Unit Representatives Meeting

April 23, 2012
- M+Box: Bill Wrobleski & Mandie Chapman
- New Cloud Services: Bill Wrobleski
Goals for Today

- Inform you about M+Box
  - How we got here
  - How it fits at Michigan
- Demonstration
  - Show you some of Box's features
- Answer your questions
what is...

INTERNET²

what is...

box
<table>
<thead>
<tr>
<th>15 GB of storage per person</th>
<th>Support for 2GB files</th>
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</thead>
<tbody>
<tr>
<td>Multi-Platform Support</td>
<td>File Sharing &amp; Discussion</td>
</tr>
<tr>
<td>UMich Authentication</td>
<td>I2 Contract Protection</td>
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<tr>
<td>MCommunity Groups (by fall)</td>
<td>Desktop Sync (by fall)</td>
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<tr>
<td>Privacy Category</td>
<td>Compliance Level</td>
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<td>-------------------------------</td>
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</tr>
<tr>
<td>FERPA (Student Info)</td>
<td>Green</td>
</tr>
<tr>
<td>HIPAA (Health Info)</td>
<td>Red</td>
</tr>
<tr>
<td>Social Security Numbers</td>
<td>Yellow</td>
</tr>
<tr>
<td>GLBA (Student Loan Info)</td>
<td>Red</td>
</tr>
<tr>
<td>PCI (Credit Card Info)</td>
<td>Red</td>
</tr>
<tr>
<td>Human Subject Research</td>
<td>Green</td>
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<tr>
<td>Export Controlled Research</td>
<td>Red</td>
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Which one should I use?
Demo
Introducing
U-M’s New Cloud Services
Goals for Today

- Why Cloud Services?
- Cloud Services Description: What’s New?
- Mini-Breakout: Benefits & Opportunities
- Your Feedback
Background

Redundant Infrastructure and Ops Management at U-M.¹

Note: These counts represent the cumulative number of services delivered by all providers across the university.

Bill— is it important that we call these folks out in this meeting?
Recommendations

- The Cloud Computing Strategy Group shared vision:

  *In the future, the University’s IT investment should be focused on providing more externally provided services that meet constituents’ high-level needs.*

- We call this “moving up and to the right”
  - Up… Refers to offering services higher in the technical stack
  - Right… Refers to leveraging more external providers
Direction #1: Move “Up” the Stack

Researchers, Instructors, Learners and Administrators are looking for more-and-more offerings at these higher layers.

Traditionally, University IT providers have focused at offering services at these layers.

Over time, the University should work toward offering more complete services to consumers rather than raw infrastructure. There will be exceptions but our strategy should be to “move up the stack.”
Direction #2: Move to the “Right”

<table>
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<tr>
<th>SaaS (Software as a Service)</th>
<th>Off-Premise (Cloud) By 3rd Party</th>
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<tbody>
<tr>
<td>PaaS (Platform as a Service)</td>
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<tr>
<td>IaaS (Infrastructure as a Service)</td>
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Over time, the University should work toward adopting more externally provided cloud services. There will be times when on-premise solutions are appropriate, but off-premise cloud solutions will eventually provide the best cost, feature and flexibility options for many needs around the University.
How do we move "Up and to the Right?"

- The Cloud Computing Strategy Group developed three recommendations to move the University toward its cloud vision:
  1. Develop Enabling Capabilities
  2. Expand Private options
  3. Increase Public adoption

- We want to take actions and create an environment that are enablers (rather than barriers) to adoption of cloud services for both units and individuals
Where did we go next?

U-M Private Cloud

Shared Service and Technology Capabilities
Units no longer need to buy and manage their own servers. Now they can purchase virtual servers from ITS and greatly reduce the effort and cost of doing their business. Unit technical staff members no longer need to worry about applying software patches and upgrades, because this service provides these capabilities for them.

Units can choose from three distinct virtual server options:

- **Windows Server**  This is a server that includes a fully managed Windows operating system.
- **Linux Server**  This is a server that includes a fully managed Red Hat Linux operating system. (This option is not available until late 2012.)
- **Core Server**  This is a server with no operating system at all. In special cases where the Windows and Linux servers won’t be workable for a unit, Unit staff members can install and manage their own operating system. This will take more effort from the Unit staff members, but provides flexibility to support non-standard configurations.
New Service: MiDatabase

Units no longer need to install and manage their own databases. Now they can purchase databases directly from ITS and greatly reduce the effort and cost of doing their business. Each of these databases runs on top of the ITS Server service. Unit technical staff members no longer need to worry about applying database or operating system patches and tuning because this service provides these capabilities for them.

Units can choose from three distinct options for the database service:

- **MS SQL Server**  This runs on a Windows virtual server.
- **MySQL**  This runs on a Linux virtual server. (This option is not available until late 2012.)
- **Oracle**  This runs on a Linux virtual server. (No availability date has been yet set for this option.)
Managing Servers in Units

**Effort Today**
- Purchase hardware
- Upgrade hardware
- Repair hardware
- Install databases
  - Patching
  - Antivirus
  - Monitoring
- Access management
- Backup & recovery
  - Migrate data
- Manage data
- Support faculty & staff

**Effort with New Services**
- Manage data
- Support faculty & staff
Think about what you or your IT staff could do if you had these services up and running in your unit. Think about opportunities this could open up in teaching and learning and research and collaboration. Dream big. What could you, your staff, or faculty do -- or do better -- that you can’t do today?
Next Steps

- Solicit and Apply Lessons Learned
- Pilot Cloud Services
  - ITS in June 2012; UHR in September 2012
- Integrate with New Online Service Portal
  - Summer/Fall 2012
  - Launch services
QUESTIONS & FEEDBACK