IT Open Forum

Information Technology Services

Engineering 285/287 5/16/2013

Open Forum Q&A Instructions

- Remote Users (those participating via WebEx) can ask questions during the speakers presentation
- There is a Chat & Q&A window. Questions will only be answered in the Q&A window. To do so, click on the Q&A window on the right side of the screen, click on the panelist name in the dropdown, type your question in the blank field and click send. Our Q&A Panelist will respond to your question
- If you don't see the Q&A window, move your mouse to the top of the presentation and a drop-down menu will appear

Agenda

- ISO Appointment Update: Terry Vahey, AVP ITS & Deputy CIO
- Unified Communications Deployment: Don Baker, Senior Director Unified Communication Services, IT Services
- Computing Services Support to Campus: Greg Porter, Director of Computing Services, IT Services
- IT Open Forum—Your Feedback: Terry Vahey

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ISO Appointment Update

Terry Vahey

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Unified Communications Deployment

Don Baker

UC Pre-install Activities

- Department Contact identified
- Assist in the review and approval of existing telephone services
- Distributes introduction letter to department personnel
- Assists with implementation planning
- Assists in providing access to offices
- Floor plans—End user, Office#, Phone#

UC Pre-install Activities

- Department contact will assist in gathering the following optional feature choices for each user:
 - Reach-Me-Anywhere (RMA): Basically programmable call forwarding to any number
 - Mobility—Think of it as call park on steroids
 - For both RMA and Mobility, the UC department will need to know if the transfer is to a mobile device is iPhone, iPad or Android
 - Jabber—Soft phone client that may be requested to be installed on the Windows or Mac

UC Deployment Expectations

During this initial UC deployment we will not be:

- Replacing classroom telephones
- Installing new fax lines
- Deploying any Contact Center agents

During this initial deployment we will be:

- Deploying phones outside of normal business hours
- Looking for a centralized E-fax solution
- Creating user portals for self-service
- Publishing call bridge how to use information

UC Scheduling Strategy

- Deployment will be by Department within a Building
 - Prepare building and coordinate with departments
- Factors driving scheduling:
 - Building network switches upgraded to support
 - Power over Ethernet (POE)
 - Building network over to Next Generation
 - Network
 - Departments with call centers to use Unified
 - Contact Center Enterprise (UCCE)
 - Departmental work peak times

UC Deployment—Summer 2013

- Selected for ease of changes (firewalls, size, etc.)
 - Music
 - Moss Landing Marine Labs (MLML)
 - HR/UPD Building
 - Faculty Office Building
 - Central Classroom Building
 - Hugh Gillis Hall/Washington Square
 - Student Union Expansion
 - Mod F
 - 210 N 4th Street

UC Deployment—Early Fall 2013

- Moderate change complexity (firewalls, size, etc.)
 - Art
 - Dudley Moorehead
 - Dwight Bentel Hall
 - IRC
 - Industrial Studies
 - Morris Dailey
 - South Campus
 - Sweeney Hall
 - Reid Hillview
 - Corp Yard/Central Plant

UC Deployment—Early Fall 2013

- Significant complexity (firewalls, size, UCCE, etc.)
 - Administration Building
 - Business Center/Business Tower
 - Clark
 - Duncan Hall
 - Engineering
 - Health
 - MacQuarrie Hall
 - Science
 - Student Services Center
 - Martin Luther King Library

UC Deployment—Completion

- Housing
- Classrooms
- Analog devices (FAX, alarms, etc.)
- Construction Buildings
 - Spartan Complex
 - Yoshihiro Uchida Hall
 - New Student Health
 - Student Union—Phase 2

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Computing Services Support to Campus

Greg Porter

Who We Are

- Computing Services are the server people and database people at SJSU
- Our operations staff monitor and maintain our infrastructure at our primary data center at Delta College, and alternate data centers in the Computing Center on campus, and other locations
- We run the infrastructure (servers, storage, etc.) that is used to run campus application software
- Our system administrators take care of Windows, Linux and Solaris servers
- Our database administrators run a lot of the well used databases on campus—we do Oracle, SQL Server and MySQL

What We Do

- We'd like to help you with your server and database needs
- If you need to replace servers, in most cases you can use virtual servers we provide
- Contact us if you need system or database administrator help
- If you have physical servers, you can put them in our data center (co-location)
- In most cases, these services are no cost, or low cost to departments and colleges

SJSU Private Computing Cloud

Cloud? Whazzat?

- To understand cloud, you need to understand virtualization
- A cloud is an easy way to access virtual resources

Virtualization—Foundation for Cloud

- Virtualization is the modern way we run servers
 - **Real** servers these days have amazing performance, usually sitting idle
 - With software like VMware vSphere, we can make one real server host dozens of virtual servers
 - Maybe you've seen a Mac user run Fusion and start a Windows machine, running on a Mac
 - We have enterprise class infrastructure and can run hundreds of servers virtually

Computing Clouds

- 'Cloud' is an overused marketing term with little meaning
- We use *cloud* to mean a virtualization infrastructure designed so that customers have easy access to request and use their own machines
 - In the simplest case, you can make a paper cloud where you have paper based procedures for customers to request and be issued virtual machines
 - More mature clouds have self service web portals where authorized customers request machines

Types of Clouds

- Private clouds are ones you own, you're the only user
 better for security
- Public clouds are ones you rent from a third party (i.e. Amazon), shared with other users
- Hybrid clouds are a mixture, where you have tools to easily move your servers back and forth between your private cloud(s) and public clouds (cloudburst if busy)

SJSU Private Computing Cloud

- We have built the infrastructure for a private cloud at SJSU
- We can offer you virtual servers to host your applications
- Safe for critical Level 1 data
 - We run it on our servers in our data center
- We support Windows and Linux
- These services are no cost to departments and colleges

Computing Services Uses This Too

- We eat our own dog food
- Almost all of our servers are virtual, or will be soon, on the infrastructure described
- We can run virtual machines both here (our old legacy alternate data center) or at our primary Delta College Data Center
- We are planning to move most servers currently here to Delta soon, over the summer

Server Co-location

- You really should consider migrating your applications to virtual servers
- If that just won't work, then put your physical servers in our CC Data Center
 - It's easier if they are rack mountable
- Our data centers are professional class
 - Good physical security, good for Level 1 data
 - Fire detection and suppression
 - Battery backup and generator
 - Professionally staffed
 - Great access to power and network
- Co-location services are no cost, or low cost to departments and colleges

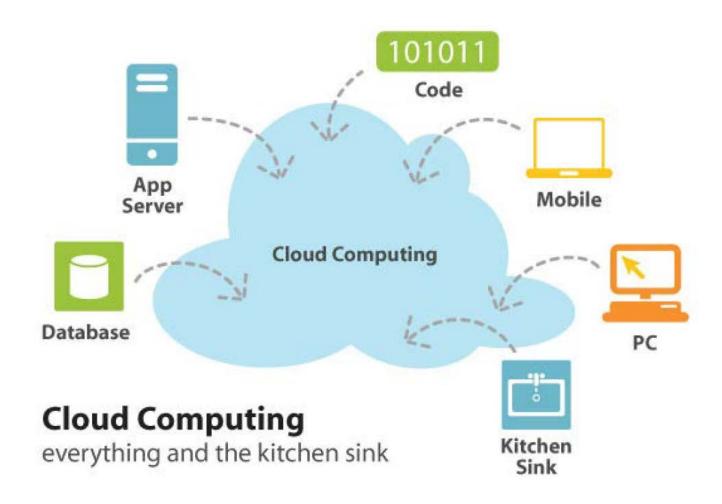
Computing Request Procedures

- For either co-location or virtual servers, we currently have a paper forms based process
- For instructions and forms, see <u>IT Services</u> (http://its.sjsu.edu) and look for *Computing Services* (Available by June 1, 2013)
- Read the instructions, fill out the form, send it to us and we'll meet with you to determine your needs
- Expected turn around time for new customer for virtual machine is 2 weeks

Coming Attractions

- We are working on using the infrastructure described to offer virtual desktops
 - For some use cases, labs perhaps, having easy to use desktops made from a central template and accessible from most devices whether on or off campus is compelling
- We are evaluating and soon will implement a true self service portal so you can order and use your machines without silly paper procedures
 - Get your stuff faster and easier

What Are Your questions?



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IT Open Forum—Your Feedback

Terry Vahey

Your Feedback

Survey data and presentation slides will be placed at

IT Services Presentations

(http://its.sjsu.edu/resources/presentations/index.html)

Recommendations:

- Allow more time for questions
- Slides have too much information. Detail might be too specific for audience.
 Fonts too small
- Please repeat questions for everyone to hear

Future topics:

- PeopleSoft
- UC Deployment Updates
- Overview of Technology and Mission
- Invite other SJSU information technology groups to present

Quote

"Quality means doing it right when no one is looking"

—Henry Ford



More Questions?

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INFORMATION TECHNOLOGY SERVICES