Open Forum Q&A Instructions

• **WebEx Users:**
  • Recorded demos will play back through your computer speakers.
  • To submit a question via WebEx, please use the Q&A panel in the bottom-right corner of your WebEx window.
  • The 'Ask' field should default to 'All Panelists', please be sure to send your questions to 'All Panelists', as questions sent to 'Host' or 'Presenter' will not be seen by the people monitoring the Q&A stream."

• WebEx Presentation with Q&A will be posted on its website after this event.
Agenda

• SJSU Data Centers – Then and Now
• IT Services Summer Projects
• Workstation Refresh
• Data Center Certification
• Info Security Training on Skillport
SJSU Data Centers – Then and Now

Greg Porter
Legacy On-Campus Data Center in CC

- Servers and storage used for VMs cobbled together, not purpose built
- 5+ years old, end of life, unsupported
- Equipment is getting to “that age” – and starting to fail regularly
SJSU Data Centers – Then and Now

New SJSU Primary Data Center
- In brand new Belarmino Data Center, Stockton
- Brand new physical plant at Delta College
- Brand new purpose built server infrastructure
  - Cisco Unified Computing System “FlexPod” – Cisco blade servers, NetApp storage
- 10X+ CPU and storage capacity compared to legacy servers here in CC

Powering Agility Through Technology
SJSU Data Centers – Then and Now

Is the new stuff any good?

• We have been using it for over a year
• Majority of our systems are on it
  • When you use your VOIP phone, you are using it
  • When you sign into wireless, you are using it
  • When you use FTS or other apps, you are using it
• The servers and storage are rock solid and reliable
• All new virtual machines are built at Delta
  • We have over 150 VMs at Delta now, and growing…..
SJSU Data Centers – Then and Now

ITS Computing Services #1 Project Now

- **CS1302 Migration to Delta**
  - Evacuate VMs from legacy data center on campus
  - Occupy Delta
  - Completed by Aug 15, 2014

- ***Started at beginning of year***

- **About 100 VMs to deal with**
  - 60% done, about 40 VMs remain
  - Remaining VMs are “the hard ones”
  - On track to finish by Aug 15
Hey!! I want a VM...

- **We are getting much faster**
  - Used to take months, then it took weeks, now it’s days
- **No more paper!**
  - Use iSupport
  - Open a new change, pick New VM template
  - iSupport VM workflow tracked and monitored better
  - Simple VM request completed in less than one business week
ITS Summer projects
John Briar
IT Services Summer Projects

1. Next Gen
   - Cores
   - NGN Firewalls
   - NGN Building Migrations
2. Data Center Certification
3. VDI Labs
4. Server Migrations
5. Unified Communications Deployment
6. Classroom Telephones
7. Contact Center Implementations
8. OU Campus Version 10 Upgrade
9. Degree Progress Workflow
10. SOTE Reporting
11. WiFi Updates
12. WebEx Enabled Telepresence
Workstation Refresh Program

Mike Cook

Powering Agility Through Technology
Workstation Refresh Program – Lab Progress

- **Total Count 1646 Workstations & 1426 Monitors Delivered & Installed since 1/1/2014!**
  - Academic Success Center (Clark Hall)
  - Athletics
  - Peer Connections
  - SSC Open labs and Front Counter
  - University Housing
  - English
  - ALL College of Business
  - ALL College of Applied Sciences and Arts
  - ALL College of Science
  - ALL College of Social Science
  - ALL 94 spaces in the College of Engineering
  - ALL College of Humanities and Arts
  - ALL College of Education
  - All College of International and Extended Studies
  - King Library Checkout Laptops and Desktop Labs
  - Moss Landing Marine Labs
Workstation Refresh Program – New Services

Virtual Desktops

Patch and Workstation Management

Active Directory Consolidation
Empowering Collaboration and Technology Integration

Workstation Refresh Program

Workstation Refresh Web Page

http://its.sjsu.edu/services/workstation-refresh/workstation-configuration/index.html

Powering Agility Through Technology
Data Center Certification

Mike Cook
Data Center Certification

Background

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Findings

What were the commonalities?

- Background Checks
- Data Center Access
- Facility Access Control and Monitoring
- Alarm Systems
- Fire Protection
- Emergency Power
- Procedures and Training
- Satellite Data Centers
Action Items

Identify the requirements for L1 data centers AND create a standard for SJSU

- Access Control
- Background Checks
- Electronic Locks
- Management Control
- Employee Separation Procedures
- Key Cards
- Master Keys
- Security Alarms
- Moisture Detection
- Smoke Detection
- Environmental Reporting
- Earthquake Protection
- Fire Suppression
- UPS Power
- Generator Power
- Firewalls
- Emergency Training
- Disaster Recovery Plans
- Off-Site Backups
- Video Surveillance
- Labeling
- Policies
- Cooling

SAN JOSE STATE UNIVERSITY

Introduction and Purpose
This standard defines the requirements for security controls of machines hosted in SJSU data centers. This standard is composed to explicitly comply with ICSUAM 8000, California SAM, local, State, and Federal law.

Scope
This standard applies to all SJSU State, Self-Fund, and Auxiliary (campus) computer systems and facilities, with a target audience of SJSU Information Technology employees and partners. This standard applies to any machine storing unencrypted Level 1 data at rest, any machine providing internet-facing services outside the campus border firewall (i.e. Web Servers), and campus core network aggregation points (i.e. Mary and Macquarie Hall).

Standard
Storage of unencrypted Level 1 information is prohibited
For any machine on the campus, storing Level 1 unencrypted data at rest is prohibited unless that machine is hosted in an approved SJSU data center. For information classification and handling of Level 1 sensitive data, refer to the Information Classification and Handling Standard.

Comment (20.1): Do you think that this might be revealing too much information to a potential attacker if a attacker wishes to know what campus core network aggregation points are. Does this absolutely need to be in here? Justification for thought.
SJSU Locations & Where are we now

- Computer Center
- SJDC – Delta
- 210 N. Fourth Street
- Moss Landing Marine Labs
- Spartan Shops
- MLK Library
- University Police
- Investigating Others
The Numbers

We have 31 physical locations with servers

6 locations already have no level 1 data

The technicians have identified ~259 servers with L1 data on them

164 of the L1 servers are already in locations we are certifying.

We have ~95 servers to migrate

Approx. Half of these are domain controllers which can be resolved by joining SJSUAD
Info Security Training on Skillport
Mike Cook
Questions?
More Questions?

• **Data Centers – Then and Now**
  Greg Porter– Director, Computing Services,
greg.porter@sjsu.edu

• **Workstation Refresh Update, Info Security training, Data Center Certification**
  Mike Cook, Director Identity & Information Security, ISO
  Mike.Cook@sjsu.edu

• **IT Services Summer Projects**
  John Briar- Managing Sr. Director, Infrastructure Services,
  john.briar@sjsu.edu