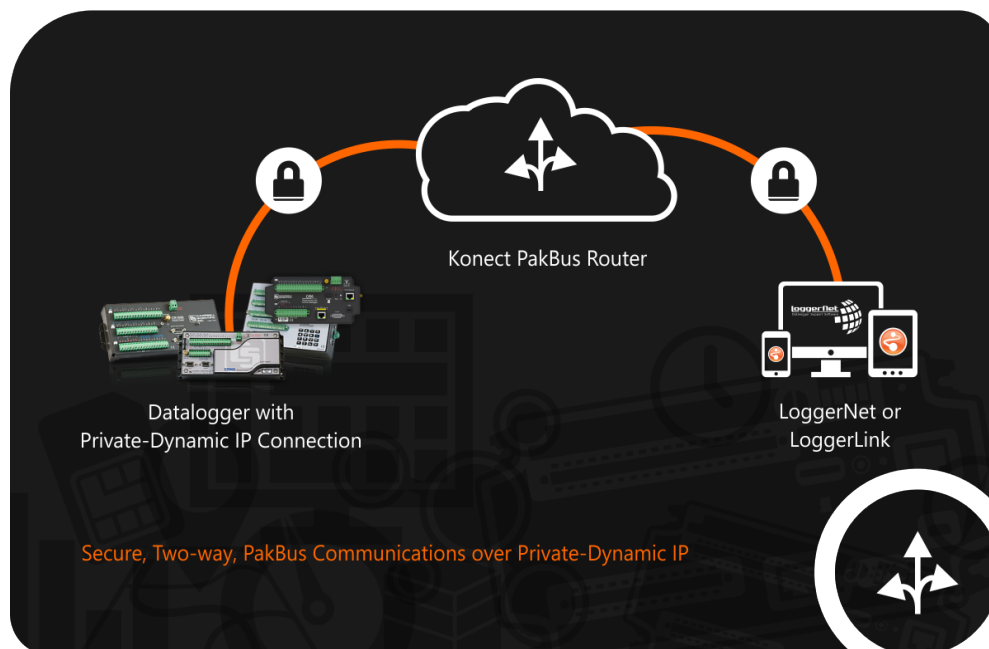




Premium Konec PakBus[®] Router

PakBus Routing Service



Guarantee

This equipment is guaranteed against defects in materials and workmanship. We will repair or replace products which prove to be defective during the guarantee period as detailed on your invoice, provided they are returned to us prepaid. The guarantee will not apply to:

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- Batteries
- Any product which has been subjected to misuse, neglect, acts of God or damage in transit.

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Please inform us before returning equipment and obtain a Repair Reference Number whether the repair is under guarantee or not. Please state the faults as clearly as possible, and if the product is out of the guarantee period it should be accompanied by a purchase order. Quotations for repairs can be given on request. It is the policy of Campbell Scientific to protect the health of its employees and provide a safe working environment, in support of this policy a "Declaration of Hazardous Material and Decontamination" form will be issued for completion.

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Premium Konect PakBus Router

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. Configure a data logger
2. Set up LoggerNet
3. Manage with KonectGDS

You will need the Premium Konect PakBus Router certificate provided with your purchase of the Premium Konect PakBus Router.


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

2. 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.

1. Data logger connected to a CELL200-series module
2. Data logger with an internal cellular module
3. Data logger connected to an RV50 modem

2.1 Data loggers connected to CELL200-series modules

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

On the Data logger tab, change the data logger PakBus Address and optional PakBus/TCP Password to match the information provided on the Premium Konect PakBus Router certificate.



The screenshot displays the 'Datalogger' configuration page within the Device Configuration Utility. The 'Datalogger' tab is selected and circled in red. The 'PakBus Address' dropdown menu is set to '101' and is highlighted with a red box. The 'PakBus Security' section contains three 'Security Code' dropdown menus, all set to '0'. Below these are fields for 'PakBus Encryption Key' and 'PakBus Encryption Key Confirm'. At the bottom of the security section, the 'PakBus/TCP Password' and 'Confirm PakBus/TCP Password' fields are highlighted with a red box.

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.

Deployment

Datalogger **Com Ports Settings** Ethernet CS I/O IP PPP

Select the ComPort: RS-232

Baud Rate: 115200 Fixed

Configuration:

Beacon Interval: 0

Verify Interval: 0

Neighbors

Begin

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.

Deployment

Datalogger Com Ports Settings Ethernet CS I/O IP **PPP** Network Services TLS

Config/Port Used: RS-232

DNS Server 1: 0.0.0.0

IP Address: 0.0.0.0

DNS Server 2: 0.0.0.0

User Name:

Password:

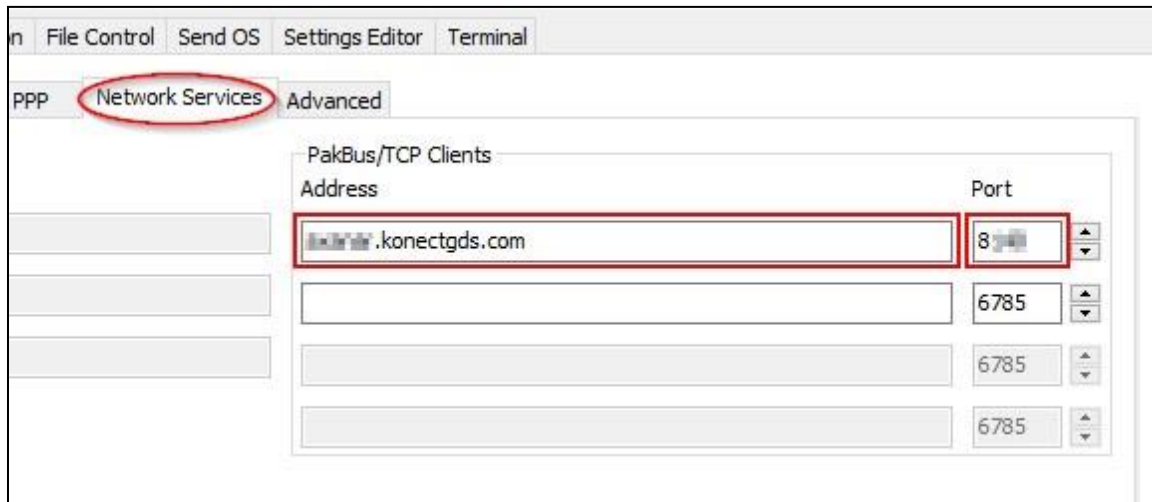
Modem Dial String:

Modem Dial Response: CONNECT

PPP Network Status


No default network.
PPP is not configured.

4. On the Network Services tab, in the PakBus/TCP Clients box, type the DNS address and Port number as stated on the Premium Konect PakBus Router certificate provided.



5. Apply to save your changes.

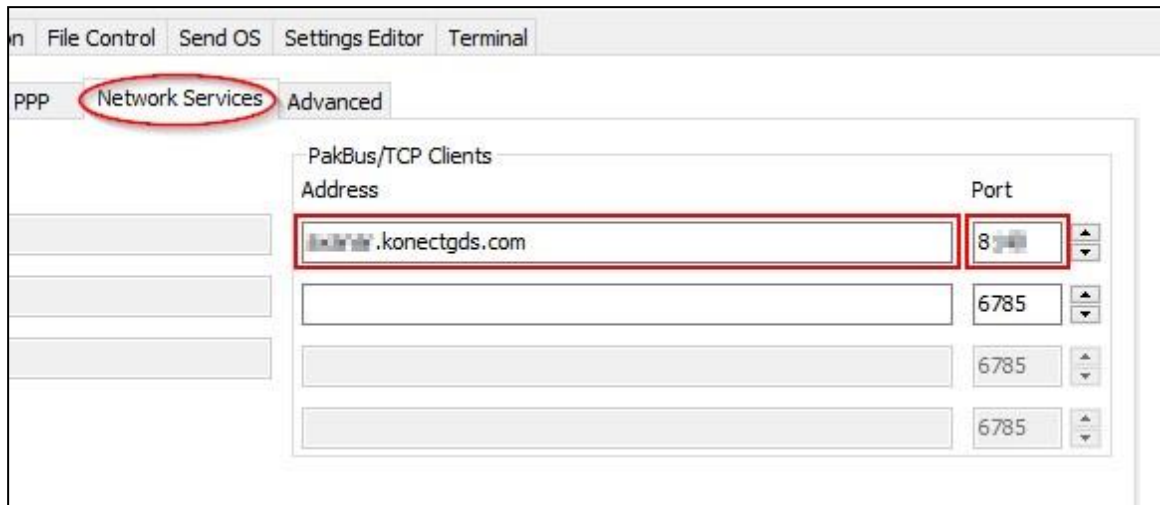
2.2 Data loggers with internal cellular modules (CR300-CELL200)

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

On the Data logger tab, change the data logger PakBus Address and optional PakBus/TCP Password to match the values as stated on the Premium Konect PakBus Router certificate provided.




2. On the Network Services tab, in the PakBus/TCP Clients box, type the DNS address and Port number as stated on the Premium Konect PakBus Router certificate provided.



3. Apply to save your changes.

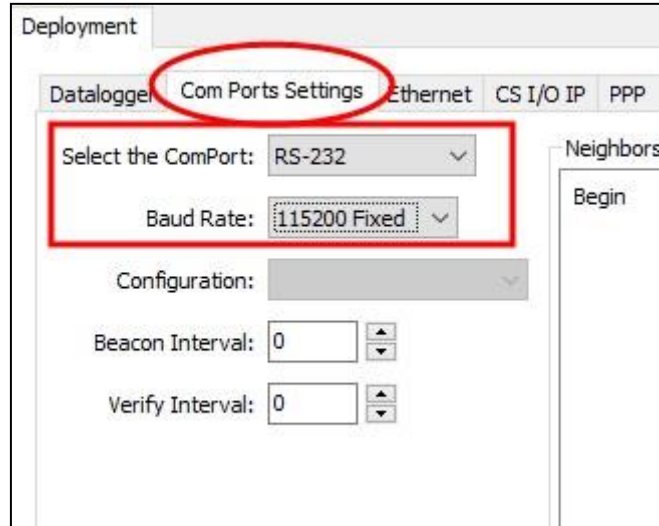
2.3 Data loggers connected to RV50 modems

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

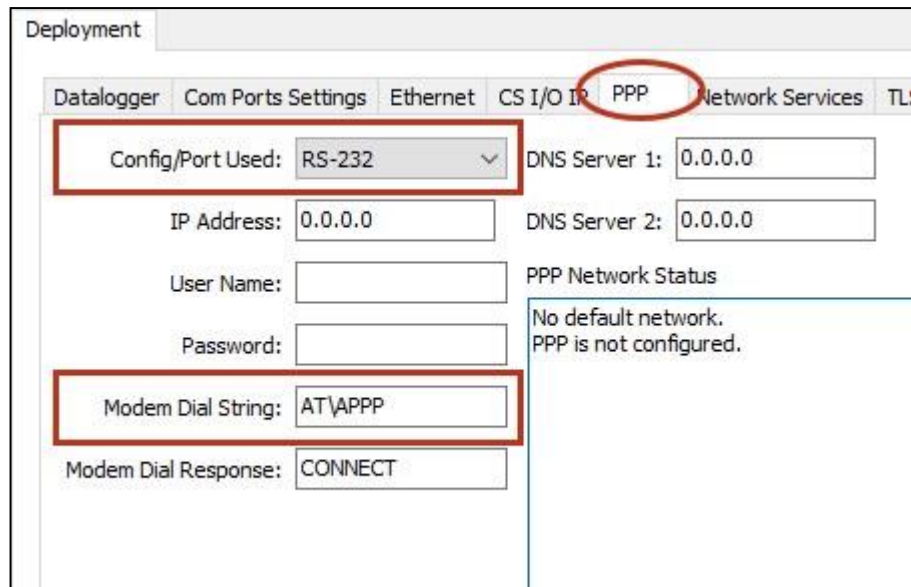
On the Data logger tab, change the data logger PakBus Address and optional PakBus/TCP Password to match the values as stated on the Premium Konect PakBus Router certificate provided.



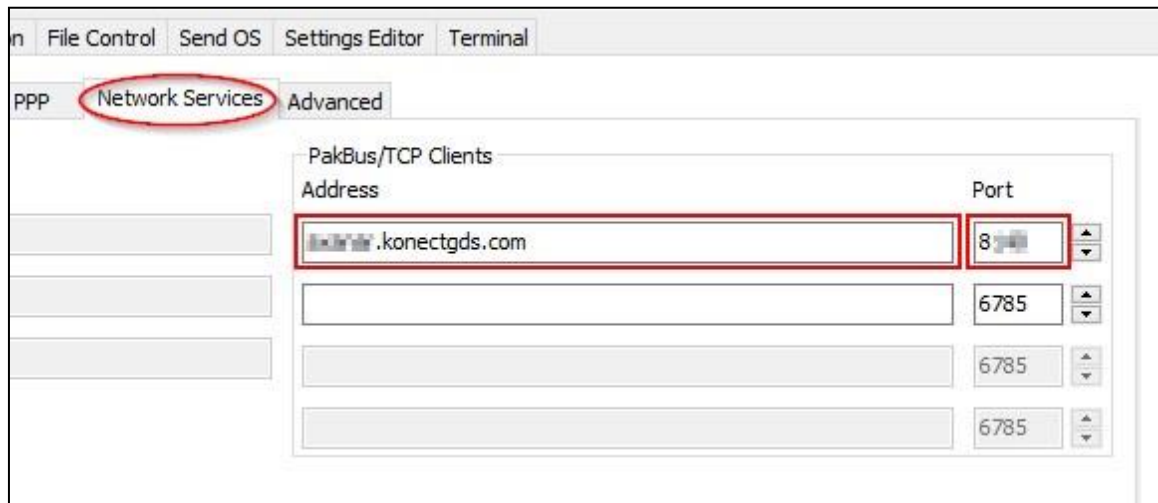
2. On the Com Ports Settings tab, Select the ComPort where the module is connected; this is generally RS-232 or CS I/O. When connecting to the CS I/O port, the default address is SDC8. When connecting via RS-232, change the Baud Rate to 115200 Fixed.



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. Set Modem Dial String to AT\APPP.



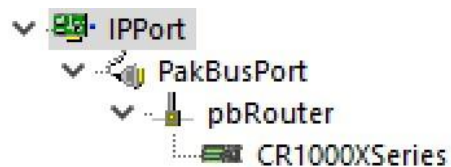
4. On the Network Services tab, in the PakBus/TCP Clients box, type the DNS address and Port number as stated on the Premium Konect PakBus Router certificate provided.



5. Apply to save your changes.

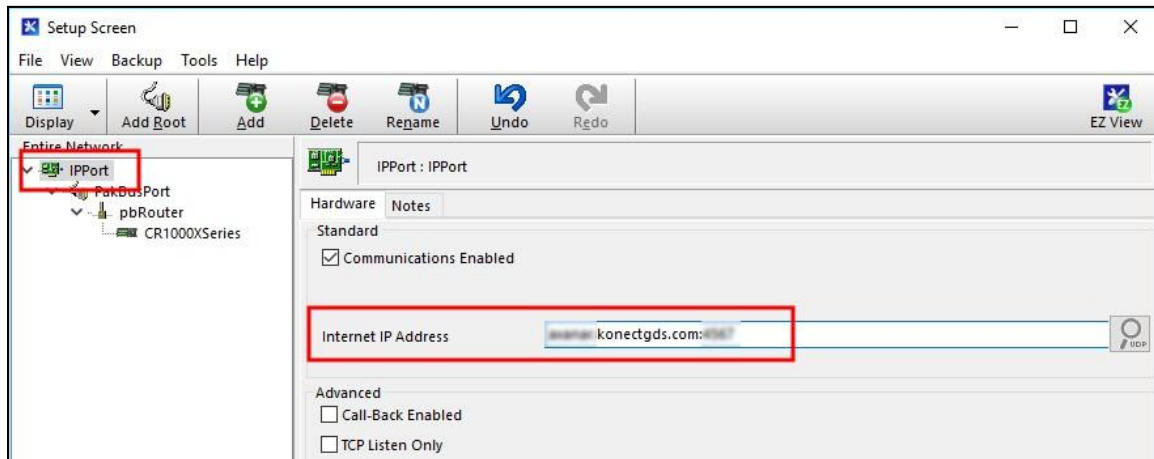
3. Set up LoggerNet

1. In the Standard View of LoggerNet Setup , add an IPort, > PakBusPort > pbRouter, and datalogger.

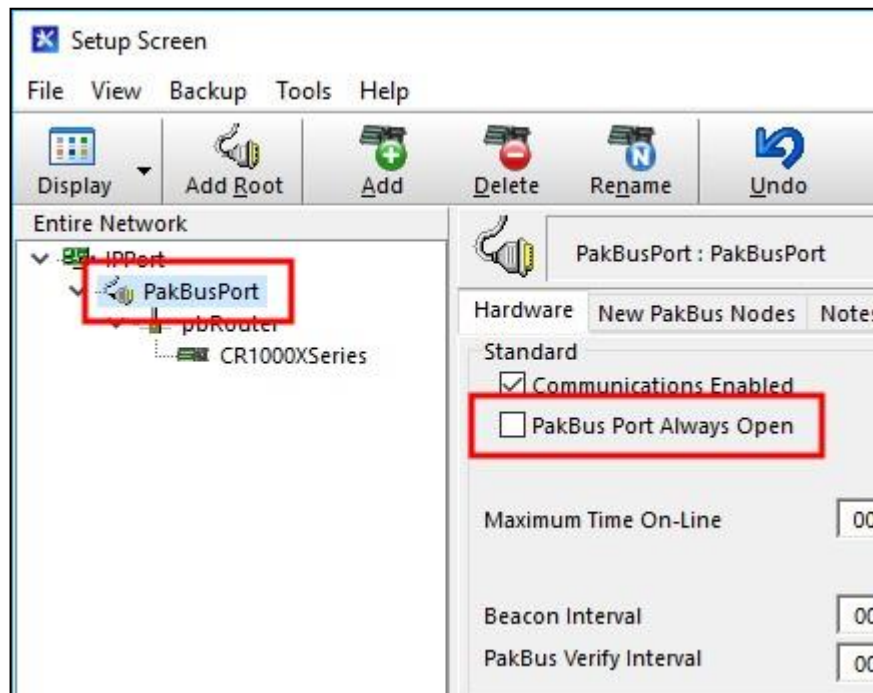


2. On the IPPort Hardware tab, select the Internet IP Address field. Enter the Konect PakBus Router DNS address and Port number separated by a colon as noted on the Premium Konect PakBus Router certificate.

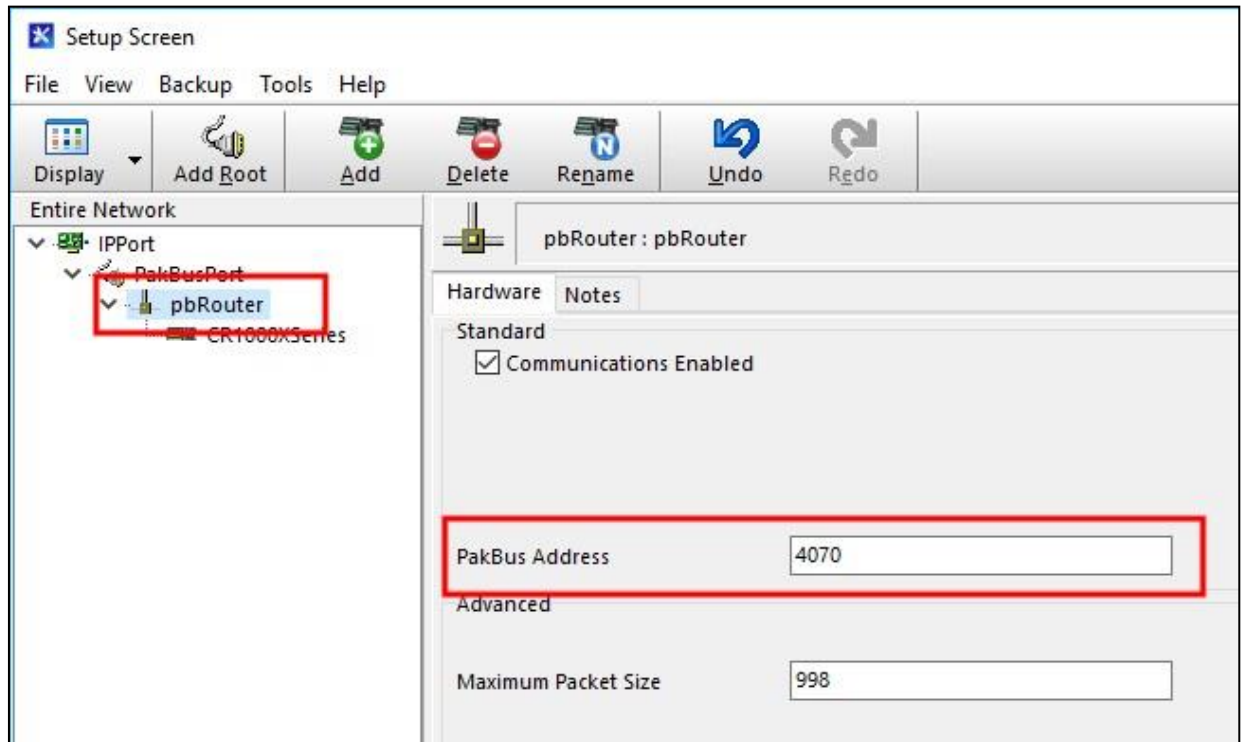
NOTE Address format: dddd.konectgds.com:pppp



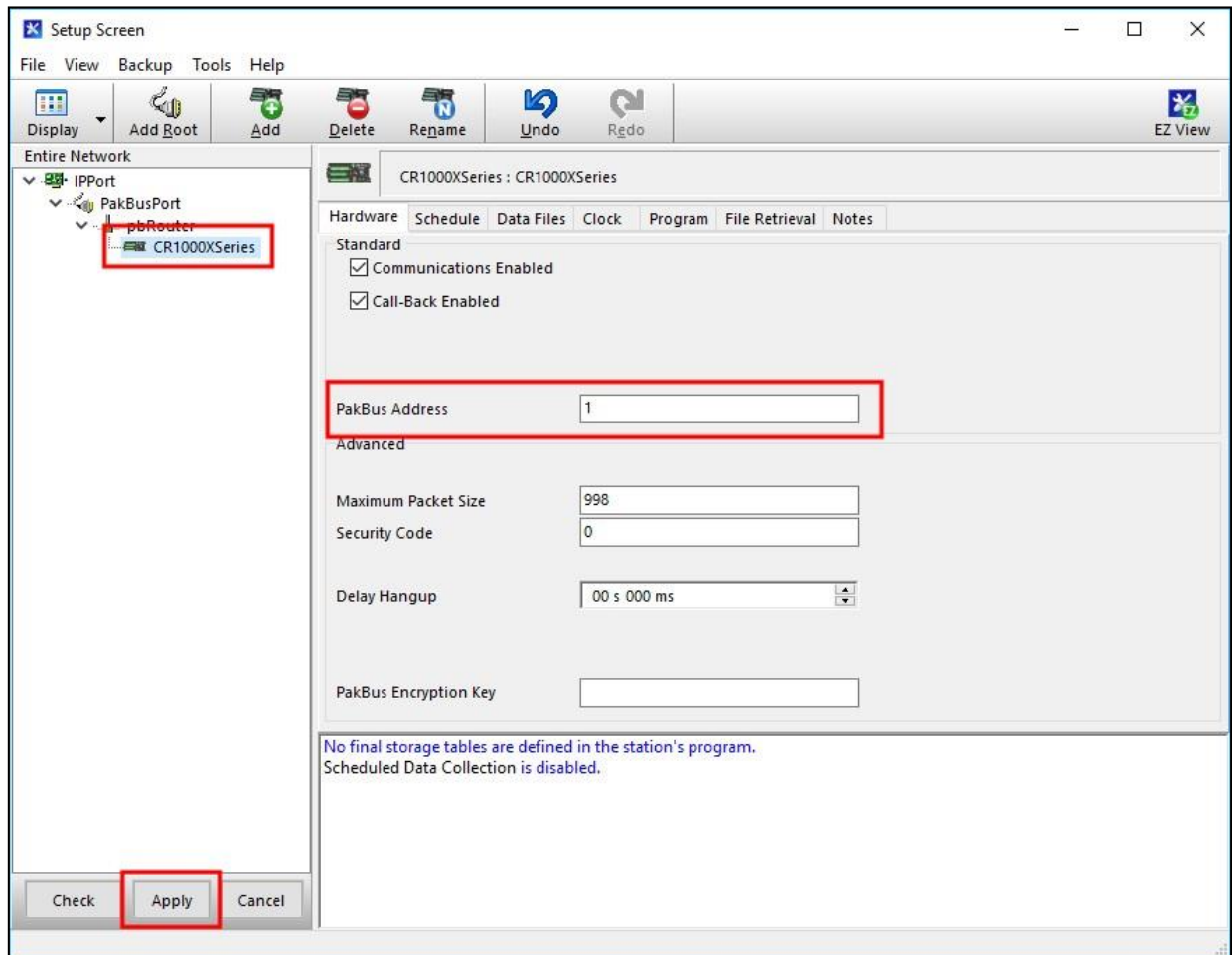
3. Leave the default settings for the PakBusPort. PakBus Port Always Open; it should not be checked. If you set or were provided with a TCP Password, enter it on the PakBusPort Hardware tab.



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 provided on the Premium Konect PakBus Router certificate.



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.

4. 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.eu/loggerlink> for more information.

5. Maintenance and troubleshooting

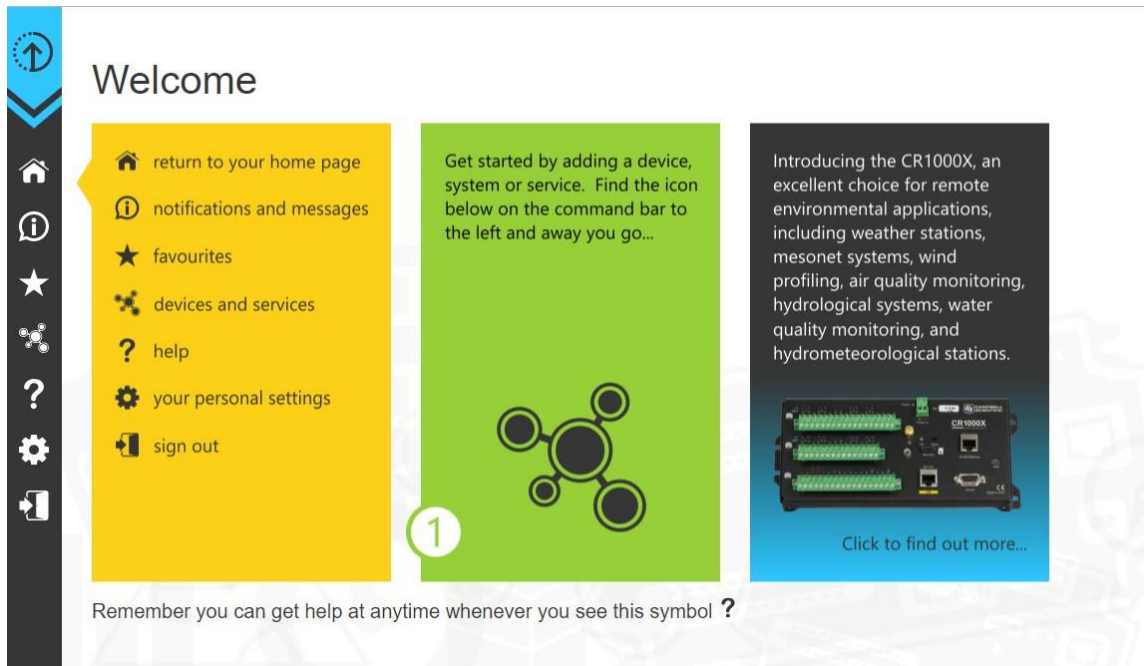
5.1 Review

1. 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.
2. 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.

5.2 Status

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

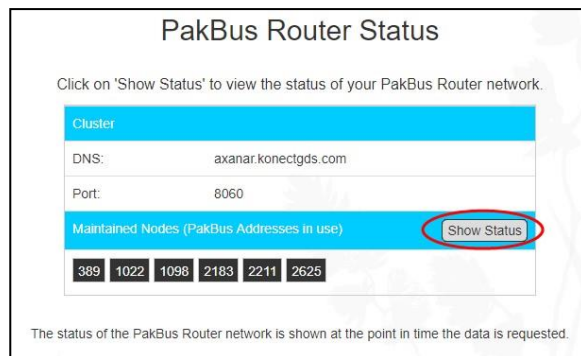
1. Sign in to www.konectgds.com using your Passport ID and Password.



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

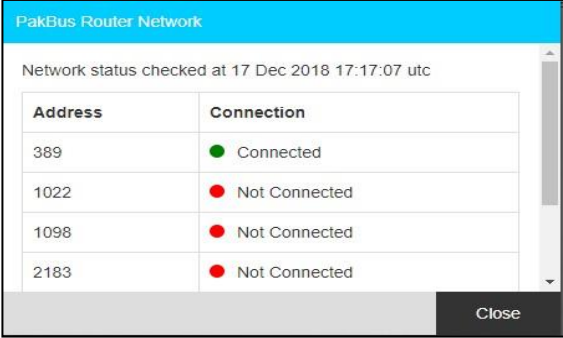


3. The next screen shows the DNS, Port, and assigned PakBus addresses. Click Show Status.



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.



Address	Connection
389	● Connected
1022	● Not Connected
1098	● Not Connected
2183	● Not Connected

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 configured correctly and network services have been configured with the correct address and port number.



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