

FinishLynx Version 8.24 Release Notes

+ Improved Windows event processing during long cancellable operations (like Video Export).

It has been observed that FinishLynx can stop updating the progress bar and get the "(not responding)" message in the title bar while it is actually still making progress on the operation. For a long operation (Video Export can easily take 30 or 60 minutes) this is indistinguishable from FinishLynx "hanging".

+ The status bar progress meter now shows tenths of a percent for "Export Video" operations that are expected to take a long time. Specifically, it shows tenths when 500 or more frames are being exported and recompression is necessary and when 5000 or more frames are being exported and recompression is not necessary. We have found that recompression increases the export time by a factor of 10-50.

+ The status bar message during "Export Video" now includes "Hit Esc to cancel" to remind people that the operation is cancellable.

+ Optimized the "Export Video" recompression. The run time is now reduced by about 1/3.

As a reminder, these are the conditions that trigger the need for recompression:

1. A subset of the entire frame (view) is selected.
2. There are overlays, either regular and/or line labels.
3. The video scale option is not 100.
4. The image is enhanced in any way (brightness/gamma/etc).
5. The video quality option is set lower than what the image was captured at.

If none of these conditions are present then "Export Video" becomes a simple copying of data from one file to another and goes much faster.

+Fixed a problem that allowed bad 5L100/5L200 image data to cause FinishLynx to crash.

+ Fixed a problem with certain Turkish characters in text overlays is fixed.

FinishLynx Version 8.23 Release Notes

+ The front LED of the 031 IdentiLynx camera is now turned off during boot.

+This version adds support for the IdentiLynx-XR and IdentiLynx-XS Cameras.

+ Hidden setting comments can now be formatted with newlines. The comment for MainFont takes advantage of this.

+ There is a new "Image Adjustments" floating window (similar to the Keypad floating window). You select it under the Window menu (right next to Keypad). The floating window is "associated" with a particular enhancement region whenever you click on some part of an image (or move the hash line with the arrow keys). When the floating window is associated the controls are made active. When not associated (because it was just brought up or you closed the active event) the controls are inactive.

+ In the remote control interface the "Time" option of the ImageExport and ImagePrint commands has been expanded. You can now specify a start time and end time for the image area to be exported or printed. The remote control spec PDF has been updated to reflect this.

+ There is a new "Export" button on the "Extra Info" version of the splits dialog. This function writes a text file with a single line for each of the participant's splits. Each line has this format:
<laptimer name>,<tag id>,<peak signal strength>,<hit count>,<elapsed time>,<first seen time>,<last seen time>,<first peak time>,<last peak time>

The file's name is automatically generated as the "event filename" + "-" + <split id> + ".txt".

+ A drawing glitch with the LinkPod Address (on the Options Dialog LapTime Tab) is fixed. This only happened when there were no LapTimers in the list.

+ Fixed a problem with combo boxes on Windows 8. Any click in the drop down list would cause the list to disappear. This prevented the use of the scrollbar and also caused the list to prematurely disappear when selecting an item.

+ The main program font is now settable on the Options Dialog General Tab. You can select font name, size, and whether you want it bold. The "<default>" font name option gives you the system defined font that FinishLynx uses (and has always used) by default.

This is actually setting the \General\MainFont hidden setting, which has been around for a while. (Arial 15 Bold or 16 Bold adds considerable readability without taking up much additional space)

+ The \General\MainFont hidden setting now has a comment that details its format:

```
<f>,<s>[B][I][,<h>|A[,<w>|A]
```

<f>=font name

<s>=font size

B=Bold

I=Italics

<h>=extra line height

<w>=extra line width

A=Auto extra line height/width

The "A" is a new option for automatically determining how much to increase the line height and/or width. The new Options Dialog "Font"

setting always enables this new automatic mode. So, for instance, selecting "Arial 16 Bold" in the dialog will result in \General\MainFont being set to "Arial,16B,A,A".

+ You can now explicitly select the first (\17) and last (\18) names in a scoreboard script. Example2.lss is updated to document this.

+ The Remote Control interface has a new "R" image coordinate unit that is like the "r" unit but with zoom compensation.

+ The Remote Control interface "ImageGetInfo" command has a new "Options" parameter that can be used to select which information is returned. In addition to the existing pieces of information, there are 3 new ones: "Rate" (frame rate), "FirstTime" (time of first frame), and "LastTime" (time of last frame).

+ The Remote Control Spec has been updated ("FinishLynx Remote Control.pdf").

+ Exported video (AVI) files that reach 2GB are now kept instead of being deleted. The user is shown a message describing what happened and the last frame that fit in the AVI file is shown on screen. The message is:

AVI 2GB limit reached; last exported frame showing.

To avoid this limit try selecting fewer frames, lowering the video export quality, and/or lowering the video export scale.

+ FinishLynx will now recompress exported video if the video export quality is set lower than the quality that the video was recorded in, even if there is no other reason to do recompression (like overlays, less than full frame selected, enhancement, etc).

+ A problem is fixed that caused new IdentiLynx cameras to not work correctly in locales that don't use a period as the decimal separator.

A similar (though less noticeable) problem was happening with old IdentiLynx cameras in this situation.

+ There is now LapTime support for the RMonitor protocol.

FinishLynx Version 8.22 Release Notes

+ **Fixed a bug which caused the Focus Indicator to display Blocks per second, rather than Focus value.**

FinishLynx Version 8.21 Release Notes

+ There is a new "Enter serial number..." option under the Help menu. It will keep asking for a serial number until you either enter a valid number or hit Cancel. After you enter a valid number you must quit and re-start for it to take effect.

+ \Event\Image\SplitLineClose now defaults to 5000 (milliseconds).

+ There is a new "Time Offset" field in LapTime splits. This is displayed (and editable) in the "Edit split times..." dialog. You can use this field to "correct" where a split should be without having to change the time value that actually came from the LapTime device. While somewhat useful on its own, this field was really added to support the next item.

+ You can now "correct" (or move) split times directly on the image. You do this by holding down the Alt key while clicking (within 10 pixels) on the split line. The split line will turn the same color as the hash line to indicate that you are in this "correct" mode. When you release the mouse button the split will be moved from its original location to the current hash line location. This is accomplished by setting the split's Time Offset field to the appropriate value. You can repeatedly do this to the same split and the Time Offset field will always be set appropriately. To undo this go into the dialog and set the offset to zero. Note that if you release the Alt key before you release the mouse button the operation will not happen (useful if you realize that you "picked up" the wrong split).

New IdentiLynx stuff:

+ Added Support for the 031 Camera that will replace the model 511 camera.

+ The in-camera contrast value is now supported (these cameras don't support gamma, but they do support contrast). This setting appears above the gamma setting. Note that all cameras default to a value of 0.25, and have a range of 0.01 to 1.00, but they don't treat deviations from the default the same. For instance, 0.45 is moderately more contrast on the 765 and extreme on the 031.

+ A few unused settings (manual gain, AGC frequency, gamma) are now disabled.

+ Resolution is now selected from a menu rather than having to enter a legal height.

+ FinishLynx takes more time to change settings, and this delay is now shown in the status bar. Bootup takes a good bit longer, but now the camera is "ready to go" when boot is finally finished.

FinishLynx Version 8.20 Release Notes

+New Scoreboard Script, uGraphLED.lss is included.

+ There is a new hidden setting directory \Event\Results\Breaks\Names\ that is used to look up a break's name based on the distance of the race. You create "distance" subdirectories in this directory, and in those subdirectories you create strings numbered 1, 2, 3, etc, whose value is the name to be associated with the corresponding break time.

For example:

```
\Event\Results\Breaks\:,1=  
\Event\Results\Breaks\Names\:,1=  
\Event\Results\Breaks\Names\800\:,1=  
\Event\Results\Breaks\Names\800\1:String,1=100M  
\Event\Results\Breaks\Names\800\2:String,1=200M  
\Event\Results\Breaks\Names\800\3:String,1=300M  
\Event\Results\Breaks\Names\800\4:String,1=400M  
\Event\Results\Breaks\Names\800\5:String,1=500M  
\Event\Results\Breaks\Names\800\6:String,1=600M  
\Event\Results\Breaks\Names\800\7:String,1=700M  
\Event\Results\Breaks\Names\800\8:String,1=800M
```

An event with no distance set will look for strings in the ...\

+ There is a new .lss group code (\18) used to access the break names. Example2.lss is updated to document this.

+ There is now aspect ratio control for FinishLynx images. This image toolbar control (a simple edit box) is off by default; you'll have to enable it in the Options Dialog.

The primary way that you specify the aspect ratio is to indicate what the "effective" frame rate should be. By default, the current frame rate is displayed in this box to indicate no aspect ratio change. Entering a different frame rate (type the number and hit Enter) will cause the image aspect ratio to change. The change actually takes place in the vertical dimension so that you still see all of your frames at 100% zoom, but the aspect ratio will be as if you had captured at the entered frame rate.

An alternate way to specify the aspect ratio is to simply specify how much to zoom in the vertical dimension. You do this by appending a "%" to the number. So entering "200%" will make everything twice as tall (equivalent to halving the frame rate).

You can also do both of the above things but instead alter the horizontal dimension instead of the vertical. Entering a number with "h" appended creates that effective frame rate by stretching (or compressing) horizontally instead of vertically. Entering a number with "H" appended means to zoom horizontally by that percentage.

For completeness, you can also append "v" or "V", which are the same as blank and "%", respectively.

+ You can now use the mouse scroll wheel to scroll scrollable elements in FinishLynx (lists and the image windows). For simple lists it moves the list up and down.

For image windows it moves the image backwards and forwards

+ Scoreboard running time Auto Break has been enhanced to allow one action (Finish, say) to happen when capturing and the other action (Pause, say) to happen when not capturing.

+ LapTime support for the Microgate LinkPod is added. You specify the camera port that the LinkPod is attached to on the RadioLynx tab. You then create a LinkPod LapTimer on the LapTime tab. Instead of specifying a serial port you specify the LinkPod Address (0-15).

+ The RadioLynx ID (bib number) field sent by newer EncRadios is now used to fill in the start's ID field when in Time Trial mode.

+ The Chronelec LapTime module will now request and report the Decoder's status (which consists of noise and threshold for loops 1 and 2).

There are two hidden settings that control this (`\LapTime\Chronelec>StatusMode` and `\LapTime\Chronelec>StatusTime`). The Mode default is to only request status if ACKing (ie, "Chronelec No ACK" not selected) and the Time default is to request status every 3 seconds. Both have comments in the hidden settings.

+ The Database Module now attempts to keep its connections "fresh" (both the schedule connection and the ReactTime connection). This will help to make the "Import ReactTime" function work the first time whenever possible.

+ The Import ReactTime error handling is improved. If a "real" error happens it gets reported in a pop-up dialog box. The actual error could vary depending on what went wrong, but if you see "Serial communication handshake error" that specifically means that the CC firmware is old and doesn't support the needed command. If the communication all seemed to work fine but no ReactTimes actually got updated then it will beep.

+ There is support for the new lynx wind gauge p/n "WG-Lynx".

This wind gauge reads both wind vectors (N-S and E-W). FinishLynx stores both vectors and calculates the wind direction. The direction is displayed after the wind unit. How (and if) the direction is displayed is controlled by the hidden setting `\WindGauge\DirectionMode`.

This wind gauge is listed as "Lynx" in the Options Dialog.

+ You can now import reaction times directly from the Command Center (requires the latest 1.51b01 firmware).

You can control which protocols are used with the hidden setting `\Database\ReactTime\Mode`.

+ The "Import ReactTime" menu item is now always enabled. It used to only be enabled if the E-R-H numbers were valid, but now those aren't always necessary (for serial connections).

The ReactTime Command Center uses 19200,8,N,1.

FinishLynx Version 8.10 Release Notes

+ Nearby starts are now saved with an event and can later be selected from a list (even when the event is no longer capturable). This feature is controlled by a hidden setting (`\Event\Start\Saved`) that defaults to 5. This causes the 5 most recent starts to be stored in an event when it is first created or when it is re-loaded (and is capturable). In addition, all starts that are received when an event is loaded (and capturable) are also stored in the event. And finally, if for some reason a start is added to an event that isn't already stored in the event then that start (and those around it) are also stored in the event.

If you want to disable the storing of starts then set the hidden setting to 0.

+ IdentiLynx line label overlays now have leader and trailer (both hidden settings) default to 1 second. The default format string has also changed.

+ There is a new "Speed" setting for "Video Export" in the Options Dialog. The default is 100 (percent), which exports the video at the same frame rate as it was recorded. You can set this higher or lower than 100 to make the video play faster or slower. You can even use negative numbers to have the video play backwards. For instance, -50 will play the video backwards at half speed.

+ The current on-screen playback speed is now displayed on the IdentiLynx image toolbar. The current speed is also retained between stops and starts of playback.

+ You can now independently control the overlay colors for "show lines" and "split lines". The "Line labels" dialog has two color settings now ("Lines" and "Splits") and each of those settings now has an "Off" option so you have full control of which information is shown on both FinishLynx and IdentiLynx images.

+ You can now sort the results area using any of the "simple string" fields (id, lane, first name, last name, affiliation, license, user 1, user 2, or user 3). The alternate sort appears on-screen and in results printouts, but not on the scoreboard or in the .lif file. You set the sort field by clicking on any of the column headings that don't already have their own pop-up menu (place, id, lane, etc). The underlying order is still the same as it has always been, meaning that when there are ties in the sort those results will be listed in place order. This is nice when sorting by Affiliation, as you get a team by team printout with each team being in finish order.

This setting isn't "sticky" in any way. It isn't saved with the event and the last value set isn't used the next time an event is created. If you really want a different sort field all the time there is a hidden setting (`\Event\Results\SortBy`) that can be used to set the sort method each time a results pane is created.

There are 3 hidden settings that affect how the sort is done. Each

setting is a bitmap that can control how each field is sorted. A value of 0 turns off the setting for all fields, a value of -1 turns on the setting for all fields. Other values can be used to turn on the setting for a subset of fields. You determine this value by summing 2^f for each field f that you want to use that setting. The field numbers are in the comment for the \Event\Results\SortBy setting.

\Event\Results\SortCase - Set this to ignore case in the sort.

\Event\Results\SortInvert - Set this to invert the order of the sort.

\Event\Results\SortJustify - Set this to "right justify" the sort, which will essentially cause the strings to be treated like numbers.

The first 2 default to 0 (sort is always case sensitive and in normal order). SortJustify defaults to 48 ($2^4 + 2^5$), which causes Lane and Id to sort like numbers are sorted. Without this, you would get this order for lanes 1-10: 1, 10, 2, 3, 4, 5, 6, 7, 8, 9.

+ You can now have the equivalent of "Line labels" on IdentiLynx images (including exported video). The same menu item is used (Image|Overlay|Line labels...) and the same Dialog Box is used, though all of the settings (font, format string, etc) are kept separate. There is one slight change in the meaning of the format string, which is that semicolon means "new column" instead of "new line". (The Dialog shows this.)

There are some hidden settings in \Event\Image\Overlay\IdLLines:

Mode - 0 for default, 1 for results only, 2 for splits only, and 3 for both. Right now, 0 is equivalent to 1 because I'm not really sure what the "default" should be.

Lines - Max lines displayed. Leader and Trailer - Range (milliseconds before and after a frame) that is used to decide which times to display. HorOffset and VerOffset - Pixels from upper left to offset the text. HorSpace - Pixels between columns. VerSpace - Pixels between lines.

+ es_ES.lng is updated.

+ Hidden settings dialog is bigger.

+ \SerialPort\TypeMask now defaults to -1, which causes all types of COM ports to be listed.

+ FinishLynx now remembers its window state.

+ When not maximized FinishLynx now centers dialogs on the main window instead of the entire screen.

+ You can now Ctrl-Click to add a split with the popup menu. Any participants that have been assigned a code will not appear in the list. Any participants that are "full" of splits (laps count down and the participant shows zero laps left) will not appear in the list.

+ There are checkboxes on the System Info Dialog that will cause the .cfg and/or .cdf files to be deleted when FinishLynx quits.

+ The LIF file now includes each participant's start time in field 12. This field has been used for the start time (on input) but was always blank on output. For "normal" races the start time will be the same as what is on the event header line (except that the precision will be the same as the participant's time field). For time trial races the start time will be the start used for that particular participant.

+ Support is added for the BEST wind gauge.

+ You can now override the automatically generated special length in each of the delta fields. Clicking in one of the delta fields (when set to decimal or fractional lengths, but not when set to time) will bring up a menu with a "Special length" submenu. The "None" option will turn off special lengths for that field (you will see the numerical length for that field). The "Auto" option (the default) will show the calculated special length (as it has always worked). The options below that are the special lengths defined in the .cfg file that you can choose for "override."

+ BibLynx info is now saved with the event (tag number, signal strength, hit count, first seen, last seen, first peak, last peak). This can be accessed (along with the calculated average values) through Line Label

codes:

%101: tag number

%102: signal strength

%103: hit count

%104: first seen

%105: average seen

%106: last seen

%107: first peak

%108: average peak

%109: last peak

This info is also available on the Splits Dialog if you hold down the shift key when selecting "LapTime|Edit split times...".

Finally, if you hold down the shift key when selecting "LapTime|Options..." you'll get settings at the bottom for time method (first seen, average seen, last seen, etc) as well as the settings for computing average seen and average peak (percents from 0-100).

+ Changed the line labels Levels default to 10 and the maximum to 20. The default was 3 and the max was 10.

+ You can now use internal photo eye with non-timing cameras if ACM is installed. This will only work, of course, if the non-timing camera is time tracking with a timing camera.

+ Closing a dialog box (with the upper right "x" button) is now equivalent to hitting the Escape key (which sends a "cancel" event if the cancel button is present or a "no" event if the cancel button is not present).

+ Improvements to the new line labels feature:

If you hold down the shift key when selecting the "Line labels..." menu item when it's already checked then it stays checked and the dialog comes up. This saves you from having to uncheck it and check it again to get to the dialog.

There is an "Insert" pop up menu in the dialog box that lists all of the field codes and the line break character. Selecting one of these will insert it into the text field at the current cursor position. If the text field doesn't currently have focus then nothing is inserted and a beep (default sound) is produced.

There is an Apply button on the dialog that saves the current settings and redraws all image areas.

Line labels are now shown in full screen mode.

Hidden settings HorOffset, VerOffset, and VerSpace are added that control distance from the line, distance from the top, and extra distance between lines, respectively. Note that you probably would want to use negative numbers for VerSpace to "tighten things up" for fonts that leave a lot of space above and below the glyphs.

+ You can now label the lines in the image. This setting is toggled by the "Image|Overlay|Line labels..." menu item. If checked, selecting this item will turn off line labels. If unchecked, selecting this item will bring up an overlay dialog box that allows you to select the font and set the format string (defined below). You must select "Ok" to turn on line labels.

By default you'll get labels on enabled lines ("show lines" and "split lines", if enabled). If you don't like this behavior you can override with the hidden setting \Event\Image\Overlay\Lines\Mode. The default is 0. Setting it to 1 gives "show lines" only, 2 gives "split lines" only, and 3 gives both. Note that this can even be used to turn on labels for lines that aren't enabled.

There is also a hidden setting \Event\Image\Overlay\Lines\Levels that controls how many levels of labels will be used (how far down into the image the labels will go). The default is 3, max is 10. If lines are close enough together that a free level can't be found for a particular line's label then that label won't be shown at all.

The format string allows you to display pretty much any information any way you like. A percent (%) followed by a number will be replaced by that field value. A percent followed by a non-digit will be replaced by that non-digit character. A semicolon (;) will cause a line break. All other characters will appear as entered. The field values are:

- 1: The line's time.
- 2: The line's split number or a "T" if not a split line.
- 3: The line's LapTimer name or blank if not a split line.
- 4: Place.
- 5: Id.
- 6: Lane.
- 7: First name.
- 8: Last name.
- 9: Affiliation.
- 10: License.
- 11: User 1.
- 12: User 2.
- 13: User 3.

14: Time.
15: Delta 1.
16: Delta 2.
17: Delta 3.
18: ReactTime.
19: Cumulative split time.
20: Last split time.
21: Best split time.
22: Laps.
23: Speed.
24: Pace.

+ The new scoreboard option "If capturing" is now created for existing scoreboards, eliminating the need to delete your old scoreboards and create new ones.

+ There is a new hidden setting "General\MainFont" that can be used to set the font in most of FinishLynx (most parts except menus and system dialogs). The format of the setting is:

,[B][I][,<extra height>[,<extra width>]]

 is the name of an installed font

 is the desired size and can be made Bold and/or Italic by appending a B and/or I

<extra height> allows you to increase the dialog box line height if the desired font is much higher than the standard font

<extra width> allows you to increase the dialog box cell width if the desired font is much wider than the standard font

For example, "Arial,15B" or "Arial,16B" adds considerable "punch" on my system without adding excessive height or width. Going larger ("Arial,20,4") needs some extra height or else dialog box lines run into each other. And larger still ("Arial,24,8,4") needs some extra height and width.

+ There is a new "Length Time" override field on the Results line in the Info Zone. This defaults to blank, which means to use the global value set in the Options Dialog. There is also a new "Image|Set|Length time" function that allows you to draw a selection box in the image and set the Length Time to the time span represented by the box.

+ There is a new "If capturing" checkbox on the "Auto Break" line of the scoreboard settings. If checked, this option will only allow breaks that occur while manual capture is active to stop the running time.

+ The scoreboard refresh command will now send all participants when in the "one at a time" mode (Results Automatic, Paging On, Page Size 1, Page Time 0). Note that only 1 participant is sent per scoreboard update (approximately 100 milliseconds), so you'll get about 10 participants sent per second.

+ LapTime.lss is now included. This is a scoreboard script that sends LapTime events in the "Lynx" LapTime format.

+ The serial port settings are now hidden when ReactTime Port is set to Files.

+ You can now set per-LapTimer overrides of all LapTimer-specific global settings. For instance, this is what part of lynx.cfg looks like:

```
\LapTime\IPICO\:,1=  
\LapTime\IPICO\Suffix:String,1=  
...  
\LapTime\1\:,1=  
\LapTime\1\Name:String,1=LapTime  
\LapTime\1\Type:Int,1,,=11  
\LapTime\1\SerialPort:String,1=0,9600,8,N,1.0  
\LapTime\1\ActiveSplitsOn:Int,1,,=0  
\LapTime\1\ActiveSplits:String,1=  
\LapTime\1\SyncSource:Int,1,,=0  
\LapTime\1\Token:Int,1,,=52566367
```

The IPICO Suffix is blank. If that's what you want by default but you want to change the Suffix for LapTimer 1 you can now do that by adding a couple of lines at the end of the LapTimer 1 section:

```
\LapTime\IPICO\:,1=  
\LapTime\IPICO\Suffix:String,1=  
...  
\LapTime\1\:,1=  
\LapTime\1\Name:String,1=LapTime  
\LapTime\1\Type:Int,1,,=11  
\LapTime\1\SerialPort:String,1=0,9600,8,N,1.0  
\LapTime\1\ActiveSplitsOn:Int,1,,=0  
\LapTime\1\ActiveSplits:String,1=  
\LapTime\1\SyncSource:Int,1,,=0  
\LapTime\1\Token:Int,1,,=52566367  
\LapTime\1\IPICO\:,1=  
\LapTime\1\IPICO\Suffix:String,1=FS
```

This will cause LapTimer 1 to use a Suffix of "FS" and all other LapTimers to use a blank Suffix.

FinishLynx Version 8.04 Release Notes

+ The max filename length for the "Quick Open" dialog has been increased from 63 to 127 characters.

+ The hidden setting `\WindGauge\Reminder` can now be set greater than 1. When greater than 1, it will cause the reminder message to be displayed for all events with distance greater than zero and less than or equal to `Reminder`. For instance, a value of 200 will show the message for all races of distance 200 or less.

+ There is a new LIF File Name Suffix option in the Options Dialog. The only choice ("Filters") will cause the name of every enabled Results Filter to be appended to the LIF file name.

+ You can now enter more than one Id value for each received start in Time Trial Mode. To enable this you must set the hidden setting `\Event\Start\IdDelim` to the character you want to use to delimit the Id values. When `IdDelim` is blank (the default) you cannot enter multiple Ids and all behavior is as before. With `IdDelim` set to something (like a comma) the "Enter Id" dialog will always appear (even if it wouldn't have appeared before) so that you have an opportunity to enter multiple Ids. For each Id entered a separate Start object is created in the Event with that Id. From there, everything works just as it otherwise would. Entering more than one Id in the dialog is functionally equivalent to adding that Start multiple times from the main toolbar. Note that whitespace is not stripped from the entered text, meaning that "1, 2" will probably not do what you want. You need to enter "1,2" with no whitespace.

To be clear, this just affects the *name* of the LIF file, not the contents of the LIF file. The LIF contents have always been affected by the currently enabled Results Filters.

Say you have an event called "Event" and it has filters called "10-19", "20-29", and "30-39" that select for those Id values. If the new Suffix option is checked, depending on which filters are enabled, you could get these various LIF file names when you save the event (or do "Save LIF"):

```
Event 10-19.lif
Event 20-29.lif
Event 30-39.lif
Event 10-19 20-29.lif
Event 10-19 20-29 30-39.lif
etc.
```

+ There is a new hidden setting (`\Event\Results\Delta\LengthDecPrec`) that controls decimal length precision. Valid settings are 0-3 (default 1), which specifies the number of digits to the right of the decimal point.

+ All values in the scoreboard script group \13 (Results Header/Trailer) are now cached except for code \08 (number of participants). This means that all of these fields can be included in running time output without them "dropping out" when the event is marked as busy (saving the event, adding new image, etc).

+ Two additional delta fields have been added to the results pane. These default to disabled and at the end of the list; you can move and enable them in the Options Dialog. They are included in the .lif file and their scoreboard codes are documented in Example2.lss.

+ There is a new hidden setting (LapTime\TimesSortBy) that controls how participants with times are sorted based on their lap count. A value of 0 (the default) sorts as it always has without any use of the lap count. A value of 1 is "Laps Major" order, meaning that participants are first sorted by lap count and then within a given lap count participants are sorted by time and then time string. A value of 2 is "Laps Minor" order, meaning that participants with time strings are all moved below participants with real times, and only the participants with real times are sorted by lap count. If you never use time strings (entering an arbitrary string in the time field) then both 1 and 2 will produce the same order.

+ You can now override the following settings (found in Event\Results\Delta) for each Delta field: Length, LengthDecPrec, TimeGap, and SpecialLengths. To do this you must create the hidden setting with the Delta field's number appended. So to use a different LengthDecPrec for Delta field 3 you would create the hidden setting Event\Results\Delta\LengthDecPrec3. To prevent Delta field 2 from using any special lengths you would create the hidden setting Event\Results\Delta\SpecialLengths2\ and not put any special length values inside it.

If these "override" hidden settings are not present (which is the default) then the additional Delta fields will use the same setting as the first Delta field.

FinishLynx V8.03 Release Notes

- + Improved error code reporting for more efficient trouble-shooting.
- + TagHeuer CP 540 LapTime support is now included. The CP 540 has both RS232 and Ethernet ports. To connect on Ethernet you need to choose "Network (connect)" and use port 7000.
- + LapTime devices that have a standard TCP port number now have that port number automatically filled in. The Tag Heuer CP 540 is 7000, Chronolec is 2008, and IPICO is 10000.
- + There are two new scoreboard fields that are specifically intended to help integrate the Chronolec system with FinishLynx.
 - Code\14\13 is the "From Image" Cumulative Split Time field and always reports the most recent split time that came from image. If there aren't any split times from image for that participant then this field will be empty.
 - Code \14\14 is the "From Image" Window Number field. This reports which window number the "From Image" Cumulative Split Time came from. This value can be used to request image (through the Remote Control Interface) from the correct image window.
- + The reported "type" of COM port (as reported by Windows) is now displayed in parenthesis after the port name in the drop-down lists.
- + You can now open events that are missing image files.
- + Added "Gill 6 Digit.lss" script.