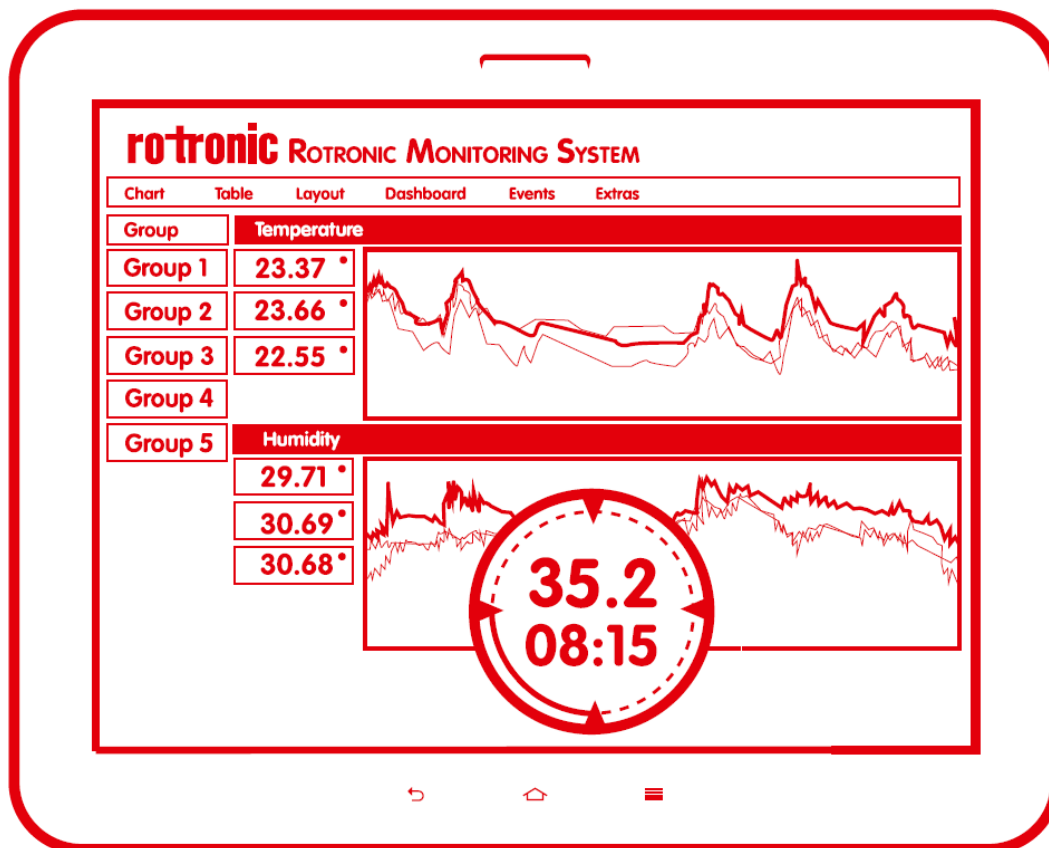


Troubleshooting Guide

This troubleshooting guide documents the most frequently occurred problems during RMS installation and commissioning.

Product

Name	RMS Software
Number	11070



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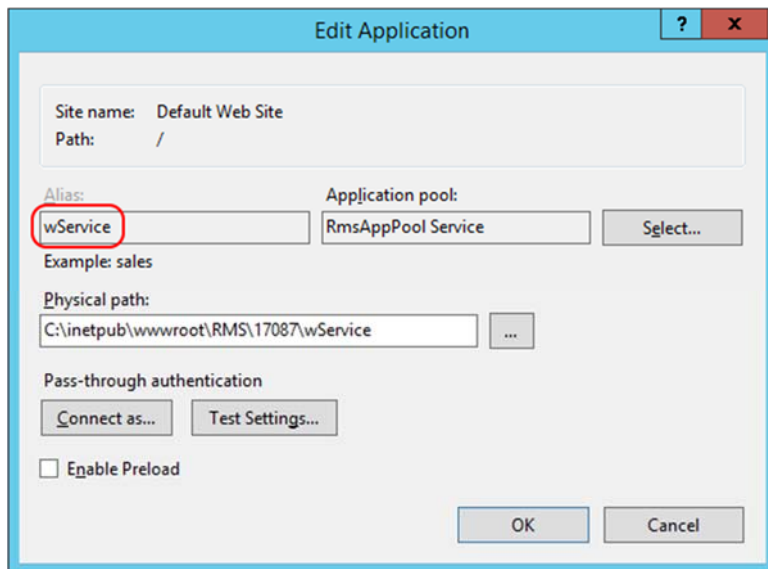
1. Installation

1.1 wService or rmsService?

What is the right URL for my WebService?

- <server>/**wService**.wService3.DeviceService.svc
- <server>/**rmsService**.wService3.DeviceService.svc

The service name is defined on creation of the service application in Internet Information Services Manager.



1.2 Web Service Page Error 404

HTTP Error 404.3 - Not Found

The page you are requesting cannot be served because of the extension configuration. If the page is a script, add a handler. If the file should be downloaded, add a MIME map.

Most likely causes:

- It is possible that a handler mapping is missing. By default, the static file handler processes all content.
- The feature you are trying to use may not be installed.
- The appropriate MIME map is not enabled for the Web site or application. (Warning: Do not create a MIME map for content that users should not download, such as .ASPX pages or .config files.)
- If ASP.NET is not installed.

URL (z.B): <server>/wService3.DeviceService.svc/GetTimeString

Are "WCF Services" and "HTTP Activation" enabled in the Windows Features?

- .NET Framework 4.5 Features (4 of 7 installed)
 - .NET Framework 4.5 (Installed)
 - ASP.NET 4.5 (Installed)
- WCF Services (2 of 5 installed)
 - HTTP Activation (Installed)
 - Message Queuing (MSMQ) Activation
 - Named Pipe Activation
 - TCP Activation
 - TCP Port Sharing (Installed)

1.3 Web Page Error 500

Server Error

500 - Internal server error.

There is a problem with the resource you are looking for, and it cannot be displayed.

- ➔ Check the web.config file in the folder "wPage" for invalid changes or use a new clean file and modify again the connection string

1.4 Test Database connection string

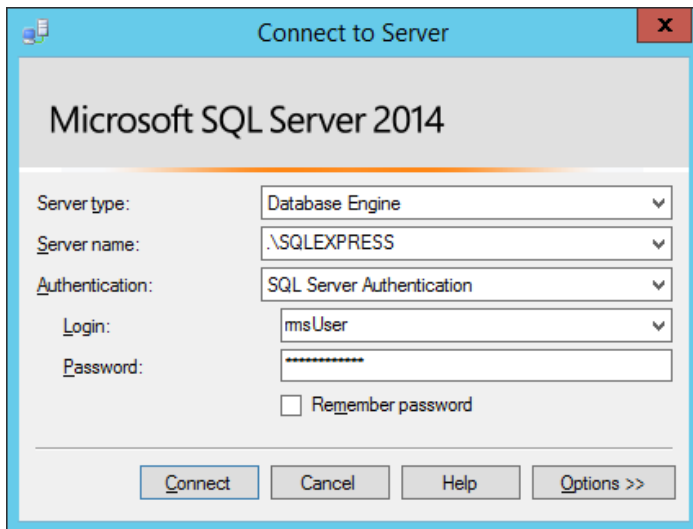
Ensure that your username and password for your database are actually working

Connection.config or Web.config

```
<connectionStrings>
  <add name="DataContext" providerName="System.Data.SqlClient"
  connectionString="Data Source=.\SQLEXPRESS;
    Initial Catalog=RMS;
    Persist Security Info=True;
    User ID=rmsUser;
    Password=rmsPasswordExample" />
</connectionStrings>
```

Use the credentials in the config file to log in the SQL Server Management Studio

Caution: the password is probably not "rmsPasswordExample", use the defined password on database installation.



When the login is successful and the RMS database tables are accessible, the credentials in the config file are correct.

Different Types of SQL Server:

Local SQL Express	Data Source=.\SQLEXPRESS
Remote SQL Express	Data Source=SERVERNAME\SQLEXPRESS
Local SQL Server	Data Source=SQL_INSTANCE_NAME
Remote SQL Server	Data Source=SERVERNAME\SQL_INSTANCE_NAME

1.5 Webservice Database Connection failed

URL: <server>/wService.wService3.DeviceService.svc/TestDatabase

1.6 See previous chapter "Web Page Error 500

Server Error

500 - Internal server error.

There is a problem with the resource you are looking for, and it cannot be displayed.

- Check the web.config file in the folder "wPage" for invalid changes or use a new clean file and modify again the connection string

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➔ Test Database connection string"

1.7 Web Page Database Connection

[Only for RMS V1.1.x]

The connection string looks different than in the wService config file:

```
<connectionStrings>
  <add name="wData2Entities"
  connectionString="metadata=res://*/Model.wContext.csdl|res://*/Model.wContext.ssdl|res://*/Mod
  el.wContext.msl;
  provider=System.Data.SqlClient;
  provider connection string=&quot;
  data source=.\SQLEXPRESS;
  initial catalog=RMS;
  Persist Security Info=True;
  User ID=rmsUser;
  Password=rmsPasswordExample;
  MultipleActiveResultSets=True;
  App=EntityFramework&quot;;" providerName="System.Data.EntityClient" />
</connectionStrings>
```

- ➔ Do not remove any characters or insert spaces except the yellow marked!
- ➔ In doubt, use a completely new and unchanged config file

2. Register

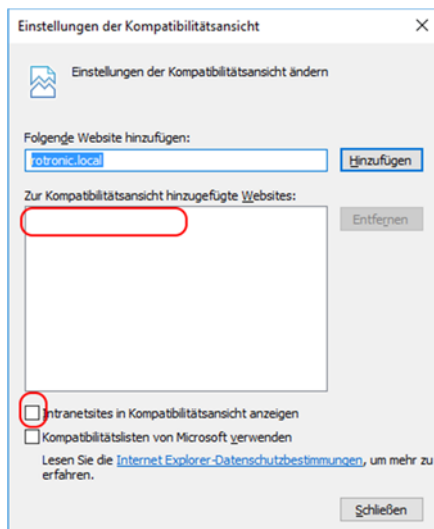
2.1 Error Message: An Error has Occurred

- Error on the connection to the database. Check the connection string in the config file. (see Test Database connection string)

2.2 Your Browser is outdated

But your Browser is IE11 and should be supported by RMS

- Check that you not use the "compatibility mode" in the IE Settings



- The RMS Page should not be listed here
- "Intranet sites" should not be checked

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3. Login

3.1 I forgot my Password

Log in by using another administrator and reset the password in the user setup

If there is no way to log in, then the password can be cleared in the database:

1. Log in to the SQL Server management Studio
2. Open the Database RMS
3. Open the Table "dbo.Users" (Right click, edit first 200 rows)
4. Clear the content in the column "Password" for the desired user

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4. RMS-Config

4.1 Device not found in RMS-Config

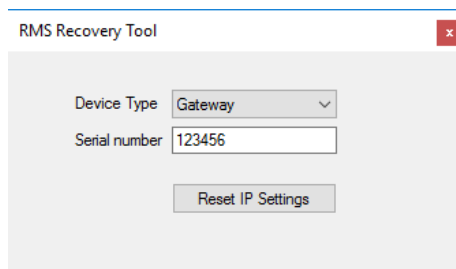
4.2 Device not found after programming invalid IP-Address

Some IP Addresses are not valid and after programming of such an Address, the device cannot be found anymore.

List of invalid IP Addresses:

IP Address	0.0.0.0 to 0.255.255.255 127.0.0.0 to 127.255.255.255 224.0.0.0 to 239.255.255.255 255.255.255.255
------------	---

→ A Recovery tool is available in order to reset the IP settings of a device to the factory defaults.



1. Enter the right device type and serial number
2. Press "Reset IP Settings"
3. Wait 10 seconds while the device reboots
4. Search the device again in RMS-Config

4.3 Button "Add" is grayed out

The device can be found in the search dialog, but cannot be added. An error icon appears in the column Network status.

→ Press "Network configuration" and enter a valid IP address and subnet mask for the device

4.4 Device is write protected

Error Message: "Device is write protected" while trying to program the Network and Webservice settings.

→ Press the Key on the device for 8s and try again

4.5 Service Path

What is the right path for the Web-Service?

- `/wService.wService3.DeviceService.svc`
- `/rmsService.wService3.DeviceService.svc`

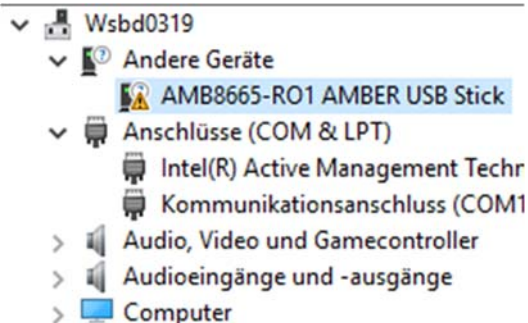
Web-Service	
Host	192.168.1.1
Pfad	/wService.wService3.DeviceService.svc
Anschluss	80

See description in: wService or rmsService?

4.6 Search "Wireless devices" is grayed out

But the USB-Antenna is plugged in!

Open the device manager and search for exclamation mark under "other devices"



Or search for "USB Serial Converter" under USB-Controller



Reinstall the FTDI USB driver:

- Download the newest driver from <http://www.ftdichip.com/Drivers/VCP.htm> (Windows x64) and extract the files in an empty folder.

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- Right click on the selected item in the device manager and select "Reinstall driver"
- Select "Search on the computer"
- Select the folder, where the downloaded files are located

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5. Device Pairing

5.1 No Gateway can be selected (Add rf device)

- Navigate to the group where the desired gateway is located

5.2 Gateway goes not in pairing mode

- Restart wService Application Pool (see How to Restart the Application?)

5.3 Rf Device cannot be paired

Check the LED of the device

- After pressing the button, the red LED should blink 5x fast (10x on 915MHz).

If the LED blinks green, orange or red 1..3 times:

- Unpair the device by pressing the button for 5s
- The red LED blinks 3x slow
- Try again to pair by pressing the button once (short press, like mouse click)

5.4 Device Properties cannot be read

However, the device is not offline!

- Restart wService Application Pool (see How to Restart the Application?)

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6. Using RMS

6.1 Delete Device or measuring point not allowed

Error message: "Delete not allowed, use archiving instead"

- Enable deleting of measure point in "Setup-System"

6.2 Cannot recreate deleted user

Why can I not recreate a deleted user?

- The user remains in the database, but marked deleted. It is not allowed to create a new user with the same username who is actually another person. The assignment to the user in the audit trail must clearly.

6.3 Phone Alarm does not work

Why does the phone alarm not work for me?

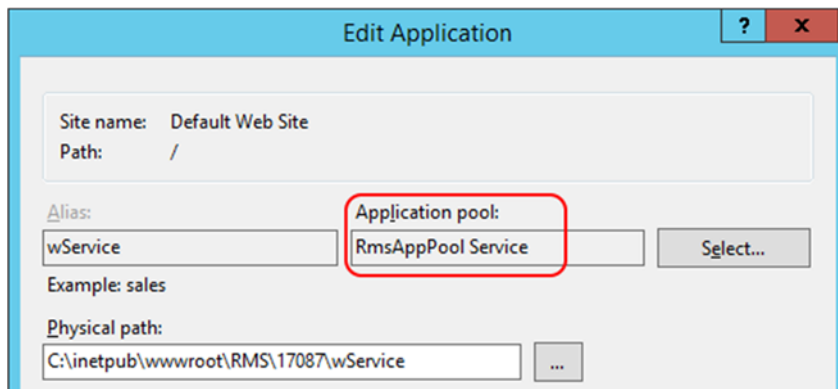
- The user should define his phone number in the user setup
- The destination country must be enabled
- The callback on the RMS server must be available from the internet (URL: CallController.ashx)

7. FAQ

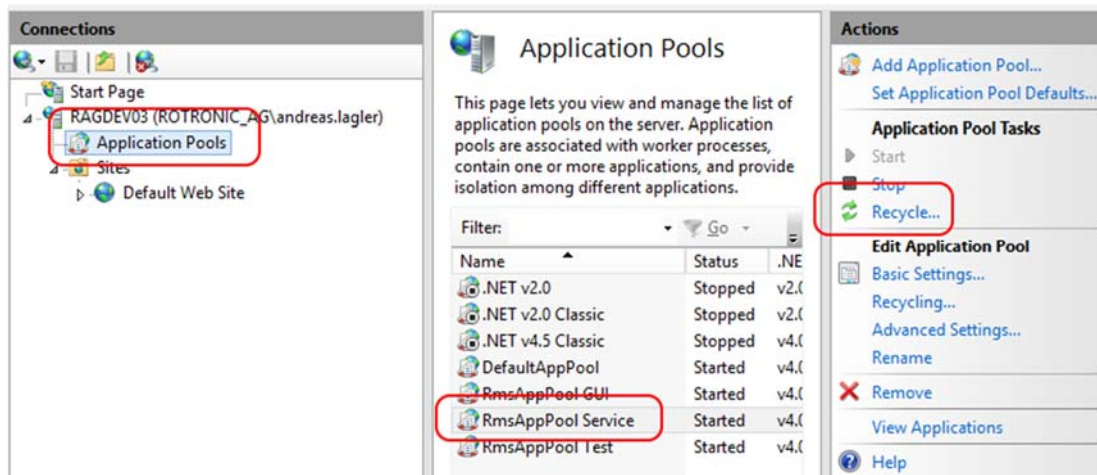
What is the URL of my RMS WebPage?

7.1 How to Restart the Application?

1. Determine the application pool name



2. Select the application pool and click "recycle"



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7.2 How to configure automatic logout?

Check the web.config file of the wPage application

```
<authentication mode="Forms">
  <forms loginUrl="Login.aspx"
    protection="All"
    timeout="1440"
    name=".ASPXAUTH"
    path="/"
    requireSSL="false"
    slidingExpiration="true"
    defaultUrl="Default.aspx"
    cookieless="UseDeviceProfile"
    enableCrossAppRedirects="false" />
</authentication>
```

timeout	User will be logged out after the defined time (in Minutes). Default is 1440min = 1Day
slidingExpiration	Sliding expiration resets the expiration time for a valid authentication if a request is made and more than half of the timeout interval has elapsed.

7.3 Can I send an email to a user without RMS account?

No, every user has to be added to the RMS. However, a user can be added without any user rights, so his email can be used but he cannot view any data in the RMS.

7.4 What are valid IP Address settings?

Determine the IP Address of your Computer:

Open a console by pressing the "Windows-Key and type "cmd"

Enter the command "ipconfig"

```
Ethernet-Adapter Ethernet:

Verbindungsspezifisches DNS-Suffix: rotronic.local
Verbindungslokale IPv6-Adresse . . : fe80::d1db:2dd8:d921:58fc%9
IPv4-Adresse . . . . . : 10.75.22.20
Subnetzmaske . . . . . : 255.255.255.0
Standardgateway . . . . . : 10.75.22.1
```

Typical IP address	Typical IP Address for Intranet use: 192.168.x.x and Subnet Mask 255.255.0.0 or 255.255.255.0
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	10.x.x.x and Subnet Mask 255.0.0.0 or 255.255.0.0 or 255.255.255.0
Invalid IP-address	0.0.0.0 to 0.255.255.255 127.0.0.0 to 127.255.255.255 224.0.0.0 to 239.255.255.255 255.255.255.255
Invalid Subnet Masks	0.x.x.x 255.255.255.255 Subnet may not be the same as the IP address
Gateway	Gateway may not be the same as the IP address Gateway must be in the same subnet than the IP Address

7.5 What happens, when an Alarm occurs while a device is offline

- As soon as the device is online again, the missing measured values are downloaded from the device.
- If an alarm is detected in the downloaded data, an entry in the alarm table will be created, but no notification will be released.
- If the alarm is still active, the configured notification will be released.

7.6 What application layer Ethernet protocols are used by the devices

Webservice Client	TCP, Port 80	HTTP	Connection to the webservice, measurement data and commands.
DNS Client	TCP, Port 53	DNS	Webservice URL resolution.
DHCP Client	UDP, Ports 67, 68	DHCP	Dynamic network configuration.
Discovery Server	UDP Broadcast, Port: 502	Proprietary	Used to search devices within the subnet.
Modbus Server	TCP, Port 502	Modbus TCP	M2M communication, also used by RMS-Config.

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8.1 RMS update

If the wService is not linked to the new wService, you will not be able to add devices with Converter.

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