We virtualized the lab... Now what? BYOD access? Persistent faculty vm’s?

Luke VanWingerden – Director, ITS Client Services
Kevin Hodges – VDI System Administrator
Jeremey Steadman – VDI Technician
What is your role?

<table>
<thead>
<tr>
<th>Code</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>399872</td>
<td>CIO/IT Director</td>
</tr>
<tr>
<td>399878</td>
<td>Network/System Administrator</td>
</tr>
<tr>
<td>399879</td>
<td>Faculty</td>
</tr>
<tr>
<td>399880</td>
<td>Other</td>
</tr>
</tbody>
</table>

We virtualized the lab... Now what? BYOD access? Persistent faculty vm’s?
Are you currently using Desktop Virtualization?

<table>
<thead>
<tr>
<th>Code</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>399901</td>
<td>Yes</td>
</tr>
<tr>
<td>399907</td>
<td>No</td>
</tr>
<tr>
<td>399908</td>
<td>Evaluating Virtualization</td>
</tr>
<tr>
<td>399909</td>
<td>Just Curious</td>
</tr>
</tbody>
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We virtualized the lab... Now what? BYOD access? Persistent faculty vm’s?
We virtualized the lab... Now what?
BYOD access? Persistent faculty vm’s?
The Presentation

• Learn about your peers in the room
• Try it out
• Hear what we’re doing, how we’re doing it and where we’re headed
• Hear from our users
• Ask Questions

Questions:
Text 399935 and your message to 37607 or Submit 399935 and your message to http://PollEv.com
What are others in the room thinking?

What is your role?

- CIO/IT Director: 399872 (80%)
- Network/System Administrator: 399879 (20%)
- Faculty: 399879
- Other: 399880

Are you currently using Desktop Virtualization?

- Yes: 399901 (45%)
- No: 399907 (18%)
- Evaluating Virtualization: 399908 (36%)
- Just Curious: 399909

What do you hope to learn or see in this session?

- Text 399911 and your message to 37607
- Submit 399911 and your message to http://PollEv.com

Questions?

"how do handle GPU? We had a lot of backlash from people accessing YouTube which was choppy."

4 days ago
Meet our Users

**Tim Ellis:**
- Faculty
- Program: Engineering Technology Mgmt
- Early Adopter

**Stephanie Barnhill:**
- Staff
- Nurse practitioner
- Not Tech Savy

**Scott Bollhoeffer:**
- Student / Senior
- Marjor: Engineering Technology Mgmt
- Minor: Business
- Tech Savy
Server and Storage Hardware

Questions:
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Cisco UCS
- Single Chassis
- 8 B230 Blades
- Dual Processors 10 Core
- 128 GB RAM
- Mirrored 72GB SSD HD

NetApp FAS3240
- 16 TB
- 48 Drives 450GB each
- 256GB Flash Cache
- NFS
- ISCI
Virtual Infrastructure

VMware vSphere 5.1
8 vSphere Servers

yCenter 5.1
1 - vCenter Server Virtualized

600 – 750 Virtual Machines

Questions:
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or
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View Environment

Client Devices
- Laptop
- Tablet/Phone
- Zero Client

VMware View Environment
- View Connection Servers
- View Security Server

Virtual Machines
- SPSS Lab
- Math Lab
- General Lab
- Individual Persistent VMs

Logon ➔ Connect ➔ Connect ➔ Connect
Questions:
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Monitoring vCenter Ops
Monitoring

vCenter Ops

Questions:

Text 399935 and your message to 37607 or
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Monitoring

vCenter Ops

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Campus Buy-In

Guaranteeing **USERS** are **COMFORTABLE** with new technology

Questions:
Text **399935** and your message to **37607**
or
Submit **399935** and your message to [http://PollEv.com](http://PollEv.com)
Campus Buy-In

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Campus Buy-In

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Subject: CONGRATULATIONS! You have been given permission to SpartanGreenSky Anytime/Anywhere Access!

CONGRATULATIONS! You have been given permission to SpartanGreenSky, your own Persistent Virtual Desktop/Machine (VM) that is unique to you! Below is some valuable and helpful information to get you off to a successful start.

What is the SpartanGreenSky?
SpartanGreenSky is a ‘Cloud Computing’ technology or a ‘Virtual Desktop/Machine’, (VM) which allows you to access USC Upstate owned software and computer labs Anytime; Anywhere you have a device with internet access.

What advantage does SpartanGreenSky provide me?
- Anywhere access – You can now access not only your own VM (computer) but also the virtual labs on campus that provide academic specific software. You are no longer confined to your office, you can connect to your VM from across campus, across town, your home, hotel, or anywhere you have a device with an internet connection.
- Access to network files and software – No more VPN – If you
Deployment/Life Cycle Refresh

Traditional Approach to Life Cycle Refresh deployments:
- Group class/Deployment
- Date is assigned and you have to change it out on that date
- Low Touch / Low Satisfaction

Our Approach:
- One-On-One or Small Group deployment/training
- Employee chooses date that fits their calendar within a time frame
- High Touch/High Satisfaction

Questions:
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Deployment/Life Cycle Refresh

Desktop Client Environment:
- Samsung Zero Clients: 385
- HP Thin Clients: 171
- Wyse Thin Clients: 56

2012 LCR
- 277 planned replacements
- 360 replaced

2013 LCR
- 313 planned replacements
- 400 estimated replacements

Questions:
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or
Submit 399935 and your message to http://PollEv.com

Nursing Classroom lab

Samsung Zero Client setup with secondary monitor.
New Initiatives
SpartanGreenSky Supports

Questions:
Text 399935 and your message to 37607 or
Submit 399935 and your message to http://PollEv.com
Hear from our Users
Hear from our Users

Stephanie Barnhill
Nurse Practitioner - Not Tech Savvy
Hear from our Users
Where Are We Going Next

2013 Roadmap

Q1
- HTML Access
- Software Upgrades

Q2
- LCR
- Lab Replacements
- PCI Compliance Setup

Q3
- LCR
- Hardware/System Eval
- Pool Expansion
- Marketing SGS

Q4
- Hardware Expansion
- F5 Load Balancer
- LCR Planning

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