



World Leader in Rating Technology

OFFSHORE RACING CONGRESS



ORC Scorer User Guide 2023

1 Installation

The **ORC Scorer** is a Microsoft Windows application, distributed for free, aimed to cover all aspects of scoring using the ORC rating system. ORC Scorer is continuously under development, with at least one new version published every racing season.

The ORC Scorer may be downloaded from the ORC Sailor Services website (free registration required at www.orc.org/sailorservices). To download the ORC Scorer software go to the “Software” section:



Click “download ORC Scorer” to receive the ORC Scorer installation file (ORCScorer.exe). If prompted, select a folder on your computer where the installation file will be saved.

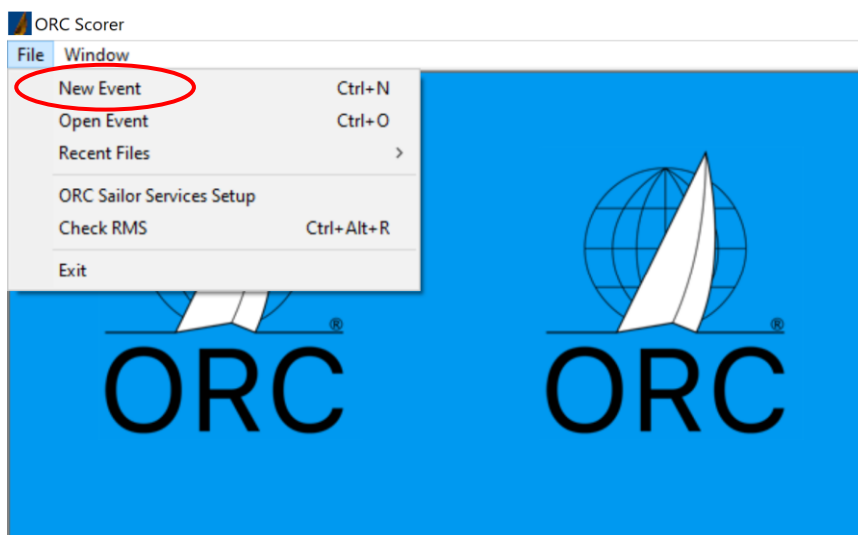
When the download is complete, open the download folder and double-click on "ORCScorer.exe" to initiate the installation process.

Tip: Hit CTRL + J on your keyboard to view your recent downloads in Internet Explorer, Firefox and Chrome.

Follow the instructions on screen to complete the installation, and now launch the application.

2 Setting up an Event

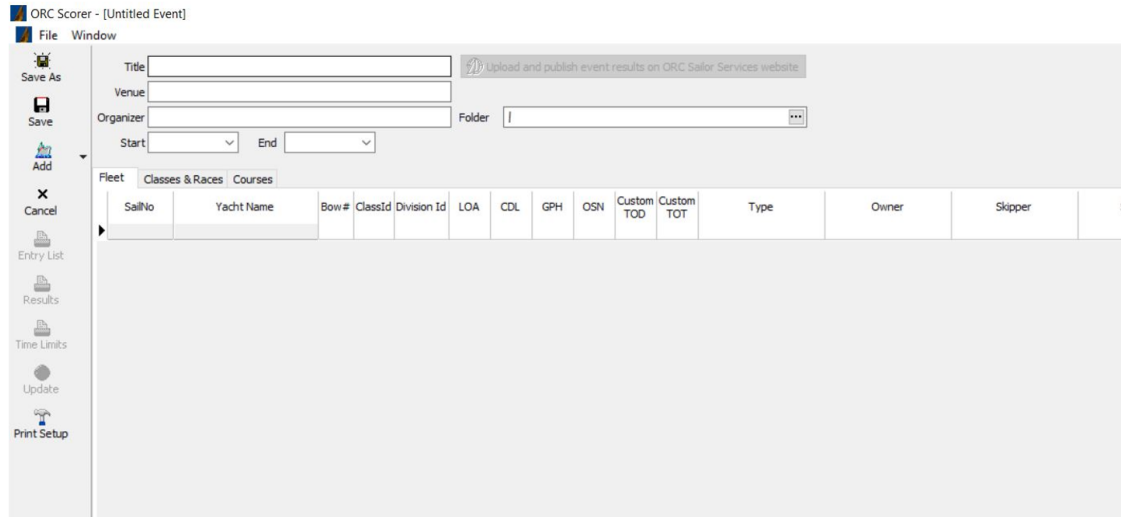
To set up a new event click on New Event under the File menu:



Then enter the details about the event such as:

- Title
- Venue
- Organizer
- Starting and Ending Date

These details will be shown on every report produced by the application (entry list, results etc). These reports may be further customized, as explained later.



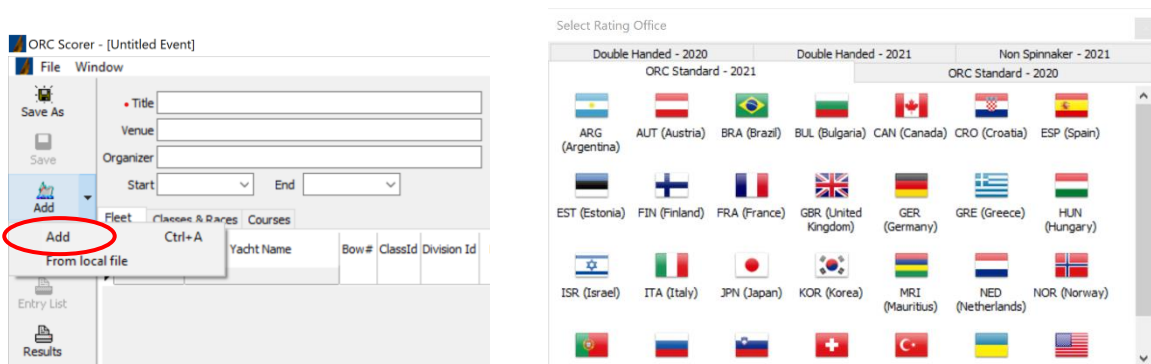
Click the “Save As” button, to store the newly created event on your computer. All the event-related data (boats, races, etc) are stored in the single file you will select in the dialog window that appears. The folder selected for saving the event file is also used for all program outputs (such as reports and temporary files). You may configure a different folder for program outputs using “Folder” field. The event file has the “.orcsc” extension.

Tip: Make sure to save your changes frequently clicking the “Save” button.

3. Adding boats to event

Participating boats may be easily imported to the ORC Scorer from the following choices:

- a) the ORC Database containing the last valid certificate data for every boat with a valid ORC Rating Certificate. For this option an internet connection is needed. ORC Certificates are available in form of: Regular (fully crewed), Double Handed or Non-Spinnaker. Certificates are valid for one year where change of the year is usually done on 1 January while some countries on the Southern hemisphere may opt to change certificates on different date like 1st July. Therefore, boats need to be selected from the relevant certificate year, certificate type and Rating office of the country that issued certificate as follows:



- b) A file on your computer (local file) that has been downloaded from the ORC website. The ORC provides rating files (files that include boat rating data) of the currently valid-for-racing certificates organized by country, to be used by the ORC Scorer as well as other scoring applications, and are directly available from the ORC website in three formats, but ORC Scorer is using “JSON” format

The screenshot shows the ORC Scorer software interface. The 'Add' menu is open, and 'From local file' is highlighted with a red circle. The website screenshot shows the 'RMS files' page with a table of download options for various countries. The table is as follows:

Country	Download options	International	Club	Total	Last Update
Netherlands	2021 RMS JSON CSV	43	606	649	15/04/2021 09:44
Spain	2021 RMS JSON CSV	245	265	510	13/04/2021 18:17
Australia	2020 RMS JSON CSV	123	184	307	15/04/2021 12:25
Italy	2021 RMS JSON CSV	137	157	294	09/04/2021 14:09

In both cases software that is using RMS files contain all rating data for different scoring options as well as LOA and certificate Issue Date and Reference number that may be used to check that the proper data of the last valid certificate is used.

ORC Certificates are issued by national rating offices and individual boat data should be searched by the country that issued the certificate. Normally, national rating offices are issuing certificates for boats within that country, but they may also do this for boats from different countries if they usually race in their waters. Therefore, it is always good to double check where the certificate is issued.

When the appropriate nation and certificate type file is selected by one of the two methods described above a list of boats to be selected will be shown:

The screenshot shows the 'Select boats from RMS file' dialog box. The 'Unselected Boats' list is visible, showing the following data:

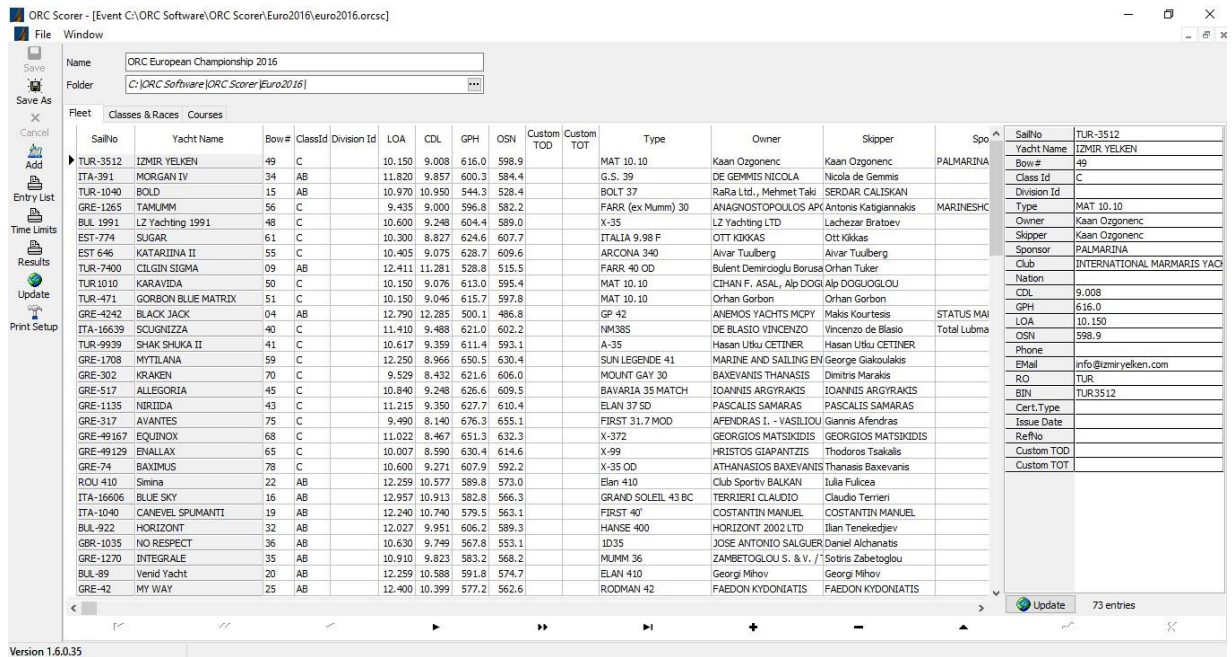
SailNo	Yacht Name	GPH	CDL	Class	Cert.Type	IssueDate	RO	RefNo	BIN
AUT-24	FAIR LADY BLUE	620.6	10.070	COMFORTINA 42	CLUB	21/02/2017 20:48:16	ITA	CLU00020207	AUT24
AUT-2895	LUNZ AM MEER	532.5	14.209	SWAN 651	INTL	09/10/2017 23:30:24	ITA	ITA00023004	AUT2895
AUT-49	VAQUITA	514.6	11.687	AKLARIA RC1 CL 40	CLUB	19/04/2017 20:15:00	ITA	CLU00022037	AUT49
CAY-65	CARO	428.3	18.482	BOTIN 65	INTL	22/09/2017 15:40:50	ITA	ITA00022928	CAY65
CZE-898	HEBE V	613.6	9.303	M37	INTL	22/09/2017 15:40:36	ITA	ITA00022927	CZE898
DEN-555	FLED 2	762.2	5.822	KEELBOAT	CLUB	31/03/2017 18:44:50	ITA	CLU00021746	DEN555
ESP-4158	STRUPPEASE	588.3	9.386	TRIP 40	CLUB	04/04/2017 22:40:32	ITA	CLU00021843	ESP4158
ESP-6610	CHEYENNE	584.5	10.357	RODMAN 42	INTL	26/07/2017 20:22:54	ITA	ITA00022827	66610
EST-774	SUGAR	623.2	8.761	ITALIA 9.98 F	INTL	26/06/2017 21:46:52	ITA	ITA00022749	EST774
EUR-36002	COSTELLATION	564.7	10.354	SOLARIS 36 OD	CLUB	14/03/2017 20:24:10	ITA	CLU00021465	EUR36002
EUR-36008	COLUMBIA	561.6	10.174	SOLARIS 36 O.D.	INTL	19/05/2017 17:11:02	ITA	ITA00022446	EUR36008
EUR-36009	FURIETTA	564.4	10.145	SOLARIS 36 OD	INTL	20/06/2017 11:33:38	ITA	ITA00022708	EUR36009
EUR-36017	EMY TOO	561.1	10.242	SOLARIS 36 O.D.	CLUB	07/02/2017 23:07:04	ITA	CLU00021081	EUR36017
F-3446	JALINA	668.7	8.099	SLOOP 1947	INTL	22/05/2017 22:38:24	ITA	ITA00022466	FRA3446

The list of unselected boats may be sorted by clicking on any of header items: Sail No, Yacht Name, GPH, CDL, Cert. Type or Issue Date. Typing the first letters in a search criteria in “Search unselected” will reduce the list to the entries containing only these letters. For example, when a list is sorted by the

Yacht Name and the boat to be located is named “Columbia” simply type “Col” in “Search unselected” and this will reduce the list only to the boats whose name starts with “Col”.

Once the boat is identified it can be selected for the race by a double-click, then it will appear under “Selected Boats.” If any boat is wrongly selected it may be removed from the list in the same way by double clicking in the “Selected boat” list.

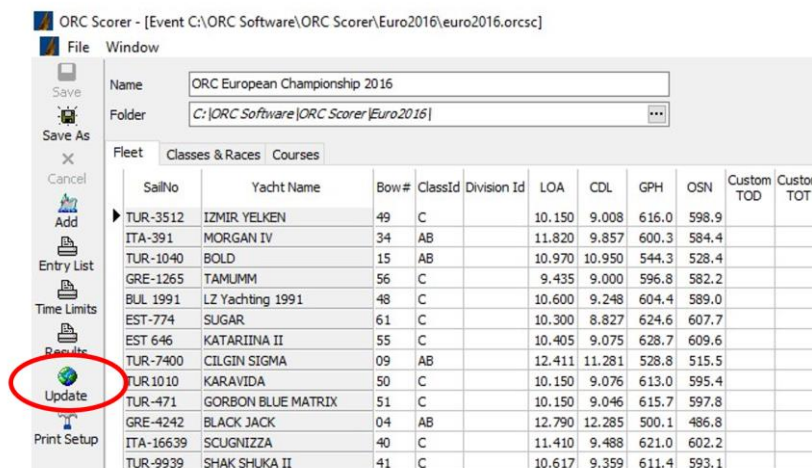
This procedure may be repeated with files from different countries or different certificate types or when it is needed to add boats after the original setup. When the process of selecting boats is completed, all boats entered for the event will be shown in the “Fleet” tab of the main screen.



Each individual boat data may then be edited by adding other identifying data such as Club, Sponsor, Skipper name or Custom ToD (Time or Distance) or Custom ToT (Time on Time) for when a scoring coefficient that does not exist in the ORC Certificate may be used to score a specific race.

By clicking on “+” below the table a new boat may be added (without ORC certificate data) or by clicking on “-“ a boat may be deleted from the list.

By clicking on “Update” on the left menu all ORC certificate data will be checked from the ORC Database to confirm if it is the latest valid one or for when it is known that any certificate is updated after the data has been imported.



This may also be done for individual boats by clicking on the “Update” button on the lower right side below the details of the particular boat that needs an update of its certificate data:

Type	Owner	Skipper	Spo
MAT 10. 10	Kaan Ozgonenc	Kaan Ozgonenc	PALMARINA
G.S. 39	DE GEMMIS NICOLA	Nicola de Gemmis	
BOLT 37	RaRa Ltd., Mehmet Taki	SERDAR CALISKAN	
FARR (ex Mumm) 30	ANAGNOSTOPOULOS AP	Antonis Katigiannakis	MARINESHC
X-35	LZ Yachting LTD	Lachezar Bratov	
ITALIA 9.98 F	OTT KIKKAS	Ott Kikkas	
ARCONA 340	Aivar Tuulberg	Aivar Tuulberg	
FARR 40 OD	Bulent Demircioglu Borusa	Orhan Toker	
MAT 10. 10	CIHAN F. ASAL, Alp DOG	Alp DOGUOGLU	
MAT 10. 10	Orhan Gorb	Orhan Gorb	
GP 42	ANEMOS YACHTS MCPY	Makis Kourttesis	STATUS MAI
NM38S	DE BLASIO VINCENZO	Vincenzo de Blasio	Total Lubma
A-35	Hasan Utku CETINER	Hasan Utku CETINER	
SUN LEGENDE 41	MARINE AND SAILING EN	George Giakoulakis	
MOUNT GAY 30	BAXEVANIS THANASIS	Dimitris Marakis	
BAVARIA 35 MATCH	IOANNIS ARGYRAKIS	IOANNIS ARGYRAKIS	
ELAN 37 SD	PASCALIS SAMARAS	PASCALIS SAMARAS	
FIRST 31.7 MOD	AFENDRAS I. - VASILIOU	Giannis Afendras	
X-372	GEORGIOS MATSIKIDIS	GEORGIOS MATSIKIDIS	
X-99	HRISTOS GIAPANTZIS	Thodoros Tsakalis	
X-35 OD	ATHANASIOS BAXEVANIS	Thanasis Baxevanis	
Elan 410	Club Sportiv BALKAN	Iulia Fulicea	
GRAND SOLEIL 43 BC	TERRIERI CLAUDIO	Claudio Terrieri	
FIRST 40'	COSTANTIN MANUEL	COSTANTIN MANUEL	
HANSE 400	HORIZONT 2002 LTD	Ilian Tenekedjiev	
1D35	JOSE ANTONIO SALGUER	Daniel Alchanatis	
MUMM 36	ZAMBETOGLU S. & V. /	Sotiris Zabetoglou	
ELAN 410	Georgi Mihov	Georgi Mihov	
RODMAN 42	FAEDON KYDONIATIS	FAEDON KYDONIATIS	

SailNo	TUR-3512
Yacht Name	IZMIR YELKEN
Bow#	49
Class Id	C
Division Id	
Type	MAT 10. 10
Owner	Kaan Ozgonenc
Skipper	Kaan Ozgonenc
Sponsor	PALMARINA
Club	INTERNATIONAL MARMARIS YAC
Nation	
CDL	9.008
GPH	616.0
LOA	10.150
OSN	598.9
Phone	
EMail	info@izmiryelken.com
RO	TUR
BIN	TUR3512
Cert.Type	
Issue Date	
RefNo	
Custom TOD	
Custom TOT	

4. Creating Classes and Divisions

Naming of Classes and Divisions may be interpreted differently by different events and it is therefore important to understand how Classes and Divisions are defined in ORC Scorer software.

A **Class** is a group of boats that compete against each other with the same starting time on the same course with separate results from the rest of the fleet.

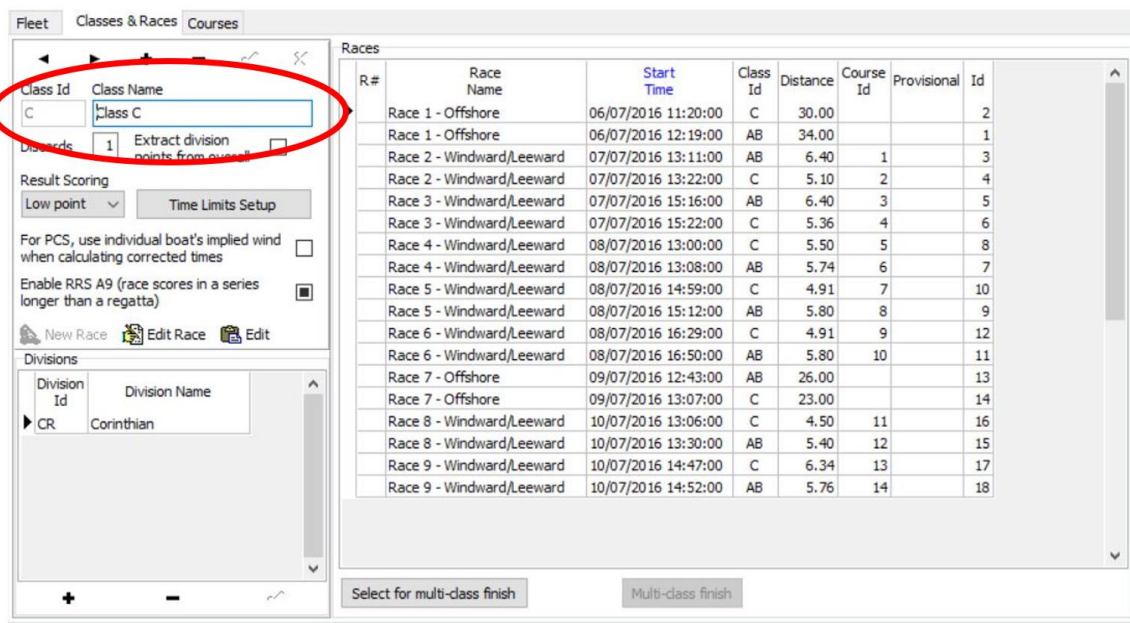
A **Division** is a sub-section of the Class where boats can be scored with the same points they are getting in the Class or separately as a Division only.

For example, ORC World and European Championships have three Classes that have separate starts. Each class then has a Division for Corinthian entries that meet that criteria.



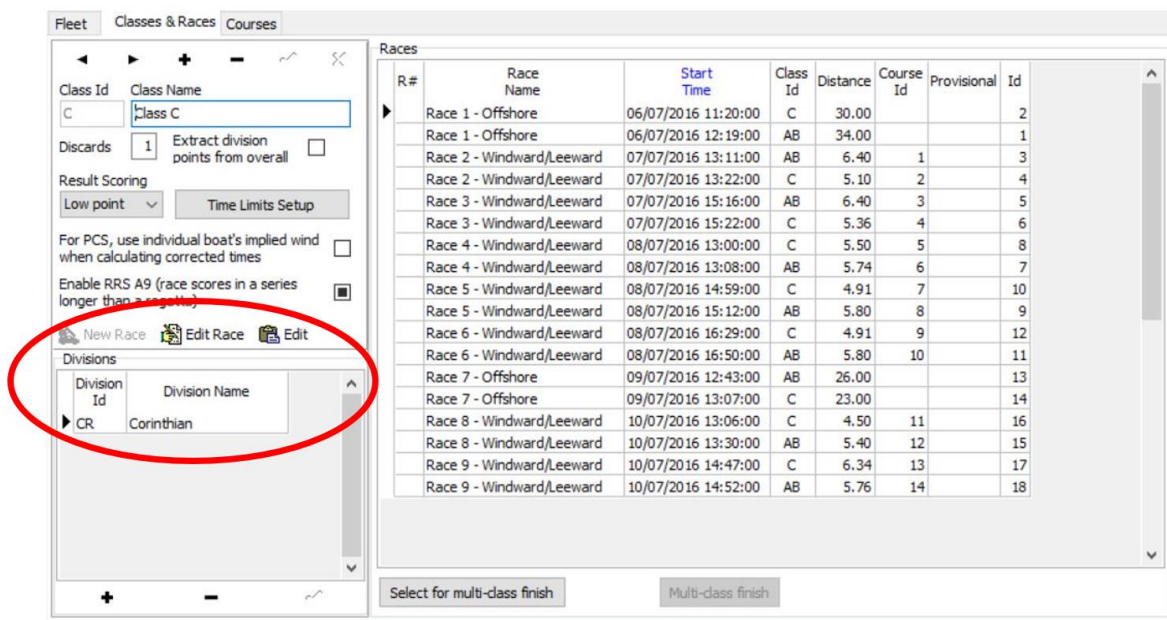
Another example is an offshore event where all ORC boats have an overall results but at the same time within that fleet there are classes or groups that also have results within that groups. In such a case, complete fleet shall be defined as a Class and groups shall be defined as Divisions.

The Class should be designated with a Class ID and Class Name. For the Class ID it is recommended to use simple identifications, such as A, B, C or 1, 2, 3, while Class Name may contain a broader description of the class such as Class A, Class B or Class C:



Clicking on “✓” will save changes to the current class, while a new class may be added by clicking on “+” with the arrow signs “◀” and “▶” used to browse between the classes. A class may be deleted by clicking on “-” or changes to the current class may be deleted by click on “X”.

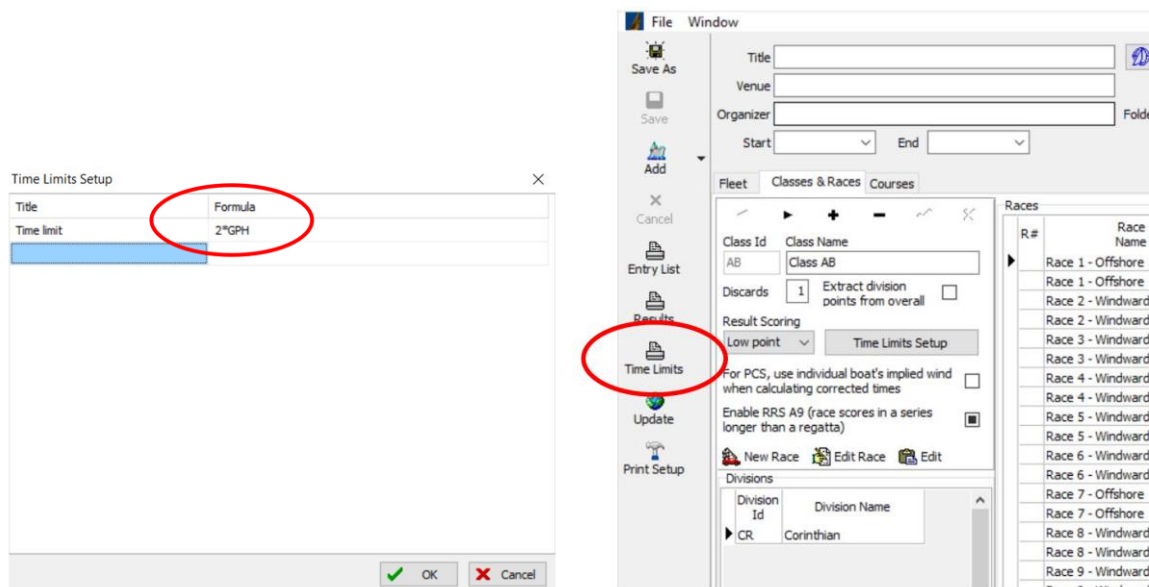
Within each Class, a Division may be created by adding Division ID and Division Name in the same manner as was as it is done for the Classes. It is possible to enter more Divisions for one class that will be listed as entered:



For each class the following may then be defined:

- **Discards:** The number of race scores that will be excluded when calculating series results. It should be updated when reaching the number of completed races needed for discard. (For example, if one discard is allowed after 5 or more races are completed, this number shall be 0 up to the 5 entered races and 1 thereafter).

- **Extract division points from overall:** When this check box is ticked, division points will be the same as the boat's score in the class, while if not ticked division points will be calculated only within each division.
- **Results scoring:** The scoring method may be selected as Low Point (as defined in RRS Appendix A) or High Point where the first boat is receiving the highest number of points.
- **Time Limit Setup:** This option may be used to define a Time Limit for each boat depending on her rating. It may be entered as a formula such as:



Once the formula is defined click on Time Limits on the menu on the left to get the table of Time Limits for all boats:



Time Limits

#	Yacht Name	Sail No	Type	Owner	Club	Class	Division	LOA	CDL	GPH	OSN	Time Limit
1	CILGIN SIGMA	TUR-7400	FARR 40 OD	Bulent Demircioglu Borusan Sailing	Istanbul Sailing Club	AB		12.411	11.281	528.8	515.5	00:17:38
2	Three Sisters	CZE 117	FIRST 40.7	First sailing SRO	CZECH REPUBLIC	AB		11.924	9.921	606.4	588.1	00:20:13
3	PARALOS	GRE-1482	GRAND SOLEIL 40	KARAMITSOPOULOS SOKRATIS	NCTH	AB		11.990	10.116	600.5	584.3	00:20:01
4	DUVETICA GREY GOOSE	ITA-41503	ARYA 415 MOD.	VAGLIANO GIAMPIERO	YC HANNIBAL	AB		12.697	11.271	542.3	528.1	00:18:05
5	AFRITA	ISR 1	XP-44	Easy Swissa	Israel Yacht Club IYC	AB		13.300	11.723	546.6	531.0	00:18:13
6	MORPHEUS	TUR-8843	Sydney 43 GTS	MORPHEUS YACHTING LTD	TAYK	AB		13.094	12.254	530.5	514.5	00:17:41
7	ALSOUMA-Allanz	GRE-8	IMX-40	THEODOROS GEORGIADIS	HORC	AB		12.100	10.245	583.7	568.6	00:19:27
8	Simna	ROU 410	Elan 410	Club Sportiv BALKAN	Club Sportiv Balkan	AB		12.259	10.577	589.8	573.0	00:19:40
9	Venid Yacht	BUL-89	ELAN 410	Georgi Mihov	OMK Nesebar 2000	AB		12.259	10.588	591.8	574.7	00:19:44
10	INTEGRALE	GRE-1270	MUMM 36	ZAMBETOGLOU S. & V. / TERLEMES X.	NAOKTH	AB		10.910	9.823	583.2	568.2	00:19:26
11	NO RESPECT	GBR-1035	1D35	JOSE ANTONIO SALGUERO SUDREA	NO VOULIAGMENIS	AB		10.630	9.749	567.8	553.1	00:18:56
12	HORIZONT	BUL-922	HANSE 400	HORIZONT 2002 LTD	YC PORT BOURGAS	AB		12.027	9.951	606.2	589.3	00:20:12
13	CANEVEL SPUMANTI	ITA-1040	FIRST 40'	COSTANTIN MANUEL	ADRIACO	AB		12.240	10.740	579.5	563.1	00:19:19
14	BLUE SKY	ITA-16606	GRAND SOLEIL 43 BC	TERRIERI CLAUDIO	C.V.RAVENNATE	AB		12.957	10.913	582.8	566.3	00:19:26
15	MY WAY	GRE-42	RODMAN 42	FAEDON KYDONIATIS	HORC	AB		12.400	10.399	577.2	562.6	00:19:14
16	MELITI IV-MUSTO	GRE-44	GRAND SOLEIL 42 R	VIGLA SA	NOE	AB		12.660	10.592	554.4	539.7	00:18:29
17	EXTREME WAYS	USA 38800	XP-38	ANDREW HOLDSWORTH	St. Francis Yacht Club	AB		11.580	10.248	586.6	571.0	00:19:33
18	MELX II-P.L. FERRARI	ITA-6326	SINERGIA 40 MOD	STAVROS PAPAGIANNPOULOS	NOE	AB		12.090	10.364	581.6	566.6	00:19:23
19	BULLETT-Encode	GRE-76R	TP 52	Nikolaos Sinouris	YCG	AB		15.850	14.874	458.7	446.5	00:15:17
20	OPTIMUM 3-THENAMARIS - OPTIMISE	GRE-53	FARR 52	NIKOLAOS LAZOS - PERIKLIS LIVAS	NOK	AB		15.839	14.288	473.9	461.8	00:15:48
21	BLACK JACK-STATUS MARITIME CORP	GRE-4242	GP 42	ANEMOS YACHTS MCPY	IOP	AB		12.790	12.285	500.1	486.8	00:16:40
22	MORGAN IV	ITA-391	G.S. 39	DE GEMMIS NICOLA	C.C.BARION	AB		11.820	9.857	600.3	584.4	00:20:01

Please note that this list is purely for information purposes for the competitors and the Race Committee and it is not intended to replace the actual scoring.

- **For Performance Curve Scoring (PCS), use the individual boat's implied wind when calculating corrected times:** This option is specific for the PCS method as defined in ORC Rule 402.10. The default setting is the calculation of implied wind as defined in ORC Rule 402.9.

- **Enable RRS A5.3:** This option will activate application of RRS Rule A5.3: “If the notice of race or sailing instructions state that rule A5.3 will apply, rule A5.2 is changed so that a boat that came to the starting area but did not start, did not sail the course, did not finish, retired or was disqualified shall be scored points for the finishing place one more than the number of boats that came to the starting area, and a boat that did not come to the starting area shall be scored points for the finishing place one more than the number of boats entered in the series.

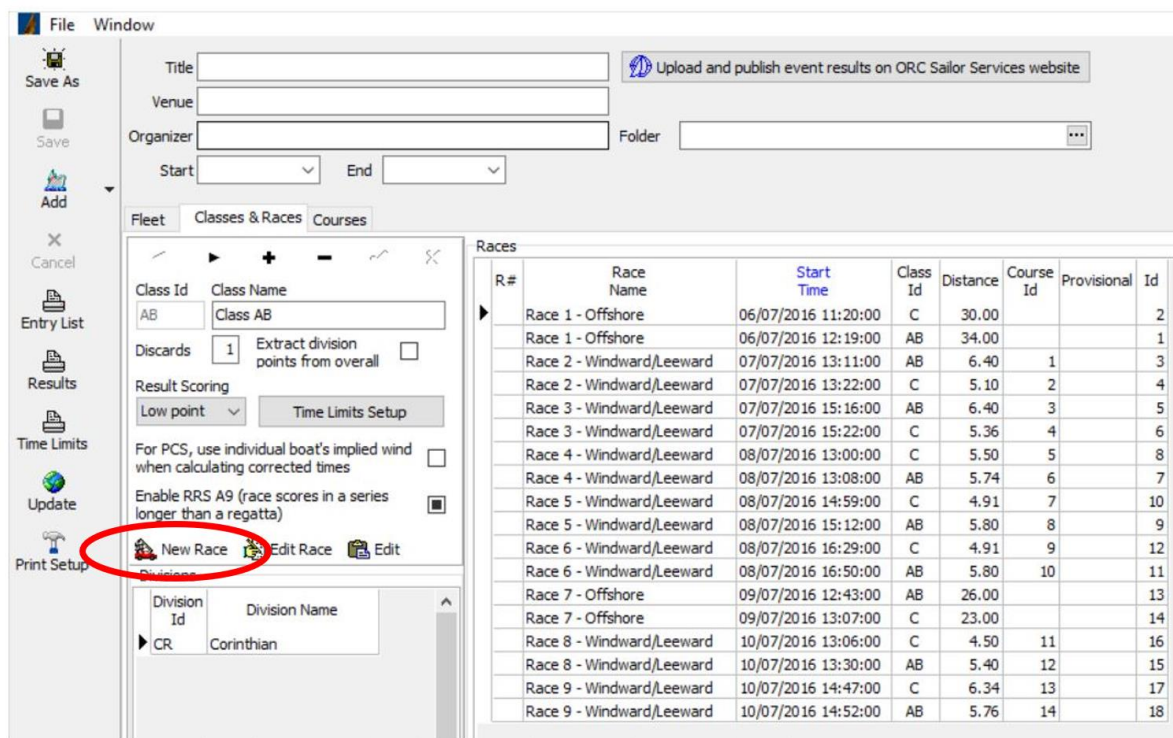
Once Classes and Divisions are defined each entry needs to be assigned under the “Fleet” tab of the main screen. Class ID and Division ID shall be entered in the relevant column:

SailNo	Yacht Name	Bow#	ClassId	Division Id	LOA	CDL	GPH	OSN	Custom TOD	Custom TOT	
GRE-1221	ADRA	77	C	CR	9.490	8.230	675.5	654.5			F
GRE-1418	AEGLI	71	C	CR	11.001	8.346	667.3	648.4			B
GRE-1007	AEOLUS II	89	C	CR	10.640	8.996	630.8	614.3			F
ISR 1	AFRITA	07	AB		13.300	11.723	546.6	531.0			X
GRE-517	ALLEGORIA	45	C		10.840	9.248	626.6	609.5			B
GRE-8	ALSOUMA-Allianz	29	AB		12.100	10.245	583.7	568.6			II
GRE-1282	ANATELOUSSA AFRODITI	63	C	CR	9.982	8.621	636.9	621.1			F
GRE-1550	ANAX	66	C	CR	9.982	8.530	645.2	626.2			F
GRE-1577	ARGO 1	13	AB	CR	13.352	10.989	583.3	566.4			F
GRE-155	ARISTOTELIS	24	AB	CR	12.400	10.443	571.4	556.0			R
GRE-01	ASTRAPI	79	C	CR	10.632	9.107	630.7	613.2			JI
GRE-317	AVANTES	75	C		9.490	8.140	676.3	655.1			F
GRE-1212	BANA BIOLETTA 3	12	AB	CR	12.500	11.067	544.1	531.3			II
GRE-48	BANA BIOLETTA 4	11	AB	CR	12.490	11.128	538.8	526.2			II
GRE-74	BAXIMUS	78	C		10.600	9.271	607.9	592.2			X
GRE-4242	BLACK JACK	04	AB		12.790	12.285	500.1	486.8			G
GRE-1153	BLUE LINE	52	C	CR	10.840	9.108	633.0	615.6			B
ITA-16606	BLUE SKY	16	AB		12.957	10.913	582.8	566.3			G
TUR-1040	BOLD	15	AB		10.970	10.724	536.4	522.2			B
GRE-76R	BULLETT	01	AB		15.850	14.874	458.7	446.5			T

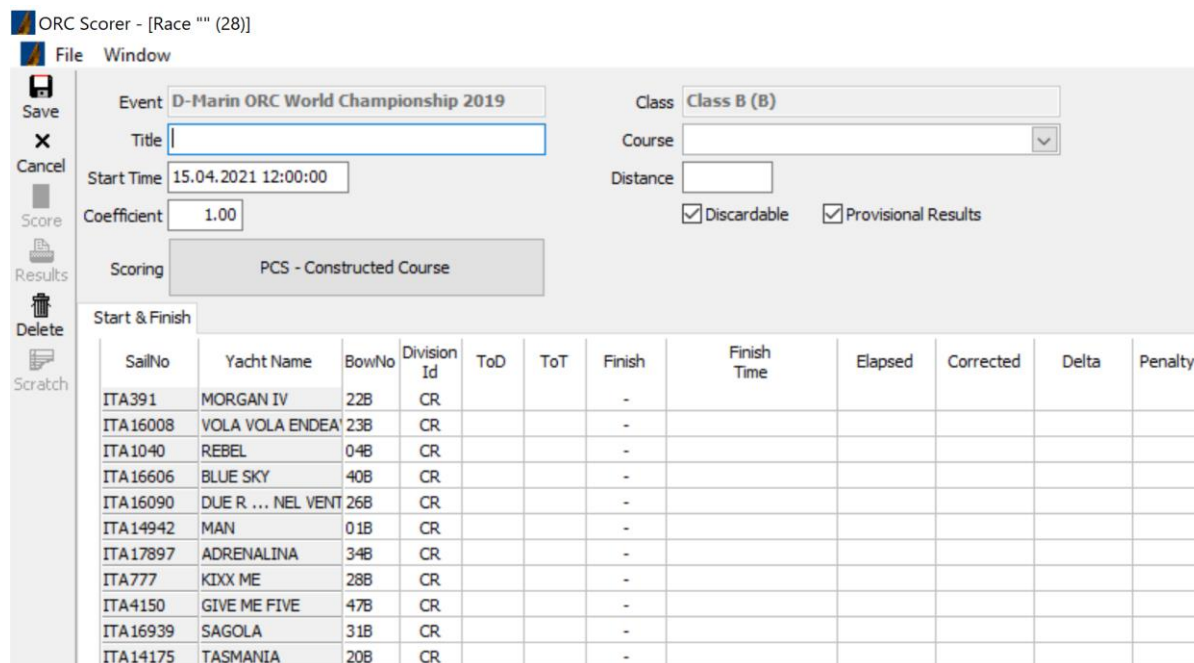
SailNo	Yacht Name	Bow#	ClassId	Division Id	LOA	CDL	GPH	OSN	Custom TOD	Custom TOT	
GRE-1221	ADRA	77	C	CR	9.490	8.230	675.5	654.5			F
GRE-1418	AEGLI	71	C	CR	11.001	8.346	667.3	648.4			B
GRE-1007	AEOLUS II	89	C	CR	10.640	8.996	630.8	614.3			F
ISR 1	AFRITA	07	AB		13.300	11.723	546.6	531.0			X
GRE-517	ALLEGORIA	45	C		10.840	9.248	626.6	609.5			B
GRE-8	ALSOUMA-Allianz	29	AB		12.100	10.245	583.7	568.6			II
GRE-1282	ANATELOUSSA AFRODITI	63	C	CR	9.982	8.621	636.9	621.1			F
GRE-1550	ANAX	66	C	CR	9.982	8.530	645.2	626.2			F
GRE-1577	ARGO 1	13	AB	CR	13.352	10.989	583.3	566.4			F
GRE-155	ARISTOTELIS	24	AB	CR	12.400	10.443	571.4	556.0			R
GRE-01	ASTRAPI	79	C	CR	10.632	9.107	630.7	613.2			JI
GRE-317	AVANTES	75	C		9.490	8.140	676.3	655.1			F
GRE-1212	BANA BIOLETTA 3	12	AB	CR	12.500	11.067	544.1	531.3			II
GRE-48	BANA BIOLETTA 4	11	AB	CR	12.490	11.128	538.8	526.2			II
GRE-74	BAXIMUS	78	C		10.600	9.271	607.9	592.2			X
GRE-4242	BLACK JACK	04	AB		12.790	12.285	500.1	486.8			G
GRE-1153	BLUE LINE	52	C	CR	10.840	9.108	633.0	615.6			B
ITA-16606	BLUE SKY	16	AB		12.957	10.913	582.8	566.3			G
TUR-1040	BOLD	15	AB		10.970	10.724	536.4	522.2			B
GRE-76R	BULLETT	01	AB		15.850	14.874	458.7	446.5			T

5. Creating races and entering finishing times

Once the fleet is defined with classes and divisions assigned the next step is to create a race. A Race should be created for each class by clicking on “New Race” for the selected Class at the Classes & Races tab:

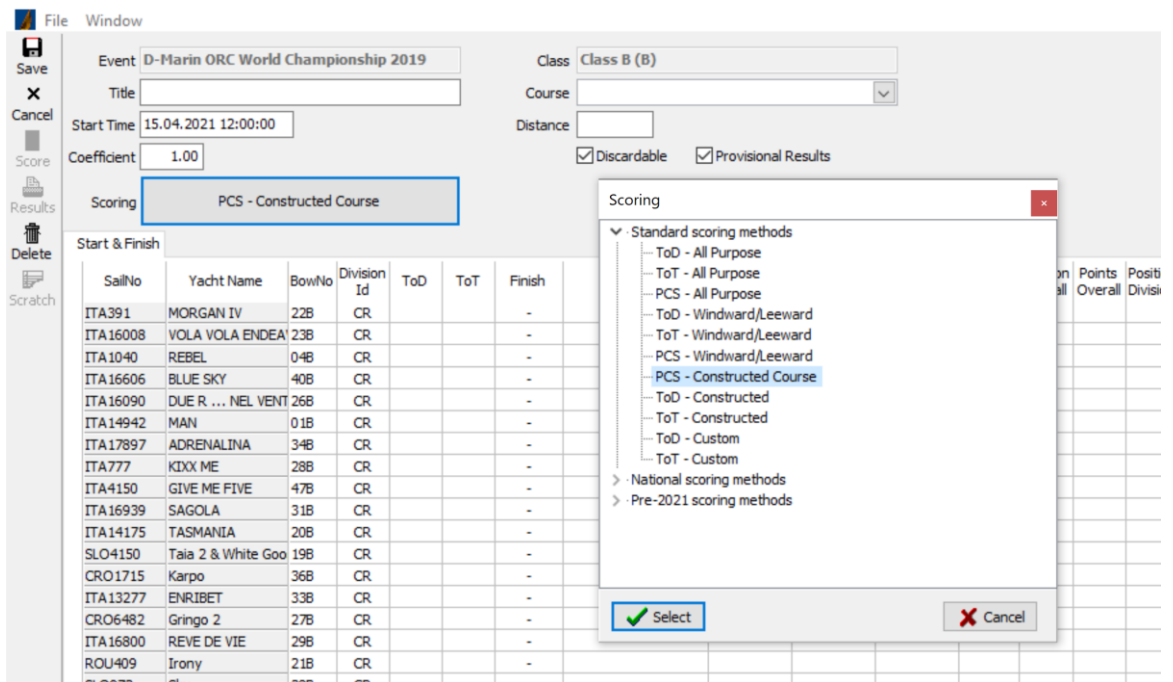


For each race the following can be entered:



- **Title:** A description of the race, such as Inshore Race 1 or Offshore Race or simply Race 1.
- **Start Time:** Date and time of the starting signal
- **Coefficient:** Scoring coefficient. If different from 1.00 all scores will be multiplied with that coefficient
- **Course:** Course as defined for Constructed ToD, Constructed ToT or PCS scoring as described below
- **Discardable:** Uncheck this box if that race should not be discarded in calculations of the series results

- **Provisional Results:** Checking this box will add a notification in output of results that results are “Provisional”
- **Scoring:** ORC Rating systems offer a variety of scoring options that may be selected here as one of the following:



- **Standard scoring options** as presented on each ORC International and ORC Club certificates that are given given for two course types:
 - a) **Windward/Leeward** (up and down) is a conventional course where the race course consists of 50% upwind and 50% downwind legs.
 - b) **All-purpose** course type includes equal distribution of all wind directions.

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	886.1	737.6	668.8	638.7	624.4	613.1	601.9
52°	580.2	491.6	457.4	445.4	439.6	436.4	428.8
60°	547.3	471.5	444.5	433.2	427.6	424.2	417.6
75°	520.8	457.5	434.5	421.0	411.5	405.4	398.8
90°	506.5	446.2	423.6	409.0	396.6	387.9	373.3
110°	524.0	452.6	425.6	405.9	386.0	368.1	341.2
120°	553.7	465.9	430.7	409.0	387.5	369.2	335.7
135°	623.5	508.0	450.3	424.7	403.8	381.5	336.9
150°	742.8	598.6	507.4	453.6	427.5	407.6	365.5
Run VMG	857.7	691.2	585.9	518.5	474.9	440.9	400.2
Selected Courses							
Windward / Leeward	871.9	714.4	627.3	578.6	549.7	527.0	501.1
All purpose	663.6	554.7	501.3	472.7	454.4	438.9	416.9

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	601.8	0.9971
All purpose	486.3	1.2338

These include:

- **Time On Distance (ToD)** for **All-purpose** or **Windward/Leeward** courses
- **Time On Time (ToT)** for **All-purpose** or **Windward/Leeward** courses
- **Time On Distance (ToD)** or **Time on Time (ToT)** for specific constructed course These are calculated from the specific course model using the weather forecast prior to the start of the race or historic wind data. The course model should be entered at the “Course” tab of the main screen

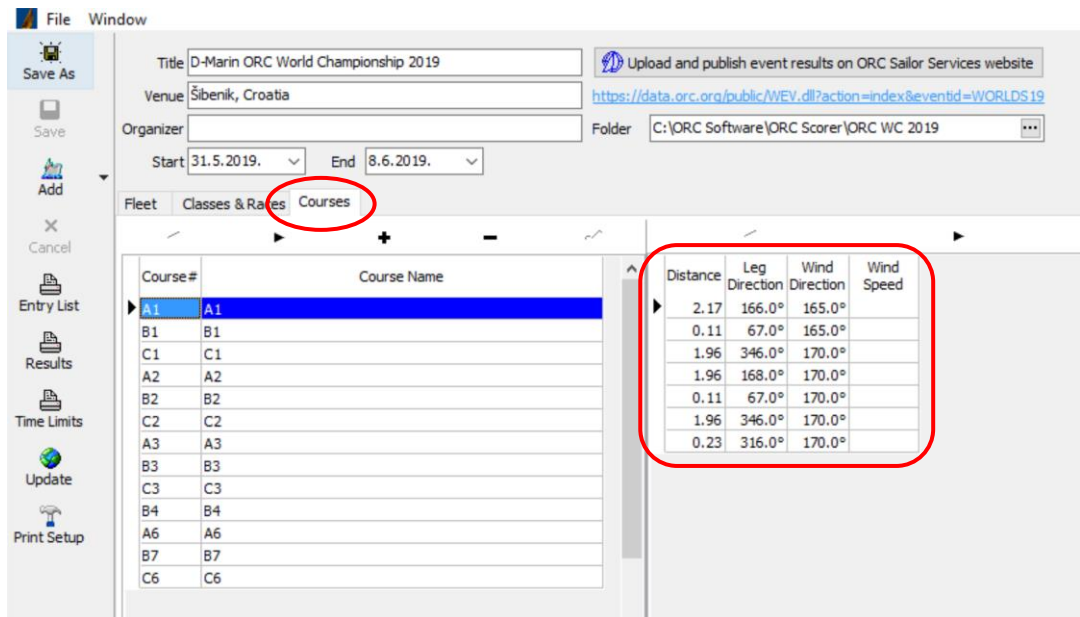
Course#	Course Name	Distance	Leg Direction	Wind Direction	Wind Speed
1	Predominantly upwind	10.00	0.0°	0.0°	8.00000
2	Predominantly downwind	15.00	0.0°	0.0°	12.00000
		7.00	0.0°	0.0°	16.00000
		10.00	52.0°	0.0°	8.00000
		15.00	52.0°	0.0°	12.00000
		9.00	52.0°	0.0°	16.00000
		5.00	90.0°	0.0°	8.00000
		7.00	90.0°	0.0°	12.00000
		3.00	90.0°	0.0°	16.00000
		4.00	135.0°	0.0°	8.00000
		5.00	135.0°	0.0°	12.00000
		2.00	135.0°	0.0°	16.00000
		3.00	180.0°	0.0°	8.00000
		4.00	180.0°	0.0°	12.00000
		1.00	180.0°	0.0°	16.00000

- **Custom Time On Distance (ToD)** or **Time on Time (ToT)** where coefficients may be entered manually for each boat. These may include simple scoring coefficients from any other rating system or entering 1.00 for Custom ToT may be used for scoring the race in elapsed time (or for one-designs) since each boat's corrected time will be equal to her elapsed time:

SailNo	Yacht Name	Bow #	ClassId	Division Id	LOA	CDL	GPH	OSN	Custom TOD	Custom TOT	Type	Owner	Skipper	Spo	SailNo	Yacht Name
TUR-3512	IZMIR YELKEN	49	C		10.150	9.008	616.0	598.9			MAT 10.10	Kaan Ozgonenc	Kaan Ozgonenc	PALMARINA	TUR-3512	IZMIR YELKEN
ITA-391	MORGAN IV	34	AB		11.820	9.857	600.3	584.4			G.S. 39	DE GEMMIS NICOLA	Nicola de Gemmis			
TUR-1040	BOLD	15	AB		10.970	10.950	544.3	528.4			BOLT 37	RaRa Ltd., Mehmet Taki	SERDAR CALISKAN			
GRE-1265	TAMIRRA	56	C		9.435	9.000	596.8	582.2			FARR (ex Mumm) 30	ANAGNOSTOPOULOS AP	Antonis Katsiarmalis	MARINESHC		
BUL-1991	LE Yachting 1991	48	C		10.600	9.248	604.4	589.0			X-35	LE Yachting LTD	Lachezar Bratzev			
EST-774	SUGAR	61	C		10.300	8.827	624.6	607.7			ITALIA 9.98 F	OTT KIKKAS	Ott Kikkas			
EST-646	KATARINA II	55	C		10.405	9.075	628.7	609.6			ARCONA 340	Avvar Tuulberg	Avvar Tuulberg			
TUR-7400	CILGIN SIGMA	09	AB		12.411	11.281	528.8	515.5			FARR 40 OD	Bulent Demiroglu Bonusa Orhan Tulker				
TUR-1010	KARAYIDA	50	C		10.150	9.076	613.0	595.4			MAT 10.10	CIHAN F. ASAL, Alp DOGI Alp DOGUOGLU				
TUR-471	GORBON BLUE MATRIX	51	C		10.150	9.046	615.7	597.8			MAT 10.10	Orhan Gorbun	Orhan Gorbun			
GRE-4242	BLACK JACK	04	AB		12.790	12.285	500.1	486.8			GP 42	AHEMOS YACHTS MCPY	Hajko Kourtesis	STATUS MAI		
ITA-16639	SCUGNIZZA	40	C		11.410	9.488	621.0	602.2			NM38S	DE ELASIO VINCENZO	Vincenzo de Blasio	Total Lubma		
TUR-9939	SHAK SHUKA II	41	C		10.617	9.359	611.4	593.1			A-35	Hasan Utku CETNER	Hasan Utku CETNER			
GRE-1708	MYTLANA	59	C		12.250	8.966	650.5	630.4			SUN LEGENDE 41	MARINE AND SAILING EN George Galoulakis				
GRE-302	KRAKEN	70	C		9.529	8.432	621.6	606.0			MOUNT GAY 30	BAEVEVANIS THANASIS	Dimitris Marakis			
GRE-517	ALLEGORIA	45	C		10.840	9.248	626.6	609.5			BAVARIA 35 MATCH	IOANNIS ARGYRAKIS	IOANNIS ARGYRAKIS			
GRE-1135	NBRIEIA	43	C		11.215	9.350	627.7	610.4			ELAN 375D	PASCALIS SAMARAS	PASCALIS SAMARAS			
GRE-317	AVANTES	75	C		9.490	8.140	676.3	655.1			FIRST 31.7 MOD	AFEDRAS I. - VASILIOU	Germis Afendras			
GRE-49167	EQUINOX	68	C		11.022	8.467	651.3	632.3			X-372	GEORGIOS MATSIKIDIS	GEORGIOS MATSIKIDIS			
GRE-49129	ENALLAX	65	C		10.007	8.590	630.4	614.6			X-99	HRISTOS GIAPANTZIS	Thodoros Tsakalis			
GRE-74	BAVMUS	78	C		10.600	9.271	607.9	592.2			X-35 OD	ATHANASIOS BAEVEVANIS	Thanasis Baxeveanis			
ROU 410	Simina	22	AB		12.259	10.577	589.8	573.0			Elan 410	Club Sportiv BALKAN	Iulia Fulceca			
ITA-16606	BLUE SKY	16	AB		12.957	10.913	582.8	566.3			GRAND SOLEIL 43 BC	TERRIERI CLAUDIO	Claudio Terrieri			
ITA-1040	CAVEVEL SPUMANTI	19	AB		12.240	10.740	579.5	563.1			FIRST 40'	COSTANTIN MANUEL	COSTANTIN MANUEL			
BUL-922	HORIZONT	32	AB		12.027	9.951	606.2	589.3			HANSE 400	HORIZONT 2002 LTD	Ilan Tenebtelev			
GBR-1035	NO RESPECT	36	AB		10.630	9.749	567.8	553.1			1D35	JOSE ANTONIO SALGUER	Daniel Alchanats			
GRE-1270	INTEGRALE	35	AB		10.910	9.823	583.2	568.2			MUMM 36	ZAMBETOGLU S. & V. / Sotris Zabetoglou	Georg Mihov			
BUL-89	Venid Yacht	20	AB		12.259	10.588	591.8	574.7			ELAN 410	Georg Mihov	Georg Mihov			
GRE-42	MY WAY	25	AB		12.400	10.399	577.2	562.6			RODMAN 42	FAEDON KYDONIATIS	FAEDON KYDONIATIS			

- **Performance Curve Scoring (PCS)** is the most powerful engine of the ORC rating systems. It is fundamentally different and much more precise than any other handicap system since it gives different handicaps for different race conditions in recognition that sailing yachts of different design do not have the same performance in different wind strengths and directions. It may be used with pre-defined or constructed course models. Pre-defined course models are *Windward/Leeward* and *All-purpose*.

However, the most accurate use of Performance Curve Scoring will be when it is used with a constructed course. Course descriptions should be entered in the "Course" tab of the main screen (Race window may need to be closed to step backwards):

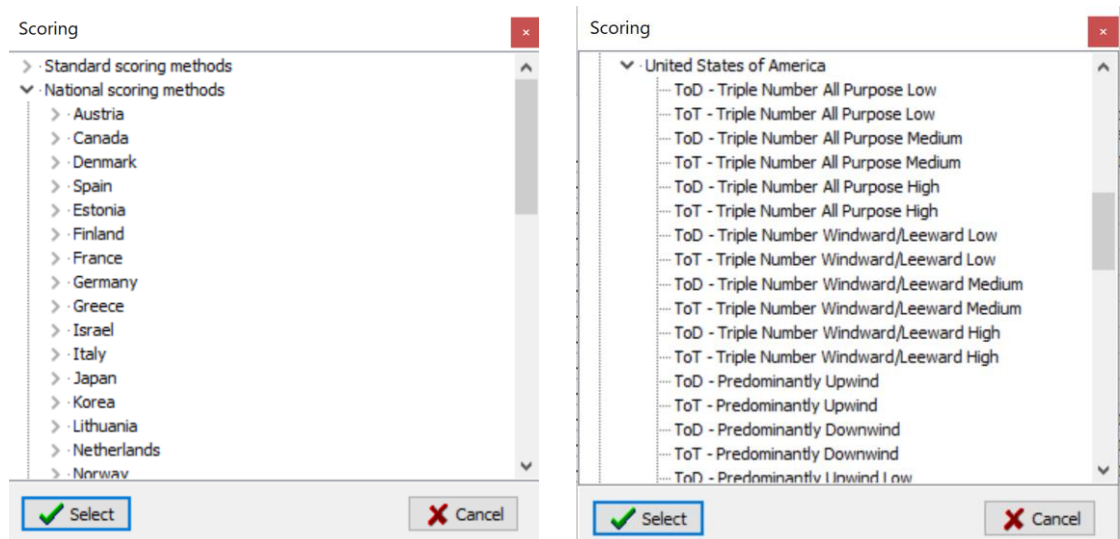


The Course is then defined by entering for each leg: distance, compass bearing and wind direction. The results of the PCS calculation is a so-called “Implied Wind” that represents the boat’s performance on the course. The faster the boat has sailed, the higher the “Implied Wind”, which is the primary index for scoring.

The “Implied Wind” for the winning boat normally approximates the predominant wind strength for the race and it should be checked before publishing the results. However, in cases where the “Implied Wind” does not represent fairly the real wind strength during a race, the wind strength may be determined by the Race Committee and therefore entered in the column of “Wind Speed.”

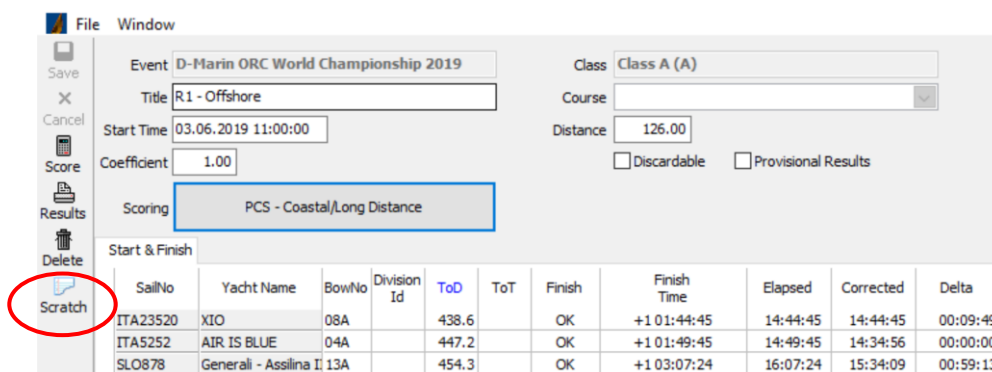
- **National Rating Offices** may publish on their certificates **other scoring options**. This may include ToD and/or ToT coefficients using different course models as well as multiple ToD and/or ToT coefficients for different wind ranges. The course type used to calculate these ratings and the methods of how they will be applied shall be specified in the Notice of Race and/or Sailing Instructions of the races and events that use them.

Appropriate National Scoring option may be selected from the drop-down menu of the countries and available scoring options within each country.



Scratch sheets:

Once the race is defined a Scratch sheet may be generated by clicking on “Scratch” on the menu on the left:



A Scratch sheet shows the time allowances between the boats for the selected scoring method in ToT, ToD or PCS formats. Clicking on the button for a particular boat will show the time allowances as for a given length of distance or time shown at the head of the columns.

For ToD the columns are in miles, and for ToT the time is in minutes of elapsed time, while for PCS time allowances are shown for different true wind speeds.

Times shown in Red are owed to the reference (Scratch) boat, and times in Black are owed to this boat.

	Yacht Name	Sail No	Type	GPH	TOD	2 NM	3 NM	5 NM	10 NM	20 NM	30 NM	50 NM
○	ZUJUL	38012	AERODYNE 38	564.1	548.9	-60.8 00:01:01	-91.2 00:01:31	-152.0 00:02:32	-304.0 00:05:04	-608.0 00:10:08	-912.0 00:15:12	-1520.0 00:25:20
○	Cookie Monster	04	Salona 380	590.3	574.4	-9.8 00:00:10	-14.7 00:00:15	-24.5 00:00:25	-49.0 00:00:49	-98.0 00:01:38	-147.0 00:02:27	-245.0 00:04:05
●	LA DEFONCE	USA 61170	Figaro 3	591.9	579.3	0.0 00:00:00	0.0 00:00:00	0.0 00:00:00	0.0 00:00:00	0.0 00:00:00	0.0 00:00:00	0.0 00:00:00
○	ALCHEMIST	USA	SUN FAST 3300	611.2	592.2	25.8 00:00:26	38.7 00:00:39	64.5 00:01:05	129.0 00:02:09	258.0 00:04:18	387.0 00:06:27	645.0 00:10:45
○	INFRINGER	USA 10	L-30 OD	603.8	598.1	37.6 00:00:38	56.4 00:00:56	94.0 00:01:34	188.0 00:03:08	376.0 00:06:16	564.0 00:09:24	940.0 00:15:40
○	ABIEN TOT	42979	J-35	617.9	601.1	43.6 00:00:44	65.4 00:01:05	109.0 00:01:49	218.0 00:03:38	436.0 00:07:16	654.0 00:10:54	1090.0 00:18:10
○	BOAT 63	63	J 105	619.9	601.6	44.6 00:00:45	66.9 00:01:07	111.5 00:01:52	223.0 00:03:43	446.0 00:07:26	669.0 00:11:09	1115.0 00:18:35
○	HORNET	USA 45	J-33	619.6	603.1	47.6 00:00:48	71.4 00:01:11	119.0 00:01:59	238.0 00:03:58	476.0 00:07:56	714.0 00:11:54	1190.0 00:19:50
○	VICHINGO	17261	ITALIA 998 F	622.6	605.4	52.2 00:00:52	78.3 00:01:18	130.5 00:02:11	261.0 00:04:21	522.0 00:08:42	783.0 00:13:03	1305.0 00:21:45
○	BLAZE STAR	USA 83348	PEARSON FLYER	688.5	672.1	185.6 00:03:06	278.4 00:04:38	464.0 00:07:44	928.0 00:15:28	1856.0 00:30:56	2784.0 00:46:24	4640.0 01:17:20
○	TROUBLE NO TROUBLE	USA 831	POGO 2	697.9	676.5	194.4 00:03:14	291.6 00:04:52	486.0 00:08:06	972.0 00:16:12	1944.0 00:32:24	2916.0 00:48:36	4860.0 01:21:00

Making this scratch sheet available to competitors prior to racing is recommended so they may use this at their discretion to understand the time allowances among the fleet while racing. It should be noted, however, that this is intended as a guide only and not a substitute for the official results.

Calculate results:

To calculate results finishing times may be entered in the column “Finish Time” by entering actual time and date when the boat has crossed the finishing line:

Event: ORC European Championship 2016
 Title: Race 9 - Windward/Leeward
 Start Time: 22/08/2019 12:00:00
 Coefficient: 1.00
 Scoring: PCS - Constructed Course

Class: Class AB (AB)
 Course: AB-P9
 Distance: 5.76
 Discardable Provisional Results

Start & Finish

SailNo	Yacht Name	BowNo	Division Id	ToD	ToT	Finish	Finish Time	Elapsed	Corrected	Del
ISR 1	AFRITA	07				-				
GRE-8	ALSOUMA-Allianz	29				-				
GRE-1577	ARGO 1	13	CR			-				
GRE-155	ARISTOTELIS	24	CR			-				
GRE-1212	BANA BIOLETTA 3	12	CR			-				
GRE-48	BANA BIOLETTA 4	11	CR			-				
GRE-4242	BLACK JACK	04				-				
ITA-16606	BLUE SKY	16				-				
TUR-1040	BOLD	15				-				

For an easier search of the boat for which a finishing time is entered, the list may be sorted by clicking on any of header items, such as Yacht Name, BowNo, or SailNo. Entered Finishing times may also be sorted by clicking on “Finish Time” that visually separates boats that have finished from those still racing.

Scoring abbreviations such as DNS, DNC, DNF, BFD, UFD etc... are entered in the “Finish” column and any scoring penalty as defined in RRS 44.3(c) may be entered in the “Penalty” column:

Event: ORC European Championship 2016
 Title: Race 9 - Windward/Leeward
 Start Time: 10/07/2016 14:52:00
 Coefficient: 1.00
 Scoring: PCS - Constructed Course

Class: Class AB (AB)
 Course: AB-P9
 Distance: 5.76
 Discardable Provisional Results

Start & Finish

SailNo	Yacht Name	BowNo	Division Id	ToD	ToT	Finish	Finish Time	Elapsed	Corrected	Delta
ISR 1	AFRITA	07				OK	+0 15:49:24	00:57:24	00:50:29	
GRE-8	ALSOUMA-Allianz	29				OK	+0 15:53:37	01:01:37	00:50:57	
GRE-1577	ARGO 1	13	CR			OK	+0 15:54:24	01:02:24	00:52:22	
GRE-155	ARISTOTELIS	24	CR			OK	+0 15:49:50	00:57:50	00:48:12	
GRE-1212	BANA BIOLETTA 3	12	CR			OK	+0 15:50:08	00:58:08	00:50:35	
GRE-48	BANA BIOLETTA 4	11	CR			OK	+0 15:50:47	00:58:47	00:51:30	
GRE-4242	BLACK JACK	04				OK	+0 15:42:53	00:50:53	00:46:45	
ITA-16606	BLUE SKY	16				OK	+0 15:48:49	00:56:49	00:46:50	
TUR-1040	BOLD	15				OK	+0 15:49:06	00:57:06	00:49:10	

Once all finishing times are entered the race may be saved with a click on the “Save” button on the menu on the left while clicking on “Score” will produce race results:

Event: ORC European Championship 2016
 Title: Race 9 - Windward/Leeward
 Start Time: 10/07/2016 14:52:00
 Coefficient: 1.00
 Scoring: PCS - Constructed Course
 Class: Class AB (AB)
 Course: AB-P9
 Distance: 5.76
 Discardable Provis

SailNo	Yacht Name	BowNo	Division Id	ToD	ToT	Finish	Finish Time	Elap
GRE-76R	BULLET	01		468.1		OK	+0 15:36:56	00:4

If there are more classes racing on the same area or finishing at the same finishing line it may be useful to enter finishing times for more classes from the same list of boats. This is made possible by activating “Multi-Class finish”.

To do this, classes first need to be selected from the “Class & Races” tab at the main screen by clicking on the Race and the class and confirm it by clicking on “Select for multi-class finish.” Selected classes will then be shown in green. When all classes are selected the file needs to be saved with a click on the “Save” button and a click on “Multi-class finish” will create a list for entering finishing times for those classes.

Races

R#	Race Name	Start Time	Class Id	Distance	Course Id	Provisional	Id
1	Race 1 - Offshore	06/07/2016 11:20:00	C	30.00			2
1	Race 1 - Offshore	06/07/2016 12:19:00	AB	34.00			1
2	Race 2 - Windward/Leeward	07/07/2016 13:11:00	AB	6.40	1		3
2	Race 2 - Windward/Leeward	07/07/2016 13:22:00	C	5.10	2		4
3	Race 3 - Windward/Leeward	07/07/2016 15:16:00	AB	6.40	3		5
3	Race 3 - Windward/Leeward	07/07/2016 15:22:00	C	5.36	4		6
4	Race 4 - Windward/Leeward	08/07/2016 13:00:00	C	5.50	5		8
4	Race 4 - Windward/Leeward	08/07/2016 13:08:00	AB	5.74	6		7
5	Race 5 - Windward/Leeward	08/07/2016 14:59:00	C	4.91	7		10
5	Race 5 - Windward/Leeward	08/07/2016 15:12:00	AB	5.80	8		9
6	Race 6 - Windward/Leeward	08/07/2016 16:29:00	C	4.91	9		12
6	Race 6 - Windward/Leeward	08/07/2016 16:50:00	AB	5.80	10		11
7	Race 7 - Offshore	09/07/2016 12:43:00	AB	26.00			13
7	Race 7 - Offshore	09/07/2016 13:07:00	C	23.00			14
8	Race 8 - Windward/Leeward	10/07/2016 13:06:00	C	4.50	11		16
8	Race 8 - Windward/Leeward	10/07/2016 13:30:00	AB	5.40	12		15
9	Race 9 - Windward/Leeward	10/07/2016 14:47:00	C	6.34	13		17
9	Race 9 - Windward/Leeward	10/07/2016 14:52:00	AB	5.76	14		18

Select for multi-class finish Multi-class finish

Using Multi-class finish will also give additional search tools for finding boats for which finishing times are entered by typing the field on which the Finishing list is sorted. For example, if the list is sorted by Yacht Name, typing “M” will move to the first boat with a name starting with the letter “M”; a complete boat name may also be typed.

The screenshot shows the ORC Scorer software interface. At the top, there is a search bar with the text "ISR 1 AFRITA" entered. Below it, the "Finish Time" is set to "14:20:34 07/07/2016" and the "Finish Type" is set to "OK". To the right, a "Races" table is visible:

Id	Race Name	Start Time	Class Id	Distance
3	Race 2 - Windward/Leeward	07/07/2016 13:11:00	AB	6.40

Below the search filters is the "Finish List" table:

SailNo	Yacht Name	BowNo	ClassId	Division Id	Finish	Finish Time	Elapsed	Penalty	Remarks
ISR 1	AFRITA	07	AB		OK	+0 14:20:34	01:09:34		
GRE-8	ALSOUMA-Allianz	29	AB		OK	+0 14:25:32	01:14:32		
GRE-42	MY WAY	25	AB		OK	+0 14:20:32	01:09:32		
GRE-44	MELITI IV	21	AB		OK	+0 14:18:34	01:07:34		

There is also a button (or F5 as a shortcut) to enter the finishing time from the computer’s clock. This is useful for the race committee at the finishing line by simply pressing F5 when a boat is crossing the finishing line.

When all race results are entered the overall results may be produced by clicking on “Results” on the menu on the left side at the main page:

The screenshot shows the ORC Scorer software interface. The title bar reads "ORC Scorer - [Event C:\ORC Software\ORC Scorer\Euro2016\euro2016.orcsc]". The menu bar includes "File" and "Window". The main window displays the "Fleet" tab with a table of boat data:

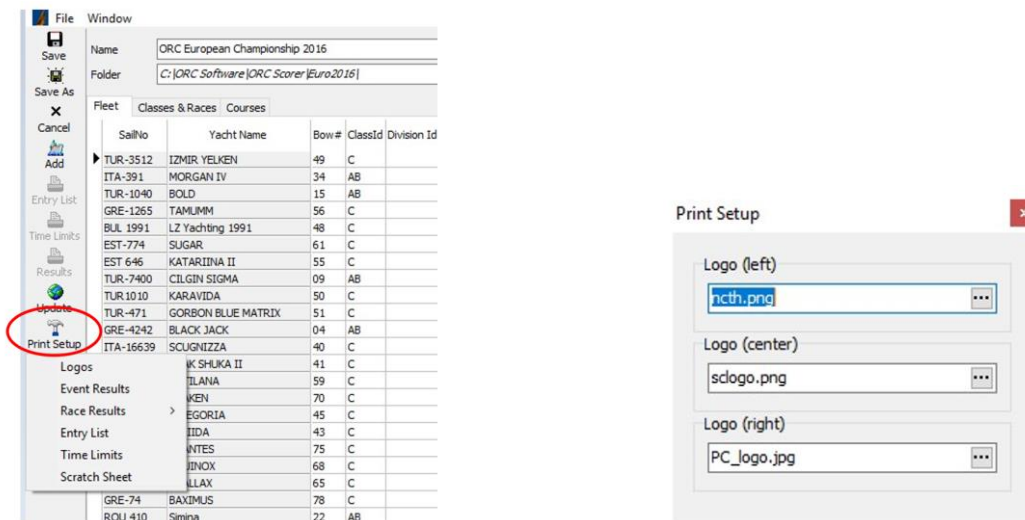
SailNo	Yacht Name	Bow#	ClassId	Division Id	LOA	CDL	GPH	OSN
TUR-3512	IZMIR YELKEN	49	C		10.150	9.008	616.0	598.9
ITA-391	MORGAN IV	34	AB		11.820	9.857	600.3	584.4
TUR-1040	BOLD	15	AB		10.970	10.950	544.3	528.4
GRE-1265	TAMUMM	56	C		9.435	9.000	596.8	582.2
BUL 1991	LZ Yachting 1991	48	C		10.600	9.248	604.4	589.0
EST-774	SUGAR	61	C		10.300	8.827	624.6	607.7
EST 646	KATARIINA II	55	C		10.405	9.075	628.7	609.6
TUR-7400	CILGIN SIGMA	09	AB		12.411	11.281	528.8	515.5
TUR 1010	KARAVIDA	50	C		10.150	9.076	613.0	595.4
TUR-471	GORBON BLUE MATRIX	51	C		10.150	9.046	615.7	597.8
GRE-4242	BLACK JACK	04	AB		12.790	12.285	500.1	486.8
ITA-16639	SCUGNIZZA	40	C		11.410	9.488	621.0	602.2

On the left side of the interface, there is a vertical menu with several options: "Save", "Save As", "Cancel", "Add", "Entry List", "Time Limits", "Results", "Update", and "Print Setup". The "Results" option is highlighted with a red circle.

Note: Whenever any of the functions described are not active (shown in grey) remember to Save the file before continuing what will make that field active.

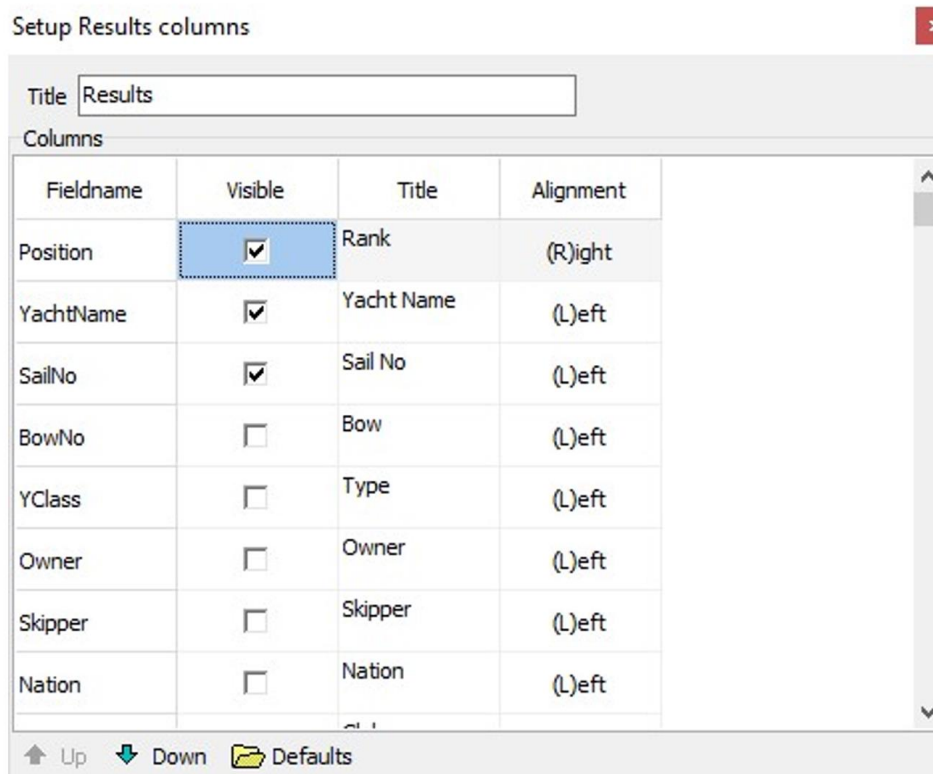
6. Customizing printouts

All printouts such as Entry list, Race Results, Event Results, Scratch Sheet and Time Limits may be customized by selecting the fields to be shown from the “Print Setup” menu on the menu on the left of the main page



Up to three logos may be uploaded as .jpg or .png files to be shown in the middle and on the left and on the right side on the top of each printout.

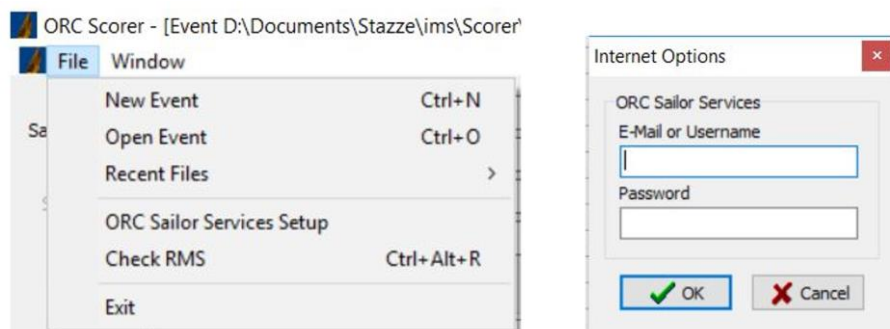
For Entry List, Race Results, Event Results, Time Limits and Scratch Sheet all columns may be selected or un-selected as visible with the Title edited, and Alignment set as (L)eft, (C)enter or (R)ight. Using the Up and Down arrows order on the columns shown in the printouts may also be edited.



Finally, by clicking on “Defaults” all printouts will reset to defaults set up by the software ignoring any changes made.

7. Publishing results on the internet

One of the unique features of the ORC Scorer software is the possibility to upload all results on the internet and create a web page containing entry lists, scratch sheet, race results and event results with just one click. To use this option, the user needs to be registered for the ORC Sailor Services (www.orc.org/sailorservices) and to enter their credentials under the main menu: File – ORC Sailor Services Setup:

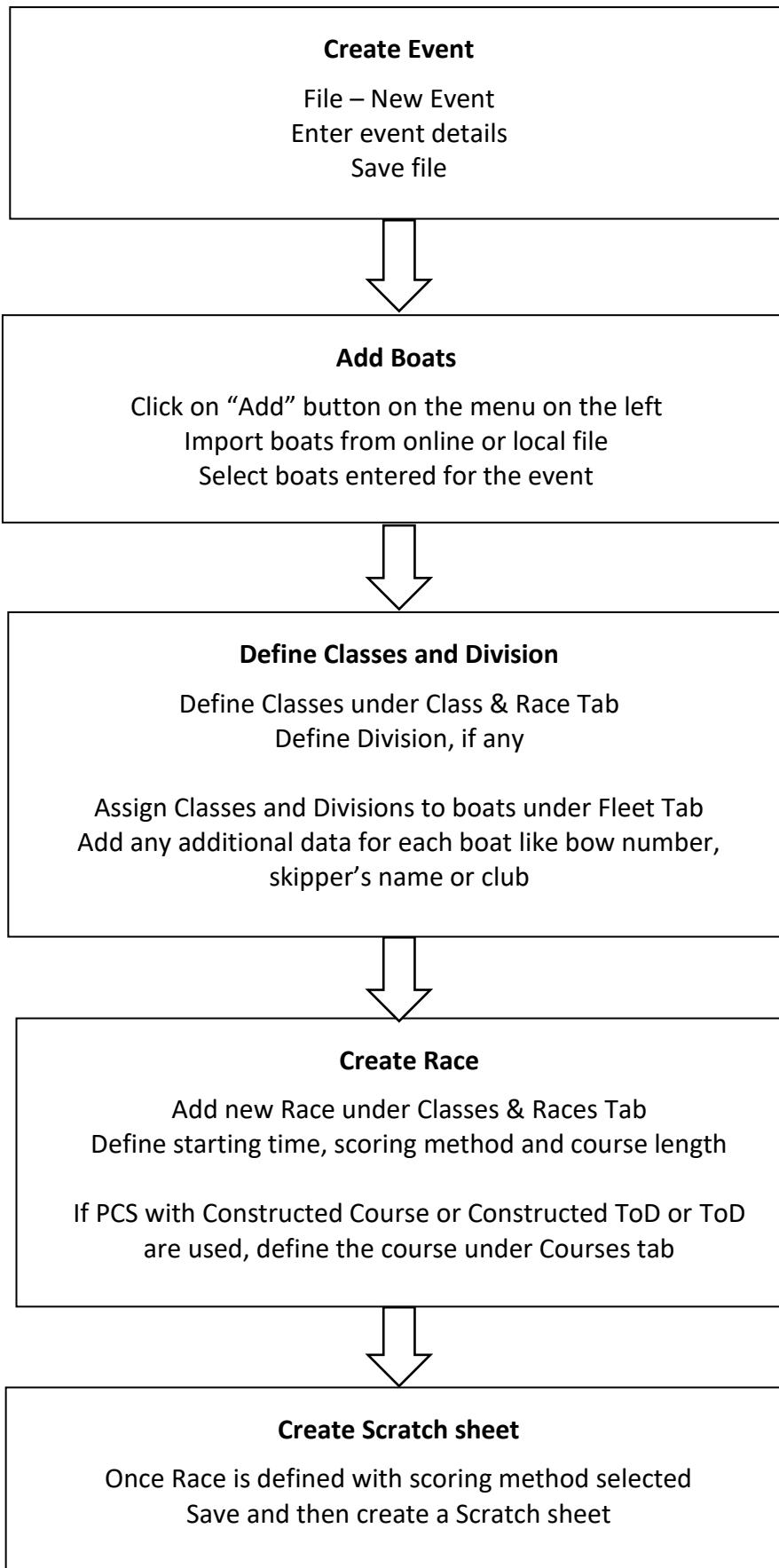


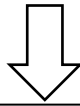
After the ORC Sailor Services credentials are entered, clicking on “Upload and publish event results on ORC Sailor Services website” will create a page with links to complete results, including the entry list and scratch sheets with links to that page shown below the upload button:

That link may be given to the organizer to set it up on the event’s website with Results re-directing to the ORC Scorer Event Page

Whenever any change on the results is made and races are re-scored just click on this button and all pages will be automatically updated.

ORC Scorer Step by Step Guide



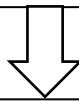


Enter finishing times

Enter finishing times in Race window
If more classes are racing in the same area use
Multi Class Finish option

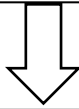
After entering all finishing times score the race by click on
“Score” on the menu on the left.
Check results before publishing

Repeat last two steps for any further races.



Produce overall results

Click on “Results” on the main menu on the left.
Always check results before publishing



Publish results to the internet

Click on “Upload and publish event results
on ORC Sailor Services website”

Check results after publishing

Notes:

Printouts may be customized under “Print Setup” on the main menu on the left

Whenever any field in the software is inactive (grey) remember to Save the file before continuing.