

PractiScore

iOS & Android USPSA Scoring System User Guide and Reference

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Prologue

I remember my first USPSA match very well. I'd shot a few IDPA matches, which has simpler time-plus scoring. But this USPSA game had this odd hit factor scoring, with A,B,C,D, and no-shoots, penalties, procedurals, misses, and minor and major hit factor. I shot the match but beyond time comparisons to what I was hearing called out for other shooters I had no idea how I was fairing.

Two days later I found out that misses and minor matter.

I suspect the idea for PractiScore was born that week, but it took a while for my experience in the sport, and dedication to it, to germinate. But once it did I decided that it was time to bring the scoring part of the sport as far along as the gun part.

Fortunately, I was well positioned to make that happen, being a long time software entrepreneur with a staff of smart and hard working software engineers.

And so over the last year the PractiScore project has developed. From a first meeting with Dave Thomas (the guy who runs the USPSA day to day) and Rob Boudrie (Area 6 Director and a key USPSA tech guy) at the SHOT show in February 2011 to when I write this in Oct 2011, we've worked hard and come up with an impressive system - considering it was a part-time project for all involved.

First... some thanks.

I'd like to thank Rod Cassidy for his impressive StageScore program for the Palms. As an engineer, I'm astounded by what he was able to cram into an aged Palm platform. PractiScore rests squarely, from an interface and procedure view, on what he built.

I'd also like to thank the USPSA, and in particular Dave Thomas, Rob Boudrie and Roger Maier. They have been totally supportive of this "new guy with the big ideas" from the get go. They put a lot of trust in me, and I've worked hard to earn and keep it.

I'd like to thank my two USPSA clubs, Southern Utah Practical Shooters (St. George, UT), and Sin City Shooters (Las Vegas). They gamely put up with early versions of PractiScore. Their willingness to try new stuff, and also their excellent feedback has made PractiScore way better, far quicker, than it might have been.

I can't say enough positive about the sponsors of PractiScore – MGM and STI. They also put trust in me. Basically, on a description of what we were trying to do they signed up. They do so much for the sport... you really should buy their superb products any time you have a need. Without their sponsorship PractiScore would be far less comprehensive than it is now.

Finally, I'd like to thank my co-workers at NiftyBytes (<u>www.niftybytes.com</u>). In particular, Devin Pitcher, who is the lead engineer for PractiScore and the primary author of the iOS (Apple) version. Josh Ruesch, lead on the Android version, Bryan Williams (who handles PractiScore.com) and Kim Hancock (working on a awesome stage designer for PractiScore.com) also deserve big thanks for working on my hobby in their evenings.

Regards,

Ken Nelson

Oct 2011

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What is PractiScore?

PractiScore is a scoring system for USPSA pistol matches. It runs, currently, on iOS platforms (iPhone, iPod Touch, and iPads). It also runs on Android devices running the Android 2.2 kernel or later.

PractiScore can be used in three distinct modes:

1. Stand-alone complete scoring system

Using one or more devices running *PractiScore* you can score and generate complete match results for a match of any number of competitors or squads. You can register shooters, score them, compute results, and share the results – all using just the mobile devices (no PC needed). There is even club support that remembers shooter information from match to match, making registration quick and easy. Registration need not be done on a single device either. You can hand devices out, have shooters register in their first squad, first bay, and then integrate the registration and results as the match proceeds. Match definitions, shooter registrations, and scores are shareable from device to device via Bluetooth, or preferably by a common Wi-Fi router. If on the same network (provided by a Wi-Fi router) then all match data is easily shared between devices.

2. Stand-alone scoring. Use ezWinScore for classification submitting

This mode works as Mode #1. However, because *PractiScore* does not export USPSA classification / activity reports, you must use ezWinScore to process the match and submit the activity and classification results to the USPSA classification system.

This is very easy to do. *PractiScore* generates match export files that ezWinScore reads. No data need be entered by hand, the process takes a couple minutes on any sized match. You MUST however make sure you are using compatible versions of ezWinScore.

3. Data collection system for ezWinScore

In this mode, *PractiScore* operates much as the Palm systems do today by collecting scores that are then imported into ezWinScore. The process, and files, are identical to those used in the Palm system.

Terms

- *Device* in this manual a "device" is any device running *PractiScore*. All major functionality except Bluetooth (not available from Android to iOS or vice versa) is available on any device running *PractiScore*.
- *iOS* iOS is the operating system running on Apple's iPad, iPod Touch, and iPhone.
- *ezWinScore* ezWinScore is the official scoring software of the USPSA. It runs on Windows PCs. *PractiScore* integrates with ezWinScore. Each version of PractiScore will tell you what version, or versions, of ezWinScore it works with.
- *Android* Android is a computer operating system offered by Google. It is used on a wide variety of mobile phones and mobile computing tablets. *PractiScore* runs on Android 2.2 or later.
- *Synch* Short for "synchronize", this term is what we call the process of getting match data (stages, shooters, scores) from one device to another. Synching is done via Bluetooth (iOS to iOS device) or between any device on the same network (common WiFi router).

How to use this manual

This manual is not meant to be comprehensive. Instead it describes the key screens in *PractiScore*, as well as basic methods for using PractiScore in practice, club matches and higher sanctioned matches.

It is meant as an overview and a supplement to more current videos available at <u>www.practiscore.com/support/</u>.

Occasionally you will see notes of importance that you should heed. So heed them!



This would be important stuff you should take notice of. If not, well, you may end up with wrong match results, or sending in bad classifier scores, or who knows what. Anyway you won't be happy if you ignore this.

Getting Help

The quickest way to get help is to visit the forums at:

www.practiscore.com/support

You can get help on procedures, report bugs, and suggest features there.

If you can't sort out the issue there, or if you are running a Level II or III match and need urgent help then e-mail <u>support@practiscore.com</u>

If in dire match threatening trouble call my cell (435) 703 2897. And prepare to send a nice gift. (-:

PractiScore Work Areas

PractiScore has three main work areas, which you can switch between by tapping this bar at the bottom of the screen:



- Match Scoring this is the main area of *PractiScore*. Create matches, register shooters, score matches, and view results here.
- **Club Management** you can manage multiple clubs, which are really just lists of shooters you have registered into matches. To prime the pump you can also import your ezWinScore master database.
- **Synch** use this area to share match data between devices, ezWinScore, the USPSA match results web system, and ultimately PractiScore.com. You can also backup the current match here (by e-mail or to local store) a good idea.



The three main work areas

Creating a Match

To create a new match, touch the menu item "Change Match" at the bottom of the touch screen. The list of existing matches is shown, along with a menu option to "Add Match". Press Add Match, and enter the required information in the resulting screen:

| Carrier 🗢 8:53 PM | Carrier 🗢 | 8 8:54 PM New Match | |
|-------------------|---------------|------------------------|------|
| Choose a match: | Name | Match for Manual | |
| my first match | Date | Oct 3, 2011 | |
| Add Match | Club | My Local Club | |
| | | Club | Done |
| | none My Lo | cal Club | |
| PracticScore MGM | | | |

The name can be anything you want... almost.



It is a good idea to AVOID special characters in the name of matches. For instance the characters "'/ $\$. and , PractiScore can handle them fine, but ezWinScore and some e-mail programs might not. The club selection is optional. You can choose none, which is useful for practice sessions, or use the club of your choice. Once set, it will remember shooters you've registered and suggest them automatically when registering.

Changing Matches

By default *PractiScore* will switch to the match you just created. It will also remember the match you were using when your device shutdown, or when *PractiScore* was stopped by the iOS or Android system.

If, however, you need to go back to a prior match, it is easy. And you do not have to do anything special to save the current match, all changes are saved automatically as you make them.

Just go to the "Change Match" menu as shown above, and select the match that interests you. The current match is always shown at the top of the screen (shown in the red circle).



Deleting Matches



There is no need to regularly delete matches to save space or memory. They don't take much room. The usual need to delete matches is when they are created as tests, or by accident. Deleting them is easy. Just choose the "Edit" button at the top of the Change Match menu, and then hit the minus (-) sign next to the match you want to delete. The delete button will appear, after due consideration hit it. And then hit the Done button in the upper right.



Designing Stages

Building stages is quite easy in PractiScore. A typical 5 or 6 stage club match will take less

than 5 minutes. To get started choose "Build Stages", then "Add Stage" and give the stage a name.



Enter the basic stage data, such as name, scoring type, and number of poppers/steel plates:



If you select Classifier then you will be asked for the classifier number. This can be of the format CM ##-##, or just ##-##, for instance CM 99-12 or 06-05. It is a good idea to have the name of the stage be the actual formal classifier name for example "Fluffy's Revenge 1". But it isn't necessary.

Try to get the stage definition right... but take heart, you can change it as you shoot if you discover a mistake was made.

Specifying Targets

Initially there are zero (0) paper targets specified. To add paper targets click on "Paper Targets" menu. Then click "Add Target" to add the number of targets desired for the stage. I'll add 4 for this example.



Note that the number of hits required defaults to 2. To change this tap the number 2 once to increment it to 3, and 4, so on. To correct a mistake just TAP AND HOLD the number until it resets to zero, then tap again to the correct number.

No Penalty Misses (NPM) may be optionally specified for disappearing targets. If specified then NPM will be available when scoring the stage but JUST FOR THAT TARGET. My practice for this is to make it NPM targets the last or the first, that way I can enter them consistently.

If you need to remove a target, simply hit the "Edit" button and then the "-" sign next to the one you want removed. That target will be highlighted in red, as shown below. It won't be removed though, just inactivated (effectively the same). It won't be scored, and if scores for it exist, they won't be used. At any point, however, it can be added back.

| | • | | | | | e | | | |
|--------|----------------|---------------|--------------|---|--------|----------|----------|-------------|---------------|
| Carrie | r 🗢 1 | 0:36 PM | | | Carrie | r 🔶 | 10: | 37 PM | |
| Edit | Stage Setu | o Targets | Done | | Edit | Stage | Setup | Targets | 5 Done |
| | Hits | Required | Max NPM | | | | Hits | Required | Max NPM |
| | Target 1 | 2 | 0 | 1 | • | Targ | et 1 | 2 | 0 |
| • | Target 2 | 2 | 0 | | | Targ | et 2 | 2 | 0 |
| • | Target 3 | 2 | 0 | | • | Targ | et 3 | 2 | 0 |
| • | Target 4 | 2 | 0 | | • | Targ | et 4 | 2 | 0 |
| • | Target 5 | 2 | 0 | | • | Targ | et 5 | 2 | 0 |
| | A | dd Target | | | | | Ac | d Target | : |
| Тар | o to increment | or tap and ho | ld to reset. | | Тар | o to inc | rement o | r tap and h | old to reset. |
| | PracticS | | | | - | Pr | acticSc | ore M | GETS MGM |
| | | | | | | | | | |

Once design is complete, take time to verify it is correct. The rounds required and the points available are shown at the bottom of the stage design screen:

| Classifici | |
|--------------------|------------|
| Strings | 1 |
| minimum rounds: 12 | points: 60 |

Continue adding stages until your match is defined.

Registering Shooters

There are three ways to register shooters into a PractiScore match:

- Use the "Edit Shooters/Squads" menu to add them on a device, then share them with other devices.
- Use the "Edit Shooters/Squads" menu to add them on multiple devices, for instance on a squad by squad basis, then combine them via the WiFi or Bluetooth sharing (see next chapter)
- Register them in ezWinScore and export them to PractiScore by e-mailing them to the device, or by using iTunes file sharing to get the ezWinscore export file to the device.

Sharing registrations between devices will be covered in the next chapter – "Using Multiple Devices". Registering in ezWinScore will be covered in the chapter "Working with ezWinScore".



Adding Shooters on a device

All data except EZWinScore Shooter #, Squad, and E-mail is required and I will assume you know what the data is used for.

ezWinScore Shooter # defaults to -1, leave it alone. It is used in rare cases where shooters have been initially registered in ezWinscore, and then shooters are added later. Using this field you can keep the numbers in synch.

Squad defaults to 1. It isn't critical to squad, it can be done on any device having shooters, and the squads need not even be the same, or have the same members. The squad number is really just used as a convenience to winnow down the list of shooters.

E-mail is intended for later use, when the device will automatically e-mail a shooters results to this address.



Any data you enter is remembered and kept as the default for the next time that shooter is registered into a match. This makes registration fast and easy, BUT, you must take care to ensure you verify a shooters Division, Power Factor, and other changeable data each time you register.

Selecting Squad and Stage

After selecting "Enter Scores" you then select squad and stage



Setting a Shooting Order

You have 4 ways of choosing a shooting order:



- Alphabetic, Shooter Number, and Hit Factor are obvious and happen as you select them.
- **Random** sets the shoot order to a random list of the shooters in the squad. This order will stay until re-randomized via the Re-randomize button. In our experience shooters like the random shoot order feature and we re-randomize each stage.

Entering Scores

After selecting a shooter, verify at the top of the screen that the shooter is who you want, and that the stage is correct:

| Carrier 🗢 | 9:50 P | М | |
|-----------|---------|------|---------|
| Shooters | Nelson, | Ken | |
| Fast & (| Curious | | |
| Time | | 0.00 | seconds |
| | | | |

• Entering Time

Just click the time area. A keyboard pops up, enter the time. And then check it. To accept it just click anywhere else on the screen to close the time keyboard. If you click in the time field again it nulls out the time, or if you click elsewhere it will restore the original time.

• Steel Targets

By default all Steel targets are counted as DOWN. If one is left standing, just tap where it has "0" by the Miss. This will increment "Miss" and decrement "Hit".

• Procedurals

Tap the procedural box to increment the procedural penalty count. If you make a mistake just TAP AND HOLD the box to zero it out and start over.

• Paper Targets

To score paper targets click on the "Targets" button to expose this screen:

| _ | | | | | | | |
|---------|--------|----------------|-------------------|------------------|----------|-------|--------|
| Carrier | | on | 9:54 | 1 PM | Fact | 8 CI | |
| T# | A | В | С | D | NS | M | NPM |
| | | | | | | | |
| 2 | | | | | | | |
| 47 | | | | | | | |
| 5 | | | | | | | |
| Tap t | o inci | remen row h | t, tap a eader | and ho to res | old to r | eset, | or tap |
| statu | s: C |)/5t | arget | s cor | n | D | one |
| | | | | | | | |
| | | | | | | | |
| | | | / | | | | |
| | | | | | | | |

Just tap the A, B,C,D, NS (No Shoot), or NPM (No Penalty Miss) as appropriate. So, for instance, for 2 Alpha on T1, just click the A cell twice.

If you make a mistake on a target, clear the target by tapping the circled T1, T2, so forth, label on the left.

Finally, when a target is completely scored its row is GREEN. When too many hits are recorded the row is red.

| T# | А | В | С | D | NS | Μ | NPM | T# | А | В | С | D | NS | М | NPM |
|----|---|---|---|---|----|---|-----|----|---|---|---|---|----|---|-----|
| I | 2 | | | | | | | T | 2 | 1 | | | | | |
| | | | | | | | | | | | | | | | |

Reviewing Scores

When scoring is complete the "Targets" field shows "Ready". The score is then ready for review. To do this hit the Review Score

A summary pops up showing the hit factor, scoring zone summaries, misses, noshoots and procedurals:



To return to the squad list and choose the next shooter just choose "Squad". Note that the shooters Hit Factor is now shown, with remaining shooters shown as "Not Completed".

PractiScore gives complete match results including Combined Overall and Division results for the entire match and each stage. These results have been tested on numerous matches and found to be exactly the same as ezWinScore.

All match results can be viewed on the device and e-mailed from devices that have Internet access.

Stage and Match Results are found in the "View Results" menu, you are then shown options for match and by stage results.



Match result are simple HTML files.





Clicking on the button brings up the default e-mail tool (as defined on the iOS or Android system) to send the HTML result file being viewed via e-mail. This does require the device to be connected to the Internet.

PractiScore has been used to score large multi-squad matches, including the Utah State Championship, numerous club matches in Las Vegas, and also a large 130 shooter, 6 squad high round count match called the Halloween HoseFest.

You can use PractiScore on its own, or you can use it as a data collection system that feeds scores into ezWinScore.

We will handle this section on the <u>www.practiScore.com/support/</u> area because it is very different in those two modes, and also because the system is changing rapidly and we can maintain the website more accurately than PDFs that might have been downloaded and not updated.

So visit <u>www.practiscore.com/support</u> to see how to use PractiScore to score multi-squad matches, solo or with ezWinScore.

The most important part of working with ezWinScore is to ensure you have the correct version of ezWinScore to use with the version of PractiScore you are using.

Before ANY import or export operation, PractiScore will also report what PractiScore version (or later) the feature depends on.

If you are familiar with using the Palm systems to work with ezWinScore then you will know how to do it with PractiScore. The only difference is how to get score and stage import files to the PC.

This area is undergoing regular updates, so to avoid the risk of incorrect information being in a PDF that hasn't been updated, find information about this feature of PractiScore at www.practiscore.com/support/

PractiScore Remembers

Any competitor you enter into a match in PractiScore is remembered so that if you want to register them again, you can just type part of their first name, last name, or USPSA # and it will suggest them to you.

This happens with shooters you register by hand, or when you synch a match, or when you import a match.

It is essentially an autocomplete shooter entry database.



To delete a shooter from the database just swipe to the left over the autocomplete text.



As of right now there is no way to clear the AutoSuggest database other than uninstalling PractiScore. Take care though... that will also clear any matches you've scored.

Importing club information from ezWinScore

If you have been using ezWinScore for some time then you will have a well developed "master" database in the ezWinScore databases. You can create a club with it by exporting it, and importing it in PractiScore.

The first step is to export a textual list of your master database from ezWinScore. Do this from the *Reports->Export Registration Information* menu of ezWinScore. This brings you to the Export dialog:

| 🐺 Export Registration To Exter | nal File | | |
|----------------------------------|----------------------|---|--------|
| Fields to Include in Export File | | _ Select Database | |
| Competitor Number | Rifle Entered | 🥑 Master Database | Export |
| 🗹 USPSA Member Number | Rifle Division | Current Match | |
| ✓ Name | Rifle Power Factor | | Liose |
| Address | Shotgun Entered | Competitors to include | |
| _ Telephone | Shotgun Division | Exclude deleted competitors | |
| E-Mail Address | Shotgun Power Factor | Exclude competitors with first name "Walkin" | |
| ✓ Female | Aggregate Division | | |
| Division | | | |
| Power Factor | | | |
| | | File Format | |
| Squad | | O CSV - Comma Separated Values | |
| Deleted from match | | TSV - Tab Separated Values | |
| 🔲 Foreign | | | |
| 🔜 Military | | Include header with titles as first line | |
| Law | | | |
| Select All Clear All | | Use the Export button to create registration.txt in your output file directory | |

Choose the "Master Database" from the radio selection box option in the upper right, and then the "Select All" button. We suggest using the file format "TSV", as "CSV" isn't as reliable because of commas embedded in names like "Thurston Howell, Jr". If a CSV export has extra commas in them then that row is skipped. You are told how many were skipped at the end of the export. TSV is a better choice, though, so we recommend it strongly.

MAKE SURE "include headers with titles as first line" is checked.

Then click "Export" and REMEMBER WHERE IT PUT THE FILE when it tells you.

The easiest way is to e-mail that file to an account you can read on the same device you run PractiScore on. Then in the e-mail, open the attachment. It will give you a list of apps that work with it – choose PractiScore. And then the names will be imported.

If you do not have e-mail on the device, then in PractiScore, go to the Sync page and choose "Import from iTunes. Just follow the instructions on the device, they will change from system to system, so they are documented in the tool, not in this manual.

This Appendix describes our view of "Best Practices" as we've learned using early version of *PractiScore*.

A key point is that while we have never lost a single score with *PractiScore,* it could happen, if not from software bug, then from something natural – like a truck driving over a device, or dropping a device in a puddle.

Club Matches (Level 1)

- Have as many club members watch the training videos available on www.practiscore.com/support/
- During your intitial use we recommend using a paper backup system where you record the data on the "Review Score" scoring page. This has the time, hit factor, conts of Alphas, Bravos, Charlies, Deltas, No-Shoots and Procedurals. This need not take very long, and multiple shooters can be recorded on one sheet of paper. A paper summary example PDF file is available at www.practiscore.com/support/

Continue this approach until you have confidence in your devices and your system.

- When confident with your devices and user, drop the paper system. But have a device devoted to backing up scores via the device sharing methods described in the "Using PractiScore with Multiple Devices" support page online.
- Have 1 extra device for every 4 squads. And 1 device devoted to gather backup data.
- Make sure to have waterproof bags to operate devices in. They are readily available online at places like Amazon.com

Level II and III matches

• We recommend paper summary backup and regular backup to other devices.

• Please let us know (email support@practiscore.com) when you plan to use PractiScore at a Level II or III match. We would be happy to help, and time/money permitting come to the match and help with setup and implementation.

Complete Match Export for backups and technical support

The *PractiScore* Sync menu option "Email Match Export File" provides a means for backup and also sending complete matches to the PractiScore development team for debugging problems.

So, for instance, if you have an incorrect score using the Match Export file we can get your exact dataset and go about replicating the problem, and then fixing it.

Remember when sending a file to also document the problem to as much detail as you can.

The Match Export file also acts as handy backup, and way to duplicate a match. Just e-mail it, and you have it in your Sent box as a full match backup. Slick!