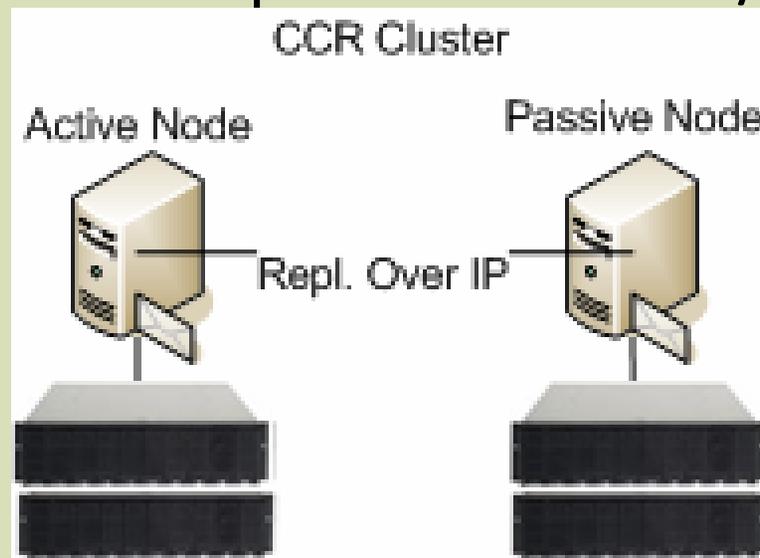
10,000 – 15,000 Users

Storage & Disaster Recovery



Disaster Recovery

- IOC
 - Cluster Continuous Replication (CCR)
 - Traditional Backup and Restore w/offsite tapes

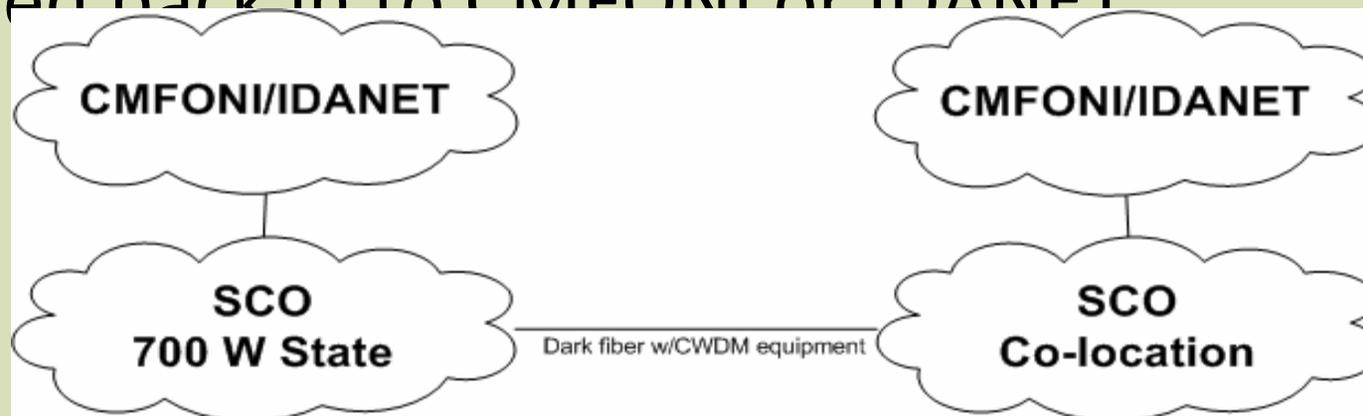


Storage & Disaster Recovery



Co-location site

- Plan for site out of flood plane
- High speed connectivity between SCO and co-location
- Tied back in to CMFONI or IDANET

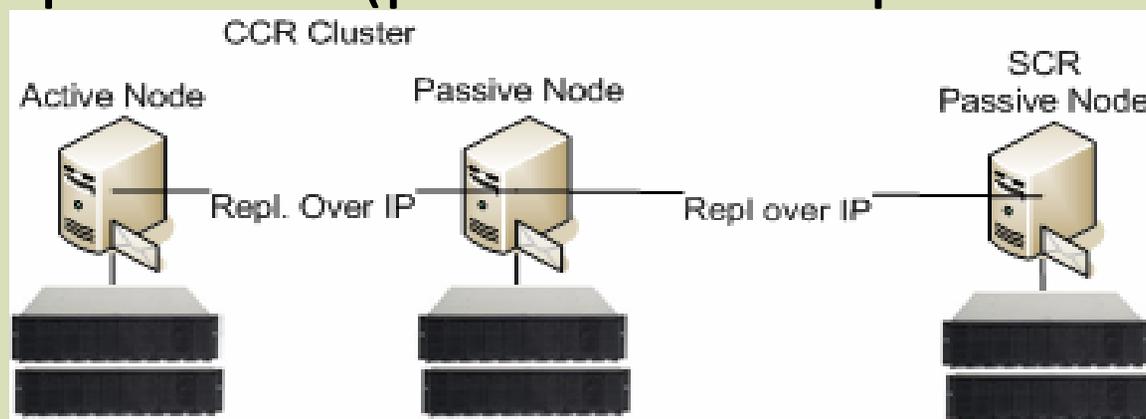


Storage & Disaster Recovery



FOC

- CCR + Standby Continuous Replication (SCR) at SCO co-location site
- Large amount of Data -- 4 TB per copy
- Backup to Disk (possible Deduplication)



Storage & Disaster Recovery



Business Continuity

- Active Server Fails
 - passive server picks up automatically
- CCR cluster or site failure
 - SCR server is started with manual intervention.
- Role server fails
 - VM Ware high availability w/SAN replication



Questions and Feedback?

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