LIVETRACKING FOR
EVENTS & COMPETITIONS
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1.1 MAIN FEATURES OF LIVE EVENTS & TASKS
- Professional look web site in minutes

- Very easy to setup

- Visual representation of the whole task, with turnpoints, making it easy for viewers to follow the task.

- As in usual LiveTracking, the viewers in Google Earth can enjoy really frequent updates of even down to 10 secs.

- 3D glider models
New 3D tracking interface using Google Earth plugin inside the browser, **1 sec updates for smooth animation of the live tracks!!!**

- Live Scoreboard, that is updated every 1-3 minutes. The Server scores all pilot tracks and produces realtime on the fly scoring. In good GSM signal areas the scoring can be very close to the final scoring produced by the downloaded tracklogs.

- The retrieve cars can be represented on the map and Google Earth with their own unique symbols

- Automatic upload of tracks to the server and auto-scoring. This means temporary live results are available as soon as pilots land and submit their track or end of flight signal
• The autoscoring can be done based on Task definition from an FSDB file OR by using an auto-optimization method of best 3 turnpoints. This makes it possible to set unofficial LiveTasks among a group of friends.

• Ability for the system to send an SMS to the retrieve officer when a pilot lands. Although this person can track all pilots from a PC, still in some cases getting the report via SMS is still needed.

• Task board with visual and interactive representation of the task.

The optimal task route is computed and displayed.

Wedge sector support for Gliding.
2 USING THE LIVETRACK24 SERVICES

LiveTrack24 was designed from the ground up with a focus on the special needs and requirements of air-sports. Manolis Andreadakis a paraglider pilot from Greece is the founder and lead developer and constantly improving the service based on the feedback of pilots and event organizers.

**NOTICE:** The system is designed to be operated by event organizers and their stuff and is as simple as it can get. If you however feel the need, a LiveTrack24 expert is available for hire on your event. He will come, setup the tracker units and take care of all the LiveTracking day to day tasks. The daily rate is 120 EUR with a minimum of 3 days (1 day before the event is required to setup the units) plus transport and accommodation.

Here is how an event organizer can set up the system to be used on his event.

2.1 OPENING UP AN ACCOUNT

Use the "Sign Up" link on the home page to create your account.

http://www.livetrack24.com/register

If you already have an account enter your username and password in the login form

http://www.livetrack24.com/login
2.2 HOW TO SETUP A COMPETITION TASK

It is pretty easy, there are 3 steps involved:

2.2.1 ADDING A TASK

You start by adding a task using the "Add Task" link on the top right.

Take care to fill in correctly the values in the form because the error checking is very minimal.

Take care with the date format it should be YYYY-MM-DD, some examples:

2009-03-28  (for march 28, notice the padding zero)
2009-01-07  (for Jan 01, notice the padding zero)

2.2.2 IMPORTING WAYPOINTS & PILOTS & RETRIEVE VEHICLES

Upload the event's Turnpoints file in CompeGPS format, the file should look like this:

```
G  WGS  84
U  1
z  23.692600,41.134972,24.621620,41.434586
W  LO8060  A  41.4166717529ºN 23.8373298645ºE 27-MAR-62 00:00:00 594.456299 LANDING EXOHI
w Blue Flag,0,-1.0,16777215,255,1,7,,0.0,
```
2.2.3  ADDING THE PILOTS FROM AN FS DATABASE

You can upload the FSDB file that you used during registration and holds the pilot names along with their competition pilotID and their other info. In order to do that when entering the pilot info in the FS program you must add an extra field in each pilot that will use Leonardo Live.

This field must be called LiveUsername (note the uppercase) and should contain the exact username that the pilot uses in LeonardoLive.

After you upload the FSDB, a CSV file will be generated on the server for you.

You can download this file, edit/add some more last minute pilots

You could also add pilots not officially in the comp but ones you would also like to include in the task display. Enter 0 or nothing at their PilotID so LeonardoLive will display them differently.

After editing the CSV file locally you can change the extension to csv re-upload it.

2.2.4  ADDING THE PILOTS FROM A CSV FILE

The format of a CSV file should be like that:

id;name;nat;female;birthday;glider;color;sponsor;fai_licence;CIVLID;LiveUsername;phone
23;Andreadakis Manolis;GR;0;;Gradient Gloden 2 26;Orange – Blue;;1402;manolis;306947262244

Note The first line with the field names must be present.

Note2: If you enter a contact phone for each pilot you will have the possibility to SMS pilots directly from the task HQ page

2.2.5  ADDING / EDITING PILOTS ONLINE

You can also add/edit the pilot list with the use of an ipad/tablet/smartphone even on takeoff, from a special admin page.

The LiveUsername field is actually the number on the tracking devices prefixed by the word Comp1.

For example the device #85 has LiveUsername Comp1085
2.2.6 ADDING RETRIEVE VEHICLES OR OTHER TYPE OF TRACKING PERSON/VEHICLES.

Each entry can have it's own unique defined colors/ vehicle type and also a special selection if this tracking object will be included in the scoring or not.

So a typical example for a retrieve vehicle you should enter “Car” and “No Live Scoring” as shown below.
Follow this procedure:

go to http://www.livetrack24.com/admin/tasks/1220/pilots

click on the and enter the new tracker number (CompPWCA0034), press OK and the scroll DOWN and press "APPLY Changes".

IMPORTANT
if a pilot has passed a turnpoint but is not registered in the system because of tracker malfunction you can fix this easily:

go to http://www.livetrack24.com/tasks/1220/score

and click on the "admin" of the pilot you need to adjust
you then have the option to add a TP to this tracker manually!

CAUTION!!!!
you cannot undo this operation so be sure that there are no mistakes!

done? Lets give some publicity by giving out the URL to our sponsors / public

2.3 EASY URLS TO GET THINGS GOING FOR VIEWERS AND SPONSORS

Lets take for example Day 3 (date:2011-05-31) of the British and Dutch Open Championship 2011

The only thing to note for a task is its unique ID, for this task we have an ID of 196. The Main livetracking page is:

http://www.livetrack24.com/tasks/196

Now the fun begins:

http://www.livetrack24.com/tasks/196/tp for the taskboard
http://www.livetrack24.com/tasks/196/score for the scoring /uploading of tracks
http://www.livetrack24.com/tasks/196/ge for the google earth link
http://www.livetrack24.com/tasks/196/ge/replay for the google link for after task replay
http://www.livetrack24.com/tasks/196/3d for the new 3d interface
http://www.livetrack24.com/tasks/196/hq for the HQ page, helping the retrieve officer
http://www.livetrack24.com/tasks/196/monitor for the monitoring page

Nice? there is more!

By putting /embed/ in front of the /tasks/ part in these urls you get a versin that you can use in an iframe

http://www.livetrack24.com/embed/tasks/196
http://www.livetrack24.com/embed/tasks/196/tp
http://www.livetrack24.com/embed/tasks/196/score

Instead if you put /mobile/ you have a version for mobile phones

http://www.livetrack24.com/mobile/tasks/196
http://www.livetrack24.com/mobile/tasks/196/tp
http://www.livetrack24.com/mobile/tasks/196/score

Now for the admin pages:

http://www.livetrack24.com/admin/tasks/196 The basic task information
http://www.livetrack24.com/admin/tasks/196/tp Defining the task
http://www.livetrack24.com/admin/tasks/196/times Defining window times and type of task

You are on takeoff and access the task admin pages via your mobile ? No prob!

http://www.livetrack24.com/mobile/admin/tasks/196/tp
http://www.livetrack24.com/mobile/admin/tasks/196/times

You will be asked to enter the “Task Password” the one you have defined in the basic task Information page. That way you can give the 2 above mobile links to a 3rd party without giving them access to your full account.

Now you are almost done... let's wait for the task briefing.

2.4  FILLING IN TASK DETAILS AFTER THE BRIEFING

After the task is set, someone on the HQ or even right on takeoff must insert the turnpoints into livetrack24. Here is how:

Use the "Turnpoints" link on the "Task Managment" page on the task you want.

The info you usually have to enter in each row is

- First Select the turnpoint form the List , the fields name,lat,lon are auto completed.
- Enter the type of the Turnpoint "TAKEOFF/START/WPT/ES/GOAL"
- Enter the radius in meters ( ie 400 )
Do this for all turnpoints of the task.

You should have a list that is like this:

**TAKEOFF**

START  (Start of Speed section)
WPT
WPT
WPT
ES  (End of Speed section)
GOAL

If the START is also a turnpoint you must enter it again as WPT right after START.

The way the enter/exit Start cylinders is handled is according to the FS convention:

“If after the start cylinder you have the next turnpoint inside it, then the start would always be taken as an Entry Start. Else if you have the next turnpoint after the start, outside of it’s cylinder, then it would be handled as an Exit Start.”

Press submit to store the turnpoints, you should also be informed of the task distance, both GPS distance and also Optimized route of task.

You can come back to this page any time to update the turnpoints (ie if the task changed)

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### 2.4.1 ENTERING THE TASK'S TRUNPOINT FROM A MOBILE DEVICE

You can use a very simple version of the above page to enter the turnpoints even from a mobile phone on takeoff if GPRS is available. Before leaving for takeoff you must check on the “Task's basic Info” page and set a “Task password”.

Then click on the link “What is this?” to see the link that you can access the mobile version of the page.

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### 2.4.2 ENTERING THE TASK'S TURNPOINT VIA AN SMS

You are also able to setup the task by sending a simple SMS with a custom format. Here is a sample SMS:

```
LIVE 99 3333 task 176 1234 7 t1.1 race wo1340 wc+200 so+20 tc1900 d03 b42.ss.r4000 b43 b55 b54 a06.es.r1000 a06.gl.r200
```

- **LIVE** → dont change
- **99** → Your user ID
- **3333** → your Mobile pin, you set this on your user profile page
- **task** → dont change
- **176** → the task ID
- **1234** → the task password, you set this in the main task edit page
- **7** → min distance in Km
t1.1 → arbitrary string for identifying the task, not used
race → type of task, currently is not taken into account
wo1340 → Window Open 13:40 local time
wc+200 → window Close +2:00 hrs after window open
so+20 → Start opens +20 mins after Window open
tc1900 → Task deadline is 19:00
d03 → takeoff is turnpoint D03xxx (only enter the first 3 chars of the name)
radius is 400m
b42.ss.r4000 → Start of speed section is B42xxx with a radius of 4km
b43 → next tp (if no rXXXX is defined, then the default radius of 400m is assumed)
b55 → next tp
b54 → next tp
a06.es.r1000 → End of speed section is TP A06xxx with a radius of 1000m
a06.gl.r200 → Goal is A06xxx with a radius of 200m

Send those SMS to +306931903827 and if everything is ok you will receive back an SMS saying:
Task set OK, task distance 44123m, GPS distance 48242m

2.5 LIVE CHAT

Viewers can now chat with each other with a small interactive chat box. You can also use this chat box to take part in the conversation and post task info and updates

2.6 SEND NEWS AND UPDATES VIA TWITTER SUPPORT

By setting your Twitter username on the “Task’s basic Info”, all your tweets will be displayed on the task main page. Also a popup will display them even in the Google Earth 3d interface
Great for online visitors to get the latest news!!!
You can even send photos from takeoff or the task with a simple smart phone.

If you don't know what Twitter is, visit www.Twitter.com

2.7 ADD AN INFORMATION PAGE FOR THE TASK

You then have to select the "Task General Information" and fill in info and news about your task. you can also upload very easily photos by using the icons marked in red.

2.8 ADD YOUR SPONSOR'S BANNERS AND LOGOS

You can do this by setting the fields Link to Custom Html and Link to Custom Kml.

The Html page you define will be displayed on the main task page on the right side just below the tweets or the general task info. NOTE: The html page must be designed to a width of 200 pixels only to fit nicely to the task page.

The Kml link you define will be included in the Google Earth feed. It can be anything you wish, or multiple items combined into one file. For example all the banners of your sponsors and also your custom live feed of news.
2.9 PILOTS CAN UPLOAD THEIR TRACKLOGS THEMSELVES TO THE SITE

Here is a cool feature that can come handy to some events

The pilots can independently download their tracklogs from their normal flying instrument on their PC’s and then upload the file to livetrack24.com. Each tracklog file that gets uploaded is scored (only distance points) and a zip file is ready for the scorer to download with all uploaded tracklogs ready to use in a format compatible with FS program. He can then do the normal scoring with the provided tracklogs.
3  USING THE LIVETRACK24 SERVICE DURING THE TASK

SETTING UP THE RETRIEVE SYSTEM

You need an android phone dedicated just to this task. This is the phone number that pilots will send their SMS to. Start by installing the SMSsync app from here http://smssync.ushahidi.com/download/

And configure it so that it forwards all incoming SMS to LiveTrack24 server:

1. Open Settings-> General. Select “Enter Unique ID” and fill in your EventCode. You don’t need to enter a name to identify the device nor an alert phone number. Disable SMS delivery report.

   ![Settings General](image)

2. Setup the options like in the photos below. Use 1 min interval for all frequencies
   Settings-> Messages: Enable “Get Reply from Server” Leave the Reply messages disabled
   Settings-> Automation: Click “Enable Auto Sync”, set a frequency of 1 minute
   Settings-> Task: Click “Enable Task Checking”, set a frequency of 1 minute

![Settings Options](image)

4. Click on "Start the SMSsync service" If you are running Android 5.0 or newer this dialog will appear. You have to agree in order to continue. This will make the SMSsync app the default app for SMS but the side-effect is that you will not be able to use the normal android app for sending SMS. Have this in mind while provisioning for the event.
4 CHARGING THE TRACKER

Every tracker gets charged via the mini-USB plug. You will get the half the amount of Plug chargers and USB cables. The charging cycle is about 3 hours.
5 USING THE TRACKER AND STATUS LEDs

Give every pilot his individual tracker short before or after the task briefing. You can educate them how to switch them on and off or do it on your own. Pressing the power button until the lights begin to flash and pressing the power button for six seconds.

Past competition has shown us, that you never can explain the livetracking to every competing pilot ;-) . Means – as less the pilot has to do with the tracker, as better your result.

- If you turn them on before handing out to the pilot – good idea!
- Tell them do not touch anything ;-) 
- NEVER, NEVER make a GPS download after task until you received the tracker from the pilot

PLACEMENT OF TRACKERS DURING FLIGHT

Like every cell phone the tracker can interfere with your flight instrument, but it depends on the flight instruments shielding. For best GPS and GPRS coverage the tracker should not be very deep in the harness but some cm away from the flight instrument.
Google Earth. To follow the LiveTracking in Google Earth you need the free google earth application. Download it here: [http://www.google.com/earth/index.html](http://www.google.com/earth/index.html)
You can include your sponsor’s logos on all tracking pages. If you have more than one logo they can rotate (eg every 10 seconds).
8 SERVICE FEES & TRACKER RENTAL

HARWARE TRACKER RENTAL

Rental fee **(INCLUDES SIM + internet)**

**For more than 30 trackers discounted prices apply**

**EURO 15,00 / tracker and event (1-7 days) (no tax) (has to be paid in advance)**

+ shipping costs

**For Less than 30 trackers**

**EURO 20,00 / tracker and event (1-7 days) (no tax) (has to be paid in advance)**

+ shipping costs

- If the event is scheduled longer than 7 days, 50 % discount for the next 7 days, 14 days …
- In case of bad weather or other unavoidable circumstances the rental fee will be refunded, if not even one task took place.

**Damaging fee:**

In case some units get damaged or lost:

**EURO 120,00 / Tracker** (depending on the organizer rules the participant will probably has to pay in the end).

FOR USING LIVETRACK24.COM SERVICE

Please consult the online version here to be sure to have the latest information

http://www.livetrack24.com/docs/event_pricing
We have provided our services to a wide variety of sports including:

- Bike and MTB Braces
- Hike & fly X-alps style competitions
- Back country skiing
- Cross country skiing
- Running / Marathon / Mountain running
- Sailing races / Regatta
- Triathlon (with waterproof cases for the trackers)
- Car races
10 RESERVATION

Please book well in advance your hardware trackers. Availability is limited at peak season.

You don’t need a reservation in order to use our services online. The service is activated and provisioned in real-time provided you have already contacted us for giving you access to the Events administration backend.

You do need to make a reservation for our physical presence to your event or for renting tracking equipment.

Contact Details

Contact Name: Manolis Andreadakis
Email: info@livetrack24.com
Skype: m.andreadakis