System Configuration (Do Once)

1. Confirm System Requirements and RVC Network Logon User Credentials:
   a. Laptop has a wireless adapter that is WiFi compliant (WPA and 802.1X) and supports the 802.11g standard frequency. Check the specifications on the wireless card to verify this.
   b. Wireless adapter is installed and functions properly.
   c. Laptop has Windows XP Pro or XP Home, with SP2 installed; or Windows Vista. (Verify this by right-clicking on the My Computer Icon, and select Properties. On the General tab under System it will state the Windows XP version and Service Pack 2 if it is installed.) Most Apple Mac laptops are also supported. Read through step 2 below and then for XP, see step 3; for Vista and Win7, see step 4; and for Macs, see the Mac section of this document for more specific details.
   d. Windows updates are current and firewall enabled.
   e. Anti-virus and anti-spyware definitions are current and actively running.
   f. Use your RVC network access credentials:
      Students: Your Student username ID (ie s0123456) and password as credentials for accessing the wireless network. Students must be a current credit student enrolled in at least one class.
      Employees: Your Employee username ID (ie e0123456) and password.
      Guests: Your Guest username ID (ie g0123456) and password which was provided by an RVC Employee that requested a Guest account on your behalf.

2. Locate an RVC Wireless Network Area and Start Your Computer
   a. Go to a Wi-Fi range at RVC. All locations are now enabled for Employees, Guests and Students. However, wireless signals do not cover every square foot of every location.
   b. Power on your laptop.

3. Configure the Wireless Card for 802.1X Authentication (Windows XP):
   a. If you have a third-party software controlling your wireless network adapter, then you must disable it to allow Windows to control your wireless adapter. Look in the Windows tray in the lower right for an icon for your wireless card manufacturer (ie Intel) and right-click on it and take action to Disable it or select Windows Zero Config. Then, Right-click on the Windows Wireless Network Connection icon in the system tray and select View Available Wireless Networks.
   b. Verify the RVC network is highlighted in the ‘Choose a wireless network’ box, and click on the Connect button. You will receive a message indicating that you are not connected properly, so proceed to the following configuration steps.
   c. With the RVC network highlighted in the ‘Choose a wireless network’ box, click Change Advanced Settings in the Related Tasks box on the left hand side of the screen.
   d. Click the Wireless Networks tab and do the following:
      i. Verify the ‘Use Windows to configure my wireless network settings’ check box is checked
      ii. Click the RVC network in the ‘Preferred networks’ box
      iii. Click the Properties button.
      iv. In the RVC Properties dialog box, click the Association tab and verify the following:
         1. For Network Authentication, select WPA2
         2. For Data Encryption, select AES.
      Or
         1. For Network Authentication, select WPA
         2. For Data Encryption, select TKIP.
   v. Click the Authentication tab and do the following:
      1. Verify the checkbox for Enable IEEE 802.1X authentication.... is checked
      2. Select Protected EAP (PEAP) as the EAP type
      3. Uncheck Authenticate as computer when computer information is...
      4. Verify the Authenticate as guest... checkbox is unchecked
      5. Click the Properties button
         a. Uncheck Validate server certificate in the Protected EAP Properties dialog box
         b. Click the Configure... button, and uncheck the checkbox for Automatically use my windows logon name and password...
   6. Click the OK button.
e. Click the **OK** button.
f. **Click OK** button in the Authentication dialog box and **OK** in the Network Connections window.

### 4. Configure the Wireless Card for 802.1X Authentication (Windows Vista or Win7):

a. If you have a third-party software controlling your wireless network adapter, then you must disable it to allow Windows to control your wireless adapter. Look in the Windows tray in the lower right for an icon for your wireless card manufacturer (ie Intel) and right-click on it and take action to Disable it or select Windows Zero Config. Then, **Right-click** on the Windows **Wireless Network Connection** icon in the **system tray** and select **Network and Sharing Center**.

b. **Click Set up a Connection or Network**.

c. **Click Manually Connect to a Wireless Network**.

   a. **For Network Name**, type RVC.
   
   b. **For Security Type**, select **WPA2-Enterprise / Encryption Type**, select **AES**.
   
   c. **Or For Security Type**, select **WPA-Enterprise / Encryption Type**, select **TKIP**.
   
   d. **Click Next**.
   
   e. **Click Close**.

d. **Click Connect to a Network**

   a. **Right-click** on RVC.

   b. **Select Properties** option

      i. **Select** the **Security** tab.

         1. **For Authentication Method**, select **PEAP**.
         2. Uncheck the **Cache User Info…** box.
         3. **Click Settings** button
         4. **Click Configure…** button

            a. Uncheck **Validate Server Certificate**
            b. **Click OK**

   5. **Click OK**

   ii. **Click OK**.

   c. **Click X** to close window.

e. **Click X** to close Network and Sharing Center window.

### Wireless Connection

1. **Perform Wireless Login**

   When you are in range of a wireless area and you wish to access the WiFi network, you may do so either of the following ways:

   - If no dialog bubble appears over the system tray, **click** on the **Wireless Network Connection icon** in your system tray. A Wireless Network Connection window will appear with the RVC network selected. **Click** on the **Connect** button to connect to the wireless network.
   - If a **dialog bubble** appears over the **Wireless connection icon** in your system tray prompting for login credentials, **click** on the bubble and enter your credentials as described in Step 1: Your **username**, your **password** and RVCNET as the Logon domain, and then **click the OK** button.

   Be patient, and within about a minute, the bubble will then inform you of your connection status and wireless signal status. If you want to check on your connection or wireless signal status at any time, point to the wireless adapter icon in the system tray. Close the window by clicking the X.

2. **Verify Connectivity**

   The laptop should now be connected via the RVC Wireless Network, to the Internet only (for Students and some Guests), as well as the internal RVC Network (all Employees and some Guests). The following resources may be accessed to verify connectivity:  [http://library.rvc.cc.il.us](http://library.rvc.cc.il.us)  [http://www.rockvalleycollege.edu](http://www.rockvalleycollege.edu)
Apple Mac Network Preferences

Note: Be sure to read steps 1 and 2 of the System Configuration section at the beginning of this document for very important information before continuing with steps below.

Requirements:

Airport card: 54G/Extream
Operating System: OS X version 10.4.x or higher (verify OS updates with Software update from the Apple logo menu)
Anti-Virus program: Recommended
Valid RVC network username and password to RVCNET domain

Steps:

1. Locate an RVC wireless network area and start your computer.

2. From your AirPort Icon, verify that your airport card is on.

3. If RVC is not available in your network list, select “other”

4. Enter in the required information:
   - Network Name: **RVC**
   - Wireless security: **WPA Enterprise**
   - User Name: **RVCNET\*(your username, like s0123456, g0123456 or e0123456)**
   - Password: Whatever was provided for your network access.

5. 802.1X Configuration: Automatic

6. Click Continue when prompted to verify certificate.
Trouble-Shooting Tips

If you encounter connection problems, try the following:

- Students must be a current credit student enrolled in at least one class.
- Verify your RVC network logon credentials by using them first on a wired RVC computer in a computer lab.
- If you are in a zone with 'low' signal strength, then move to an area with better signal strength. (Using wireless access is similar to using a cell phone - when the signal strength gets low, it doesn’t work very well or at all, so you need to move to an area where the signal is better). RVC wireless covers about 85% of our building spaces, so it does not cover every square foot of every building.
- Right-click the Wireless Network Connection icon in your system tray, and select the Repair option.
- Restart the laptop and try accessing the wireless network again.
- Shut down the laptop, wait 6 minutes and then turn it back on and try the Wireless Connection steps again.
- If you change your network login password, you will need to use that new password for wireless access.
- Verify that your wireless adapter software driver files are up to date and are made to work with your OS type (ie XP, Vista).
  - First, determine current driver:
    - Click Start, then Right-Click My Computer and pick Properties
    - Click Hardware Tab, then click Device Manager button
    - Locate Network Adapters and expand by clicking on the +
    - Right-click on the wireless adapter and select Properties
    - Click the Driver tab and note the following: exact name of the wireless adapter (at the top, ie Intel etc..), Provider, Date, Version
  - Second, visit the web site of the provider (ie www.intel.com) to check for latest driver available:
    - Navigate to the support or download area
    - Search for the exact name of the wireless adapter
    - If the latest driver from the manufacturer site is newer than yours, then:
      - Download the driver and wireless utility
      - Note the specific instructions for installation and install the driver
- Verify the configuration steps were completed accurately. If you suspect any of the configuration steps need adjustment, it is recommended you remove the wireless network, and re-configure it from the beginning as instructed in the System Configuration section above. For example, in XP, to remove the non-functioning network, do the following:
  1. Right-click on the Wireless Network Connection icon in the system tray and select View Available Wireless Networks.
  2. In the Choose a wireless network dialog box, select RVC network, and click the Change Advanced Settings option in the related tasks pane on the left.
  3. Select the Wireless Networks tab.
  4. Under Preferred networks, select the RVC network, and click on the Remove button.
  5. Click OK.
  6. Go through the System Configuration steps above to re-create the wireless network.
- Report the problem and request assistance
  - If you are a student and are having logon issues, contact the lab monitor in the Main Campus Student Center lab (815 921 1111) or Woodward Technology Center lab (815 921 1108).
  - If you are an employee or guest, then contact your local IT Microcomputer Support Specialist.
  - You may also send email to RVC-IT-Wireless@RockValleyCollege.Edu
  - Include the following information in your report:
    - Your student or employee number
    - The date and time of the event
    - The location where you experienced the event
      - Site (ie Main Campus or Samuelson Road Center)
      - Building (ie WTC or SC)
      - Room (ie 201 or 102)