

Overview

The Walkabout Device Configuration Tool provides basic network communication settings for NK-NET. Walkabout helps DashBoard to identify NK-NET network adapters without any prior configuration of IP settings. Walkabout provides basic information about the adapter and helps with the initial identification and setup. This document explains how to use the Walkabout Device Configuration Tool.

- ★ The Walkabout software is available as part of DashBoard (requires version 6.2 or greater) and as a free download from the Walkabout page at www.rossvideo.com.

Before You Begin

The following prerequisites are necessary in order to configure the NK-NET using Walkabout:

- ★ If your system uses a firewall or port blocking, ensure that traffic on port 5555 is allowed. If you are unsure, contact your network administrator.
- An ethernet connection with one or more NK-NET devices on the same LAN segment. For example, ports on the same network switch.
- Network configuration that permits the Walkabout protocol on the local LAN. For most configurations, no distinctive configuration is necessary.
- The IP information you want to assign to the NK-NET. Contact your network administrator for this information.

Walkabout User Interface

This section provides a brief summary of the Walkabout user interface.

No.	Device	ID	Name	Address	Netmask	Gateway	Reboot	Default	Locate	Link Quality
1	NK-NET		NK-NET				Reboot	Default	Locate	100%

Figure 1 Walkabout Interface — Stand-alone Application

- ★ Any change made in Walkabout is reflected in DashBoard once the Device page for the NK-NET is reloaded.

The Walkabout interface is organized into a table where each row represents a detected device. The following columns are displayed (left to right):

No. (read-only) – the row number index of the NK-NET in Walkabout.

Device (read-only) – the product name of the device.

ID (read-only) – the unique identifier for the device. This is the ENET MAC address of the primary network interface of the device, which allows the Walkabout system to distinguish among detected devices.

Name – the label assigned to the NK-NET by the user. Double-click inside the cell to enter or edit the text.

Address – the IP address assigned to the NK-NET. Double-click inside the cell to enter or edit the address. Ensure the address is detectable in DashBoard. If unsure of the information, contact your network administrator.

Netmask – the IP net mask assigned to the NK-NET. Double-click inside the cell to enter or edit the net mask.

Gateway – the IP gateway assigned to the NK-NET. Double-click inside the cell to enter or edit the gateway.

Reboot – click this button to restart a device. The reboot will occur immediately.

Default – click this button to return the NK-NET to its factory default settings including the name and all network parameters required for basic operation. Ensure the default settings are valid and correct or the device will be rendered undetectable by DashBoard. Ensure the IP address is detectable in DashBoard.

Locate – click this button to toggle the Locate mode of the NK-NET on or off. The Locate mode produces a display of alternating flashing between the yellow and green LEDs on the NK-NET chassis.

Link Quality (read-only) – displays the status of the connection where:

- **100%** (green) indicates that the connection is valid.
- **0%** (white) indicates that the connection has failed.
- Red indicates a slow connection.
- Any percentage from 1% to 99% is a relative measure of response time.

Refresh – click this button to query the network for NK-NET devices.

Launching Walkabout

There are two methods for launching Walkabout: as a stand-alone application or within the DashBoard interface.

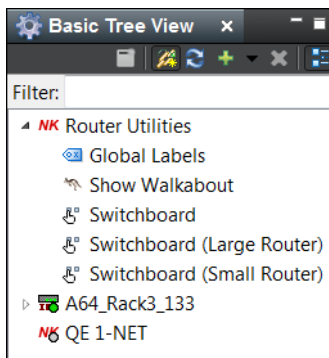
To launch Walkabout as a standalone application

★ Walkabout must be stored and launched locally from your computer.

1. Download the Walkabout zip file from the Ross Video website.
2. Locate the Walkabout zip file where you have saved it on your computer.
3. Extract the files to a local folder.
4. Double-click **walkabout.exe** to launch Walkabout.

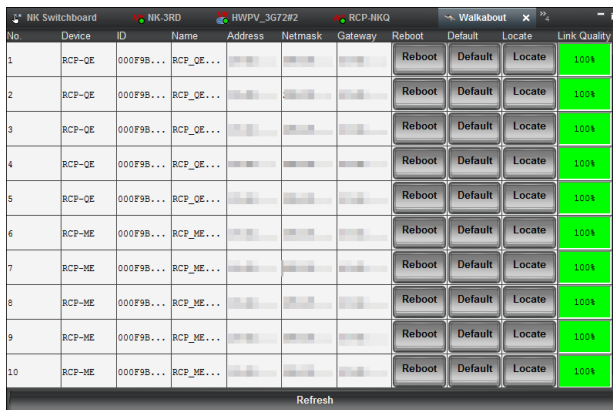
To launch Walkabout from DashBoard

1. In the **Basic Tree View** of **DashBoard**, expand the **NK Router Utilities** node.



2. Double-click the **Show Walkabout** icon.

The **Walkabout** window opens in DashBoard. The following is an example of an integrated DashBoard Walkabout client communicating with 10 devices.



No	Device	ID	Name	Address	Netmask	Gateway	Reboot	Default	Locate	Link Quality
1	RCP-QE	000F9B...	RCP_QE...				Reboot	Default	Locate	100%
2	RCP-QE	000F9B...	RCP_QE...				Reboot	Default	Locate	100%
3	RCP-QE	000F9B...	RCP_QE...				Reboot	Default	Locate	100%
4	RCP-QE	000F9B...	RCP_QE...				Reboot	Default	Locate	100%
5	RCP-QE	000F9B...	RCP_QE...				Reboot	Default	Locate	100%
6	RCP-ME	000F9B...	RCP_ME...				Reboot	Default	Locate	100%
7	RCP-ME	000F9B...	RCP_ME...				Reboot	Default	Locate	100%
8	RCP-ME	000F9B...	RCP_ME...				Reboot	Default	Locate	100%
9	RCP-ME	000F9B...	RCP_ME...				Reboot	Default	Locate	100%
10	RCP-ME	000F9B...	RCP_ME...				Reboot	Default	Locate	100%

Refresh

Adding an NK-NET or RCP-ME/QE to the Device Tree Using Walkabout

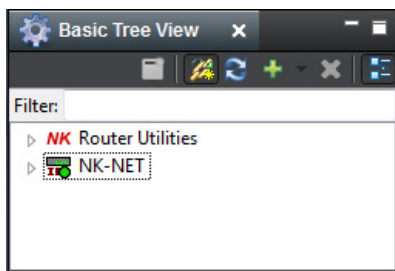
The NK-NET and RCP-ME/QE can be added to DashBoard via automatic discovery or manually using the NK-IPS Connection window.

Automatic Discovery

The NK-NET and RCP-ME/QE can be detected in DashBoard using auto discovery via SLP once the IP address for the LAN has been configured for use within a network using Walkabout.

To add an NK-NET or RCP-ME/QE to DashBoard via Automatic Discovery

1. Launch **Walkabout**.
If necessary, click **Refresh** to query the network for devices.
 2. Locate the device you want to add to DashBoard and configure the following information if necessary:
 - **Name** – double-click inside the cell to enter a name for the device.
 - **Address** – double-click inside the cell to enter an IP address for the device.
 - **Netmask** – double-click inside the cell to enter an IP netmask for the device.
 - **Gateway** – double-click inside the cell to enter an IP gateway for the device.
- ★ Any changes made to the device in Walkabout are applied immediately. As settings are updated, the device might go offline for a few seconds as it reboots.
- ★ When making changes in DashBoard, the configuration must be sent to the device before the changes are applied.
3. In **DashBoard**, refresh the **Basic Tree View**.
The device (for example, NK-NET) is added to the devices listed in the **Basic Tree View**.
The device settings can now be edited or further configured in DashBoard.



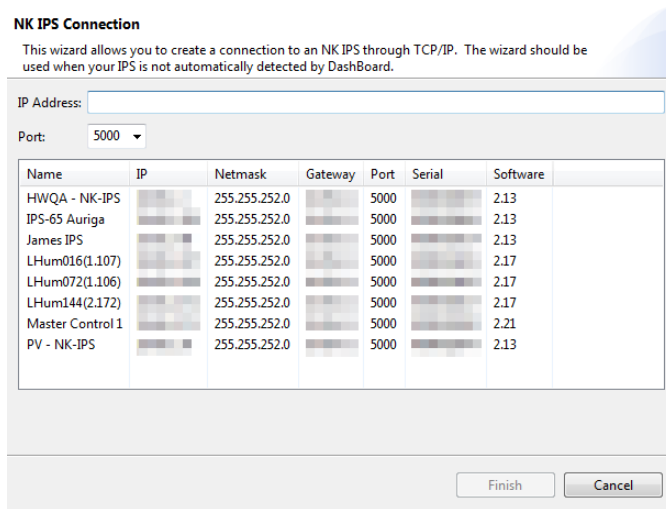
Manually Adding an NK-NET or RCP-ME/QE to DashBoard

Once a device is detected and configured in Walkabout, it can be added manually to DashBoard using the **NK-IPS Connection** window.

To manually add an NK-NET or RCP-ME/QE to DashBoard

1. Launch **Walkabout**.
2. Click **Refresh** to query the network for devices.
Detected devices will display in table rows.
3. Locate the device you want to add to DashBoard and configure the following information if necessary:
 - **Name** – double-click inside the cell to enter a name for the device.
 - **Address** – double-click inside the cell to enter an IP address for the device.
 - **Netmask** – double-click inside the cell to enter an IP netmask for the device.
 - **Gateway** – double-click inside the cell to enter an IP gateway for the device.

- ★ Any changes made to the device in Walkabout are applied immediately. As settings are updated, the device might go offline for a few seconds as it reboots.
 - ★ When making changes in DashBoard, the configuration must be sent to the device before the changes are applied.
4. In **DashBoard**, click **File > New > NK-IPS Connection**.
The **NK-IPS Connection** window opens.



NK IPS Connection

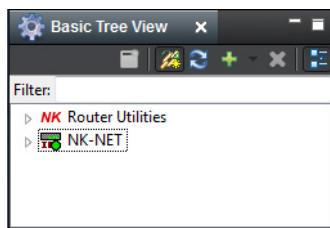
This wizard allows you to create a connection to an NK IPS through TCP/IP. The wizard should be used when your IPS is not automatically detected by DashBoard.

IP Address:

Port:

Name	IP	Netmask	Gateway	Port	Serial	Software
HWQA - NK-IPS		255.255.252.0		5000		2.13
IPS-65 Auriga		255.255.252.0		5000		2.13
James IPS		255.255.252.0		5000		2.13
LHum016(1.107)		255.255.252.0		5000		2.17
LHum072(1.106)		255.255.252.0		5000		2.17
LHum144(2.172)		255.255.252.0		5000		2.17
Master Control 1		255.255.252.0		5000		2.21
PV - NK-IPS		255.255.252.0		5000		2.13

5. In the **IP Address** field (at the top), enter the IP address of the NK-NET you want to add to DashBoard.
 6. Use the **Port** drop-down menu to select a port number. The default is 5000.
- ★ If the port number is changed in Walkabout, the port number in the NK-IPS Connection window must be configured to reflect this change.
7. Click **Finish**.
The **NK-IPS Connection** window closes and the NK-NET is added to the devices listed in the **Basic Tree View**.
The NK-NET settings can now be edited or further configured by opening the device tab in DashBoard.



Identifying Discovered Devices

If more than one device is detected, it may be necessary to identify devices physically in order to ensure the correct names and settings are being assigned to the correct device.

There are two methods for identifying devices:

- using the Walkabout ID
- using the Walkabout Locate function

Using the Walkabout ID

Devices may be identified in Walkabout using the **Device** column and the **ID** column. The ID column displays the factory-assigned MAC number of the device, which is indicated by a label or stencil on the unit.

Using the Locate Function

Walkabout also allows positive identification of a specific device by using the **Locate** function. Clicking the **Locate** button of an NK-NET will cause its physical Ethernet status LEDs to blink in an alternating on/off pattern for 60s (one second on, one second off) to allow the device to be physically identified. The Locate mode display will cease after 60s have elapsed or when the **Locate** button is pressed a second time.

For RCP-ME/QE panels, the locate function causes the front panel lights to flash for 60s.

Configuring the System

Once the NK-NET and RCP-ME/QE have been configured to communicate on the network and are discovered by DashBoard, it is possible to configure their remaining settings for your specific application.

For More Information on...

- configuring a device, refer to the user guide for the respective device.

Beyond Walkabout: Configuring Basic System Network Connections

To create a useful system configuration involving RCP-ME/QE panels and the NK-NET, the devices must be configured to establish connections over the network to which they are attached. Unlike T-BUS, where several devices are simply connected to the same physical bus link to form a system of routers and panels, network-enabled devices must be:

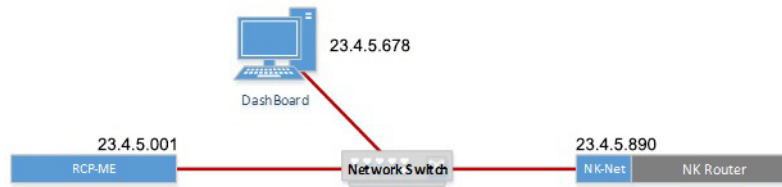
- configured via Walkabout to communicate on the network to which they are attached, and
- explicitly configured via DashBoard to establish client/server connections over the network with one another to build a system configuration.

This section provides examples on how to create the connections necessary to establish a basic system configuration using the RCP-ME/QE and NK devices.

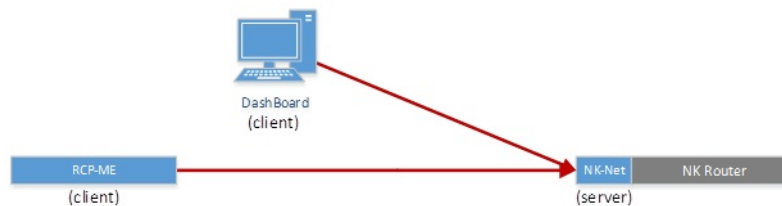
- ★ In these systems, a *client* refers to a device on the network that originates and establishes a connection to another device (a *server*) at a specified IP address. The *server* is the device that listens for, and accepts, incoming connections from one or more clients.

Quick Start Scenario #1: Control an NK Router Over the Network Using an NK-NET and RCP-ME/QE

The system configured in this scenario is illustrated in the following diagram:



Operationally, the client/server relationships established in this system are as follows:



To control an NK router over the network using an NK-NET and RCP-ME/QE

1. In **Walkabout**, configure the basic network settings for the RCP-ME/QE and NK-NET.
2. Verify that the devices are discovered by Dashboard.
3. Double-click the RCP-ME/QE icon in the **Basic Tree View** of **Dashboard**.
The RCP-ME/QE tab opens in Dashboard.
4. In the **Servers to connect to** section of the RCP-ME/QE tab:
 - a. Enter the IP address of the NK-NET in the **IP Address** cell of the first row of the **Servers** table.
 - b. Leave the IP addresses of the other rows as 0.0.0.0.
5. Click **Send Configuration**.

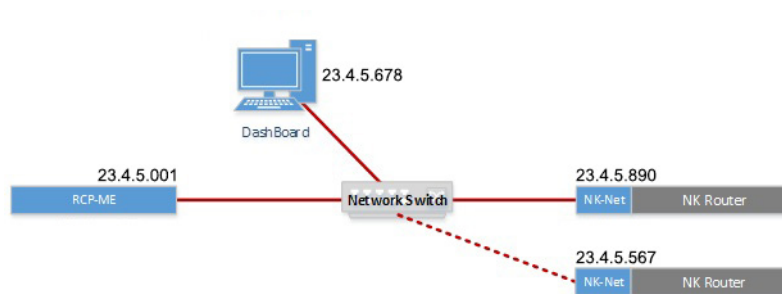
For More Information on...

- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.

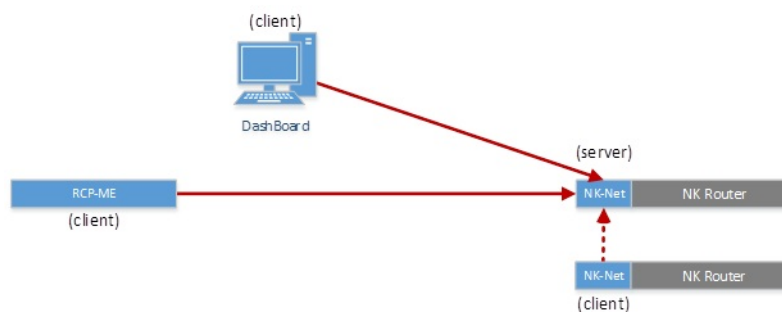
Quick Start Scenario #2: Join a Router to the System Over the Network Using Two NK-NETs

The following scenario builds on the example above, to add a second router to the system. The system uses an NK-NET as a client to connect the new router to the existing system over the network rather than using T-BUS to connect the second router to the first.

The following diagram depicts the resulting system configuration:



The client/server relationships established in this system are as follows:



To add the new router connected to the NK-NET as a client to the existing NK-NET

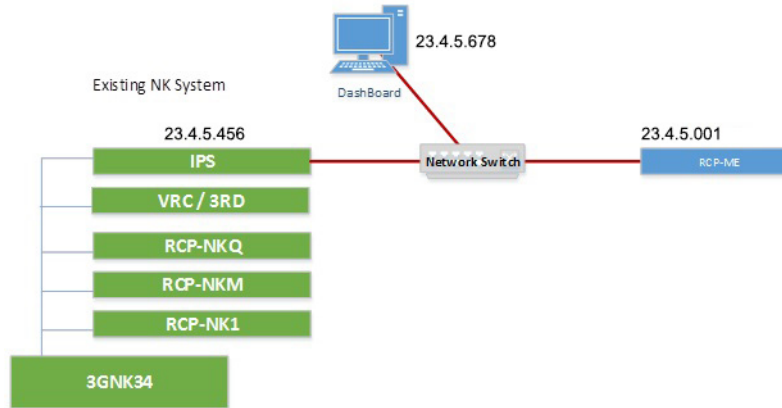
1. In **Walkabout**, configure the IP settings for the second NK-NET.
2. Verify that the second NK-NET is discovered by Dashboard.
3. Double-click the NK-NET icon in the **Basic Tree View** of **Dashboard**.
The NK-NET tab opens in Dashboard.
4. In the **NK-NET to connect to** section of the NK-NET tab:
 - a. Enter the IP address of the first NK-NET in the **IP Address** cell of the first row of the **Servers** table.
 - b. Leave the IP address of the second row as 0.0.0.0.
5. Click **Send Configuration**.

For More Information on...

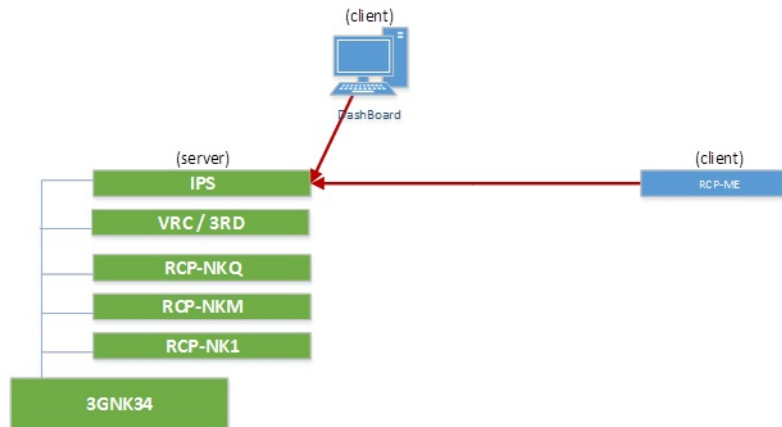
- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.

Quick Start Scenario #3: Connect an RCP-ME/QE to an Existing NK System with an NK-IPS

In this scenario, an RCP-ME/QE is added as a client to an existing system that has an NK-IPS. The following diagram shows the system that will be created:



The following diagram depicts the client-server relationships that will be established in this system:



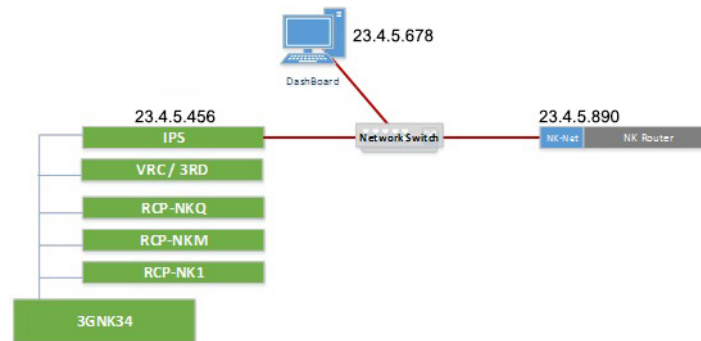
To configure this system, follow the same basic discovery and configuration steps as the RCP-ME/QE client configuration as are shown in steps 4 and 5 of **“Quick Start Scenario #1: Control an NK Router Over the Network Using an NK-NET and RCP-ME/QE”**, substituting the IP address of the NK-IPS for the address of the NK-NET.

For More Information on...

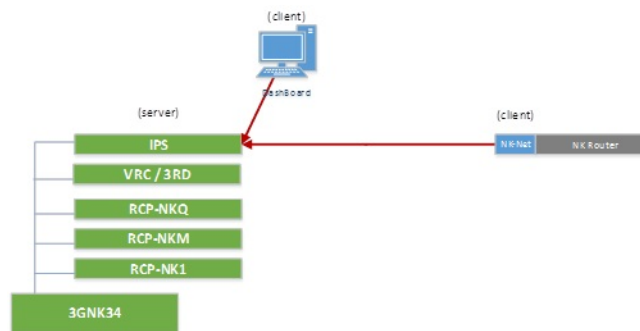
- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.

Quick Start Scenario #4: Use an NK-NET to Connect Another NK Router Over Ethernet to an Existing NK System that Includes an NK-IPS

This scenario connects a new router to an existing system using the Ethernet network rather than T-BUS:



The configuration depicted in this scenario establishes the following client-server relationships:



To use an NK-NET to connect another NK router over Ethernet to an existing NK system that includes an NK-IPS

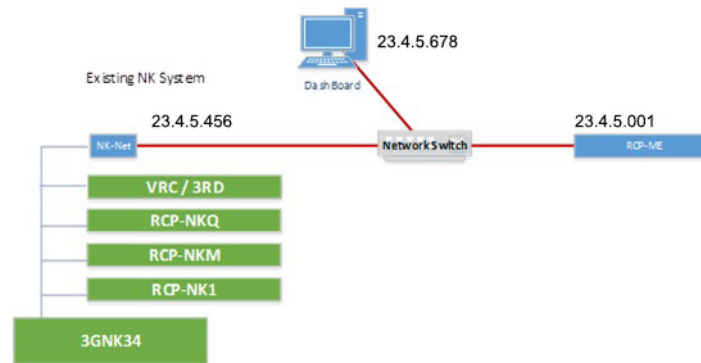
1. In **Walkabout**, configure the IP settings for the second NK-NET.
2. Verify the second NK-NET is discovered by Dashboard.
3. Double-click the NK-NET icon in the **Basic Tree View** in **Dashboard**.
The NK-NET tab opens in Dashboard.
4. In the **NK-NET to connect to** section of the NK-NET tab:
 - a. Enter the IP address of the NK-IPS in the **IP Address** cell of the first row of the **Servers** table.
 - b. Leave the IP address of the second row as 0.0.0.0.
5. Click **Send Configuration**.

For More Information on...

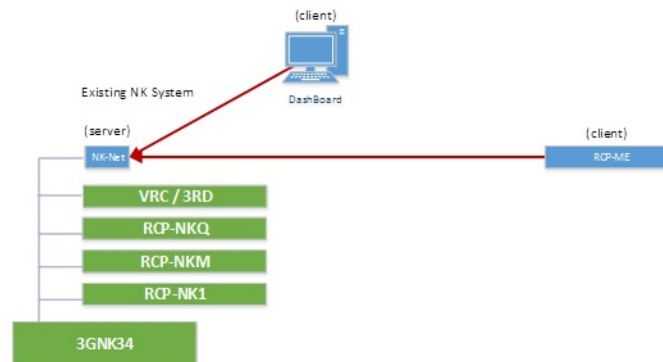
- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.

Quick Start Scenario #5: Use an NK-NET to Connect an Additional RCP-ME/QE Over Ethernet to an Existing NK System that Does Not Include an NK-IPS

In this scenario, an NK-NET is used to add an RCP-ME/QE to an existing system that has no NK-IPS:



This setup will result in the following client-server relationships:



To configure this system:

1. Connect the NK-NET to the T-BUS of the existing system.
2. In **Walkabout**, configure the basic network settings for the RCP-ME/QE and NK-NET.
3. Verify the devices are discovered by Dashboard,
4. Double-click the RCP-ME/QE icon in the **Basic Tree View** in **Dashboard**.
The RCP-ME/QE tab opens in Dashboard.
5. In the **Servers to connect to** section of the RCP-ME/QE tab:
 - a. Enter the IP address of the NK-NET in the **IP Address** cell of the first row of the **Servers** table.
 - b. Leave the IP addresses of the other rows as 0.0.0.0.
6. Click **Send Configuration**.

For More Information on...

- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.
- connecting the NK-NET to the T-BUS system, refer to the *NK-NET User Guide*.