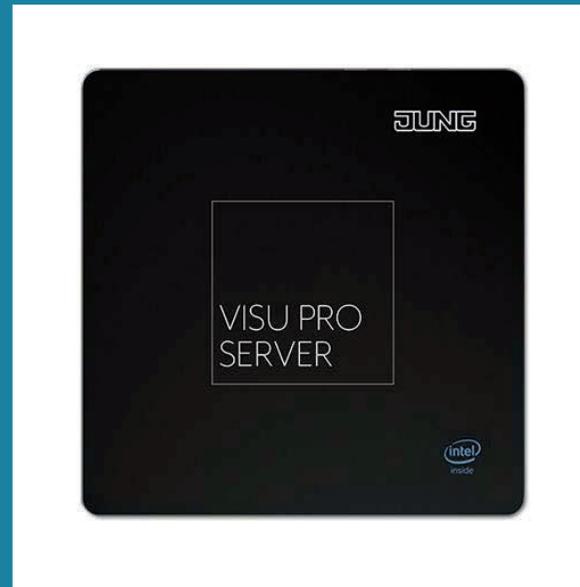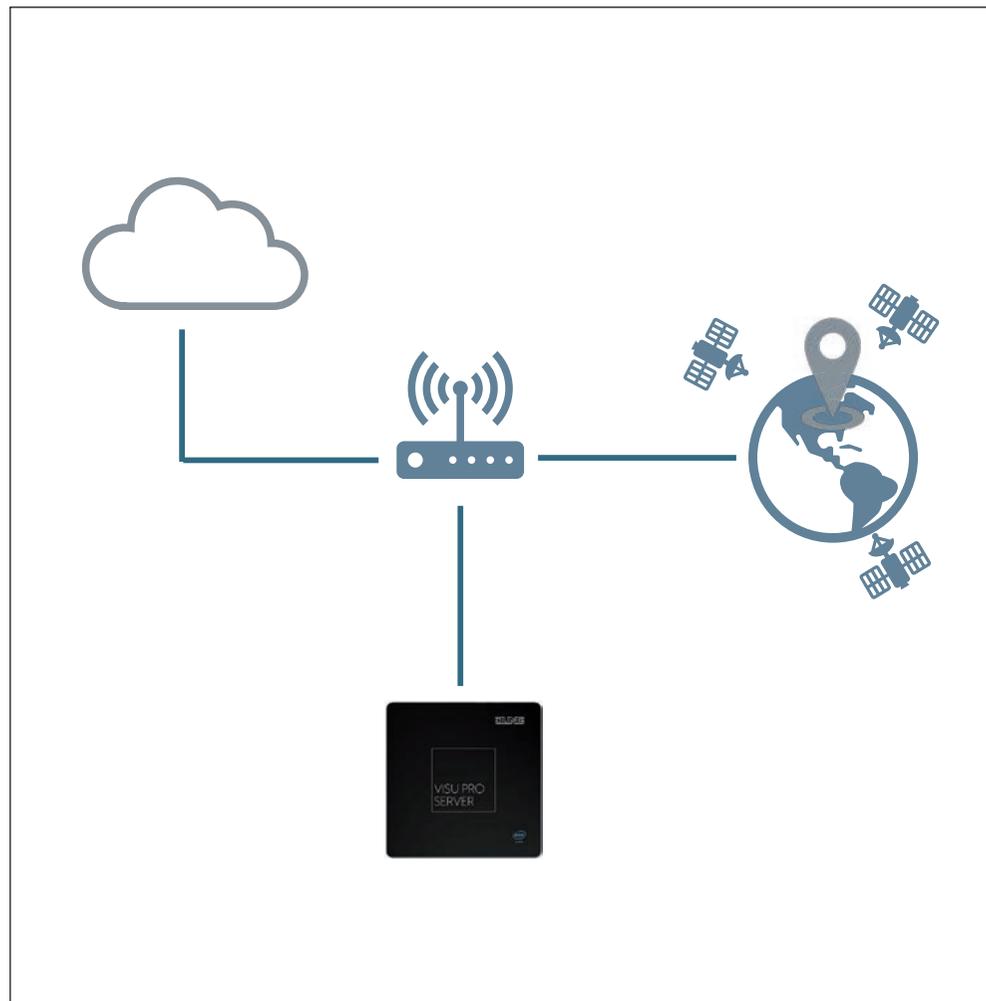# JUNG Visu Pro Server

How do I set up the system time?

1. Introduction

With JUNG VISU PRO you control your system reliably and comfortably, irrespective of whether in the private or commercial sector.

You can manage several KNX systems independently of each other thanks to the professional software solution. It is important for proper operation that the time is synchronised between the systems and that you set the correct system time for your JUNG VISU PRO Server.

This quick start guide explains the individual steps of commissioning and operation using an example.

COMPONENTS JUNG	PART NO.	QUANTITY
Visu Pro Server	JVP-SERVER-H2GB	1

COMPONENTS THIRD PARTY SUPPLIERS	PART NO.	QUANTITY
hopf 8029 NTS-V2	–	1
ZyXel VMG 8546	–	1

2. Overview

The system time of your JUNG VISU PRO Server can be set up in just a few steps.

The table here gives an overview of the necessary steps.

The individual steps are described in detail on the following pages.

3. Time server

Synchronous system time is indispensable for correct operation within the plant and for time-critical tasks in networks. All clients, i. e. KNX devices, external systems and IP nodes as well as your JUNG VISU PRO Server only work optimally if they are time synchronised. For example, a time server allows all nodes to perform important updates at the same time without a device being disconnected during running operation. Furthermore, on non-time-synchronous systems, requests and commands are rejected if the time stamp between client and server does not match.

You have the following three options for setting up the system time on your JUNG VISU PRO Server:

1. Use an NTP server from the Internet.
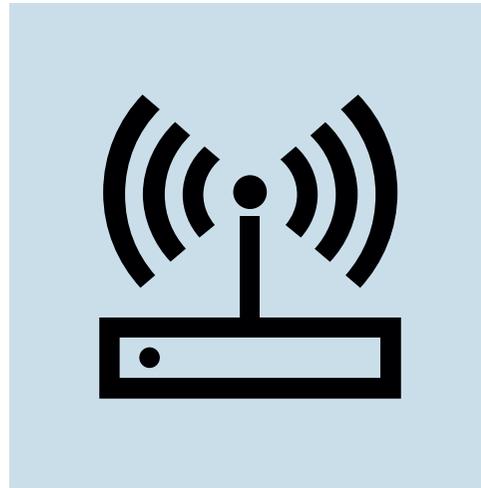
2. Use the system time of a router.

3. Use a GPS time server in a closed network without Internet.

3.1   Use an NTP server from the Internet

The Windows 10 operating system with a preconfigured time is installed as standard on your JUNG VISU PRO Server. The following describes how to use an NTP server to synchronise system time on Windows 10. The prerequisite for this is an existing Internet connection.
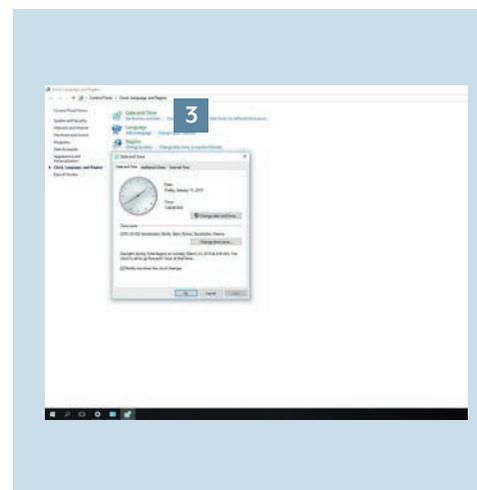**Note**: The Network Time Protocol (NTP) is a standard for the synchronisation of clocks in computer systems.
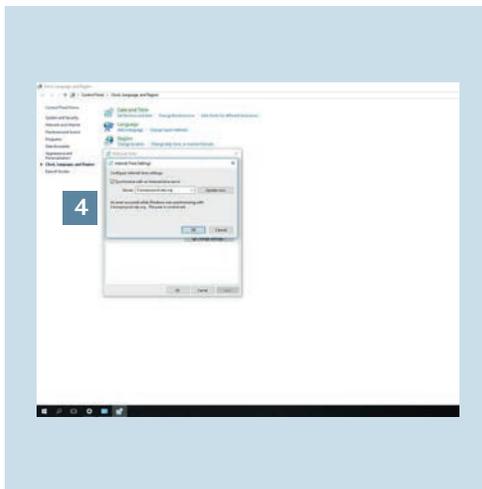

1. Login to your JUNG VISU PRO Server and open the clock. Click on Date and time settings [1].
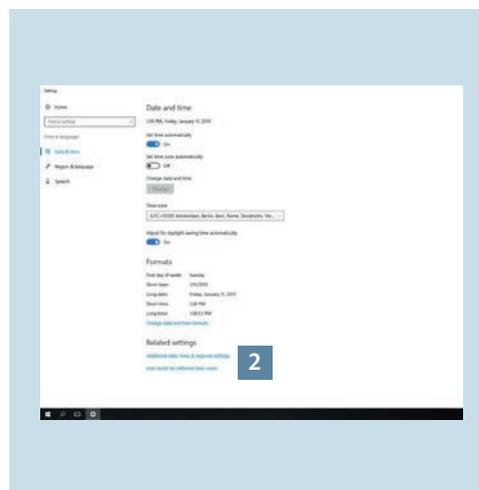
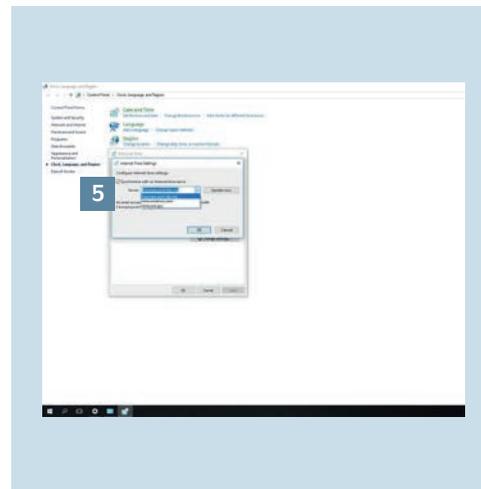2. Under Related settings then select Additional date, time & regional settings [2].

3. Then click on Set the time and date [3]. A pop-up window opens. Then change the current Internet time settings in the Internet Time tab.

4. Ensure that the checkmark for Synchronise with an Internet time server [4] is set. The default time server for JUNG VISU PRO is 0.europe.pool.ntp.org.

5. If you would like to use another NTP server, enter the address in the input field for Server [5].
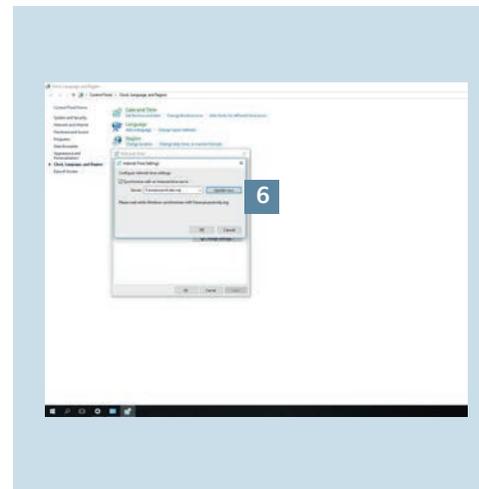
6. Click on Update now [6] to synchronise your JUNG VISU PRO Server with the current time of the NTP server.

3.2 Use system time of a router

As an alternative to the NTP time server, you can also use the system time of your router.
Note: First check whether your router can be used as an NTP server in your home network. Detailed information for this can be found in the manufacturer documentation of your router. A ZyXel VMG 8546 is used in the following example.
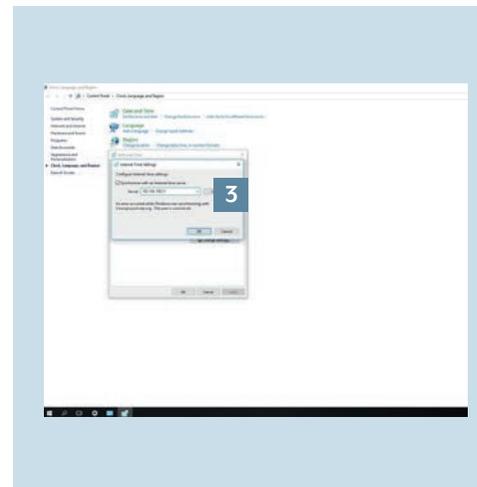

1. Login to the user interface of your router and open the system time settings. There you can either make a user-defined time setting or set a new NTP time server from the Internet [1].

2. Now open the clock [2] again in your JUNG VISU PRO Server and repeat the steps from chapter 3.1 to adjust the Internet time settings.

3. Enter the name or the IP address (default gateway) [3] of your router in the Server input field in the Internet time tab.

3.3 Use a GPS time server

If you use the JUNG VISU PRO Server in a closed network without Internet connection, you can alternatively also synchronise the time with a GPS transmitter. Thereby, you synchronise the GPS device and the JUNG VISU PRO Server via Ethernet in a local network.
Note: In this example, a GPS time server from hopf Elektronik GmbH - model 8029 NTS-V2 - is used. It is assumed that the device has already been configured.
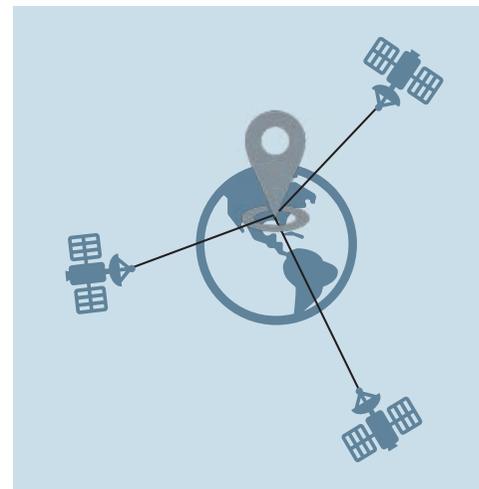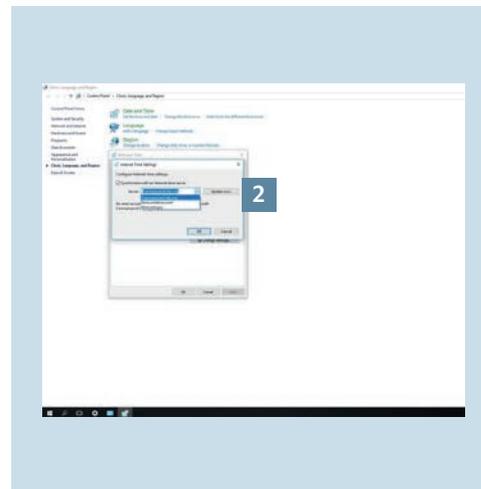

1. Connect the GPS device to a port on your router or switch.
2. Read the IP address of the GPS device [1] from the network overview of your router or switch.
3. Now navigate again via the Windows clock to the Internet settings.

4. As described in the previous steps, enter the IP address of the GPS device in the Server field [2] in the Internet time tab.
5. Pay attention to the reception quality on the GPS device. To do this, check the connection status using the respective manufacturer software or via the web interface.

6. Successful time synchronisation with a GPS signal requires satellite reception. At least three satellites should be connected with the GPS device for continuous function. If you use a GPS device as (NTP) time server, ensure that the GPS device is operated as Stratum 1.

4. Update rate of the clock

4.1 Change update rate manually

Now that you know how to synchronise the time of your JUNG VISU PRO Server, the next section explains how to set the update rate of the clock.
Note: The update interval is set to 86,400 seconds (this corresponds to exactly one day) as default.
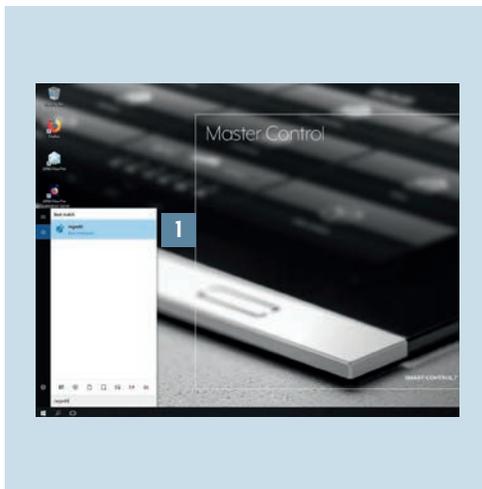
1. Click on the magnifying glass at the bottom left in the taskbar and enter the command regedit in the search field [1]. Press the Enter key to confirm the input.
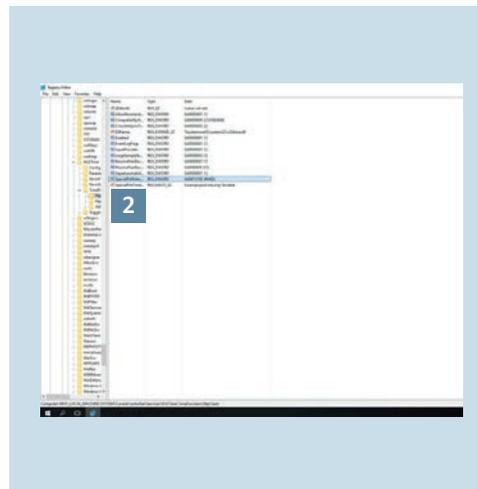
2. Navigate to the subitem HKEY_LOCAL_MACHINE\SYSTEM\ CurrentControlSet\services\W32Time\ TimeProviders\NtpClient [2].

3. Then double click on SpecialPollInterval [3] on the right. A pop-up window opens, in which you write the value (in seconds) for the update interval (decimal) [4] – e.g. 86,400 seconds (1 day).
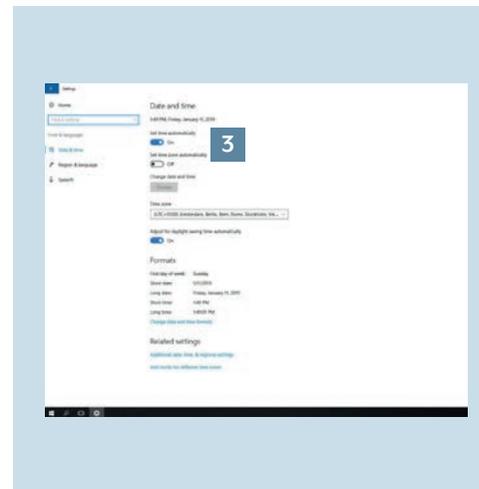
4.2 Set time automatically

If the time of the JUNG VISU PRO Server is not displayed correctly although you have carried out the steps described above and a connection to the time server exists, you can correct this with a simple step.

1. Click on the Windows icon in the task-bar or press the Windows key to call the Start menu and open Settings [1].

2. Then select Time & language [2].

3. You can activate or deactivate the automatic time update of the system using the Set time automatically button [3].
4. If you want to update your JUNG VISU PRO Server quickly, set the button here to OFF and then ON - the current time is retrieved from the time server.

5. Completion

Congratulations - you now know how to configure the time in your JUNG VISU PRO Server and how to select different time servers for your applications.

Any questions?

We are pleased to help.

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