

GAMEVIEWER SERVER\CLIENT SOFTWARE

Game Server

Game Server Software CD

A Game Server Software CD is packed with the Master GameViewer. Run this CD in the Scoring computer. Open the CD in Windows Explorer, and click on the GAMESERVER SETUP Icon. If the Scoring computer does not have a CD drive, copy the setup folder to a floppy disk and run from the floppy drive.

The Server Software will install (it takes about a minute). A green and gold GV “GameServer” Icon will appear on your Desk Top.

Double clicking the GV Icon will bring up the GV setup screen. (A smaller green and gold GV Icon will appear in the System Tray located on the bottom right corner of the Scoring computer next to the time clock)

When you complete the setup, you can minimize the setup screen. **Do not close (X) the screen**, this will close GameViewer.

If you close GameViewer, double click the green and gold Game Server icon on Desk Top, and GameViewer will restart, and the GV icon will re-appear in the System Tray.

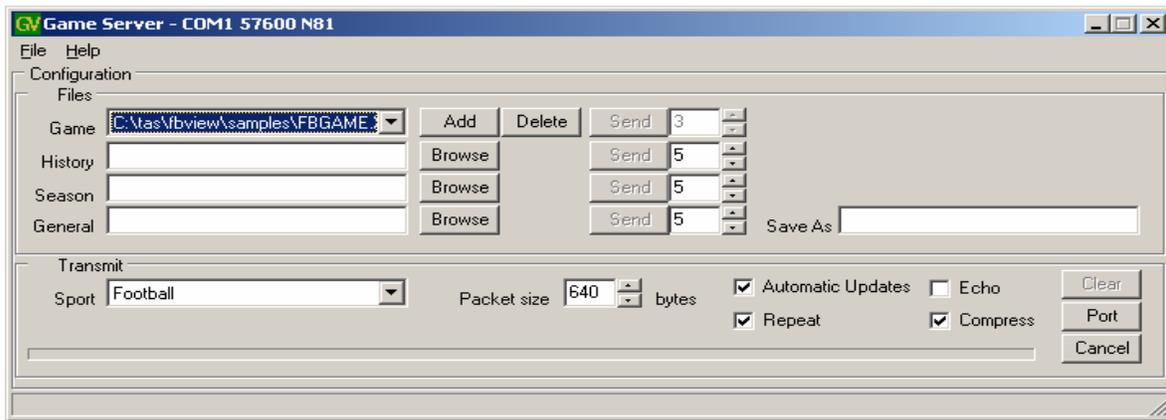
When you are ready to run GameServer, make sure the Master unit is attached and turned on, then click the Game Server icon on the Desktop.

Game Viewer Server/Client File transmitter

The Game Viewer Server-Client software package has been designed to automate Stat Crew game file transfer. It can be configured to automatically transmit a file via radio attached to a serial port. The user has the ability to set several configuration values to facilitate communications.

Game Server

Attach and turn on the Master unit before activating the Game Server icon. All detailed configuration options are located on the Game Server setup screen (double click the green and gold GV icon in the System Tray, bottom right corner next to the time). Once the GameServer software is started, it will immediately transmit test data (that is displayed in the scroll box located in the bottom left corner of the GameViewer remote terminals) until you transmit a game file. At this point normal operation logic will begin (described later). The user can define career, season, and a list of Game files to be transferred.



The Repeat box should not be checked for game time use. Repeat is for test purposes or for the rare case there is significant radio interference and Remotes are not able to receive updates normally.

The Game, Career (or history) and Season files should be sent manually (one time prior to the start of the game) via their respective send button. The server will repeat the transmission the number of times set in the box next to the Send button. This is to help ensure that all clients receive the entire file. Only the active Game file will be sent when the Send button is clicked or monitored for automatic updates.

If the Repeat box is checked, then the Send option for the Game files is disabled and the file will be transmitted continuously, not just when an update is detected. **Leave the Repeat box unchecked for game use. Repeat is used only for test purposes.**

A General transmission option is available should the need arise to send a non-game file to the client, such as program upgrades.

Configuration

The GameServer will maintain the list of files to transmit for each sport that is configured via the ini file. **Do not modify ini files.** Please call StatView Technical Support if a situation arises where we need to change GV ini files.

The Sport window defines which sport program to run and maintain. For example a basketball configuration:

```
[Basketball]
Channel=16
Games=4
GameDestination =c:\GameFiles\game.xml
HistoryDestination=c:\GameFiles\history.xml
YTDDestination=c:\GameFiles\ytd.xml
History=c:\tas\bbview\samples\hcar.xml
YTD=C:\tas\bbview\samples\hseas.xml
Game1=C:\tas\bbview\samples\bbgame.xml
Game2=C:\tas\bbview\samples\hcar.xml
Game3=C:\tas\bbview\samples\hseas.xml
Game4=C:\tas\bbview\samples\VSEAS.XML
```

Details show basketball is set for radio channel 16, is maintaining 4 game files and has both a home team career and season file defined. There is also career and season file destination files for the visiting team, when used. The five destination files and the radio channel are not modifiable from the User interface.

Each time the sport selected is changed to a new sport, the GameServer will change the radio channel and the associated files.

Since radio reception can vary, the option of varying packet sizes is available. The current minimum is 128 bytes with a maximum packet size of 1024 bytes¹. Packet sizes should be left at the default setting, but can be made larger to increase speed, or smaller to improve reception. The Compress box should be checked for game time use.² An option to echo outgoing data is available for debugging/field testing.

To configure the serial port, click the Port button, and select the proper serial port. You must select the serial port on the Scoring computer that GameViewer is using. The drop down arrow in the Com port window will show all com ports available. If you are not sure which com port to use, try the first com port available, if GV does not connect, switch to another com port and retest. **If the proper com port does not work, it could be in use or locked out by another program, such as TASCOMMS32, AOL or a modem.** If this happens, either close that application or switch to another physical serial port and reboot the Scoring computer. AOL, if running, will prevent the radio from changing sports.

¹ . In house testing at The Development Works found that overhead from packet headers had a noticeable effect on transmission at packet sizes less than 640 bytes

² The necessary components for compression are provided with the setup.exe

If you are also running Dumb terminals or StatView wireless terminals running TASCOMMS32, they must use a different serial port, not the same serial port used by GameViewer. If your Scoring computer has only one physical serial port, you can use a USB port with a USB to Serial Adaptor. Serial Adaptors should be installed using the set up disk provided with the Adaptor, do not use default Windows drivers.

After initial setup, the proper com port and all other setting should be default. It is important to note, that **Hardware flow control should be selected**, Software control is not checked. **Do not change Baud rate, Parity, Data bits or Stop bits, unless instructed to do so by StatView Technical Support.** An option to restore all defaults can be found in the File Menu, the Server will ask for confirmation before performing this action.

The required settings on the “port” configuration are;
Com port = **The com port you are using on the Scoring computer.**
Baud rate = 57600
Data bits = 8
Parity = None
Stop bits = 1
Flow control = **Hardware is checked**, Software in not checked.

Note: USB to Serial Adaptors must be installed using the drivers provided by the Manufacturer. Generic Windows drivers do not always work properly.

Game Day Setup

Stat Crew Scoring Program

Open the Stat Crew **scoring** software for the sport to be run. Set up the new game and save. **Make sure options are set to transmit the game files after each play.** “connect comms” must be activated in **Baseball** scoring. Refer to the Stat Crew Software manuals for instructions.

Stat Crew Reports Program

Open the Stat Crew Reports program for the sport to be run. Select the current game from the Games List. The Directory and game will display in the Reports setup screen. If the current game does not show up in the Games List, you may need to change directories or you did not save the game in the Scoring Program. Please refer to Stat Crew manuals for instructions on setting up the Reports Program.

Click the **Live** tab, then **Live Setup**. The **live stats settings** screen will appear.

FTP settings do not affect GameViewer settings.

Copy File Settings

Auto-copy files should be checked.

Xml should be checked.

Target directory should be the target directory and folder you select for the XML file created by the Reports program.

c:\tasfb\samples works for football; **c:\tasbs\samples** works for baseball.

We recommend that you create a new folder to save game files, such as **c:\tasfb\xml** or **c:\XML**. The software programs sometimes have problems with long paths. This same path must be followed in Game Server software as discussed below.

If this target directory does not work with Stat Crew Reports and the game XML file is not saved in the chosen location, **GameViewer will not function**. Please refer to instructions in the Stat Crew manual for proper setup of the Reports Program.

XML output

Enable XML stats feed should be checked.

XML gameid: should be the name given to the current game, for example – **fbgame2**. This copy XML file is used by GameServer and any computers on your local network running Gameviewer. The game XML file used to upload to the internet is stored in a different location, as specified in the Game Reports program. The Stat Crew scoring programs run in DOS, thus game and game folders should be 8 or less characters in length. **CSTV dictates the name of the game for each school. It is ok to use this directed game name for the XML game name, the game name will then be the same for the “LIVE XML” folder and the “XML” or “SAMPLE” folder.**

Other settings

The **Poll rate in seconds** is set to 2 by default, and may be changed to longer periods if desired

Show stats on screen, Reverse play-by-play, and Generate lastplay.htm, are personal choices of the Scorer.

Activate

Check the **activate** box, then click the **OK** button.

This will activate Reports and create the XML file for use by Game Viewer software.

It is best to leave all the program screens open. While scoring, you can see that Reports is copying the file and GameServer is sending the file (there is a blue bar at the botton when files are transmitted) You can minimize Game Server and Stat Crew Reports while scoring, but do not close the programs.

Game Server Program

Attach the Master unit to the Scoring computer serial port and turn on the unit. The first LED (the fourth LED is next to the antenna) will glow green and the second LED will glow red. The third and fourth LED will flicker dimly when sending or receiving data.

Turn on the Display terminals (GameViewer) and set them up as described below.

Open Game Server software by double clicking the Game Server icon on the desktop (if it is not already open). This will activate Game Server. Double click the GV icon in the System Tray in the bottom right hand corner of the desktop (next to the time display), this will open the setup screen.

The current game XML file must be added to the drop down box Game Files. **To prevent game file confusion, click the “-” button next to the Game Files. This will remove all games.** Click the + button next to the Game Files box. This will open an explorer window. Go to the folder that holds the XML game file **you created in the Reports program** and select the proper game. In our default settings and example for football, that would be **c:\tasfb\samples\ (or c:\tasfb\xml)**. In our example the **Game** window will now display **c:\tasfb\samples\fbgame.xml**.

Uncheck the **Automatic Updates** box and the **Repeat box**, if they are checked. Click the **Send** button next to the **Game** window. This will send the game XML file to the GameViewers. The files will be resent the number of times shown in the box next to the **Send** button. The default number is 3, if the Remote Terminals are getting excellent reception, you can change the number to 1 or 2.

If you are using **Season** and **Career** stats, Home or Visitor, click the **Browse** button next to the selected set of stats you want to use and display. (Season and Career stats must be available in the Reports program for the sport you have selected. Some Stat Crew Reports programs do not support Career an\or Season stats.)

This will open an explorer window. Go to the folder that holds the selected Season or Career XML file **you created in the Reports program** and select the proper Season or Career XML file. Click the **Send** button next to the selected Season or Career window. This will send the selected XML file to the GameViewers.

Repeat this procedure for each set of stats you want to use. Season and Career stats (history files) are only sent prior to the game and are not resent during the game.

Check the **Automatic Updates** box. This will send an updated game XML file each time an entry is made in the Stat Crew Scoring software. **Make sure the Repeat box is not checked. Repeat is for test purposes only.**

You can left click and hold the blue bar at the top of the Server setup screen and move the screen to one corner of your Windows screen. This will allow you to see that data is being sent to the Remotes by watching for the blue progress bar at the bottom of the Server screen. This blue bar will display a few seconds after a play is entered. If you prefer, you may minimize the Game Server setup screen. **Do not close (X) the screen, doing so will turn Game Server off.**

Game Client

The Client (GameViewer terminals) has been designed to be as thin as possible. In essence, its main function is to listen on its configured port and radio channel for incoming packets sent by a Game Server. It chooses which Radio channel to use by keeping track of the last GameViewer that was launched by a user. When the user launches a GameViewer, the game client will switch to the radio channel defined in its ini file for that sport.

Configuration

The Client is shipped to you pre-configured. GameViewers are preloaded with 7 sports supported by Stat Crew Game Viewer software: Football, Baseball, Basketball, Soccer, Volleyball, Ice Hockey and LaCrosse.



Communication Settings

For testing and trouble-shooting, you may access more advanced information on the GameClient's communication. Click on the satellite dish located at the bottom of the main window. This will open a window that reports current status of a file being downloaded. An echo option allows for even more detailed observation on communication and displays whether data packets are received with or without errors. This window will also display the Client software version.

Mouse Pad

The mouse pad is located on the front, under the viewing screen. The mouse has a finger pad to move the mouse cursor and a left and right select button. This mouse pad functions like a mouse pad on standard laptops. The mouse pad is very sensitive, be sure to use only one finger. Placing the palm of your hand or several fingers on the pad will confuse the mouse pad sensors. If the mouse does not work, check that the cable is securely plugged into the back right side of the LCD (screen) case. If desired, you may unplug the mouse pad (it is secured by silicone) and plug a standard PS2 mouse into this port. This disables the mouse pad.

Game Day Setup

The antenna should be attached when the GameViewer is located 20 feet or more from the Master Terminal, or is in another room. If the GameViewer is within 10 to 20 feet of the Server, the antenna will not be needed. The radios operate at full power and generate a strong radio field. **If the GameViewer is too close to the Master (10 feet or less), communication between the Master and GameViewer could be interrupted and the game files may not be received and updated.**

Turn the GameViewer on using the rocker switch on the lower part of the right side. The switch will show red when on. The first LED on the radio (there are four LED's just below the radio antenna) will glow green. If the GameViewer is set to the correct sport and the GameViewer is communicating with the Master, **the second LED will glow red**. If the second LED is not red, allow the GameViewer to boot to the screen with your school logo, then click on the proper sport bar. (If the Master is set to football, then the Remote must be set to football for the units to communicate.) The second LED should now glow red. **When changing sports, be sure the GameServer software is not transmitting data, turn automatic updates off and do not send a game file until the radio has been set to the proper sport.** If you change sports on the Remote before changing sports on the Master, you will have a green light and no red light. Start GameServer, then change the Transmit Sport to the same sport selected on the Remotes. The Remotes should now have a red and green light, which indicates the radio on the Remotes and Master are locked on the same sport.

If the Server has been turned on and no files have been sent, you will see numbers scrolling on the scroll bar at the bottom left of the screen. This indicates the GameViewer is working properly and is receiving test data. When you send the game file, you will see the data file scrolling on the scroll bar (this is unreadable data).

To access more advanced information on the GameClient's communication, click on the satellite dish located at the bottom of the main window. This will open a window that reports current software version and status of a file being downloaded. An echo option allows for detailed observation on communication and displays whether data packets are received with or without errors. If data is being properly received, the echo screen will display many "packed received" messages. If you receive a large number of "header parser" or "failed checksum" errors, move the unit to a better reception area or charge the battery.

The first time you select a sport for which you have not previously loaded a game XML file, you may receive an **error message**. Click OK on each error message, then click the **VIEW** button. The Remote will display a data screen with no stats. Once you send the game XML file from the Master, game data will populate the screen.

The first LED must be green (power on) and the second LED must be red (radio connected) for game file transfer.

Single click the desired sport bar (**do not double click, *double clicking will open the client software two times***). If this happens, move the mouse cursor to the bottom of the screen. The System tray will pop up. Move the mouse cursor to one of the games, right click and close the game. Move the mouse back up and the System tray will disappear.

The **View** setup screen will appear. The default setting for the data files will show in each window. Default for the game XML file is C:\GameFiles\game.xml. **Do not change this setting.** The game file will not load if this setting is changed, and the game file will not update. The window is only used for program updates as needed.

The Visitor and Home files should be left at default settings. If you are not using Season or Career files, a message will appear stating the file could not be found. Click OK each time this message appears. If you are not using Career or Season stats, you can prevent this message every time you open a game by deleting the default file name. Place the mouse cursor on either end of the Career or Season file name, push down and hold the left mouse button, run the mouse cursor over the entire file. The file will be highlighted. Push down the **right** mouse button and click **Delete**. If you later decide to use Career or Season stats, you will need to re-enter the default file name. Call StatView Terminals for instructions.

Click the **View** bar. The Game Viewer screen for that sport will appear. If you have not sent the game XML file, the screen will appear with no data or data from the last game. When the current game XML file is sent, the current game data will appear.

When you set up for new games in the same sport, you only need to single click the appropriate sports bar and then click the **View** bar on the View screen. When you change sports, clicking the selected sports bar will change the radio setup to that sport and the View screen for that sport will appear. When changing sports, make sure automatic updates and repeat are **not** checked in GameServer.

If the GameViewer is not receiving data, make sure the first LED is green and the second Led is red. If the second LED is not red, change to another sport, then change back to the desired sport. The second LED should now be red.

Since each sport has its unique setup, multiple sports can be scored at the same time, even if the facilities are very close, without interfering with each other. Each scoring computer must have a Master unit connected.

As the game progresses, the user can select which data screen to view by moving the mouse cursor over the appropriate tab (Visitor, Home, Play-by-Play, for example), then click the left mouse button or tapping the mouse pad.

The PRINT or COPY buttons do not function on the Remote Terminals.

DISPLAY SCREEN BRIGH/DIM CONTROL

Adjustments to the brightness of the display screen are made by pushing the two red buttons on the back of the display panel. The buttons can be located by placing your fingers under the bottom left corner of the display screen housing.

These units use a DSTN LCD panel which tends to get brighter after being on for 5 to 10 minutes. Always set the screen a little dark at initial setup, it will get brighter as it warms up.

Shutdown

It is important to shut down *Windows* before turning off the GameViewer. Move the mouse cursor to the bottom of the screen. The System tray will appear. Click on the **Start** button and **Shut Down**. When windows shuts down (the screen will go black), turn the ON/OFF switch to OFF. (the switch will show black rather than red).

THE ROCKER SWITCH MUST BE TURNED OFF (in addition to Windows shutdown). **If you leave the power switch on, the radio will still be on and will eventually completely discharge the battery. This is very harmful to the battery and the internal charging system.**

POWER SUPPLY

The Power Supply is specifically designed for the GameViewer. It provides proper voltage to power the unit or recharge the battery. The Power Supply case has an LED that will glow green when plugged into a 120v outlet. When the DC plug is plugged into the Master or Remote Terminal, the LED will glow orange if the unit is drawing power from the power supply. If the LED remains green after about 15 seconds after the DC plug is plugged in, there is possibly damage to the DC plug or the power supply, or the battery is fully charged. If the Terminal is not receiving power, the battery will not charge. This is usually the result of pulling or jerking on the Power supply cable to unplug the DC jack, or the power supply has blown a fuse.

You must hold the DC Power Supply jack by the plug to unplug the Power supply. Do not unplug by pulling on the cable. Pulling on the Power Supply cord will damage the wire or plug. When a Power Supply is damaged, the battery will not charge, therefore the Remote will not update stats during the game.

BATTERY

THE ROCKER SWITCH MUST BE TURNED OFF WHEN THE UNIT IS NOT IN USE.

If you leave the power switch on, the radio will still be on and will eventually completely discharge the battery. This is very harmful to the battery and the internal charging system.

The battery must have an adequate charge for the GameViewer to work properly for an entire game. After each game, plug in the power supply (with the power switch off) and allow the unit to charge for 24 hours, up to 48 hours. Unplug the power supply after the charge is complete and disconnect from the GameViewer. If several weeks pass between use, charge the GameViewer again before use. Batteries should last 3 to 5 years or more if they are maintained with full charges. If the units are stored for several months, charge them fully before storage and at least every two months, and again before using for a game.

When a battery is charging, the light on the Power Supply will glow amber. When the battery is fully charged, the light will change from amber back to green.

MAINTENANCE

Clean the plastics with eye glass cleaner (a bottle was shipped to you with the Master unit) or original Windex and a soft cotton cloth. Lens cleaner is available at Walmart for about \$2 a bottle. Cleaning the clear plastic cover over the LCD panel with course cloth or rough paper towels can scratch the lens.

Batteries must be recharged after each game and before being stored when not in use. Plugging in the power supply during the game only will not allow the battery to fully charge. This will eventually lead to battery failure. Terminals with a low battery will not update stats – even with the power supply attached.

GameViewers with serial #08050258 or higher have a battery status indicator, located on the Windows tray at the bottom of the screen. Move the mouse cursor to the bottom of the screen and the Windows tray will pop up. The indicator shows a relative charge %. If there is a “X” over the battery, the unit will run about 1 hour and needs to be recharged.

There is no internal maintenance that can be performed by the user. Contact StatView Tech Support if you have any setup issues that can not be resolved using this manual.

When unplugging the Power Supply, always grab the hooded plug and pull straight out. Do not unplug by pulling on the power cord!!!! Yanking on the cord will cause damage to the plug and the Battery will not charge and the Remote will not display data.

WARRANTY

Parts and labor are covered for one year. You are responsible for shipping cost to Statview and return shipping to you.

Office phone 662-429-9015 Ask for Bill or Elton. 9-5 M-F
Cell phone 901-429-9015 24\7
Email bill@statviewterminals.com

NOTES – General Info

January 18, 2006

SYSTEM REQUIREMENTS FOR PLAY UPDATES TO DISPLAY ON THE REMOTE UNITS

GameServer software version 1.1.8. or higher
Remotes have software version 1.1.5 or higher
The Comm. Port on the scoring laptop is set up properly
The copy XML file in Game Reports is saved in a sub folder in the root directory, such as C:\XML. Long multidirectory paths cause problems. Do not use the game Xml file in the LIVEXML folder.
The units are fully charged between games. The Remotes may operate with power supplies connected, which will extend run time, but they must be fully charged before game time use.

GameViewer uses 4 separate programs to function: Statcrew scoring, Statcrew Reports, GameServer, and Statcrew Gameviewer. All 4 must be set up properly for stats to post and update. Updates take time to post.

Timing is dependant upon:

The speed and proper setup of the scoring laptop.
The time taken by the scorer to input the play.
Statcrew scoring to generate and transmit the game file.
Statcrew Reports to receive the file, create and copy the XML file.
GameServer to recognize a new time stamp on the XML file and send the data by radio to the Remote units.
The quality of radio signals in the arena or stadium. Radio interference may not allow the XML file to be received on the first of multiple transmissions.
Statcrew Gameviewer running on the Remote to recognize a new time stamp on the XML file and update the stats on the screen.

Typically, in basketball games, it takes about 4 to 10 seconds from the time Statcrew scoring accepts the play and the Remotes post the update. If there is radio interference it may take 15 or 20 seconds. Due to the nature of the entire system, stats are not going to post immediately after a play. Radio\TV personnel should be advised of the time delay and should not expect instant updates.

AOL If your scoring laptop has AOL loaded, you must turn AOL off when changing sports. Computers running AOL can not send executable files through the Serial port, therefore Gameserver can not reconfigure the radio.

Remotes will not work properly if you only plug in the power supply during a game. Remotes must be charged between games.

If you are having any problems, please call me on my cell phone – 901-486-2129.

Thanks
Bill

RADIO AND FCC DATA

FCC = KQL-AC4490
 IC = 2268C-44901000

TRANSCEIVER			
Frequency Band	902 – 928 MHz		
RF Data Rate	76.8kbps fixed		
RF Technology	Frequency Hopping Spread Spectrum		
Output Power		<u>Conducted (no antenna)</u>	
		<u>EIRP (3dBi gain antenna)</u>	
	AC4490-1x1:	10mW typical	
	AC4490-200:	100mW typical	
	AC4490-1000:	743mW typical	
		1486mW typical	
Supply Voltage	AC4490-1x1:	3.3V, ±50mV ripple	
	AC4490-200:	3.3 – 5.5V, ±50mV ripple	
	AC4490-1000:	Pin 10:	3.3 – 5.5V ±50mV ripple
		Pin 11:	3.3 ±3%, ±100mV ripple
Sensitivity	-99dBm typical @ 76.8kbps RF Data Rate		
Range, Line of Site (based on 3dBi gain antenna)	AC4490-1x1:	1 mile	
	AC4490-200:	4 miles	
	AC4490-1000:	20 miles	
ENVIRONMENTAL			
Temperature (Operating)	-40°C to 80°C		
Temperature (Storage)	-50°C to +85°C		
Humidity (non-condensing)	10% to 90%		



WARNING: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.



WARNING: This equipment has been approved for mobile applications where the equipment should be used at distances greater than 20cm from the human body (with the exception of hands, wrists, feet and ankles). Operation at distances less than 20cm is strictly prohibited.