



Konect PakBus[®] Router

PakBus Routing Service

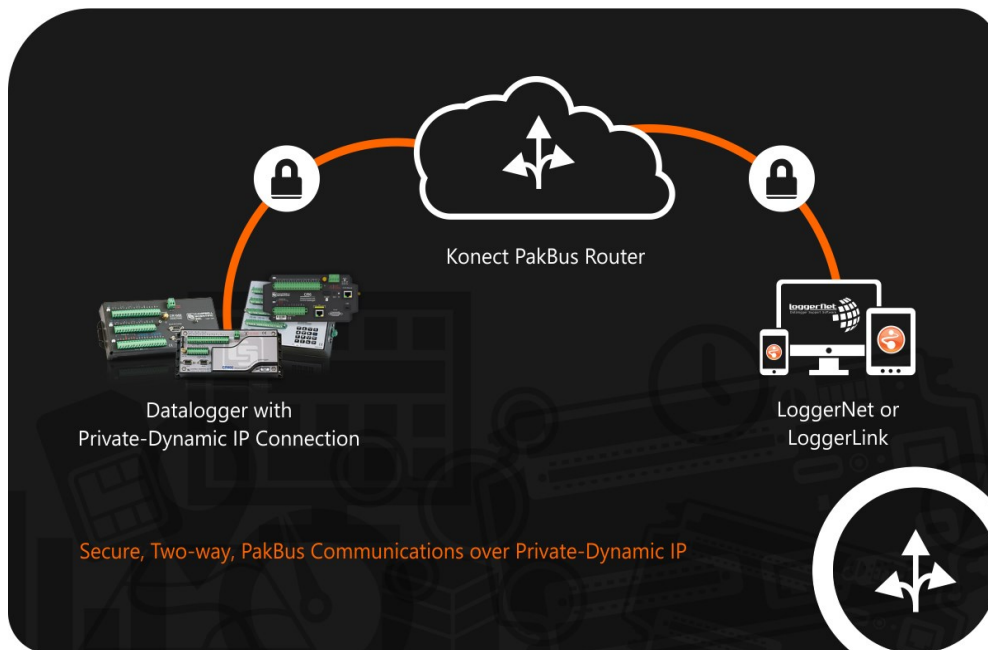


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1. Introduction


Take advantage of the secure Konect PakBus®¹ Router for on-demand two-way access to your data logger. The Konect PakBus router is a cloud-based service that acts as a bridge between an internet-enabled data logger and *LoggerNet* or *LoggerLink* data logger support software.

This guide will walk you through the steps to:

1. Set up the Konect PakBus Router.
2. Configure a data logger.
3. Set up *LoggerNet* or *LoggerLink*.

2. Get started

You will need the Konect PakBus Router redemption code that came on a card with the cellular-enabled device.




Konect
Data Services from Campbell Scientific

Safe, secure routing for access to your IP-connected datalogger

Important Information! Do not discard!
Activate a Complimentary PakBus® Router on Campbell Scientific's Konect PakBus Routing Service. See the Getting Started Guide at:
<http://campbellsci.com/start/pbrouter>

REDEMPTION CODE [blurred]

Open a web browser and go to www.konectgds.com .

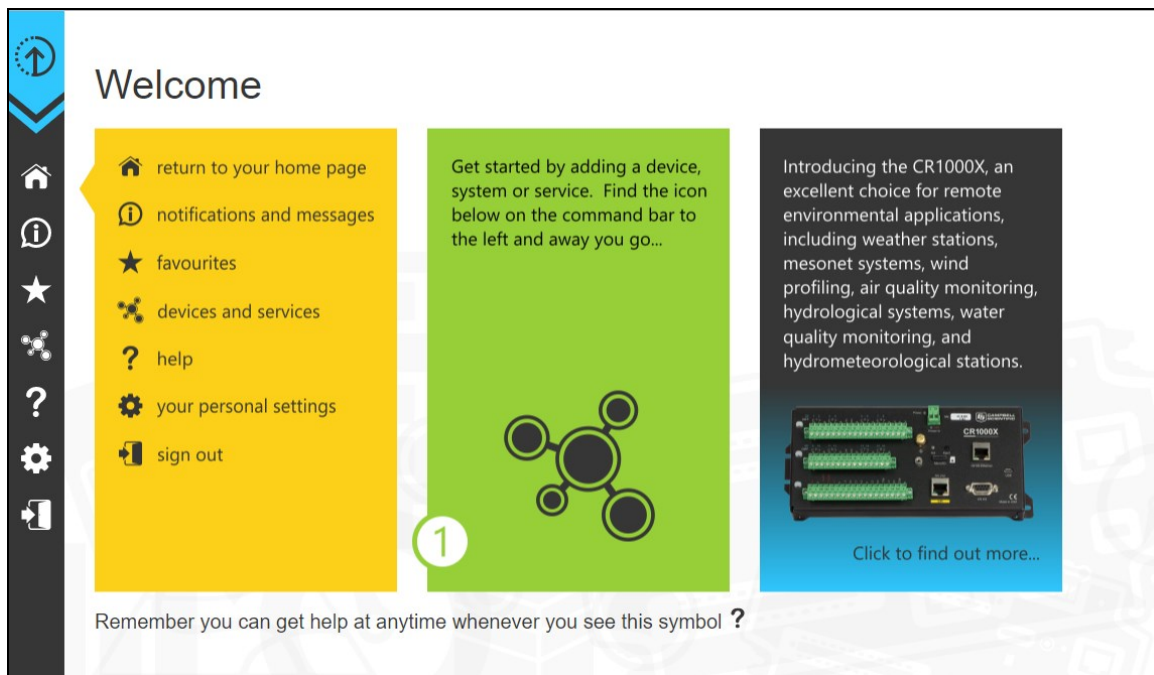
¹PakBus is a registered trademark of Campbell Scientific, Inc.


First-time users need to create a **free account**. After you submit your information, you will receive two emails up to five minutes apart. One email will contain a Passport ID and the other your Password. If emails are not received, check your email junk folder.

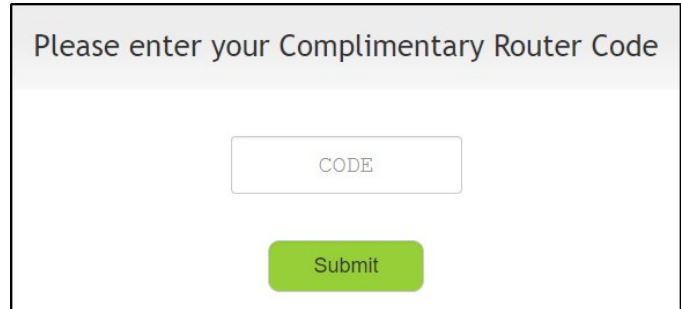
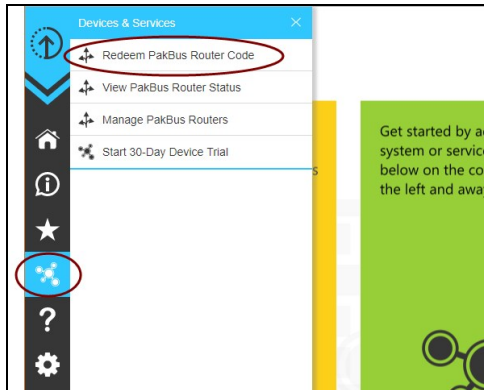


3. Set up Konecct PakBus Router

1. Sign in to www.konecctgds.com using your Passport ID and Password found in the two received emails. Once logged in, you will be at the Welcome page.

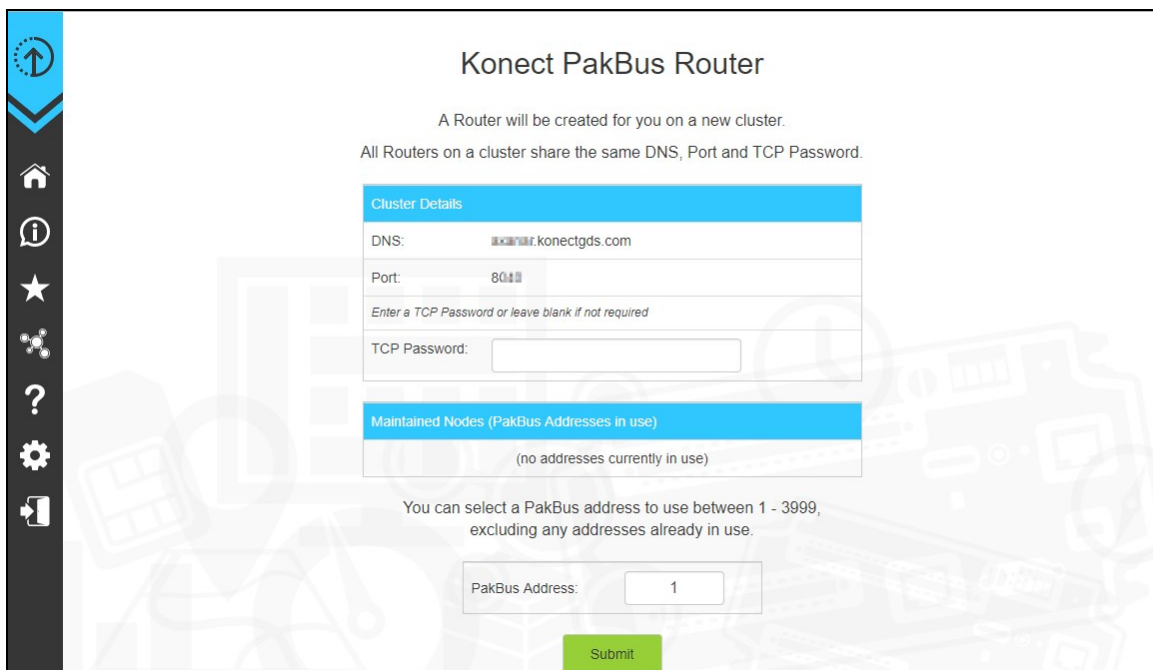


2. Click **Devices and services**  on the command bar to the left and select **Redeem PakBus Router Code**. Enter your complimentary Router Code found on the included card with your cellular-enabled device and click **Submit**.


A screenshot of a form titled 'Please enter your Complimentary Router Code'. It features a single text input field labeled 'CODE' and a green 'Submit' button below it.

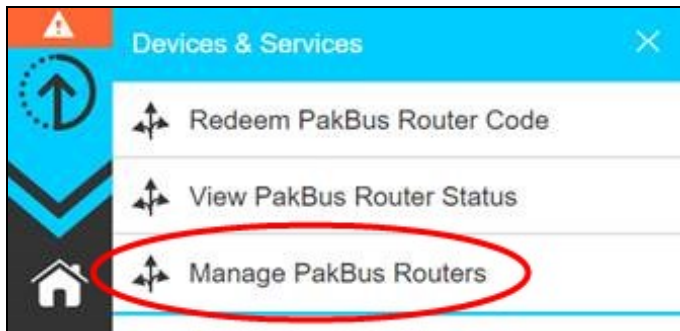
3. The next screen shows the assigned **DNS** address and **Port** for the router. Enter a **TCP Password** and select a unique **PakBus Address** for your data logger.

TIP:
Make note of this information; it will be required for data logger configuration as well as *LoggerNet* setup. Please note your **DNS**, **Port**, **TCP Password** and **PakBus address**; you will need them later.

A screenshot of the 'Konect PakBus Router' configuration screen. The title is 'Konect PakBus Router'. Below the title, it says 'A Router will be created for you on a new cluster. All Routers on a cluster share the same DNS, Port and TCP Password.' There are two main sections: 'Cluster Details' and 'Maintained Nodes (PakBus Addresses in use)'. The 'Cluster Details' section shows: DNS: , Port: , and TCP Password: . The 'Maintained Nodes' section shows '(no addresses currently in use)'. Below this, it says 'You can select a PakBus address to use between 1 - 3999, excluding any addresses already in use.' There is a 'PakBus Address' input field with the value '1' and a green 'Submit' button at the bottom.

4. Click **Submit**.

5. To edit settings at a later date, click **devices and services**  on the command bar and select **Manage PakBus Routers**.



NOTE:

The DNS address and **Port** number, assigned when your account was setup, cannot be edited.

4. Configure data logger

The data logger setup depends on the type of cellular hardware you are using. Follow the instructions in the section that applies to your hardware configuration.

- [Data loggers connected to CELL200-series modules](#) (p. 5)
- [Data loggers with internal cellular modules \(CR300-CELL200\)](#) (p. 7)
- [Data loggers connected to RV50 modems](#) (p. 8)

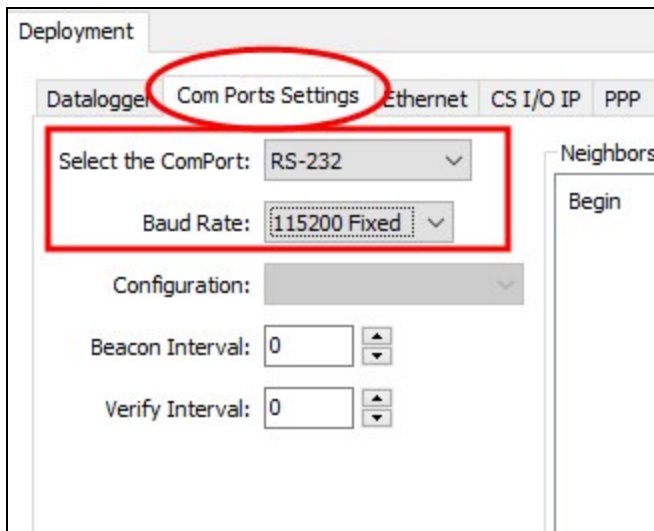
4.1 Data loggers connected to CELL200-series modules

1. Launch the *Device Configuration Utility* . All tabs are within the **Deployment** category.

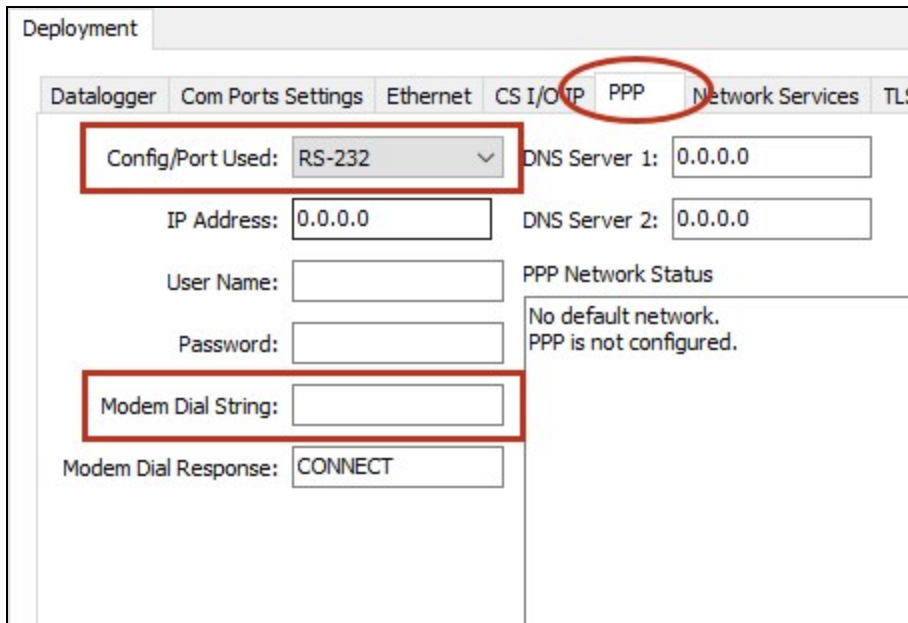
On the **Datalogger** tab, change the data logger **PakBus Address** and **PakBus/TCP Password** to match the values entered in the [Set up Konect PakBus Router](#) (p. 2) step.



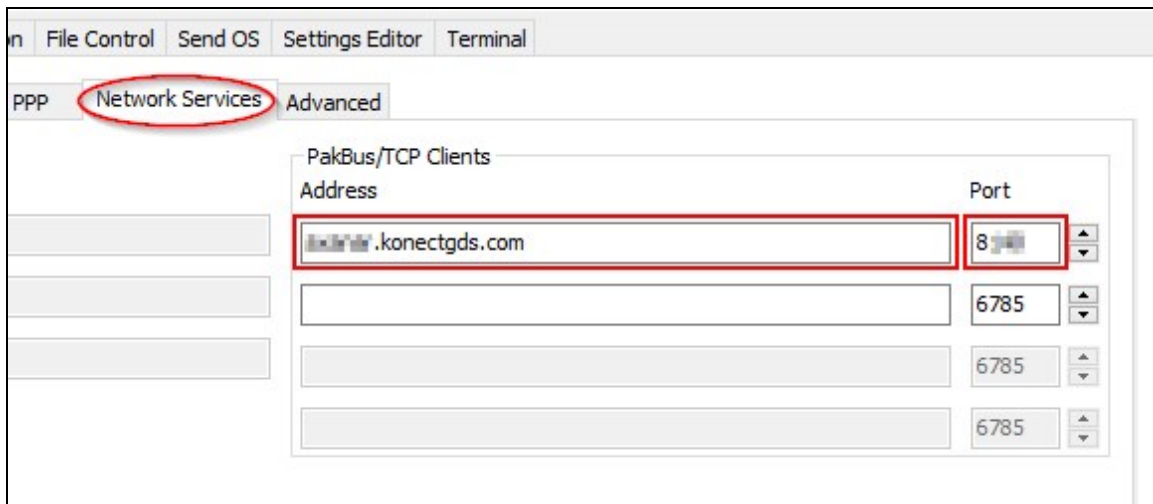
2. On the **Com Ports Settings** tab, select the **COMPort** where the module is connected; this is generally RS-232 or CS I/O. When connecting to the CS I/O port, the default address is SDC8. When connecting via RS-232, change the **Baud Rate** to **115200 Fixed**.



3. On the **PPP** tab, select the **Config/Port Used** where the modem is connected. This is the same as was selected on the **Com Ports Settings** tab. Leave the **Modem Dial String** blank.




4. On the **Network Services** tab, in the **PakBus/TCP Clients** box, type the DNS address and Port number noted during the [Set up Konect PakBus Router](#) (p. 2) step.



5. **Apply** to save your changes.

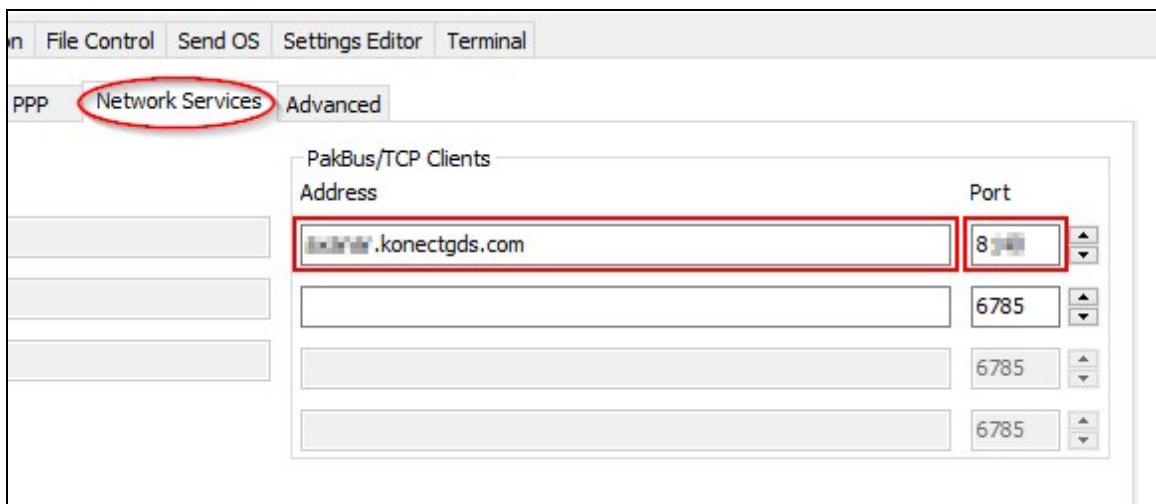
4.2 Data loggers with internal cellular modules (CR300-CELL200)

1. Launch the *Device Configuration Utility* . All tabs are within the **Deployment** category.
On the **Datalogger** tab, change the data logger **PakBus Address** and **PakBus/TCP Password** to match the values entered in the [Set up Konect PakBus Router](#) (p. 2) step.



The screenshot shows the 'Datalogger' tab in the Device Configuration Utility. The 'PakBus Address' dropdown menu is set to '101'. In the 'PakBus Security' section, the 'PakBus/TCP Password' and 'Confirm PakBus/TCP Password' fields are highlighted with a red box.

2. On the **Network Services** tab, in the **PakBus/TCP Clients** box, type the DNS address and Port number noted during the [Set up Konect PakBus Router](#) (p. 2) step.




The screenshot shows the 'Network Services' tab in the Device Configuration Utility. The 'PakBus/TCP Clients' table is visible, with the first row containing the DNS address '192.168.1.1.konectgds.com' and the port number '8'. The first row is highlighted with a red box.

Address	Port
192.168.1.1.konectgds.com	8
	6785
	6785
	6785

3. **Apply** to save your changes.

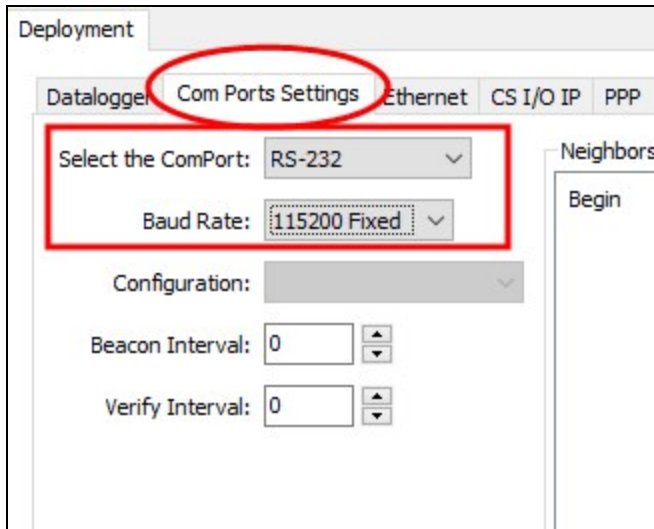
4.3 Data loggers connected to RV50 modems

1. Launch the *Device Configuration Utility* . All tabs are within the **Deployment** category.
On the **Datalogger** tab, change the data logger **PakBus Address** and **PakBus/TCP Password** to match the values entered in the [Set up Konect PakBus Router](#) (p. 2) step.



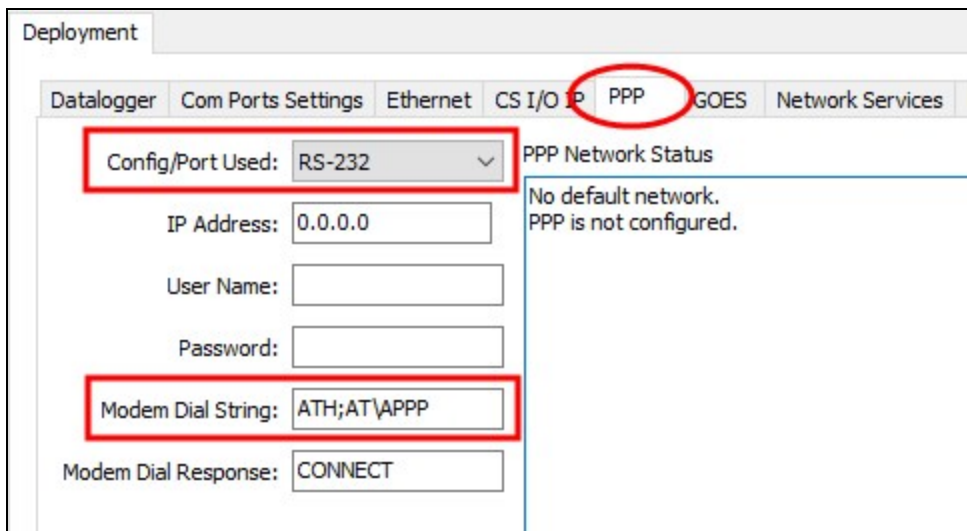
The screenshot shows the 'Datalogger' tab in the Device Configuration Utility. The 'PakBus Address' dropdown is set to '101'. In the 'PakBus Security' section, the 'PakBus/TCP Password' and 'Confirm PakBus/TCP Password' fields are highlighted with a red box. Other fields include 'Serial Number: 1007', 'OS Version: CR.1000.Std.32.02', and 'Station Name: 1007'.

2. On the **Com Ports Settings** tab, select the **COMPort** where the module is connected; this is generally RS-232 or CS I/O. When connecting to the CS I/O port, the default address is SDC8. When connecting via RS-232, change the **Baud Rate** to **115200 Fixed**.

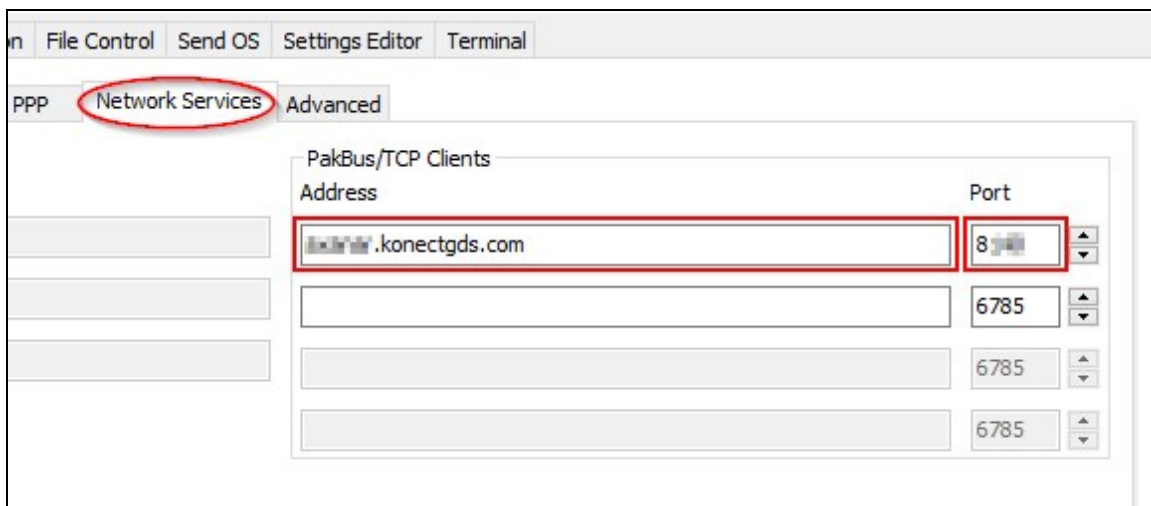


The screenshot shows the 'Com Ports Settings' tab in the Device Configuration Utility. The 'Select the ComPort' dropdown is set to 'RS-232' and the 'Baud Rate' dropdown is set to '115200 Fixed'. Other fields include 'Configuration', 'Beacon Interval: 0', and 'Verify Interval: 0'.

- On the **PPP** tab, select the **Config/Port Used** where the modem is connected. This is the same as was selected on the **Com Ports Settings** tab. Set **Modem Dial String** to **ATH;AT\APPP**.




- On the **Network Services** tab, in the **PakBus/TCP Clients** box, type the DNS address and Port number noted during the [Set up Konect PakBus Router](#) (p. 2) step.



- Apply** to save your changes.

5. Set up *LoggerNet*

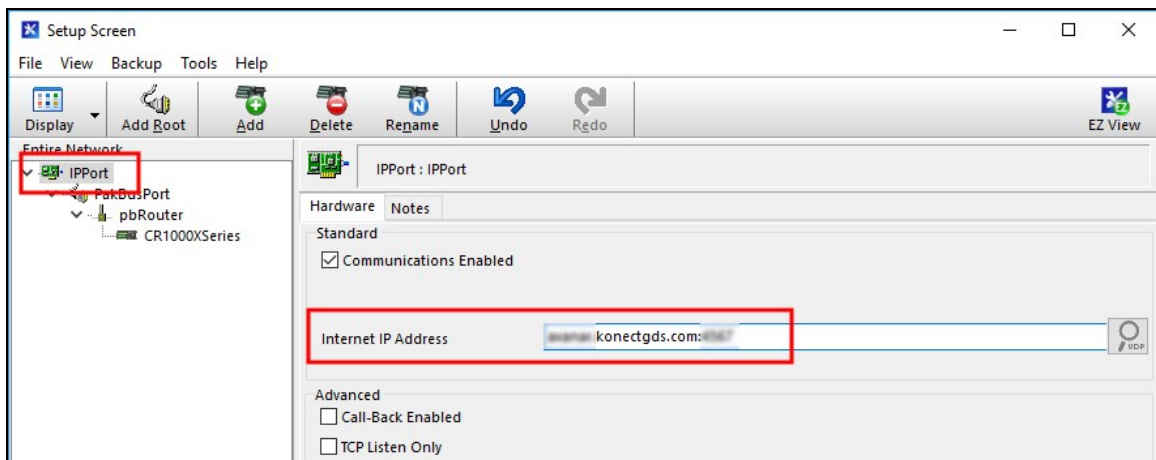
1. In the Standard View of *LoggerNet* Setup , add an IPPort > PakBusPort > pbRouter, and data logger.



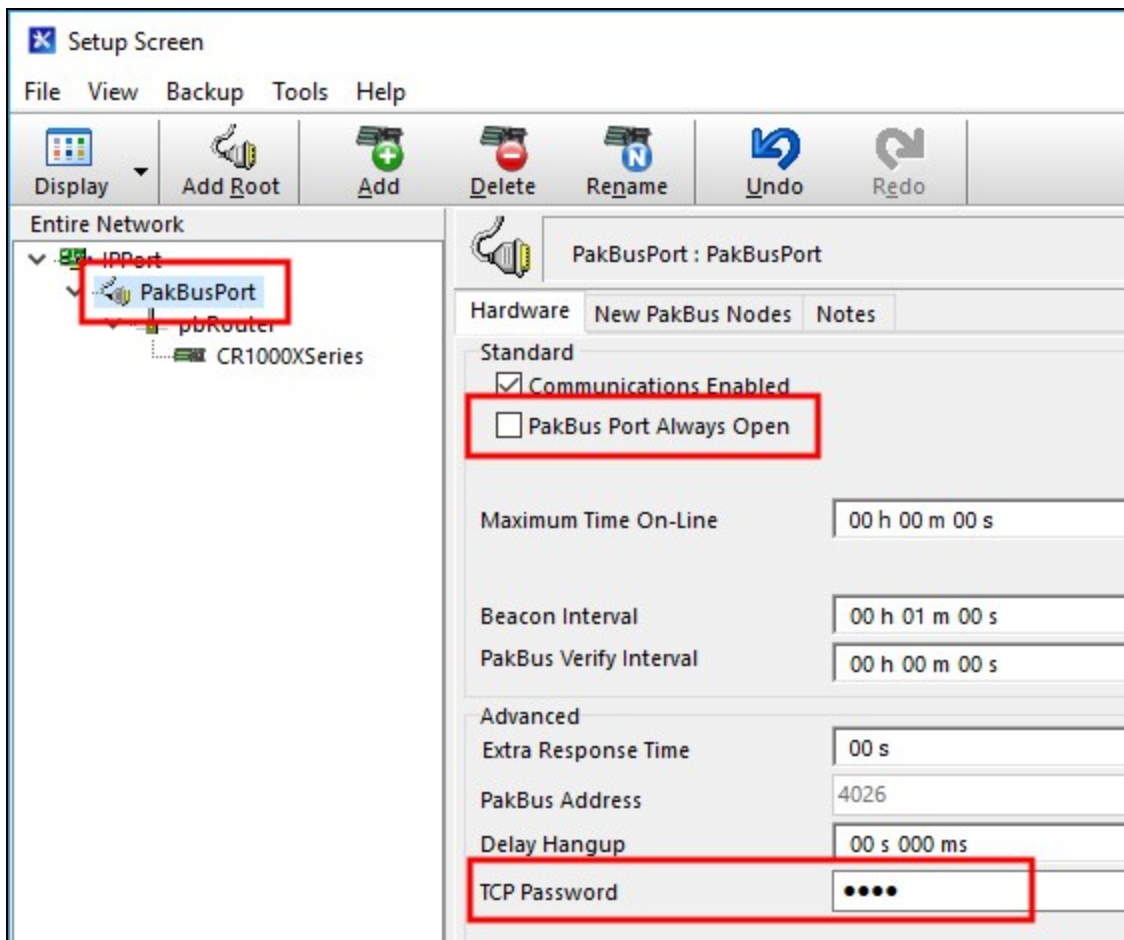
2. On the **IPPort Hardware** tab, select the **Internet IP Address** field. Enter the Konect PakBus Router DNS address and Port number separated by a colon as noted during the [Set up Konect PakBus Router](#) (p. 2).

NOTE:

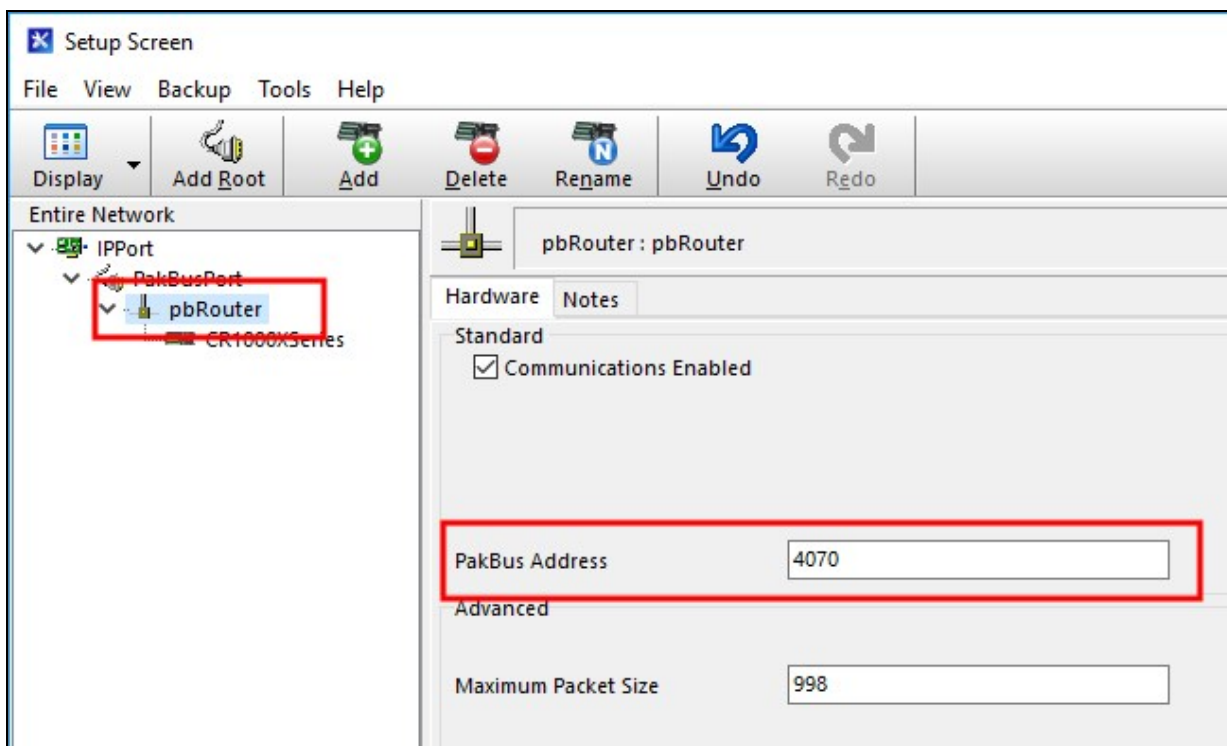
Address format: dddd.konectgds.com:pppp



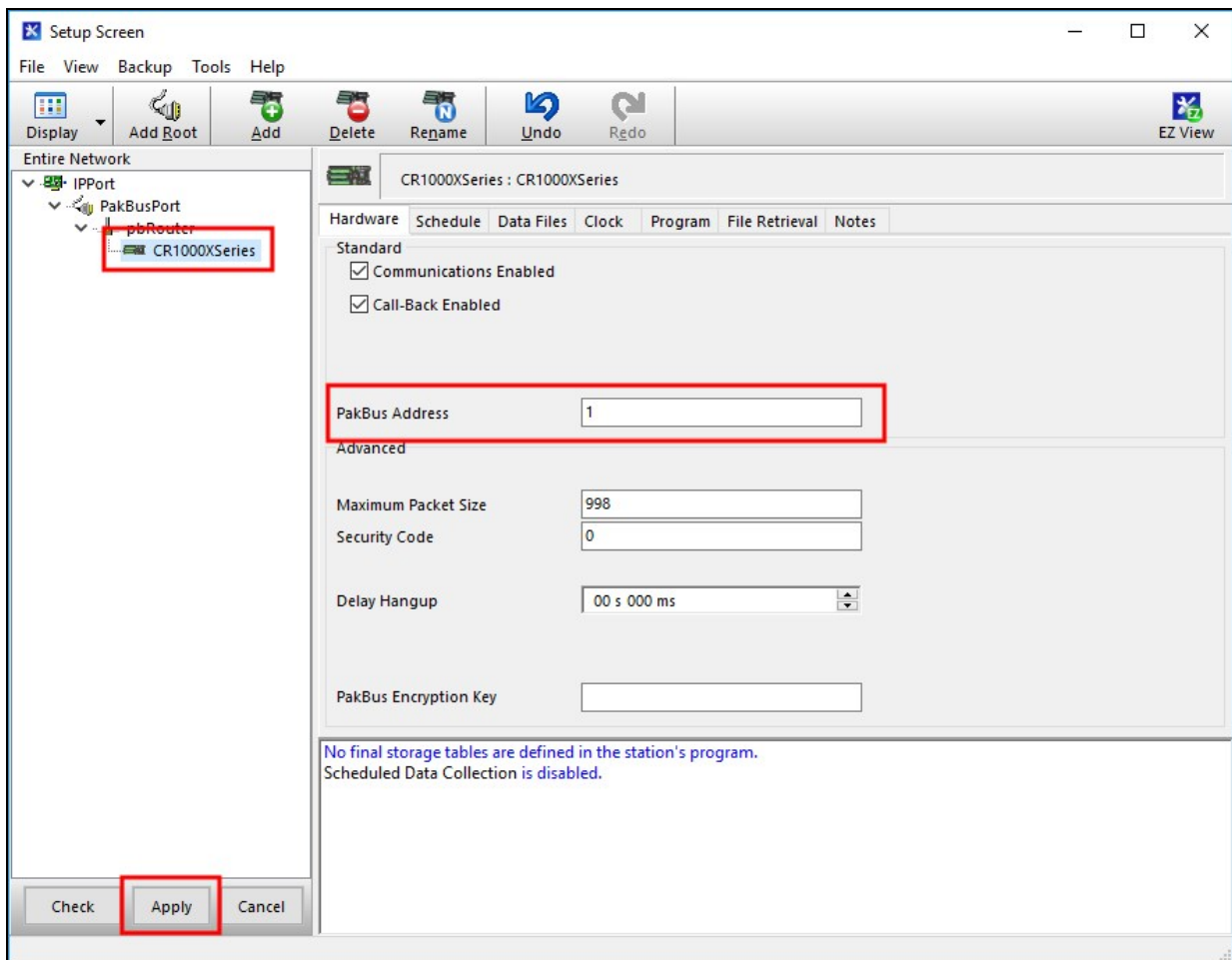
3. Leave the default settings for the PakBusPort. PakBus Port Always Open; it should not be checked. Set the TCP Password on the PakBusPort Hardware tab.



4. Select **pbRouter** from the Entire Network. On the **Hardware** tab, enter **4070** in the **PakBus Address** box.



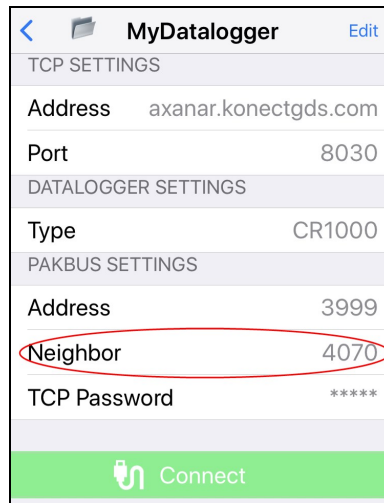
5. On the data logger **Hardware** tab, enter the **PakBus Address** chosen during the [Set up Konect PakBus Router](#) (p. 2) step.



6. **Apply** to save your changes.
7. Apply power to the data logger and cellular module. On the **Clock** tab, **Check Clocks**. When communications are successful, the **Station Date/Time** field will update.

6. Set up *LoggerLink* (optional)

LoggerLink mobile apps are another way to connect to your data logger through the Konect PakBus Router. When using *LoggerLink* the **PakBus Neighbor** setting must be set to **4070**.



See the help in *LoggerLink* or <https://www.campbellsci.com/loggerlink> for more information. Or, watch a video about using *LoggerLink* <https://www.campbellsci.com/videos/loggerlink-software-an-introduction>.

7. Maintenance and troubleshooting

7.1 Review

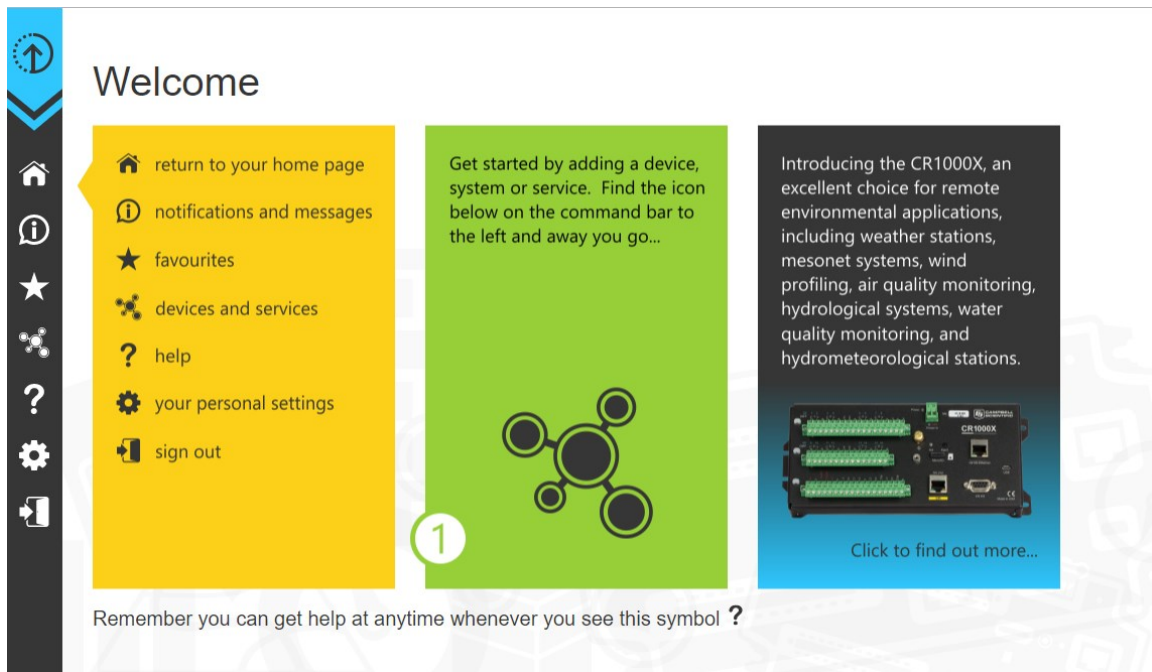
1. You have created a free KonectGDS account. In this account, a complimentary Konect PakBus Router Code was redeemed and a router set up.
2. The data logger was configured to use the information received during the Konect PakBus Router setup. The data logger now maintains a connection with the Konect PakBus Router.

3. **LoggerNet** has been configured with information received during the Konect PakBus Router setup. **LoggerNet** can now connect through the Konect PakBus Router to the data logger.

7.2 Status

Check the connection status between the data logger and Konect PakBus Router.

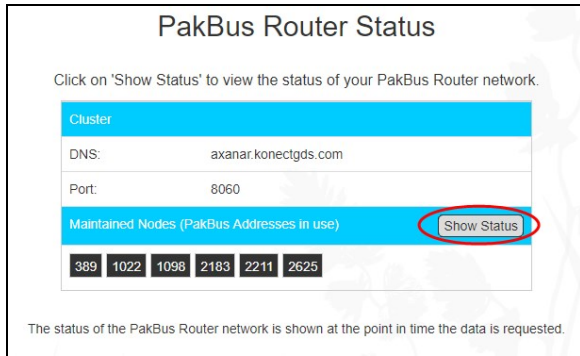
1. Sign in to www.konectgds.com using your Passport ID and Password.



2. Click **devices and services** on the command bar and select **View PakBus Router Status**.



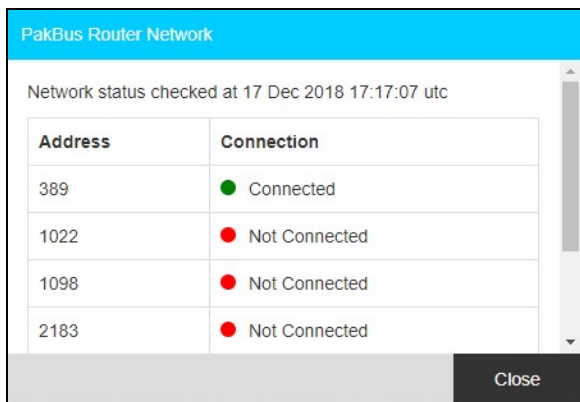
3. The next screen shows the **DNS**, **Port**, and assigned **PakBus** addresses. Click **Show Status**.



4. A **Connected** status indicates that the data logger has successfully established a connection to the Konect PakBus Router.

NOTE:

This does not indicate the communication status with *LoggerNet*.



5. To troubleshoot a **Not Connected** status:

- Verify the data logger and module have adequate power.
- Verify the module is connected to the Internet.
- Verify settings in the data logger are as described in [Configure data logger](#) (p. 4).



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