

# Network Setup and Compare

(effective as of version 2.0)

This paper is an explanation of how data, licenses, and configuration information are shared in networked systems running multiple copies of *ForScore*. It assumes you have a basic knowledge of network hardware, connectivity, permissions, etc., can use command line switches and create shortcuts, and can share and map drives.

One hi-tech user wrote a step-by-step setup description for how he networks computers to use *ForScore*. His text is reprinted by permission beginning on page 10.

If you are using **Windows Vista**, please read the supplemental information beginning on page 8 and the Vista-related information in the main documentation.

Networked data entry with *ForScore* involves two considerations – licenses and data (both active data and background data backups.)

Prior versions of *ForScore* offered the use of a centralized license server for large matches. In that score shacks are often hostile environments, and people often don't get equipment networked together until the day of the match (bad! bad!!), that option has been discontinued. Networked computers need to use dongles or have a software activation code used on each computer to enable a license.

*ForScore* normally reads data files from a folder called DATA. By default, that's **c:\Program Files\ForScore\DATA**. On a **Windows Vista** computer, the default is **C:\ForScoreFiles\DATA**. If you're using multiple computers to enter data, they will all be writing to the hard drive of the 'master' or 'server' computer. The data path will thus vary, as discussed later.

The files in the **DATA** folder can be freely copied from one *ForScore* computer to another (providing they're all running the same version of the software). You may or may not want to copy the **config.tps** file. Most of the choices you specify in **Program Preferences** are stored there (see page 8). The remaining files in the DATA folder need to be **copied as a group**. See the main documentation paragraphs on the Merge Utility for an explanation. You can copy the data files as a group to and from the **FSAdmin** utility to allow someone to set up a large match on a computer that does not have a license for *ForScore*. See the main documentation.

## License types

*ForScore* supports three types of licenses:

**Demo** – this is created when the software is first installed on a machine, and runs for up to 45 days. Demo licenses cannot be networked as clients or servers.

**Standalone** – This is the normal license purchased and installed on a computer. It is tied to the computer's hardware and enables any optional features the user may have purchased. You can purchase a permanent license or temporary licenses for extra computers for a large match.

**Dongle** – This is a license contained on a USB hardware 'dongle'. It enables *ForScore* to be run on any computer on which the necessary software and drivers are installed. It's possible to put the *ForScore* installation on a USB thumb drive and plug both the drive and dongle into a computer to have a truly portable installation (although each host computer must have the USB dongle drivers installed first.) Dongles are available with permanent licenses or with temporary licenses for use in large matches.

## Command-line switches

You want to be using the same DATA folder if both computers are working with the same data files. You will not want both computers to be using the same LICENSE folder.

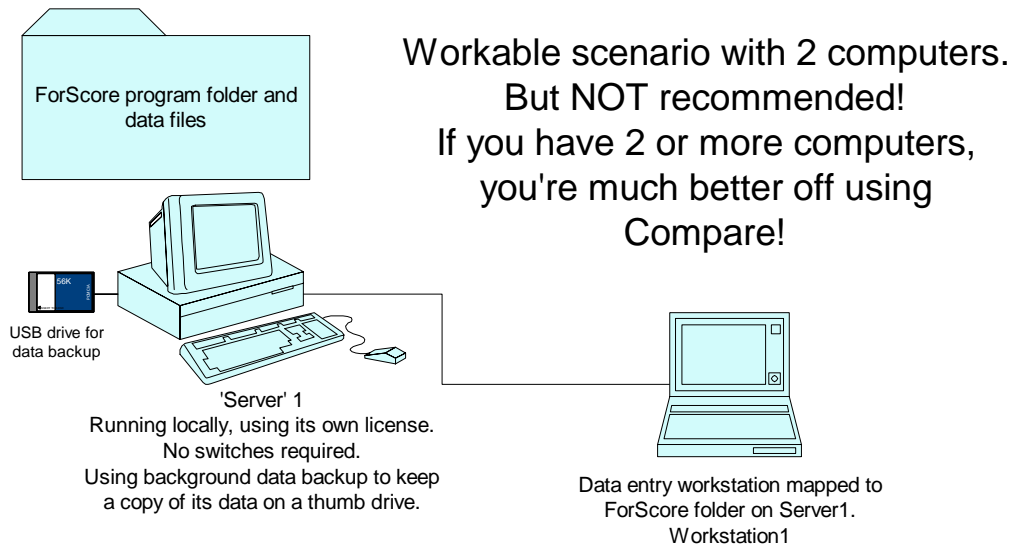
**/local** tells a client computer to use the license on its own hard drive, keyed to its hardware, when the program is being run from a network share.

**/dongle** tells a computer to get its license from a hardware dongle plugged into one of its USB ports. USB drivers must be installed first. Consult the help file.

**/data** tells a computer to use the data path location stored in its registry, regardless of the location of the *ForScore* program files it is running. This must be configured using the Data tab in Program Preferences or by using **datapathset.exe**. Consult the main documentation.

**/data1 /data2 /data3** or **/data4** provide additional data path options. These are configured using the **datapathset.exe** utility that you'll find in the program folder.

# Scenarios Using Two Computers



- Run ForScore from the server share. Use the workstation's license by starting it with the **/local** switch.
- Run ForScore from the server share. Use the workstation's license by starting it with the **/dongle** switch.
- Run ForScore locally. Use the **/data** switch to point it at the DATA folder shared on the server. Use the **/dongle** switch if appropriate.

## Scenario 1, two workstations, not using Compare

In a simple example using two computers to enter scores for a match ( Server1 and Workstation1 from the illustration), you would create a share on Server1 for the **ForScore** folder. We'll assume that you name the share **ForScore**. (If you're lazy and have shared the entire drive rather than the **ForScore** folder, adjust paths and commands appropriately.)

Each computer will be entering half of the score sheets.

On Workstation1 you'll map a drive to the **ForScore** share on Server1. (You can do this through the Windows interface, or with a batch file with the line

```
net use z: \\server1\forscore ).
```

### A. Running ForScore from the Server

In this scenario, you want to start the program from Server1 and use the DATA folder on Server1, but you want Workstation1 to use its own license.

In this case, you'll modify the shortcut on Workstation1 to use a command line switch telling it to use its own LICENSE folder rather than Server1's.

If you have a software license on Workstation1, use

```
z:\forscore.exe /local
```

If you are using a dongle on Workstation1, use

```
z:\forscore.exe /dongle
```

If you are running **Windows Vista**, you will need to set your data path manually as well, either in **Program Preferences** or using the **datapathset.exe** utility. Assuming you're using the **DATA** location set in **Program Preferences**, your shortcut would use

```
z:\forscore.exe /local /data or z:\forscore.exe /dongle /data
```

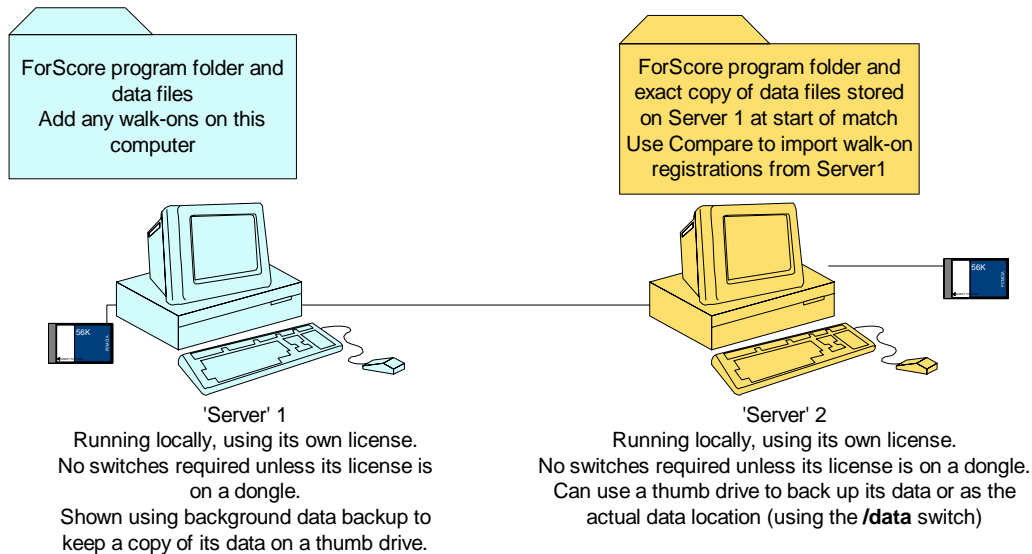
If you're using the **/local** switch, **ForScore** will look at the Registry on Workstation1 to find the path to a LICENSE folder on Workstation1. That path normally points to the local folder in which **ForScore** was first run on a computer. If for some reason your LICENSE folder on Workstation1 has been moved (perhaps you've purchased a temporary license with additional modules), you can specify its location by clicking **Program Setup | Program Preferences | License**. (For more information, open the documentation and read **Details – Going Beyond the Tutorial | Program Setup | Program Preferences – License** )

### **B. Running ForScore locally**

In this scenario, you will run the software from Workstation1's hard drive, but use data shared on Server1. First map a drive on Workstation1 pointing at the DATA folder you're sharing on Server1. On Workstation1, click **Program Setup | Program Preferences | Data** and browse to the data file location on the server, or use **datapathset.exe** to set one of the other alternate data paths.. Be sure to click the **Set** button before clicking **OK**. Then start **ForScore** using the **/data /data1 /data2 /data3** or **/data4** switch (and the **/dongle** switch if applicable).

**But please – do not use this scenario!** I realize it seems efficient to split data entry up this way, but you're relying on 100% accuracy on the part of your data input folks. If you have two or more computers, you will save yourself heartburn and add 22 years to your life by using Compare instead.

## Recommended scenario using two computers and Compare



### Scenario 2, two workstations, using Compare

In this example, two computers are networked together.

Each computer is entering scores for *all* score sheets. This sounds like a lot of extra work, but it's really not. Each operator can enter scores quickly and doesn't have to go blind double-checking. It's actually faster and less fatiguing.

During the scoring or after the match, the Compare procedure is run to find any discrepancies (errors) between the two entry systems. (Read the documentation section under **Details – Going Beyond the Tutorial | Optional Modules | Compare Module**)

In that data is being entered on two machines, each machine needs to have *ForScore* installed.

The match data files should be created on one of the machines. (Or it can be created on a different computer using the FSAdmin.exe utility program.) At the start of the match, the contents of the DATA file needs to be *identical* on both computers. If you have any walk-ons, add them on Server 1. Use Compare on Server 2 to import the additional shooters into its database.

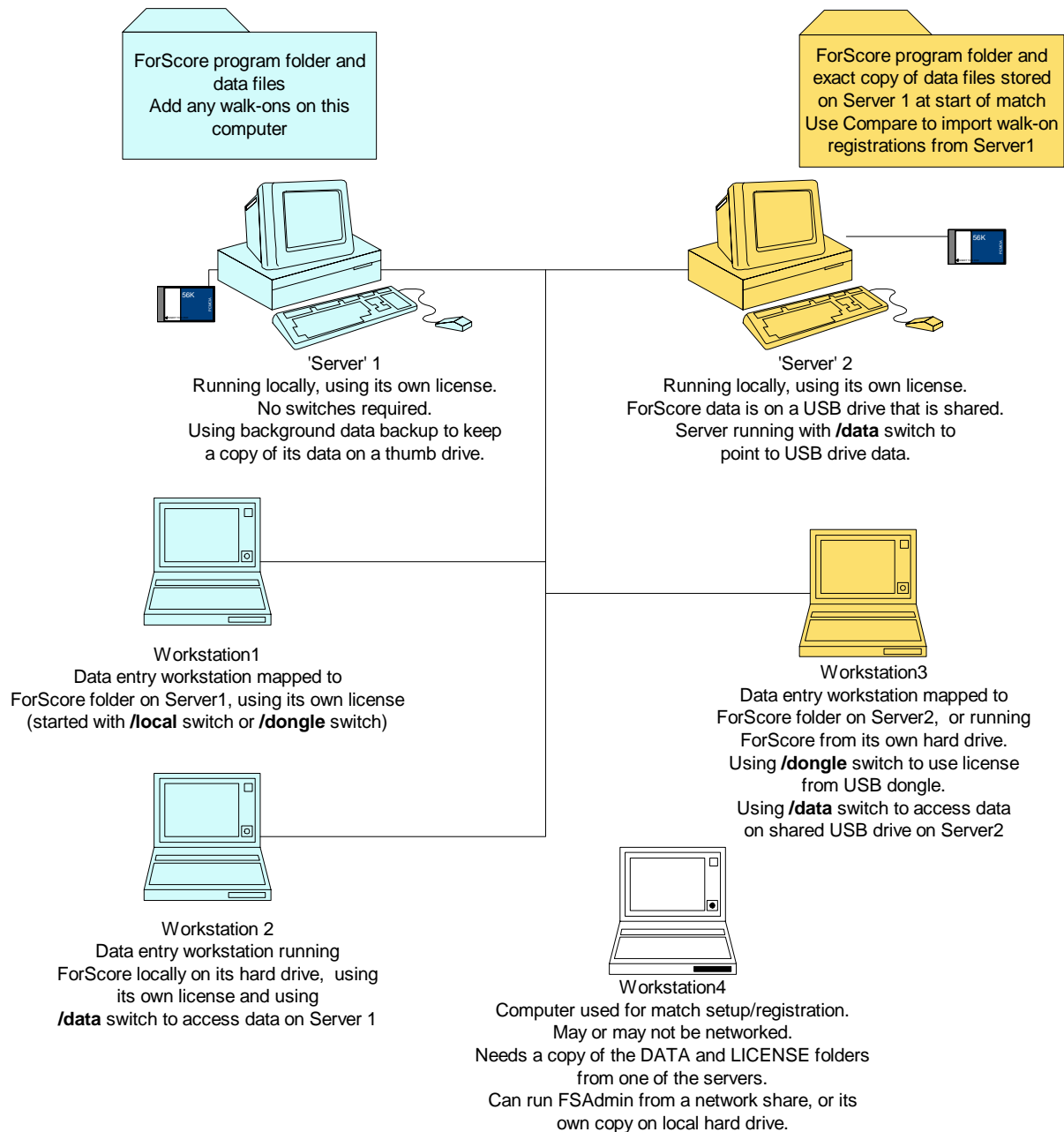
At least one of the computers needs to have the optional Compare module activated.

Start *ForScore* on each computer normally (or with the /dongle switch on any machine that's using a dongle license.) Each computer is using its own DATA and LICENSE folders.

Enter all shooter stage results on both computers.

During data entry and/or at the end, click the Compare button on whichever computer has the Compare module installed. Follow the instructions in the documentation to verify that the data is identical on both systems. Versions of *ForScore* from 1.41 onward permit you to edit data discrepancies on either computer from within the Compare module.

# Scenarios Using More Than Two Computers



This diagram illustrates some alternative possibilities for data and license configuration. One server is using a USB drive for data backup, the other is actually keeping its match results on a USB drive that it's accessing using the **/data** switch.

Workstation1 and Workstation2 illustrate two ways of using a local license on a computer to work on data on a server. One is getting program and data from Server1, the other is running the program locally and just using the data folder shared on Server1.

In this scenario, Workstation 3 it may not have the **ForScore** software installed at all, as it is running the program from one share on Server2 and accessing data from another share on Server2. For it to be able to use the dongle, you'll need to run the FSdongle.exe utility to install

the dongle drivers. FSdongle.exe is present in the *ForScore* program folder of any full installation of *ForScore* version 1.34 or later. It is a self-contained program that does not require any other DLL files and can be run from a floppy or a thumb drive if you wish. Consult the main help file for more information on dongle drivers.

If any of your computers are running **Windows Vista**, be sure to read the supplemental information beginning on page 8. For a Vista client machine, you will need to use one of the **/data** command-line switches.

## **Emergency Reset**

While not strictly a part of network setup, I'll mention these here. There are two batch commands you can invoke from the main score entry screen.

If for some reason you want to force *ForScore* to recalculate an entire match, hold the **Ctrl+Alt+Shift** keys and press **C**. This adds all the stage scores to the total, but does not recalculate each stage.

If for some reason you want to reset all scores to zero hold **Ctrl+Alt+Shift** and hit **R**. The only time I've really wanted this was at a match last year where a number of scores had been entered before the stats crew got around to copying the database onto the other Compare computer and they didn't have a blank copy of the database.

Needless to say, there's no "oops" button... so be sure you've backed up your data.

## Configuration, Data, and Windows Vista

*ForScore* stores configuration information in three locations. Version 2.0 changes the details of this slightly.

1. **Config.tps** is the main configuration file. This is stored in the **DATA** folder along with the other data files used by the software. It contains most common configuration items.
2. **INI files** are used to store machine-specific information. In prior versions of *ForScore*, these were stored in the program folder (by default, **c:\program files\ForScore**) They are now stored in the **DATA** folder
3. **The Windows Registry** is used to store a few items that don't fit well into either of the other locations.

### Networking Implications

Ordinarily, you won't need to be aware of this information. If you are using *ForScore* in a multi-computer network setting, though, it is important to understand.

In a multi-computer score entry situation, there are three basic ways of proceeding

1. The client runs *ForScore* from its hard drive, but points its data location to a share on the server
2. The client runs *ForScore* from the server and automatically uses the server for its data location. This, however, **will not work correctly with Vista client machines**.
3. The client runs *ForScore* from the server and specifically points its data location to a share on the server. This **will work correctly with Vista client machines**.

### config.tps

If you have networked two or more computers to work on the same set of data, they're obviously reading and writing to the same set of files. (I'm **not** talking here about two computers just being used for **Compare**.)

That means they will both (or all, if more than two) be using the settings defined in **config.tps**. For most configuration items - club name, report format preferences, **Compare** alternate screen color, etc. - this is appropriate.

### INI files

Some items, however, are inherently specific to a computer.

For example, if I've specified a custom graphic for web results, I've had to tell *ForScore* where that logo is on my hard drive. There's a good chance that that graphic doesn't exist on the server and client machines in exactly the same location. Similarly, *ForScore* remembers window positions; those may differ if the different machines have different size monitors and resolution. Those parameters along with the last choices you've made when creating web results and various printouts are stored in INI files.

*ForScore* creates several INI files - one specifically for the custom logo graphic, another for the last date you checked for program updates; a third for all most configuration items that I've chosen to store as INI items.

- In order that multiple machines can access their INI files when they're running from a server and/or getting their data from the server, the INI file names are customized. The name begins with the computer's NetBIOS name. So for example, with my laptop that's named **P4X**, the INI files it will use are named **P4X-forscore.ini**, **P4X-graphic.ini**, and **P4X-update.ini**.

**NOTE:** If you are used to the INI settings on your machine and you now want to connect it to a server, you will want to copy those INI files manually to the data folder you are sharing on the server.

### **Windows Registry**

A few items are stored here that need to be accessed before *ForScore* is up and running.

- The default program location, used to tell my installer programs where to find *ForScore* when you install an update to the software.
- Alternate data file locations, used when you start *ForScore* using **/DATA /DATA1 /DATA2 /DATA3** or **/DATA4** command-line switches (set in **Program Preferences** and with the **datapathset.exe** utility program.)
- The folder location you have specified to do background data file backups while you're entering scores.
- The license file location you specify when you start *ForScore* using the **/local** switch.

Because these need to be stored in a common location (not dependent on which user account is logged onto the machine), you need to be logged onto your computer as an administrator.

In addition, **on a Vista machine** you must be running the program as an administrator.

When you run **datapathset.exe**, it will bring up the elevation screen and require you to be running with full administrator privileges.

For the items that are set directly in **Program Preferences** in *ForScore*, however, you will need to right-click your *ForScore* shortcut and specify **Run as administrator**.

### **Conclusion**

These networking scenarios are only examples, of course.

If they don't meet your requirements, or you have other questions, please contact Beach Bunny Software technical support at 805.773.1006 (Pacific time) or e-mail [support@beachbunnysoftware.com](mailto:support@beachbunnysoftware.com)

## WT's Network Setup Instructions (Thanks, WT!)

Establishing a Local Network (wired) connection for ForScore using Vista.

This document will give you the basic steps for configuring your computer to connect to a “private” network. It is not a substitute for general networking knowledge and don't assume when you are finished that you even come close to understanding networking. This documentation will only create a situation that allows for connecting two computers via TCP/IP. **BE SURE TO TAKE NOTES OF THE CURRENT SETTINGS SO YOU WILL KNOW WHAT TO DO TO RETURN YOUR COMPUTER TO NORMAL OPERATION.**

Note: Use the IP addresses listed below unless you understand how to generate an IP address on your own.

Note: most computers use a function called “DHCP” to acquire a network address along with information needed to work with the network. When working with ForScore it is much more advantageous to use a static IP address without the additional overhead required for the Internet. This procedure will turn off the DHCP functions and enable file sharing for your computers.

Note: this procedure assumes that you are 1) not connected to the Internet and 2) you have established a working network connection between the two systems via a crossover cable (not recommended) or a hub/switch. If you need help doing this please contact your local computer guru.

### Vista:

7. On your desktop, right click on the Network icon and select properties.
8. Under tasks on the network and sharing screen, click on “manage network connections”.
9. Select the device for “local area connection” and click on it. (note: if the “local area connection” is disabled the first time you double click it will enable. You must double click it a second time.
10. On the “local area connection status” screen, click on the properties button.
11. When the networking window opens, locate the entry for “Internet Protocol Version 4” and select it by clicking it once and then click the properties button.
12. When the “Internet Protocol Properties Version 4” panel opens you will see selections for “Obtain an IP address automatically” selected. This is the normal condition. Click on the “use the following IP address” button. This will “un-gray” the IP address information fields.
13. In the IP address field type the following information:
  1. For the local:
    1. 192 168 100 101
  2. For the remote:
    1. 192 168 100 102
  3. The subnet mask should default to 255 255 255 0. If it does not then enter it as such.
  4. The entries for the DNS servers should be blank.
14. Click on the OK button.
15. Click on the CLOSE button.
16. Click on the CLOSE button
17. On the Network Connections Panel, click on the X in the upper right hand corner.

18. If you are running the Windows Firewall you will need to turn it off on the REMOTE computer.
  1. On the remote computer, on the network and sharing panel, under tasks, at the bottom, click on “Windows Firewall”.
  2. On the firewall panel, at the upper right under tasks, click on “turn Windows firewall on or off”.
  3. On the “Windows Firewall Settings” panel, select “Off (not recommend)”. It is OK to do this here because you are not connected to the Internet. If you are then get off the Internet before doing this.
  4. Click the OK button.
  5. Click the X in the upper right hand corner of the Windows Firewall panel.
19. On the Network Control panel, in the middle of the screen, under file sharing and discovery, make sure the network discovery and file sharing buttons on green (mean they're on). The other entries can be safely ignored as long as you are not exposed the Internet.
20. Click the X in the upper right hand corner of the network control panel of the screen.

**XP:**

1. On your desktop, right click on the My Network Places icon and select properties.
2. Locate the “Local Area Connection” entry under the “LAN or High Speed Internet” section and click on it.
3. When the “local area connection status” panel opens click on properties.
4. On the local connection properties panel, under the your connection uses the following, scroll down until you locate the “Internet Protocol (TCP/IP)” entry. Click on it and then click on the properties button.
5. When the “Internet Protocol Properties Version 4” panel opens you will see selections for “Obtain an IP address automatically” selected. This is the normal condition. Click on the “use the following IP address” button. This will “un-gray” the IP address information fields.
6. In the IP address field type the following information:
  1. For the local:
    1. 192 168 100 101
  2. For the remote:
    1. 192 168 100 102
  3. The subnet mask should default to 255 255 255 0. If it does not then enter it as such.
  4. The entries for the DNS servers should be blank.
7. Click on the OK button.
8. If you are running the Windows Firewall you will need to turn it off on the REMOTE computer.
  1. On the remote computer, on the “Local Connection Properties” click on the advanced tab.
  2. Click on the settings button next to “Windows Firewall.”
  3. On the “Windows Firewall Settings” panel, select “Off (not recommend)”. It is OK to do this here because you are not connected to the Internet. If you are then get off the Internet before doing this.
  4. Click the OK button.
9. Click the OK button.
10. Click the close button.

At this point your computer should be configured to share or connect to a share.

On the remote computer using windows explorer locate the data directory under ForScore's home directory. This will vary on the type of O/S that you are using so refer to the ForScore documentation to locate this information.

1. When you have located the ForScore “data” directory right click on it and select “share” from the menu.
2. If the checkbox for “read only” is checked then click once on it and if the dialogue box requesting that this attribute be changed for the underlying directories and files should be changed click yes and click the OK button.
3. When the properties panel is displayed click the “advanced sharing” button.
4. Click the checkbox to share this folder. Leave the name as “data” in the sharename box.
5. Click the “permissions” button.
6. The “permissions” panel will be displayed. Under the permissions for “everyone” click all the boxes (full control, read, change).
7. Click the OK button.
8. Click the OK button.
9. Click the OK button.

At this point the remote computer should have its data directory shared and ready for connections from the local computer.

On the local computer using windows explorer do the following:

1. After opening windows explorer click on the “tools” option on the menu bar and select “map network drive”.
2. In the folder name type the following “\\192.168.100.102\data” without the quotes.
3. Unselect the box marked “reconnect at logon”.
4. Click the “finish” button.

**Resetting a system** that has been configured with a static IP address for ForScore:

Local System:

1. Locate the “Network” icon on the desktop and right click on it.
2. From the menu that drops down from the icon, select properties. This will open the Network and Sharing Center.
3. In the panel on the left of the Network and Sharing Center, click on the “Manage network connections” link. This will open the “Network Connections” section.
4. Double click on the “Local Area Connection”. This will open the “Local Area Connection” properties display.
5. The items that are used for this Network connection will be displayed in the window. Double click on the “Internet Protocol Version 4 (TCP/IPv4) line in the window. This will open the “Internet Protocol Version 4 (TCP/IPv4) properties window.
6. Click on the “Obtain an IP address automatically” setting. This should “gray” out the rest of the “use the following IP address:” info that was supplied above.
7. Click OK to close the window.
8. Click OK to close the Local Area Connection Properties window.
9. Close the “Network Connections” Window. (X in the upper left hand corner.)

10. Close the “Network and Sharing Center” Window. (X in upper left hand corner.)  
This completes resetting your system to use DHCP.

Remote System:

1. Locate the “data” folder in ForScore's Folder, right click, select “share” from the drop down menu.
2. Click the “advanced sharing” button.
3. Uncheck the “share this folder” check box.
4. Click OK.
5. Click Close.
6. Proceed to step 1 in “Resetting a system that has been configured with a static IP address” above.