

What is VCL?

VCL (Virtual Computer Lab) is a service running on servers in IIT's datacenter that enables users to schedule and connect to virtual desktops running specific academic software applications from their own computers, from on or off campus, 24-7.

VCL Access

VCL provides access to Linux and Windows 7 Virtual Machines

- All IIT users can access Linux images
- Access to Windows 7 virtual images is limited to specific IIT Classes, because of current Microsoft License Restrictions

Users will only see those images that they are authorized to access.



Accessing Linux Virtual Machines

In order to connect to **Linux Virtual Machines** students will require an **SSH Client** and an **X Window System** on their devices.

SSH Clients

- Windows OS- Putty can be downloaded at:
<http://www.putty.org>
- Mac OS X, Linux/Unix – SSH Clients are included and can be accessed by opening a Terminal window.

X11– X Window Systems

- Windows OS- **Xming** is a free package that can be downloaded at
<http://sourceforge.net/projects/xming>
- Mac OS X- Install X11. Included with OS X install media.
- Linux/Unix– Included in OS builds.

Accessing Windows Virtual Machines

In order to connect to **Windows Virtual Machines** users will require a **Remote Desktop Client** on their devices.

- **Windows OS**- Remote Desktop Connection is included in Windows 7, and Windows 8.
- **Mac OS X** – Clients can be downloaded from Microsoft.
 - Mac OS X 10.6 and later:
<https://itunes.apple.com/us/app/microsoft-remote-desktop/id715768417>
 - Mac OS X 10.5 and prior:
<http://www.microsoft.com/en-us/download/details.aspx?id=18140>
- **Linux/Unix** - The client is called **rdesktop**. Most builds contain this package. If not, the tool can be downloaded from a third party site: <http://www.rdesktop.org>



Reserving a Virtual Desktop



Open the **VCL Reservation System** by logging into **MyIIT** and clicking on the **"VCL Icon"**



The VCL Welcome Page



- Select **“New Reservations”** to **Schedule** a VCL session
- Select **“Current Reservations”** to **Connect, Modify,** or **Delete** an existing VCL Reservation



Creating a New Reservation

VIRTUAL COMPUTING LAB_ English

Developed at Apache.org
cwiki.apache.org/VCL/

HOME
New Reservation
Current Reservations
Block Allocations
User Preferences
Statistics
Documentation
Logout

New Reservation

Please select the environment you want to use from the list:
IIT Linux, No Apps (VMware GSX) ▼

Image Description:
This is a Linux VMware image.

When would you like to use the application?

Now
 Later: Monday At 3 15 p.m. (CDT)

Duration: 1 hour

Estimated load time: < 1 minute

Create Reservation

1. Click the "Down Arrow" to View and Select the Desired Image from the Drop Down List

2. Select the Desired Reservation Time and Duration

3. Click "Create Reservation"

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“Current Reservations” Screen

Image Loading

VIRTUAL COMPUTING LAB_

Developed at Apache.org
cwiki.apache.org/VCL/

HOME
New Reservation
Current Reservations
Block Allocations
User Preferences
Statistics
Help
Logout

Current Reservations

You currently have the following normal reservations:

Environment	Starting	Ending	Initially requested
<div style="border: 1px solid red; padding: 2px;"> Pending... Est: 1 min remaining </div> <input type="button" value="Delete"/>	IIT Win7 OTS 1	Friday, Jan 10th, 3:07 pm	Friday, Jan 10th, 4:15 pm

Estimated image load time

This page will automatically update every 20 seconds until the *Pending...* reservation is ready.

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Images can take up to 15 minutes to load. Although generally, load time is less than 5 minutes. Click “**Connect**” when notified your image is ready. The updated page will provide you with the information necessary to connect to the **Virtual Session**.



Current Reservations Screen

“Connect”

VIRTUAL COMPUTING LAB_ English

Developed at [Apache.org](http://cwiki.apache.org/VCL/)
cwiki.apache.org/VCL/

Current Reservations

You currently have the following normal reservations:

Environment	Starting	Ending	Initially requested
IIT Win7 OTS 1	Tuesday, Sep 16, 2014, 1:32 pm	Tuesday, Sep 16, 2014, 2:45 pm	Tuesday, Sep 16, 2014, 1:32 pm

Buttons:

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.

Click the **Connect!** button from a web browser running on the same computer you will be using to connect to the remote computer; otherwise, you may be denied access to the virtual session.

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If you did not click the **Connect!** button from the computer you will be using to access the VCL system, you will need to return to the **Current Reservations** page and click the **Connect!** button from a web browser running on the same computer from which you will be connecting to the VCL system.



Connecting to Linux Images

The screenshot shows the Virtual Computing Lab (VCL) interface. At the top, there is a header with "VIRTUAL COMPUTING LAB_" and a language dropdown set to "English". On the right, it says "Developed at Apache.org" with a link to "cwiki.apache.org/VCL/". A left sidebar contains navigation links: HOME, New Reservation, Current Reservations (highlighted), Block Allocations, User Preferences, Statistics, Documentation, and Logout. The main content area is titled "Connect!". A red box highlights the text "Connect to reservation using ssh on port 22". Below this, a list of details is provided: Remote Computer: 216.47.141.51, User ID: ornt, and Password: 6Ye7xQ. Two red arrows point from external text to these elements. The first arrow points to the "Connect to reservation using ssh on port 22" text, and the second arrow points to the list of details. Below the list, there are two notes: "NOTE: The given password is for this reservation only. You will be given a different password for any other reservations." and "NOTE: You cannot use the Windows Remote Desktop Connection to connect to this computer. You must use an ssh client."

Connect to Linux Images through ssh clients on port 22.

Connect!

Connect to reservation using ssh on port 22

You will need to have an X server running on your local computer and use an ssh client 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 return to the **Current Reservations** page and click the **Connect!** button from 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: 216.47.141.51
- User ID: ornt
- Password: 6Ye7xQ

NOTE: The given password is for *this reservation only*. You will be given a different password for any other reservations.

NOTE: You cannot use the Windows Remote Desktop Connection to connect to this computer. You must use an ssh client.

Use the provided Virtual Machine details to connect to your Linux Image. Note that the Password is for this Reservation Only!

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Connect to **Linux Images** using the **IP Address**, **Username**, and **Password** provided on the **Current Reservation Screen**.



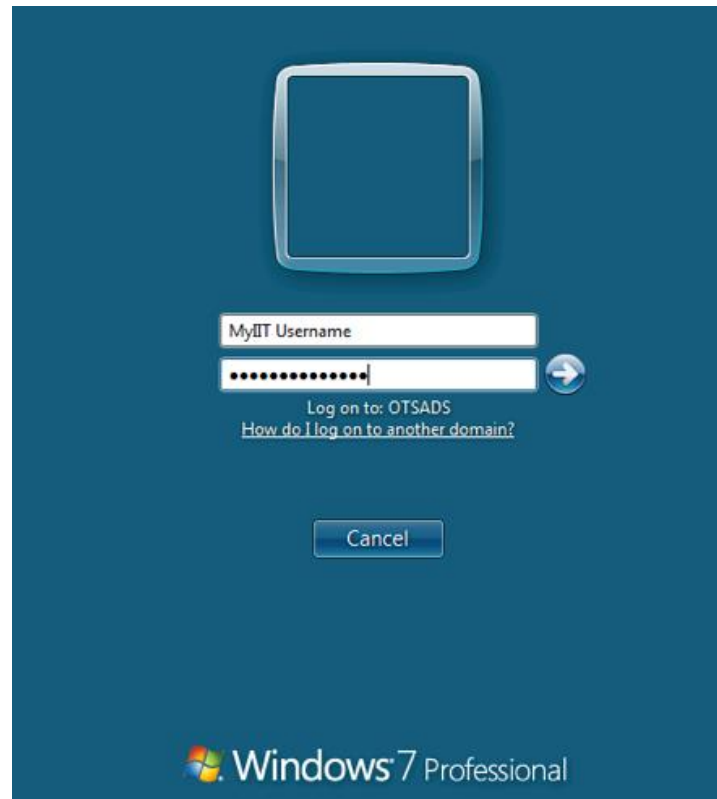
Connecting to Windows Images

Connect to **Windows Virtual Desktops** by either:

- Selecting **“Get RDP File”**
- Opening your **“Remote Desktop Client”** and providing the **“Remote Computer IP address”**



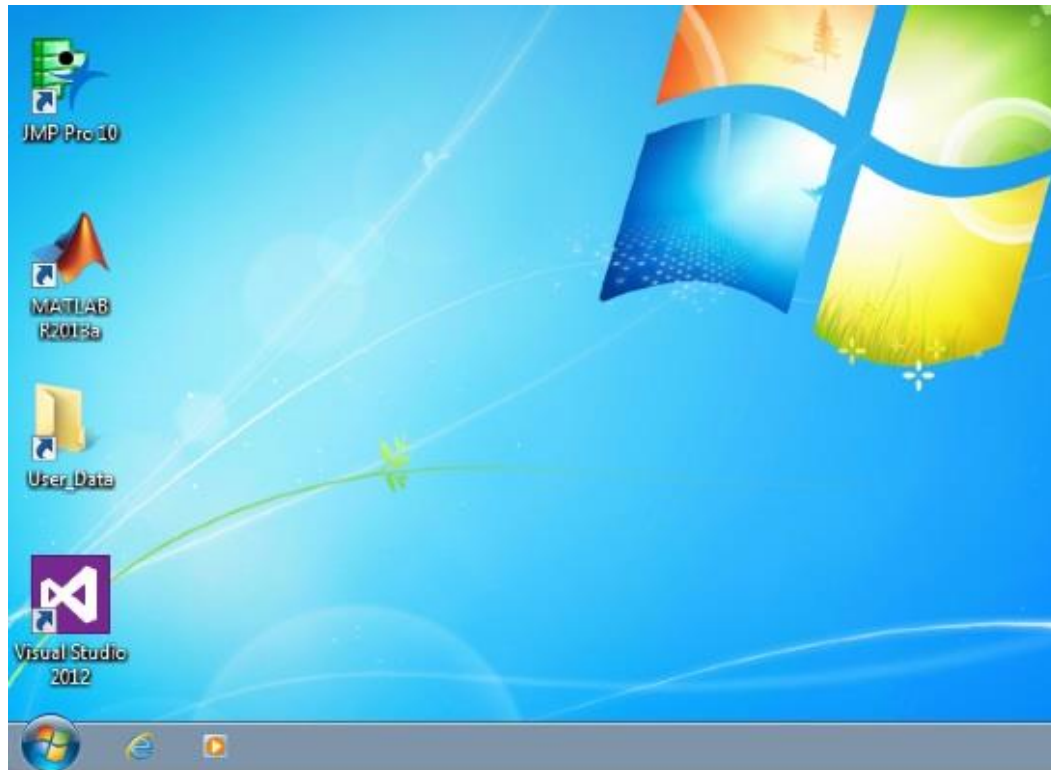
Windows 7 Login Screen



Login with your **MyIIT Username** and **Password**.



The Windows 7 Remote Desktop



Users can change the size of the VCL window size by changing **“User Preferences”** in VCL, or by adjusting settings in their **“Remote Desktop Client”**



Saving Your Work!

Note!

Once a remote session “expires or times out” work not saved to the user’s local computer will be lost and not recoverable.

Whenever working in VCL, it is recommended that users:

- 1) Copy work files from the Local Machine to the Virtual Machine.
- 2) Open, Edit, and Save work on the Virtual Machine.
- 3) Save your work often, and copy saved files back to your local machine often.
- 4) Copy all work files to your local machine before your session expires.

Printing from the VCL

Users can print output to:

- The **IIT B/W or Color Remote Printers** to be printed and collected later at an **OTS Print Release Station**
- A .pdf file using the **PrimoPDF Printer** and saved to their local machine.
- **Local Printers** if available on the virtual machine.

**If you have any questions, please
contact the OTS Support Desk at:**

Phone: 312-567-3375

Online: <http://support.iit.edu>

Email: supportdesk@iit.edu