Kickoff Meeting
Tuesday, August 28, 2018
UA Cooperative Extension Service
Today’s Agenda

• Opening – Carder Hawkins (Deputy Director – DIS)
• Collaboration/Responsibilities – Donnie Matthews (Relationship Manager – DIS)
• Customer Feedback-Larry Tate (IT Manager, ADFA/AEDC)
• Schedule – Jim Coyne (Enterprise Architecture – DIS)
• Data Gathering – Missy Morehart (Applications Development Manager – DIS)
• Questions & Closing – Donnie Matthews and Team
Data Center Optimization
Push/Pull Team

Opening-Carder Hawkins
The data center optimization initiative to consolidate the IT infrastructure into a shared environment can reduce the server and storage spend to $5M per year. DIS is currently working with Gartner on developing an RFP to bring in a systems integrator to help with this effort. The duration of this project is expected to be four years. Your support and cooperation is critical to its success.
Data Center Assessment (Dec. 2017)

Gartner benchmarked Arkansas agencies against peer groups, identified service gaps and developed a strategy to improve efficiency.

<table>
<thead>
<tr>
<th>Information Gathering Scope</th>
<th>Strategic Planning Scope</th>
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<tbody>
<tr>
<td>■ Benchmarked DIS and 84 agencies</td>
<td>■ Formed advisory group</td>
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<tr>
<td>■ Interviewed DIS and 17 agencies</td>
<td>■ Identified opportunities for service improvement</td>
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<tr>
<td>■ Visited data centers to observe condition of each site</td>
<td>■ Identified alternatives for IT infrastructure optimization</td>
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<td></td>
<td>■ Evaluated alternatives based upon business alignment,</td>
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<td></td>
<td>operational excellence, risk and cost</td>
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<td>■ Selected best strategy</td>
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Why are we doing this?
Transformation

Inconsistent security
Lack of standards
Obsolete or end-of-life technology
Limited economies of scale
Duplication of effort/redundant systems
License mismanagement/unexpected expenses
Limited or no disaster recovery
Recommended Target State

The state should build a shared foundation for next generation digital government that all agencies can use for current and future services

Optimize agencies into a shared services environment

Establish a colocation data center

Improve DIS service delivery

Direct cloud connectivity to major cloud providers

DIS will improve staff and skill alignment based on project roadmap
Optimization:
an act, process, or methodology of making something (such as a design, system, or decision) as fully perfect, functional, or effective as possible


Infrastructure:
the underlying foundation or basic framework (as of a system or organization)

Shared Services:

Shared services is the provision of a service by one part of an organization or group, where that service had previously been found, in more than one part of the organization or group. Thus the funding and resourcing of the service is shared, and the providing department effectively becomes an internal service provider. The key here is the idea of 'sharing' within an organization or group. This sharing needs to fundamentally include shared accountability of results by the unit from where the work is migrated to the provider. The provider, on the other hand, needs to ensure that the agreed results are delivered based on defined measures.

“Shared Services.” Wikipedia.  
Should future state leaders worry about IT or focus on solving problems and improving the quality of life in Arkansas?
How can you help?
In Closing

- The status quo is no longer a viable option for the state.
- Together, we must take action to mitigate the significant risks identified in the Gartner Data Center Assessment and the Kroll Cybersecurity Assessment.
- Optimization will enable the state to address these risks and achieve efficiency improvements.
- Your executive sponsorship and commitment to this strategy is critical to success.
Collaboration-Donnie Matthews
Collaboration is Critical for Success

We need YOU!
We Are Here
Opportunities for Improvement

• Improve governance process
• Improve enterprise IT change management process/communication
• Promote service priority transparency
• Improve/simplify the IT service catalog
• Remove siloed support and delivery
• Improve IT financial management practices
Opportunities for Improvement

• Provide service desk self-service capabilities

• Provide disaster recovery as a service

• Provide more robust data protection/backup services

• Enable self-service provisioning
Why Push/Pull Teams?

✓ Collaborative approach
✓ Successful in other states
<table>
<thead>
<tr>
<th>Push/Pull Team Issues</th>
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<tbody>
<tr>
<td>Funding</td>
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<td>Contracts</td>
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<tr>
<td>Service Level Agreements</td>
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<td>Infrastructure</td>
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<td>Applications</td>
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<td>Procurement</td>
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<td>Governance</td>
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<td>Rates</td>
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<td>Business Relationship Mgmt.</td>
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## Pull Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Jim Coyne</td>
<td>Enterprise Architecture – DCO Project Sponsor</td>
</tr>
<tr>
<td>Debbie Martin</td>
<td>Operations Center Manager</td>
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<tr>
<td>Brian Fortson</td>
<td>Enterprise Operations Division Director</td>
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<tr>
<td>Amy Buss</td>
<td>Chief Financial Officer</td>
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<tr>
<td>Donnie Matthews</td>
<td>Customer Relationship Manager</td>
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<tr>
<td>Rick Martin</td>
<td>State Network Architect</td>
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<tr>
<td>Missy Morehart</td>
<td>Enterprise Applications Manager</td>
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<tr>
<td>Kristi McKinnon</td>
<td>Legislative Liaison/Policy Coordinator</td>
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<td>Murat Al</td>
<td>Lead Quality Analyst</td>
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This Will Not be Easy!
Customer Feedback

Larry Tate, IT Manager
Arkansas Development Finance Authority
Arkansas Economic Development Commission
Scheduling - Jim Coyne
### Data Center Optimization

**Push/Pull Team**

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<td>Q3</td>
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<td>Q4</td>
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#### Governance
- On-going Data Center Governance
- Approvals etc.
- Project budget approved, resources on-boarded and staffed

#### Preparatory Activities
- **A** Approvals etc.
- **B** Foundational Elements: Enhancements to the shared services environment
- **C** Foundational Elements: Other DIS Service Improvements
- **D** Sourcing SI and new Colo facility

#### Foundational Elements for consolidation
- Enhanced Shared Services Environment ready at SDCW and new site
- Service improvement initiatives substantially complete

#### Transition to Target State
- MAC Migration Planning
- MAC Migration Execution
- MAC decommisioned
- Agencies continue to leverage or transition to existing DIS shared services
- Phased migration of Agencies into the DIS Shared Services Environment
- All Agencies in the MAC data center migrated into the shared services environment
- Migration Contingency

#### Benchmark
- On-going Continuous Improvement
- Program Milestone
- Bi-Annual Benchmark
Scheduling – Who Goes First?

• Volunteers

• Low-Hanging Fruit
  • New systems/applications in the acquisition process
  • Systems/applications due to be replaced
  • All new infrastructure implementation will take place in the DIS shared services environment

• After That, Start Small/Work Our Way Up

• Larger Agencies May Expect Multiple Migrations
Scheduling Process– Selection Criteria

• Unfortunately, we can’t assist everyone all at once:
  • Obviously, “life and limb” takes first priority (i.e., life-critical or life-impacting)
  • Followed by “biggest bang for the buck” (i.e., highest rate of return, for the state)
  • Next, come migrations most-readily accommodated by the evolving shared services environment
  • Ramping up to everything else

• Consideration Factors:
  • Cost avoidance (e.g., contract renewals)
  • New functionality implementation
  • Aging infrastructure replacement
  • Business/Timing issues (e.g., peak seasons, school terms, SEC football games, etc.)
Scheduling Process– How do we get in line?

• Pull team members will be available immediately following this meeting
• Pull team member contact information is available on the Push-Pull teams web page: http://dis.publishpath.com/data-center-hosting-services
• Engage with your DIS customer relationship manager (CRM)
• Eventually, we will be contacting you
• We look forward to working with you to provide optimal IT services for Arkansas
Data Gathering-Missy Morehart
Data Gathering

- AIMS – Arkansas IT Management System
- AIMS will be accessible to agency users throughout the duration of the effort
- We are working on identifying data elements available through other sources – less for agencies to key
- Will begin with your initial Push/Pull team meeting
- Spreadsheets will be used in the interim and uploaded into the system
Data Gathering (cont.)

• Categories of data collection:
  • Agency information and IT objectives
  • Applications
  • Data
  • Equipment
  • Network
  • Fiscal
Data Gathering (cont.)

• Sample of data elements for agency information & IT objectives:
  • Total number of full time employees currently supporting the IT infrastructure
  • Who are your customers?
  • What are your agency’s long term goals as they relate to IT?

• Sample of data elements for applications:
  • Is this a custom application or a commercial off-the-shelf solution?
  • Is there a development/maintenance agreement for the application with a vendor?
  • Where is the application hosted?
### Data Gathering (cont.)

<table>
<thead>
<tr>
<th>HOME</th>
<th>SECTION</th>
<th>QUESTION</th>
<th>ADDITIONAL INFO</th>
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<tbody>
<tr>
<td></td>
<td>NETWORK A (Customer Manages LAN)</td>
<td>What is the State Network bandwidth to your location that houses servers to be relocated</td>
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<td>Are there other WAN or Internet connections serving this location? Yes / No</td>
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<td>Number of remote locations accessing in house applications today</td>
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<td>Number of remote users accessing in house applications today</td>
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<td>Is local VPN in use today? Yes / No</td>
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<td>What is current VPN technology?</td>
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<td>Approximate number of VPN users?</td>
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<td></td>
<td></td>
<td>Number of local users accessing in house applications today</td>
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<td>Network and security assets (switches, firewalls, filtering appliances, load balancers etc)</td>
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<td>Asset brand</td>
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<td></td>
<td></td>
<td>Asset model</td>
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<td></td>
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<td>Do you have server interface utilization monitoring in place today? Yes / No</td>
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<td>If the above is yes, what format is this report available in?</td>
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<td>Describe IP addressing scheme in use today</td>
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<td>Do users access local applications via hostname or IP Hostname / IP</td>
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<td>List all impacted maintenance contracts in effect today and their expiration dates</td>
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<td>Vendor with whom you have a maintenance contract in effect today.</td>
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<td>Expiration Date of Vendor agreement</td>
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<td>Who manages the firewall</td>
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<td>What is your backup methodology?</td>
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<table>
<thead>
<tr>
<th>NETWORK A RESPONSE</th>
<th>10Mbas</th>
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<tbody>
<tr>
<td>No</td>
<td>75</td>
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<tr>
<td>Yes</td>
<td>10</td>
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<tr>
<td>DIS provided</td>
<td>20</td>
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<td>6</td>
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</table>

- Firewalls, Switches
  - Firewalls = Juniper, LAN & Server Switches = Dell
  - Firewalls = Juniper SRX, Switches = Dell S3148
- Yes
- PDF or CSV
- Private IP addresses used on all devices with NAT at firewall
- One application is accessed by IP and all others by Hostname
- SRX maintenance contract expires June 23, Switches are not covered
- Juniper
- Juniper June 23
- Vendor = Presidio
- Backup to tape every night then store offsite
Questions
Fiscal/Procurement/Contract Questions

• How do fiscal divisions relate to the push/pull initiative?

• What push/pull goals related to fiscal?

• Will agencies receive cost estimates for budgeting purposes? If so, how will they be received and what level of detail will be available?

• Will agencies need to provide funding information?

• Will IT procurements occur at the agency or state level?
Fiscal/Procurement/Contract Questions

- What type of approval process is anticipated for IT purchases and/or contracts?
- Will there be IT reporting requirements related to budgets, funding, assets etc.?
- Will billing occur on the current DIS bill using the current billing system?
- Will agency level contracts be allowed?
Technology Questions

• Who will control the replacement of IT equipment?

• Will agencies be allowed to keep local servers for file storage/backups?

• Once consolidated, will there be a mechanism to allow sharing data and access to various databases from the cloud or will this functionality be removed?

• What is the design for accessibility of IT staff to meet agency IT needs?
Technology Questions

• Will agencies have access to programmers for agency specific application needs?

• Will there be a cost to the agency for maintaining existing and future applications?
More Questions?
Adjourn

DCO Resources on the DIS website:
http://dis.publishpath.com/data-center-hosting-services