

Approved: 2-9-2010
Date

MINUTES OF THE HOUSE GOVERNMENT EFFICIENCY AND FISCAL OVERSIGHT
COMMITTEE

The meeting was called to order by Chairman Jim Morrison at 3:30 p.m. on February 4, 2010, in Room 546-S of the Capitol.

All members were present except:

Representative Judy Loganbill- excused
Representative Tom Sloan- excused
Representative Melvin Neufeld - excused

Committee staff present:

Renae Jefferies, Office of the Revisor of Statutes
Gordon Self, Office of the Revisor of Statutes
Julian Efird, Kansas Legislative Research Department
Artur Bagyants, Intern, Kansas Legislative Research Department
Gary Deeter, Committee Assistant

Conferees appearing before the Committee:

Don Heiman, Legislative Chief Information Technology Officer
Joe Hennes, Director, Division of Information Systems and Communications
Eric Sweden, Senior Enterprise Architect, National Association of State Chief Information Officer
Daniel Bryant, Legislative Division of Post Audit

Others attending:

See attached list.

Don Heiman, Legislative Chief Information Technology Officer, introduced the topic of data center consolidation (Attachment 1). He listed three approaches to consolidation: co-location of Information Technology (IT) facilities, shared platforms for hardware and software, and—the most challenging—application consolidation. He referenced the Kansas Legislative Information Systems and Services (KLISS) project as an example of application consolidation, which joins law-making, bill drafting/amending, and legislative publications, a process that includes 19 sub-systems and 120 servers. He itemized the benefits of consolidation, suggested possible savings of 25% to 40%, and recommended that the Committee consider further IT consolidation efforts. Responding to a question, he replied that the Judicial Branch FullCourt IT consolidation is an excellent system that could be replicated in the Executive Branch.

Joe Hennes, Director, Division of Information Systems and Communications (DISC), reviewed the history of consolidation in Kansas, giving DISC as an example. He noted DISC's uniting of data centers (Landon Building, Off-site Topeka, and Wichita), referenced the importance of SB 5 in 1997 as impetus for coordinating IT governance, commented on the KANWIN system (Kansas Wide-area Information Network), and noted the 22 agencies using DISC for IT services.

Answering a question about leveraging IT funding, Mr. Heiman replied that Real Decisions (now Gartner

CONTINUATION SHEET

Minutes of the House Government Efficiency and Fiscal Oversight Committee at 3:30 p.m. on February 4, 2010, in Room 546-S of the Capitol.

Group) created a system for analyzing costs and creating benchmarks. Using the Gartner benchmark of good (1.0), he said the federal government is rated as 1.21; DISC is rated as .62 (lower is better). In 2002 Kansas was ranked number one in the nation for IT services; for five years it has been ranked number two nationally. He added that national statistics show how much can be saved by IT consolidation.

Eric Sweden, Senior Enterprise Architect, National Association of State Chief Information Officers (NASCIO), explained that for 40 years his organization has fostered government excellence through quality business practices and IT management (Attachment 2). He stated that shared services, collaboration, and consolidation are effective means for reducing costs, improving IT services, increasing security, fostering transparency, and augmenting governance. Noting that the "stovepipe" mentality is obsolete, he commented that 62% of states have some form of consolidation under way. Although change is often resisted, he said consolidation is a wise response to the state's economic challenges.

Daniel Bryan, Legislative Division of Post Audit, distributed Attachment 3, a proposed audit to assess the potential savings by consolidating data centers. He stated that, excluding the Regents institutions, the Executive Branch spent more than \$111 million on IT services in FY 2007. The audit will offer an estimate of potential savings effected by data consolidation.

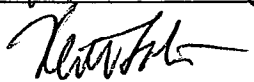
The meeting was adjourned at 4:54 p.m. The next meeting is scheduled for February 9, 2010.

**HOUSE
GOVERNMENT EFFICIENCY AND FISCAL OVERSIGHT
COMMITTEE**

GUEST LIST

DATE: FEBRUARY 4 2010

NAME	REPRESENTING
Joe Heunes	DISC
BILL ROTH	CITA
ERIC SWEDEN	NASCIO
Cindy Manley	NA
MIKE MAULEY	NA
Alan Weis	LAS
Nike Reecht	SPRINT
Mary Sullivan	DISC
BRYAN DREILING	KITO
KYLE KITSON	KITO
Wigh Keck	Hlinlaw firm
Jeanette BRANAM	KDOT
Ursula Andersen	KDHE
CON BUFFINGTON	KANDEN
DAK & SHAW	KDOR
Raf Lorie	KDOR
Glen Caspers	Office of the State Bank Commissioner
Bob Vaneman	Vaneman law firm


 (Duy Pham)
 JEFF LEWIS

Rep. McCray-Miller's intern
 Rep. Ruiz's intern
 SRS

**HOUSE
GOVERNMENT EFFICIENCY AND FISCAL OVERSIGHT
COMMITTEE**

GUEST LIST

DATE: Feb 4, 2010

NAME	REPRESENTING
Brad Williams	Kansas Board of Regents
JERRY HUFF	11
Ron Kaufman	KDWP
John Spurgeon	KDWP

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STATE OF KANSAS IT CONSOLIDATION DISCUSSION

House Committee on Government Efficiency and Fiscal Oversight
Panel Presentation
February 4, 2010

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Presenters

- Don Heiman - Topic overview and legislative consolidation initiative
- Joe Hennes - History of DISC and state consolidation efforts
- Eric Sweden - National and state trends on consolidation
- Christine Clark and Daniel Bryan - Data center consolidation audit
- Panel questions and answer

Attachment 1
GEFO 2-4-10

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TOPIC OVERVIEW AND LEGISLATIVE CONSOLIDATION INITIATIVE

Don Heiman
Legislative Branch Chief Information Technology Officer

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Three Major Strategies for Consolidation

- Collocation of facilities
 - Disaster recovery and production data centers
- Hardware and Software Shared Platforms
 - Mainframes and Virtualized Server Farms
- Application Consolidation
 - Administrative applications and applications that perform like functions such as e-mail hosting, case management, criminal justice information sharing
- As we move from collocation strategies to sharing platforms to sharing applications through hosting strategies the savings increase from 25% to 45%+

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Kansas Legislature Information and Services (KLISS)
consolidation strategic plan

- Approved by the Legislative Coordination Council – October 2004
- Plan calls for full consolidation of Legislative IT hardware, software and applications
 - 36 individual projects (due to funding cuts 8 projects on hold)
 - Integrate all law making, chamber, and decision support applications
 - Consolidated servers, system level software, and application software in two production data centers (SW Vault and 411 W House IRC system)
 - Consolidated all disaster recovery in DISC Wichita data center (99.9% uptime)
 - Virtualized servers and system level software (120 virtual servers in 4 environments)
 - The Strategic Plan success is based in part on how well we are able to consolidate staff for IT Infrastructure support while keeping developers intimate to users in the Department and Divisions.

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Application Consolidation – No Wrong Door and Open source

Law Making	Chamber	Decision Support
Bill Draft	Bill Status	Claims
Bill Amendment	Journals	Confirmations
Engrossing	Engrossing	Appropriations
Resolutions	Messages Between Chambers	Conference Committee Reports
Statute Publication	Calendars	Fiscal Note Reporting
		Bill Explainer
		Meeting Minutes
		Testimony
		Supplemental Notes
		Interim Committee Reports

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Benefits from Consolidation

- Reduce cost by sharing IT infrastructure staff –we need 3 staff members to support 120+ virtual KLISS servers and we have only one staff member. In order to provide the necessary support for the KLISS infrastructure we need to consolidate IT staff from Legislative Departments and Divisions.
- Reduce cost by sharing Servers –120 Servers+ are carved out of 6 servers and are deployed over 4 environments –development, testing, production, and failover
- 30 minutes to full recovery with no additional staff required
- Reduce cost by sharing software –Open source software costs only \$3,500 per year
- No license fees for application custom code or system level software (except VM Software)
- Reduce cost by consolidating data centers to share power, data center environmental, lights out computing, one network fully converged for voice data and video, share 96 terabytes of storage, –reduce cost for power and environmental from conventional data center by 72%.

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Organizational Acceptance

- Divisions and Departments are reluctant to consolidate staff
- However, Division and Departments are very open to sharing infrastructure hardware and software but only if the application that uses the shared platform is highly integrated
- Cost sharing is welcomed for maintaining applications as long as developers are within the Divisions and Department
- Some Departments do want to consolidate staff for infrastructure support

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HISTORY OF DISC AND STATE CONSOLIDATION EFFORTS

Joe Hennes
Executive Branch Chief Information Technology Officer
Director of Division of Information Systems and Communication (DISC)

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State of IT in Kansas

- Federated Environment
 - Each agency is responsible for their own IT budget, staff, and support
- DISC is a provider for specific enterprise-wide services
 - Agencies purchase DISC services
 - Drives down cost to agency by taking advantage of state buying power and economies of scale on large multi-agency investments
 - Available for all agencies to use

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Scope of IT in Kansas

- **General Government**
 - Servers: 2,028
 - Storage: 314 TB
 - IT Spend: \$173.7 Million
- **Employee Data**
 - Classified Employees 1,970
 - Data Management – 147
 - Network - 236
 - Operations – 290
 - Security – 69
 - Other – 1,226
- **Regent Institutions**
 - Servers: 1,241
 - Storage: 185 TB
 - IT Spend: \$64.4 Million

Data from Three-Year IT Management and Budget Plans available at:
http://da.ks.gov/kito/3YR_ITPlans/FY10-12PlanSumm.pdf

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History of DISC

- **Created in 1972**
 - Consolidation of Highway Department, Revenue, and Accounts and Reports data centers
- **1974 – Centralized telephone service**
- **1984 - Merged DISC and Office of Telecommunications into one organization**
- **1990 – Current generation Enterprise Application administration**
 - Financial (1990), Human Resource (1995), and Budget systems
- **1995 – Consolidation of state data network (KANWIN)**
 - Gartner Data Center and Networking Benchmarks
- **1998 - Consolidated IT governance as per KSA 75-7201 et seq. (SB 5)**
 - Roles included: Branch CITO, CITA, ITEC, IT Architecture, IT Strategic Plan and others
- **2002 – Opened the consolidated Topeka Offsite Data Center**
- **2009 – Opened the consolidated Wichita Offsite Data Center**

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DISC Today

- DISC was created to lead consolidation initiative in Kansas
- Those initiatives include:
 - State-wide data and phone network administration
 - Mainframe, UNIX, Windows, and shared services administration
 - Data center administration
 - Enterprise Application support
 - Financial (1990), Human Resources (1995), Budget Systems
 - IT governance support
 - Security infrastructure and administration
 - Other Agency Support

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Combined Telecommunications Networks

- KANWIN
 - Provides Internet and data services
 - Established in 1995
 - 32,000 users and 24,000 connections
 - Available statewide in all 105 counties for all agencies
- KANS-AN
 - Provides voice, voicemail, IVR, and ACD services
 - Established in 1974
 - Available statewide in all 105 counties for all agencies
 - 32,000 users

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Consolidated Computer Services

- Mainframe
 - Centralized processing power available for state usage
 - 102 business applications for 9 agencies
- Sun environment
- Windows server environment
- Tivoli
 - Centralized backup management system
 - 8 agencies currently customers
 - 67.5 TB of data
- Virtualized servers and storage

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DISC Funding Overview

- Our rate methodology is reasonable, consistent, and equitable
 - Rates audited annually by Health and Human Services Office of Cost Allocation
 - For full transparency, DISC publishes P&L statements for each rated service as required by OMB circular A-87
 - P&L statements are GAAP based, including using a depreciation reserve fund to replenish assets

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DISC Funding Overview

- Improves state buying power and establishes economies of scale
- Promotes maximum use of federal dollars reducing state general fund needs
- Tradition promotes experience - experience promotes success

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Uptime Institute Data Center Tier Structure

- **Tier I Data Center** - Single path for power and cooling distribution with no redundant components - 99.671% availability.
- **Tier II Data Center** - Single path for power and cooling distribution with redundant components - 99.741% availability.
- **Tier III Data Center** - Multiple power and cooling distribution paths. These data centers only have one active path with redundant components.
- **Tier IV Data Center** - Multiple active power and cooling distribution paths, redundant components and fault tolerance - 99.995% availability.

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Consolidated Data Centers

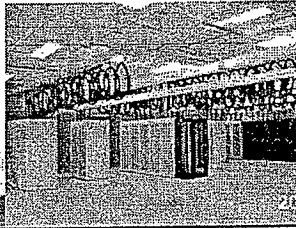
- Landon Primary Data Center
 - Opened in 1986
 - 22 agencies currently customers
 - Tier III data center, built by Santa Fe Railroad in 1960's
- Topeka Offsite Data Center
 - Opened in 2000
 - 13 agencies currently customers
 - Tier I data center
- Wichita Offsite Data Center
 - Opened in 2009
 - 6 agencies currently customers
 - Tier II data center

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Wichita Data Center

- 2500 Square Feet of space in 9000 Sq. Ft. facility
- 3-year Agreement with option to renew for 3 more-Thru 2014
- Located approximately one half mile from FSOB
- 50 Watts per square foot electrical service
- 375 KVA UPS system ~ 15 minutes of runtime
- 800 KW Motor Generator
- Production and DR support



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Three Major Strategies for Consolidation

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- Hardware and Software Shared Platforms
 - Mainframes and Virtualized Server Farms
- Application Consolidation
 - Administrative applications and applications that perform like functions such as e-mail hosting, case management, criminal justice information sharing


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Opportunity for Kansas



- DISC has a long history of pursuing IT consolidation strategies when the business drivers dictated it was necessary
- We endorse conducting a feasibility study that becomes a roadmap for increasing the state's resilience to disasters, better protect state data, and reduce the cost of IT operations
- We are willing to participate fully in the development of the proposed IT consolidation feasibility study

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**NATIONAL AND STATE TRENDS ON
CONSOLIDATION**

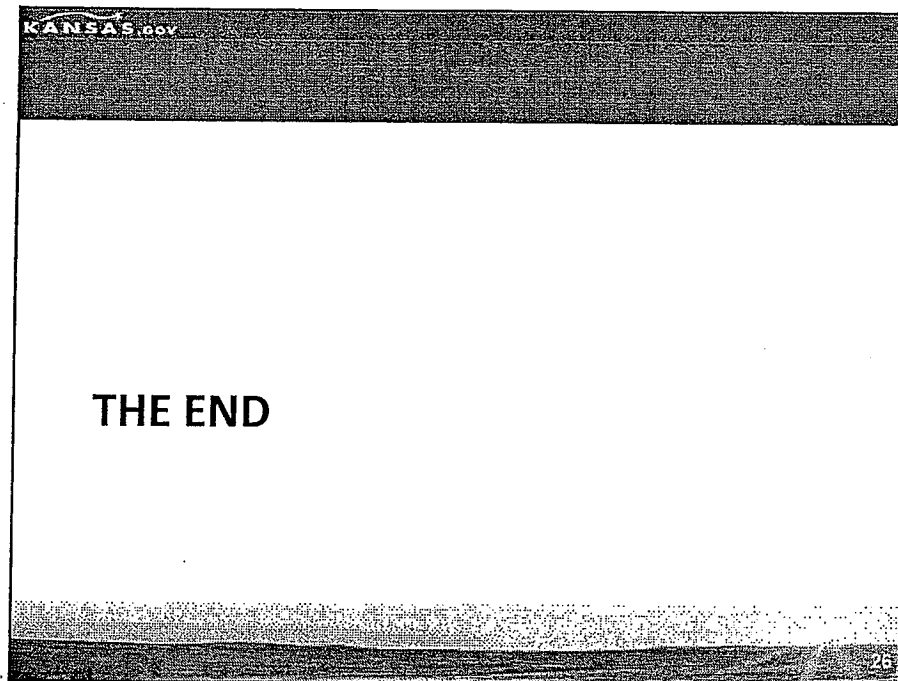
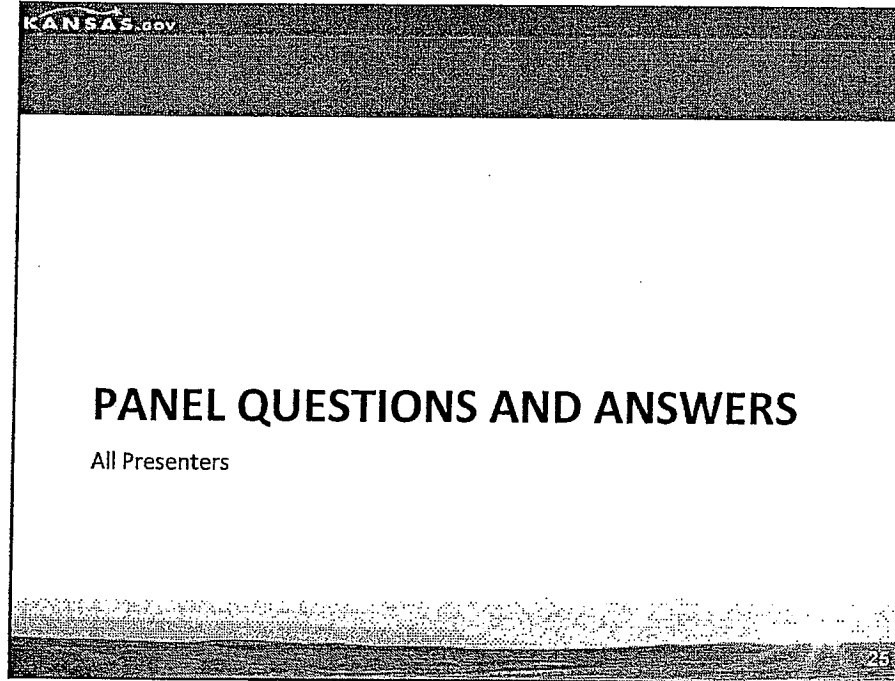
Eric Sweden
National Association of State Chief Information Officers (NASCIO)

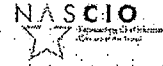


**CONSOLIDATION AUDIT SCOPE
STATEMENT AND START DATE**

Christine Clark
Legislative Post Audit







State of the States 2010: CIO Priorities and IT Consolidation Trends

Eric Sweden, MBA, MSIH
Senior Enterprise Architect

National Association of State Chief Information Officers (NASCIO)



About NASCIO

- ❖ National association representing state chief information officers and information technology executives from the states, territories and D.C.
- ❖ NASCIO's mission is to foster government excellence through quality business practices, information management, and technology policy.
- ❖ Forty years of service to state IT leaders (1969-2009)



State IT Landscape Today

- ❖ **Tough Times** - dealing with the state fiscal crisis, forced budget reductions, layoffs
- ❖ CIOs seeking IT operational cost savings
- ❖ Continued **consolidation** - IT infrastructure, services and more
- ❖ Living with the past - modernizing the **legacy**
- ❖ IT security and **risk!** Game has changed
- ❖ IT workforce: retirement wave, skills, recruiting
- ❖ Issues with federal funding: laws, program regulations, constraints

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CIOs: Bringing Focus to the "Enterprise"



- ❖ Advocating IT Governance
- ❖ Driving efficiency - improving state government operations
- ❖ Cross functional collaboration
- ❖ Managing risks - IT projects
- ❖ Data management and exchange: complexity
- ❖ IT portfolio management
- ❖ Federal funding and rules

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State CIO Priorities: 2010

Strategies, Management Processes and Solutions

1. **Budget and Cost Control:** managing budget reduction, strategies for savings, reducing or avoiding costs, activity based costing
2. **Consolidation:** centralizing, consolidating services, operations, resources, infrastructure, data centers
3. **Shared Services:** business models, sharing resources, services, infrastructure, independent of organizational structure
4. **Broadband and Connectivity:** strengthening statewide connectivity, broadband and wireless
5. **American Recovery and Reinvestment Act:** execution, support, data reporting and management
6. **Security:** risk assessment, cyber security safeguards, enterprise policies, employee education, data protection, insider threat
7. **Transparency:** open government, performance measures and data, accountability, access to government data
8. **Infrastructure:** data centers, infrastructure investment, critical infrastructure protection
9. **Health Information:** architecture, assessment, partnering, implementation, health information exchange, technology solutions
10. **Governance:** improving IT governance, data governance

Source: NASCIO State CIO Survey, October 2009

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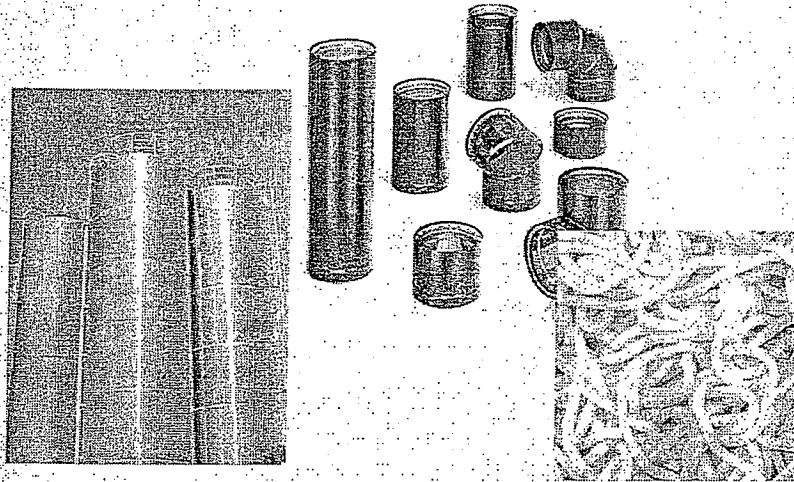
IT and Solution Priorities 2010

1. **Virtualization:** data center, computing, servers, applications
2. **Networking:** voice and data communications, unified communications
3. **Document/Content/Records/E-mail management:** repository, archiving, digital preservation
4. **Cloud computing/software as a service**
5. **Security enhancement tools**
6. **Enterprise Resource Planning (ERP),** legacy application modernization, renovation
7. **Geospatial analysis and Geographic Information Systems (GIS)**
8. **Business Intelligence (BI) and Business Analytics (BA)**
9. **Identity and access management (IAM)**
10. **Social Media and Networking:** Web 2.0 services, wikis, blogs, collaboration technologies, and social networking

Source: NASCIO State CIO Survey, October 2009

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Why Consolidation? The Reality of State IT



2009 ANNUAL CONFERENCE



(State Attendees Only) Where is the focus of your state's consolidation initiative? Select all that apply.

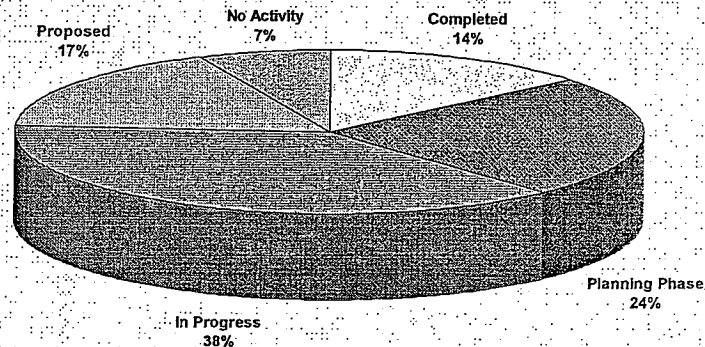
- 93% a. Data center
- 51% b. E-mail system
- 80% c. Network infrastructure
- 85% d. Agency servers
- 55% e. People
- 0% f. None of these

Data Center Consolidation Survey

- ❖ 62 % of states responding - consolidation is underway in some form
- ❖ 14% have completed consolidation initiatives
- ❖ Factors driving consolidation
 - Disaster recovery
 - Replication, redundancy and fault tolerance
 - Cost savings
 - Security
 - Access to new technologies for all agencies
 - Aging state facilities

Source: "Enterprise Data Center Consolidation in the States - Strategies and Business Justification," NASCIO, August 2007

Status: Data Center Consolidation



Source: "Enterprise Data Center Consolidation in the States - Strategies and Business Justification," NASCIO, August 2007

Consolidation to Reduce Costs

IT consolidation: a key strategy to address budget issues and cost control. Infrastructure complexity is a major cost driver.

- ❖ Facilities: reducing data centers, equipment, operational costs
- ❖ Enterprise services: networks, email, telecommunications, imaging, wireless
- ❖ Server consolidation: operations, security, backup/recovery
- ❖ IT personnel

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Consolidation to Reduce Costs

IT consolidation: reducing the "numbers of kinds"

- ❖ Licensing and subscription fees
- ❖ Personnel training: technical and business
- ❖ Hardware and software
- ❖ Service contracts

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(State Attendees Only) What do you see as the primary benefit of consolidation/shared services for your agency/department/enterprise?

39% a. Cost savings

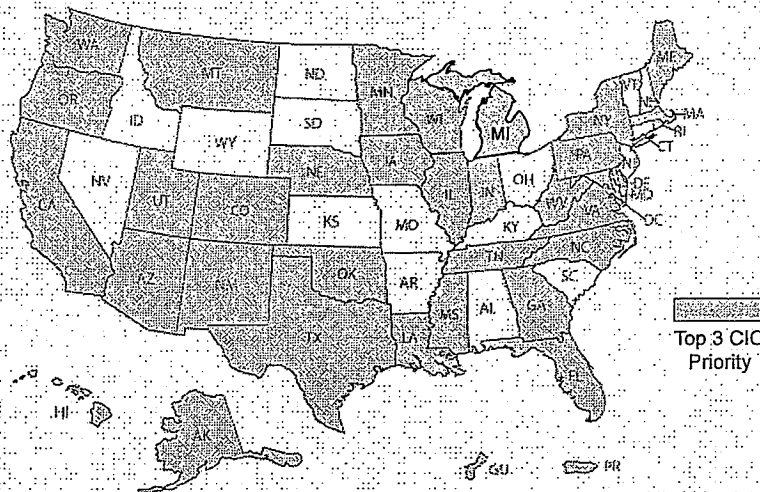
43% b. Efficiency

14% c. Increased service levels

4% d. Improved security

1% e. Information sharing

Consolidation: CIO Top 3 Priorities for 2009-10



Iowa Survey-33 states

National State CIO/CTO Offices Survey 1/25/2010
 A random survey was conducted via telephone and email to forty-nine state CIO offices to understand consolidation efforts with respect to Iowa's proposed IT related consolidation initiatives. Thirty-three responses were received. Consolidation for the purposes of the survey means the merger or combining of IT services or IT assets into a centralized IT enterprise service, location, or system.

Consolidation Initiatives	Percentage of states that have or are consolidating	Number of states that have or are consolidating
Mainframes	82%	27
E-mail/Messaging	76%	25
Data Centers	70%	23
IT Contracting	70%	23
Servers	67%	22
Cell/PDA Wireless	64%	21
Networks (Both LAN/WAN)	58%	19
Infrastructure Help Desks	58%	19
Print Shops	48%	16
Data Storage Retrieval and Backup	42%	17
Application Integration	39%	13
Desktop, Laptops, Thin Clients	36%	12
Document Management	33%	11

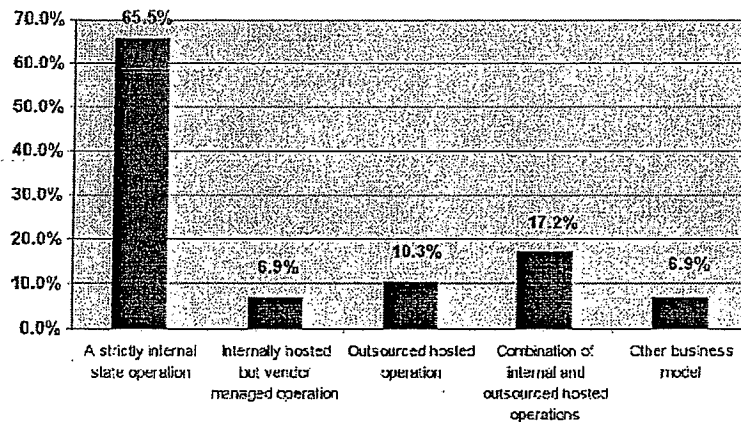
Note: The data does not indicate which agencies (if any) were exempt from consolidation efforts.

One Size Doesn't Fit All

States approach IT consolidation with different strategies, business drivers and models. There are variations on these themes depending on state finances, political will and the ability to absorb change.

- ❖ Enterprise IT centralization - big bang
- ❖ Federated - enterprise mandates with agencies retaining program autonomy
- ❖ Hybrid - enterprise/agency mix
- ❖ Outsourcing - selective and enterprise

Figure 2. Business Models States are Considering When Developing Data Center Consolidation Initiatives



Source: NASCIO's 2007 survey of state data center consolidation initiatives.

Rationale for Consolidation

- ❖ Cost control & economies of scale
- ❖ Eliminate redundant business functions and systems
- ❖ Promote enterprise integration and applications
- ❖ Strengthen IT security
- ❖ Improved support for legacy systems
- ❖ Facilitate information sharing
- ❖ Improve disaster recovery/business continuity
- ❖ Energy efficiency

Challenges to Consolidation Initiatives

- ❖ Workforce resistance to change
- ❖ Agencies desire to remain autonomous
- ❖ Problems moving local devices away from the agencies
- ❖ Backlash when consolidation doesn't meet agency business needs
- ❖ Higher than projected costs
- ❖ Seeking exemptions from federal statutory and regulatory requirements

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Table 4. Obstacles or Challenges States Have Experienced as a Result of Data Center Consolidation Initiatives

Obstacles or Challenges Experienced as a Result of States' Data Center Consolidation Initiatives	
Perceived Challenges	Percent
Workforce resistance to change	89.7%
Agencies' desire to remain autonomous	86.2%
Problems experienced in moving localized devices away from current customer base	48.3%
Backlash when consolidation didn't meet specific business needs	20.7%
Higher than anticipated costs	17.2%
Seeking exemptions from state statutory and regulatory requirements	17.2%
Seeking exemptions from federal statutory and regulatory requirements	17.2%
Failure to identify and adhere to service levels	3.4%

Source: NASCIO's 2007 survey of state data center consolidation initiatives.

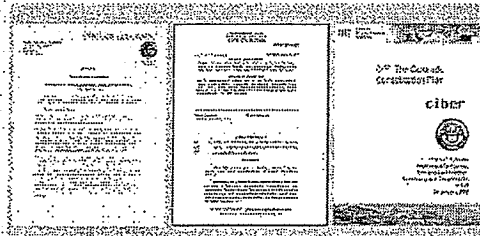
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Critical Success Strategies

- ❖ Have a plan - defined process
- ❖ Document the "as is" - baseline of assets
- ❖ Capture the known costs – expect hidden \$\$
- ❖ Engage the agency stakeholders early
- ❖ Constant communication
- ❖ Address cost allocation and A-87 impact
- ❖ Negotiate existing contracts
- ❖ Manage expectations and expect surprises

Other States

- ❖ Colorado
- ❖ Michigan
- ❖ Indiana
- ❖ Missouri
- ❖ Iowa
- ❖ Minnesota
- ❖ Texas
- ❖ Harris County Texas





Thank You!

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SCOPE STATEMENT

Agency Data Centers: Assessing the Potential Savings of Consolidation

According to the most recent set of agency IT plans compiled by the Kansas Information Technology Office, executive branch agencies (excluding the Regents institutions) spent more than \$111 million on IT services in fiscal year 2007. One of the major IT cost areas is the operation and maintenance of data servers. According to the IT plans, agencies currently operate four large mainframe systems and more than 2,100 smaller servers.

A 2005 report commissioned by the Department of Information Resources for the State of Texas estimated that Texas could cut the cost of operating mainframes and servers by almost 23% if they were consolidated into a single data center. Data center consolidations potentially create cost savings in areas such as staffing, hardware, software, maintenance, space, power consumption, and support contracts. According to proponents of data center consolidation, non-monetary benefits can include better security, reliability, and technology available to State agencies.

In 2007, the National Association of State Chief Information Officers (NASCIO) conducted a survey of the states to look at current trends in data center consolidations. Out of 29 states responding to the survey, four reported having completed a consolidation, 11 were in the process of consolidation, and seven indicated they were in the planning stages.

Legislators are interested in knowing whether there is potential for significant cost savings in Kansas from consolidating data centers, and what potential up-front costs would be incurred to achieve those savings.

A performance audit in this area would address the following question:

- 1. Could State agency data centers in Kansas be combined to achieve cost savings?** To answer this question, we would talk to officials in other states that have undertaken data center consolidation to determine what information they have about savings and costs, and what pitfalls and benefits they have experienced with their data center consolidations. We would review the information technology plans compiled by the Kansas Information Technology Office and gather additional information from State agencies as needed to inventory the State's data servers and estimate the number of staff and other resources required to operate them. We would use industry benchmarks and work with DISC staff to estimate the cost of consolidating the State's servers into one data center, and compare those costs to current costs in order to estimate the potential savings. In addition, we would determine what types of upfront costs the State would need to incur to consolidate the data centers into a single location. If needed, we would use consultants to help with our estimates. We would conduct additional work as needed.

Estimated completion time: 14-18 weeks

Attachment 3
GEFD 2-4-10