



# Installation Guide

## WirelessServer Software

Release Datum: 08.05.2017

M-000010.en v1.2.0

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## 1. Introduction

This guide describes how to install the WirelessServer software, which is part of the Mobility Monitor Wireless System.

The installation of the client application "Mobility & Care Manager" and the creation of the database are described in separate instructions.

### 1.1. WirelessServer Software (Brief description)

The WirelessServer, an application installed as a Windows service, connects to one or more receivers and manages communication with the mobility monitors. It also accesses the Mobility & Care Manager database and stores the received measurement data there.

The installation of the WirelessServer takes place via an MSI installer. Administrator rights are required for the installation.

The installation also includes the WirelessServer Manager and the TinyMesh Visualizer. The two tools are not absolutely necessary for operation and can also be installed on a workstation with TCP / IP access to the server.

## 2. System requirements

|                  |  |
|------------------|--|
| Operating System | Windows 7 (32 and 64 Bit) or newer<br>Windows Server 2008 R2 or newer  |
| Processor        | 1.4 GHz (2 GHz recommended)  |
| Harddisk-memory  | 50MB   |
| Ram-memory       | 1 GB (2 GB recommended)  |
| .NET-Framework   | .NET Framework 4.5 or higher (only if WirelessServer Manager or TinyMesh Visualizer is installed locally on the same server) |

## 3. Download the Software

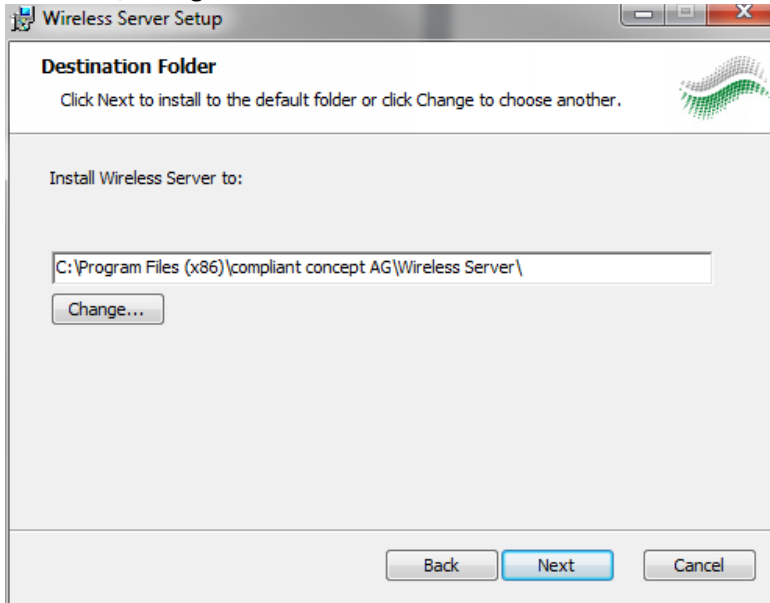
1. Go to [www.compliant-concept.ch](http://www.compliant-concept.ch) and select Support. Clicking on software on the left will open a page where you will find the download link for the WirelessServer software.

## 4. Installation

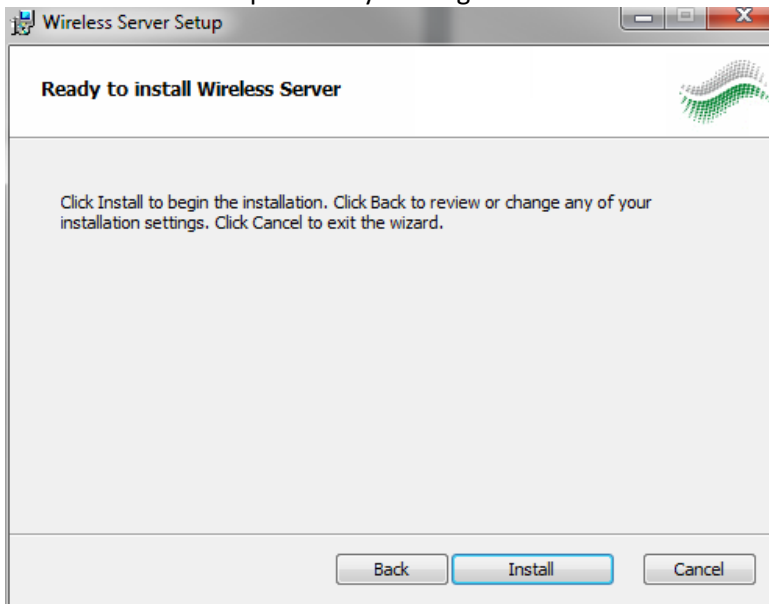
2. If the downloaded file is a Zip package, unzip it.
3. Run the downloaded installation package (double-click).



4. Click „Next“.
5. If desired, change the installation location:



6. Start the installation process by clicking "Install".



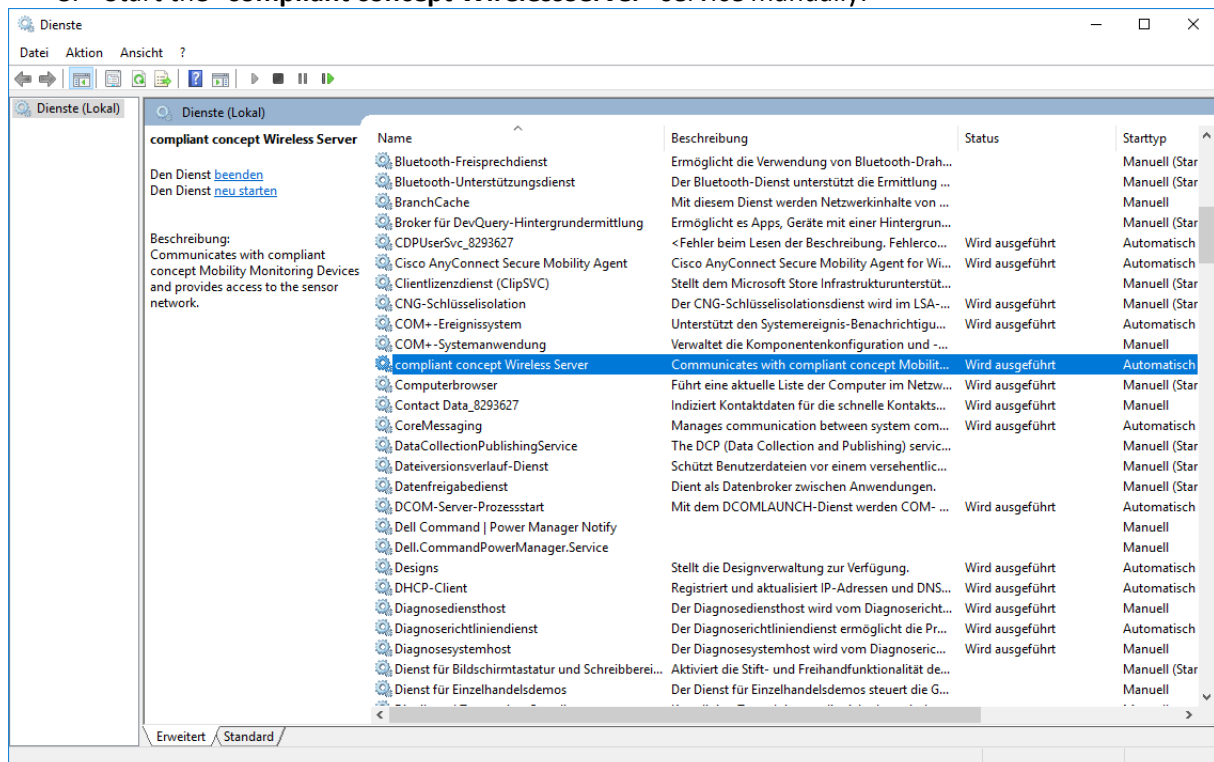
7. If the installation was successful, the following window appears, which you can close with "Finish".



After the installation, the WirelessServer is started as a service at every startup. In addition to the WirelessServer, the Server Manager and the TinyMesh Visualizer were also installed for commissioning.

The service will automatically start the next time the system is started.

8. Start the "compliant concept WirelessServer" service manually.



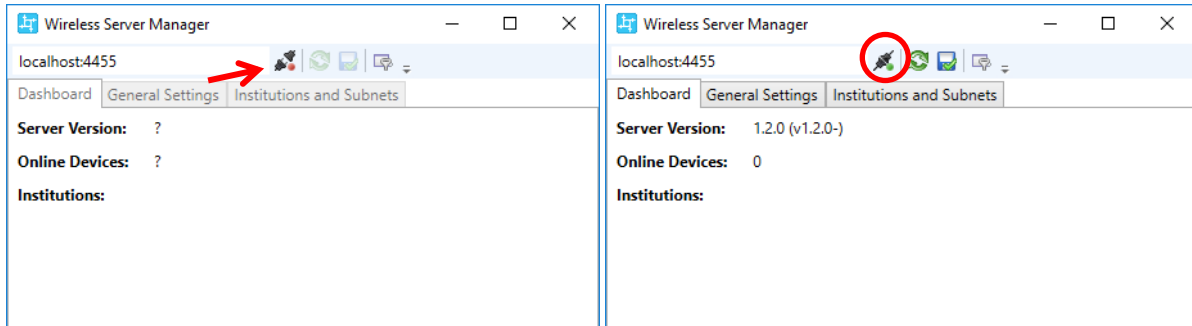
## 5. Configuration

- Start the WirelessServer Manager. You will find the following icon in the start menu after successful installation.

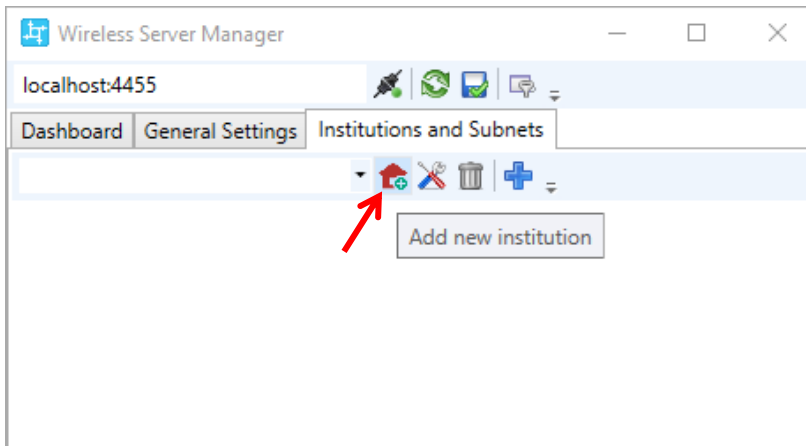


WirelessServer Manager

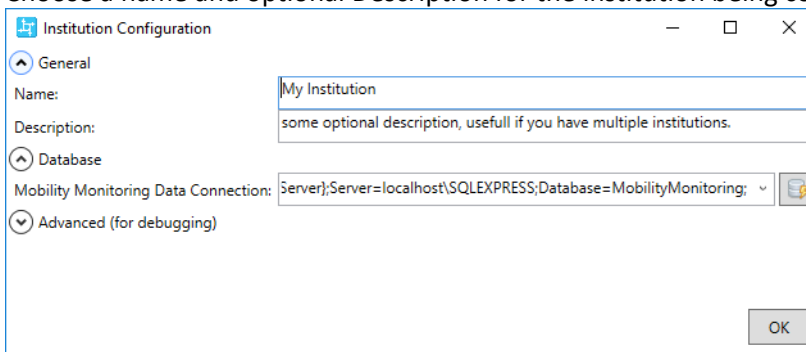
- Press the Connect button and wait until the connection is established.



- Go to “Institutions and Subnets” and hit the “add new institution” button.



- Choose a name and optional Description for the institution being configured.




13. In the Database field select the first default value from the drop down list. If the database is not on the same server or you need special sql user credentials, alter the connection string.

```
Driver={SQL Server};Server=localhost\SQLEXPRESS;Database=MobilityMonitoring;
```

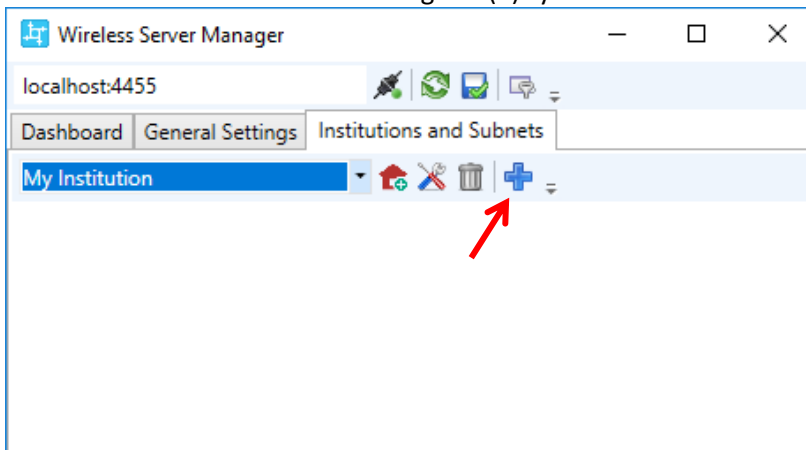
Replace if necessary. localhost\SQLEXPRESS with your server instance.

If you are using an SQL user for database access, add the parameter:

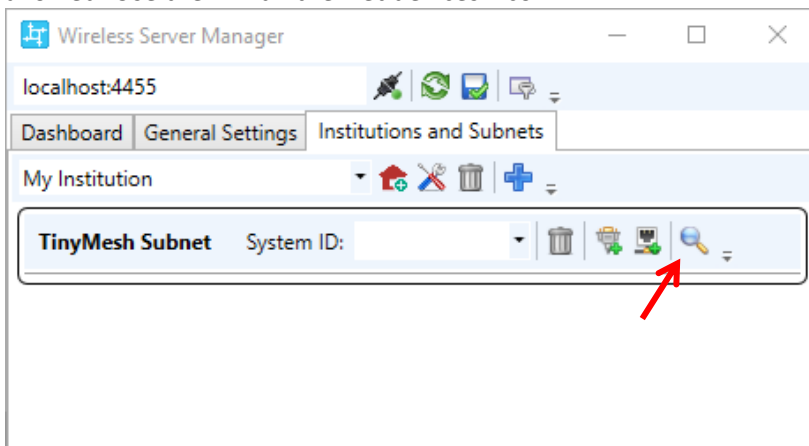
```
Driver={SQL Server};Server=. \SQLEXPRESS;Database=MobilityMonitoring;Uid=MyUser ;pwd=theSecretPassword
```

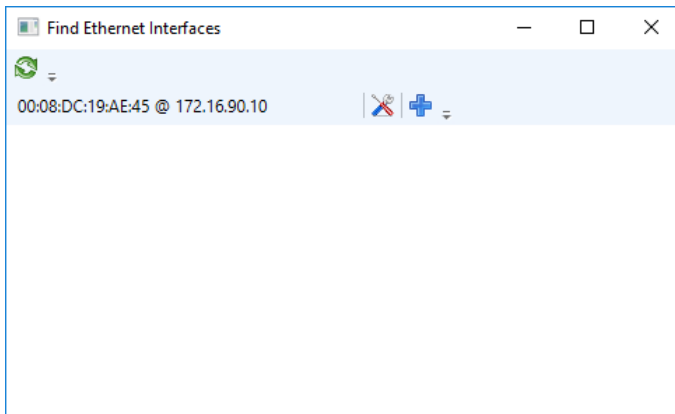
Use the button  to check the connection to the database.


14. Now connect a receiver (Ethernet, IPv4).  
 15. Add a subnet to the institution using the (+) symbol.

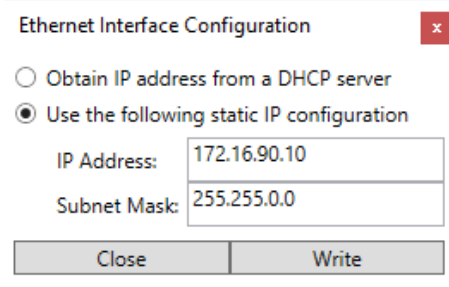


16. Look for the connected receivers in your network. For this to work, UDP broadcasts must be allowed. Use the "Find Ethernet devices" icon.

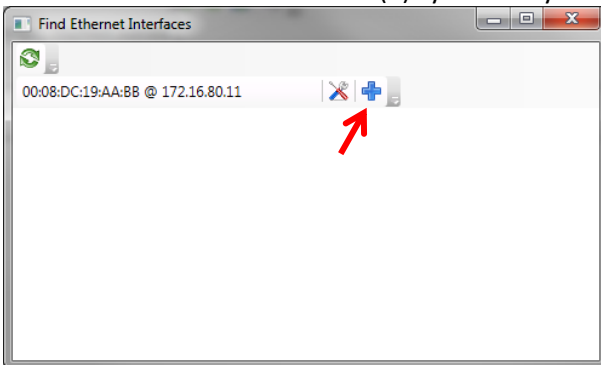




17. Open the Receiver's IP address configuration window using the "Tool" button .

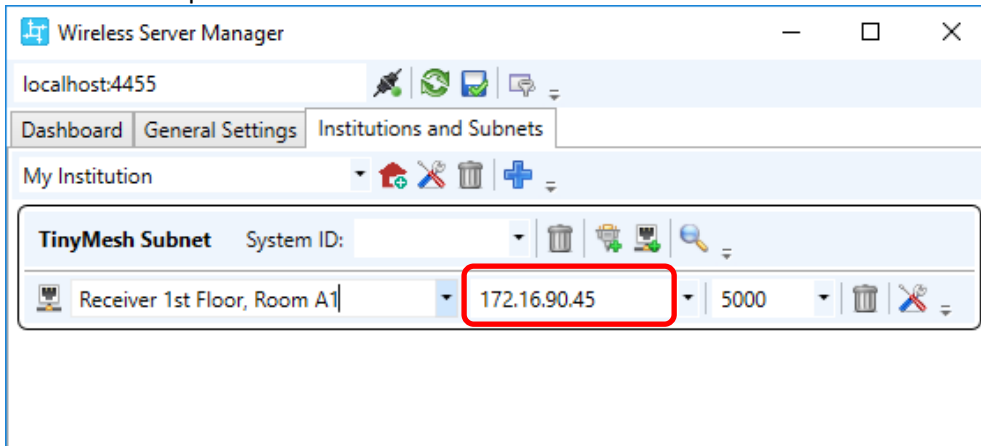


- 18. Select the first option if you assign a fixed IP address to the receiver using DHCP. Otherwise, specify the IPv4 address and subnet mask for the receiver.
- 19. Select "Write" to write the configuration to the receiver's memory.
- 20. Then add the receiver with the (+) symbol to your institutions' subnet:



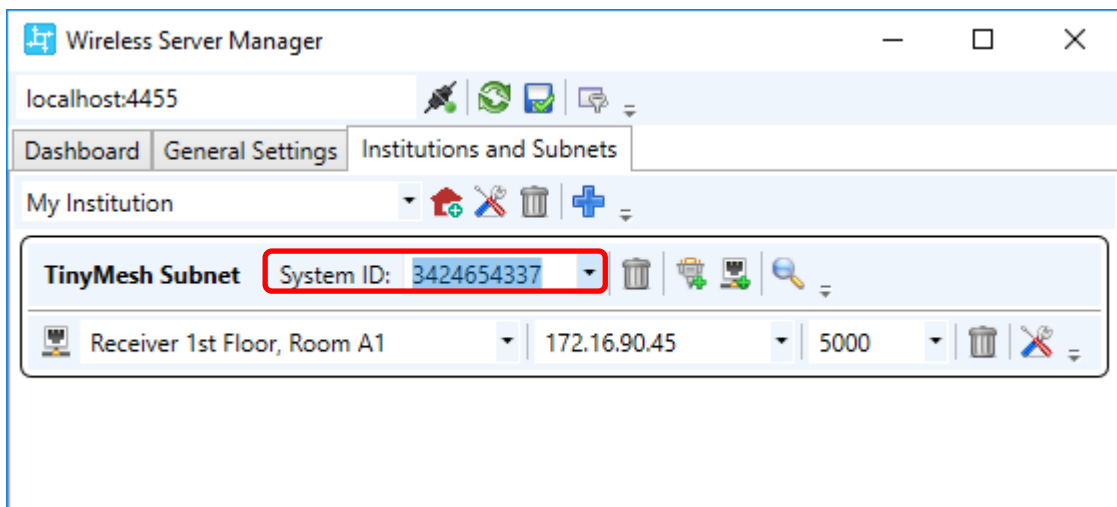


21. Make sure that the correct IP address for the receiver is added to the subnet. Optionally choose a descriptive text for the Receiver.

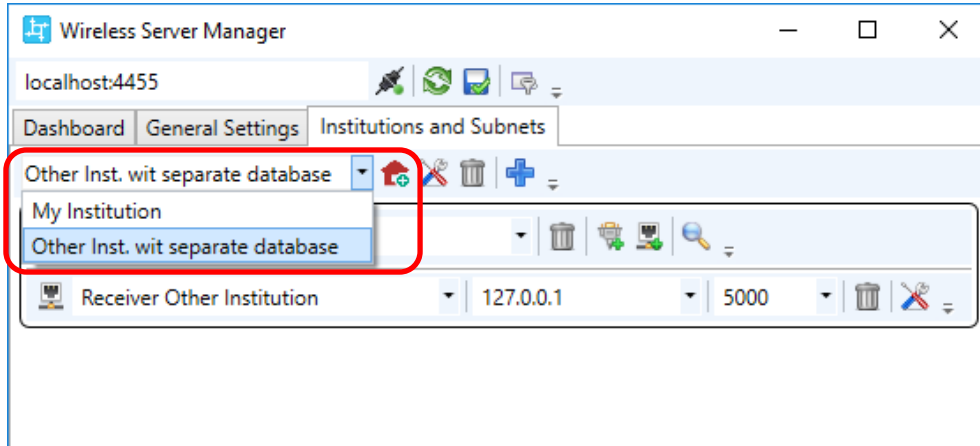



22. If you have multiple Receivers within the same institution (e.g. one Receiver on each floor) then repeat steps 16 to 21.
23. Complete the configuration with the system ID if you are not using the default (empty). The system ID must match the value of the repeaters and Mobility Monitor devices. Select the ID1 (3424654337), unless you want to operate several independent radio networks.

System-ID1: 3424654337 / System-ID2: 3424654338 / System-ID3: 3424654339



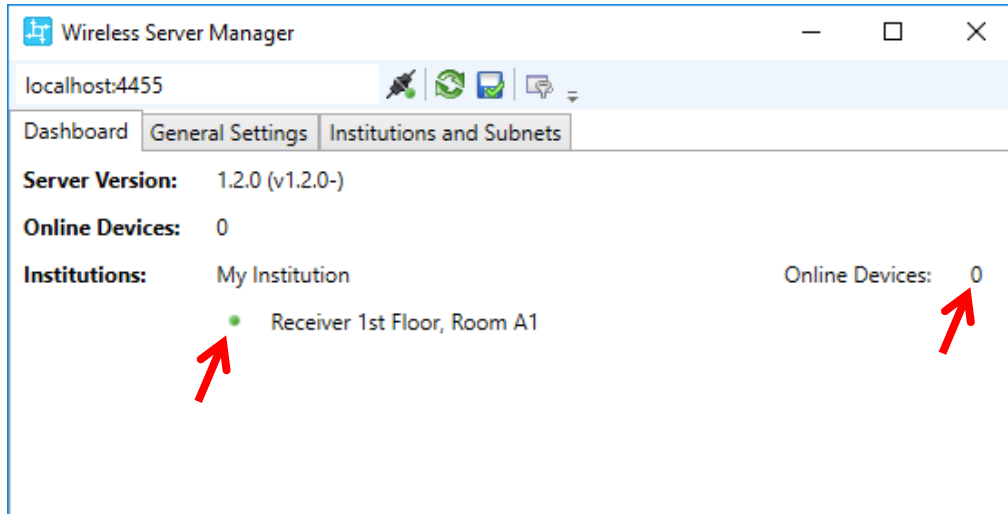
24. Repeat steps 11 to 24 if you want to configure additional Institutions with separate databases.



25. Save the configuration before closing the WirelessServer Manager! 

## 6. Test the Installation

26. In the Wireless Server Manager application (from section 5) check the “Dashboard”.

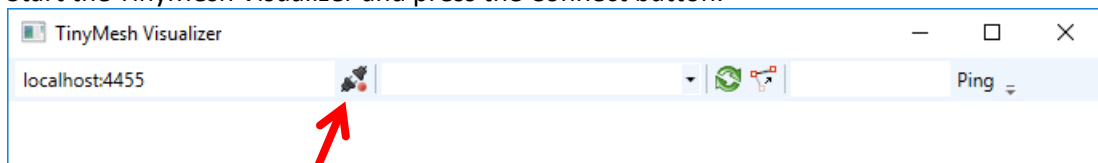


A green dot next to the Receiver name indicates that the Receiver is connected.

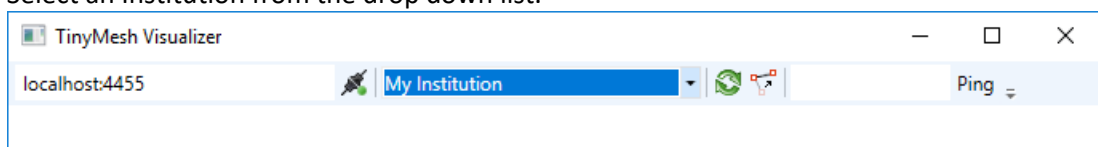
The number “Online Devices” indicates how many Mobility Monitor devices are currently connected to the Receivers. Note that it takes 1-2 minutes after powering a Mobility Monitor device before it get connection to the Receiver.

The connection of repeaters (optional) and Mobility Monitor devices can be checked with the tool TinyMesh Visualizer.

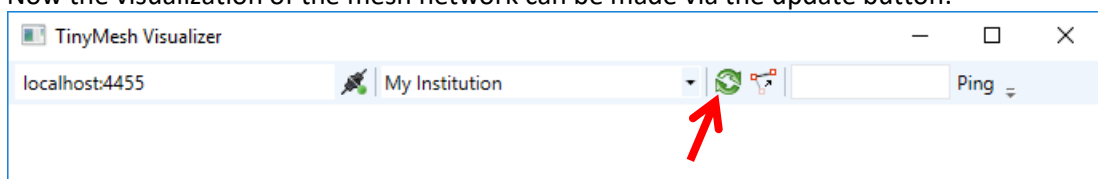
27. Start the TinyMesh Visualizer and press the Connect button.



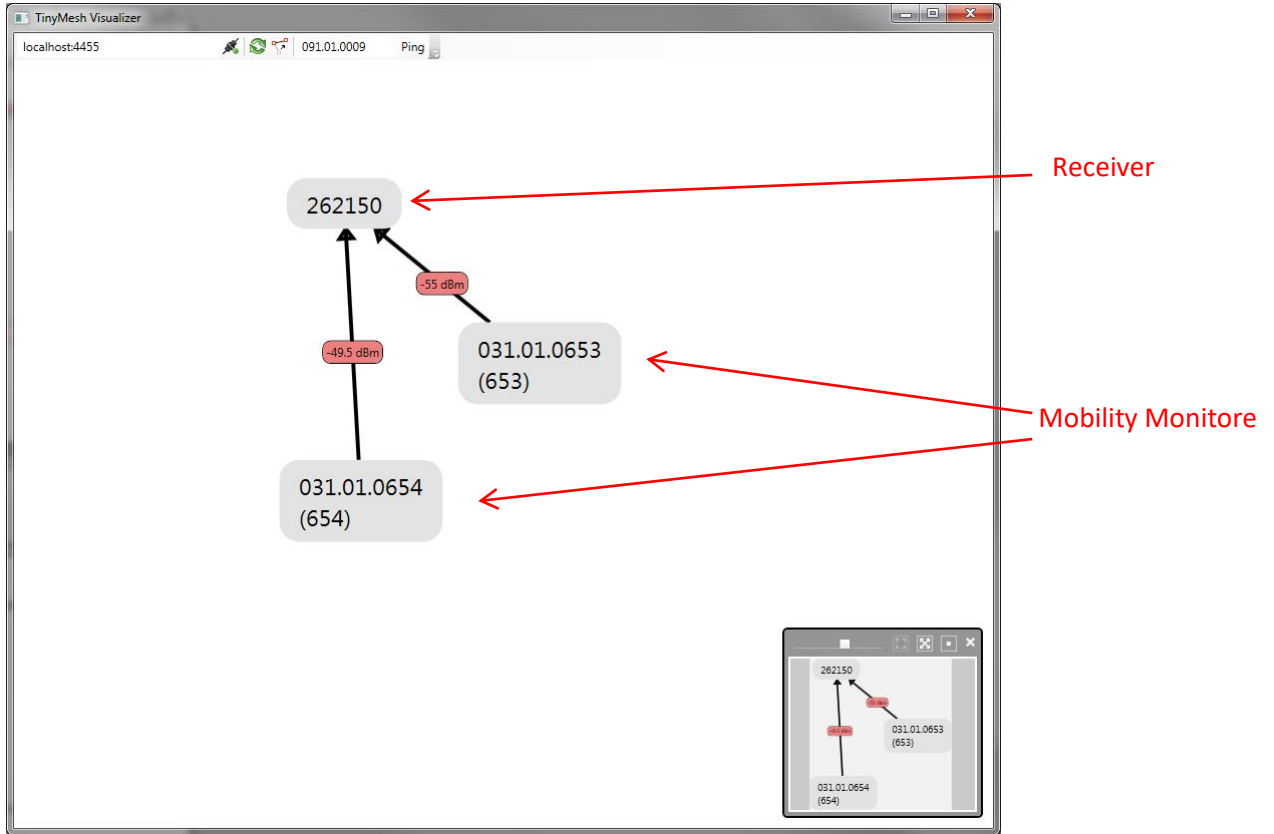
28. Select an Institution from the drop down list.



29. Now the visualization of the mesh network can be made via the update button.

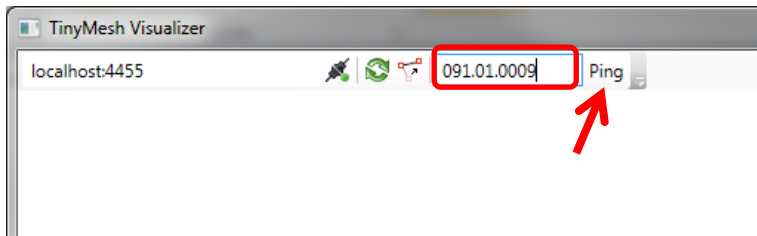


All Mobility monitors and the receiver are displayed. If a Mobility Monitor is routed via a repeater, this is also displayed.



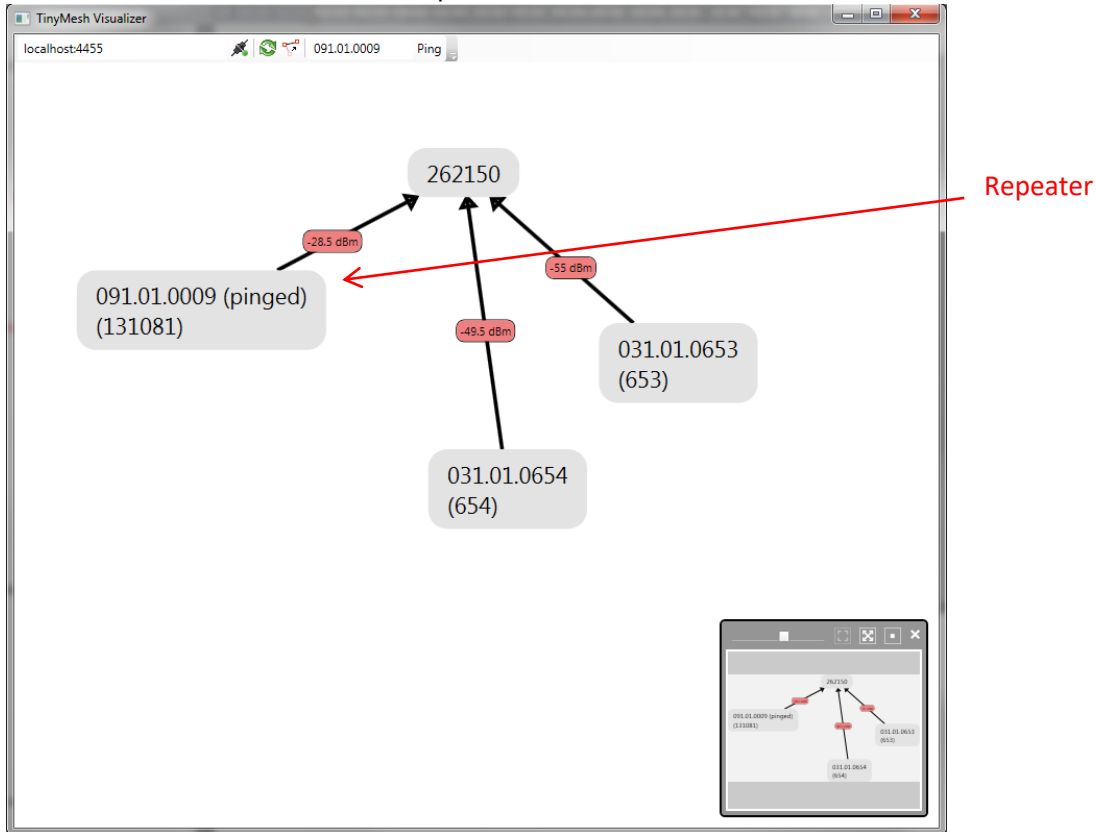
The repeaters can be searched manually. Enter the serial number and press "Ping".

e.g: **091.01.0009**



The pinged repeater should then send a response and also be displayed.

30. Test the connection to all repeaters.




## 7. Troubleshooting

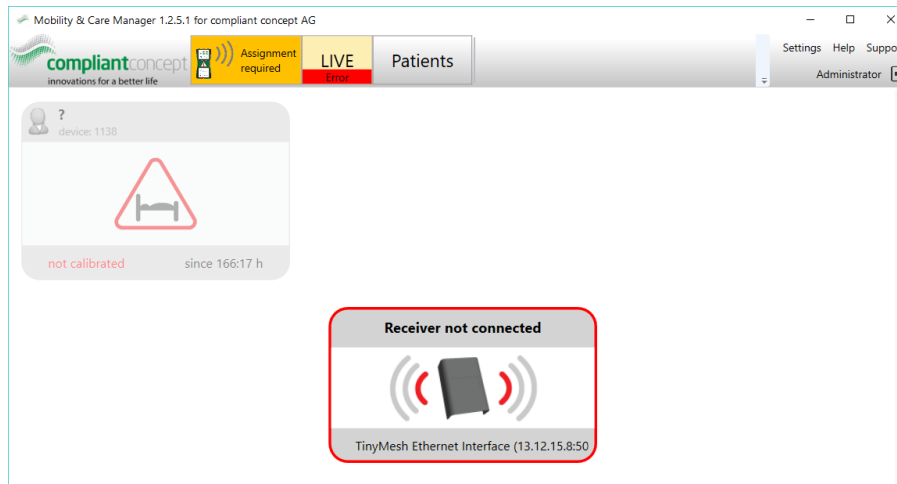
### 7.1. WirelessServer Manager cannot connect



- Make sure that the background Windows Service called “compliant concept Wireless Server” is running. You can use the “Start Service” script found in the start menu folder to start the Wireless Server.

 compliant concept Wireless Server Communicates with compliant concept Mobility Monitoring Devices and provides access to the sensor network.

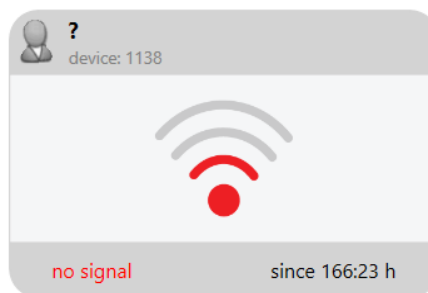
## 7.2. Mobility & Care Manager LiveView shows “Receiver not connected”



The WirelessServer service is running and can access the database. But there is a problem with one or more Receivers.

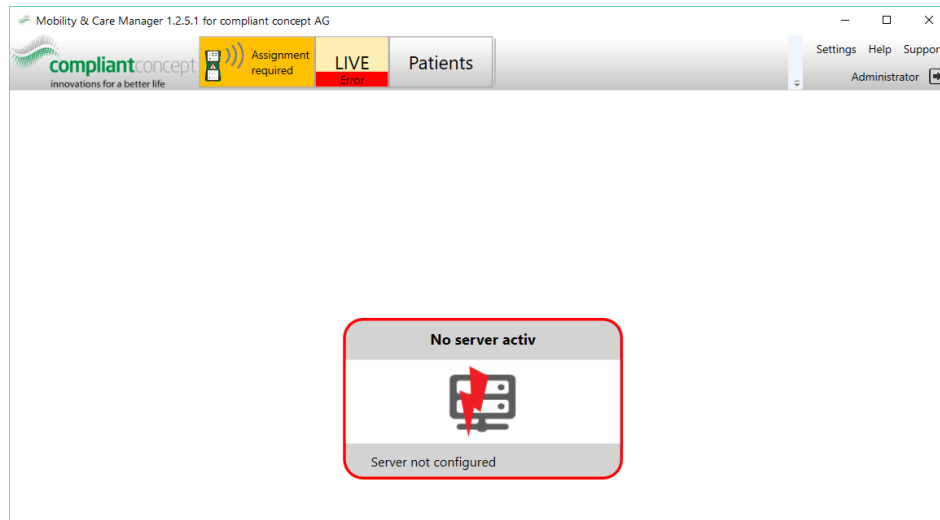
- Check power and ethernet cables of Receiver.
- Check IP address of Receiver. Can you ping it?
- Power-cycle the Receiver (unplug power cable for 5 seconds).

## 7.3. Mobility & Care Manager LiveView shows “no signal” for Mobility Monitor device.



- Check if the Mobility Monitor device is powered.
- Check if the Mobility Monitor device is within radio link range (bring it closer to the Receiver or place a Repeater-868 in between).
- Check if the Mobility Monitor handheld device is not too close to the Receiver! A minimum distance of approx. 2 meters to the Receiver is necessary.

#### 7.4. Mobility & Care Manager LiveView shows „No server active“



This means the WirelessServer was running before and it was able to write to the database however at the moment the WirelessServer is no longer writing to the database.

- Check if the Windows service “compliant concept Wireless Server” is running.
- Check if the database connection string has changed or if new Sql Server access credentials are required.

## 8. How to reach us

Questions about the Mobility Monitor? We are pleased to provide you with technical support by phone or e-mail.

Telephone main number      +41 44 552 15 00  
 Telephone Support:          +41 44 552 15 03  
 Telefax:                        +41 44 552 15 09  
 E-Mail:                         [support@compliant-concept.ch](mailto:support@compliant-concept.ch)

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### **International**

Support and contact addresses distributors  
<http://www.compliant-concept.ch/de/support>

## Change history

| Version | Release Date | Change   | Prepared | Reviewed  | Approved  |
|---------|--------------|--|----------|-----------|-----------|
| 1.0     | 05.04.2017   | First Version                                    | jdo      | men       | men       |
| 1.2     | 05.05.2017   | WirelessServer version 1.2.0,<br>Troubleshooting | men      | jdo( pdx) | bhu( pdx) |