

Network setup for master / secondary computers – XP Wireless

The Precinct Atlas

To connect or not to connect

The Precinct Atlas software will work whether or not you connect two or more computers at a precinct. Leaving them unconnected is certainly easier, especially if you do not have the technical resources, equipment, or time to set up the computers to be connected. The main advantage of connecting computers is that you will have one set of data from each precinct. All the data for the election will reside on the master computer, and the secondary computer will simply feed off and feed to the database on the master. The benefits of having one set of data include:

- 1) after the election you can upload into I-VOTERS the voter activity for regular voters once from each precinct instead of multiple times
- 2) a voter who has been processed through either the master or secondary computer cannot be processed again through either
- 3) you can get an accurate count of all the regular and provisional voters at the precinct by pressing the Ballot Count button on either the master or secondary computer, without having to add the numbers from multiple computers

Step 1 – connecting multiple computers in a precinct

If you decide to connect the computers in a precinct, you can do so in one of the following three methods.

Wireless connection

You will need to have a Wireless Access Point (WAP). Linksys is recommended but any brand will do. Follow the manufacturer's instructions on setting up the WAP. It is also recommended that you turn on wireless security and set a password. By doing these steps you will ensure that data is encrypted between the laptops at the precinct.

Wired – hub connection

You will need a switch or hub with enough ports available to connect the master and secondary computers at the precinct, (for three computers at a site, you will need a 3-port hub or more for that site). Most newer switches will be sufficient for this purpose; follow the manufacture's instructions for connecting the computers.

Wired – crossover cable connection

A crossover cable will work to connect two computers at a precinct; if you need to connect more than two computers, you will need to use one of the other methods above. Also, a crossover cable works best when the two computers are physically close to each other. Plug the ends of the crossover cable into the network ports of each computer.

Step 2 – security settings for master and secondary computers

- 1) Click **“Start”**
- 2) Click **“Settings”**
- 3) Click **“Control Panel”**
- 4) Double-click **“Windows Firewall”**
- 5) Click **“Off (not recommended)”**
- 6) Click **“OK”**
- 7) Close the window

Step 3 – connecting the access point

- 1) Press and hold the reset button located on the back of the AP (access point) until the power light blinks
- 2) Plug the blue network cable into any of the four network ports located on the back of the AP
- 3) Plug the other end of the blue network cable into the network port located on the master laptop
- 4) Restart the laptop

Step 4 – master computer setup – wireless

- 1) Open a web browser
- 2) Type in the address bar **“192.168.1.1”**
- 4) A window will pop up asking for a user name and password
- 5) Leave Username blank
- 6) After **“Password:”** type **admin**
- 7) Click **“OK”**
- 8) Linksys setup screen will pop up
- 9) Scroll down to network address server setting (DHCP)
- 10) After **DHCP Server:** Click on **“Disable”** tab
- 11) Click on **“Save Settings”**
- 12) A screen will pop up that says **“Settings are successful”** Click **“Continue”**
- 13) Click the **“Wireless”** tab
- 14) Click the **“Wireless Security”** tab located under **“Wireless”** tab
- 15) After **“Security Mode:”** click **“WPA personal”**
- 16) After **“WPA Shared Key:”** type a password that you create. The password must be between 8 and 63 characters long. You will need to remember this password for later.
- 17) Click **“Save Settings”**
- 18) A screen will pop up that says **“Settings are successful”** Click **“Continue”**
- 19) Click the **“Security”** tab
- 20) Uncheck: **“Block Anonymous Internet Requests”**
- 21) Click on **“Save Settings”**
- 22) Close the web browser
- 23) Click **“Start”**

- 24) Click **"Settings"**
- 25) Click **"Control Panel"**
- 26) Double-click **"Network Connections"**
- 27) Right-click **"Wireless Network Connection"**
- 28) Click **"Properties"**
- 29) Click the **"General"** tab
- 30) In the **"This connection uses the following items:"** window, double click **"Internet Protocol (TCP/IP)"**
- 31) Click **"Use the following IP address:"**
- 32) After **"IP address:"** type **192.168.1.100**
- 33) After **"Subnet mask:"** type **255.255.255.0**
- 34) Click **"OK"**
- 35) Close the window
- 36) Disconnect blue cable from the laptop

Step 5 - search for wireless connections

- 1) Click **"Start"**
- 2) Click **"Settings"**
- 3) Click **"Control Panel"**
- 4) Double-click **"Network Connections"**
- 5) Click **"Wireless Network Connection"**
- 6) Click **"View Available Wireless Networks"** located on the left task bar
- 7) Double click **"Linksys Wireless Network"**
- 8) Network Key window will pop up
- 9) After **"Network key:"** type in the password that you created earlier
- 10) Confirm the password by typing it again
- 11) Click **"Connect"**
- 12) Linksys will have the word **"Connected"** by it
- 13) Close all screens

Step 6 – secondary computer setup - wireless

- 1) Click **"Start"**
- 2) Click **"Settings"**
- 3) Click **"Control Panel"**
- 4) Double-click **"Network Connections"**
- 5) Right-click **"Wireless Network Connection"**
- 6) Click **"Properties"**
- 7) Click the **"General"** tab
- 8) In the **"This connection uses the following items:"** window, double click **"Internet Protocol (TCP/IP)"**
- 9) Click **"Use the following IP address:"**
- 10) After **"IP address:"** type **192.168.1.101**

- 11) After "**Subnet mask:**" type **255.255.255.0**
- 12) Click "**OK**"
- 13) Close all screens

Step 7 – search for wireless connections

- 1) Click "**Start**"
- 2) Click "**Settings**"
- 3) Click "**Control Panel**"
- 4) Double-click "**Network Connections**"
- 5) Click "**Wireless Network Connection**"
- 6) Click "**View Available Wireless Networks**" located on the left task bar
- 7) Double click "**Linksys Wireless Network**"
- 8) Network Key window will pop up
- 9) After "**Network key:**" type in the password that you created earlier
- 10) Confirm the password by typing it again
- 11) Click "**Connect**"
- 12) Linksys will have the word "**Connected**" by it
- 13) Close all screens

Step 8 – configure the secondary computer for SQL connection

- 1) On the secondary computer only, click "**Start**"
- 2) Click "**Settings**"
- 3) Click "**Control panel**"
- 4) Double-click "**Administrative Tools**"
- 5) Double-click "**Data Sources (ODBC)**"
- 6) Click the "**System DSN**" tab
- 7) Click "**Configure**"
- 8) Under Server replace the period in "**.\SQLEXPRESS**" with **192.168.1.100**
- 9) It should read "**192.168.1.100\SQLEXPRESS**"
- 10) Click "**Next**"
- 11) If a message box comes up asking you whether to overwrite, click "**Yes**"
- 12) Click "**With SQL Server Authentication using a login ID and password . . .**"
- 13) After "**Login ID:**" type "**sa**"
- 14) After "**Password:**" type "**sa**"
- 15) Do not change anything else on this screen
- 16) Click "**Next**"
- 17) Check the box next to "**Change the default database**"
- 18) Select "**iavoter**" from the drop-down list
- 19) Do not change anything else in this window
- 20) Click "**Next**"
- 21) Make sure that "**Perform translation for character data**" is checked
- 22) Click "**Finish**"

- 23) Click "**Test data source**". You should get a "successful" test of the connector. If you get a test failure, double check your IP address settings and retest
- 24) Click "**OK**" after you have a successful test
- 25) Click "**OK**" again
- 26) Click "**OK**" again
- 27) Close the window