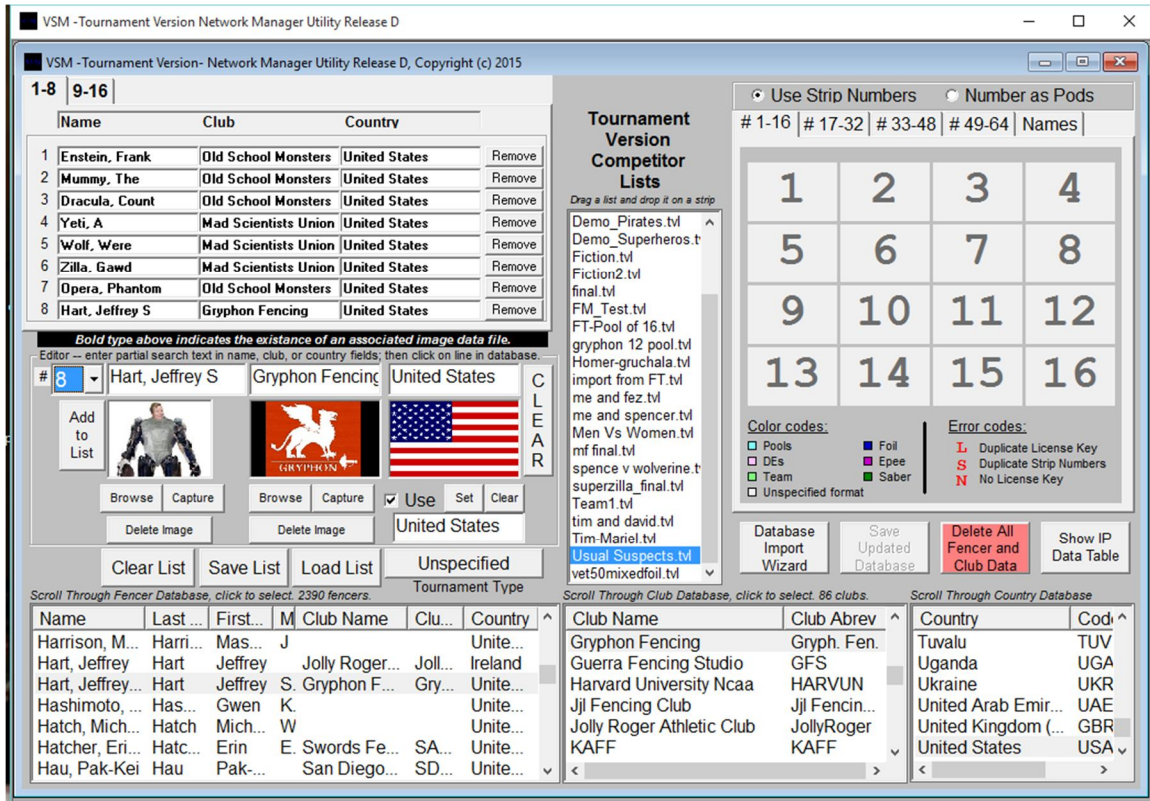


VSM-TV Network Manager Utility

Application Release D



October 19, 2015

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Overview:

VSM - Tournament Version (VSMTV) adds great capabilities to the Virtual Scoring Machine by integrating fencer, club, and country information and graphics into the scoring machine's display, and allowing the display to be relayed to remote repeaters anywhere on the local area network. Lists of competitors can be created at the VSMTV strip's pc and used directly; however that methodology can be impractical during the typically dynamic and hectic tournament environment.

Enter the VSM-TV Network Management Utility (or NetManager.) NetManager allows the tournament organizer to centrally and remotely monitor and manage up to 80 VSMTV fencing strips via a wired or wireless local network from a single laptop or PC.

The NetManager application also simplifies and consolidates the task of acquiring and managing fencer and club data, allowing CSV (Comma separated value spreadsheet) files to be imported from the USFA website, or exported Fencing Time CSV data, or club information downloaded from the AskFred website.

After NetManager has imported a database, lists of competitors can be easily built using point and click, and then saved. NetManager serves as a centralized data tool, and making it unnecessary to keep updated fencer and club data files on the individual VSMTV strips, simplifying the management of a tournament or a club.

NetManager can also associate already existing image files to individual fencers and/or club logo graphics to fencing clubs either by browsing to stored image files or through capturing a live image using an inexpensive webcam.

Once a Tournament VSM List (.tv1) has been saved, to use it on a VSMTV fencing strip just drag-and-drop the file onto the icon of the targeted fencing strip. The list with all it's associated graphics are copied over the network to the target VSMTV strip.

First: Install the application.

Like all the VSM applications, the latest installer file is always available for download from www.VirtualScoringMachine.com. If you are uncertain if you have the latest version, check there first. You can either download the most recent version from the website, or use the file from the CD included with your VSM system.

To install NetManager, you will need the files named "VSM-TV_NetmanSetup_Rel_X.exe" on the computer you wish to use. Double click to install it (you may need to "Install as Administrator" with some versions of Windows.) NetManager does not need any license keys or registration, and it is free to install on as many PCs as you wish. Installing NetManager will add shortcuts to your Start menu and onto your desktop. It will also create a working data directory in the current user's

“My Documents” folder called “NetManData.” This is where your data files, tournament lists, and image files will be stored. Unlike VSMTV, it is not necessary to “share” this folder for access on a network. Inside the newly created “NetManData” folder will be the default data files: “Fencer.csv,” “Clubs.csv,” and “Countries.csv.” The Fencer and Club files included correspond to fictional/demo fencers and clubs for the provided 5 demo lists; however the “Country.csv” file contains the actual list of IOC countries, codes, and that country’s flag filename. **Do not modify this file.** Also inside this folder will be various sub-folders that will contain image files and list files. Once your installation is complete you may begin using NetManager immediately.

Just click on the VSMTV-NetManager icon in your Start folder or desktop to begin

Running the Application: A Quick Start Guide.

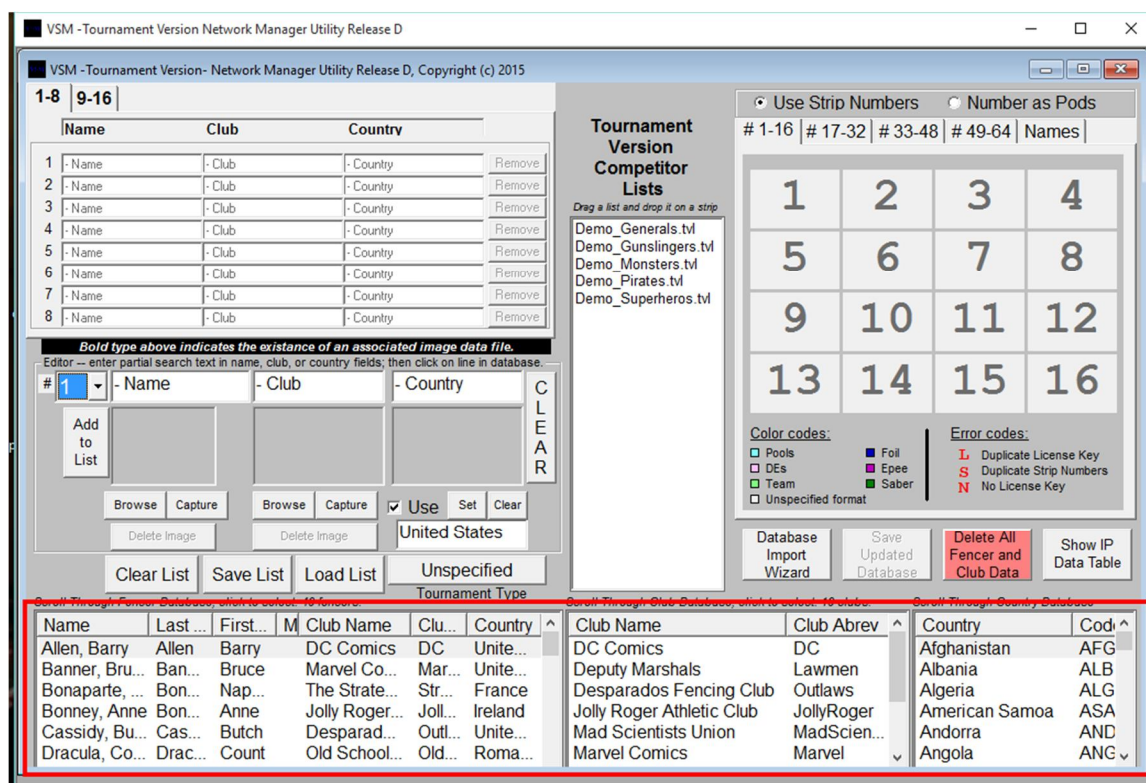
Once run, NetManager will begin by loading the current database of fencers and clubs.

You should see something like this:



When first run, NetManager will load its data files very quickly as there are very few fencers and clubs in the sample data included. After you’ve added or imported large amounts of fencer and club information, the above dialog will be shown while the data is being read. NetManager imposes no limit on how many fencers or clubs you can load. In the United States, our sport normally has just over 20,000 current “competitive” USFA fencers, as well as a large number of “non-competitive” members. Each year we get new members who join, and have some members who lapse, and still other participants who don’t officially join the USFA at all, yet still fence at a local or unsanctioned events. NetManager allows all these fencers to be kept in a single convenient database so that you can simply point and click on them to place them into a pool, team, or DE.

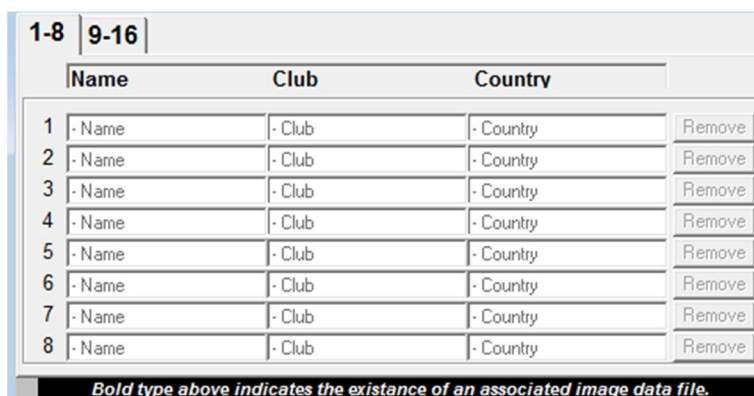
After your current data is read into NetManager, the main application interface will look like this:



The NetManager application's user interface is organized into 5 main sections. Above (and outlined in red) are the three databases: fencers, clubs, and countries. Each of the three sections of data are independent of each other. Note the header columns across the top of each section. The data is normally sorted by name of the fencer, club, or country but by clicking on a column header you can re-sort the data as desired. This can be occasionally useful in the fencer selection to group fencers together by club or country instead of alphabetically by name.

The upper-left quadrant of the program's display is used to show the list currently under construction.

A new competitor can be input using "the Editor" section (described next) and then added to one of the sixteen (2 pages of eight) lines here. If that line's data element has an existing image file then the name, club, or country will be shown in bold text. If an existing previously saved list is loaded (covered later) it is possible to remove any of the sixteen lines with the



“Remove” button on the right of each line. That way pre-existing lists of competitors can be edited without having to re-create the whole list from scratch.

Under the list currently being constructed is the “Editor” section. This section is used to identify each competitor, associate him or her with a club and/or country (if one was not already associated,) and also associate images (if desired). Once satisfied, you can set the list position/seed number for that competitor and click the “Add” button. The newly created line of data will be added into the list being constructed. Once a list is completed,

Bold type above indicates the existence of an associated image data file.

Editor — enter partial search text in name, club, or country fields; then click on line in database.

#	- Name	- Club	- Country

Buttons: Add to List, CLEAR, Browse, Capture, Delete Image, Use, Set, Clear, Default Country, Clear List, Save List, Load List, Unspecified, Tournament Type

it can be saved by clicking the “Save List” button. You will be prompted to enter a name for each of your newly created lists. The “Load List” button functions as expected, allowing you to load a previously saved list. You may desire to

edit a list that was created earlier, modify it, and then save it as a new list with a different (or even the same) name. You’ll notice that there are two “Clear” buttons. The vertical “Clear” button on the right side clears only the line of data being created in the editor; whereas the horizontal “Clear List” button on the left will clear out the editor and the entire list under construction of up to sixteen competitors. You generally do this prior to starting the construction of a new list. Clicking the button labeled “Unspecified” in the graphic above cycles through all the VSMTV tournament formats: Pool, DE2, DE3, Team Relay, and etcetera. If you set a specific tournament type prior to saving a list, when that list is subsequently loaded by a VSMTV application, the pre-selected format will be automatically set. The final function provided by the editor is to allow you to set a default country. To do that you first select a county in the “Country” field either by clicking on any country in the country database window, entering the desired country’s IOC three letter code, or by just typing in the country’s name. Then click “set” and if you have checked the “Use” box any fencer added to a list that does not already have an associated country will use the default country just set. If there is an associated country in the fencer’s data, then the default country will be ignored.

As you build lists of competitors and save your lists, they will show up in the box labeled “Tournament Version Competitor Lists”. To load an existing list, double click on it and that list will be loaded. After having creating a list for use on a particular strip, to use it just drag and drop it onto the desired strip’s icon in the matrix of strip icons to the right.

Tournament Version Competitor Lists

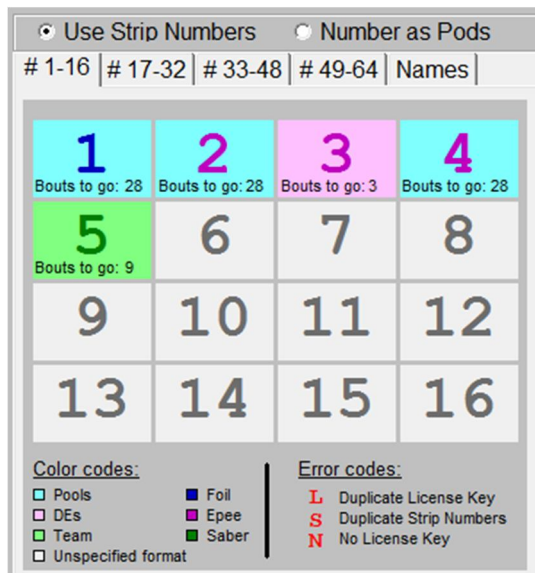
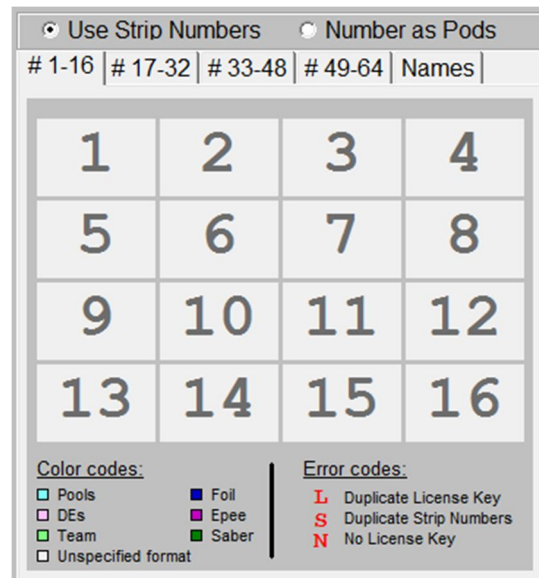
Drag a list and drop it on a strip

- Demo_Generals.tvl
- Demo_Gunslingers.tvl
- Demo_Monsters.tvl
- Demo_Pirates.tvl
- Demo_Superheroes.tvl
- Usual Suspects.tvl

All the lists displayed here are in VSMTV's ".tvl" format. By using the "Load List" button in the editor, you can also load Fencing Time exported pool lists (".pfti" files).

The next section of NetManager is the VSMTV strip icon matrix. Each of the numbers represent a potential VSMTV strip. There are 16 strips on each of four tabs allowing a total of 80 possible strips numbered 1-64 or as "Pod" numbers using the system A1 to A4, B1 to B4, etc. The final tab of 16 strips are divided into 8 "named" strips and 8 more selectable numbered strips. As each VSMTV strip is started on the competition floor and connects to the same network that the NetManager application is on, the gray strip numbers will turn black, and then when a full connection is established, the strip icon number will assume a color indicating which weapon is currently being fenced on that strip. The background color of the strip icon will also assume a color which indicates the format of the fencing being done at that strip. In this way it is easy to tell at a glance which strips are currently being used for foil pools, or epee DEs, etcetera. The strip numbers can also change to indicate if there is a communication problem with a particular strip such as two strips being configured as with duplicate strip numbers, or other problems. See the "Trouble Shooting" section for more information.

Here's what a 5 strip tournament would look like with 1 pool of foil (on strip 1), 2 pools of epee (strips 2 and 4,) a DE of epee (on strip3,) and a team match of saber (on strip 5.) Notice also each icon continuously reports how many bouts are left to go on that strip. For example, Strip 3 is an Epee DE where there are 3 bouts to go (such as would be the case during a semi-final round.)





Clicking on a strip will cause a “mini-repeater” for that strip to be created and displayed.

Here’s an example of one. You can open as many of these as you have strips. They can be minimized to the task bar when not needed.

The mini-repeaters have configurable sounds, but all mini-repeaters share the same sound settings.

Managing Your Databases.

Setting up a ‘batch’ of fencing to be accomplished on a particular strip is (obviously) dependent on who has entered the tournament. This in turn is frequently dependent on membership in the USFA for sanctioned tournaments, or local club membership for recreational or unsanctioned tournaments. While it is possible to simply type in the fencers names into a strip running VSMTV, it is much easier to point and click in NetManager’s database than to type. It is also much more convenient to do this from the bout committee than from each of the individual strips.

But how is the database acquired and updated? NetManager comes equipped with a demo database comprised of fictional fencers, each with a pre-loaded image, club and graphical logo, and a country and flag. This data is kept in a user-accessible location and in a file format (CSV files) that is easily readable by any spreadsheet program such as “Excel.”

Once NetManager is installed, the data files can be found in the newly created “\My Documents\NetManData” folder; there are three files: “Fencers.csv,” “Clubs.csv,” and “Countries.csv.” The “Countries.csv” file contains all the current International Olympic countries and three-letter Olympic codes, along with the names of the flag graphic files. This file should not be modified. If these countries eventually change names, flags, or codes, the program will be updated and posted as a new release.

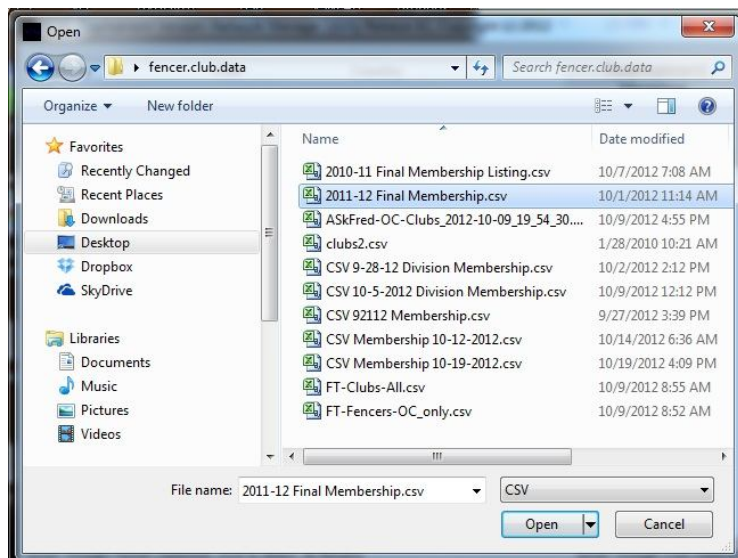
On the other hand, the Fencer and Club data is designed to be updated, modified, and customized by each user. This can be done manually using a spreadsheet (which I do not recommend) or much more easily by importing data that’s readily available.

The easiest and most “official” source of US data is from the USFA website. The USFA has been making lists of its members available to tournament organizers for several years in order to enable checking participant’s eligibility to participate in sanctioned tournaments. The content and format of these lists has evolved over the years. At present (Fall 2015) there are two CSV data file formats available for download. The oldest is the “2014-15 Final Membership List” which contains the complete membership for the recently completed 2014-2015 season. The next is the “Current Membership Mo.Da.Year” list which contains the up-to-date as of this week membership list for the current season. Additionally, there’s the same file posted again, but not as a “CSV” file, instead as an Excel file. For the purpose of importing to NetManager, you will need the CSV version.

The USFA membership data has been undergoing some modification to include more information in this downloadable file. Currently, it includes data fields for all the information needed by VSMTV and NetManager; however not every fencer has every field of information included. So, sometimes a fencer will be in the database, but be missing the club information or even the country affiliation. None the less, this is the best and most complete information “officially” available.

This file of data can be quite large, especially with the inclusion of “non-competitive” members; there may be 30,000 plus individuals in the complete list by the end of any given year. It’s possible that you might want that large a database if you are running a National level event, but more likely you will be interested in a more localized database. If so, it’s fairly easy to load the complete file into a spread sheet program like Excel, and sort it by Sections or Divisions and then delete the information that is not relevant to your event. Then, once the data is pared down to what you want, re-sort by last-name then first-name and save your customized data file as a CSV file. **Note: Be sure to leave the top line of data, the “header line” at the top! This line is necessary for the import process!**

To make use of this data, whether you simply downloaded the file or edited it to a customized data set, save it where NetManager can find it. For example, put it on the desktop, or a USB “thumb” drive or the like. Then run NetManager and click the “Database Import Wizard” button. A file dialog window will open; use it to Navigate to where your new data file is stored. Select the new file and click “open.”



The import process will begin and you will see a dialog like this one:



As each record of the new data is read, the existing database is being searched for a previous fencer by the same name. If an existing record is found, it is removed and the new record replaces it. If not, the new record is inserted into the data in the correct sequence. Simultaneously, the new data’s clubs are added to the club database, updating it using the club information of each fencer. After all the new data is read, a second

process takes place where duplicated clubs are removed with old information replaced by new. At the very end, the newly combined data files are saved automatically. As the screen says, this can take a while. Typically, the annual complete list of fencers in the USFA runs just above 30,000 members. On my test system this takes usually about 10-12 minutes. Once imported, however, data files (this large or even larger) are read at startup in under a minute or two.

If you need a very extensive database, you might want to start by importing the end-of-season complete membership list as described above, and then also import the latest weekly membership list. This list will also number close to 20,000 or above. This process might take a bit longer, more like 15-20 minutes or so, but will result in a list of fencers that includes everyone who competed this year (so far) and anyone who competed all of last year. This typically produces a fencer database of close to 30,000 fencers and a list of 1100 to 1200 clubs.

Note that it is important to import the data in chronological order (oldest data first) as new data always replaces older data automatically.

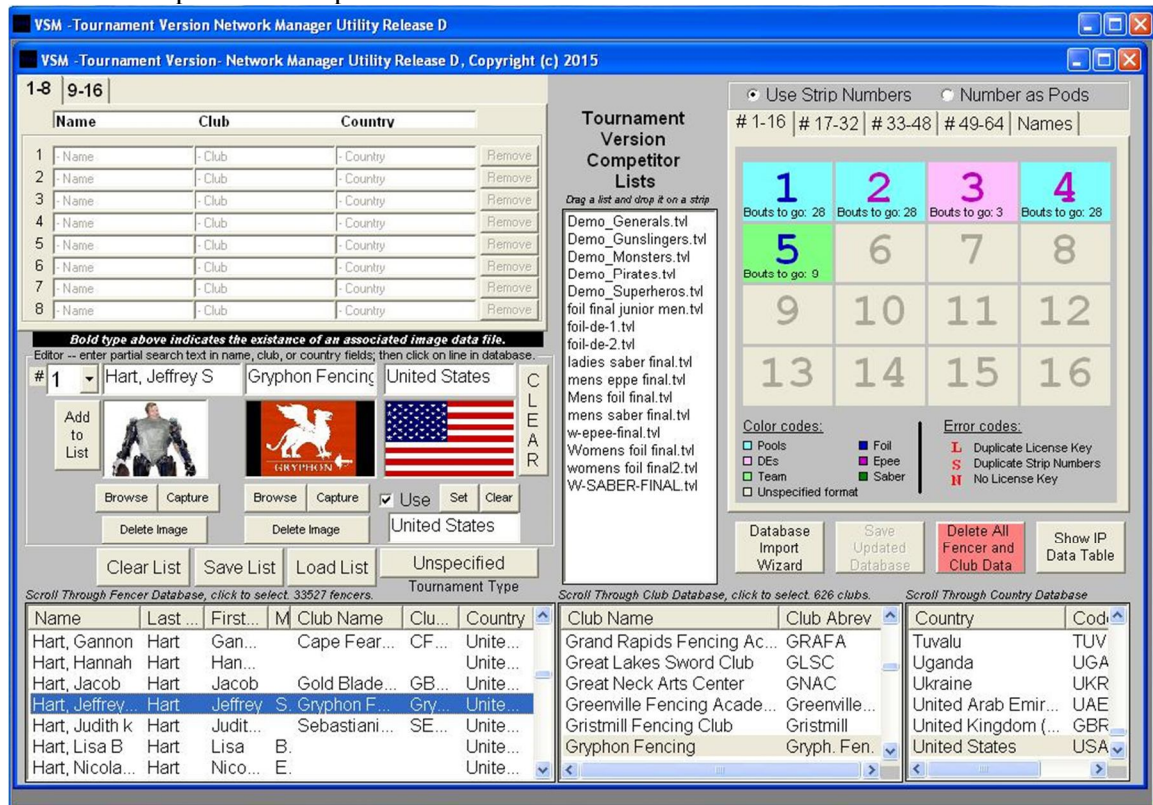
Another source of importable data is from Fencing Time. Fencing Time does its own updating of fencers and clubs, and is the tool normally used to verify USFA membership. It has its own built in methodology for cross-checking older data against new data and maintains this data in its own database. Fencing Time allows you to export this data as CSV files both for fencers and for clubs. NetManager can import and use these files via the same "Database Import Wizard" button. The exporting of data from Fencing Time can be a lengthy process, though.

The last source of importable data is from the AskFred website. AskFred keeps track of fencing club data, and has an export function that can be accessed from its website. This source only contains club data, currently.

All these data files use different data formats. NetManager is able to decode all these known data formats successfully and import the relevant information. If you have any question about whether a data file is readable by NetManager, just try it. Good data will be imported correctly, and unknown formats will be rejected.

This whole process of data importing is intended to make the actual job of creating a list of fencers as quick and painless as possible. Once a comprehensive database is built, all you have to do click on the fencers and add them to the list using the list editor.

Here's a sample of a comprehensive database:



Note that there are over 33,500 fencers and 600 clubs to choose from.

Building a List.

With a large number of fencers, it may be difficult to precisely adjust the sliders on the database boxes to show and select the fencer you are looking to add. It may be easier to click the “Search Name” text field and enter at least part of the fencers’ name. Fencers are listed alphabetically by “Last-name, First-name Middle-name” (using the comma and spaces) if needed to correctly sort to a desired name. When you have entered enough characters, and the name you are looking for is included in the database, then the list will be repositioned such that the desired name is visible. Then you just click on the line to enter the fencer into the list editor.

But what if the fencer is not in the database yet, as may be the case with unofficial tournaments? Or someone has just joined and hasn’t been input yet? Just finish entering the complete name using the “Last, First Middle” format, then select his club and country (if known) and click the “Add” button. The newly added fencer will be put on your list and the previously unknown fencer will be added to the fencer and club databases for future use.

This new data will be available during the current NetManager session, but will not be saved unless you explicitly click the “Save Updated Database” button. If you have

unsaved data when you exit NetManager, you will be reminded to save it before quitting. It's left up to the user to decide who they want to keep in the database for future use, and who might just be added for the current session.

As each fencer is picked from the database or entered directly, you must also assign what position on the list the fencers this competitor should take. In this example, Clark Kent has already been added as the number one competitor. Gawd Zilla is about to be added to

The screenshot shows the NetManager interface. At the top is a table with columns 'Name', 'Club', and 'Country'. The first row is 'Kent, Clark', 'DC Comics', 'United States'. Below it are seven rows with placeholder text '- Name', '- Club', '- Country'. To the right of each row is a 'Remove' button. Below the table is a text box with the instruction: 'Bold type above indicates the existence of an associated image data file. Editor -- enter partial search text in name, club, or country fields; then click on line in database.' Below this is a form for adding a new fencer. It has a dropdown for position (currently '2'), and input fields for 'Name' (Zilla, Gawd), 'Club' (Mad Scientists Union), and 'Country' (Japan). There are three image preview windows: one for the fencer (Zilla), one for the club (Mad Scientists Union), and one for the country (Japan). Each has 'Browse' and 'Capture' buttons, and a 'Delete Image' button. There are also 'Add to List', 'Use', 'Set', and 'Clear' buttons. At the bottom are 'Clear List', 'Save List', 'Load List', and 'Tournament Type' (currently 'Unspecified').

	Name	Club	Country	
1	Kent, Clark	DC Comics	United States	Remove
2	- Name	- Club	- Country	Remove
3	- Name	- Club	- Country	Remove
4	- Name	- Club	- Country	Remove
5	- Name	- Club	- Country	Remove
6	- Name	- Club	- Country	Remove
7	- Name	- Club	- Country	Remove
8	- Name	- Club	- Country	Remove

Bold type above indicates the existence of an associated image data file.
 Editor -- enter partial search text in name, club, or country fields; then click on line in database.

2 Zilla, Gawd Mad Scientists Union Japan

Add to List

Browse Capture Delete Image

Use Set Clear

United States

Tournament Type

Clear List Save List Load List Unspecified

the number two spot. If desired, you can assign him to any other vacant spot in the list of up to eight fencers by clicking on the down arrow above the "Add to List" button and selecting a different position to assign. The fencers can be added to the list under construction in any order. Once on the list, though, the only way to change a fencer's position is to use the "remove" button located to the right of the fencer's name, and then re-add them to the list in the corrected position.

The position numbers take on a specific significance depending on which type of tournament they are to be used in. In a pool, the number will define the order of bouts for that fencer. In DEs the position number is the seed of the fencer for that tableau. And in Teams, positions 1, 2, and 3 correspond to "Team A"; number 4, 5, and 6 correspond to "Team B". Number 7 is the alternate for "Team A", and number 8 becomes the alternate for "Team B". Once these position numbers are set and saved as a TVL (Tournament VSM List) list, they are not changeable in VSM-TV.

So the numerical position of a fencer on a list is relevant to the type of tournament List you are building: a pool, DE, or team event.

VSMTV has 8 different format tournament types that it supports: Pools with four to eight competitors, 3 types of Direct Elimination (DE) formats with from two to eight competitors, and 2 types of team formats with from six to eight participants. These tournament types can be specified and made part of the list so that when it is transferred to a VSMTV strip and loaded there, the parameters specific to that format will be automatically loaded.

To set the desired format and include that information in the list, just click the button under the heading "Tournament Type". Each time you click the button, the button's title

will change as it cycles through all eight types: Pool, DE 3, DE 2, DE: Best 2 of 3, Team: Relay, Team: Best 5 of 9, Team All of 9, and then back to Unspecified.

For example, if you are building a list of competitors that will comprise the final table of 8 for a Veteran tournament, you would select the format labeled “DE 2” prior to saving your list. Then when you load this list on a VSMTV strip, the number of periods will automatically be set to two, and the DE score display will be used. VSMTV will also enforce a maximum score of 10, and enable the “Non-Combativity” rule set.

Since each tournament type (pool, DE, and team) has a different minimum number of participants you will be warned if you have selected less than the required number of competitors when you click the “Save List” button.

Saving a list as an “Unspecified” type will leave it up to the referee to set up the VSMTV scoring machine’s parameters for the intended competition’s format.

Step by Step: How to Build a List.

1). Clear: Clear out the current list by clicking the “Clear List” button, if needed.



2). Find the fencer to add: Click on the search box labeled “- Name” and start to type the name of the fencer you’d like to add. Here, we’re adding Grant to the number 1 list position. After typing the first three letters, Grant’s name is highlighted, and his picture appears. Just click on the highlighted line in the database and all Grant’s data will be copied to the editor, including his club and country affiliations.

Editor -- enter partial search text in name, club, or country fields; then click on line in database.

1 | Gra | - Club | - Country

Add to List

Browse Capture Delete Image

Browse Capture Delete Image

☒ Use Set Clear

United States

Tournament Type

Clear List Save List Load List Unspecified

Scroll Through Fencer Database, click to select. 40 fencers.

Name	Last N...	First N...	M.	Club Name	Club ...	Country
Grant, Ulysses	Grant	Ulysses		The Strategist...	Strat...	United S...
Hannibal, Barca	Hanni...	Barca		Tacticians Fen...	Blitzk...	Tunisia
Hickok, Bill	Hickok	Bill		Deputy Marsh...	Law...	United S...
Holliday, Doc	Holliday	Doc		Deputy Marsh...	Law...	United S...
Howlett, James	Howlett	James		Marvel Comics	Marvel	United S...
James, Jesse	James	Jesse		Desparados F...	Outla...	United S...
Kahn, Ghengis	Kahn	Gheng...		Tacticians Fen...	Blitzk...	Mongolia
Kent, Clark	Kent	Clark		DC Comics	DC	United S...
Kidd, Billy	Kidd	Billy		Desparados F...	Outla...	United S...

If the fencer has no club or country affiliation in his data record, then you can use the same selection process to create one by clicking the club or country field, entering a partial amount of the club or country name, and then selecting the club or country to be associated with that fencer.

Editor -- enter partial search text in name, club, or country fields; then click on line in database.

1 | Grant, Ulysses | The Strategists FC | United States

Add to List

Browse Capture Delete Image

Browse Capture Delete Image

☒ Use Set Clear

United States

Tournament Type

Clear List Save List Load List Unspecified

Scroll Through Fencer Database, click to select. 40 fencers.

Name	Last N...	First N...	M.	Club Name	Club ...	Country
Grant, Ulysses	Grant	Ulysses		The Strategist...	Strat...	United S...
Hannibal, Barca	Hanni...	Barca		Tacticians Fen...	Blitzk...	Tunisia
Hickok, Bill	Hickok	Bill		Deputy Marsh...	Law...	United S...

3.) Set the number: Click on the down-arrow to the left of the fencers name (over the “Add to List” button) and choose the position on the list for this fencer to become.

Editor -- enter partial search text in name, club, or country fields; then click on line in database.

1 | Grant, Ulysses | The Strategists FC | United States

1 2 3 4 5 6 7 8

Add to List

Browse Capture Delete Image

Browse Capture Delete Image

☒ Use Set Clear

United States

Tournament Type

Clear List Save List Load List Unspecified

4.) Add: Just click the “Add to List” button and Grant’s data line will be copied from the editor to the selected line number in the list being built.

Add to List

	Name	Club	Country	
1	Grant, Ulysses	The Strategists FC	United States	Remove
2	- Name	- Club	- Country	Remove

5.) Repeat this process until you have built your complete list. Any time during this process you can (optionally) set what format competition will be applied to this list on strip. Click the tournament type button until the desired format is selected. Here, I've select the Best 2 of 3 DE format. When this list is loaded on a VSMTV strip, it will automatically configure itself for a DE semi-final tableau using a "best of three" five-touch bout format.

6.) Save the List: Click the "Save List" button and give the list a file name. Make it unique and one that you can easily identify.

The newly saved list will now appear in the center of NetManager as one of your saved lists.

	Name	Club	Country	
1	Grant, Ulysses	The Strategists FC	United States	Remove
2	Dracula, Count	Old School Monsters	Romania	Remove
3	Rackham, Jack	Privateers Fencing Cl	United States	Remove
4	Masterson, Bat	Deputy Marshals	United States	Remove
5	- Name	- Club	- Country	Remove
6	- Name	- Club	- Country	Remove
7	- Name	- Club	- Country	Remove
8	- Name	- Club	- Country	Remove

Bold type above indicates the existence of an associated image data file.

Editor -- enter partial search text in name, club, or country fields; then click on line in database.

#	- Name	- Club	- Country

Add to List

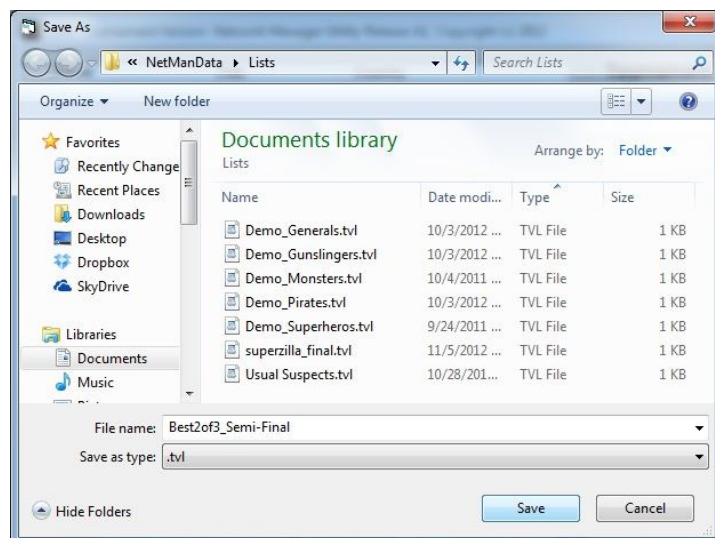
Browse Capture Delete Image

Use Set Clear

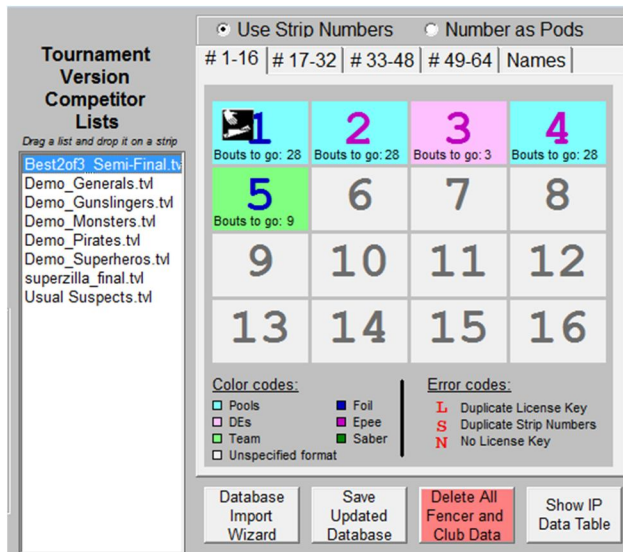
United States

Tournament Type

Clear List **Save List** Load List DE: Best 2 of 3

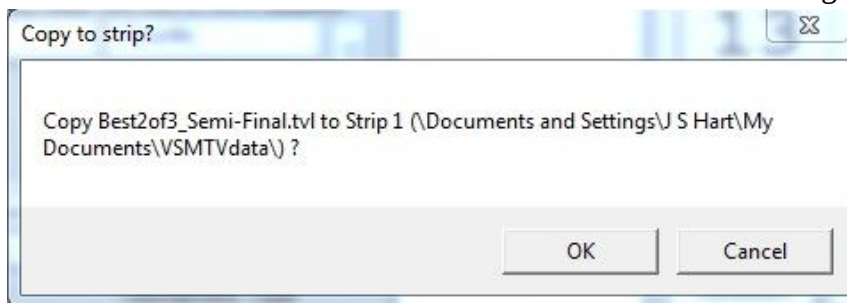


Copying a List to a VSMTV strip.



Once you have built and saved a list using NetManager it is very easy to send it to any VSMTV system on your network. Just click on the list (and hold the click) you want to copy, then drag it to the strip icon where you want it to go... then drop it.

When you release the mouse button you will see a prompt like the one below asking you to confirm that this is the correct list and the destination strip is the one you intended.



Click OK, and the list with all its associated graphics files will be

copied over the network to the target strip where it can be loaded by the referee at the appropriate time. This copy operation is done in the background and will not interrupt

any fencing currently in progress. In this way future fencing can be prepared without waiting for the current set of bouts finishing. See the VSMTV manual for how to load a Tournament Version List.

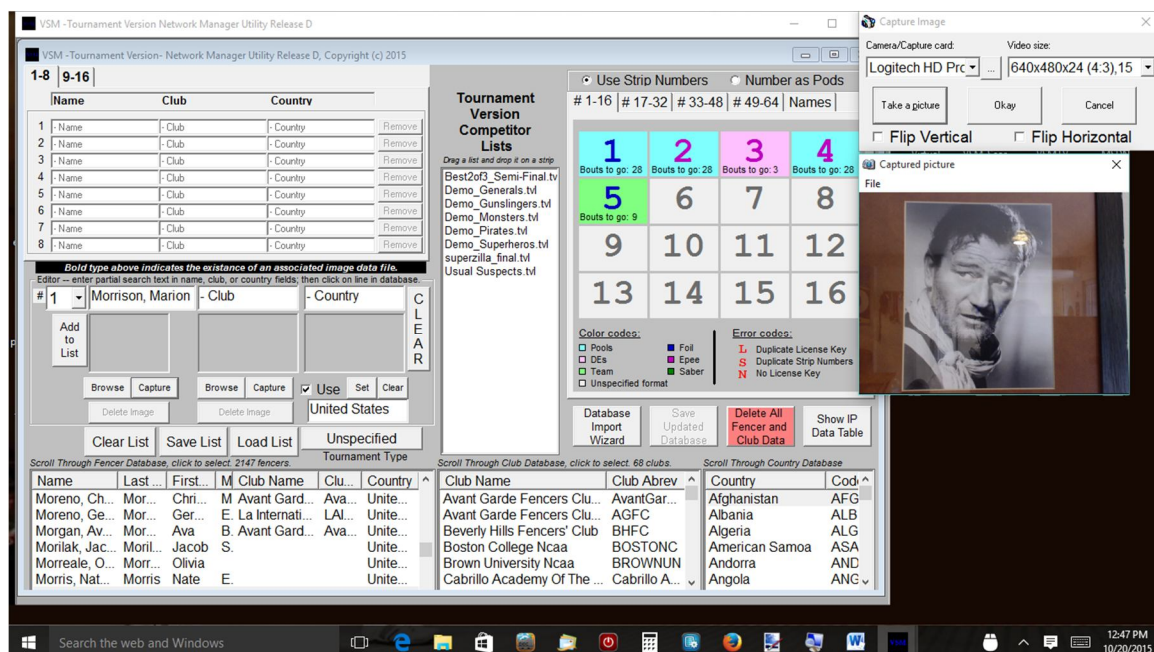
Note that for this network copy operation to succeed, your target VSMTV strip needs a (non-expired) License, needs to have its VSMTVdata folder shared on the network, and both NetManager and the VSMTV strips must be operating on the same network.

Adding Images.

One of the main ideas behind VSM - Tournament Version was to improve the “spectator appeal” of the scoring display with the addition of imbedded graphic elements like the fencers’ names, images, countries, flags, and club logos. But where do these image files come from?

Eventually, the idea is that there will be a centralized website repository for club and fencer image files where each club and fencer could upload a current image or logo. But that is still in the future; for now NetManager has a local solution and that is to allow a simple webcam to capture images, or to browse to locally stored files and attach as images.

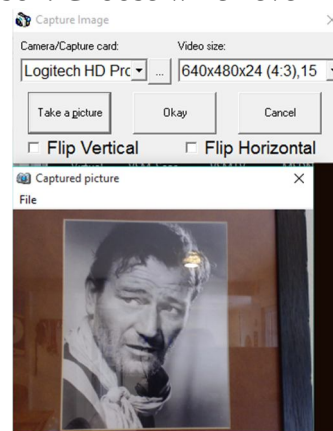
So if you have a list built or just want to add an image and associate it a fencer, first click on that fencer’s database entry line, or type his name into the “- Name” search box. In this example, I’ve added the fencer’s whole name, “Morrison, Marion” since he had no pre-existing entry in the database to select. Then I clicked on “Capture” to open the Image Capture Tool (shown below.)



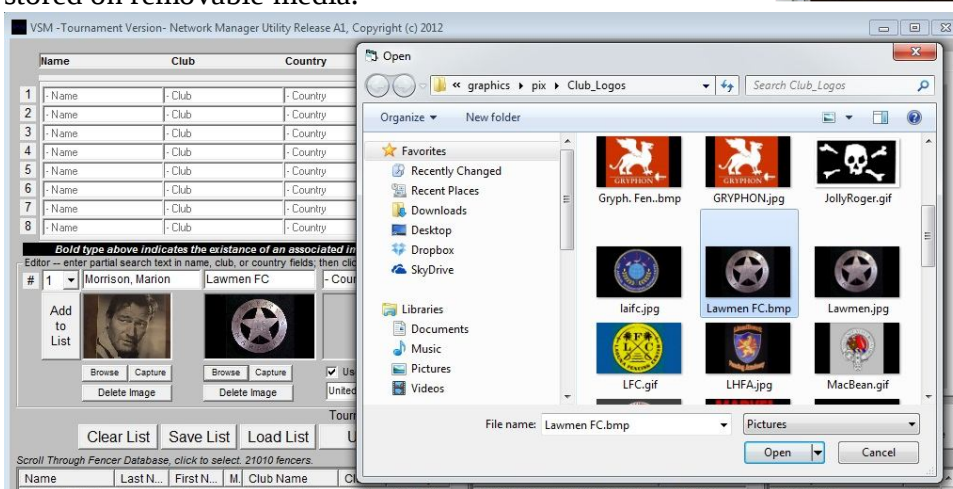
In this still you can’t tell, but the window on the right is a live video feed coming from the laptop’s webcam on which NetManager is running. Clicking the “Take a Picture” button extracts a still from the live video and puts it into the preview window. Repeat if needed until an acceptable still is achieved, then click the okay button. The image is now associated with this fencer (and saved to disk in this case as MorrisonMarion.bmp”).

It’s very possible today to have two cameras installed on a laptop or tablet (front and back,) and of course you can add a webcam very inexpensively too. Just make sure all the cameras you want are plugged in before running NetManager and they will all be

detected and listed in the Camera Capture Card drop down box. Choose which ever camera you like and the various resolutions and modes for that camera will be listed in “Video Size” drop down. The approximate aspect ratio for each mode is also listed in parenthesis like this: (4x3). Fencer Images use 4x3 aspect pictures, and Club Logos use 5x3 or 16x9 aspect pictures to avoid distortion when displayed in VSM-TV.



Next, I added his club “Lawmen Fencing Club” which had no pre-existing logo. Here, instead of capturing an image live, I used the “Browse” function to use a picture stored on removable media.



Just click “Open,” and the image file will now be associated with that club’s name. And, the association will also be true for any other fencer in the same club as well.

Once that has been done, click the “Add to List” button and the new fencer will be added to the database, including his club affiliation, and in this case, also his country affiliation since the “Use default country” feature had been set up and checked.



Resetting Your Database.

Periodically, you may wish to reset your database and eliminate un-needed or non-current fencers that have accumulated over time. If so, the way to do that is to click the red “Delete All Fencer and Club Data” button.



You will be prompted to continue and if you click ok, then the existing database will be renamed with a backup filename that is comprised of the date and time such as “2012-10-27_19-33_fencers.csv.” This indicates that the file was “deleted” on October 27th 2012 at 7:33 pm.

Should you decide that this was an error and that you’d like to restore that particular database, all you need to do is to rename the file as “fencers.csv” and restart NetManager. The Club database is also similarly renamed and can be restored by renaming that file as “Clubs.csv.”

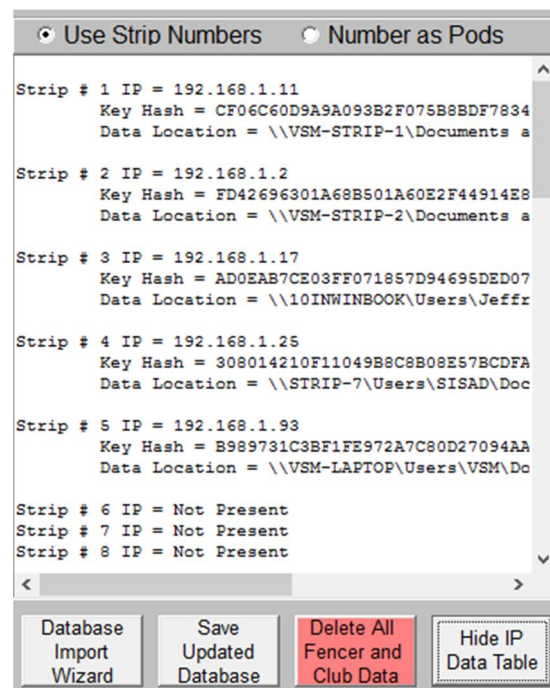
After deleting your database, setting up a new one is done by downloading a current file from The USFA website, or exporting a database from Fencing Time, and using the “Database Import Wizard” button as described in the beginning of this manual.

The IP Data Table.

Clicking the IP Data Table button will temporarily overlay the strip icon matrix with a table showing various pieces of data about any and all of the VSMTV strip PCs that are communicating over the local area network with NetManager. This table can be useful for trouble-shooting in the case of network problems, but is also useful if you want to remotely operate one of the Strips.

In the simple setup on the right, there is only one strip connected as “Strip 1,” and it is communicating on the network using IP 192.168.2.10.

This information can be very useful for remote controlling a strip. If you are running a large tournament, or even a smaller club, but have VSMTV strips that are located in other rooms or a distance away it can be very convenient to operate them remotely.



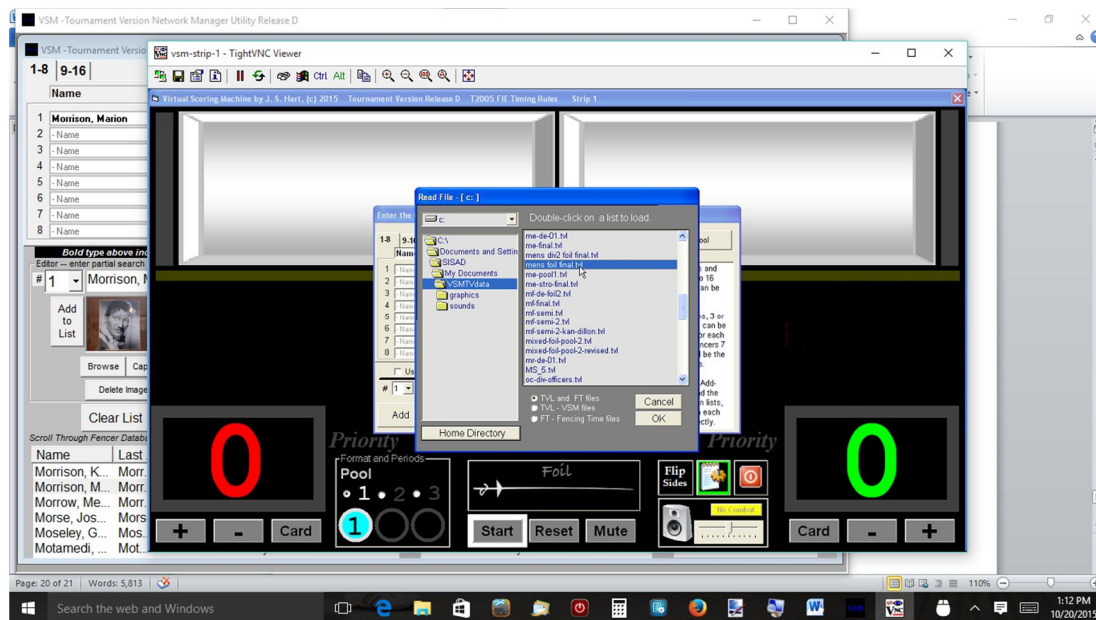
Remote Controlling a VSMTV Strip.

While it is outside the boundaries of NetManager, there are network applications that let you “take over” control of a PC using pre-installed remote control software. One of these is called “Tight VNC.” And there are others as well. Most of the “VNC” based applications should be freely useable under the “Gnu” General Public License. If you install the “server” VNC application on your VSMTV Strips, and also install the “VNC” viewer on your NetManager PC, then you can remotely operate all your network-connected VSMTV strips from the same laptop or PC that you use to build your competition lists and monitor your competition.

The one piece of information you need to connect to a remote strip (other than any passwords) is the IP that the remote strip is on. That information can be cut-and-pasted from NetManager’s IP Data Table into the VNC connection dialog shown here.



Then connect the “Connect” button and you will see a size change-able window showing the remote PC’s screen. Your local mouse and keyboard can now be used to operate the remote computer, allowing you to control any VSMTV from elsewhere on the network.



Trouble Shooting.

1.) NetManager needs network connectivity to all the client VSMTV strips to be effective. So... all the PCs need to be on the network, whatever network you elect to use. If there are problems, the first step is to check each PC's network connection. If all PCs are network-connected, then go on to step 2.

2.) If you're getting an "L" indication displayed on one of the Strip Icons, it indicates that that two of the VSMTV strips are using identical license keys. That will look something like this. One of these two "L" VSMTV strips will need to have a new unique license keys entered. License keys are available on the www.VirtualScoringMachine website.

Strips 1-16 Strips 17-32 Strips 33-48 Strips 49-64			
L Bouts to go: 28	2 Bouts to go: 28	3 Bouts to go: 3	L Bouts to go: 28
5 Bouts to go: 9	6	7	8
9	10	11	12
13	14	15	16
Color codes: ☐ Pools ☐ DEs ☐ Team ☐ Unspecified format ☐ Foil ☐ Epee ☐ Saber Error codes: L Duplicate License Key S Duplicate Strip Numbers N No License Key			

3.) If you are getting an "S" indication on one of the strips, it indicates that at least two of the VSMTV strips have been set to use the same strip number. The "S" may flash on and off. The strip that is first to connect to become connected to NetManager will be the one displaying the "S," in this example it is strip #4. At least one of the other VSMTV strips is trying to connect to NetManager and is also reporting that it is strip #4. The only way to find out which strip is duplicating this strip number is to directly examine the settings of the machines on the tournament floor. Then you will need to assign that machine a new, unique strip number in its settings.

Strips 1-16 Strips 17-32 Strips 33-48 Strips 49-64			
1 Bouts to go: 28	2 Bouts to go: 28	3 Bouts to go: 3	S Bouts to go: 28
5	6	7	8
9	10	11	12
13	14	15	16
Color codes: ☐ Pools ☐ DEs ☐ Team ☐ Unspecified format ☐ Foil ☐ Epee ☐ Saber Error codes: L Duplicate License Key S Duplicate Strip Numbers N No License Key			

4.) If you are getting an "N" indication from one of the VSMTV strips, it indicates that that strip has no key (or an expired key) and is currently operating in Demo mode. In order to have NetManager connect to this strip it needs to have a new, unique license key installed. Once again, license keys are available on the www.VirtualScoringMachine website.

Strips 1-16 Strips 17-32 Strips 33-48 Strips 49-64			
N	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
Color codes: ☐ Pools ☐ DEs ☐ Team ☐ Unspecified format ☐ Foil ☐ Epee ☐ Saber Error codes: L Duplicate License Key S Duplicate Strip Numbers N No License Key			

5.) Network permissions... It seems that every time a new version of Windows is released, a new wrinkle is added to sharing files over the network. As previously stated, all the VSMTV PCs should have their local \VSMTVdata folders shared on the network. This gives NetManager the required permission to copy the data files to that strip/PC. This was pretty simple using Windows XP. Since then, this process has gotten a bit more complicated with the advent of Vista, Windows 7, 8, 8.1 and now Windows 10. But it all still can be done...

See the VSM-TV manual for more on the ins and outs of sharing. Much of this will vary depending on your version of Windows, but in summary here are some tips:

- 1) Explicitly share the \VSMTVdata folder with full control with everyone.
- 2) If you can, make sure all the VSMTV PCs and the NetManager PC are on the same Workgroup, and if applicable, the same Homegroup.
- 3) Using the same User Name and Password for all the PCs usually avoids a lot of the security issues. (However, if you take the rest of the steps this shouldn't be necessary.)
- 4) Turn off the Windows firewall and use a private network.
- 5) If using Windows 10, do not use a "Microsoft Account" as your login account. Instead use a local account. Took me a lot of effort to track this one down...
- 6) In each of the PCs settings, under "Network and Internet" scroll down to "Change Advanced Sharing Options." Make sure that "Network Discovery" is turned ON, and that "File and Printer Sharing" is ON for Private, Guest and Public, and All Networks. And finally, also under "All Networks" make sure that "password protected sharing" is turned OFF.

A Note about Strip Numbers, Pods, and Names

This is new to NetManager, Network Repeater Application, and VSMTV with release D. The way in which strips can be identified has been expanded. Originally, VSM only used plain old numbers, from 1 to 64. I figured that would be enough for even the largest tournament... However, during the development of VSMTV release D, and the collaboration with Fencing Time's author (Dan Berke) I realized that in the wider world of FIE and USFA tournaments, strips can have other naming conventions. USA Fencing likes to use "Pod" numbers such as A1 or M3... generally a single letter with a single number. The F.I.E. uses ordinary numbers, but also uses specific "Named" strips such as "Podium" or "Rouge."

So, to expand VSM's horizons, I am expanding my naming conventions to include these methods. But there was a slight wrinkle that required some thought to solve. VSM and VSMTV has automated as much of the networking details as possible. And it does so by letting the PCs communicate over network ports to exchange information on IP addresses, as well as license information, etc. To do that, each VSM pc reserves two ports for its own use. And these port numbers are tied to the strip number via a simple formula... This worked great for strips numbered 1 to 64... but breaks down for a strip named "P2," or "Gold," or "Finals".

So instituted as system where each strip has a "Strip ID" and also a corresponding number, thus allowing me to continue using my system of automatic IP discovery while accommodating regular strip numbers, Pods, and names as Strip IDs.

So if you've used Pod numbers or Names on any of your VSMTV strips, the scoring machine display title bar on it will now display both the Strip ID, and also (in parenthesis) the equivalent strip number. This number can then be selected in one of the eight drop downs under the "Names" tab. And then NetManger can communicate with that strip even if it is a previously unknown Strip ID.

The numbering convention now is: regular strip IDs 1 to 127 are their actual number. Pods A1 to Z9 will correspond to the numbers 128 to 387. And Names will correspond to the numbers 512 to 1023. And that should be plenty. I hope.

Use Strip Numbers		Number as Pods		
# 1-16	# 17-32	# 33-48	# 49-64	Names
Podium	Finals	Red	Blue	
Yellow	Green	Gold	Bronze	
Select	Select	Select	Select	
513				
519	Select	Select	Select	
520				
521				
522				
523				
524				
525				
Team				
Unspecified format				

Error codes:

- L** Duplicate License Key
- S** Duplicate Strip Numbers
- N** No License Key