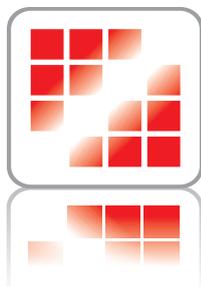
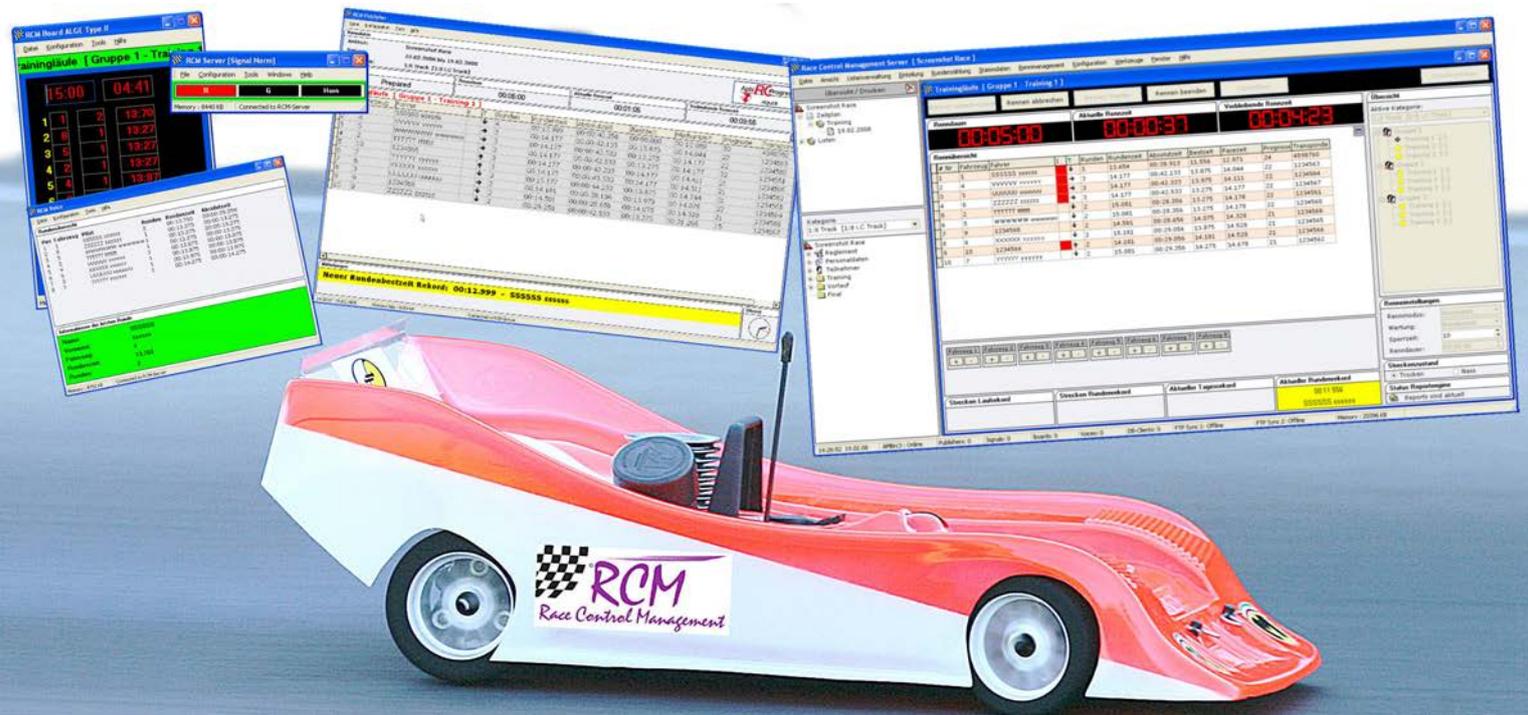


# RCM

## Race Control Management

### User Manual

### RCM Publisher Server



# RC-Timing

# User Manual

## RCM Publisher Server Version 2.0.0.17

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RC-Timing

Oberhasli, Switzerland

## 1 Introduction

Welcome to RCM Publisher Server, the essential additional application for timekeeping. RCM Publisher Server is used for:

- Live race data overlay for RC Racing TV (video live stream)
- myRCM iPhone application
- myRCM Androide application

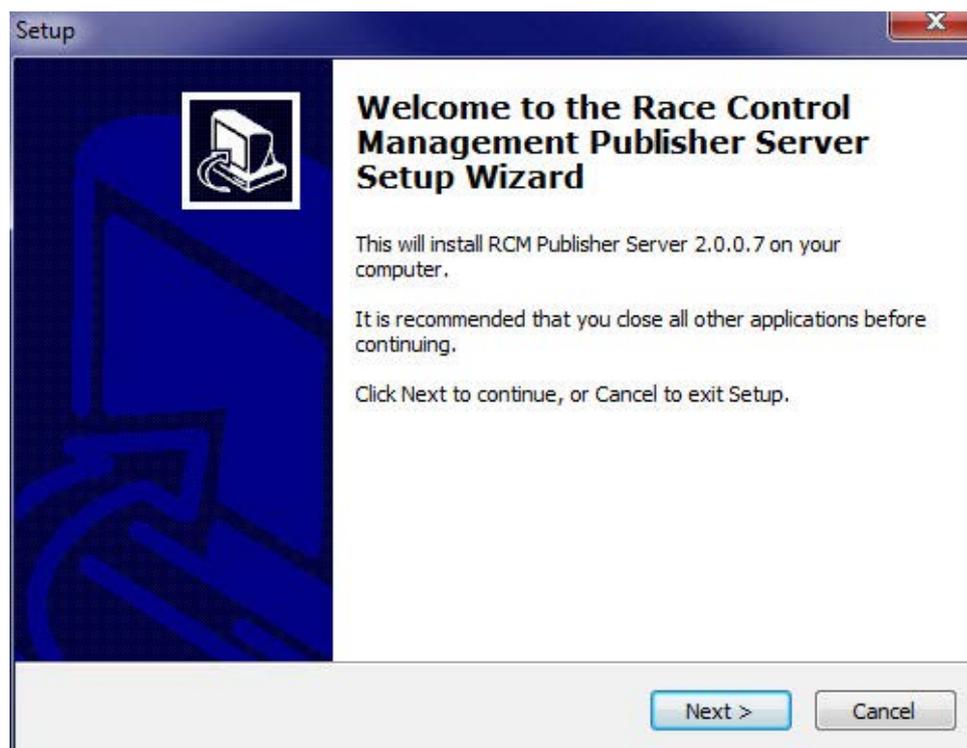
RCM Publisher Server has a HTTP-Interface und offers a JASON- and XML-port, which is used for external application to retrieve data (eventlist, Online Streaming data and so on). In addition RCM Publisher Serber has a Websocket interface with a Websocket Server.

Zudem steht ein WebSocket Interface mit WebSocket Server zur Verfügung.

RCM Publisher Server needs RCM Ultimate, RCM Professional or RCM Advanced of the RCM product spectrum.

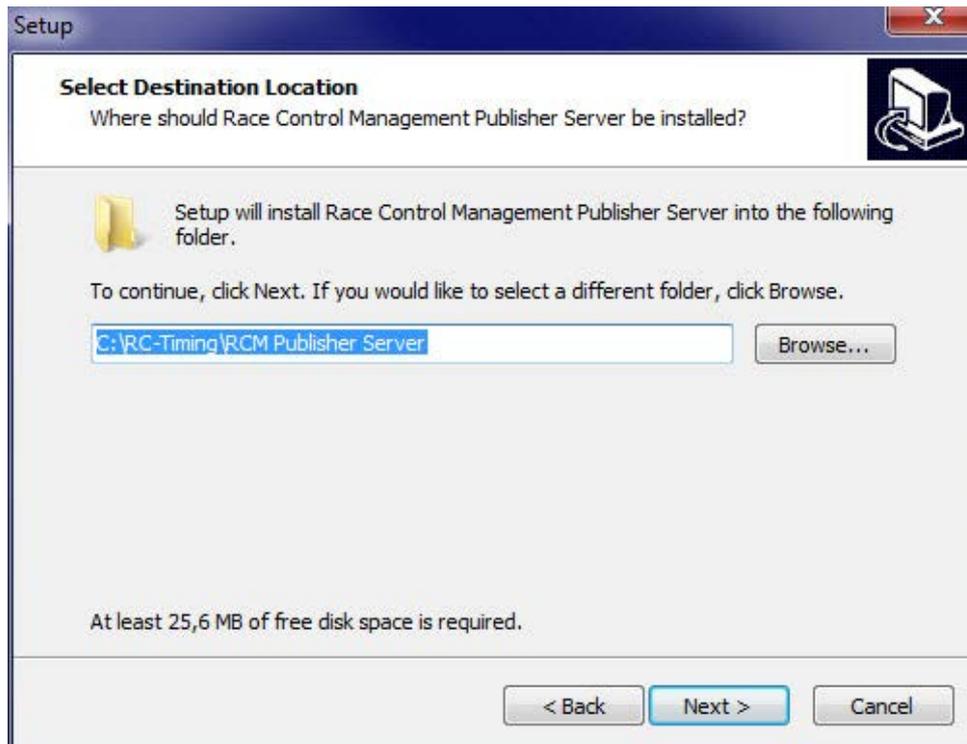
## 2 Installation of RCM Publisher Server

RCM Publisher Server is delivered as executable setup-file. To start the installation you have to run this setup file (double click in the Windows Explorer on the filename like "RCM.Publisher.Server(v2.0.0.7-F)" or use start/run the main menu of Windows).

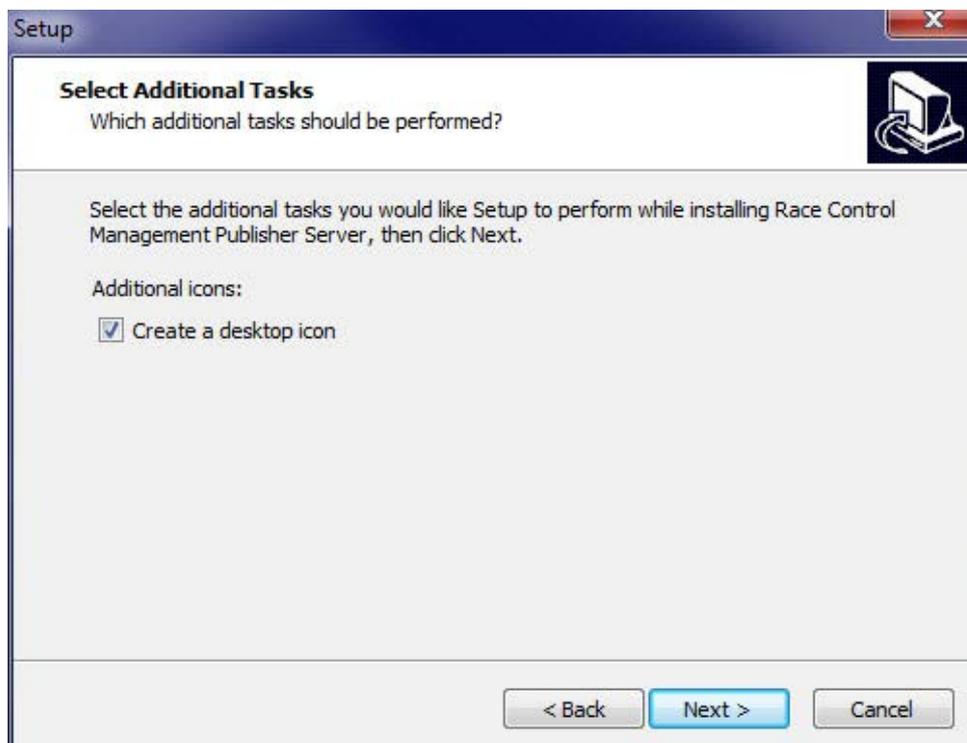


If a version of RCM Publisher Server is already installed on your computer, the setup will perform an update. Otherwise setup does a full installation. Before you install an update we recommend to backup the complete RCM Publisher Server folder. Please do not delete this folder or delete files in it.

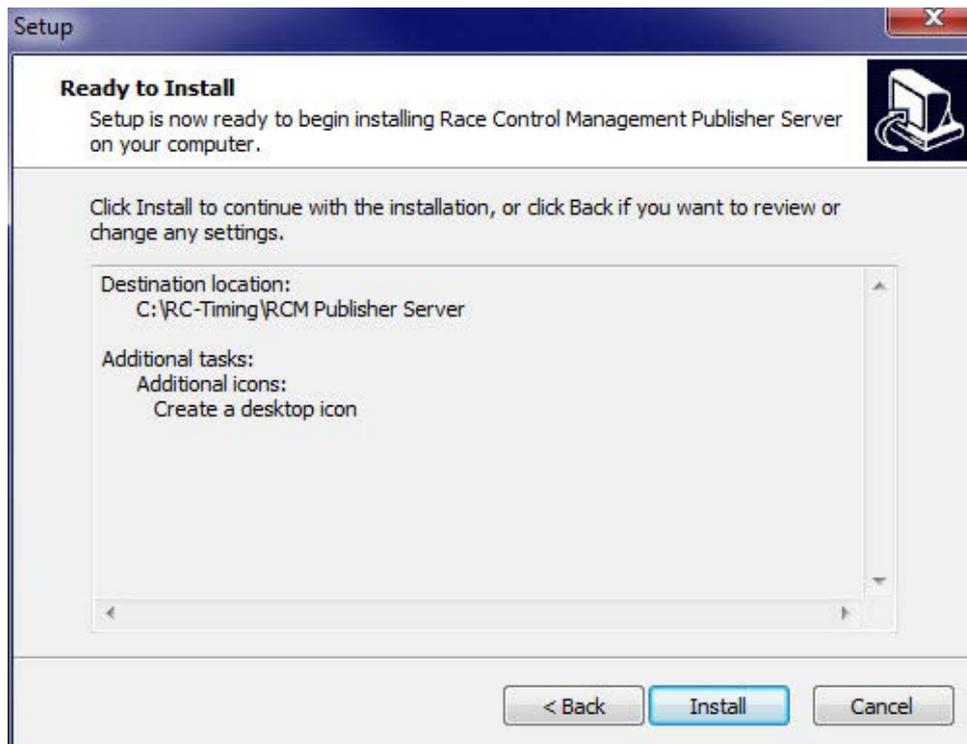
Please note, that the update version is mostly newer than the full version. If you install RCM Publisher Server the first time you should run an update directly after the installation.



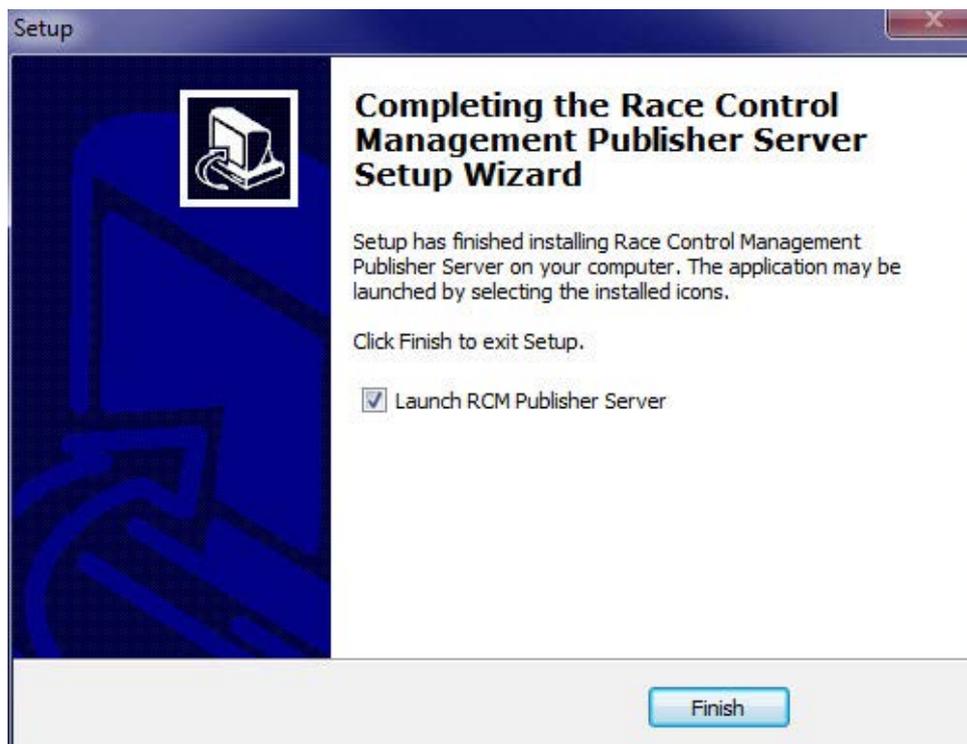
After the welcome screen (please click here on Next), the next window shows you the destination folder. Preferable this is “C:\program files\RCM Publisher Server” or “C:\RC-Timing\RCM Publisher Server”. You should never use the folder “program files” when using Windows Vista, Windows 7 or higher. Install the program in a different folder like C:\RC-Timing\RCM Publisher Server”. Due to the handling of the user rights in these versions of Windows The program will not work correctly if it is installed in C:\program files”.



Again you click on next and in the following window you can determine whether setup creates an icon on the desktop for starting RCM Publisher Server.



The next window shows you a summary of the actions setup will execute. With clicking on Install you will start the setup.

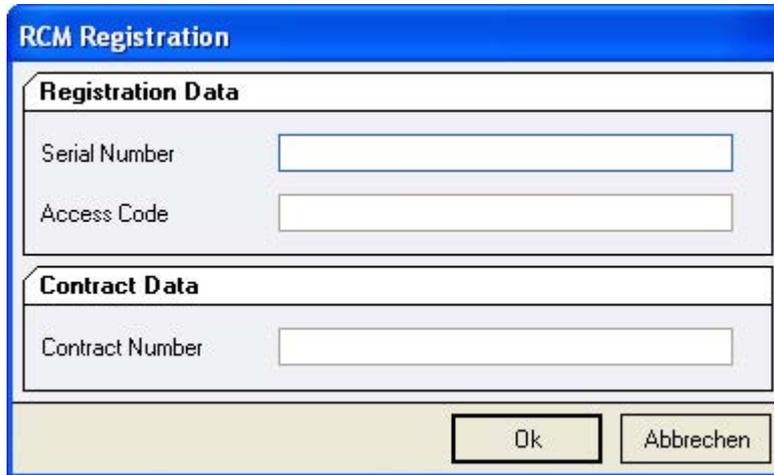


## 2.1 Install the Bonjour-Service

After the installation of RCM Publisher Server you have to install the Bonjour-Service from Apple. This enables iPhone etc. to connect to RCM Publisher Server in the WLAN. You find the installation file BonjourPSSetup.exe in the folder c:\RC-Timing\RCM Publisher Server\Tools\. Start the program and follow the advices on the screen.

## 2.2 Registration

To activate the program you need the contract number, the serial code and the access code. You have received these information with your order from RCM. Launching the application the first time you have to type in these information before you can use the program.

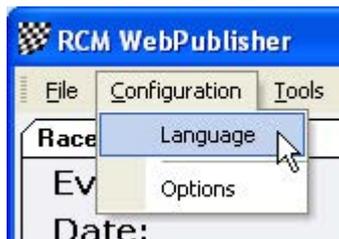


The image shows a dialog box titled "RCM Registration". It contains two sections: "Registration Data" and "Contract Data".

- Registration Data:** Contains two input fields: "Serial Number" and "Access Code".
- Contract Data:** Contains one input field: "Contract Number".

At the bottom right, there are two buttons: "Ok" and "Abbrechen".

The application language is set to English by default. For changing this language please go to Settings/Language.



In the following window you select the language you want and click on Ok. Now all menus of RCM Publisher Server are changed to the selected language.



The image shows a dialog box titled "Language Editor". It features a list box with the following options:

- Deutsch [Language\_German.lng]
- English [Language\_English.lng]
- Italiano [Language\_Italian.lng]
- Français [Language\_French.lng]
- Swedish [Language\_Swedish.lng]

At the bottom right, there are two buttons: "Ok" and "Cancel".

## 3 First Steps

### 3.1 Configuration of the network

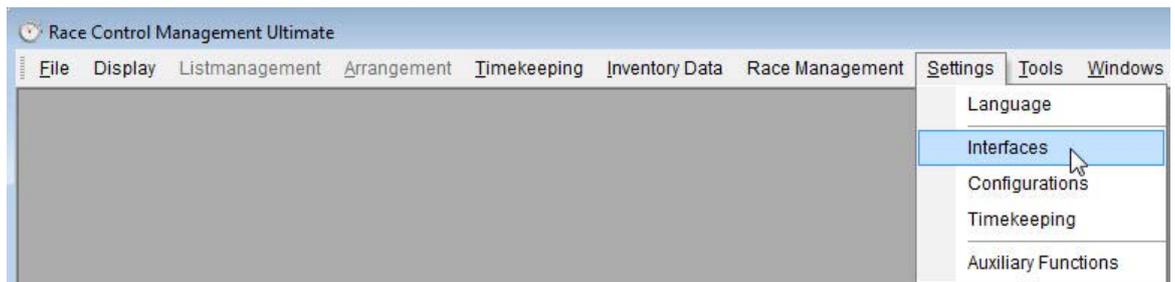
The timekeeping software of RC-Timing (RCM Ultimate, RCM Professional, RCM Advanced, RCM Beginners and RCM Kart) is equipped with a Service-Discovery-Manager, which enables an automatic connection to the clients like RCM Publisher Server, RCM Voice and all the others.

But first of all, the interface in the timekeeping software has to be enabled. Please run RCM Ultimate (or another application RCM Publisher is cooperating) and go to Settings/Interfaces. The checkbox “Publisher Interface activated” must be activated. If not, please do it and confirm this change with Save. Depending on the number of Publisher programs you have installed in your network, the number of connections must be set high enough.

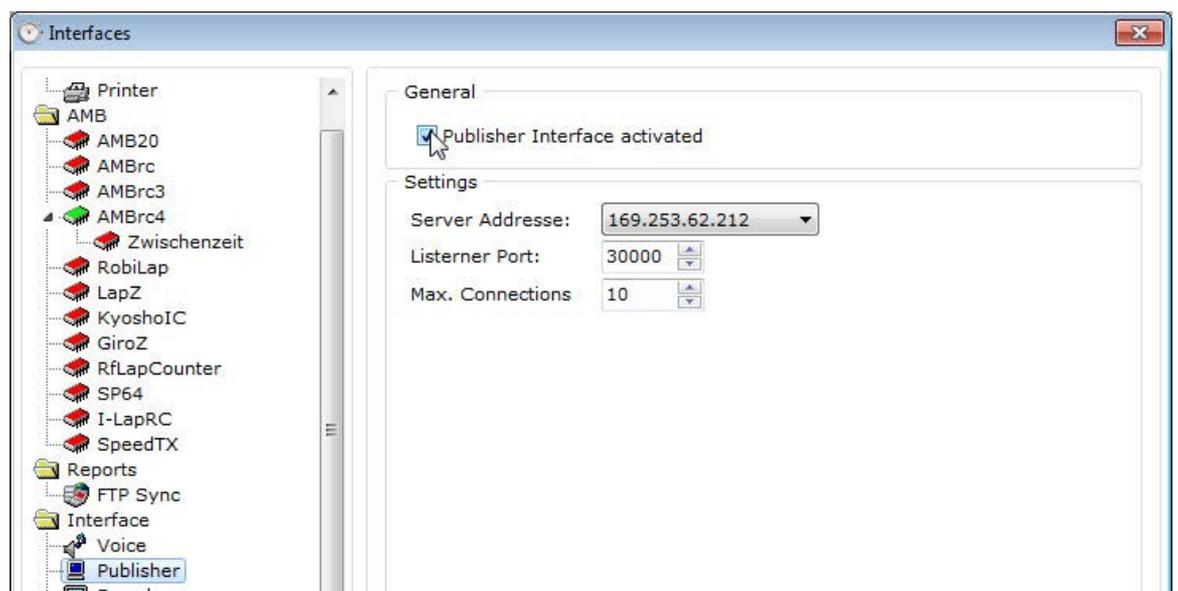
Now you start RCM Publisher Server and the program find the connection automatically, shown by the hint in the footline „Connected to RCM Publisher Interface“.

If this is not the case and in the footline “Connection Timeout!!!” is written, RCM Publisher Server is not connected to RCM Ultimate. In addition the bar just below the displayed clocks is colored red. You have to set the IP-address of the server manually.

Please run again RCM Ultimate (or another application RCM Publisher Server is cooperating) and go to Settings/Interfaces.

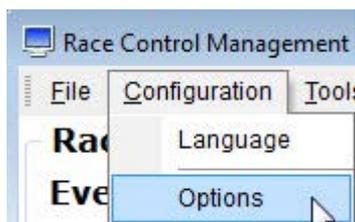


In the left column of the window you mark Publisher.

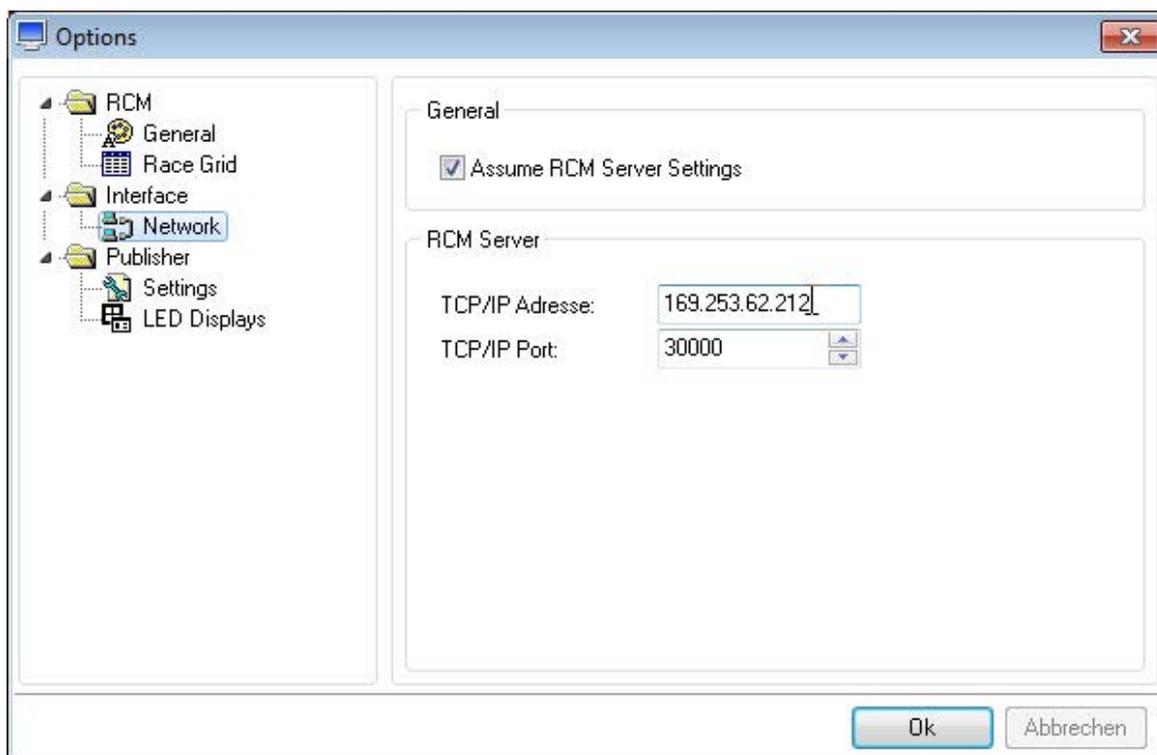


In the right column you now see the Server-IP-Address which must be set in RCM Publisher Server.

In RCM Publisher Server you choose Configuration/Options.



In this windows you mark on the left column Network and type the IP-Address you have found in RCM Ultimate into the field TCP/IP-Address.

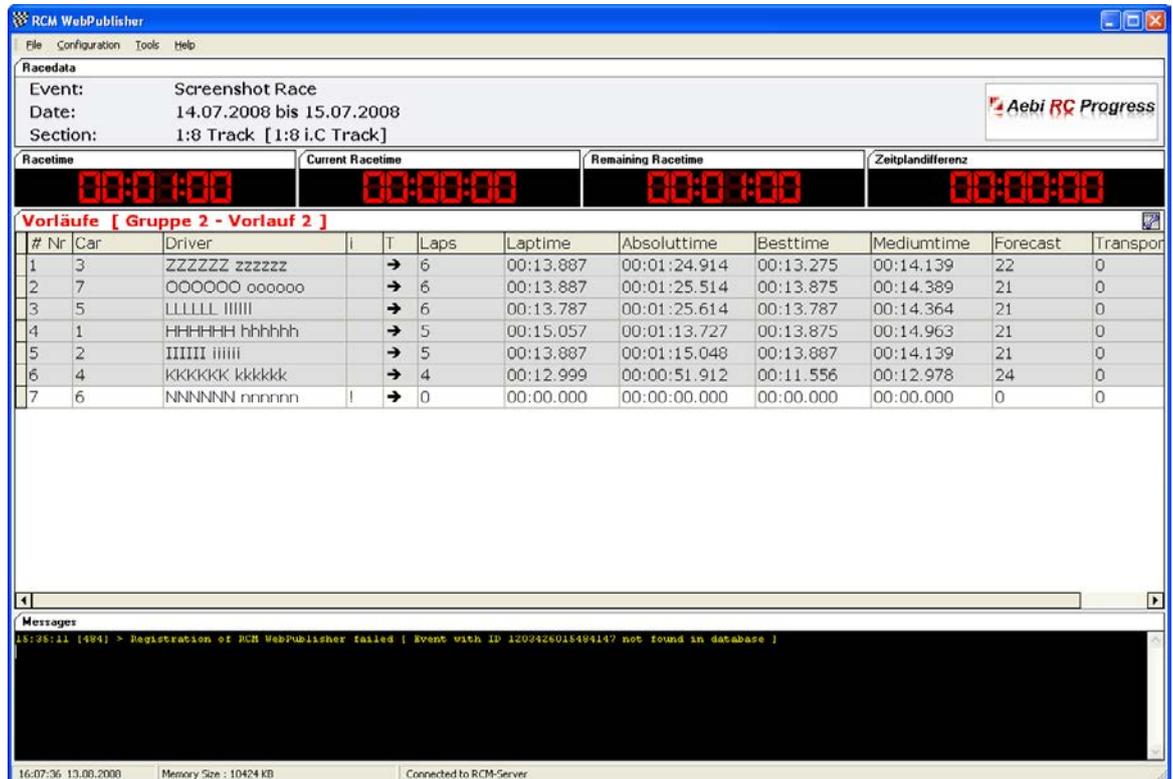


Please leave the number of the TCP/IP Port at 30000. Only with this port RCM Publisher Server is able to receive the necessary information from RCM Ultimate. Confirm your settings by clicking Ok. Now the footer line changes to “Connected to RCM-Ultimate“ and the color of the bar will change to white. Please consider, that it can take several seconds until RCM Publisher Server has found the connection to RCM Ultimate. In the footer line of RCM Ultimate you will find the information “Publisher: 1”.

If RCM Publisher Server can not establish a connection your network may be does not work properly. To check this, please open a Command Shell and type in PING <ip-adresse> (for example PING 255.255.255.158). If you got an error message (time limit exceeded), your network is not working properly and you have first to check the connections.

## 4 The RCM Publisher Server Window

RCM Publisher Server shows only information based on a race. No administration work is visible, the ranking is automatically correctly according to the used rule.



The screenshot shows the RCM WebPublisher interface. At the top, it displays 'Racedata' for 'Screenshot Race' on '14.07.2008 bis 15.07.2008' at '1:8 Track [1:8 i.C Track]'. Below this are four digital displays for 'Racetime', 'Current Racetime', 'Remaining Racetime', and 'Zeitplandifferenz', all showing '00:01:00'. The main section is titled 'Vorläufe [ Gruppe 2 - Vorlauf 2 ]' and contains a table with columns for '# Nr', 'Car', 'Driver', 'I', 'T', 'Laps', 'Laptime', 'Absoluttime', 'Besttime', 'Mediumtime', 'Forecast', and 'Transport'. The table lists 7 entries with various driver names and race statistics. At the bottom, a 'Messages' pane shows a warning: '15:45:11 [494] > Registration of RCM WebPublisher failed | Event with ID 1202426016494147 not found in database |'. The status bar at the very bottom indicates '16:07:36 13.08.2008', 'Memory Size : 10424 KB', and 'Connected to RCM-Server'.

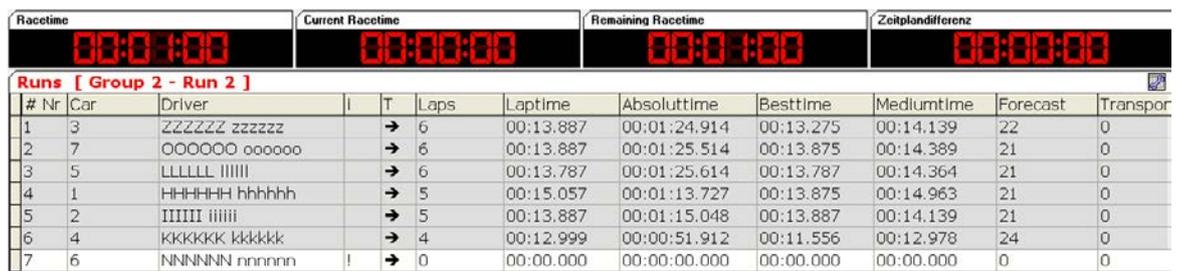
The window of RCM Publisher Server is divided in several parts where you find all useful information about a race.

In the upper part the Event, the date and the section is displayed.



This close-up shows the 'Racedata' section with the following information: Event: Screenshot Race, Date: 14.07.2008 bis 15.07.2008, and Section: 1:8 Track [1:8 i.C Track]. The Aebi RC Progress logo is visible on the right.

In the main (middle) part all data of the actual race is displayed and in the lower part you find messages regarding the internet-connection. Messages regarding data flow to applications are displayed.



This close-up shows the timing displays and the race results table. The displays show 'Racetime', 'Current Racetime', 'Remaining Racetime', and 'Zeitplandifferenz' all at '00:01:00'. Below is the 'Runs [ Group 2 - Run 2 ]' table, which is identical to the one in the main screenshot, listing 7 entries with their respective race statistics.

In the main part you find information on the racetime, the current racetime, the remaining racetime and the difference to the time schedule. Please note that this information can vary depending on the settings in RCM Ultimate.

In the line below you find the detail of the heat just running. Below this, the ranking is displayed.

Runs [ Group 2 - Run 2 ]												
# Nr	Car	Driver	i	T	Laps	Laptime	Absoluttime	Besttime	Mediumtime	Forecast	Transpor	
1	3	ZZZZZZ zzzzzz			→ 6	00:13.887	00:01:24.914	00:13.275	00:14.139	22	0	
2	7	OOOOOO oooooo			→ 6	00:13.887	00:01:25.514	00:13.875	00:14.389	21	0	
3	5	LLLLLL llllll			→ 6	00:13.787	00:01:25.614	00:13.787	00:14.364	21	0	
4	1	HHHHHH hhhhhh			→ 5	00:15.057	00:01:13.727	00:13.875	00:14.963	21	0	
5	2	IIIIII iiiiii			→ 5	00:13.887	00:01:15.048	00:13.887	00:14.139	21	0	
6	4	KKKKKK kkkkkk			→ 4	00:12.999	00:00:51.912	00:11.556	00:12.978	24	0	
7	6	NNNNNN nnnnnn			→ 0	00:00.000	00:00:00.000	00:00.000	00:00.000	0	0	

The information in the fields means in detail:

# Nr: The place (from top to bottom place 1 to last place)

Car: The number of the car in the starting position

Driver: Name of the driver

i: This is a field for information only. It changes its colour to red if the transponder passed the loop and stays red until the locktime is gone.

Laps: Number of laps of the driver

Laptime: Time for the last lap of the driver

Absoluttime: Time since the start for the last transponder passing

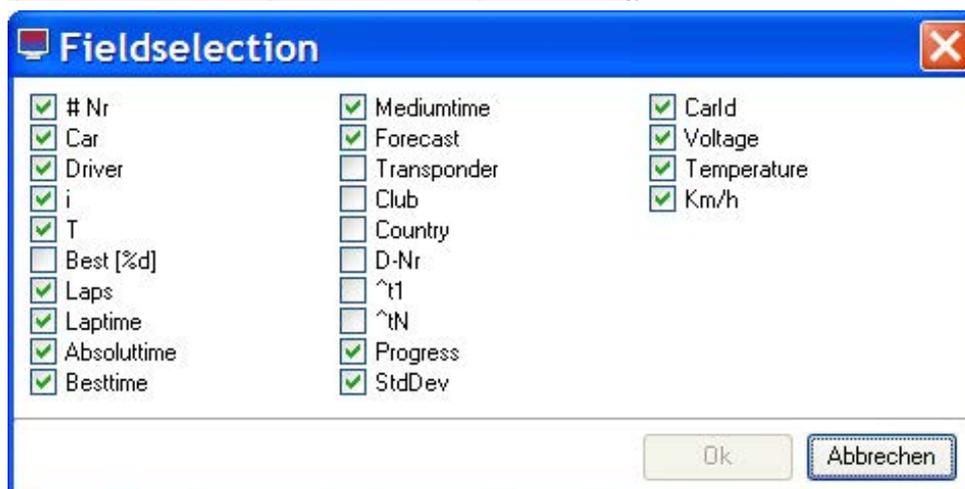
Besttime: Best laptime for the driver in this heat

Mediumtime: Average laptime for the last laps of the driver

Forecast: Forecasted number of laps for the driver under respect of the driving until now.

Additional columns will be shown like in RCM Ultimate. Please refer to the handbook of RCM Ultimate for more information.

Besides of this fields you can display more. To select more fields left click on the button in the upper right corner.



Besides of other you can activate here:

Transponder: Transponder number used by the driver

Club: Membership of the driver to a club

Country: The country of the driver

P-Number: Pilotnumber of the driver as produced in the heat arrangement.

Delay to the first vehicle (^t1): Distance in laps and time to the leader.

Delay to the next vehicle (^tN): Distance in laps and time to the car in front of the driver.

You can define the table to your wishes. The order of the columns can be varied by drag&drop. Left click on the column's name, hold the mouse key pressed and drag the name to the desired place. Then leave the key.

Racetime		Current Racetime	
00:01:00		00:00:00	
Runs [ Group 2 - Run 2 ]			
# Nr	Car	Driver	Laps
1	3	ZZZZZZ zzzzzz	→ 6
2	7	OOOOOO oooooo	→ 6
3	5	IIIIII IIIIII	→ 6

The width of columns in the table can easily be adjusted by clicking on the parting line in the header of the table. Hold the mouse key pressed and move the line to the position you need.

Racetime		Current Racetime	
00:01:00		00:00:00	
Runs [ Group 2 - Run 2 ]			
# Nr	Car	Driver	Laps
1	3	ZZZZZZ zzzzzz	→ 6
2	7	OOOOOO oooooo	→ 6
3	5	IIIIII IIIIII	→ 6

In Configuration/Option you can adjust the typeface, the size of the typeface and the colours to your wishes. We recommend to adjust the typeface for a good visibility on the monitor you are using.

#### 4.1 The messages window

In the lower part of the RCM Publisher Server window messages regarding the data flow to applications are displayed.

```

20:06:59 [822] > HTTP Interface is listening on 127.0.0.1 / 192.168.123.22 (port 80)
20:07:00 [272] > XML file has been written with new data
20:07:09 [512] > Client 127.0.0.1 has requested XML data
20:07:09 [592] > Client 127.0.0.1 has requested XML data
20:07:09 [598] > Client 127.0.0.1 has requested XML data
20:07:23 [318] > Client 192.168.123.22 has requested XML data
20:07:23 [377] > Client 192.168.123.22 has requested XML data
20:07:23 [402] > Client 192.168.123.22 has requested XML data
20:07:31 [685] > Client 192.168.123.22 has requested XML data

```

After launching RCM Publisher Server (and after connection to RCM Ultimate) you should see the messages like "HTTP Interface is listening on 127.0.0.1 / 169.253.62.175 (port 80)".

When running a race and when time keeping is running, you should see repeated messages like „XML-file has been written with new data“ or „Client 192.168.123.54 has requested XML data“. This indicates that new data from RCM Ultimate has been received and/or an application has requested new data.

## 5 File

### 5.1 Close

RCM Publisher Server will be closed.



## 6 Configuration

### 6.1 Language

With Configuration/Language you can set the languages used by RCM Publisher Server.



The languages available will be displayed and you can activate the language you want to use. Confirm your selection with Ok and all displayed texts will be changed immediately.

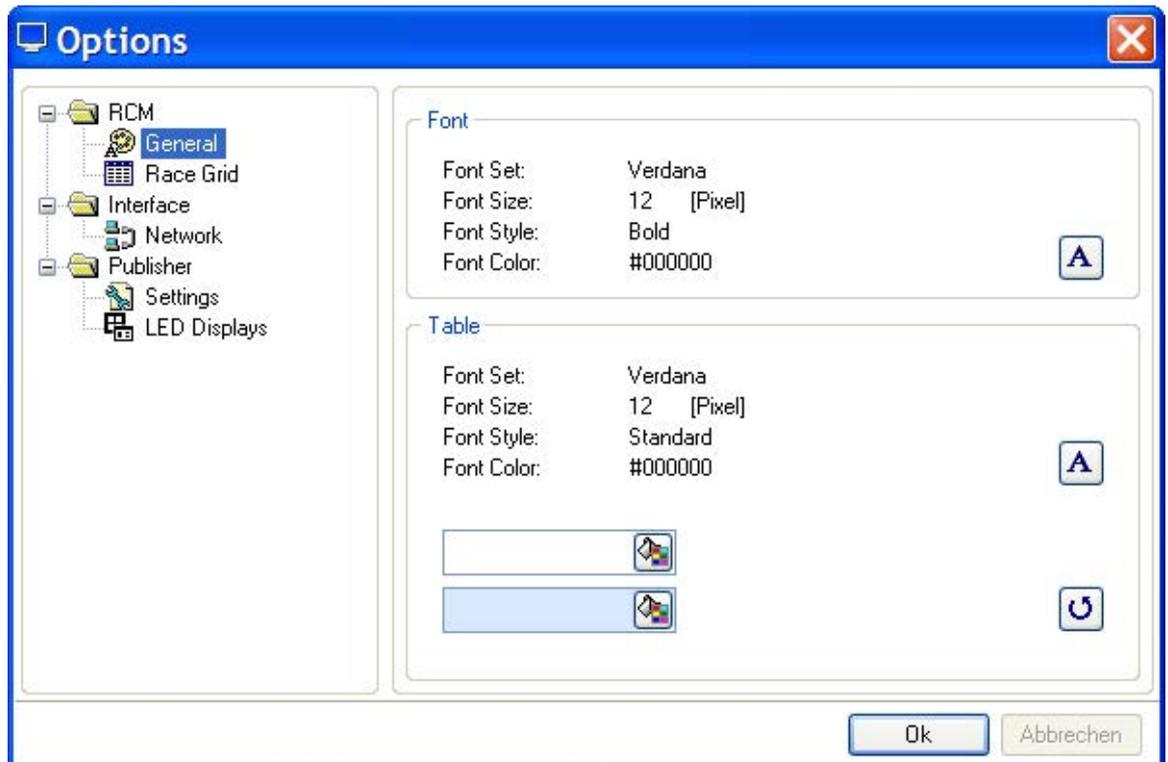


## 6.2 Options

The options allow you to to change the settings for RCM Publisher Server. You access it through Configuration/Options

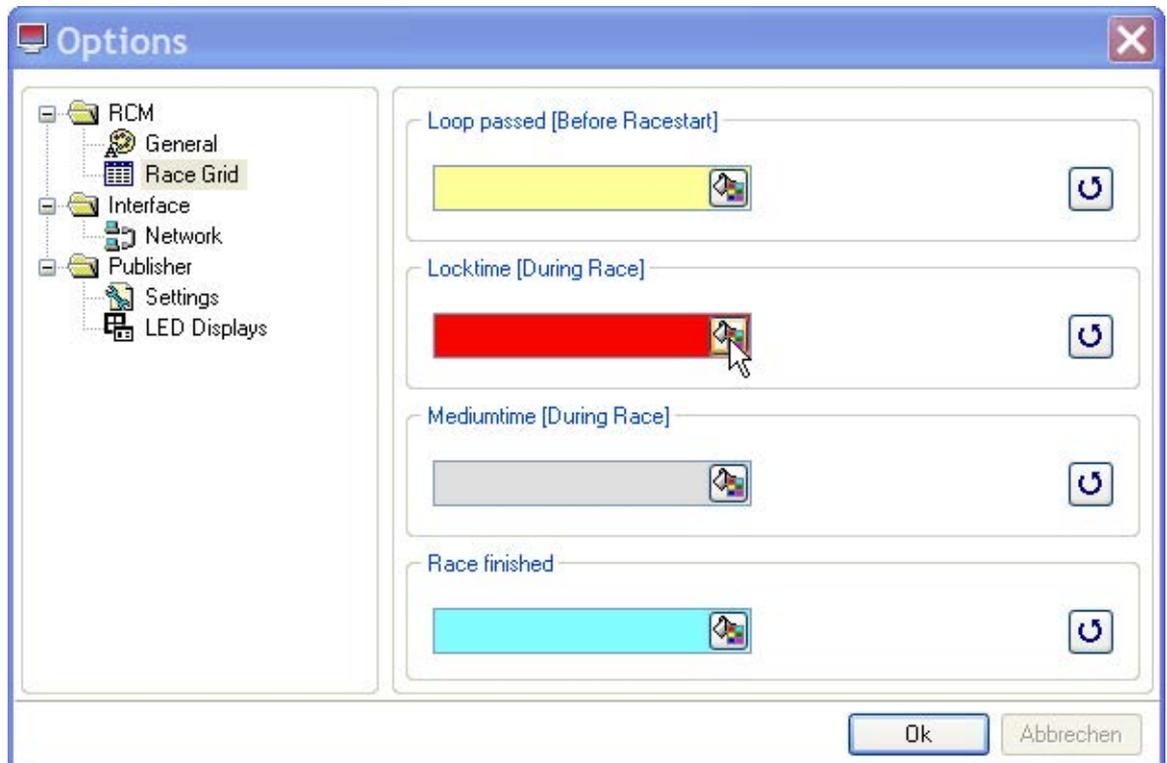
### 6.2.1 RCM/General

Marking in the left column General, you can set up the fonts, the fonts size and some colours used by RCM Publisher. You can set the Fonts for tables independent from the other text. The colours shown on the bottom of the column are used to make tables better readable. If you want to change these colours, please use light and different colours.



## 6.2.2 RCM/Race Grid

The colours a driver will be marked in the time keeping can be set here.  
 Loop passed (default light yellow): When a driver passes the loop and the transponder number is registered to a driver, it will be marked in that colour. This makes it easy to check whether all drivers are on the track or not.



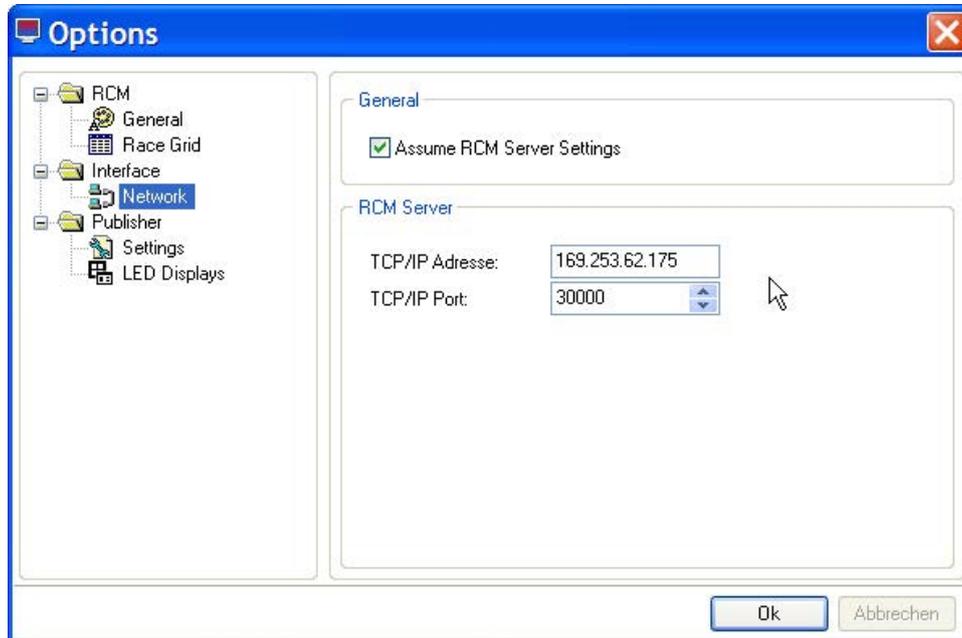
Locktime (default red): This marking is visible for the locktime. In between this time no additional laps are counted but in the lap time logfile these laps are visible and marked with "NOK". This means,, that these laps will not be counted for the result.  
 Mediumtime (default grey): Drivers usually drive their laps continuously in the time frame. This time frame is the medium time plus or mines a certain time ratio. If this medium time plus the ration time is expired the driver line will be marked in light grey and means the driver was slower. This can be an accident, a pit stop or a roll over situation.

Race finished (default light blue): When the race time is over and the driver passes the last time the loop then the driver is marked light blue and has completed the race. Additional laps will not be counted anymore, even if the driver continues racing.

### 6.2.3 Network

In Network you have to configure the IP-Address of the computer where the timekeeping-software is running (as described in First Steps in this manual). RCM Publisher needs a network connection to this computer.

You should activate the option "Assume RCM Ultimate Settings".

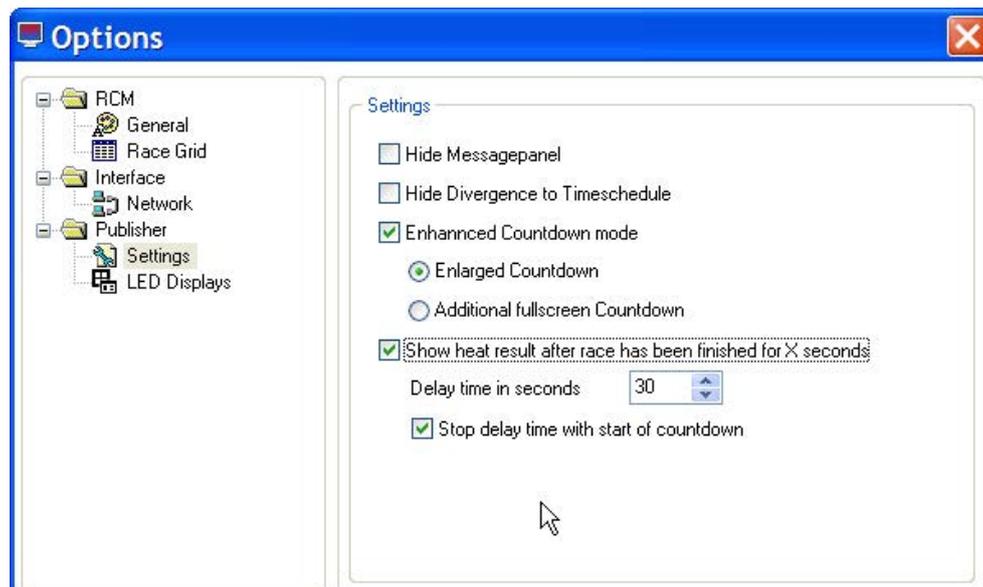


### 6.2.4 Publisher/Settings

Hide Messagepanel: You can hide the messagepanel below. This means, that the display window swill be larger. This can be usefull if the number of drivers in a heat is very high. More drivers can be displayed.

Hide divergence to timeschedule: When activated, the divergence to the timeschedule is not shown.

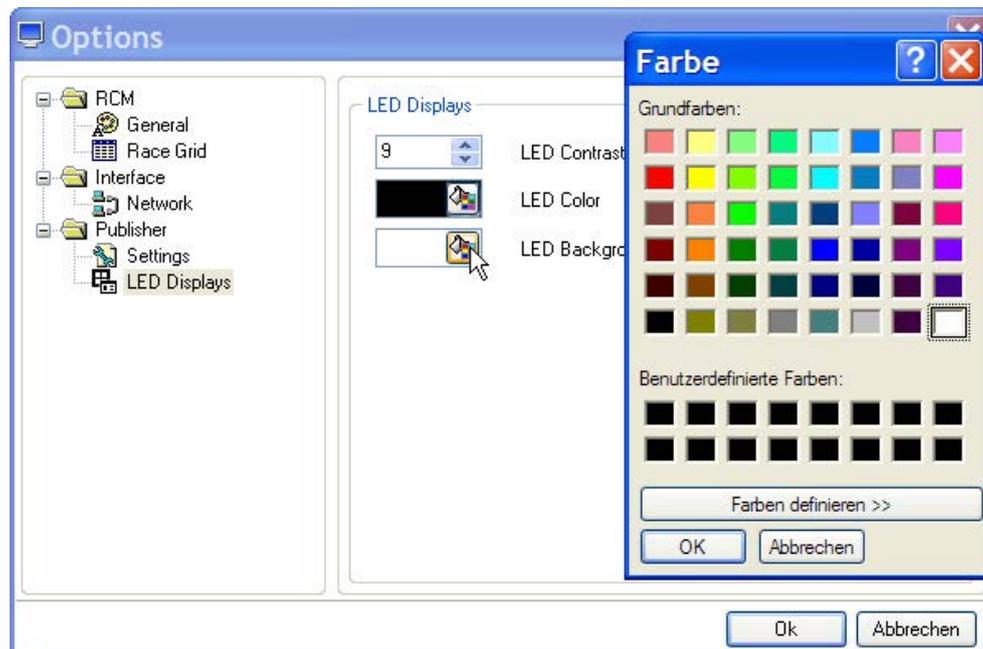
Enhanced Countdown mode: If activated, a big clock is shown with the countdown time or the countdown clock will be displayed larger, when a countdown is running on RCM Ultimate. This depends on the option you choose.



Show heat result after race has been finished for X seconds: If activated, the result is shown on the screen for a defined time. This time can be determined in seconds. If "Stop delay time with start of the countdown" is activated, the screen is switched to the new group when the countdown for the race is started.

### 6.2.5 Publisher/LED Displays

Here the contrast, Color and the backgroundcolor of the LED-Displays can be set.



## 7 Tools

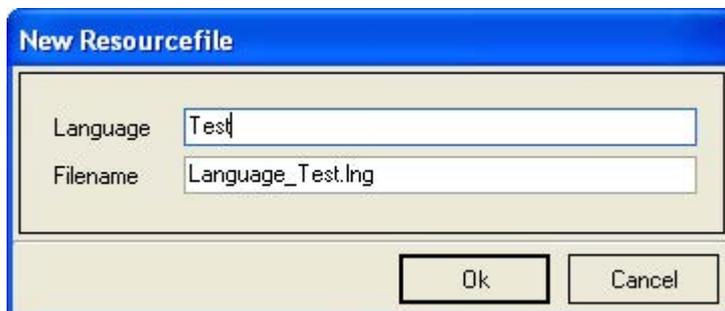
### 7.1 Language Editor

#### 7.1.1 Create a new language

The language editor can be used to create a new language set. The name of the new language must be created in the menu Configuration/Language.



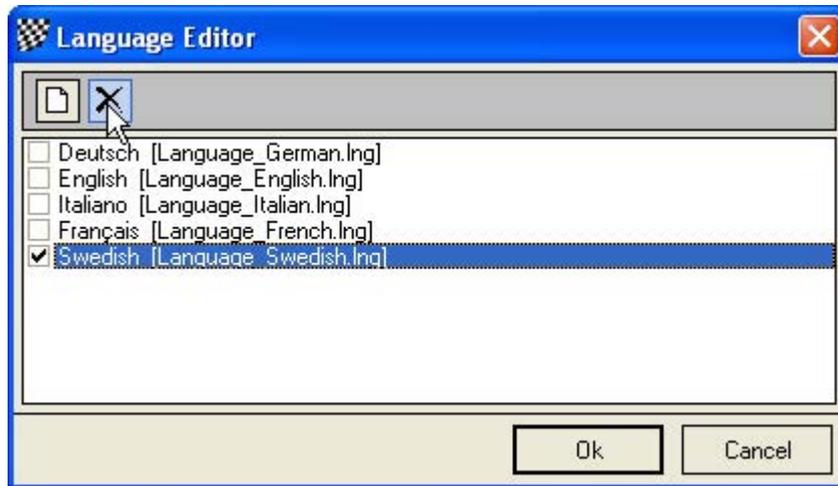
Left click on English and click on the notepad-field in the upper left corner. This opens a window in which you have to type in the new name of the Language you want to create. You have only to type in the name in the Language field.



The filename will be automatically created and should not be changed. For the name of the language please use the English description. When you confirm your input with Ok, a new set based on the English set will be created. Now you can translate all text with the language editor.

### 7.1.2 Delete a Language

With Configuration/Language you can also delete a language, except German, English, Italian and French. Left click on the language and click on the square with the cross in the upper left corner.



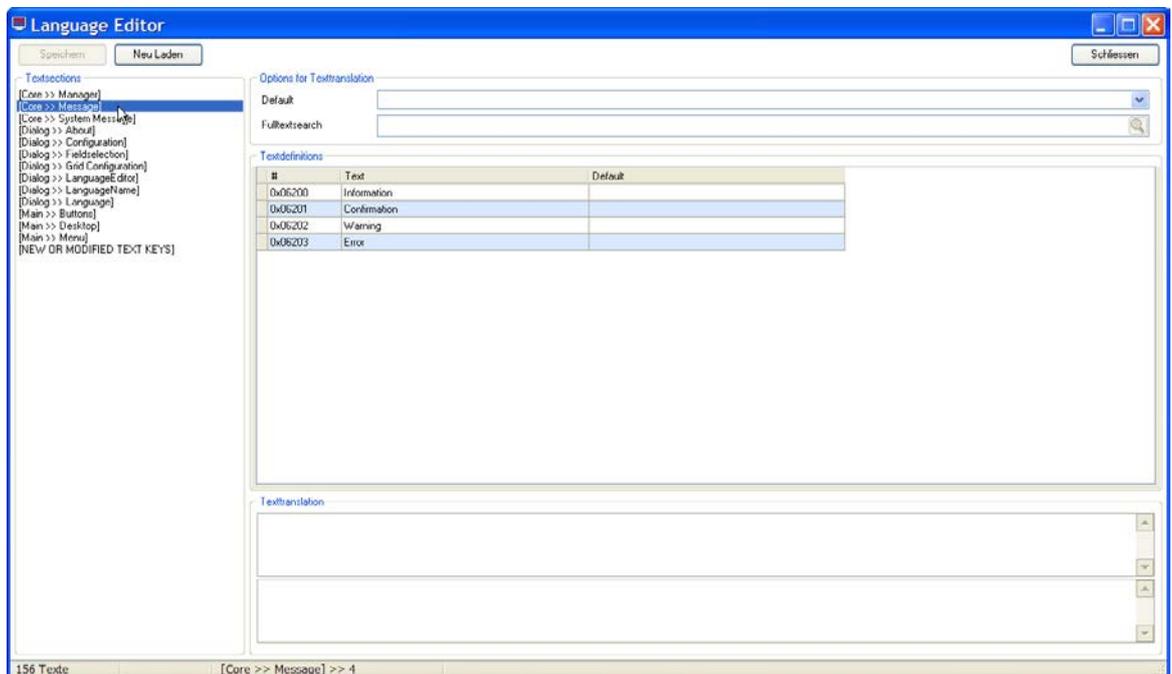
You will be asked if you really want to delete the language. Confirming this with Ok, the language will be deleted. Please be careful using this function cause it takes a lot of time to make a translation.

### 7.1.3 Language editor

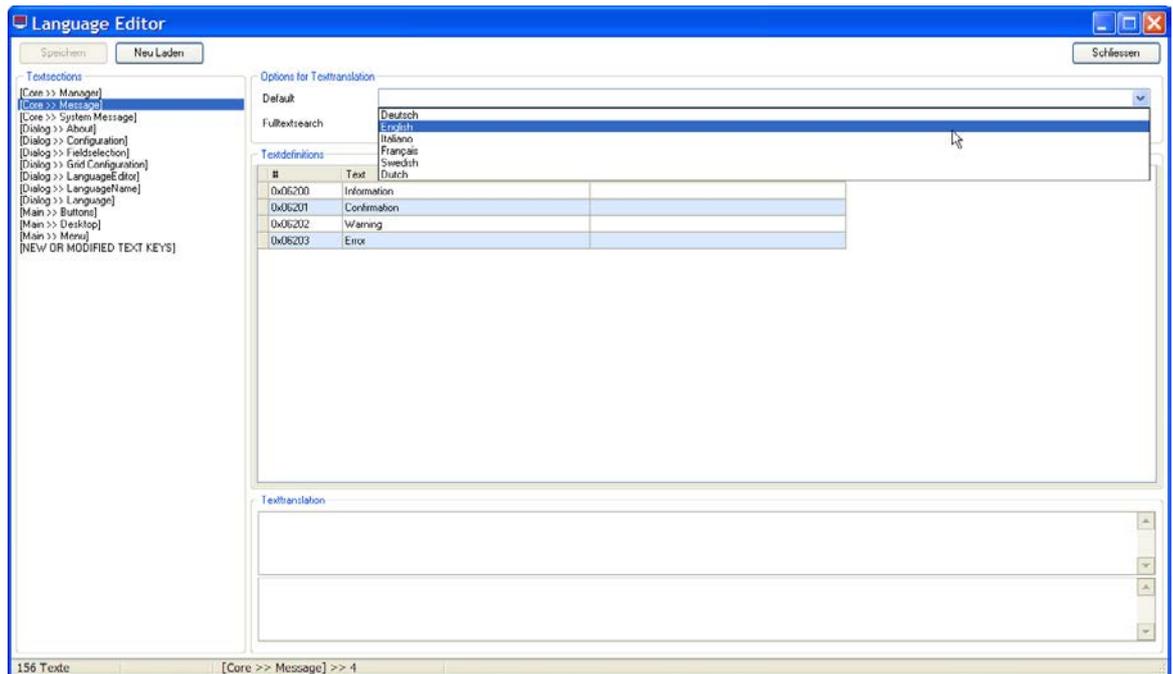
The Language editor allows to you to change all the text used by RCM Publisher Server. Furthermore it is possible to generate new language sets and to translate all the text into a desired language.



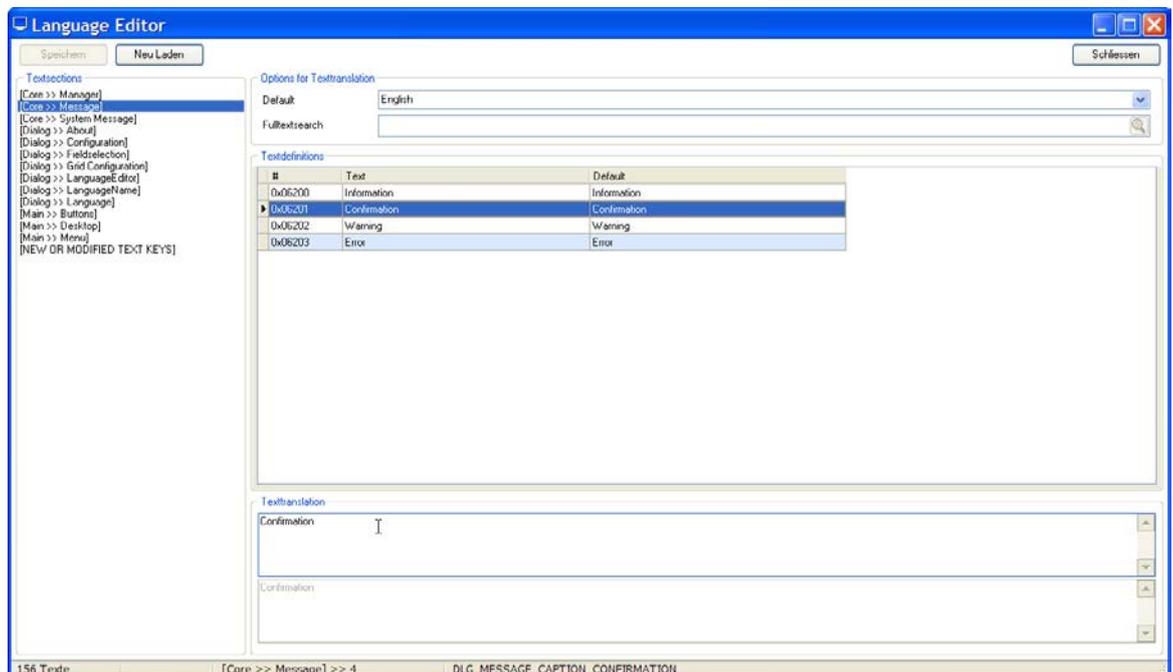
The windows of the language editor shows you in the left column a menu ordered to topics which are based on the use of windows and/or functions. If one of these topics are marked, you see in the right column a table of all the text definitions related to this topic.



On top of the right column you can define a default language. This will be active, when you mark another topic on the left side.

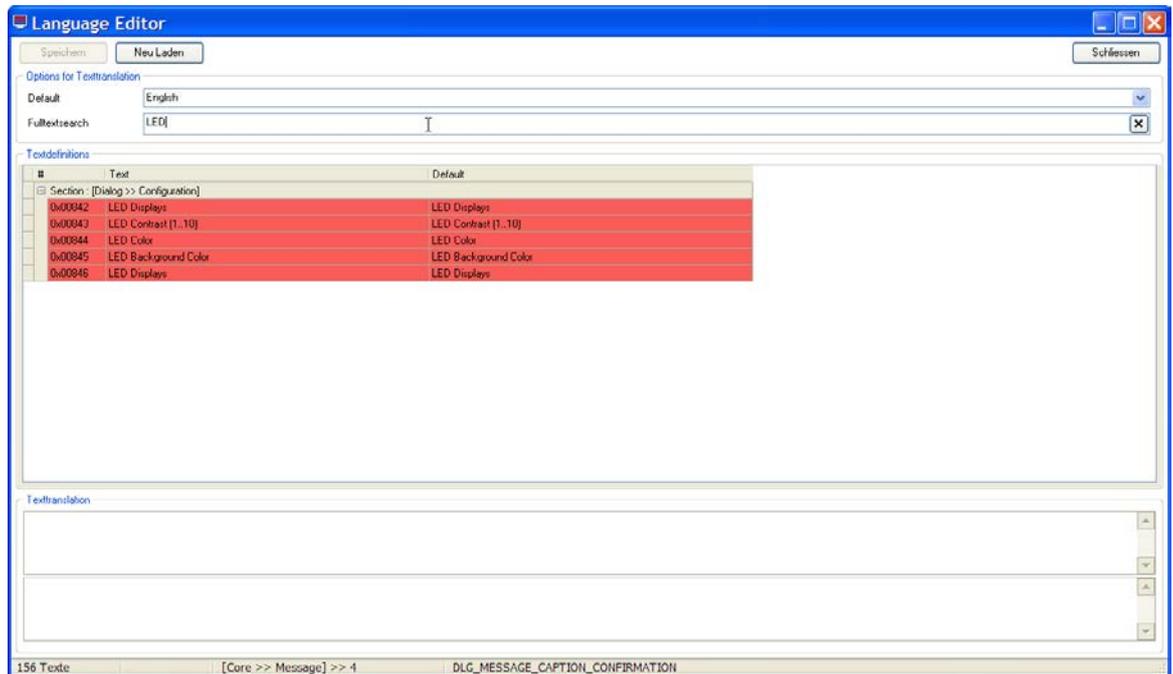


After having selected a topic in the left column you have to mark the text in the right column. You can change the text below in the field Texttranslation. Please note, that the changes will only be effective, when you finish by clicking the Save-button.



If you have created a new language file and want to translate it, make sure that RCM Publisher Server uses this language (Configuration/Language/RCM Language). Cause the new set is based on the English Set, all text is now in English. The next step is to translate all text with the language editor. For a better understanding of all text we recommend, that you use the default-setting of the language editor to have the text also displayed in that language you are familiar. Please note again, that you have to save (with the Save button) all your changes before you select another topic in the left column of the language editor.

With Fulltextsearch you can search for a Text or parts of a text. Just enter the desired text in this field and a new windows appears, in which you can change the text definitions.



## 8 Help

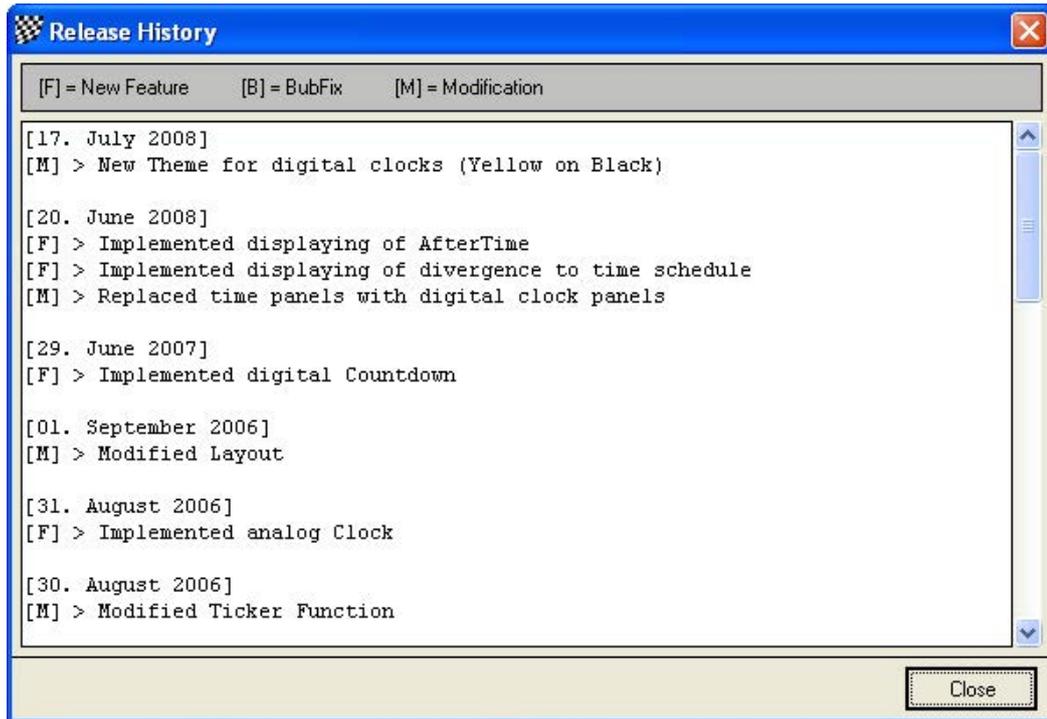
### 8.1 Release history

The release history is a text file with comments to all changes/devolepements have been made for this application.



The single entries are marked with letters: [M] = modification, [B] = bug fixing and [F]= new function.

When you get a new version we recommend that you read the release history to be informed on the news of RCM Publisher Server.



## 8.2 Info

Here you find the release version of RCM Publisher Server.



## 9 Concluding remarks

We hope you enjoy RCM Publisher Server. If you have any questions or any problems please contact us. Simply write an email to [support@rc-timing.ch](mailto:support@rc-timing.ch). Please do not forget to include the program name and the version number you are using. This will help us to answer your questions without any delay. If you are not known to us as a contact person of one of our customers, we should also know the contract number.

RC-Timing  
Felix Romer  
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