FieldWorks

1.1.0

1. **Installation**

   Both FieldWorks Setup and FieldWorks Server Setup application files will take care of everything automatically. Upgrades can be run on top of existing installations.

2. **License Installation**

   License information will be emailed out to users following purchase. You will be sent an activation code which you will put in once you open FieldWorks. There is a prompt for a Machine Identity, which is stored in case you need to deactivate the machine, limit is 30 characters.

   The server has no license component.

3. **Interacting with Meet Management Software**

   FieldWorks uses standardize FieldLynx© outputs, so any software that can output FieldLynx© can output the necessary files to FieldWorks.

   On the back end, FieldWorks produces and outputs results files in a standard LFF format, which is compatible with all Meet Management Software.

   FieldWorks recommends using MeetPro©, which includes field event software integration at no additional cost.

   Athletes must be allocated competitor numbers in the Meet Management Software in order for proper scoring to occur.

4. **Interacting with Leica Laser Measurement Devices via Bluetooth**

   As of FieldWorks 1.0.2, the program can now communicate with Leica Disto devices using Bluetooth 4.0 (Bluetooth Smart)

   In Windows > Bluetooth Settings, "Pair" your Leica device. (Device needs to be on)

   As of 1.0.2 Leica inputs are only supported for Throwing events. Jump integration is on-going.

Be sure to ready your Leica properly for the event measurements you are requesting. Shot and Weight throw are the only throws to receive a fractional component while measuring in English. A Discus throw of 150 feet 5.5 inches rounds to 150 feet 5 inches. FieldWorks will not correct this value for long throws by default.

Leica Disto D810 and S910 must be unpaired before pairing to a new device. This is an issue from Leica, not FieldWorks.

Leica Bluetooth is ALWAYS ON meaning if the device is on, and will not broadcast that it is disconnecting. If the Leica turns off and a signal is not received, select "Allow Reconnect of Leica Disto" from the Disconnect Menu to allow FieldWorks to try to connect again. This is an issue from Leica, not FieldWorks.

https://www.FieldWorks.app/LaserInfo.pdf for more info on using a Leica Disto

5. Server Operation

FieldWorks Server is a background application meant to run on the same computer as your meet management software.

When you open the server program you are immediately asked to select a folder, this folder is where you will point your meet management software to.

If you select C:\Users\YOUR_LOGIN\Desktop\FieldToday, this should be the same folder/directory you use for the meet management software. You should see three files created by your meet management software in that folder. Eventually, this is where FieldWorks will write results to.

The server address is set using the sidebar. You will see the server address change in the nav bar. We recommend starting the server with the network protocol you plan to use being the only one active.

6. Standalone Operation

FieldWorks is designed to run without any interaction from the server, if you prefer. You can deliver start lists locally or via DropBox©, OneDrive©, email, or a flash drive/SSD/HDD. FieldWorks needs the EVT file, commonly listed as "lynx.evt", and will also accept the PPL file (which has a list of participants).

Importing these files will populate their respective lists.

At the end of the event, select "Export to Meet Management" from the file menu to export results files to a folder you select. Please note, this method cannot automatically write over previous results. You will be prompted to overwrite.

7. Scoreboard Output

FieldWorks communicates with ResulTV© using TCP/IP (Network (listen)) on your **local machine or remote computer**. The FieldWorks.rss script is available online and at the end of this document. In ResulTV© use SingleByte, {Network (Listen)}, user set Port, user set Address. The address and port can be set from navbar dropdown menu.

Important – Boot ResulTV first; Confirm ResulTV computer is pingable from FieldWorks Computer. On local machine, use 127.0.0.1 for address in FieldWorks.

FieldWorks outputs:

-Event Name (33 characters long)
-Flight Position
-Last Name (10 char)
-Affiliation (5 char, use abbreviation)
–ID
-Current Mark [Mark 1]
Converted Current Mark [Converted Mark 1]
–Wind
-Attempt Number
-Place
-Best Mark –OR- Current Vertical Height
–Women's Multi Score
–Men's Multi Score

Please consider creating a layout for Horizontals and Verticals for non-multis and multis, you will need to switch fields for points depending on gender.

Recommended Layouts: Horizontal, Vertical, Horizontal Multi-Events, Vertical Multi-Events.

As of 1.0.4 there is hardcoded output for Finished Results LED Display.

8. Event Options

a. Options for All Events (available in menu bar as well)

English – Metric input is default
Wind – off natively for throws and verts, but may be turned off for Horizontal Jumps

Reordering – Off by default as some meet management programs will reject reordered events.
Adding – Off by default as some meet management programs will reject athletes not seeded in the event.

Final – Not all events require a final, FieldWorks natively does not discriminate between prelim-finals or straight finals.
Multi Event – Changes the modular height increases for Verticals. Has no bearing on scoreboard output

b. Options for Horizontal Events

Wind, Number of Finalists expected (*n*), and number of Prelim attempts are all options available.

i. Final Creation – FieldWorks will create a new flight, in reverse competition order using the top *n* athletes from previous rounds. In accordance with rules, FieldWorks will automatically bring ties to the final.

Setting finals is easy, first entry the number of finalists, then click "Click to Set Finalists". A new finals tab is created.

c. Options for Vertical Events

FieldWorks has default values to increase the heights of vertical events to create a fast work flow. This can be done manually, but is non-reversible.

d. Athlete List Options 

Once an event has been selected and the athlete list populated, there exists an athlete options icon which allows an athlete to be moved to another flight or set to no-show. This is reversible. No-Show athletes will have their profile line darkened and shortened.

9. Horizontal Event Scoring

Users select the operating flight, then "select athlete", and that athlete is moved into the Active Athlete box on the right. Their Mark/Wind may be set, Four added, or Pass Selected. When a mark is present for their attempt, the box on the right changes from green "Clear Athlete" to a red "Add {MARK}"

The green “Clear Athlete” clears the athlete from the box and re-sets the scoreboard output to nothing.

See also “Creating a Final” below.

10. Vertical Event Scoring

After selecting event, select event settings and then input starting height. Athletes can then be selected and their jump results inputted.

At the end of the jumps at that height athletes who did not compete will be given “P” if they are still valid.

Eliminated athletes will selectable profiles will be turned grey to indicate they are no longer in the competition. This is reversible.

Entering a new height, or selecting the button to move up by a specific increment speeds up the process of moving to a new height.

Efforts at previous heights can be viewed by selecting an athlete, in order to confirm the current event status with officials.

11. Creating a Final

In an event with preliminaries completed, you may create a final using terms users set in the Event Options.

You can set the number of athletes advancing to the final, then “Create Final” which will load those athletes into a new flight in reverse order.

These athletes will retain their spot for scoring in their original flight, and marks will be transferred over for easy use in Meet Management software.

12. Mark Editing

Marks can be edited in FieldWorks. Users select the mark they want to correct, and a new section displays options to make the mark a foul, a pass, or enter a new value. For Vertical events the entire height must be re-entered.

Please note, edited marks are not immediately available for re-scoring and scoreboard outputs.

13. Background Saving

FieldWorks automatically saves a copy of the event after every attempt. If something happens, please reload the program and click "Load Last Event" to recover previous data.

You may also "Clear Last Event", but this is technically not necessary to do.

14. Did we miss something?

The fastest way to find us is on Discord: https://discord.gg/x42UnUKTMf

15. Release Notes

1.0.2 Critical Fix - "Metric"/"English" output on LFF files
Critical Fix - Easy Meet Manager PPL files
Feature Add - Leica Disto measurements for Long Throws Via Bluetooth
ResulTV Output – By Default to 255.255.255.255 instead of 127.0.0.1
-ResulTV port options in future release
Critical Fix – RSS fixed for actual outputs

1.0.4 Critical Fix – Vertical Output to Server now unborked
New System for Input/Output option handling
ResulTV output moved to TCP/IP – UDP is deprecated
Ability to set RTV address and port
Leica Disto measurements for Horizontal Jumps without Wind Via Bluetooth
Ability to Turn Off ResulTV (previously, runs in background by default)
Finished Results Board integration

16. FieldWorks.rss

```
; FieldWorks ResultTV output by Patrick MacDonald
; FieldWorks makes use of TCP?/IP protocol only
; No longer uses UDP as of Version 1.0.4
; Output is currently hardcoded, asking for more lines will not scale
; Please contact Support for requests and suggestions

; The 'double semicolon' line marks the beginning of a section and is
; required even in scripts that only contain one section.

; Tell ResulTV how to recognize when data packets start and stop.
;   + Header is required.
;   + Either Trailer or BodyLength is required.
```

; Some fields are not used in given events - Attempts is only for horizontals
; Two fields are used differently given event type
; Create two different Layouts depending on event
; Multi Scores not available for all events and not available for English Marks

;;Results

Header=\01R\02,Length=3
Trailer=\03\04,Length=2

TextField=Event Name,Length=33,Process=%s\L0\P0
TextField=Flight Position 1,Length=2,Process=%s\L0\P0
TextField=Last Name 1,Length=10,Process=%s\L0\P0
TextField=Affiliation 1,Length=15,Process=%s\L0\P0
TextField=Id 1,Length=4,Process=%s\L0\P0
TextField=Mark 1 or Attempts @ Height,Length=10,Process=%s\L0\P0
TextField=Hz English Mark or Vrt This Height Eng 1,Length=10,Process=%s\L0\P0
TextField=Wind 1,Length=5,Process=%s\L0\P0
TextField=Attempts 1,Length=1,Process=%s\L0\P0
TextField=Place 1,Length=2,Process=%s\L0\P0
TextField=Hz Best Mark or Vrt This Height Metric 1,Length=10,Process=%s\L0\P0
TextField=M Multi Points,Length=4,Process=%s\L0\P0
TextField=W Multi Points,Length=4,Process=%s\L0\P0