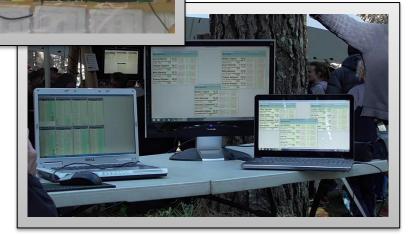
O-LYNX EVENT

For great results.





6/6/2025

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SETTING UP O-LYNX ON A COMPUTER FOR THE FIRST TIME.

INSTALLING THE O-LYNX SOFTWARE.

The O-Lynx software comes as an installation file that you run to install the various O-Lynx applications. E.g. O-Lynx_2018_Install.exe. The latest version of the installation file is available on the www.o-lynx.com downloads page.

During the install or when you restart your computer, you may see a message from Windows or your anti-virus software to indicate that it has not seen the O-Lynx software before. If you see a message like this, click "Unblock" or similar to continue.

Run the install program by double clicking the file. The first thing you will see is the license agreement. Please read it and then if OK, click "I accept the agreement" in order to continue.

You will then be asked where to install the files. Leave this at the default of "C:\Program Files\O-Lynx".

The next screen will ask if the Nexus database server should be installed. Ensure this is ticked for the first computer (the one that will be the main event computer). Later, when installing on additional computers that are simply showing results or dealing with entries, the "Install Nexus Server" option should be left unticked. Click "Next" to continue.

A "Ready to Install" screen is then shown just to summarize what is about to happen. Click "Install" to start the actual installation of the files.

To finish the installation, you will see 2 further options to update existing data and install default panels. It is recommended you always leave these ticked. Click 'Finish' to exit the install program.

The "O-Lynx Database Updater" will then start to check your database files are up-to-date. Press "Start Update" to run this process, then "Close" to exit.

You should now have 4 icons on your desktop for the O-Lynx software and an icon for the Nexus Database Server. As the Nexus Database Server will be set to start when the computer is switched on you should not need this icon unless the Nexus server is shutdown for some reason.

The 4 O-Lynx icons are ...

O-Lynx Event – Main event software. The event details, courses, and entries are all setup in this program. If using radios, O-Lynx Event is the program that communicates with the O-Lynx radios. In O-Lynx Event you will set an event to be "Current". When O-Lynx Results or Sync starts up, they will be working with the "Current" event. For this reason, start O-Lynx Event first and get it setup, including the courses, before starting Results, or Sync.

O-Lynx Results – Provides various windows for displaying live result information at the event for commentary and/or spectator use.

O-Lynx Tools – Mainly used just to set the location of the Nexus database server. For example, to provide results on multiple computers, the "Server Address" in the "Database Settings" window of the additional computers needs to be set to the address of the master computer. O-Lynx Tools also provides a link to access remote help if needed and buttons to start a backup or restore of the O-Lynx database. Other included tools include to change the current language or precisely set the computers time.

If you will be using O-Lynx Touch at your events, the install file and manual are available as separate downloads from the O-Lynx website.

ENTERING A LICENSE CODE

If you are just evaluating O-Lynx skip this step. If you feel you need more time to evaluate O-Lynx fully, then please contact us, and we will issue a license code to give you more time.

If you were supplied with a license code for the O-Lynx software, start O-Lynx Event and along the left edge of

the main screen, click the "Settings" button. Then choose the license settings by clicking on 'License' on the left side of the screen.

Enter your club or business name exactly as supplied with the license code in the box labelled 'Club'. Then click the "Edit License" button and enter the 16 character license code. Press "Register" and the License Status should change to "Licensed". Press "Close" to exit the register window and then **be sure to press "OK"** in the settings screen to save any changes to the club name.

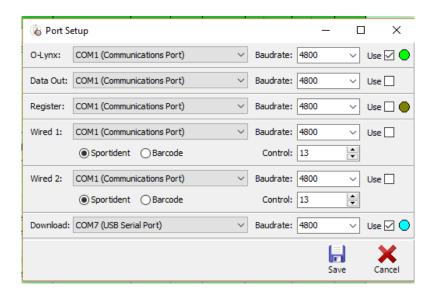
TIP: If you have problems getting "Licensed", try copying and pasting from the email sent to you containing the club and license code as both must match exactly.

SETTING UP THE HARDWARE TO USE WITH O-LYNX SOFTWARE.

Depending on how you are using O-Lynx, you may need to set up various Sportident stations.

These, along with the O-Lynx Master radio, are all set up from the "Port Settings" icon down left side of the O-Lynx Event main screen. It may appear Red or Green depending on whether it is connected to an O-Lynx Master radio.

Pressing this icon will take you into the 'Port Setup' screen.



O-Lynx gives you a lot of options with getting information in and out of the program. For simplicity, just the usual options are covered here. Any of the ports are set up with ..

- A drop down box listing the available ports. Only actual available ports are listed here, so if you have connected to something but can't see it, try unplugging it and then plugging it in again. If you have several devices connected but don't know which one is which, unplug one of the devices to see which one of those listed, disappears.
- A "Baudrate" selection box this is how fast the devices are talking. Most register /download stations will be operating at 38400 baud.
- A "Use" box tick to confirm you are using this port or un-tick if not. Note when changing ports around e.g. moving a download box to be a register box, you may have to first untick the Use option then Save, open the Ports window again and now select and tick the new port. This will allow the program to disconnect from the old port first.
- Some of the ports also show a round coloured LED. This acts as a guide to the port status box in the bottom left of the main screen, where the current status of the O-Lynx, Register and Download ports are shown.

O-Lynx – this is the port connected to an O-Lynx Master radio for getting live punch information. Because this port accepts standard Sportident messages, it may also work with other radio or wired systems. When connected the master will show up as a "(USB Serial Port)". The baudrate will usually be 38,400 though later radio masters (from 2017) will use a baudrate of 57,600 – check the back of the master radio for a baudrate sticker and try 38,400 if no sticker exists.

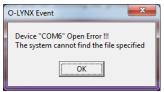
Register – the port a Sportident register station is connected to.

Download – the port a Sportident download station is connected to.

Make sure the required ports are ticked, and click "Save" to exit.

Note that because O-Lynx Event tries to connect to the ports when you start the program, it is best to have everything plugged in before starting. O-Lynx will also try to automatically connect if a station is plugged in after starting. Check the 'Port' lights in the bottom left of the O-Lynx Event screen to see if the port was detected and setup (LED will light up).

If at any time you see a message similar to the one shown below then it means one of the ticked ports is not available. Please check the setup and connections and go into and out of the port setup screen to try to connect again.



When the ports are properly connected, the corresponding status LED on the top row of the status LED's on the main screen will be lit up. When the devices are talking to each other the bottom LED will flash.

SETTING UP A DOWNLOAD PRINTER.

If you are downloading chips directly into O-Lynx and supplying a printed result sheet to competitors, you will need to setup the download printer.

Along the left edge of the main screen is the "Settings" button



Press this to go into the O-Lynx Settings screen. Towards the bottom of the opening page, you will see a box where the "Download Printer" can be selected. The printer must be installed first in windows to see it in the list of printers to choose from.

DOES THE COMPUTERS TIME MATTER?

When using the Sportident timing system, the times come from the stations. These can slowly drift and periodically need to be kept 'time mastered' to correct them so their times are all in sync.

For times displayed in O-Lynx while the event is under way, elasped times will be based on the computers

For example, if a runner has a preset start time and gets under way at the correct time, but the computer used for commentary or displaying results has a system time 20 seconds out then any elapsed times will be shown 20 seconds out. Of course, as soon as a chip is downloaded then the times will be correct, so for most events the difference wont matter. However, if you have commentary or TV's at the event, then ideally the computer should be set at "race" time so the elapsed times are accurate.

With Windows 10 and 11, this became more of an issue as its "Adjust Time" feature lacks the ability to set the seconds value.

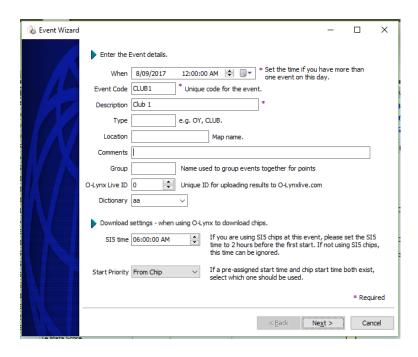
To get around this O-Lynx includes a "Set System Time" utility in O-Lynx Tools that will allow you to set the system time, including seconds to the same time as the Sportident system. This utility will ask for permission to run in administrator mode when you start it, as this is required to be able to adjust the time. You should also check the Windows setting "Set time automatically" to make sure it is turned off so that Windows doesn't try to override any changes you make.

Ideally do all computers being used at the event, but the most crucial one will be the commentary computer. e.g. A earlier runner has finished with a total time of 16 minutes and 40 seconds. A runner is approaching the finish and the commentator states she has 20 seconds to get there to beat the earlier runner. However, as the computers time is 20 seconds out, she actually has 40 seconds to get there. As she crosses the finish line (if there is a radio control on it) her time suddenly jumps by 20 seconds (or when she downloads, if no radio) and the commentator (and audience) becomes confused about the times he is receiving from the system.

SETTING UP THE EVENT.

The first step is to define an event. An event sets up somewhere to store all the information that is part of running the orienteering event, along with the controls, courses and entries.

To set up the event, go to the Event tab, and press the 'New Event' button.



There are quite a few boxes shown here but the minimum information required is ...

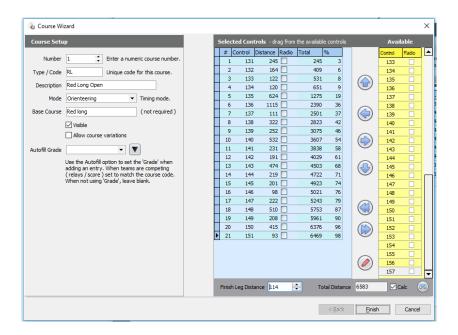
When – the date of the event. If setting up prior to the day of event, ensure this is set to the actual day the event takes place.

Event Code – A short unique code for the event.

Description – A longer descriptive name of the event.

SETTING UP THE COURSES.

A course consists of at least a minimum of a start and a finish control and usually a number of controls along the way. To begin to setup the courses, use the 'New Course' button on the Courses tab.



Use the settings on the left side of the screen to setup what makes this course unique.

A course needs....

Number – unique number for this course. Use the suggested number if you don't have a set number you want to use.

Type: a unique short code e.g. M40, WHITE or W

Description: A longer descriptive name for the course e.g. M40, White or Red Medium

Mode:

- **Orienteering** travelling through the controls in a set order.
- **Score / Rogaine** Control can be punched in any order, with points for each control.
- **Timed event** mainly used for Adventure race events where missing a control doesn't demote the competitor to show as a MP. This is because you are often dealing with competitors unfamiliar with the timing system on a route where there is virtually no route choice so a missed control is likely a lapse in memory rather than a deliberate act. The competitor can always be edited manually to assign a DSQ or MP if required.

Other optional settings include ..

Visible – ticked usually but if unticked the course won't show in as a course to select in O-Lynx Touch or O-Lynx Results. Mainly used to hide course variations.

Allow course variations – see the section "USING COURSE VARIATIONS - BUTTERFLY LOOPS"

Autofill Grade – In O-Lynx competitors can be assigned to a "grade" as well as a course. This setting can be used to automatically set a competitor to a "grade" when they are entered. E.g. if you were entering courses by age, the competitor may enter the M40 course, but also be assigned automatically to the "Red" grade so results can be posted for both age group and category. Mainly used for Team events as the "Grade" is used to provide team results as opposed to individual "Course" results.

There are a number of ways to set the course controls in O-Lynx....

Option 1. Use the wizards within O-Lynx.

The first step here is to set up the controls. On the Controls tab, add each control one by one by pushing the 'New Control' button. A better way when a lot of controls are being added is to use the 'Add All Controls' button to add all the controls in a range at once.

Then in the course wizard drag with your mouse (or use the arrow keys on the screen) to assign the controls in the order required from the "Available" list to the "Selected Controls" list.

Distance between the controls defaults to 100 metres but you can click and edit the distance column by clicking on the distance value if the distance needs to be accurate. The "Total" distance and "%" through the course columns are provided to help with planning and commentary.

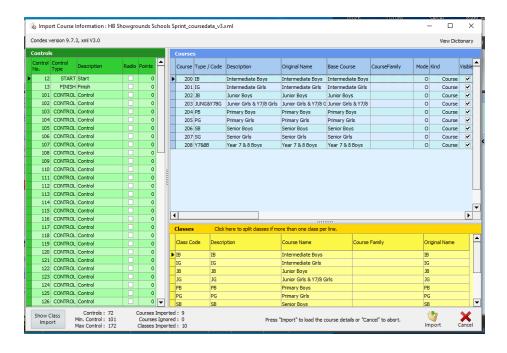
Press finish to exit and save or update the course.

Option 2. Use a coursedata.xml file.

In orienteering, separate course planning software such as Condes, OCAD or Purple Pen is usually used to plan the courses. Directly importing the course setup from these software packages is the quickest and most reliable way to load course information. The file can also contain additional information including distances and co-ordinates when using the V3 standard of the file.

Use the "IOF XML" button on the Courses tab to import the file. It will automatically set up both the controls and courses. O-Lynx now supports only V3 files.

After you have selected the XML file, the courses will be loaded to check. This may take a while if you have a lot of courses e.g. a relay.



This screen allows you to rename some things before the final import.

E,g, There is an option to split Class names where planner has set them up as one entry e.g. "M16, W50, W55".

The current Dictionary can also be shown and used to set the names to the standard ones used at your events which can be handy if doing a series where they should all be the same even with different preferences among the various planners.

The "Show Class Import" is a test button to show the way O-Lynx will import the classes, but is not normally pressed, as the classes are converted on the final import.

If things look OK, press "Import" to bring the courses into the main O-Lynx screen.

Option 3. Use a csv file.

The courses can also come from a spreadsheet or text file.

Use the "CSV Text" button on the Courses tab to import the file. It will automatically set up both the controls and courses. The file should be formatted as per the below example. The Mode column should be set using the codes ...

'O' = ORIENTEERING, 'S' = SCORE, 'T' = TIMED, 'L' = LAP, 'E' = ENDURO, 'D' = DOWNHILL

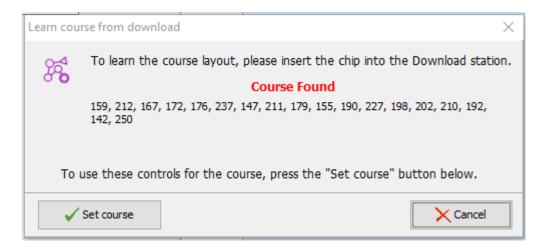
Type, Description, Mode, BaseCourse, C.1, C.2, C.3, C.4, C.5, C.6, C.7, C.8, C.9, C.10, C.11, C.12 .. etc LOOPA, Loop A, O,, 107, 133, 132, 124, 130, 117, 105, 112, 107, 101, 119, 103 LOOPB, Loop B, O,, 107, 101, 119, 103, 121, 120, 108, 111, 107, 102, 116, 129 LOOPC, Loop C, O,, 107, 102, 116, 129, 113, 118, 131, 132, 124, 107, 133, 132

Option 4. Download a chip loaded with the controls.

After defining the event, add courses using the 'New course' button, but don't add any controls. Get a chip that has punched the controls in the required order, either before the controls went out, or when the first competitor comes back.

Go into the Course Wizard for the course being setup and click on the button with the red chip on it to open a window titled "Learn course from download"

Put the chip in a download station and you should see something like the following.



Check the course then press "Set Course" to fill out the Selected Controls list, followed by "Finish" to exit the Course Wizard. Both the course and any previously undefined controls will be set up from the chips information.

If this was the first competitor's chip then it should be re-inserted now to download their times.

Special Handling of Start and Finish Stations.

If a control number is set within O-Lynx with the "Type" set as "Start" or "Finish", then at download the control will be treated as a start or finish no matter what operating mode the station is programmed in. This allows some flexibility in how events can be run without having the limitations of the standard start and finish controls.

For example ...

- A Start that can happen even if there are existing punches on a chip. E.g. if there is a test punch or small demo course before the start.
- Having a Finish that won't turn off SIAC chips. E.g. Competitors may run past the finish control while still yet to complete their course. The last finish punch becomes the "Finish" time.
- In an emergency, a standard control can take the place of a start or finish control without reprogramming.

Note:

- If the station is not programmed in the start or finish operating modes, then any punches of that station will fill up some of the places available for standard punches within the chip. The course planner should allow for these extra punches when planning the maximum number of controls on a course. (If a station is programmed in the normal "Start" or "Finish" operating mode, the start and finish punches are stored to specially reserved places within the chip, and do not take up any of the locations for standard punch storage)
- Only one "Start" and one "Finish" station should be listed on the "Controls" tab in O-Lynx.
- If a finish control is not in "Finish" operating mode, it wont turn off SIAC chips, so the event setup should have a SIAC OFF station set up somewhere so they can be turned off at the download.

SETTING UP THE ENTRIES.

To cater for the many ways events are organised, there are also many ways to get entries into O-Lynx. For pre-entry, see the topic .. Importing Entry Information.

For on-the-day entries at events, O-Lynx Touch is recommended as it means competitors can easily and reliably enter themselves without needing to have someone waiting around the registration area.

O-Lynx Touch also has features such as chip-in-use checking and automatic chip renumbering when chips are being reused throughout the day.

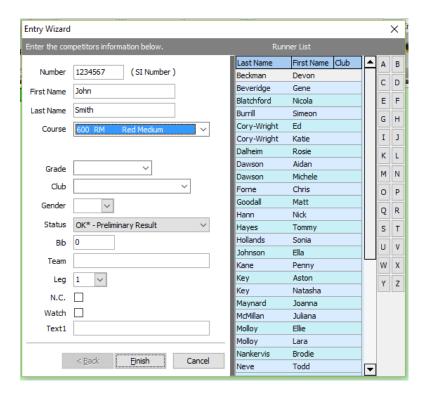
To enter directly via the entry wizard use the "New Entry" or "Edit Entry" buttons on the Entry tab.

The top 4 fields are required....

Chip Number – the unique Sportident or barcode number. If this number will be assigned later, use the race or bib number when setting the entry up.

First / Last Name of the entry.

Course - select which course the competitor is running.



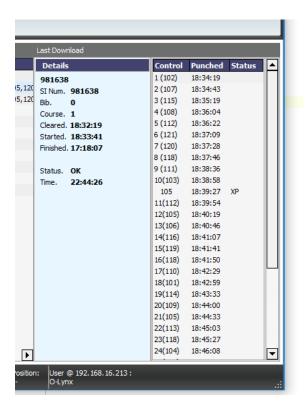
If you have a runners database setup, you can choose one of the runners from the list on the right hand side by double clicking their name.

DOWNLOADING CHIP INFORMATION.

Once the runner returns from their course, insert the chip into the download station.

The download tab doesn't have to be selected when the chip is inserted as the chips will still download in the background. On the right of the download tab you will see the last chips information. On the left, the download history is shown as a one line summary for each chip.

A panel with the download summary information but shown in a larger font can also be "pinned" to the right hand side of O-Lynx event. This panel is visible no matter what other tabs you are working in. e.g. if you are doing something on the Entries screen, you will still be able to see the competitors result come up as they download. To show this panel, click "Pin Download" on the "Downloads" tab.



The toolbar in the download screen is shown below.



If "Print Sheets" is ticked, then a results sheet will be sent to the Downloads Printer when the download completes. To produce a second copy or re-print after some changes, click on one of the competitors in the Download History list and then press the "Print" button. Result sheets can also be reprinted from the Results tab by selecting a competitor and pressing the Results- Indiv. Print button in the Receipt Printer section of the toolbar.

The information shown on the Header and Footer sections of the result sheets and the font size can be altered to suit your club or event. See the "Templates" section in O-Lynx Settings for further information on changing

the look of the information printed. If you have set the controls up with interesting descriptions such as Hill top, Transition 1 or River crossing for adventure races, it is suggested that the control name be printed next to the punches so competitors can relate to the split times . This option is enabled by ticking the "Print Control Name" option in the Settings, Download window.

To deal with queries after the download, pressing "View Download" or double clicking on a competitor in the Download History list will allow you to view the punches of any recent competitor.

An "Edit Entry" button is available on the download screen to take you directly into the Entry Wizard of a competitor listed in the Download history. This is to make it easy to change the course, fix spelling mistakes or assign a name to an unknown competitor.

The "Best Match?" button uses the O-Lynx course matching algorithm to check which course the competitor ran. This is useful if the competitor picked up the wrong map, or chose to run a different course than the one they initially entered.

If "Silent Mode" is ticked, unknown competitors (Changed SI cards or they did not register) will be saved using the SI number as their name. This mode allows downloads to carry on and is intended for events where the download computer may be left unattended. An optional "Print Error Sheet" may be printed in this situation so they can record their name for later updating in the results. If not in "Silent mode", when an unknown chip is downloaded, the operator can go directly to the entry screen to enter the persons details before the download continues.

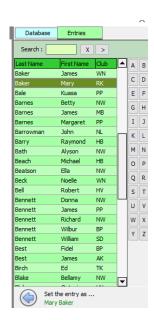
The download toolbar also features an Import "From SI Config" for those emergency situations where the download information has only been captured in the download station. There are options of importing the original csv file or an Excel formatted version, in case some editing had already been done.

DEALING WITH PROBLEMS WHEN PEOPLE DOWNLOAD.

"Silent Mode" can be useful when nobody is staffing the download point. However, for pre-entry and other events where someone is always present, it is usually best to deal with common problems as they arise and so "Silent Mode' should be OFF (un-ticked).

Competitor used someone else's chip. (e.g. family members mistakenly picked up the wrong chips)

- -They will download and then may notice it says the wrong name.
- -On the Download tab, "Edit Entry". Find the actual person's name in the green "Entries" list and click on it to select it.
- Click the blue arrow button at the bottom to "Set the entry as" ...
- This will set their entry to the chip number that was downloaded.
- Press "Finish" to exit the entry wizard.
- Re-print the docket if needed.



- When the other competitor comes to download, they will show as not registered as their chip is no longer in the entry list.

Competitor used an unknown chip.

-When they try to download, error box will be shown.



- -Use the "Register Now" button to open the Entry Wizard.
- -If the person was registered, look up their entry in the green "Entries" list and click the blue arrow button at the bottom "Set the entry as". This will change the chip number they registered under to the chip number they are downloading.
- -If the person was not registered, look for their name in the blue "Database" list and click the blue arrow button at the bottom "Set the entry as". This will create a new entry. If they are not in the Database, fill out each field of the entry as required.
- -Press "Finish" to exit the Entry Wizard and the download will continue.

Note there is an option that can be turned on in "Settings, Download" to close the "Not registered" error message after 4 seconds. This means the error box will not hold up others from downloading if the download is unattended or if it is a large event and there is a second download computer set up as a help desk, the person can be directed to it, while other downloads continue.

Competitor has changed their course.

- -If they tell you before they download, go to the entries tab and find their entry. Use the Toolbar "Edit Entry" button to change their course to the one they ran. Then continue with the download.
- -If they download first then they will show a mis-punch. On the Downloads tab, Select their name in the "Download History" list. Then press "Edit Entry" and set their course to the correct one. Using the "Edit Entry" from the Download tab will re-check their course when the Entry Wizard is completed.

USING A DICTIONARY IN O-LYNX TO MAKE SETTING UP EVENTS EASIER.

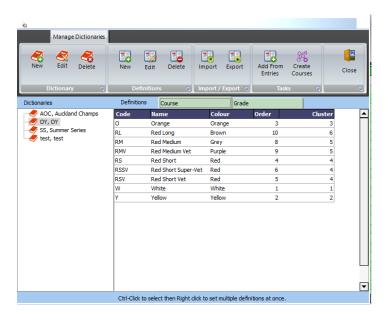
While running a simple event using O-Lynx is very easy, as events become bigger or more frequent, it is good to have some time saving tools on hand to make life easier.

The Dictionaries you can create in O-Lynx are places to store course and grade definitions that you would use across multiple events, or when you simply want to have as much set up before the day as possible.

Even if you only run the event once a year, it is good to have some definitions set up to be reused the next time the event comes around.

When you create or edit an event, you can choose which dictionary the event will be working with.

The dictionary is accessed from button on the left side of O-Lynx Event, or the "Edit,Dictionary" menu item in O-Lynx Results.



This window allows you to make and manage a dictionary, along with the definitions that are contained in it. A dictionary will be specific to a type of event and contain definitions for all the courses that will be run at the event. A dictionary can also define a list of grades which is used to populate the list available when editing entries. The "Edit All" function should allow you to create dictionaries very easily as a list of items.

Each entry in the dictionary has the following properties.

Code - The course code used to identify the course, e.g. RED, W16

Name - The descriptive name of the course. This value will be used as the course name when automatically generating courses. For Grades, it can also provide a place to set up a description to be used in reports.

Colour - The colour used in O-Lynx Results for the window titles. The colour specified in the dictionary will be the default colour when a window that matches the course code is opened.

Order - The display order of the windows in O-Lynx Results or in the results reports. For example, to display M10 before M12, give M10 an order of "10" and M12 and order of "20". Using a spacing in multiples of 5 or 10

allows for inserting other courses without renumbering the whole lot. E.g. to put W10 next to M10, an order of "15" could be used. The order can be from 1..999.

Cluster - Used when generating courses to group the courses that have the same base course. An example of this is the national champs, where M18A, M40A, M45A all are running course 3, so are set to the same cluster number. As another example, club events may have a Red Short course for Open, Senior and Vet grades. These courses would make a cluster as they utilise the same base course. If all courses are different then use a different cluster number for each course. Clusters can be any number or code up to 10 characters.

Parent Course – used for grades to group a set of codes to a certain course. E.g. the solo bike course could be the parent course for the Junior, Open and Senior grades. Used in O-Lynx touch to narrow the choices when competitors are entering.

Use the **New,Edit,Delete** buttons in the top left corner to add or delete a dictionary, or the buttons along the tool bar to manage the definitions.

Special options shown on the toolbar are ...

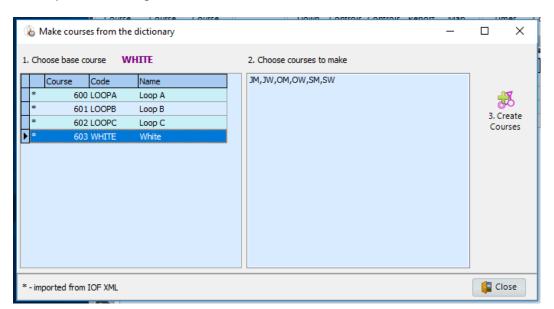
Add from Entries – this will add all courses or all grades from the current event into the dictionary. Useful when you want to set up a dictionary for the first time.

Create Courses from dictionary – will create a course for each definition in the current dictionary. However, the courses will be blank with no controls. This can be useful if no course planning software is being used e.g. you just need to set up the courses or grades for the Harrier clubs weekly run. If creating additional courses from a base course, use the "Make Courses" option on the Courses tab instead – see below.

MAKING COURSES FROM A DICTIONARY.

Often a single physical course will be used by multiple courses as required for entries and results. See the definition for "cluster" above.

Once the course setters file is imported, and with a "cluster" defined in a dictionary, it makes it easy to create the multiple new courses needed, particularly if the event is part of a series e.g. if you need to do this each week. To use the Dictionary to generate the extra courses, use the "Make Courses" button on the "Courses" tab to open the following window.



In this window, select base course (usually a course imported from the course planning software) in the first list on the left, and then the cluster of courses in the next list e.g. JW,JM,OM,OW,SM,SW. Press the "Create Courses" button to automatically create the courses and copy all the control details from the base course.

SHARING DICTIONARIES.

To transfer a dictionary to another computer system or club, use the **Export** button. This will save just the currently selected dictionary to a text file. Use the **Import** button to load the text file on the destination computer.

The file contents is comma separated text so you can also make, edit or adjust a dictionary using a text editor if it suits.

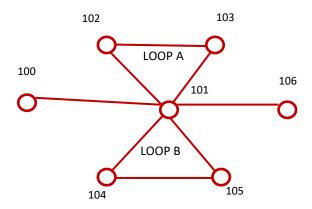
The following is an example of an exported dictionary file.

Dictionary, Type, Code, Name, Colour, Order, Cluster CLUB, Course, O, Orange, Orange, 30,3 CLUB, Course, RL, Red Long, Red, 44,6 CLUB, Course, RM, Red Meduim, Red, 43,5 CLUB, Course, RS, Red Short, Red, 40,4 CLUB, Course, S, Red Short Super Vet, Red, 42,4 CLUB, Course, V, Red Short Vet, Red, 41,4 CLUB, Course, W, White, White, 10,1

CLUB,Course,Y,Yellow,Yellow,20,2

USING COURSE VARIATIONS - BUTTERFLY LOOPS

In orienteering, butterfly or phi loops may be used to separate runners and reduce following at events. Runner 1 will run LOOP A then LOOP B while runner 2 will run LOOP A



Therefore, 2 different courses are being run,...

Course 1 is 100,101,102,103,101,104,105,101.106

Course 2 is 100,101,104,105,101,102,103,101,106

... but both runners are considered to be running the M40 course for results.

To do this in O-Lynx, each competitor can be entered for a course, e.g. M40, but they can also have another setting which specifies exactly which course they ran.

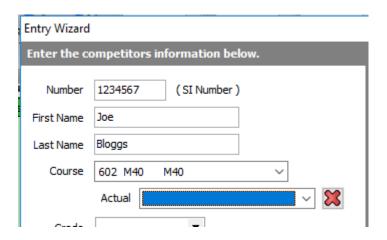
The first this in O-Lynx is to set up the courses.

		Course	Туре	Description	Mode	Visible	Allow Var.	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8	C.9
П		600	1	Course 1	0			100	101	102	103	101	104	105	101	106
$\ [$		601	2	Course 2	0			100	101	104	105	101	102	103	101	106
П	Þ	602	M40	M40	0	V	✓	100	101	102	103	101	104	105	101	106

Courses 1 & 2 are for performing the control checks against. The "Visible" setting for these courses is unticked so that they do not show when selecting a course in entries.

The M40 course has its Allow Var. (Allow Variations) setting ticked to indicate its OK for a person entered on the M40 course to run a different "Actual" course to what they are entered for.

You can see this in the entry wizard where an extra "Actual" course box appears when the M40 course is chosen. The "Actual" course can be left blank or if the course has been preselected for the runner, one of the available courses can be chosen.



If the "Actual" course is left blank, then the course will be detected when the runner downloads. If the "Actual" course is pre-selected to a certain course then at download it will be used for checking

REPLACING CONTROLS DURING AN EVENT

.

Changing the control for all competitors

If a control is changed prior to an event, or the change will affect everyone then the change can be made on the Courses tab.

At the bottom of the course list, the 2 buttons as shown below can help make replacing a control easy.



Highlight – this will highlight all controls that match the number entered in the box to the left of the button

Replace- A window will open to allow you to choose both the control number to be replaced and the number to replace it with. This function will replace the specified control for all courses.

If anyone has downloaded then their result will need to be re-evaluated by selecting the competitor on the Entries tab and pressing 'View Punches'. Use the 'Re-Check' button to check their punches against the course setup changes.

Changing the control for just some of the competitors

An example of this is when a control is not working correctly or a control has been programmed with the wrong control number and the course controller decides to replace it with a different numbered control during the event.

It is also really handy when you want to use 2 stations at one control, for example when it's a pivot control with lots of runners going through it. With this function, there is no need to reprogram the second box – just temporarily put a new label on it to match the existing control number.

Either of these examples would mean there could be 2 valid courses - the one before the control was replaced and the one after. These could be treated as courses variations and a second course set up, but there is an easier way!



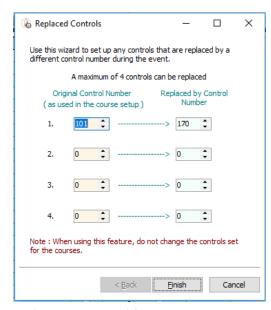
On the controls tab, you will see a button called 'Replace Controls', which opens the window as shown..

This window allows you to assign up to 4 replaced controls. On the left specify the original control number.

For example, the control as listed on the map was 101 but a control with the number 170 was rushed out to replace it after the first competitor reported it wasn't beeping.

101 would be entered on the left while 170 would be entered in the right box as the replacement.

Another example would be 2 misplaced controls e.g. 211 was placed where the 112 stand was and the 112 control station was placed on the 211 stand.



This could be fixed by either changing the course setup or using the 'Replace Controls' feature.

The Replace Controls window would show ...

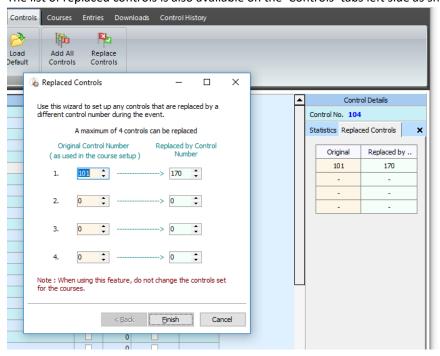
- 1. 112 ----→ 211
- 2. 211 ----→ 112

This function works by replacing the station number as the punch arrives at O-Lynx, whether by radio, or by a chip download. In the first example, control station 170 will never appear on any screens as its control number (170) will be immediately converted to 101 when the punch information arrives.

This allows O-Lynx to treat the competitors that punched before the station was changed, the same as those who punched afterwards.

If you use 'Replace Controls', there is no need to alter the setup of the courses or add the replacement control e.g. 170, to the list of controls used at the event.

The list of replaced controls is also available on the 'Controls' tabs left side as shown below



Note: When using "Replace Controls" to deal with the "2 misplaced controls" example it effects the use of the "Re-check" buttons in O-Lynx.

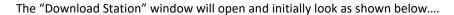
- 1. 112 ----→ 211
- 2. 211 ----→ 112

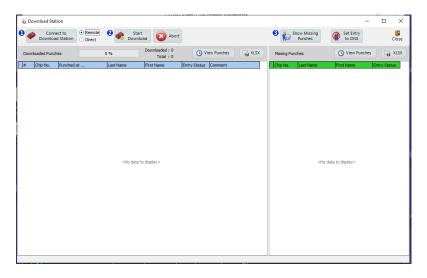
As shown above, control 211 would get changed to 112 and control 211 would get changed to 112. The effect of doing a "Re-check" is therefore to swap the controls around each time the "Re-check" button is pushed. This means you may need to press "Re-check" twice to see the correct result - when you have used "Replace Controls" in to fix accidently swapped controls.

DOWNLOADING THE PUNCH INFORMATION FROM A STATION.

When a station is punched by inserting the timing chip, a record of the punch is stored on the station. This may be used to verify someone has punched the control. A common use of this is where the information in the check or clear stations are downloaded to see who actually went out on a course as opposed to who said they would be running. Note that punches made using of the Sportident Air+ system are not recorded on the stations so usually only the CLEAR, CHECK and START (if not in Air+ mode) are really usable to confirm someone has definitely gone to a control.

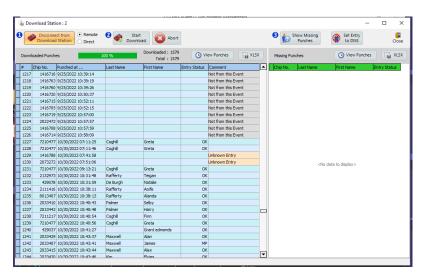
In O-Lynx, to download a station, go to the Downloads tab and press the "Station Backup" button in the "Import" section of the toolbar.





The station to be downloaded should be placed on top of the download station, with a Sportident coupling stick inserted between them. Then press #1.."Connect to Download Station", followed by #2 "Start Download".

"Remote" should be left selected as this tells the software we will be reading from a piggy-backed station. The punch information should start downloading with the "Downloaded" count increasing as the download progresses.

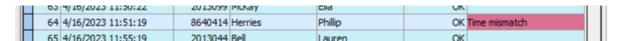


Once the download is complete, you should see a list of the punches on your screen. The "Comment" column should tell you a little more about the found punches ...

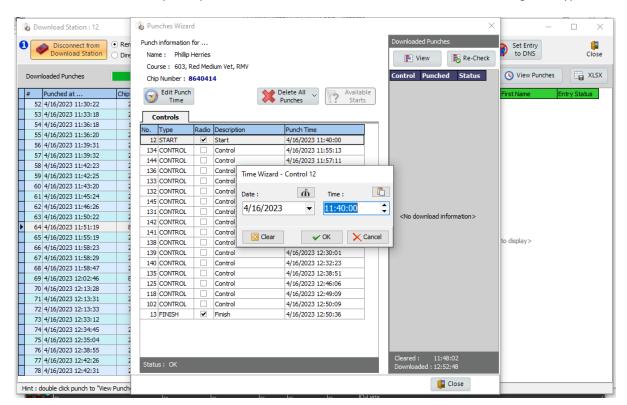
Pushing #3 "Show Missing Punches" should add a list of any entries that did not show up when the station was downloaded. If you are sure a competitor on that list did not turn up, press the "Set Entry to DNS" to set the runners status to "Did not Start". To be sure the runner is not at the event and did not punch any other controls, there are "View Punches" buttons to allow you to open up the "Punches Wizard" and check for any known punches.

Downloading a Start station to get late start times.

At events using pre-assigned start times, the Start station can be downloaded to get the times of those who punched the start box (usually in a special late starters lane). The time mismatches should show up in red.



Then double click the punch to go to the Punches Wizard. The Start punch will be selected, so press the "Edit Punch Time" button and the Time Wizard will open. When used in this way, a special "Paste" button is shown in the Wizard which allows you to paste the time downloaded from the control without having to re-type it.



[&]quot;Not from this event" - punch date does match the current events date.

[&]quot;Unknown Entry" – The timing chip number used was not found in the current entries.

[&]quot;Punch Error" – The timing chip did not punch the control properly.

[&]quot;Time mismatch" – the time in o-lynx and the time from the station do not match. Useful when downloading a start station to get late starters times.

<Blank> - The punch was recorded OK in the station and matches the day of the current event.

IMPORTING ENTRY INFORMATION

When setting up an event where people have pre-registered for the event, the entry information may come from a number of different systems such as spreadsheets, databases, web entry systems and other software programs.

This section provides details of the file formats supported by O-Lynx Event.

To import a file ... On the Entries tab, use the drop-down box to select the format, then press the "Import Entries" button.

However, first let me introduce using 'Edit All' as the easiest and most intuitive way to get entries into O-Lynx.

USING 'EDIT ALL' ENTRIES.

The 'Edit All' Entries screen provides a powerful spreadsheet interface to the entries. Externally generated entries will usually come in some form of list in a csv or xls format so having an installation of a spreadsheet program such as Excel or the free Open Office / Libre Office on the same computer as O-Lynx is ideal. You can then use it to move columns around and copy/paste in and out of the 'Edit All' screen.

Comment: Since the 'Edit All' screen was introduced, I have never used any of the other file import options as it provides such an easy way to bring in large numbers of entries and make changes to them.

Important: 'Edit All' is not designed for making changes after the event has started. The Course and Start time columns will be locked if you are using this screen after the date/time set in the event setup. So if you find yourself unable to use it to make some important last minute changes on the morning of the event, go back to event setup and change the events time to later in the day so you can continue.

Note: To ensure entry information is not accidently wiped, 'Edit All' cannot be used to delete entries.

Using 'Edit All' is simple because it involves just a copy and paste but 2 different approaches can be used.

- 1. Use the edit all screen as the main work area and copy / paste one column at a time into it from a spreadsheet type program.
- 2. Use an intermediate spreadsheet to get everything right, then copy paste the whole spreadsheet area. This allows you to easily re-do the whole copy and paste if things don't import as you think they should when you hit the 'Update Entries' button. For this approach, open 'Edit All', then select all the columns including the header row and paste into a blank spreadsheet in Excel or a similar program. Another alternative is to use the "Save As" button on the 'Edit All' screen to save a blank template. Fill out the spreadsheet, then copy paste it all (without the header this time) back into the 'Edit All' screen.

For the entries to be accepted the following information must exist...

Chip – must have a value assigned. If the chips are not yet known the column could just be filled with '1' or copy and paste the bib column into the chip column.

Course – must be assigned with a valid course code. If you are unsure what is considered 'valid', double-click on one of the cells in the course column to see the list of courses set up for the event.

Press 'Update Entries' to exit the Edit All screen and complete the entry import.

The Edit All screen has a number of useful helper functions on the toolbar.

Chips

- Connect to register station. Pressing this button will connect to the Register SI station so that if a chip
 is punched it will set the "chip" number on the current entry. This provides an easy way to assign
 chips when you have them close by.
- Assign Hire Chips. A wizard will take you through applying chip numbers from the bags of hire chips you have set up, to the entries. This makes it very easy to pre-assign hire chips to just the entries that don't have their own chip. If you want them assigned in a particular order, sort a column by clicking on the header before using the wizard. E.g. click the club column when assigning by school.

Export

- Save As. This will save the entries list to Excel format. Also useful to save a blank template to setup entries for later copy/paste.

Search

- Find. Find a specified value.
- Replace. Find and Replace. Especially useful where the external entry system used different course codes than O-Lynx.

Tools

- Fill Down. Will copy the contents of the current cell down to the selected cells below it. E.g. to fill out Gender, sort by the course column then set 'M' for all the Mens courses etc.
- Fill Series. Will fill the selected cells with a series of numbers or times. Use to assign bib numbers or temporary chip numbers (or use to re-assign bulk chip numbers so the chips can be used again for the next school class). When used on the 'Start Time' column, it will assign a sequence of times.
- Check Case. Will check first and last names for all Capitals or that the first letter is capitalised. Really
 useful for entries done on-line as often these contain self-inflicted errors, or to use this function
 before publishing results.

Useful Stuff:

If your entries come with the whole name in one excel column, you can either \dots

- Keep the name together and put it in the First Name column.
- Split the name up using formula. (change C2 to suit your spreadsheet)
 - Use =LEFT(C2,FIND(" ",C2,1)-1) to get the first name.
 - Use =RIGHT(C2,LEN(C2)-FIND(" ",C2,1)) to get the last name.
- Paste the results back in the correct place using the paste "Value(s)" option.

EXCEL XLSX.

Probably the easiest file format to work with as the data is in columns. This format is the same layout as used in the 'Edit All' Entries spreadsheet.

This option will import a Microsoft Excel spreadsheet that has an entry per line and is set up with the following columns.

Bib, Chip Number, First Name, Last Name, Gender, Course Code, Grade, Start Time, Club, Leg, Team, Text1 This import option will skip the first row of the spreadsheet as it is presumed this first row is used for column headings.

1	Α	В	С	D	Е	F	G	Н	1	J	K	L
1	Bib	Chip	First Name	Last Name	Gender	Course	Grade	Start Time	Club	Leg	Team	Text1
2	101	8640391	Brian	Roland	F	W21E		12:11:00	PP	1		
3	102	2033402	Betty	Ross	M	M21B		10:46:00	NC	1		
4	103	9080518	Martin	Freeman	F	W10		10:55:00	OTH	1		
5	104	1393128	Michelle	Hall	F	W40A		11:58:00	OTH	1		

If you are not using all the columns, keep the spreadsheet laid out as above, but simply leave the unused columns blank.

CSV TEXT.

This imports a text file that has an entry per line, with each item of information separated by a special character called a 'delimiter'. This character can be setup in O-Lynx Settings, General page, File Delimiter. Each line will be laid out as ...

Bib, Chip Number, Last Name, First Name, Course Code, Grade, Gender, Club, Team, Leg, Text1
The first line of the file is not read, as it is presumed this line is a heading. If you are not importing all the items the they can be left blank e.g. these are all valid lines in the file.

```
101;123451;Smith;John;18km-run;18kRun-F-Open;open;F;101;1;USA 101;123451;Smith;John;18km-run;;;; 101;123451;Smith;John;18km-run 101;123451;Smith;John;18km-run;;;F;;
```

Check your entry list before importing to make sure the special 'delimiter' character is not part of the entry details. E.g. if using a comma as the 'delimiter', then sometimes team names can have a comma within the name. If you find an entry like this, change the comma within the team name to another character, e.g. full stop

The following is an example file using ';' as the delimiter character.

Bib;ChipNo;LastName;FirstName;Course;Grade;Club;Gender;Team;Leg;Text1

101;123451;Forman;Sophie;18km-run;18kRun-F-Open;open;F;101;1

102;123452;Wright;Bill;18km-run;18kRun-M-Classic;classic;M;102;1

103;123453;Kingdom;Mary;18km-run;18kRun-F-Classic;classic;F;103;1

CSV (SIME).

This follows the format used for entries in the SIME orienteering program. It is a simpler format but also allows the start time to be loaded for the entries. The format imports a text file that has an entry per line, with each item of information separated by a semicolon; character. The text file is expected to have the file type of '.csv' Each line will be laid out as ...

Bib; Chip Number; First Name; Last Name; Club; Course; Start Time

All lines of the file are expected to contain entry information (no heading should be in the file). Items can be left blank if not being imported e.g. both the following are valid lines for a file. If including a start time it must be of the format hh:mm:ss

```
101;123451;John;Smith;None;M40;10:00:00;123451;John;Smith;;M40;
```

The following is an example file.

101;123451;Sophie;Forman;HB;W35 102;123452;Bill;Wright;HB;M40 103;123453;Mary;Kingdom;HB;W65 104;123454;Louise;Heriot;HB;W65 105;123455;Sophie;Jackson;WG;W40 106;123456;Janet;Taylor;AK;W40 107;123457;Jan;Gordon;HB;M40 108;123458;Judith;Smith;AK;W35 109;123459;Katrina;Benton;WG;W65

CSV (SIT).

This follows the format used for entries in the SiTiming program. The format imports a text file that has an entry per line, with each item of information separated by a special character. This character can be setup in O-Lynx Settings, General page, File Delimiter. The first line of the file is not read, as it always contains the heading.

Each line will be laid out as ...

Race Number; Card Numbers; Membership Numbers; Name; Category; Club; Country; Course Classification of the contraction of the country of th

O-Lynx imports the information as follows...

RaceNumber: Bib

CardNumbers : SI Number MembershipNumbers : not used

Name: contains the full name of the entry. Imported as the last name;

Category : Grade Club : Club

Country: not used CourseClass: Course

XML 3.0

This follows the format for entry information as specified by the International Orienteering Federation. Detail of this standard can be found at ...

http://orienteering.org/resources/it/data-standard-3-0/

O-Lynx supports the import of the following information.

- Id
- Name
- Chip number
- Course Number and Name
- Club

TEAM LIST CSV.

A simple CSV format for importing teams. The format imports a text file that has a team per line, with each item of information separated by a special character e.g. a comma. This character can be setup in O-Lynx Settings, General page, File Delimiter.

The first line of the file is not read, as it is presumed to contain the headings.

Chip numbers are set to temporary values so they can be assigned after import.

Course referenced in the file is the Course Code/Type.

If Team Name is left blank then it will be assigned based on Grade+Club+Unique number Each line should be laid out as ...

Bib, TeamName, Club, Course, Grade, Runner1, Runner2, Runner3 ... Runner6

1,SG_FRIM_1,FRIM,SG,SG,Isabelle Wain,Izzy Simon,Eliana Black

2,SB_FRIM_1,FRIM,SB,SB,Joe Bloggs,Fred Dagg,Jim Speirs 3,PB_PAKO_1,FRIM,PB,PB,Bill Cooper,Tom Cory,Rory Mac 4,PB_PAKO_2,FRIM,PB,PB,Rod Lever,Sam Pratt,Charlie Chaplin

IMPORTING OE ARCHIVE INFORMATION

If you have a database of runners within the OE Archive and would like to bring them into O-Lynx to provide the easy look-up of runners during entry, then follow the steps below.

To transfer the OE Archive to O-Lynx

In OE

In the menu, select Archive, Edit, Reports, Competitors, Export.

Character separated columns, Comma delimiter, and a String Delimiter of " should be selected. Excel time format should be ticked. (these are the defaults)

Press OK.

In O-Lynx Event

If you already have people in the Runner Database that you would like to keep separate, e.g. if swapping to a list of school students, go to the Runner database tab and "Export Runners".

Then if you need to start with a clear database, open the Tools window from the icon on the left side of the screen. Select Maintenance, and press the Runner Database button. This will clear all the existing people from the database.

Now to import the new list of people from the file saved in OE, return to the Runner database tab. In the Import box on the toolbar, select OE Archive and press Import Runners. Select Archive file saved from OE e.g. 'archive_export.csv', press 'Open' then press 'Import'

Hint: Make sure the O-Lynx Settings, File Delimiter is set correctly. E.g. if you used a comma when exporting from OE, also make sure in O-Lynx it is set as a comma.

KEEPING THE RUNNERS DATABASE UP-TO-DATE

The runners database makes for quicker entry in O-Lynx Event or O-Lynx Touch by providing a list of previous runners and information such as their chip, club and gender.

As you get new people along to your events, you should ensure they are added to the database to make entry easier next time they come.

Event

Click on the Runner Database tab to see the button "From Event" "Import Runners from the current event".

and click it to show a window titled

On the left is shows all the runners from the event. On the right you will build a list of runners to add to the Runners database.

Use the centre buttons (Add New, Add Changed, Add Changed Chips, Add Selected) to add various runners to the list of changed or new runners. Look out for spelling mistakes or capitalisation changes and use the "Delete" button to remove them if you think they are already correctly in the database.

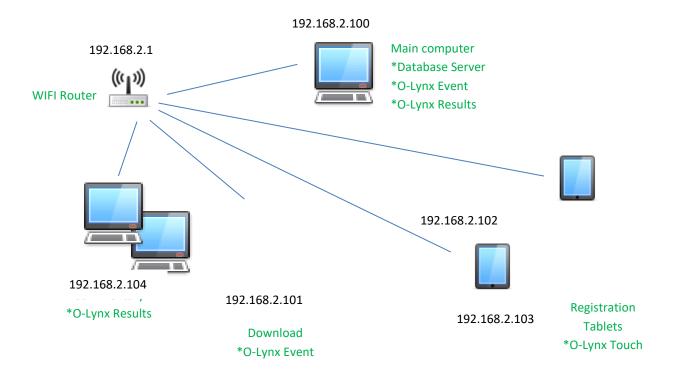
Finally before importing, click "Remove hired chips" so that you do not store the hire chip numbers in the database. See the section on "Managing Hire Chips" for more information on setting the hire list up.

Click the "Import" button to import the runners and close the window.

USING O-LYNX WITH MULTIPLE DEVICES. (NETWORKING O-LYNX)

O-Lynx can be used on one computer when running an event, but at some point you will probably want to use multiple devices. For example, hooking up a tablet to allow for self entry using O-Lynx Touch. Because O-Lynx is uses an independent database server (the TASC Nexus Server that is installed with O-Lynx Event), connecting devices is very easy.

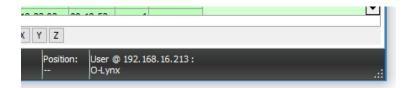
The diagram below shows several devices operating at an event. All the devices are connected together on a WIFI network. When they initially connect to the WIFI router, each device gets allocated a unique address on the network known as an I.P. Address, such 192.168.2.100



O-Lynx Event (or O-Lynx Touch for the tablets) should be installed on all devices. During the installation you will get asked if you want to install the Nexus Server. Ideally, only do this on the main computer that will hold the database, though it won't break anything if you do happen to install it elsewhere.

Install Nexus Server
Install Nexus Server and Data Files (only required if this computer will be the database Server)

When you run O-Lynx Event the IP Address assigned to the computer will be shown at the bottom of the main screen as shown below. If you turned on or connected to the network after starting O-Lynx then the address may not be valid but you can refresh it at any time by left clicking on it and selecting "Refresh IP Address"



Now take note of the IP Address that shows on the main computer where the Nexus database server is running. In the example diagram on the previous page this was "192.168.2.100".

On each of the other devices, start O-Lynx Tools (there will be an icon on the desktop). On the bottom of the O-Lynx Tools window is a place to set the IP Address of the server computer. For O-Lynx Touch the IP address setting can be found in its Settings screen.



Set the server address to the one you noted earlier .. in our example "192.168.2.100"

Press Apply, and close O-Lynx Tools. You have now setup the connection between your device and the server!

Two helper buttons can also help set up your network.

The Green home button – sets the server address to 127.0.0.1 (local host). This is a special address code which tells O-Lynx to look for the Nexus server on this PC. The main PC should use this address as it saves setting a new Server address each time you change locations e.g. moving from event WIFI to your home WIFI.

The Search button – after a 4 second delay it will show any Nexus Servers found on the network. You can then select one of the shown server addresses.

Networking Notes:

As the WIFI router issues the IP address when devices connect, it can change from event to event.

Always starting your main computer after your WIFI router but before any other equipment will help ensure it gets assigned the same address as last time.

Before starting O-Lynx on any secondary devices, please check the servers IP address by looking at the bottom bar in O-Lynx Event and then using O-Lynx Tools on the other devices to set to the new address - if it has changed.

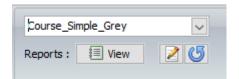
If your event has over 300 participants, it is recommended that you connect the computers by cable rather than WIFI as the results screens will cause a lot of information to flow through the network.

Ideally the main computer should be used for downloads as it will be the fastest computer for this task.

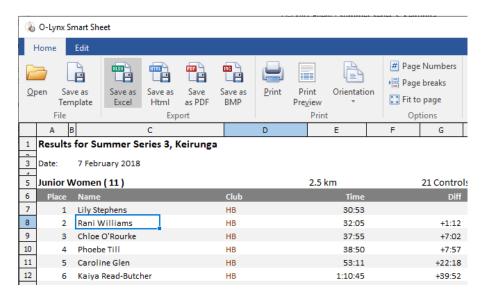
AFTER THE EVENT - PRODUCING RESULTS.

After the event you will want to produce results in various forms and upload them to a website.

On the Entries page, the toolbar has a "Print" section. In the drop-down box you can choose from one of the pre-made reports or ones you have designed yourself. See the later topic "Adjusting Results Reports" for information on customizing the reports.



Then press the view button to generate the report. The finished report will open in O-Lynx Smart Sheet window. Various export options are available as shown below.



For website use, the Html report will provide a small, fast loading webpage.

PDF will provide the best quality output in a format that is easily distributed.

BMP will save an image for each page of the report. Ideal for publishing results via facebook.

Use Save as Excel if you need to alter some of results manually before final publishing. E.g. You want to add penalties to times or points for some reason.

Excel is also a good way to provide the results to a commercial event operator so they can customize to the results to their needs e.g, add logos, sponsors etc.

Options on the right side of the toolbar will give you the opportunity to ..

Page Numbers – add a page number to the bottom of each page.

Page Breaks – will insert page breaks in the results at the start of each group e.g. per course.

Fit To Page – The results may not fit across a single page so may require scaling to do so.

For these results we will choose "Save as Html", give the file a name and save to the My Documents\O-Lynx destination.

Tip: If you need to do some work on the results reports after O-Lynx has produced them e.g. to add handicapping or total certain team scores, then this is best done by using "Save to Excel" and using a

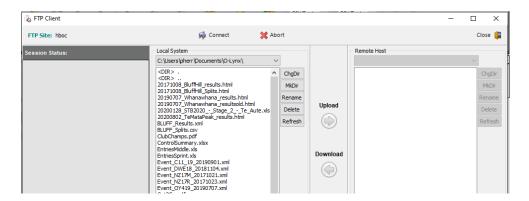
spreadsheet program to make the changes. However, some of the export options in the spreadsheet program you are using may not give you your desired results e.g. for html results it may generate multiple files.

To avoid this, you can load the modified report back into O-Lynx and use its Export options. Simply view any report in O-Lynx - just to get you back into the O-Lynx Smart sheet screen. Then use "Open" to open the .xlsx report you have modified and export to your required format.

Uploading to a website will usually be via FTP (file transfer protocol). If this is the first time you are uploading, the FTP connection details will need to be entered.

To do this go to the Settings window and click on the FTP option down the left side. The person who manages your website should be able to tell you the details to enter. Click OK when you have finished to close the settings window.

To upload the file, click the FTP button located down the left side of the screen and you should see the FTP Client window as below



Push the **Connect** button to log on.

In the middle list, navigate to the file you saved earlier, and then press the blue Right Arrow button to transfer the file to the web server. The file should show in the right hand list once uploaded.

Disconnect and **Close** the ftp client to return to the main screen.

SPLITS.

On the Results tab you can also save the results as either IOF V3 XML results or OE CSV formatted results for uploading to sites like winsplits, attackpoint, splitsbrowser, routegadget, livelox etc.

IOF V3 XML will be best for uploading to Winsplits while Routegadget seems to work best with the OE CSV file type.

UPLOADING LIVE REULTS FROM O-LYNX TO LIVERESULTAT.ORIENTERING.SE/

The website liveresultat.orientering.se/ provides a free web results service for orienteering events.

Result information from O-Lynx may be sent to this service by using a combination of the O-Lynx Web Client and their Live Results Client utility.

The O-Lynx Web Client can be set up to save a results file periodically. The Live Results Client will watch for updates to this file and upload new results to the liveresultat.orientering.se website.

As well as the website itself, apps are also available to view the results from a phone or tablet.

Preparation of LiveResults

* Visit http://liveresultat.orientering.se/adm/admincompetitions.php and "Create new competition" competition.

New competition Competitions Name NISS 2023 Sprint Organizer OT Date (format yyyy-mm-dd) 2023-02-01| (ex. 2008-02-03) Create

After pressing "Create", find your event in the list (by date) and press "Edit"

Edit competition	
CompetitionID	
26888	
Competitions Name	
NISS 2023 Sprint	
Organizer	
ОТ	
Date (format yyyy-mm-dd)	
2023-02-01	(ex. 2008-02-03)
Timezonediff (hours, +1 for finland, 0 f	for Sweden and -1 for GBR)
10	
Public	
Save	

Set the Time zone difference to ensure your event will be on their "LIVE TODAY! List. E.g. type "time difference between nz and sweden" in your web browser to get this information.

Make a note about the CompetitionID. E.g. 26888

Setting up the software

Download LiveResults Client from https://liveresults.github.io/documentation/ and install it. It will come in the form of a zip file. Create a folder in your \Program Files(x86) folder called "LiveResults" and place the contents of the zip file in it. Then right click on the "LiveResults.Client.exe" file and "Send to", "Desktop (create shortcut)" to put an icon on your desktop for easy access.

Preparation in O-Lynx Web Client



Once the Event has been setup, start the "O-Lynx Web Client"

Click "Options" to go into setup screen.

Tick "liveresultat.orienteering.se" to indicate you want to send results to this service.

If required change the output folder, but usually this can be left at the default.

Set the update interval from 30sec to 30 minutes.

Press "Save" to exit the setup screen.

At the event.

- * Visit http://liveresultat.orientering.se/adm/admincompetitions.php and "Edit" the event to make the competition visible to visitors. Mark as "Public" and press Save.
- * Start the LiveResults.Client. Choose IOF XML
- * Enter the location of results files in the field, Exportdirectory. Usually, it's best to use the browse button on the right and browse to the Libraries\Documents\O-Lynx\Live folder.
- * If using radios for splittimes, ensure the option called "Automatically create radiocontrols" is ticked so the radios per course are set up when the first files are transferred.
- note that your competition doesn't actually have to have radios out at the event to show split times. Simply ensure the required controls are ticked as radios in the Control setup tab of the O-Lynx Event main screen, and then once people start downloading, their split times for those selected controls will show up in the live results. This will provide extra value to those watching the event remotely.
- * Enter the CompetitionID from live server in the field CompetitionID that you noted earlier e.g. 26888
- * Then press the Start button to start the transfer to the live server Online results will be published on http://liveresultat.orientering.se/ Or if publishing the link

https://liveresultat.orientering.se/followfull.php?comp=26888&lang=en

where the 26888 is replaced by your events CompetitionID.

Testing the service

If you want to test the operation, set up one of your old events and make the date earlier in the year so the event doesn't appear among the coming events. (Test events can't be deleted)

MAKING A START DRAW

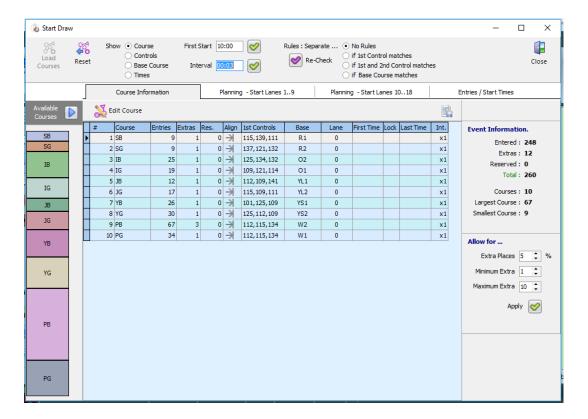
When competitors pre-enter an event, start times are usually set and published before the event. O-Lynx makes it easy to plan and perform a start draw to assign the start times to competitors.

Start

Set up the event and courses as usual then once entries have closed, import or enter the entries into O-Lynx.

On the Entries page, click the button to be taken to the Start Draw screen. Click "Load Courses" and the courses will appear. On the left side the courses are shown as coloured boxes, sized according to the number of people entered. In the centre is a list of the courses with information such as the entries, extra/spare places and the first controls.

On the right side is a summary of the event and the settings for allocating extra/spare start times. The bar at the top of the screen has the settings for the first start time, the start interval and if a "separation rule" is being used.



If you change any of the settings, click the green tick buttons beside the settings to update the start plan.

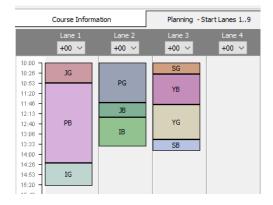
All of the settings are stored as part of the event to keep any changes you make.

The next step is planning when the starts for each course will happen, so now switch to the tab labelled "Planning – Start Lanes 1..9"

The start lanes are shown as columns across the screen. "Start Lanes" are just a way to help you organise the start. The number of start lanes you use decides how many people can start at once and whether they all start at exactly the same time. While they could correspond to course numbers or map boxes, to create the best start plan, its better just to think of them as a planning tool.

Further start lanes are available on the "Planning – Start Lanes 10..18" tab if needed.

- To manually create the start draw, drag and drop the course boxes from the left to the start lanes.
- To automatically create a start draw, click the Blue Arrow button shown next to "Available Courses". You will be asked, how many start lanes to use, but as you can easily start again by pressing the "Reset" button, simply accept the default on your first try.



The example above shows the courses automatically placed in the first 3 start lanes. (The courses are randomly sorted as they are being placed)

If you hold your mouse over a box, you will be shown...

e.g. PB (70)

- the course code and number of entries

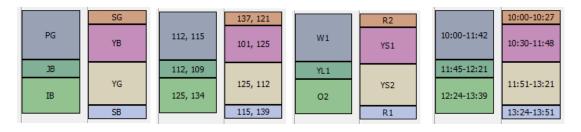
11:20 - 11:29

- the first and last start times including extra/spare places

[112]

- the first control number used on this course.

Use the "Show" options to select what is being shown in each box. This will help with planning and arranging the courses.



Show "Course"

Show "Controls"

Show "Base Course"

Show "Times"

To further refine the start plan by moving the courses, simply drag and drop them. To insert courses earlier in the day, either drop them in the space at the top of each start lane, or in the grey margin to the right of the courses. Any changes to the position of the course immediately updates the times shown in the courses list or when you hold your mouse over the course.

You can also drag and drop the courses back to the "Available Courses" area. Just drop them at the top above any other courses already there.

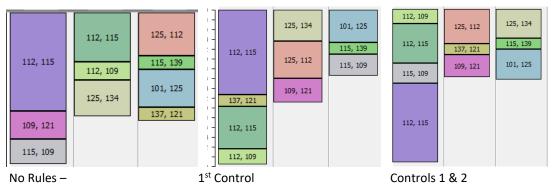
Separation Rules

Built-in rules are available to dictate whether courses can start at the same time.

- No rules any course can start at any time in any start lane.
- If 1st control matches. If two runners will be going to the same 1st control point they can't start at the same time.
- If 1st and 2nd control matches. If both the 1st and 2nd control points are exactly the same for both runners, then they cannot start together.
- If the base course matches. If its exactly the same course then they cant be starting at the same time.

These rules will affect where you can place the course boxes when moving them around.

You should have the separation rule chosen before doing the automatic placement as it will affect the which start lane the course is placed in. If a rule is being followed, the courses with the same set of start controls will get placed in the same start lane.



Courses with 1st controls 112-115 All course starting with 112 are are starting together.

placed in the first start lane

Courses starting with 125 are can start together as the second control is different.

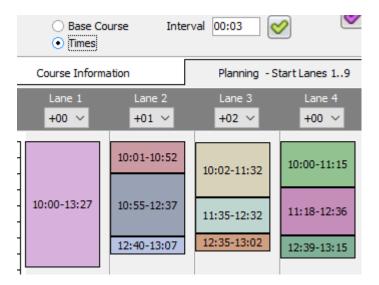
To get the start plan how you need it during the final planning stage, it may be necessary to turn off the rules and use your judgement on what is acceptable. e.g. Junior Boys and Senior Girls with the same first control in a sprint will be unlikely to run together, so the courses can be placed beside each other.

Offsets

Where the start interval is greater than 1 minute, it is common to offset the start lanes so that other starts on other courses can happen within the start interval, so reducing the overall start time.

e.g. The start interval is 3 minutes and start lane 1 courses start at 0,3,6,9 ... minutes. Start lane 2 has an offset of +1, so its starts occur at 1,4,7,10.. minutes. Start lane 3 would have an offset of +2 so its starts can occur at 2,5,8,11 minutes.

This scenario is shown below and simply involves setting the offset amount shown at the top of the start lanes. Any changes update the start plan straight away.



Performing the start draw.

Once you are happy with the start plan, move to the "Entries / Start Times" page where you will see all the entries listed by course.

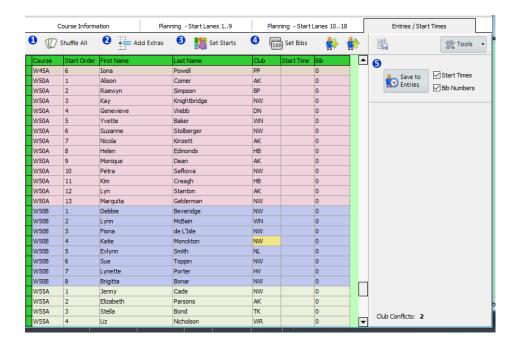
Step 1. Put the entries into a random order.

The entries will either be shown in the order they were entered or if you have already assigned start times in previous planning session, they will be shown in the order from that session.

Press the button to rearrange their order within their course. This will randomly sort the entry list for all of the courses. It will also separate runners with the same club (if possible). The "Club Conflicts" counter shown in the bottom right will indicate if there are any club members who could not be separated and their club will also be highlighted in yellow (as shown on the following image of the screen).



buttons to adjust the order on an entry manually. E.g. to separate 2 good runners.

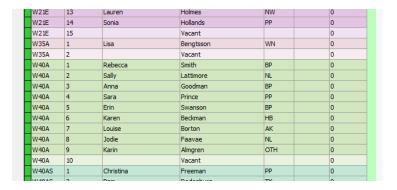


Step 2. Add Extras

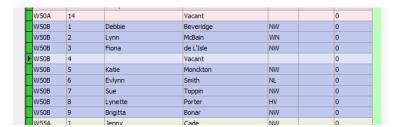
This step will add the extra start places into the list so you can see or change them if required.

"Extra" places will be added to the end of the entries for each course, while "Reserved" places can be added "In Front", "Through" or "After" the entries.

To make them easy to see the are highlighted with a lighter shade of the colour used as the background for the actual entries.



The following shows how the club conflict was removed by using the up button to move the extra start place between the entries.



You can go back and change the "Extras" and "Reserved" settings to add more or less spare start places while you are planning. Then simply press the "Add Extras" button to update the entry list.

Step 3. Draw the start times

Press the ______ button to generate the start times for each entry according to the start plan.

Step 3. Assign Bib numbers (if required)

At this point you can also assign race Bib numbers by pressing the button. You will be asked to provide the starting bib number. The bibs are assigned in starting order, with bibs also allocated to the extra/spare start times.

Step 4. Save the start times and bib numbers to the entries



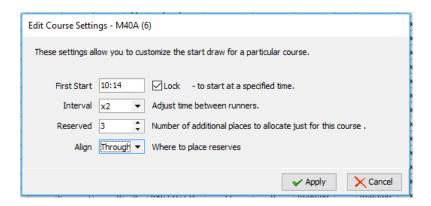
Finally, ensure the "Start Times" and /or "Bib Number" tick boxes are set as required, then click the "Save to Entries" button.

You can now close the Start Draw window and return to the main O-Lynx screen.

ADVANCED START DRAW OPTIONS

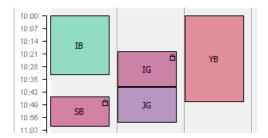
To further make the start draw suit your requirements you can edit each start draw options for each course.

Use the _____ button (or double-click the course or right click the course box) to show the options.



First Start – by setting a time here and ticking the "Lock" box, you can set the starts for a course to start at a certain time. This allows you to put gaps in the start plan. E.g. Elites are running after everyone else or the starts should be aligned to the bottom on the day rather than the top.

Shown below, the SB course has been set to start at 10:45, while the IG course has been set to start at 10:20 so that the starts in lanes 1 and 2 will finish at approximately the same time. When courses are locked to a certain time, a small padlock icon will show in one corner.



Interval – certain courses, for example - elites, may be run at a different start interval than others. This setting allows you to use "x1" – same interval as other courses or "x2" – twice the interval of other courses.

Reserved – allows additional extra start places just for this course. The number entered here is the actual number of places to allow, not a percentage.

Align – the "Reserved" start places can be aligned to "In Front", Through" or "After" the entries for a particular course.

Changing any of the course options will immediately update the start plan.

USING VACANT PLACES

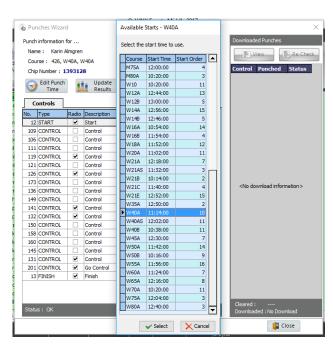
If you created any "Extra" or "Reserved" places, then these are saved for later look-up if you need to make start time changes or add a late entry.

To see a list of the spare start slots, in the "View Punches" window, press the "Available Starts" button.

Now click on the time slot that you wish to use ideally it should match the course of the entry being edited.

Press the "Select" button to exit the window and set the start time of the current entry to the selected time.

The chosen time slot will also be removed from the available starts list.



START TIME REPORTS

On the Results tab, you will find the default reports for Starts by Club, Starts by Course, Starts Alphabetical, Starts by Base Course or the Start Sheets (for the starters to use), and you can also alter them or design your own reports.

Starts by Course

M35A (5)			4.3 km		21 Controls
Name	SI No.	Bib	Club	Map Course	Start Time
Magnus Bengtsson	9791214	128	WN	2	10:30
Thomas Johnson	430103	331	WK	2	10:32
Cairn Coghill	429045	182	НВ	2	10:34
Hedley Meacheam	2041617	559	BP	2	10:36
Pablo Alonso	9434434	585	OTH	2	10:58

		4 km		20 Controls
SI No.	Bib	Club	Map Course	Start Time
683112	546	AK	3	10:57
9200868	286	NW	3	10:59
1406570	315	RK	3	11:01
7740528	146	AK	3	11:03
	683112 9200868 1406570	683112 546 9200868 286 1406570 315	SI No. Bib Club 683112 546 AK 9200868 286 NW 1406570 315 RK	SI No. Bib Club Map Course 683112 546 AK 3 9200868 286 NW 3 1406570 315 RK 3

Starts by Club

HB, HB (88)					
Name	SI No.	Bib	Course	Map Course	Start Time
Philip Mardon	2033437	363	M21C	12	10:30
Bunny Rathbone	44211	448	W80A	9	10:31
James Rawnsley	2033445	451	M14A	10	10:32
Jocelyn Plumpton	2043215	423	W21C	12	10:32
Cairn Coghill	429045	182	M35A	2	10:34
Helen Edmonds	2038441	579	W50A	6	10:34
Oliver Wright	1410523	551	M16B	10	10:34
Alan Berry	248783	129	M80A	9	10:35

Starter Sheets

Bib	SI.No	Name	Club	Course	Map Course
409	430142	Catherine Neeley	WK	W21A	4
477	2113373	Gavin Scott	HV	M75A	8
537	2016422	Genevieve Webb	DN	W50A	6
128	9791214	Magnus Bengtsson	WN	M35A	2
363	2033437	Philip Mardon	НВ	M21C	12
339	217218	Zoe Karantzas	AK	W21B	10
D:31 AM					
Bib	SI.No	Name	Club	Course	Map Course
448	44211	Bunny Rathbone	НВ	W80A	9
242	8116965	Claire Flynn	BP	W21AS	7
113	981675	Darren Ashmore	BP	M45A	3
390	442767	Katie Monckton	NW	W50B	11
383	2041616	Poppy Mitchell	TK	W18A	5

Start Sheets for separate starts.

To produce start sheets for different starting locations, the report template must be edited to add a filter. e.g. Group1;StartTime;Name;-CourseBase<>8,9

... is an example of a start sheet filter where base courses 8 and 9 are starting at a separate start, so the start times for those courses have been filtered out.

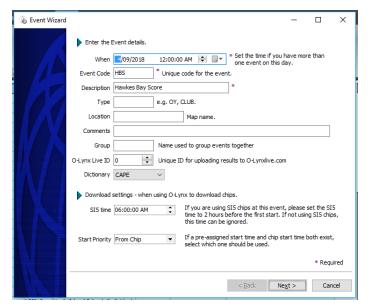
The second start list would the filter would be ...

Group1;StartTime;Name;-CourseBase=8,9

USING O-LYNX FOR SCORE / ROGAINES / ADVENTURE RACES

A score is an event where competitors navigate the controls in any order, trying to get as many controls as they can within the allocated time. Each control is worth a certain number of points and the competitor with the highest number of points who has finished in the shortest time wins. If competitors finish outside the time limit then penalty points are taken from their total score for each minute over time. A Rogaine is usually a longer version of a score. Score events can be for individuals or teams, while a Rogaine is usually a team event. For Adventure Races, the controls are the checkpoints the competitors must go through or find are assigned a points value. Any activities e.g. Gear check, Puzzles, Knots etc are also set up as a control and assigned points. If the competitor completes the activity successfully their chip is punched in the associated control by the activity marshal.

In O-Lynx Event, set up a new event as normal.

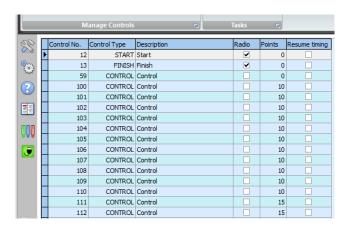


Next setup your controls and the courses. This example will import an IOF XML file produced by course planning software. For Rogaines and Adventure races the controls and courses will usually be set up manually. When creating the controls for an Adventure race, also give the control a meaningful description and in Settings, Download ensure the "Print Control name" option is ticked so the download printout shows the control descriptions as well.

O-Lynx supports 'PIVOT' type controls in score events. Normally in a score a control can only be punched once, but if the control number is added more than once to a course setup, then each time it is punched, the software will check if this is allowed and if so, add the points for it again to the total. E.g. teams pass though the event centre several times, and the organisers want to encourage them to punch a control so they can keep track of when they came through.

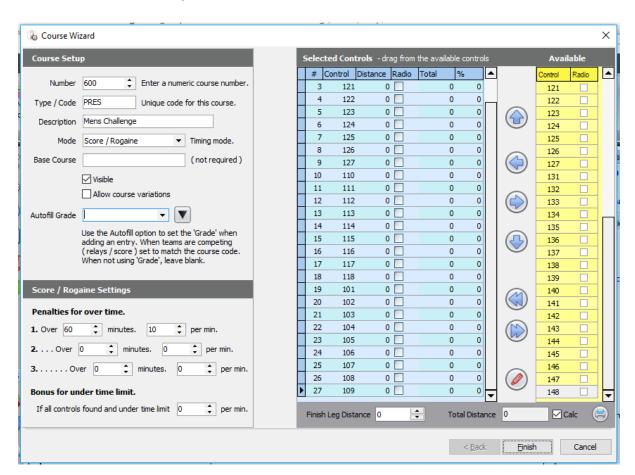
SETTING UP A SCORE COURSE

Import the coursedata using the "IOF XML" button on the Courses Tab. This should set up all the controls along with a point value for each control. If the points were not imported, edit each control and set a points value. The list of controls should look similar this example.

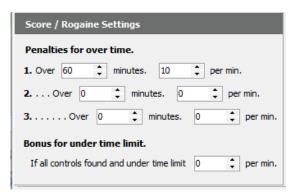


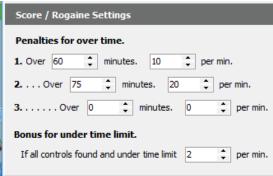
Often there will be just the one course at the event although a simple line orienteering course may also be setup for beginners. The event may also have different categories for individuals and teams or for different genders or ages, though the controls for each category will be the same.

Set up the base course first as its settings can then be copied to the other courses. A typical score course should look similar to the setup below.



When the course mode has been set to "Score/Rogaine" then additional options will be shown.





Time Limits: up to 3 time limits and penalty values can be set to specify the number of minutes before penalty points start getting subtracted from the competitors score. The example on the left uses just the one time limit, while the other example on the right will penalize ... 60 to 74 minutes, 10 points per minute. Over 75 minutes, 20 points per additional minute.

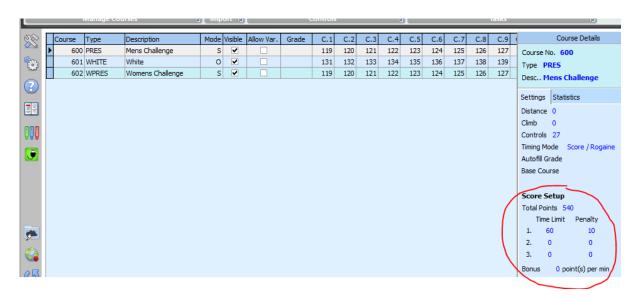
Bonus: for competitors who are early and have achieved the maximum points, a per minute bonus can be awarded. Competitors are placed according to time and points anyway so this option is only recommended if you need all competitors to have a points value for use in another system. For example a multi-event competition where points from the different activities are added together.

Team Settings:

All of the team must visit the control – if ticked then for a team to get the points for a control, every team member must has punched the control.

All of the team must punch within 1 min. – this is usually used by organisers to help force teams to stay together.

Once you have the first course setup, use the "Copy Controls", "Paste Controls" buttons to copy the setup to any additional courses. The below example shows the 2 score courses and a beginners line course. Note how the summary of the setup (ringed in red) also shows the maximum number of points a competitor could achieve.



SETTING UP THE ENTRIES

There are a number of ways the entries could be set up but the following choices are recommended...

- 1. For on the day entries, enter competitors using the entry wizard or O-Lynx Touch.
- 2. For pre-entries, use an "Edit All" spreadsheet to fill in all the entry details as per their pre-entry information. Rogaine / Adventure Race entries will usually come from a spreadsheet that can be pasted into the "Edit All" screen.

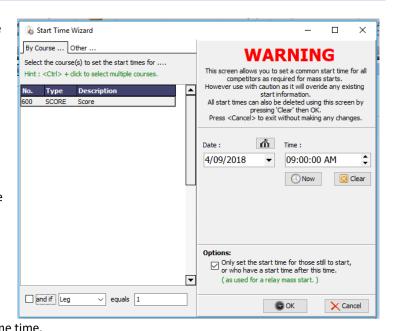
SETTING THE START TIME

Score events are usually mass start. If the event is not a mass start, skip this step.

For setting the start time use the "Mass Start" button on the "Entries" tab. As competitors will be penalized for even being a second over time, make the start time as accurate as possible. E.g. look at the display on a finish control when you start the competitors and enter this value as their start time.

To use this window, select the course(s) on the left and edit the start time. Untick the "and if" button at the bottom of the screen as if teams are competing, all members of the team will start at the same time.

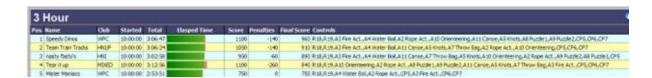
Finally press OK to exit and set the times.



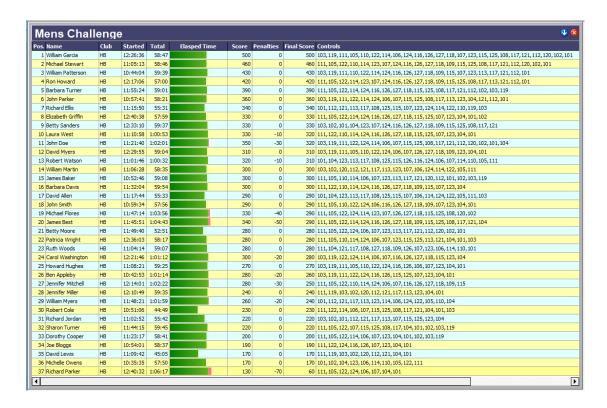
SCORE / ROGAINE RESULTS

For showing results at the event, open O-Lynx Results after the courses and controls have been set up. In the main menu, select "New", "Score / Rogaine". This opens a results window as shown below. The bar graph shows their time on the course and turns pink when they go overtime. The order they collected the controls is shown on the right. If the event is not a mass start, it is suggested the results window is narrowed by dragging the edge inwards so this column cannot be studied by competitors yet to do their course. It can be shown again after the last starter has left.

For adventure races, the list of controls can be changed to show the control names so it makes more sense to the competitors. Use the menu available from the blue down arrow to do this.



This results display can also be saved as a spreadsheet using the menu, Export option.



For publishing results, use one of the reports available on the Results tab of O-Lynx Event. The report below was produced using the 'Course_Simple_Grey' template. Use the Export, Save Html, or Save Pdf options to produce results for your web page. If you are going to format the results further, use "Save As" to save the results as an Excel file. The templates can also be altered to suit your requirements e.g. to add the grade or bib number.

Mens C	hallenge		540 Maximum Po	ints		
Place	Name	Club	Time	Points	Penalty	Total
1	William Garcia	НВ	58:47	500	0	500
2	Michael Stewart	НВ	58:46	460	0	460
3	William Patterson	НВ	59:39	430	0	430
4	Ron Howard	НВ	57:00	420	0	420
5	Barbara Turner	НВ	59:01	390	0	390
6	John Parker	НВ	58:21	360	0	360
7	Richard Ellis	НВ	55:31	340	0	340
8	Elizabeth Griffin	НВ	57:59	330	0	330
9	Betty Sanders	НВ	59:37	330	0	330
10	Laura West	НВ	1:00:53	330	10	320
11	John Doe	НВ	1:02:01	350	30	320
12	David Myers	НВ	59:04	310	0	310
13	Robert Watson	НВ	1:00:32	320	10	310
14	William Martin	НВ	58:35	300	0	300

TEAM SCORE / ROGAINE EVENTS

For a score course with teams competing, O-Lynx will track each team members individual points and time for the course. To also track the team points and time, a grade must also be assigned.

This means for each entry, fill in both the course and grade value – usually with the same or similar title.

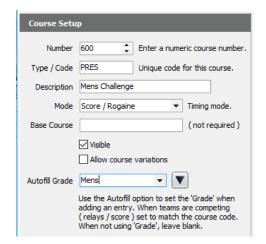
For example if the competitor is entered in the course "Mens Score", also set the grade to "Mens Score".



To make adding the grade information easier or if you are using O-Lynx Touch for entries, the course wizard has an extra property called "Autofill Grade". Set this value to a similar value to the course name.

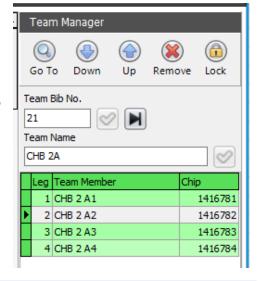
Hint: Pushing the down arrow next to the Autofill box will copy the course code into the autofill property.

Using this property means when someone is entered into a certain course, the grade will also be filled out as required for team events.



The teams members also need to be grouped together. Either use the Team manager to do this or if the teams are pre-entry, consider using a spreadsheet that can be imported or pasted into the "Edit All Entries" screen with the team name, leg and bib already entered.

As shown on the right, when setting up a team, the leg number should increment for each team member. Despite this, for a Score or Rogaine Team, O-Lynx will presume all team members will start and finish together.

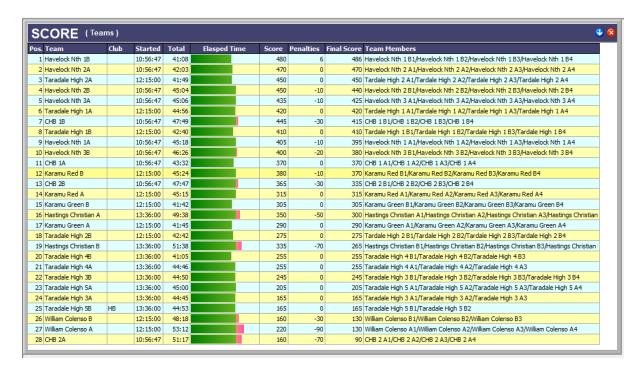


SCORE / ROGAINE TEAM RESULTS

When team members download, they will receive a printout showing their individual results. A team result summary can be printed on the Results tab. For the Receipt printer, select "Results – Team" and press "Print".

For showing results at the event, open O-Lynx Results after the courses and controls have been set up. In the main menu, select "New", "Score / Rogaine - Teams". This opens a results window as shown below. It is similar to the individual results window, but the result is for a team and the column with the list of punches has been replaced by a list of the team members.

If you have room on the results screen, try to show both the individual and team result windows.

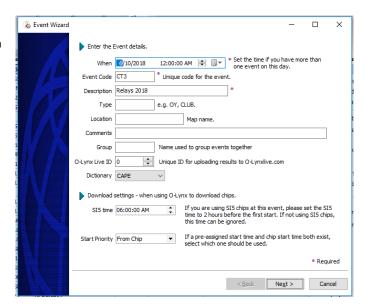


For final team results for your web page, the report templates supplied to use are "Team Score 4" for up to 4 persons in a team and "Team Score Oneline" where just one line per team is used.

USING O-LYNX FOR ORIENTEERING RELAYS

A relay is an event where up to nine entrants run as a team, with each runner taking it in turn to run around a course. Each team member will have their own unique chip. If your relay will use a single chip per team that gets passed between them like a batten then treat the whole team as one entry instead.

In O-Lynx Event, set up a new event as normal. During this process the start and finish controls will also be set up.



Next setup your controls and the courses. For an orienteering relay, usually runners will be assigned to courses that differ slightly so that following is discouraged.

SETTING UP THE RELAY COURSES

For an orienteering relay event, using course planning software (e.g. Condes or OCAD) will help ensure all the needed information to run the relay successfully is available.

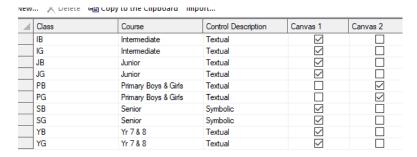
Setting the courses

When using forking to split up runners, it is possible to easily generate huge numbers (1000's) of course variations. Try to "couple" forks to make the number of courses variations manageable – usually a 3 leg relay will have 3 different course combinations per class. E.g. ABC,CBA,BCA. The maximum number of courses that should be imported into O-Lynx is 800 but if your event is approaching anywhere near this number then the course designer should have another look at how they have set up the courses.

It is recommended that the course names used in the course planning software use the code as used for the Class. E.g. Course "IB" is the course used by Class "IB", particularly if using the Condes software.

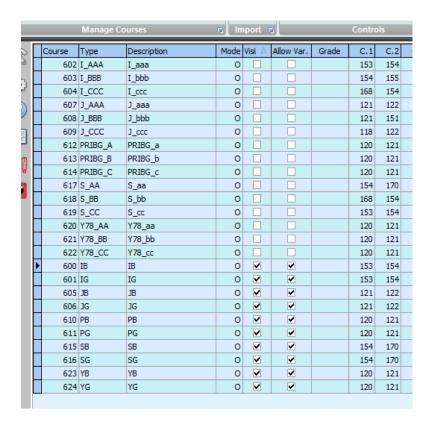
Setup the classes

The course planning software should allow you to also setup the classes used in the relay. E.g. shown below are the classes for a school relay event as used in Condes.



Try to use a very short name/code (maximum of one or two characters) for each class (e.g. "IG" for Intermediate Girls) as this class name will be combined with the a course variation code once imported to O-Lynx and the combined value should not be able to exceed 10 characters. E.g. $IG + '_' + AAA = IG_AAA$ (6 characters so OK)

Import the relays XML coursedata from the course planning software (Condes or OCAD) using the "IOF XML" button on the Courses Tab. The classes will appear as extra courses, so you should end up with a number of course variations and the relay classes (which I will refer to as "Class courses" to try to convey that, yes they are classes, but they appear in the course list due to the design of O-Lynx), similar to what is shown below.



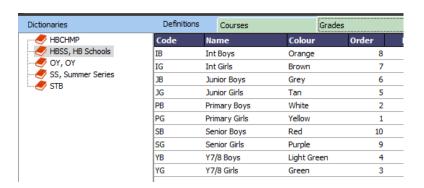
The variations will be set with "Visible" unticked as these courses are the not used for entries while the imported "Class courses" will have "Visible" ticked.

The "Class courses" will also need to have "Allow Var." ticked so the software knows that when the runners chip is downloaded, the course to be checked against may be one of the variation courses.

Setting up the Grades

For team events, as well as a "Course", competitors are also given a "Grade" as this is how their combined team result will be compared to other teams. This should be an identical code to the courses, e.g. A person running the SB course will also be running in the "SB" Grade.

Using the O-Lynx dictionary system, it is a good idea to set up a dictionary for the grades at this point so that more descriptive names can be shown on the results and also to make the grades available as a list in the entry screens. See the section of this manual about "Using a Dictionary in O-Lynx to make setting up events easier" for details on this task if you have never setup a dictionary before. Once the dictionary is setup, remember to edit the Event settings and set the dictionary that will be used.



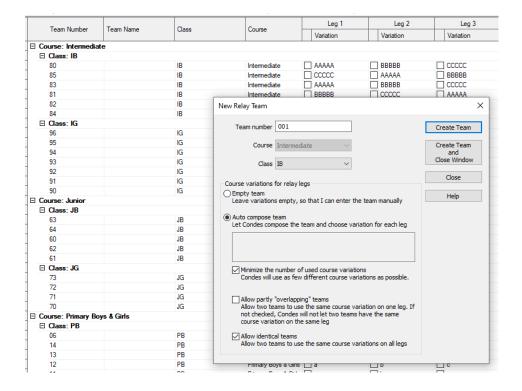
ASSIGNING THE COURSES

For low level events, O-Lynx can detect and assign the actual course variation that has been run using its course matching ability, with the runners course decided by which map they are given. This means none of the courses (known as their "Actual course" in entries) need to be assigned and you can skip to "Setting up the relay entries".

For higher level events, the leg runners are pre-assigned to their "Actual course" so that someone doesn't simply following someone else around and the organiser can do things like ensure the top teams don't end up running exactly the same variation.

The course assignments are best done in the Course planning software as it will best understand the forking arrangements and provides opportunities such as printing bib numbers on the maps.

Below is the "Relay", "Open Team Allocations..." screen from Condes where you can see that a number of teams have been setup for each class including allocating bib numbers.



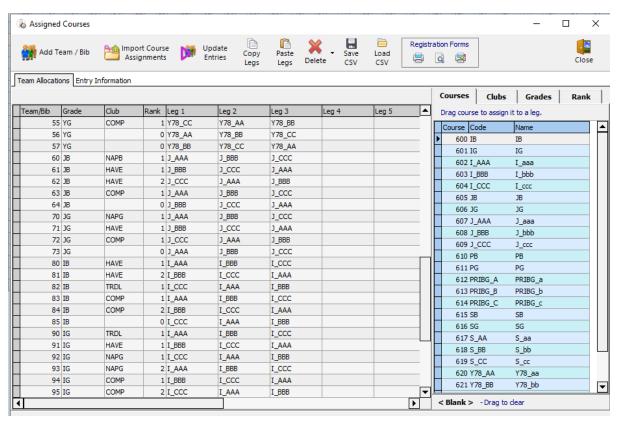
Once the required number of teams have been setup, use the Condes, "Export to XML" button on this screen to produce a file for O-Lynx containing a list of the bibs, which leg is being run, and which variation has been assigned to that bib number. In OCAD this information is contained in the one file along with the course setup. If this is not available, it is also possible to manually assign the courses.

IMPORTING THE LEG ASSIGNMENTS

On the Courses tab, click the "Assign Courses" button to open a new window.

Press "Import Course Assignments" and choose the IOF XML file. For Condes this will be a specially exported file, while if using OCAD it may simply be the same file that was used to import the course variations earlier.

Once the file is imported, you should have a list of the bibs and their leg variations. Columns also exist for Club and Rank which are optional but filling them out will help with your planning and ensure the automatic naming of the teams works as well as possible. To fill out a value, drag and drop from the information in the tabs on the right-hand side of the screen. To clear a value, drag the < Blank > item at the bottom to the cell to be cleared.



On the "Clubs" tab there is an "Autofill" button that can be used to fill the Club column based on the entries, or use drag and drop to fill out one by one.

On the "Rank" tab, "Auto Assign Rank" will number the club teams sequentially for each Grade, or again, use drag and drop.

If you don't have a club or a rank assigned they will be automatically set when the team is built in team manager.



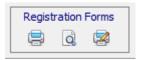
When the individual entries have been setup, the "Entry Information" tab can be used to check you have the setup for the required number of teams in each grade. Red highlighting will show where the number of assigned teams is less than the number of teams that the entries indicate are required.

For map organisation, use the "Save CSV" or Save to Excel buttons to produce a file for those organising map numbering for the teams – if they were not pre-printed on the maps. The Save CSV / Load CSV options can also be used to transfer just the assignments to another computer or event. E.g. if you are practising with a trial event.

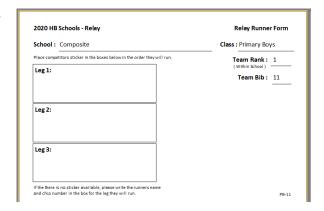
"Add Team ./ Bib" can be used for manually building assignments i.e. without a file.

"Update Entries" will update the "Actual Course" for leg runners if there have been any changes made to the variations after teams have been built in the entries screen Team manager. "Update Entries" can also be useful if the Teams were built without using the Team Manager e.g. A spreadsheet was used, as it will assign the "Actual Course" to the Entries based on the bib number and leg.

"Registration Forms" allows you to print forms for the team managers to fill in at the event. The default template is shown to the right.



The available buttons allow you to "Print", "Print Preview" or "Edit Layout" of the form.



SETTING UP THE RELAY ENTRIES

There are a number of ways the entries could be set up for a relay. Usually, the entry of an individual's details and then putting them in a particular team will be 2 different steps — unless you have the luxury of knowing the final team makeup well before the event.

Options include ...

- 1. Enter competitors using the entry wizard or O-Lynx Touch and use the "Team Manager" to build the teams
- 2. Competitors use a device running O-Lynx Touch for individual entry and then when they have gathered their team together, use a second device running the O-Lynx Touch team entry screen to assign all team members to a team. This is ideal for entry-on-the-day team events such as rogaines, friendship or sprint relays.
- 3. Use the "Edit All" spreadsheet to fill in all the team's details as per their pre-entry information.
- 4. Or a combination of some of these methods e.g. use "Edit All" to fill out entries from a registration system, but use the "Team Manager" to set up the teams on the day once no-shows or running order has been finalised.

Before setting up the entries, make managing the relay event easier by adding extra columns to the entry list to show more information relevant to a relay. This will help you detect if something isn't set up correctly.

Press the "Entry List" "Customize" button to add "Actual", "Leg", "Team" and "Grade" and "NC" to the shown columns by dragging from the customize box to a position on the dark green column heading bar. Use

"Entry List", "Save Layout" to keep the setup for next time the O-Lynx software is opened.



For pre-entry events, initially getting entries into O-Lynx will be easiest by cutting and pasting into the "Edit All" screen. Bib should be left blank or "0" while the Chip number must have a value – if these will be assigned later, e.g. from a hire chip list, simply assign sequential numbers initially starting at 1 by using the "Fill Series" button.

The "Course" and "Grade" columns should be filled out with the same values when running a relay. This is because for a relay, two competitions are being tracked - the individual team members time and placing is done for a particular "Course", while the total teams time and position is done for their "Grade".

The team name must be unique across the whole event, not just for the course/class. See the following "Using the Team Manager" section on how it automatically assigns a team names.

Don't set the start time in the "Edit All" spreadsheet – it is best and more easily done later.

USING THE TEAM MANAGER

Pressing the 'Team Manager' button on the "Entries" tab will show a panel to the right of the Entries list. This can be used to easily build or make changes to the teams.

While this panel is open, clicking on any entry in the Entries list will show the team they are a member of.

To lock to a particular team so that changes can be made, press the "Lock" button on the panel.

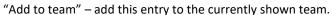
Additional members can then be added by selecting and dragging an entry to the members list.

Use the "Remove" button to remove a team member or the "Down", "Up" buttons to change the running order.

To make editing the details of other team members easy, select any team member in the Team Manager and use the "Go To" button to jump to that person in the Entries List, or double click on any team member to bring up the Edit Entry Wizard.

Once you have finished adjusting a particular team, unlock by pressing the "Lock" button again.

For even quicker team building, right clicking on an entry will give you 2 options ..



"Start a new team" – start a new team with this entry as the leg 1 runner. This option will also automatically lock the team so the other team members can be added.

When a team is being built, the "Team Name" will automatically be assigned as a combination of "Course Code" + "Club Code" + Unique Number. E.g. YG_ESKS_1. The "Team Club" will also be assigned. The automatic team name can be overwritten if the team members want to use a specific one.

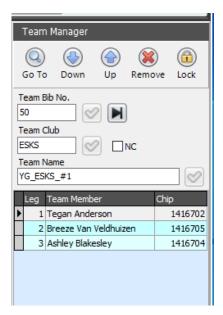
A bib number can also be entered here or the next available number button sets the bib number. If the entered bib number was setup in the course assignments then the correct "Actual course" will also be assigned at this point. If the course assignment fully matches the entry information (same Grade and Club) then the "Rank" from the course assignment will be set in the team name but with an added "#" to let you know a valid team assignment was found. E.g. YG_ESKS_1 will become YG_ESKS_#1 if Bib "50" was found in the assignments with a rank of 1 and the "ESKS" club and "YG" grades match.

The "NC" checkbox can be used to indicate a team is non-competitive – e.g. for school competitions, teams made up from different schools are NC.

USING O-LYNX TOUCH FOR RELAYS

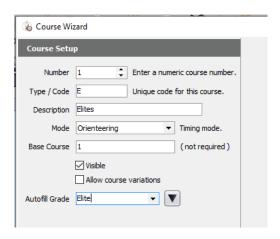
Whether all relay entries and the team setup is done using O-Lynx Touch or you just have it available on the day for last minute changes, it adds a powerful tool to events that used to be the dread of any event organiser. Using O-Lynx Touch can help make relays an easy and exciting addition to club programs by allowing entry and team organisation to be done at the event. See the sections on the "Friendship Team Event" and "2x2 Relay" for ideas.

The following provides a guide to the 2 distinctive steps O-Lynx Touch helps with. If your event is all pre-entry then the first step could be skipped.



Taking relay entries

Individuals need to enter before a team is decided. The standard "O-Lynx Touch" entry screen does not present an option for the runners "Grade", which must be filled out for Team events to work. To solve this, edit the course setup in O-Lynx Event and set the "Autofill Grade" option. This setting tells O-Lynx that whenever an entry is made for the "E", "Elites" Course, the Grade should automatically be set to "Elite" as well.



Now start up O-Lynx Touch. (Note : despite the "Touch" in its name, it is just as useful on a mouse driven laptop and even as a data entry method for entries on the main event PC.)

No other special setup is required for individual entry, so you should be able to just "Connect to the event database" and start taking entries.

Team Setup

Start another device and run O-Lynx Touch or for just using with on-the-day corrections it may be the main event computer.

First change the settings to suit the event by going into the O-Lynx Touch Setup screen. On the "Advanced" tab, set the ...

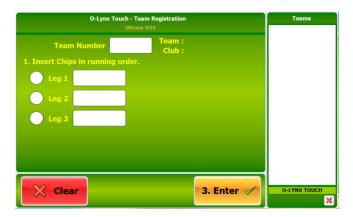
Max Team Size – sets the number of team places to show.

Mixed Team Name – team names are automatically made based on the Grade+Club+Bib but where Grade or Club are not the same for all Team members, the "Club" part of the name will be replaced with the code set here. By default this will be "COMP" (Composite) but it can be "MIXED" or any other code required.

Team Number-if the maps are not pre-allocated then you can let O-Lynx Touch set the team number and wind it over "automatic" ally. If you have preassigned team numbers to certain maps, or to track during commentary then choose "Enter Value" and they will be required to enter a team number as well. Use "Enter Value" also if you are just using O-Lynx Touch for on the day fix-ups e.g. running order changes, as the teams will need to keep their course allocations etc.

Print Team Docket – O-Lynx Touch can print a docket of the team members and running order if a receipt printer is connected to the device. (must be set up on the "More" tab.) This may be useful if the whole team didn't turn up make any changes e.g. their manager came over with a mass of chips in their hand, and you want to try to ensure the correct chip makes it to the correct person/leg.

Once the setup is complete, press OK and open the Team Registration screen.



Depending on the settings, the Team Number may not be editable as it will be automatic. Team Members then simply punch in their running order to set the team. If a mistake is made then just re-punch to correct it. If the Team Number can be set, entering an existing team number will bring up the team details, where it may be changed by re-punching the team members chips or the chip of another entry if a new team member is being brought in..



Press Enter to finish entering the team.

The O-Lynx Touch Team Registration screen has also been optimized to use with a USB barcode scanner. An example use case for this is where teachers are issued with a set of barcode stickers for their pre-registered students with the barcode representing the students chip number. (Such as the ones that can be generated in the O-Lynx Event – Tools window)

These are applied to the team forms and returned to the registration desk at the event. Such a barcoding system means a large number of the forms can be quickly scanned to setup the teams and their running order.

QBRelay 2019

Relay Runner Form

School: New Zealand

Class: Elite

Place competitors sticker in the boxes below in the order they will run.

Leg 1: Imagene Scott

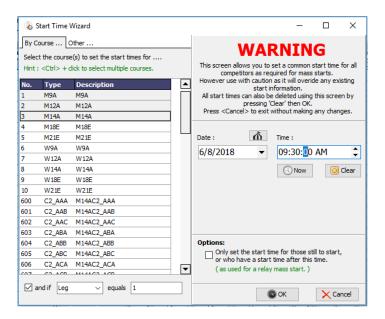
8243341

Leg 2: Nick 8305130

Leg 3: Matt Ogden 8305129 If the there is no sticker available, please write the runners name and chip number in the box for the leg they will run. Team Rank: 0 (Within School) Team Bib: 1

START TIMES

The mass start times for the relay are set up by going to the entries tab and pressing the "Mass Start" button. You should do this as late as possible so all the teams are setup and locked in. If changes are still happening e.g. a team alters its running order then the applied start time could end up moving to the second or third legs. One option is to set the start times immediately after the start has taken place – but before the first radio is punched. This means delays in the start can easily be accounted for, if for example, the start runs 2 minutes late. For the actual race start, the starter should use a start clock or read the time off a spare SI box that is synced to race time.



Select the courses starting at the same time on the left. They can be multiselected using the Ctrl or Shift keys if starting more than one course at a time. Also check the "And if" box is ticked and Leg" equals "1" (the default) so that you will only set the start times for the first leg runners. Set the date / time on the right then press the "OK" button. (If using this window before the day of the event, ensure you have the date set correctly, or use

the Event date button



to set it to the event date.

Repeat this step for all the courses / leg 1 runners.

RELAY RESULTS

Open O-Lynx Results after the courses and controls have been set up.

For showing results to spectators, open a "Grade Results – Teams" window. When opening, select the grade or grades that you wish to show. Drag between the title columns to make the columns wider if required.

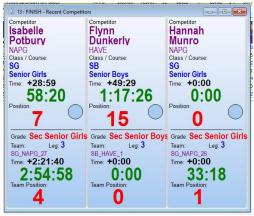


When a leg runner punches the finish radio or downloads, the next leg runners start time is automatically assigned to the previous runners finish time.

IMPORTANT: If you are not using a radio finish, design your changeover area so that finished runners are required to immediately download and can't wander off to view the racing, get a drink etc. Because their finish time sets the start of the next runner, their download is required as soon as possible, especially if the event has commentary. If runners do end up downloading out of order, then all team members will need to come to the download point again and download in the correct running order in order to get a team result.

An "Export" option can be selected from the menu (blue arrow) to produce a spreadsheet file of the team results.

For commentary, use the "Recent – Panelled" screens. There should be a "Monitor Teams" default panel layout available in the list which will show individual (top section) and team (bottom section) elapsed times.



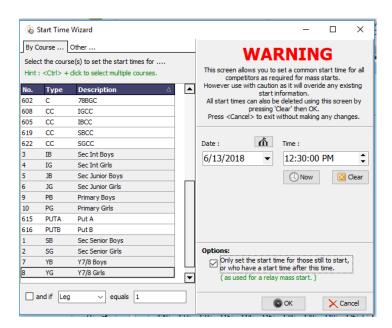
For final results, use the Team_Relay_X Templates – where X is the number of team members, to produce a results report in your required output type e.g. html, pdf or Excel.

An XML formatted results file is available from the Results tab. Choose "V3 XML Relay" option in the "Export" section of the menu.

MASS STARTS

Sometimes relay organisers will have a mass start for all remaining runners, if it looks like some teams will be running for quite some time. When the time for the mass start time comes, let the start happen and note the actual race time of the start (Again, its good to have a spare SI box set to race time for this purpose, so you can read correct time off the display).

In O-Lynx, open the "Mass Start" window from the Entries tab.



Choose the courses the mass start will apply to e.g. the above shows all the courses will be in a mass start. Un-tick the "and if" option as this start will be for all people not started, no matter which leg. Tick the relay mass start option at the bottom left and then press OK.

As this function may be carried out a couple of minutes after the mass start, it allows for re-setting the start time of teams who have leg runners that arrive in the intervening period.

Team time as shown in the results will now combine the times of all team members out running.

USING O-LYNX FOR A FRIENDSHIP TEAM EVENT (SCORE RELAY)

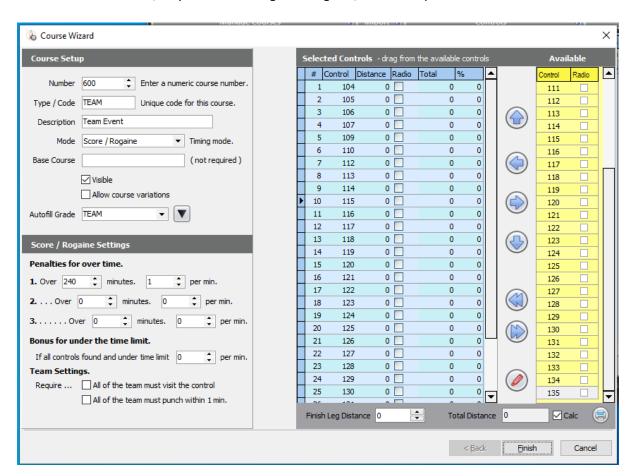
This type of event is based on the one of the events held at the Orienteering World Schools Championship. It is a score / rogaine type event where competitors try to collect as many controls as possible during the allotted time period. At the World Schools the teams are made up of pupils from different counties, hence its name "Friendship Relay". Unlike a regular Team Rogaine where the team members travel around together, for the Friendship relay, team members split the controls and each collect a different set of the controls.

It is a good format in a club setting, especially as O-Lynx's makes it easy to run the whole event on-the-day with no pre-entry.

As you can see from the course setup below, the course should be setup like a standard score event. The time limit is usually not used as all teams are encouraged to get all controls.

"All of the team must visit the control" should be unticked.

"Autofill Grade" – for team events, each entry must be assigned to a Grade. However, the normal entry screen used in O-Lynx Touch does not set the Grade, only the Course. Setting the Autofill Grade will mean when someone enters a course, they will also be assigned to a grade, in the example "TEAM".



For entries, setup 2 devices with O-Lynx Touch. They may be laptops or tablets. Use one for individual entries using the usual main screen of Touch. On the second device, go into the Settings by pressing "Clear" +

Then on the "Advanced" tab in the "Team Setup" section, set the Max Team size to the number of people per team. As bibs are unlikely to be used, also set "Team Number" to "Automatic".







Device 1 : Competitors enter.

Device 2: Team members punch to make a team.

As shown above, an automatic team name and number will be assigned when the team register.

For the event a mass start may be used, though if it's a club event it may attract more entries if teams can start individually with a start box, throughout the day.

For a friendship event, the team will usually meet up at the final control so they come in together.

For at event results, the "Score / Rogaine – Teams" screen will show the results.



For published results, the templates "Team Score Oneline" or "Team Score 2" for 2 person teams.

USING O-LYNX FOR A 2X2 RELAY

For a 2x2 relay each team has 2 people and they each run 2 legs.

Such an event should be run as a 4 person relay as O-Lynx requires each leg to have different chip numbers.

For entries, setup 2 devices with O-Lynx Touch. They may be laptops or tablets. Use one for individual entries using the usual main screen of Touch. On the second device, go into the Settings by pressing "Clear" +

Then on the "Advanced" tab in the "Team Setup" section, set the "Max Team size" to 4 people per team.







Device 1 : Competitors enter.

Device 2: Team members punch to make a team.

When the team punches the second device to build their team and set their running order, they use the 4 chips they registered with in alternate order.

When setting up the event, put the download right at the changeover point to try to ensure competiors download straight away. The download of one runner sets the start time of the next so the runners need to download in their running order. Forcing them through the download point straight after they finish will help ensure this happens correctly.

USING O-LYNX FOR A KNOCKOUT SPRINT

A knockout sprint puts runners through a series of qualifying races, with the top fastest from each qualifier making it through to the next race.

The organisation of such a race on race day is quite complicated, but O-Lynx takes a lot of the work away by automating the tasks required as much as possible.

In its full form, a Knockout sprint consists 4 events.

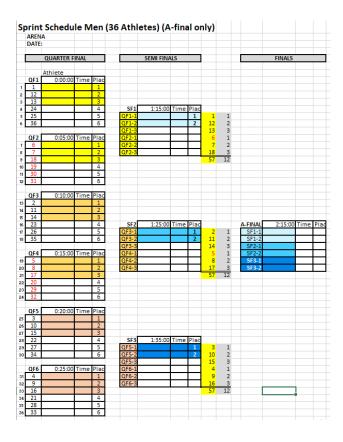
- Qualifiers
- Quarter Finals
- Semi Finals
- Finals

However, depending on the number of competitors you have, some of these may be skipped. E.g. for an event with maximum of 36 competitors in each Gender category, then the first event would be the Quarter Finals. The International Orienteering Federation link to the format is here ...

https://orienteering.sport/orienteering/internal/foot-orienteering-commission/3rd-sprint-format/with the format for runners moving through the events here ...

https://www.dropbox.com/s/0ce5jb5sfnepcmy/SprintSchedule 6heat V6.xlsx?dl=0

A miniature version of this spreadsheet is shown below to give you a quick idea of how the top runners in each event move to the next event.



To run a knockout sprint in O-Lynx, set up each knockout level (Qualifiers, Quarter Finals, Semi Finals, Finals) as separate events, with their own courses, course variations etc as set by the course planner. As Sportident Air+ is generally used for this event, consider going to "Settings" and putting the "Timing Accuracy" to 0.1 of a

second. The event is all about the order the runners cross the finish line, not the time they take. By using 0.1 of a second timing, the likelihood of any tied placings in greatly reduced. Tied placings are to be avoided if possible, as then rules regarding IOF ranking are supposed to come into play.

When setting up the courses, decide upon a set naming convention system. As you will see later, this if important to make management of the event as simple as possible.

e.g. MQF1..6 = Mens Qualifiers 1 to 6, MSF1..3 = Mens Semi-finals 1 to 3, MF = Mens Final

One of the rounds may have a "Map choice" option where the competitor chooses their map based on 3 choices. O-Lynx is ideally suited for this with its automatic course assignment at download. These courses will need to be set up as "Allow Var" to let O-Lynx pick the course.

Pre-event, the Entries should only be made to the first event, as the entries for the next level will be decided after that event has run. Start times for the first event can also be setup and are usually affected by the competitors ranking going into the competition as the initial races should be "equally strong".

Once the first race has been run, the next event has to be setup fairly quickly. To do this a "Rule" file is used. This is a text file with 3 columns. Rank, Course, New Course. An example file would be ...

	Course	New Course
	MH3	MQF1
	MH2	MQF5
1	MH1	MQF3
2	MH3	MQF4
2	MH2	MQF2
2	MH1	MQF6
3	MH3	MQF2
3	MH2	MQF6
3	MH1	MQF4
4	MH3	MQF5
4	MH2	MQF3
4	MH1	MQF1
5	MH3	MQF3
5	MH2	MQF1
5	MH1	MQF5
6	MH3	MQF6
6	MH2	MQF4
6	MH1	MQF2
7	MH3	MQF4
7	MH2	MQF2
7	MH1	MQF6
8	MH3	MQF1
8	MH2	MQF5
8	MH1	MQF3
9	MH3	MQF5
9	MH2	MQF3
9	MH1	MQF1
10	MH3	MQF2
10	MH2	MQF6
10	MH1	MQF4
11	MH3	MQF6
11	MH2	MQF4
11	MH1	MQF2
12	MH3	MQF3
12	MH2	MQF1
12	MH1	MQF5
1	MQF1	MSF1
2	MQF1	MSF1
	MQF1	MSF1
1	MQF2	MSF1
2	MQF2	MSF1
3	MQF2	MSF1

1 MQF3	MSF2
2 MQF3	MSF2
3 MQF3	MSF2
1 MQF4	MSF2
2 MQF4	MSF2
3 MQF4	MSF2
1 MQF5	MSF3
2 MQF5	MSF3
3 MQF5	MSF3
1 MQF6	MSF3
2 MQF6	MSF3
3 MQF6	MSF3
1 MSF1	MF
2 MSF1	MF
1 MSF2	MF
2 MSF2	MF
1 MSF3	MF
2 MSF3	MF

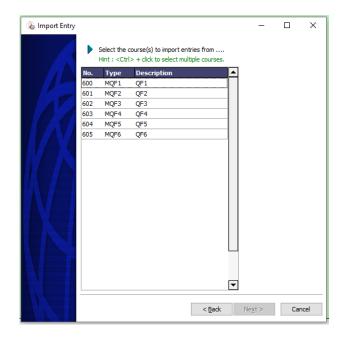
This file tells O-Lynx how to move entries from one event to the next. To keep things organised 2 files would normally be used, one for Men and one for Women, with the "M"'s changed to "W" or "F" in the second file. The course codes used in these files must match what you have setup in O-Lynx Event.

The first column is the placing in the "From" event and the second column is the "Course" Code – also for the "From" event. The third Column is the Course code the competitor should be put in for the "To" event.

e.g. 2 MQF3 MSF2 tells O-Lynx that is the competitor got 2nd in the MQF3 course (Mens Quarter Final 3) then they should be placed in the MSF2 course (Mens Semi Final 2) of the next event.

So this file can be though of as a text representation of the IOF spreadsheet and can be customized to suit your events. E.g. if you had A and B finals, then the file would double in size with "A" and "B" added to all the course codes. This may seem like a lot of setting up but will make the event on the day run so much smoother.

To use this file after one on the events has been run, switch to the next event and go to the Entries tab. In the toolbar "Import" option, choose "From Event" then press "Import Entries". On the first screen select the "From" event then "Next". Now select the courses to import from. This will usually be all of them.

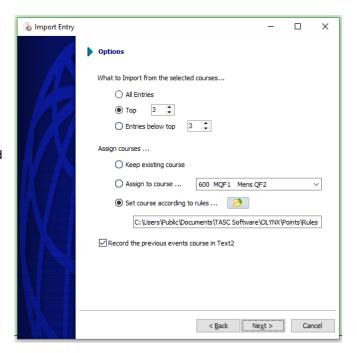


After pressing "Next" again you will be shown a screen similar to that shown on the left.

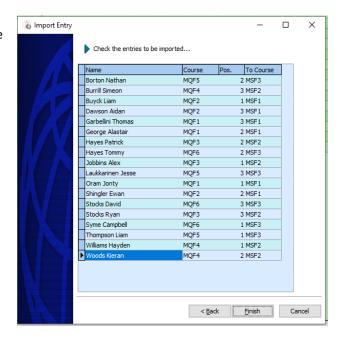
What to Import – here the top 3 places have been chosen but it will change as the rounds progress i.e. 6 then 3 then top 2 into the final.

Assign Courses – the rules file has been selected.

Record previous event details – has been ticked just to provide a check of the import system.



Pressing "Next" will show the list of runners to be brought into the current event and the course they will go to. Press "Finish" to finally import them as Entries.



Then it is just a case of setting their Start times and publishing the start list as soon as possible so the runners can get ready for the next race.

Start times for the Final are set as a mass start.

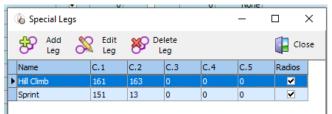
SETTING UP SPECIAL LEGS TO ENHANCE EVENTS

Special legs were introduced for events that have small sub-courses within the main courses. These mainly are used in orienteering sprint weekends like the iconic "Sprint the Bay" where the event will have up to 6 sprint events over 2 or 3 days. Sprint the Bay introduced coloured singlets as used in cycle tours to the sport of orienteering. The coloured singlets were worn by the current leader in ...

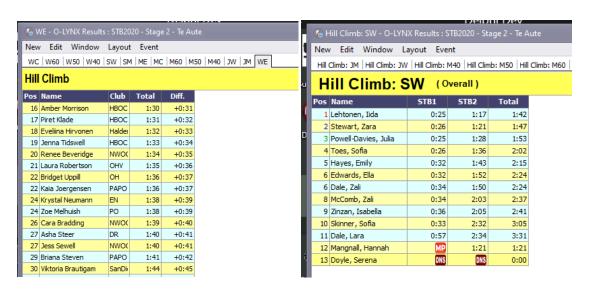
- Overall points in the Elite Class
- Hill Climb Legs
- Sprint Legs
- Overall Points in Junior Class

The overall points can be done from the standard series results as per the "Multiple Results" screen in O-Lynx Results. "Special Legs" and the corresponding "Leg Results" and "Leg-Multiple Events" screens allow the placings for the Hill Climb and Sprint legs to also be easily tracked over the series of events. With instant results, it makes awarding the singlets and any awards simple.

A Special Leg can consist of up to 5 controls though usually only uses two that represent the start and finish of the leg.



Ideally these controls would be monitored with radio controls so the announcer has live access to the results. If using age classes, these sub-courses can create a lot of extra results, so usually they are not displayed on the main result TV's, but instead are left for the announcer and end-of-race web results. O-Lynx Results has the ability to show its windows as tabs (Windows, Tabbed Windows in menu) which gives the announcer a way to view many results in a very compact way and navigate easily to the current runners result.



Overall results can accumulate times, or as in Sprint the Bay, use one of the points formats for better equality between the Events or "Stages". Sprint the Bay used the 15-0 points system where the winner gets 15 points, second place 14 points etc.

No formal "Report" format exists for special legs but these results screens provide the "Export Results" option to save as excel spreadsheets.

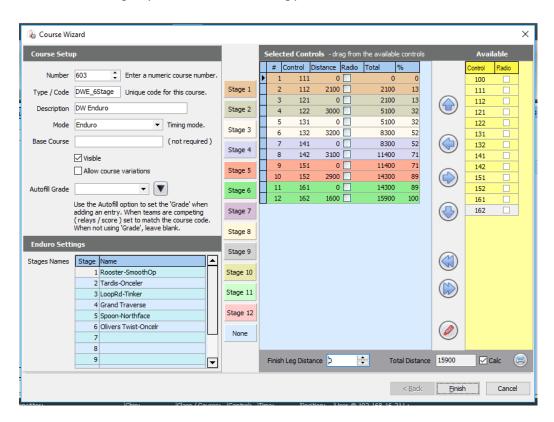
USING O-LYNX FOR A MOUNTAIN BIKE ENDURO

An enduro is an event where the riders have a number of timed stages to complete that are added together to give a total time. The time taken for the rider to make their way from the end of one stage to the start of the next is not included in their race time.

The event and entries are set up the same as for other course modes with the main difference being the allocating of stages within the course.

As shown below, when you select the course mode as "Enduro", a set of buttons will be shown in the centre of the course wizard. To allocate stages move the controls you will be using for your course to the selected controls list. Following this, click on each control and click one of the stage buttons so that the control is highlighted in the same colour as the stage button.

O-Lynx will work out which control needs to allocated for the start and finish. You can also have intermediary controls in each stage if you have additional timing points.



The stages must be allocated in numerical order e.g. 1..6. This means you cannot have a 3 stage event and allocate them as stages 1,3 and 5 or some other combination. They would need to be setup as stages 1,2,3.

In the course wizard, in the lower left corner under the heading "Enduro Settings", is a list of stage numbers. This can be used to assign titles to the individual stages which can show on the rider's splits docket when they finish.

TIMING RESOLUTION

On the left edge of the main screen, use the "Settings" button to open the 'O-Lynx Settings' screen. In the 'General Setting box you will find the options for 'Timing Accuracy' as shown below.

Timing Accuracy 1 second.	0.1 second.	0.01 second.
	O 0.1 000011a.	O 0.01 0000.13.

Set this to the required value as specified by the organisers. This should be done before any chips start to be downloaded. Sub-second accuracy (0.1 or 0.01) will require Sportident Air+ chips.

Also in the settings screen is the option to determine how stage re-runs are dealt with.

- Use first stage time. Use this option if stage re-runs are not allowed.
- Allow repeat runs and use fastest time. Use this option is riders are allowed to repeat runs.

Note that if allowing re-runs, a stage cannot be re-used as another stage. E.g. the "mad mike" track cannot be both stage 3 and stage 4, as O-Lynx will use the fastest run of 'mad mike' as the stage 3 time. If not allowing re-runs, then 'mad mike' can be reused as 2 separate stages.

COURSE AND GRADE SETTINGS

When timing an enduro, organisers will usually be interested in an overall placing and an age group placing. A competitor can be assigned to a course and to a grade so to achieve this

- set a single course up e.g. "6SE', "6 Stage Enduro" to record the overall placing. Note though, if the overall placing is be required to be split by gender, then 2 courses would be set up exactly the same e.g. "M6SE" and "W6SE".
- use the competitors "Grade" for the age group categories, e.g. U19M, U19W, OpenM, OpenW etc.

It is important to realise that course and grade are independent of each other. If more than one type of course is held at the same event, say a 6 stage and 3 stage enduro, then the name of competitors grade needs to be made unique for the course.

e.g. if the "U19M" grade name was assigned to both 6 stage and 3 stage competitors, then the placings would not be correct as the software would group riders of both course types together. To make the placings correct, give the grades a name that also reflects what course they are on. E.g. U19M_6 and U19M_3.

PARTIAL DOWNLOADS

Enduro events may be a single day, or the stages may be spread across 2 or more days. To allow competitors to know they are placing while the event is still under way, O-Lynx supports downloading chips at any time. To allow this, O-Lynx needs to know how to treat a chip download – is it a partial download or did the competitor just not finish?

Firstly, the partial download option must be enabled as it is hidden by default. Open the "Settings" screen and then select the "Download" option on the left. You will see the setting below. Ensure it is ticked to allow partial downloads.

Allow partial chip downloads (to be able to update times mid course)

On the downloads tab, you will now see the current mode shown above the area where the last download shows, as shown below. It will default to "Final Download" for downloading finished competitors.



To change the download stations mode to "Partial Download", click the down arrow and select the "Partial Download" option. When this mode is selected a warning panel will show. Now any chip download will be treated as just a partial download of the course that they have completed so far.



Be sure to set it back to "Final Download" before downloading a finished competitor's chip.

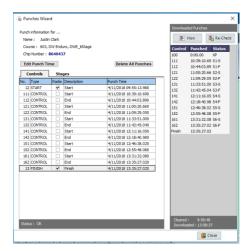
VIEWING AND EDITING STAGE TIMES

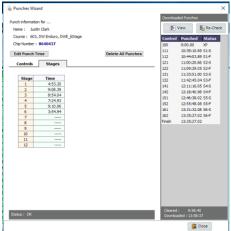
If there is ever the need to manually adjust stage times, then the recorded times can be accessed from the Entries tab, "View Punches" button.



As shown below, when if the course mode is "Enduro" then the Punches Wizard will have a "Controls" with the actual time and a "Stages" tab to view the stage times.

Use the "Edit Punch Time" button to change or add a time. All times recorded on the chip can be shown on the right by pressing the "View" button. This can be handy if you need to see times that were initially ignored. An example of this would be if the competitor did a stage twice and the organisers were allowing the later run to be used in the results. To do this "View" all the punches and adjust the stage start finish times to match the second run.





START / FINISH PUNCHES

If you look carefully at the "Punches Wizard" screen example on the previous page, you may notice that an Event Start and Finish Punch is shown even though no such controls existed at the event. O-Lynx will automatically generate these punches at the download by duplicating the earliest and latest punch times. These punches are required by the software, but do not affect stage or race times. At an enduro there may be no dedicated separate start and finish controls. It can actually be very dangerous to have a control set up in "Finish" mode at a Sportident Air+ event as this control will turn off the chips if competitors pass too close accidently.

If you would like to record total race time or just track that the competitors are out on the course then usually you will just want a control setup as they leave the event centre - although some events with a remote final stage finish may also want to time the ride back.

To use additional start and or finish type controls you can either ...

 Set the controls up as standard Beacon Controls (not Beacon Start, Beacon Finish), and label them as start and finish. When programming them use the control numbers as set up in the O-Lynx settings.
 O-Lynx will recognise the station numbers at download and assign them as Start and Finish.



2. Simply use controls of any number. Because the punches recorded by these controls will be the earliest and latest times, when the chip is downloaded O-Lynx will use these times when it makes a start and finish time. Make sure you don't assign the control numbers to a stage.

TIMING DOCKETS

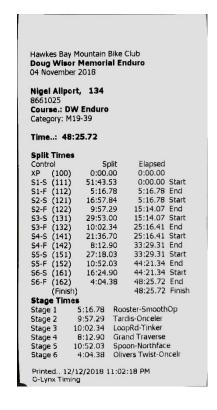
A typical enduro docket is shown on the right. The Header and Footer sections can be customized in O-Lynx, Settings, Templates, Enduro.

The central sections "Split Times" and "Stage Times" are preformatted and will always print.

Split Times shows all individual punches and is handy in case there are any queries as all extra punches will show.

Stage Times show the time taken on each stage along with the stage name as set in the course setup.

The timing resolution shown will depend on the "Timing Accuracy" option set in O-Lynx Settings.



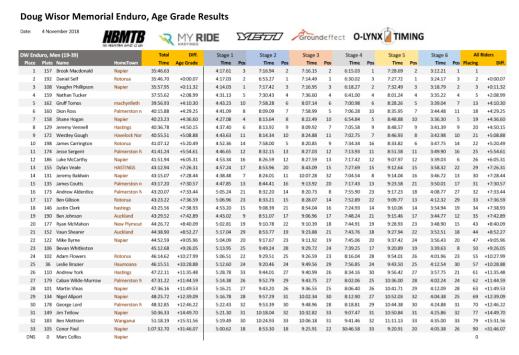
SCREEN RESULTS

For showing up-to-date results on a screen at the event centre use the O-Lynx Results, New, Enduro / Downhill, By Grade screen. This will show results as shown below. Optional columns for the Text1, Overall, Gender can also be shown.



FINAL RESULTS

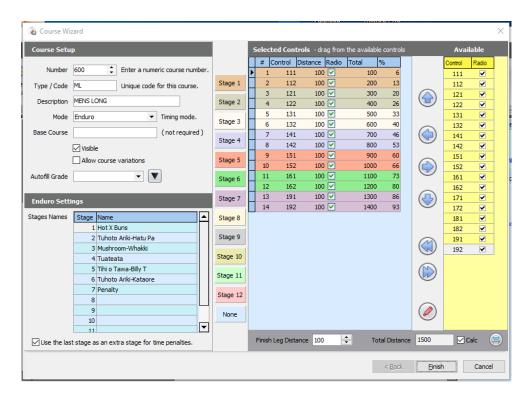
For publication of the final results, use the smart sheet reports available on the "Results" tab of O-Lynx Event. 2 sample reports are included when O-Lynx is installed ... "Enduro Course" and "Enduro Grade". Smart sheets are Excel based reports so these can easily be customized in Microsoft Excel meet the needs of the organisers and sponsors. A version of the "Enduro Grade" report that has been modified with sponsors logos is shown below.



TIMING AN ENDURO THAT REQUIRES PENALTIES

Some organisers require a penalty time to be added to the riders time in some circumstances. For example, if the time a rider takes for the whole course exceeds the limit set by the organiser, then a time penalty may be added for each minute over the limit.

This can be handled in O-Lynx by adding an extra "Penalty" stage to the course. This penalty stage doesn't actually exist out on the course, but is just used as a place where extra time can be inserted in their total time. In the Course Wizard, add an extra stage to the course(s). If multiple courses exist for the event add a penalty stage for each course. Use the same control numbers for the penalty stages. The example below shows a stage 7 added to a six stage enduro using controls 191 and 192. At the bottom right of the wizard there is an option called "Use the last stage as an extra stage for time penalties" should also be ticked. This will ensure the extra stage is not shown on the results dockets and will add times for the stage when the rider's chip is downloaded.



Penalties must be manually added. To see the total time a rider is away, use start and finish controls at the event centre. The total time is stored as "All Time" and can be added to the Entries screen as a custom column. To add a penalty time "View Punches" for the rider. Initially the times for the 191 to 192 stage will be the same -meaning no penalty time is added. Change the time for the stage end (192) to set a penalty. Below shows a one minute penalty added by increasing the punch time of control 192 by one minute.

161	CONTROL	✓		1/03/2020 15:06:21.860
162	CONTROL	~		1/03/2020 15:16:07.260
191	CONTROL	~		1/03/2020 15:20:20.700
192	CONTROL	~		1/03/2020 15:21:20.700
13	FINISH	~	Finish	1/03/2020 15:20:20.700

For showing results using O-Lynx Results, use the standard Enduro results screen, but customize the screen by removing the last stage column.

Modified results reports can be generated with the last stage re-labelled as "Penalty". Sample Enduro results reports using this layout are included in the O-Lynx installation.

USING O-LYNX FOR A MOUNTAIN BIKE DOWNHILL EVENT

Using O-Lynx for a multiple run downhill event is very similar to running an enduro event so please read the previous section on enduros first to ensure you understand topics such as timing resolution, grades and partial downloads.

The following guide will cover the type of downhill where the riders repeat the downhill a number of times and their best time is used to decide the winner. If you are holding an event where the course is only ridden once, e.g. a world cup final, then the event can also be set up as just a standard timed event.

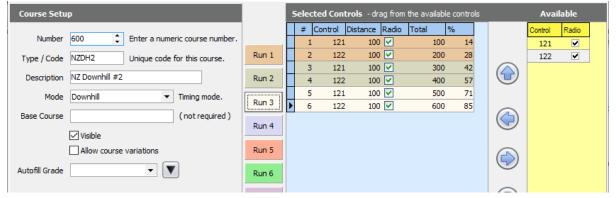
If using Air+, the Sportident stations should be setup as standard "Beacon control"s. DO NOT use "Start" or "Finish" operating modes. If using punching stations, they should also be used in standard regular "Control" mode. This is because the riders will be repeating their runs so there is no single "Start" and "Finish" points.

When you have added the controls being used to O-Lynx, the control list should look similar to



Note that the default Start and Finish controls MUST be left in the control list, even though they don't exist out on the course.

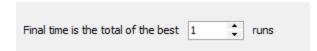
Then the course can be setup. On the "Courses" tab, select "New Course". Enter a unique code and description. Then for the course mode, choose "Downhill". This will show a set of buttons in the centre of the course wizard. To setup the runs move the controls you will be using for your course to the selected controls list. Repeat for the number of runs competitors are allowed. E.g. if the run start control is 121 and the run finish control is 122 and riders can ride the course 3 times, the screen will look similar to below. Hint: after setting up Run 1, the other Run buttons can be right clicked to quickly duplicate the stage 1 controls to the other stages.



Use the colour highlighting to set up the runs. Click on each control and click one of the run buttons so that the control is highlighted in the same colour as the run button.

You can also have intermediate controls in each run if you have additional timing points. Simply place the intermediate control in-between your start/finish controls and set the Run colour accordingly.

The course setup includes the option to base the winning time on more than one run, e.g. best 2 of 4 runs, if your competition requires it. This may also be used to make an enduro type event using one downhill course. Leave the setting on "best of 1" if running a standard downhill event.



TIMING RESOLUTION

On the left edge of the main screen, use the "Settings" button to open the 'O-Lynx Settings' screen. In the 'General Setting box you will find the options for 'Timing Accuracy' as shown below.



ON THE DAY

Air+ chips should be turned on as they are handed out to the riders. Also ideally, a "SIAC test" station should be set up so that as they leave the registration tent they can self check and get an idea of how the chips work by passing their arm over the station.

After each run, riders can download their chip to get their times so far. See the topic "Partial Downloads" in the previous Enduro section for further information. The chips should not be cleared between runs. Once a rider has completed their runs for the day, the chips should be handed in and turned off with a "SIAC OFF" station.

When riders download, they will receive a docket similar to the one below.



For formal results, "Downhill_Course" and "Downhill_Grade" reports are available.

For showing up-to-date results on a screen at the event centre use the O-Lynx Results, New, Enduro / Downhill, By Grade screen. Optional columns for the Text1, Overall, Gender can also be shown.

LINKED COURSES

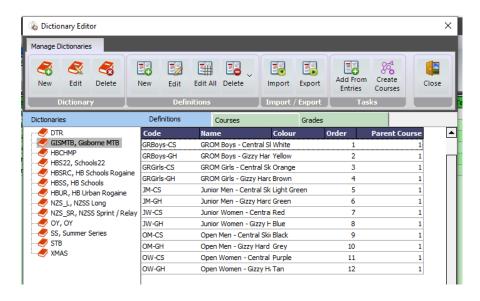
A "Linked Course" can be used to allow multiple courses to be processed from a single timing chip at MTB events. Normally this would not be possible without re-numbering and re-registering the chips between courses as the chip number must be a unique value and so cannot be registered on 2 courses at the same time. The following example will use the case of a downhill event where 2 downhill courses will be timed on the same day. Another case where this has been used is during an enduro, with one of the uphill rides being used as a separate hill climb competition.

Setting up the downhill competition – for the sake of clarity the following example will take you quickly through setting up the whole event.

Step 1: Set up a dictionary to get a grades list. Not a must do, but makes doing entries a lot easier if there is a list to choose from.

In the Dictionary editor, "New" dictionary, then give it a code and a name.

On the "Grades" tab, "Edit All" and set up the age grades used in the event. Note that the grades also need to be unique per course so each downhill run will have its own set of grades. Fill out the "Code" and "Name" columns and then press "Update Definitions" and you should end up with something like the following.



Step 2 : Setup an event.

On the "Events" tab, setup an event

e.g. Event Code = DHS1_23, Description = 2023 Downhill Series, Event 1

For the "Dictionary", choose the one generated in the previous step and "Finish

After the event is setup is also a good time to go into settings (Gears button on left of main screen) and check the timing accuracy is correct (usually 0.01 for MTB Downhill).

Step 3: Setup the controls.

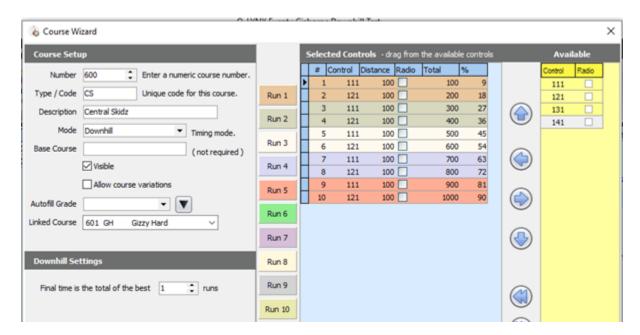
Using the codes of the controls you have, add the controls on the controls tab.



Step 4: Setup the courses

On the Courses Tab, "New Course" and setup a number of runs for each course. Hint: after setting up the first run, right click on the other run buttons to duplicate run 1.

Initially, leave "Linked course" blank until both courses are setup.



Once both courses are setup, edit the first course and set its "Linked Course" to the second course.

This is telling the software that when the person downloads, it will first process their chip against the first course, then will also process the same chip against the second course setup.

The "Linked course" for the second course should be left blank.

Step 5: Setup the entries.

This is where using a linked course becomes different (and more complicated) from a normal event. The rule "No entries can have the same chip number" still applies, so for the additional courses the entries must use different chip number. But those entries also need to be easily identified by the software as being linked to the original chip.

To do this, the entries for the linked courses need chip numbers that follow the format ...

Course + Chip number. E.g. Chip 8633199 for the second course will be 28633199.

The software helps with this as when you do an entry for the first course, it will also generate an entry for the linked course.

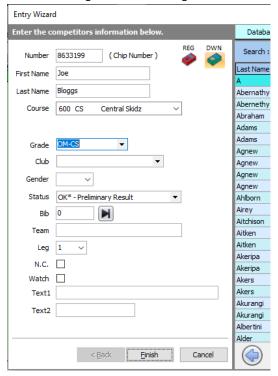
To try this out, Press "new entry" on the Entries tab.

If using just one download station at the event, press the "DWN" icon so the download box can be used to get the chip number. If a separate register station is available, you can simply punch it.

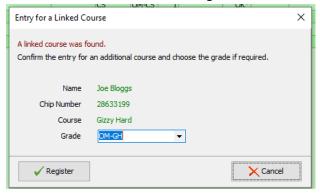
Punch the chip, and the chip number should come up.

Enter Last Name and First Name (or choose from the list on the right if setup in the runner database), then choose the first course, in this example, Central Skidz.

Choose their age "Grade" making sure it is the one for the chosen course. Then press "Finish"



Because the chosen course was linked to another, a box will pop up asking if you want to also register for the second course. You must choose the grade for the second course, then press "Register"

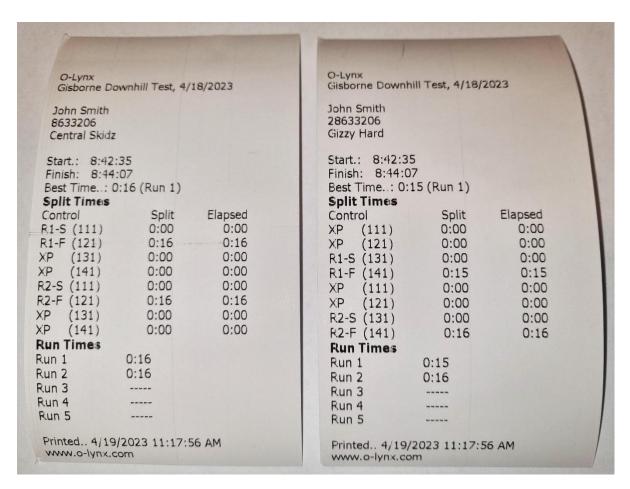


In the entries list, you should now see 2 entries of the same person, one for each downhill run. After several entries, the entry list should look something like ...

	No.	Chip	Last Name	First Name	Club	Course.	Grade	Leg	Actual
	0	8633199	Bloggs	Joe		CS	OM-CS	1	
	0	28633199	Bloggs	Joe		GH	OM-GH	1	
	0	8650538	Dagg	Fred		CS	OM-CS	1	
	0	28650538	Dagg	Fred		GH	OM-GH	1	
١	0	28633206	Smith	John		GH	OM-GH	1	
	0	8633206	Smith	John		CS	OM-CS	1	

Downloading at a Linked Courses Event

When a rider has finished for the day and comes in and downloads (or downloads after a run), even though only punching the download once, both entries will be processed separately with 2 dockets printed (if printing), one for each course. Extra punches (XP) will show on each printout for the controls not on that particular course, but each course will be evaluated correctly.



Additional Notes on Linking.

 More than two courses can be linked e.g. if there were 3 or more different downhill courses on the same day, however the separate entries would have to be done manually for course 3.
 Chip numbers would follow the format specified previously.

First entry – actual chip number e.g. 8633206

Second Course – '20000000' + Chip number e.g. 28633206

Third Course – '30000000' + Chip number e.g. 38633206

In the course setup, Course 1 **Linked Course** would be Course 2, Course 2 **Linked Course** would be Course 3, Course 3 **Linked Course** would be blank.

- Using "Edit All" or O-Lynx Touch or Importing Entries does not currently automatically generate a second course as the Entry Wizard does. If doing pre-entry events using "Edit All" then you would also need to make the additional entries as well.
- If using O-Lynx Touch for entries on-the-day, then usually there is enough time while the riders are out to duplicate the entries needed for the second course.

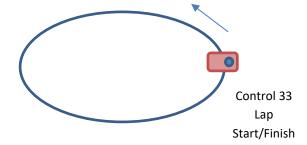
USING O-LYNX FOR A LAP BASED EVENT

A lap type course is one where the runners or riders repeat the course during the race, for example on a MTB XC course, or a track or street based running event. The maximum number of laps handled in O-Lynx is currently set at 12.

The event and entries are set up the same as for other course modes, but the course setup is quite different. When allocating the controls to the course, set the controls up as if for a single lap. The course can have intermediate controls, such as a halfway point or the bottom and top of the hill climb section, but the last control listed must be the control used to indicate the finish of a lap (and so also the start of the next one).

This diagram shows a typical lap course. No finish control is used and the only control present is control 33 which is the lap finish.



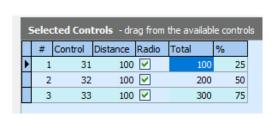


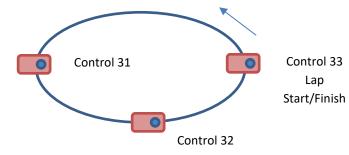
It doesn't matter how many laps are done by the runners, the control is only listed once. To set the expected

maximum laps, there is also a setting displayed in the course setup. This is to let O-Lynx know how many laps to show in the results or when editing punch times.

The start time for a lap course will usually be a preset start time. These can be easily set in the "Edit All" Entries screen, or using the Entries, "Mass Start" screen to set all runners in the course or grade at once.

For a course with intermediate controls the setup is shown below.





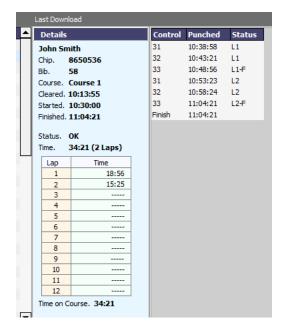
COURSE AND GRADE SETTINGS

Often there will be several grades (classes / categories) competing on the same course. This means a competitor will usually be assigned to a specific course as well as a grade.

- for example, the above courses may be setup as C1 and C2. Then each competitor is also assigned to a grade of "Junior", "Open" or "Elite"

DOWNLOADING

When the competitors download, a docket can be printed to show their split times per lap. This information is also shown on the download screen and includes a column showing the current lap number.





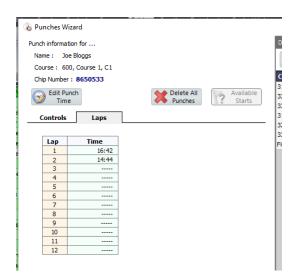
VIEWING AND EDITING LAP TIMES

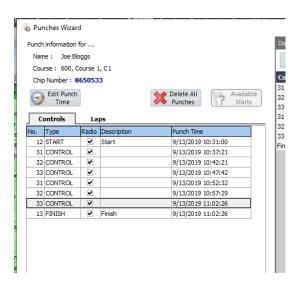
If there is ever the need to manually adjust lap times, then the recorded times can be accessed from the Entries tab, "View Punches" button.



As shown below, when if the course mode is "Lap" then the Punches Wizard will have a "Controls" tab with the actual times and a "Laps" tab to view the stage times.

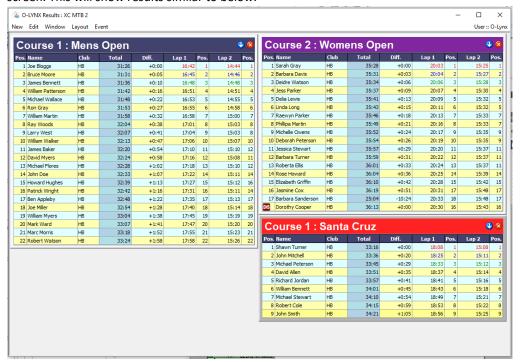
Use the "Edit Punch Time" button to change or add a time.





SCREEN RESULTS

For showing up-to-date results on a screen at the event centre use the O-Lynx Results, New, Lap, By Grade screen. This will show results similar to below.



FINAL RESULTS

For publication of the final results, use the smart sheet reports available on the "Results" tab of O-Lynx Event. Base reports are included when O-Lynx is installed ... "Lap3_Course", "Lap7_Course", "Lap3_Grade", "Lap7_Grade" . Smart sheets are Excel based reports so these can easily be customized in Microsoft Excel meet the needs of the organisers and sponsors.

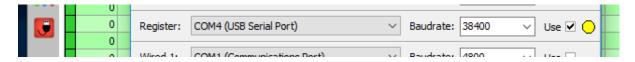


MANAGING HIRE CHIPS

While not necessary to running a successful event, O-Lynx provides a way to store a list of the chips your organisation has available to hire out at events. The list of the chips for hire is used in various places within O-Lynx Event, such as when new competitors are transferred to the Runner database.

The "Hire Chips" window also provides a handy Chip-Checker tool to help count and keep track of whether all the hired chips were returned.

Loading and checking the chips uses a Sportident 'Readout" Station plugged into the 'Register' Port. Open the Port setup window and check you have a station setup similar to that shown below. If you don't use a register station, it could be just the download station where you have un-ticked the 'Use' box and set it up again on the 'Register' line.

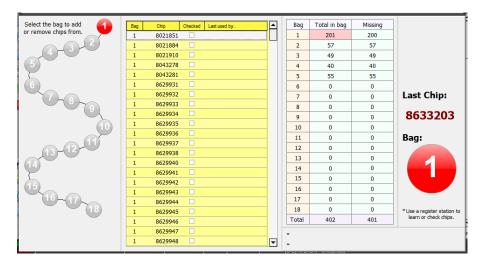


To open the "Hire Chips" window, click the chips button on the left side of the O-Lynx Event main screen. This will open a new window with the first task to load all the hire chips into it.

LEARN CHIPS.

Click on the "Learn Chips" tab to start loading chips in for the first time.

Click a one of the eighteen "Bag" circles on the left side so that it turns red. This is the bag that the chip will be allocated to. Punch the chip in the station and your screen should look similar to the one below, with the chip showing in the middle yellow list and also in large numbers on the right. The totals on the right should also increase as chips are punched.



Keep punching all your chips in bag 1, then press the "2" bag and repeat until all your chips are loaded.

You can also load chips using the "Load From File" button on the toolbar. The two supported file types are

Chip List xml – this is the format used by O-Lynx Touch and enables the chip list to be transferred to or from the computer or tablet you use.

CSV Text – an alternative simple format that is simply a text file formatted as follows and may be useful if you are just sent a list of chips.

ChipNumber,BagNumber

8623673,1

8629939,3

8629963,4

8640393,3

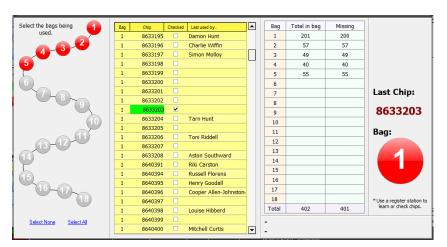
The first line is a header, followed by lines, each with a chip number and bag number separated by a comma. The chips are stored within the O-Lynx database, so there is no need to load and save the chips every time.

CHECK CHIPS.

To check off the chips after or during the event, ensure you are on the "Check Chips" tab.

Click the "Start New Check" button. This sets all chips as unchecked and clears the "Last Used" column, It also resets the "Missing" Totals.

Now start punching all the returned chips. The allocated bag will show up in the large red circle so the chips can be sorted into piles per bag. The returned chips will show up green in the list, making it easy to identify missing chips. Press the "Show Users" button to fill out the "Last used by" column from the current event information as shown below. "Hide Unused" will remove any chips not used in the event so you can check chips without having to check all of a partially used bag.



After your chips have all been punched, press the "Save Report" button to create a permanent record of the Chip Check. This will allow you deal with any enquiries as to when a particular chip went missing and who last used it.

HINT: If the chip has been assigned to an entry, the users name and club will show at the bottom right of the screen. This is a great way to sort pre-assigned chips into school lots before an event. Simply punch the chips and sort into piles based on the club/school.

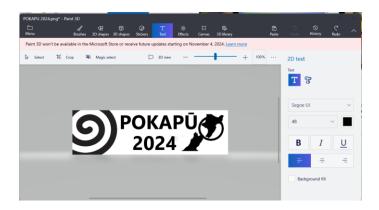
USING GRAPHICS FOR RESULTS DOCKETS.

Requirements: To print on the receipt printers, the graphics format can be bmp, png, or bmp. The size of the graphic should also match the size of the printer as no scaling takes place during printing. This means a maximum width of 512 pixels for 80mm printers or 380 pixels for 58mm wide printers.

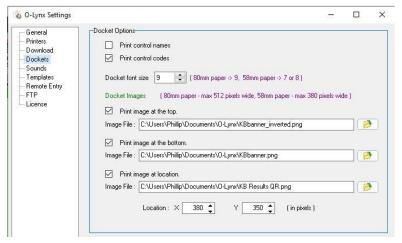
Lots of different tools could be used to produce the graphics file, but here is an example done with the tools available within Windows.... Microsoft Paint or in Windows 10, Microsoft Paint 3D.

This example will use Paint 3D to build a graphic to show at the top of each results docket.

- 1. Open Paint 3D from the Start menu and choose "New".
- 2. Press the "Canvas" button on the toolbar. Choose "Pixels" rather than "Percent" as the measurement and untick "Lock aspect ratio" and "Resize image with canvas", then set the size to 512 x 122 px.
- 3. Select a graphic to add, e.g. from the event bulletin, and copy paste it into Paint 3D. Note that you may have to resize it before "Copy" to get it to the size you want. If it doesn't end up in exactly the place you want it, use the "Select" tool to draw a box around it, then drag it to its correct position.
- 4. Add text is required by choosing the "Text" tool, then the "T" button on the right. Click somewhere on the image and input the text as well as choosing font, font size etc.
- 5. Add any other text or images. Use the "Select" to move items around and you will also probably use "Undo" quite a bit until you are happy with your effort. Its best to use large bold graphics as fine text will not show up well on the docket printers.



To use this graphic, in O-Lynx go to Settings, Dockets, tick "Print image at top" and browse to the saved graphics folder. Images may be set up to appear at the top, bottom or in a specified position as per the shown example.





PRINTING CONTROL CODES ON THE RESULTS DOCKETS

One of the goals of O-Lynx is to help create an 'event centre' where people gather and discuss their efforts of the day, rather than simply arrive, have a run or ride, and leave.

An additional feature introduced to help is the ability to print the symbolic control descriptions next to the times at each control on the results dockets. This provides a reminder of the course features as people peruse and compare their split times.

To enable this option, tick "Print Control Codes" in Settings, Dockets.

If the event was planned with the "Condes" course planning software the control descriptions can be imported.

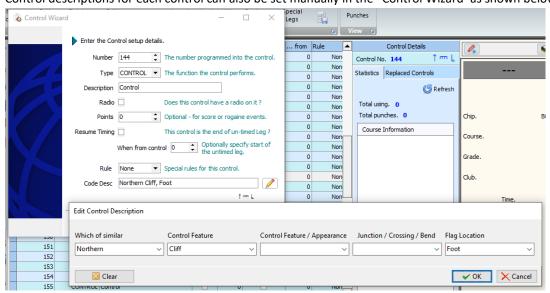
In Condes, choose "Control" in the menu, then "Open Controls Spreadsheet". At the top choose "Copy to the Clipboard". Now in Windows, open the "Notepad" application and "Edit", "Paste" into a blank document. Then "File", "Save" to a file that will be a tabdelimited "txt" file.

In O-Lynx Event, on the "Controls" tab, there is a "Import Codes" button. Choose the file you saved in Notepad, then "Open" and "Code Desc" column should be filled with the text versions of the control descriptions.

Note that if the text in Condes was manually altered then O-Lynx may

not recognise it to be able to generate the symbolic version of the control description. The "Orienteering Font" from Martin Minow / H-J Fabian is used to create the symbols. This font is missing a couple of the current orienteering symbols e.g. Trench, Out of bounds. These symbols will not show on the dockets if used as control sites. The Orienteering font is installed as part of the O-Lynx installation.

Control descriptions for each control can also be set manually in the "Control Wizard' as shown below.



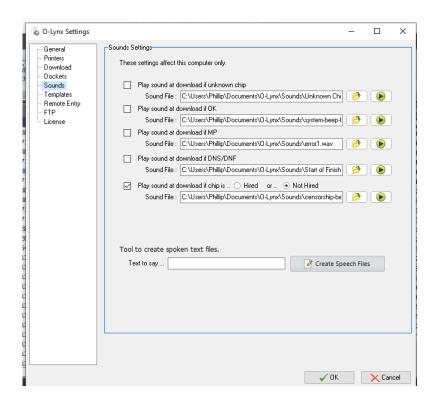


PLAYING SOUNDS WHEN DOWNLOADING THE CHIPS

MP, unregistered chip, chip is hired etc.

If the download operation is largely being left un-manned, it may be useful to use audible beeps or notifications to alert the competitor or a nearby official that something needs attention.

In "Settings", "Sounds", sound files may be assigned to play for some of the different download events, e.g.



These settings are per computer. Sound files may be picked from those are used by Windows although these can be a bit soft sounding for outdoor use. Many sites on the internet also can provide free sound (.wav) files that can be better, or if you want spoken text, a tool is included on the settings page to create a spoken .wav file using the voices included with windows.

For Hired chips, you can choose to play the sound if the chip is hired, e.g. at an event where a few chips are hired and you want to know when to collect them. Otherwise the sound can be played only if its not a hired chip. E.g. at a school event where virtually all of the chips are hired but you just want a notification to know when not to ask for a chip back instead.

ADJUSTING THE RESULTS REPORTS.

O-Lynx Event provides example Results Reports that are available on the Results tab. These can be easily customized as the templates are simply excel spreadsheets. An **Edit Report** button is available on the Entries tab but if you have Excel installed, it is recommended for editing, as you can leave the template open in Excel to adjust while you preview the report in O-Lynx Event.

The following detailed information may seem overwhelming, but most people's needs will be meet by making minor changes to the supplied examples without needing to fully understand the reports.

If you do make changes to an example report, save it with a different name so that it will not get overwritten when you do a software update.

Smart Sheet Templates

Grouping items.

The first column of the spreadsheet ... column A, is reserved for any grouping or filtering required on the report. This column is deleted when the report runs.

To set up a group, the text in the column 'A' cell for the line should start with the word 'Group', followed by something to uniquely identify it. E.g. Group1. A number of groups can exist on the template as long as each has a unique name, e.g. Group1, Group2.

Smart Sheets are not case sensitive. That is GroupM10 and GROUPM10 is the same thing. A common use of a group is to list runners by course, such as on the 'Course_Simple' template.

GROUP1;CourseOrder;Course;DisplayOrder;EntryKey

As shown, semi colons are used to separate the types of information that makes up the group. The group also controls the order of the runners. In the above example, **CourseOrder** is specified first to put the courses in the order setup in the dictionary. Then **Course** comes next to group runners by course, followed by **DisplayOrder** to show runners by placing. Last is **EntryKey**, which is a unique identifier for each runner to make it show one runner per line.

Up to 12 different types of information can be used to make a group.

Groups may also include filtering to limit the data included in a group.

e.g. **Group1;-CourseMode=0,2;CourseOrder;Course;DisplayOrder;EntryKey** in column 'A' will show just the runners only Orienteering (mode = 0) or Timed (mode = 2) courses.

As well as =, group filters may also use the <,>,<= , >=,<> operators.

Filtering can also use multiple values e.g. **TotalPos=1,2** will be interpreted as **(TotalPos=1)** or **(TotalPos=2)** which will show just the first 2 places on each course. For filtering between by a range, separate the values with a hyphen e.g. **TotalPos=1-4** will show the first 4 places.

When using a group filter where you don't want the filter to affect the display order, place a minus sign in front of the filter variable. e.g. Group1;StartTime;Name;-CourseBase<>8,9 is an example of a start sheet filter where base courses 8 and 9 are starting at a separate start, so the start times for those courses have been filtered out. The second start list would replace CourseBase<>8,9 with CourseBase=8,9.

There are some items that may not be used for grouping or filtering such as split times. See the column labeled 'Filter' in Appendix A to see what information can be used for grouping and filtering data.

The background colour of the rows in the group is set by the colour of the top corner rows of the template.

Cell A1 colour = Colour used for odd rows.

Cell A2 colour = Colour used for even rows.

Group Headers and Footers.

A group, such as a list of runners, can be broken up further using headers e.g. to list runners by course, the Course_Simple report has a line ...

Header1;2 #:CourseName above the Group line in column 'A'.

This tells the report to add a header line above group 1. The list of runners is divided up into courses using the ';2'. This tells the report what information to watch for differences. The group line is ...

Group1;CourseOrder;Course;DisplayOrder;EntryKey

As specified in the header, the report watches the first 2 variables that define the group. .. CourseOrder and Course. When either of these changes a new header is inserted.

Headers and Footers can have multiple lines and show variables.

Variables.

The spreadsheet can be populated with all sorts of information. It does this through the use of what are referred to as "variables"

Variables are distinguished from other text on the spreadsheet by prefixing them with the characters #: (the hash symbol followed by a colon)

Variable names cannot contain the following characters.... =+-*/^();,{}

Variables fall into 3 groups.

Entry Information Variables.

This is the information stored against the entry or runner. For example, the course, time, position.

e.g. to have a spreadsheet cell show the course name, a variable would be entered in the cell as...

#:CourseName (note that it is not case sensitive so **#:COURSENAME** would give the same result)

See appendix A for a list of the currently available Entry information variables.

Split variables.

In order to find information related to the split times through each checkpoint, a special Split variable is used.

Report variables.

Some variables are also generated when the report is being made. For example, within a group, a row will have a Quantity value that may be used within cells in that spreadsheet row.

e.g. #:Row.Quantity will return the number of entries on the current row.

An example of this in use would be to have a template set up as ..

Group2;CourseOrder;Course;

#:CourseName

#:Row.Quantity

Which would list the courses and how many runners were entered on each course.

Quantity Report variables exist for the Report, Group, and Row levels of the document.

To display the events total number of runners at the top of the report, use #:Report.Quantity

To display the number of runners per group (e.g. per course) in the groups header or footer use

#:Header.Quantity or #:Footer.Quantity

Filtering Report Variables.

Report variables can be filtered using the parameter format ...

#:REPORTVARIABLE.UNITS[PARAMETER1|PARAMETER2|PARAMETER3|PARAMETER4]

... where the parameters are expressed as filters.

e.g. changing the previous example to list Male and Female totals for a course can be done by the entering the following in 2 cells

#:Row.Quantity[Gender=M] #:Row.Quantity[Gender=F]

As up to 4 parameters are allowed, up to 4 filters can be set per cell.

e.g. #:Row.Quantity[Gender=M|StatusName=MP] will show the quantity of male runners who mispunched. Note in the above example that when variables e.g. Gender are used within a filter the usual #: is not placed in front.

More advanced formatting techniques.

A single cell can contain more than one variable or other text e.g. **#:COURSECODE** : **#:COURSENAME** would be converted to GR : GREEN. **(#:Distance km)** will convert to (18.1 km)

Entry information variables.

Press the Help? button at the bottom of the Report screen to show the variables that can be dragged and dropped onto the templates or see the following list.

Variable Name	Description	Filter
EventID	Event database ID	
EventName		
EventCode		
EventDate		
EventDateShort		
EventDateText		
EventLocation		
EventComments		
DataKey	Database ID of the entry	
EntryKey	Same as DataKey	Υ
Name	Full Name	Υ
AlphaName	Full Name, Surname First	Υ
FirstLetter	First Letter of Surname	Υ
Club	Club	Υ
ClubName	ClubName	
Gender	M,F,X	Υ
Bib	Bib or Race number	Υ
Text1		Υ
Text1List	Text1 split at commas to create a vertical list of names	
Text2		
Text3		
Text4		
Team	Team name	Υ
Leg	The leg this team member is running	
SINum	SI Card / Chip number	Υ
NC	Non-competitive	Υ
Hired	True or False	
Bag	Bag number of the Hired Chip or Blank	
Actual	Actual course number when there are course variations	Υ

ActualCode	Actual course code when there are course variations	Υ
Course	Course number	У
CourseCode	Course Code / Type	Υ
CourseName	Full Course Name	Υ
CourseOrder	Order to display course in – from the Dictionary	Υ
CourseMode	0 = Orienteering, 1 = Score, 2 = Timed, 3= Lap, 4 = Enduro, 5 = Downhill	Υ
CourseBase	Base course name	Υ
CourseStages	Number of stages in an Enduro course	Υ
CourseVisible	Is the course visible or hidden	Υ
Distance	Length of course	Υ
Climb	Climb during course	Υ
Controls	The number of controls on this course	Υ
MaxPoints	The maximum number of points possible on the course	Υ
MaxLaps	The maximum number of laps for the course	Υ
Raw	Points collected in Score event	Υ
Penalty	Late Penalties for Score event	Υ
Score	Sum of Raw - Penalties	Y
Laps	Number of Laps completed for a lap course	
TotalTime	Total Time on course when finished	Υ
TotalPos	Total Position/Placing	Y
Elapsed	Total Time on course	Y
Diff	Difference from course leader	Y
FinishSplit	Split time for finish control	Y
FinishPos	Split Position for finish control	Y
StartTime	Start time	'
StartLoc	Start Location if multiple starts are used	Υ
DisplayOrder	A number that takes into account Status and Position	Y
PosOrStatus	Shows Position/Placing or Status code	Y
StatusName	The short code for the runners Status e.g. OK, DNF, DNS	Y
Finished	True / False	'
Downloaded	True / False	
Grade	Grade of runner	Υ
GradeName	The Grade code or if a Dictionary items exists – The full name	'
GradeOrder	The order in which to show grades as specified in the dictionary	
GradePos	Position / Placing within Grade	Υ
GradeDiff	Time difference from the Fastest Grade time	ı
	Position / Placing or status code	
GradePosOrStatus	A number that takes into account Status and Position	
GradeDisplayOrder		
Series Pos	Position/Placing for the series The cost and a of the persons position for display.	
SeriesOrder	The sort order of the persons position for display The grand total for the sories either in Time or Beints	
SeriesTotal SeriesPostOf	The grand total for the series, either in Time or Points The total for the series if using a subset of the races	
SeriesBestOf	The total for the series if using a subset of the races	
Series Events Team Time	Number of events that the competitor finished successfully	
TeamTime TeamDiff	Total time for the team Time difference for the Team from the first placed Team	
TeamDiff TeamStatus	Time difference for the Team from the first placed Team The whole teams surrent status	
TeamStatus	The whole teams current status	
TeamPosOrStatus	The Teams Position in the grade or Status Code	
TeamDisplayOrder	A number to sort the team results into finish order	
TeamMembers	A list of the team members	
TeamScore	Teams total points for a score/rogaine	<u> </u>
TeamPenalty	Teams total penalties for a score/rogaine	
TeamRaw	Teams total points before penalties for a score/rogaine	
TeamClub	Combined club code	

TeamClubName	Full name of combined clubs	
TeamNC	Non-competitive setting for team	
TeamError1	List of controls not visited by all of team in score event	
TeamError2	List of controls not visited by all of team within 1 minute	

Appendix B: Split information variables.

To put split information in the reports, use the format #:Split.xxx[n] e.g. to get the time at control 1, the cell should contain ... #:Split.Time[1]

Variable Name	Description	Filter
Time	Elapsed time at this control	Υ
Control	Control Number	Υ
Split	Split time from last control	
Pos	Course Position at the control	
Points	Number of points for the control at this split	
PunchTime	Time of day of the punch	

Appendix C: Team information variables.

To put team information in the reports, use the format #:Team.xxx[n]

e.g. to get the Leg time for the leg 1 runner, the cell should contain ... #:Team.LegTime[1]

Note: To use Team variables, the report must be told to make team information available. This is done be placing #:Teams in column 1 somewhere in the report. See the provided Team reports as examples.

Variable Name	Description	Filter
Member	The team members full name	
LegTime	Total time for the Leg	
TeamTime	Total combined time at the end of the Leg	
LegPos	Position/Placing or Status code for the Leg	
TeamPos	Position/Placing of the team at the end of the leg	
Actual	'Actual' course run on this leg	
Score	Team members total points for score/rogaine	
Penalty	Team members total penalties for score/rogaine	
Raw	Points before penalties included	
Gender	M,F,X for team member	
Club	Club code for team member	

Appendix D: Stage information variables.

To put stage information in the reports, use the format #:Stage.xxx[n] e.g. to get the Stage time for the stage 1, the cell should contain ... #:Stage.StageTime[1]

Variable Name	Description	Filter
StageTime	The time taken on the stage	Υ
StagePos	Placing by course	Υ
StageDiff	The difference from the fastest person on the stage by course	Υ
GradePos	Placing by grade	Υ
GradeDiff	The difference from the fastest person on the stage by grade	Υ
StageName	Name of the stage as set in the course setup	Υ
CourseOrder	A value which sorts the runner placing for the stage by course	Υ
GradeOrder	A value which sorts the runner placing for the stage by grade	У

Appendix E: Series information variables.

To put information from a series of events in the reports, use the format #:Series.xxx[n] e.g. to get the Series result for the first event, the cell should contain ... #:Series.SrResult[1]

Variable Name	Description	Filter
	·	

SrResult	The result for the event. Will be either a points or time value **	Υ
SrEvCode	The events identifying code	Υ
SrEvDesc	The events name or description	Υ
SrEvDate	The date of the event	Υ
SrStartTime	Competitors start time for the event	Υ
SrStartLoc	Competitors Start Location for the event if multiple start points	Υ
SrCsCode	Course Code / Type	Υ
SrCsName	Full Course Name	У
SrCsBase	Base course name	Υ

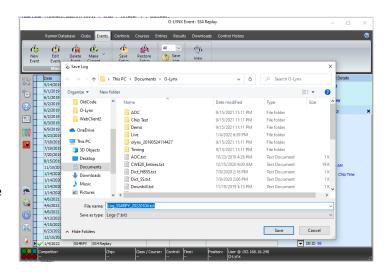
^{**} requires the results to be saved in the O-Lynx Results, Multiple Events windows

REPLAYING AN O-LYNX EVENT

If you want to test the software, for example, see what happens with different options selected in O-Lynx Results, or demonstrate O-Lynx to an event organiser, then an entire existing event can be replayed. The event will replay over the same time period as the original event.

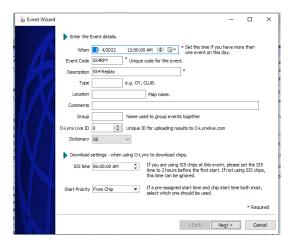
Save the event setup and log files.

If you are replaying an event in which the files were supplied to you then skip this step. Otherwise, if you are replaying one of your existing events firstly go to the Events tab. Check that event you want to replay is current is shown on the O-Lynx Event title bar. If not, then use the "Make Current" button to select it. On the O-Lynx "Events" tab you will also see the "Save Log" and "Save Setup" buttons. Use both these buttons to save the event log of punches and a copy of the event courses and entries to somewhere you can find them.



Make a new event for the replay.

Now create a "New Event" on the Events tab. This event will be used for the replay. The Event Wizard will pop up. At a minimum, Date, Event Code and Description should be set. Give the event a different code and name than the original event e.g. "STB6R", "Sprint the Bay 6 Replay". The other information is all optional. The "Event Code" should be unique. The next page of the wizard sets the start and finish control numbers. These will be imported from the actual event information so just accept the default ones shown. Press "Next" to see the final page asking for confirmation of the setup. Also note this page has a tick box to force this new event to become current event. Press Finish to exit the wizard.



Import the Event Setup.

Still on the "Events" page, choose the "Restore Setup" button. Choose the event file and press "Open". Then you should be able to go to the "Controls", "Courses" or "Entries" tabs and see the event settings the same as they were when the actual event was run.

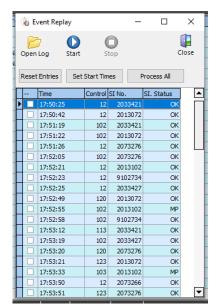
Now start the replay.

Along the left side of the O-Lynx Event Main Screen at the bottom there is a "Replay Event" button. Press this to open Event Replay Window. Click the "Open Log" button, select and "Open" the log file for the event that was saved in step 1.

You should see a list of times, controls and SI numbers appear. Note the first time in the list as this is the first starters time. E.g. 17.50:25 in the screen shot shown. The computers time should now be set to just before this time e.g. 17:45. To do this right click on the windows time shown on your Windows taskbar (usually the bottom right corner of your screen) and choose "Adjust date/time". Turn off the "Set time automatically" option then "Change" the computers time.

Return to O-Lynx and push the "Reset Entries" button and then "Start". The replay will have now started and the Event Replay window can be closed. You can now look at the "Control History" tab and watch the first start punches appear or go to O-Lynx Results to set up the various screens to watch the event.

Once you have finished the replay, remember to return your computers time to the correct time.



USING A SI-CONFIG+ BACKUP TO RECOVER FROM DISASTER OR TRANSFER AN EVENT

The Sportident download station saves all recent downloads internally within its memory. The backup memory can hold up to 21802 punches or 1022 SI-Card data records.

This memory can be read and stored to a file using the Sportident SIConfig+ application.

In SIConfig+, Choose station from the list of devices, then Direct, Backup. When the download has finished choose Export, Full detail list, CSV, Semicolon, None, OK. Will save something like "readcard_136576.csv", usually to the My Documents folder.

In O-Lynx either setup or restore a saved event as per it was before event day or you could use O-Lynx tools and restore a full backup if one was done.

Then on downloads tab, CSV, From SI Config, choose the readcard file. This will obviously a lot easier if station has been cleared with a master station before the event so only has the one events records on it.

The import from excel option is there as it allows the csv file to be loaded into excel and be edited e.g. to remove other event punches etc before loading into O-Lynx.

For events with preassigned start times, Starter sheets would still have to be looked at for changed start times, changed SI cards etc but allows an event to be rebuilt if a computer or software went down.

Moving an event.

This operation can also be used to move just a single completed event. A full backup can move all event data (see next section on the O-Lynx Database), while the Event, Save Setup / Restore setup will only transfer the initial event data without all the punches. Because O-Lynx can also generate the SIConfig+ style file from event data. It can be used to rebuild an event on another computer.

For the event to be transferred, go to the Results Tab, select "SIConfig Log" in the export section and press "Export Results". Also go to the Events Tab and "Save Setup".

On the other computer, on the Events Tab, "Restore Setup". Then on downloads tab, CSV, From SI Config, choose the saves SIConfig log.

THE O-LYNX DATABASE

O-Lynx uses a database system called NexusDB. This uses a central Database Server application called the "TASC NexusDB Server" whose job it is to supply all the information for the events to the various O-Lynx programs such as "Event", "Results", "Touch" etc. The actual information for the all the events is stored in a number of files on the main PC. Only the Database Server accesses these files directly.

The NexusDB Database Server is installed along with everything else when the O-Lynx install is carried out. It is set to run automatically whenever the PC is turned on so that it is always ready when you start any of the O-Lynx programs. It appears as blue/grey barrel icon in the windows notification area, though you may have to press the "Show hidden icons" up arrow "^" to see it.



Usually the only time you will interact with the Database Server is when you want to close it down. This may happen if you ...

- Wish to run a new installation program because an update has come out.
- Need to access the database files directly. The Database server normally will have these files locked so only it can access them, but if the server is closed, it will then allow access to the files. E.g. if you want to copy them for a backup, or to another computer.

To close the server, locate the TASC NexusDB Server icon in the notification area as discussed above (the blue/grey barrel icon), then right click it to show its pop-up menu, and choose "Exit". To restart the server, there should be a "Nexus" shortcut on the windows desktop, or it can be run from the Windows Start menu, under "O-Lynx". It will also re-start if you re-start the computer.

BACKING UP ALL OF THE O-LYNX DATABASE

It is a good idea to do a backup periodically in case something goes wrong with your computer, but you may also want to backup if you are setting up an event and want to be able to go back to a certain point in case the next step e.g. setting start times, does something unexpected. Creating and sending a backup is also a great way to get help with any issues you may be having.

The best way to backup is to use the O-Lynx Backup utility, that can be found in the "O-Lynx Tools" application. This can do a backup during an event without having to stop all the other things going on. It will create a single file with the date and time in its file name, so you can easily find a particular backup if you need to restore it again.

To backup, simply start "O-Lynx Tools", click the "Backup / Restore" button and push "Start". The backup file will be stored in the "O-Lynx User Folder" then in the "Backup" sub-folder. There should be a desktop icon "O-Lynx User Folder" to make accessing the backup files easy so you can copy them to a USB drive if required.

To restore a backup, exit any of the running O-Lynx programs such as "Event" or "Results". Then from "O-Lynx Tools" click the "Backup / Restore" icon again. This time select "Restore" as the operation and press "Start". You will then be asked for the backup file to be restored. Note that if restoring an older backup, and you have recently done a software update, the backup may be out of date. If this is

suspected you should run the "Database Update" utility in O-Lynx Tools to bring the restored database up-to-date to match your software.

MOVING THE DATABASE FILES AROUND DIRECTLY

While backups are best done with the backup utility, the entire database folder can also be copied and moved around if required. This can be handy if you want to run completely separate databases for some reason, e.g. one for regular club events, and another database for a big multi-day event e.g. the world masters.

Remember the Nexus Database Server must be closed to do anything with the files. The files are located on the main drive of the computer in the "O-LYNX" folder e.g. Local Disk (C:)\O-LYNX. Within this folder they are grouped in the "Datadir" folder.

Taking a copy of the files to place on another PC

Close the Server, then take a copy of the C:\O-LYNX\Datadir folder. This will include all the files within the DataDir folder. Then go to the other PC and make sure the Nexus Database Server on it is closed if it has one running. Rename the existing DataDir folder to DataDirOld (in case you want to go back to it) and then copypaste the Datadir from the other computer. I

Setting up a new database for a big event or a new year.

Close the Server. Then rename the existing DataDir folder to DataDirClub or similar. Run the O-Lynx Install program again. Because the install will not see a "DataDir" folder (as it has been renamed), it will reinstall a new empty database into a new "DataDir" folder. If you want to move between databases you will have to swap the folder names around e.g. rename "Datadir" to "DataDirMasters" and "DatadirClub" to just "DataDir"

FIXING DATABASE ISSUES

The Nexus database has proven extremely reliable, but some possible errors and their solutions are ...

"Program unable to start. Check server has started"

This indicates either the server is not running or it can't be found as the network address to it is incorrect. See the section "USING O-LYNX WITH MULTIPLE DEVICES. (NETWORKING O-LYNX)" for help with this error.

"An error occurred in the application. xxxx not found."

When a new version of the software is installed it may requires a changes to the database structure. During the install the "O-Lynx database updater" will run to check and update the database. However is this is somehow skipped, it may need to be run again. Use O-Lynx Tools, Database Update to do this. There is no harm that can be done re-running the database update if you see this message.

"NLS Error"

This is a rare error but could happen after a major windows update, or when running O-Lynx for the first time. It indicates there may have been a change to language or character set used within the operating system. If you see this error, start O-Lynx Tools, then "Database Settings", "Database Tools" tab and press the "Pack Database" button.

"Block Error"

A very rare error that can sometimes occur if the computer is switched off or crashes in the instant O-Lynx is storing something in the database. To fix, the database will need to be checked for errors.

Firstly, exit all O-Lynx applications and shutdown the Nexus database server. Then start O-Lynx Tools, go to "Database Settings", "Database Tools" tab and press the "Recover Tables" button.

Restart the Nexus Server after the recover operation is complete.

FAQ

Downloads

Q. When a chip is inserted into the download station a second time, there is no warning about over-writing the previous information?

A. In order to minimise the times O-Lynx asks an operator to intervene, the software will recognise if the chip information hasn't changed at all. The chip will re-download and print again automatically. The most likely circumstances for this are ...

- Someone re-inserts their chip soon after inserting the first time, such as while waiting for the result sheet to print out.
- They are asked to re-download after the operator has changed something. E.g. a course is changed.
- They want to re-print their docket.

Pivot Controls

Q. Why are some controls set as a 'PIVOT' control?

A. O-Lynx detects if a control is used more than once on a course and sets that controls 'control type' to 'PIVOT', mainly to indicate to O-Lynx that it could expect multiple radio punches from this control. O-Lynx radios try to emulate what happens at the download, therefore if a standard control is punched twice, it will simply ignore the second punch and the split time will remain the split time of the first punch. When a PIVOT control is first punched, it looks for the first place on the course with that code and assigns the punch there. If it gets a second PIVOT punch it looks for the next place on the course with that code and assigns the punch there.

Note that in most cases a control will be automatically set to PIVOT if the control appears more once on any of the courses in the event.

<u>Unlicensed software</u>

After the initial 5 day trial period, O-Lynx will become 'unlicensed' with the following limitations.

O-Lvnx Event

 No radio information messages are processed i.e. radio or serial port input does not work in demo mode.

O-Lynx Results

- 'Course Results' is limited to showing the first 10 competitors results only.
- 'Panelled' screens are limited to 1 panel
- Other results screens disabled

If you wish to trial O-Lynx for longer, simply let me know (pherries@tasc.co.nz) and I will issue a license code to enable the full software for a longer period.

SOFTWARE FEATURES / LIMITS

Event and course planners should be aware of the following software features. These are subject to change and are often simply based on ...

- the maximums needed to be set to something.
- the need to keep the software as responsive as possible.
- the amount of room available on the screens or reports to display the information.

Chip Numbers need to be unique per competitor for the event.

Maximum Controls per course = 50.

Maximum Controls downloaded from chip = 128. When a SIAC chip is low on battery, it will sometimes store multiple punches per control, quickly filling the chip. To try to extract a useable result from the chip, all punches on a chip are downloaded and any duplicates (with the exact same punch time) are removed. Maximum range of controls numbers = 1..399 - but it is highly recommended control numbers be kept to less than 250 to ensure compatibility with all timing equipment and other software.

Maximum Stages per Enduro = 12

Maximum Intermediate Controls per stage = 10

Maximum Laps per Lap Course = 12

Maximum Intermediate Controls per lap = 10

Maximum Intermediate Controls per downhill course = 10

Maximum Team members = 12

Maximum Bags allocated for storing Chips = 18

Maximum number of controls per Special Leg = 5 not including the Leg start control.

Maximum Radios per course = 10. - can be higher but this is the maximum that will be displayed.

Maximum Control Replacements during the event = 4

Maximum number of events that can be grouped together for Series results = 10

Competitors names should ideally be unique – The name is used as the identifying item when dealing with multiple events. E.g. updating chips or other info across a multiday events, or totalling series points or times.