

# Configuring Devices Using Walkabout

## Overview

The following information explains how to use the Walkabout configuration software to configure the basic network communications settings for the NK-NET.

- ★ Walkabout software is available as part of DashBoard (requires version 6.2 or greater) and as a free download from the Walkabout section at [www.rossvideo.com](http://www.rossvideo.com).

## Prerequisites

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

- 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 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. If unsure of the information, contact your network administrator.
- ★ If your system uses a firewall or port blocking, ensure that traffic on port 5555 is allowed. If you are unsure, please contact your system administrator.

## Walkabout User Interface

This section explains the various functions and features of the Walkabout user interface.

No.	Device	ID	Name	Address	Netmask	Gateway	Reboot	Default	Locate	Link Quality
1	NK-NET	000F9B027055	NK-NET	10.65.1.190	255.255.255.0	10.65.0.1	Reboot	Default	Locate	100%

*Figure 4.1 The Walkabout User Interface*

### Field Descriptions

- ★ Any change made in Walkabout will be reflected in DashBoard once the device page for the NK-NET has been reloaded.

**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 name assigned to the NK-NET by the user. Double click inside the cell to enter or edit the name.

**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 netmask assigned to the NK-NET. Double click inside the cell to enter or edit the netmask.

**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 reboot the NK-NET.

**Default** – click this button to return the NK-NET to its factory default settings. 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.

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

- **100%** (green) indicates that the connection is good.
- **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

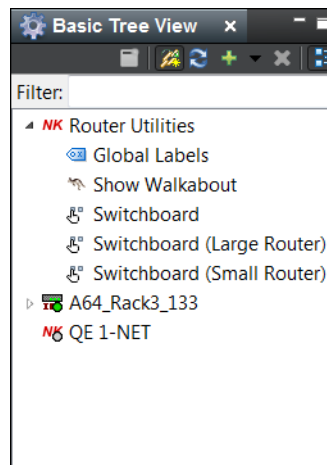
**To launch Walkabout (Standalone Client):**

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

1. Locate the zip file where you have saved it on your computer.
2. Extract the files to a local folder.
3. Double-click **walkabout.exe** to open Walkabout.

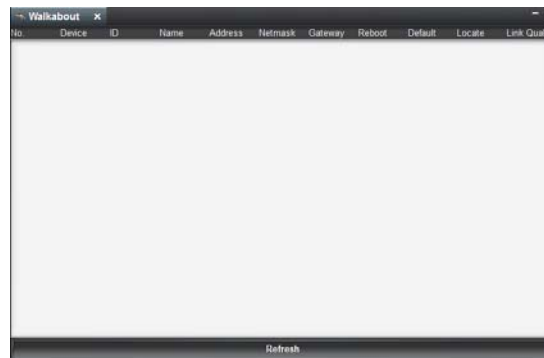
**To launch Walkabout from Dashboard:**

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



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

The **Walkabout** window opens in DashBoard.



The following image displays the integrated DashBoard Walkabout client with devices detected.



## Adding an NK-NET or RCP-ME/QE to the DashBoard 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.

### Adding an NK-NET or RCP-ME/QE to DashBoard via 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:

1. Open **Walkabout**.

If necessary, click **Refresh** to query the network for NK-NET or RCP-ME/QE 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**.



**Figure 4.2** The Basic Tree View in DashBoard

The device settings can now be edited or further configured by opening the device tab in DashBoard.

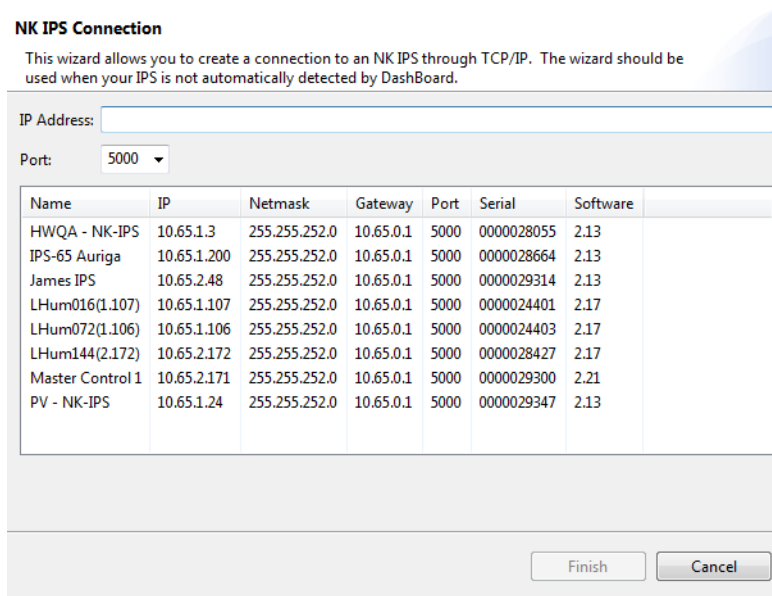
#### Manually Adding an NK-NET or RCP-ME/QE to DashBoard

The NK-NET and RCP-ME/QE can be added manually to DashBoard by entering the IP address using the **NK-IPS Connection** window once it has been detected and configured in Walkabout.

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

1. Open **Walkabout**.
  2. Click **Refresh** to query the network for devices.  
Detected devices will appear 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.



**Figure 4.3** The NK-IPS Connection Window

5. In the **IP Address** box, enter the IP address of the NK-NET you want to add to DashBoard.
6. Use the **Port** dropdown 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**.



**Figure 4.4** The Basic Tree View in DashBoard

The NK-NET settings can now be edited or further configured by opening the device tab in DashBoard.

## Distinguishing Between Discovered Devices

If more than one device has been 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 distinguishing between devices:

- by Walkabout ID
- by using the Walkabout Locate function

### Distinguishing Between Devices Using 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 sticker or stencil on the unit.

### Distinguishing Between Devices 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 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.

## Restoring Factory Defaults

Click the **Default** button to restore the device to its factory default settings. The **Name** and all network parameters that are necessary for basic device operation will be restored to their default status.

## Rebooting Devices

Click the **Reboot** button to restart a device. The reboot will occur immediately.

## 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, please refer to the user guide for the respective device.

# Beyond Walkabout: Configuring Basic System Network Connections

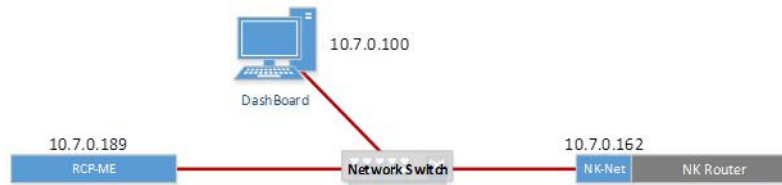
## Overview

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 not only be configured via Walkabout to communicate on the network to which they are attached, but also explicitly configured via DashBoard to establish client/server connections over the network with one another to build a system configuration. This section describes the steps to create the connections necessary to establish a basic system configuration using the RCP-ME/QE and NK devices.

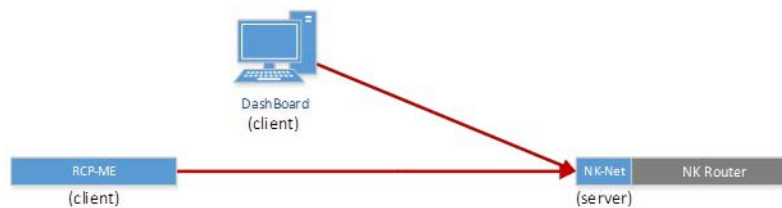
★ In these systems, a *client* refers to a device on the network that originates and establishes a connection to another device (a server) at a specified IP address. The *server* is the device that listens for, and accepts, incoming connections from one or more clients.

## 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. Once the devices have been discovered by DashBoard, double-click the RCP-ME/QE icon in the **Basic Tree View** in **DashBoard**.

The device tab opens in the main window in DashBoard.

3. In the **Servers to connect to** section of the RCP-ME/QE device tab, enter the IP address of the NK-NET in the **IP Address** cell of the first row of the **Servers** table. Leave the IP addresses of the other rows as 0.0.0.0.
4. Click **Send Configuration**.

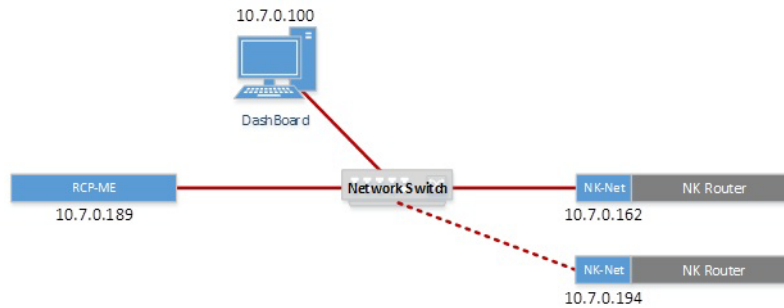
**For More Information on...**

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

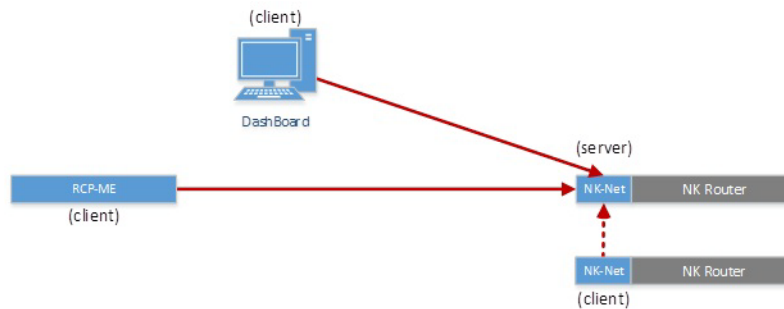
## Quick Start Scenario #2: Join a Router to the System Over the Network Using Two NK-NETs

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. Once the second NK-NET has been discovered by Dashboard, double-click the NK-NET icon in the **Basic Tree View** in **DashBoard**.

The device tab opens in the main window in Dashboard.

3. In the **NK-NET to connect to** section of the NK-NET device tab, enter the IP address of the first NK-NET in the **IP Address** cell of the first row of the **Servers** table. Leave the IP address of the second row as 0.0.0.0.
4. Click **Send Configuration**.

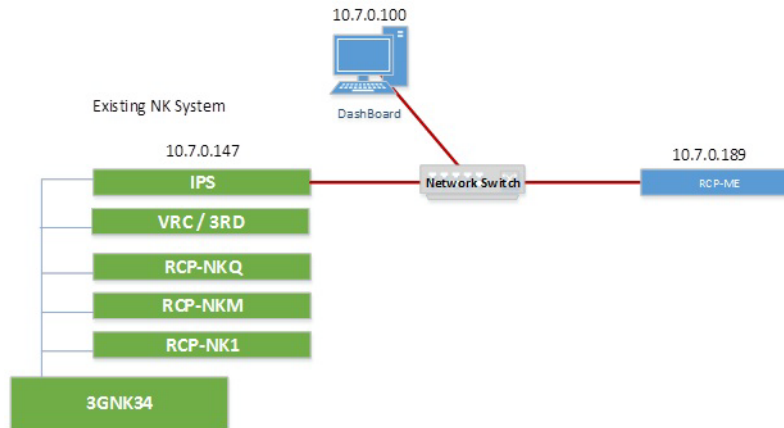
**For More Information on...**

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

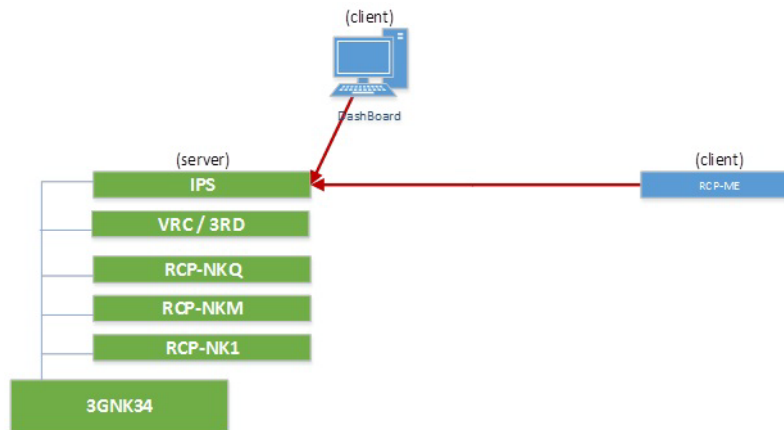


## Quick Start Scenario #3: Connect an RCP-ME/QE to an Existing NK System That Includes an NK-IPS

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:



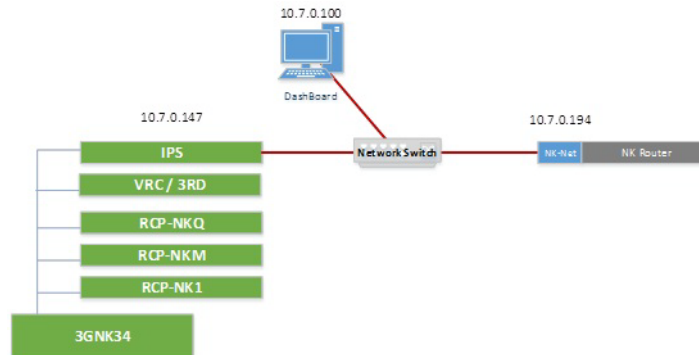
To configure this system, follow the same basic discovery and configuration steps as the RCP-ME/QE client configuration as are shown in steps 3 and 4 in “Quick Start Scenario #1: Control an NK Router Over the Network Using an NK-NET and RCP-ME/QE”, substituting the IP address of the NK-IPS for the address of the NK-NET.

### For More Information on...

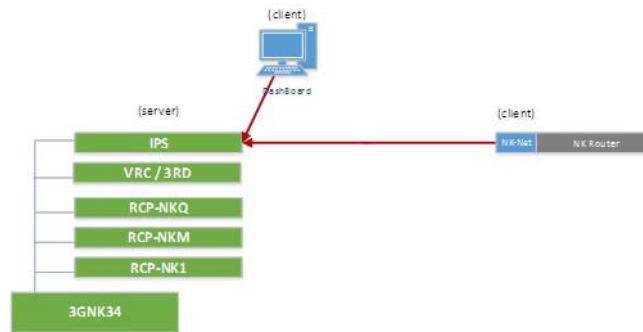
- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.

## 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. Once the second NK-NET has been discovered by **DashBoard**, double-click the NK-NET icon in the **Basic Tree View** in **DashBoard**.

The device tab opens in the main window in **DashBoard**.

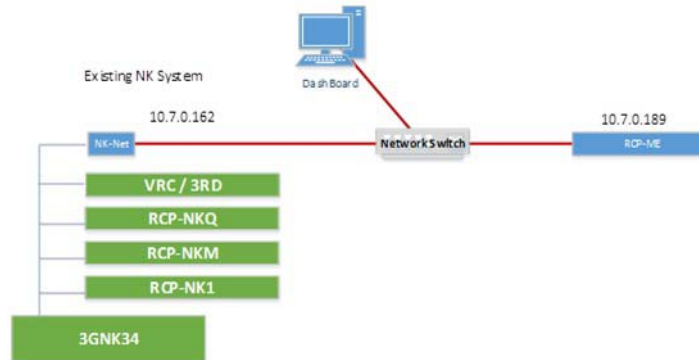
3. In the **NK-NET to connect to** section of the NK-NET device tab, enter the IP address of the NK-IPS in the **IP Address** cell of the first row of the **Servers** table. Leave the IP address of the second row as 0.0.0.0.
4. Click **Send Configuration**.

**For More Information on...**

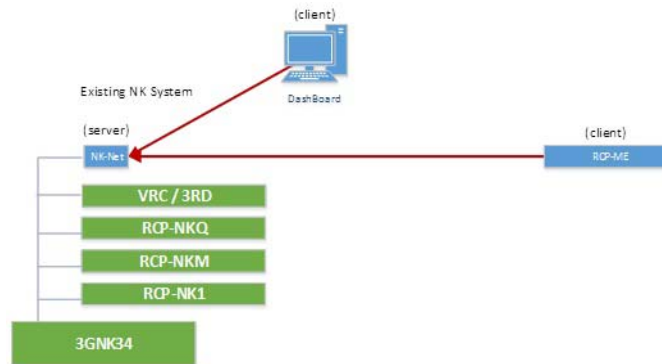
- the device tab and sending a configuration, refer to the RCP-ME or RCP-QE User Guide.

## 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. Once the devices have been discovered by Dashboard, double-click the RCP-ME/QE icon in the **Basic Tree View** in **DashBoard**.

The device tab opens in the main window in Dashboard.

4. In the **Servers to connect to** section of the RCP-ME/QE device tab, enter the IP address of the NK-NET in the **IP Address** cell of the first row of the **Servers** table. 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.
- connecting the NK-NET to the T-BUS system, refer to the *NK-NET User Guide*.