Virtual Computing Support for Alice (Alice in the Cloud)

Alice Workshop - Summer 2014
Questions We'll Answer

• What is VCL?
• How does VCL Work?
• What can VCL can do for Alice Instructors?
• Demo
Virtual Computing Lab

What is it?

- A Computing Environment (Desktop) Delivery Service (i.e., Cloud Computing)
- Remote Access to High-End Software
- Anytime, Anywhere, On Demand Computing
What is VCL?

- VCL represents a transformation in the business of education -- a transformation in how education is delivered.
Virtual Computing Lab

- Motivation
- Shared Compute Resources (Always On)
- Custom Compute Environments (Can be Saved and Recalled at a Later Date)
- "Distributed" Education
- Increased Utilization of Hardware, While Meeting the Needs of Teachers and Students
VCL Development Partners

- Academic
  - Duke University
  - ECU
  - Johnston Community College
  - NCCU
  - NCSU
  - UNC - CH & G
  - Wake Tech Community College
  - Western Carolina University

- Industry
  - IBM
  - Intel
  - Sun Microsystems
  - NetApp

- Government Agencies
  - North Carolina Community College System
How VCL Works

Client Computer

Public Internet

VCL Servers

Operating System & Application Screen
Value for Alice Instructors

- Update one (the VCL), run many (student machines)
- Shared Libraries
- Ubiquitous Access
- Shared Resources, Help Files, etc.
- CIPA Compliant (per Durham Public School District Standards)
VCL Nuts and Bolts

- Web Reservation Interface http://vcl.ncsu.edu
- Account Required
- Individual or group reservations
- Remote Desktop Client needed to access your compute environment (native on a PC, for Mac http://www.microsoft.com/mac/remote-desktop-client)
- Software Licensing Issues???
Authentication Method

* Select "non-NCSU Account"
Reservation Screen

New Reservation

Please select the environment you want to use from the list:

- Alice_Innerv8 (WinXP)

When would you like to use the application?

- Now
- Later: [date] [time] (Eastern Time Zone)

Duration: [length]

Create Reservation
Your Credentials

NC State Login Required
Please enter your Unity ID and password

UserID: [Redacted]
Password: [Redacted]
Cookie: [Redacted]

What is my Unity UserID? Unity UserID's are usually your first and middle initial followed by the first six characters of your last name. A Unity UserID is never longer than 8 characters.

Should I put quotes around my password? No. Any quotes you give will be treated as part of your password.

What Cookie Type should I choose?
use 1 hour, any address:
- If you are on a network that uses a proxy or goes through a firewall to connect to the Internet.
- If you have problems using the fixed-address cookie.
use 1 hour, fixed address:
- If you are on a kiosk or other public computer where you do not want someone else to use your cookie.
use 10 hour, fixed address:
- If you are sure that you are on a computer that connects directly to the internet, and you can close the browser when you are finished.

WRAP will try to guess which type of cookie you need and will set that value for you when you load the page.
Reservation Pending
Ready to Connect

Current Reservations

You currently have the following normal reservations:

- **Environment**: Alice_Innov8 (WinXP)
- **Starting**: Monday, Jun 1st, 12:28 pm
- **Ending**: Monday, Jun 1st, 1:30 pm
- **Initially requested**: Monday, Jun 1st, 12:28 pm

Click the 'Connect!' button to get further information about connecting to the reserved system. You must click the button from a web browser running on the same computer from which you will be connecting to the remote computer; otherwise, you may be denied access to the machine.
Connection Info for RDC

Connect!

You will need to use a Remote Desktop program to connect to the system. If you did not click on the Connect button from the computer you will be using to access the VCL system, you will need to cancel this reservation, request a new one, and make sure you click the Connect button in a web browser running on the same computer from which you will be connecting to the VCL system. Otherwise, you may be denied access to the remote computer.

Use the following information when you are ready to connect:

Remote Computer: 152.46.20.139
User ID: lucic
Password: BWTCxW

DIFFERENT THAN ACCOUNT PASSWORD!
Connect RDC to VCL
Alice Environment
Windows 7 Environment
File Transfer

Make the following Mac disk drives or folders available on the Windows-based computer:

Documents folder

⚠️ Someone with access to your Windows-based computer can open your Mac disk drives and folders. This is potentially unsafe.
VCL Workflow

- Launch RDC (for Mac, download from Microsoft)
- Go to http://vcl.ncsu.edu and make a reservation
- Environment = Alice_Innov8(Win XP)
- Log into environment using RDC and the credentials provided by the VCL website
Math for Alice Resource

Danica McKellar
Demo
iPhone Demo
Thoughts, Comments, Suggestions, Questions.......