Nokia Siemens Networks

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Nokia FlexiHopper (Plus) Product Doc, Rel. 2.7

Administering Nokia FlexiHopper (Plus) 2.7

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The product is marked with the CE marking and Notified Body number according to the Directive 1999/5/EC.

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Contents

1 Summary of changes to Administering Nokia FlexiHopper (Plus) 2.7

1.1 Changes in documentation

1.1.1 Changes between release 2.5 and release 2.7

- one caution has been removed and one tip has been updated in *Introduction to Nokia Hopper manager* chapter.
- Steps have been updated in *Connecting via Nokia Q1 address* chapter.

2 Using Nokia Hopper Manager

2.1 Starting Nokia Hopper Manager

Steps

1. **Start the computer and Windows**
2. **On the Start menu, select Programs → Nokia Application → Nokia Hopper Manager**

   Or

   In Windows 2000/XP, select **Programs → Nokia → Nokia Hopper Manager** on the **Start** menu.

Expected outcome

Nokia Hopper Manager is launched.

Further information

From the Nokia Hopper Manager's **Equipment view** window you can manage all functions of the manager.

2.2 Introduction to Nokia Hopper Manager

Before you start

This section assumes that:

- Nokia Hopper Manager has been installed on your computer (for installation instructions, see *Installing Nokia Hopper Manager from CD-ROM* and *Installing Nokia Hopper Manager from NOLS*.)
- you have read the `README.TXT` file, which contains important last minute information.

Note

Many of the changes or actions that can be performed in Nokia Hopper Manager do not take place until they have been sent to the node.

The **Equipment View** window opens automatically whenever you are managing a network element or virtual node file.

The window displays the configuration of the managed network element. It is also the connection to the network element; if the window is closed, the connection is also closed.

The window shows the basic information about the network element; its name and address, and so on. Figure *Equipment View in Nokia Hopper Manager (FIU 19 (E))* is a graphical representation of the network element. The figure displays the number and configuration of indoor units, plug-in units, outdoor units, and Flexbus connections.

In the **Equipment View** window you can access the settings and identifications of each unit, view the status information for the radio hop, and see the LED status of the functional entities of the node. This information is updated periodically.

The LED indicators in the **Equipment View** window show the status of each functional entity of the node. They are not the same as the front panel LEDs.

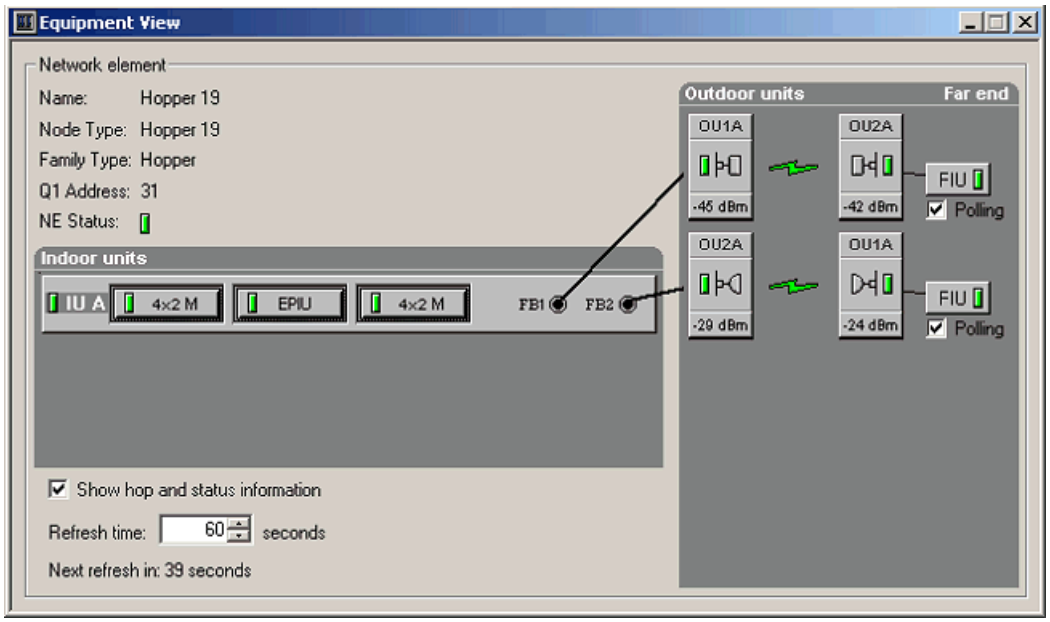

Figure 1. Equipment View in Nokia Hopper Manager (FIU 19 (E))

Steps

1. **To display the pop-up menu, click the right mouse button while the mouse pointer is over a unit**

2. **To change the refresh interval for the automatic refresh, set the time in the Refresh time text box**

3. **To enable the status information, check the Show hop and status information checkbox**

Tip

Do not set the refresh interval to a very small value when monitoring a network element remotely. Too small a value puts a strain on the Q1 bus resources and delays other activities.

Expected outcome

You are familiar with the basics of the Nokia Hopper Manager and you can start commissioning.

2.3 Working offline or configuring a virtual node

Purpose

You can use the Nokia Hopper Manager online or offline. Online mode manages the actual network element and any changes are made directly to the equipment. Offline mode allows you to manage a virtual node. In offline mode, all the configuration information is saved to the node file, except for the fault settings, measurements, and performance statistics. The node file is a representation of a real network element.

When working offline it is possible to create a template that can be used to commission numerous installations with similar configurations. You can also use the offline mode to make changes to an installation at the office before going into the field.

Note

When the Nokia Hopper Manager is in offline mode, it does not verify the entered configuration. The configuration is verified with the actual equipment when it is sent to the node. If the created configuration does not correspond to the actual installed equipment, a warning message is displayed.

Before you start

Nokia Hopper Manager software application is running on your computer.

Steps

1. To create a new virtual node file, select File → New

It is necessary to first create the equipment structure to be used. The Commissioning Wizard (**New File Wizard**) first asks you to select the indoor units, plug-in units, and outdoor units for your virtual node file.

After a node file has been created and saved, you can re-configure the file and its equipment structure by selecting **Configure → Node File** on the Hopper Manager menu.

When creating a virtual node file for the first time, you must specify the equipment configuration. When managing an online node, the configuration is read directly from the equipment.

2. **To save an image of the network element to disk, select File → Save As while managing an actual network element**

   The file is saved with the `.NOD` default extension and can be stored wherever you prefer. This file provides the basis for a virtual node but it can also be used as a backup.

3. **To work on an existing file, select File → Open**

4. **To send the settings of a node file to the local network element, connect the local management port (LMP) cable and select Manage → Send All**

   For instructions, see *Connecting the LMP cable*.

5. **Close the Hopper Manager session**

   For instructions, see *Closing the connection to a node*.

Further information

Continue commissioning by opening a new session.

Expected outcome

You have finished working offline, and/or a virtual node has been configured.

2.4 Using online help in Nokia Hopper Manager

Purpose

Nokia Hopper Manager offers an online help that is available at all times.

Before you start

Nokia Hopper Manager software application is running on your computer.

Steps

1. **To access the help system, use one of the following methods:**

a. Press **F1** on your PC keyboard while any window or dialogue box is active. The appropriate help topic opens in the **Help** window.
b. On the Hopper Manager menu, select **Help → Hopper Manager Help Topics**.
c. On the Windows **Start** menu, select the **Hopper Manager Help** program icon.

Tip

You can find the help under **Programs → Nokia Applications → Nokia Hopper Manager Help**. You can then select the required topic.

Expected outcome

Nokia Hopper Manager online help opens.

Further information

For more information on using helps, see Microsoft Windows Help or manuals.

2.5 Printing in a Hopper Manager window

Purpose

You can print the information in the currently active window to a Windows printer. The window is printed in text format.

Before you start

Nokia Hopper Manager software application is running on your computer and a connection to the node has been established.

For more information, see *Introduction to Nokia Hopper Manager*.

Steps

1. Select the window you want to print

If the window is not open, you can open it from the toolbar or menu.

2. On the Hopper Manager menu, select File → Print

Further information

For instructions, see *Exporting information to a text file*.

Expected outcome

The information in the Hopper Manager window is printed.

Further information

You can print some screens and windows as graphic pictures using Microsoft Windows. Note, that all windows cannot be printed. For more information, see the Windows Help or manuals.

2.6 Exporting information to a text file

Before you start

Nokia Hopper Manager software application is running on your computer and a connection to the node has been established.

Steps

1. **Open the window or dialogue box that has the information you want to export**

2. **On the Hopper Manager menu, select File → Export File to export information in the active window to a text file**

Expected outcome

The information is exported to a text file.

3 Establishing a connection to the node

3.1 Connecting the LMP cable

Before you start

When Nokia Hopper Manager is used for local management, the computer must be connected to the indoor unit using the local management port (LMP) communication cable. The cable has a D9 (female) serial connector at one end and a BQ (FIU 19) or an RJ-45 (FIU 19E) connector at the other end.

Steps

1. **Connect the BQ/RJ-45 connector to the LMP of the indoor unit (FIU 19 or FIU 19E)**

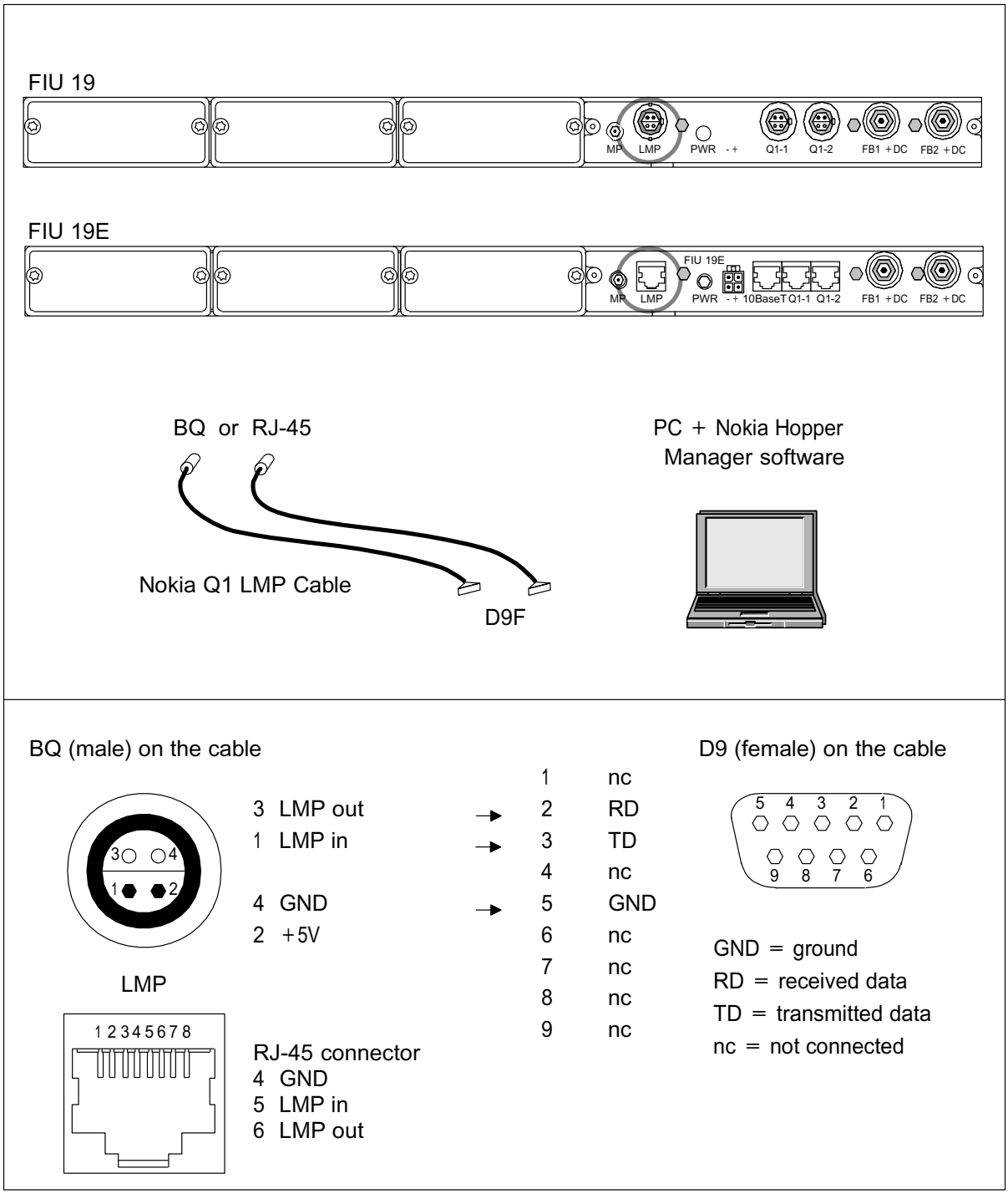

Figure 2. Connecting the communication cable

2. **Connect the other end to COM port (sub D-9 connector) of the PC**

Expected outcome

The LMP communication cable is connected.

3.2 Connecting locally

Before you start

The following steps describe how to connect directly to a local network element for the first time. The steps assume that:

- your computer is physically connected (with the serial LMP cable) to the local management port (LMP) of the network element
- Nokia Hopper Manager software application is running on your computer.

Steps

1. **On the Hopper Manager menu, select Tools → Options → Manager Options**

   The **Manager Options** dialogue box opens.

2. **Click the Communication tab**

3. **In the Serial port text box, set the serial port number, and in the Baud rate (bit/s) drop-down list select 'Auto' for the baud rate**

   See the figure below.

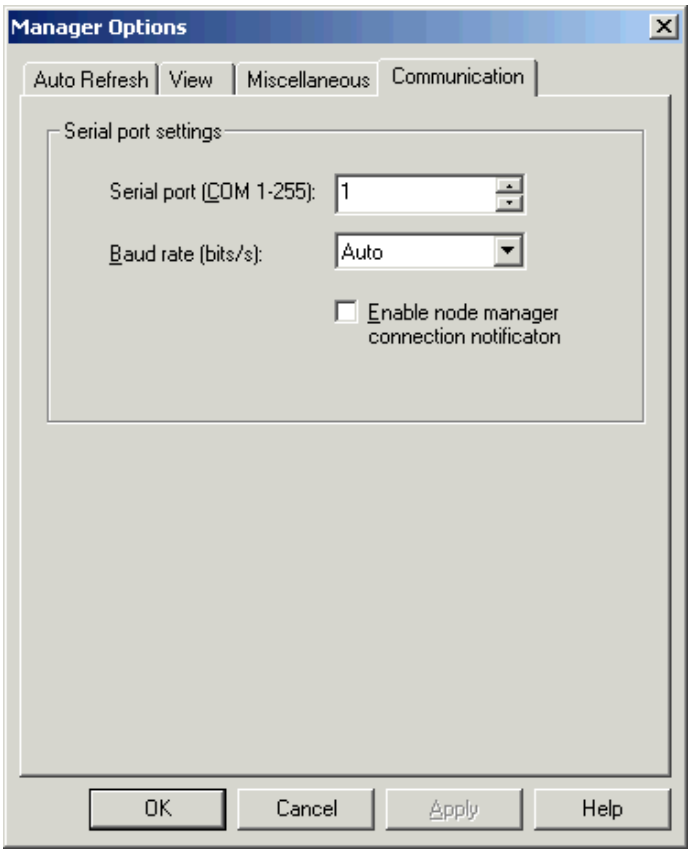

Figure 3. Manager options: Serial port

Further information

The **Miscellaneous** tab in the **Manager Options** dialogue box controls the verification settings for Nokia Hopper Manager and the logging of alarms and measurements. If a verification is checked, the Hopper Manager asks you if it should continue with the particular action whenever it occurs.

Far-end management is not supported with FXC RRI positioned as the far-end indoor unit.

For more information on the **Enable node manager connection notification** checkbox, see alarm *168 Equipment door open*.

4. Click OK to send the settings to the node

5. **To connect to the network element via the serial port on the Hopper Manager menu, select Manage → Connect Locally**

   Or

   Click the *Connect locally* icon on the toolbar.

Expected outcome

A local connection is established.

3.3 Connecting via Nokia Ethernet connection

3.3.1 Overview of connecting via Nokia Ethernet connection (LAN)

Purpose

The Nokia Ethernet connection can be used to obtain a faster connection to FIU 19E node.

Note

The commissioning wizard is not available when you are using a Nokia Ethernet connection.

Steps

1. **Set the FIU 19E Ethernet connection parameters**

   For instructions, see *Setting FIU 19E Ethernet connection parameters*.

2. **Set the Nokia Connection Tool Ethernet connection parameters**

   For instructions, see *Setting Nokia Connection Tool Ethernet connection parameters*.

3. **Connect via Nokia Ethernet connection**

   For instructions, see *Connecting via Nokia Ethernet connection*.

Expected outcome

A connection via the Nokia Ethernet connection (LAN) is established.

3.3.2 Setting FIU 19E Ethernet connection parameters

Steps

1. Start Nokia Hopper Manager

For more information, see *Starting Nokia Hopper Manager*.

2. Connect to a FIU 19E node via local management port (LMP)

For instructions, see *Connecting locally*.

3. Set the FIU 19E Ethernet interface IP address

The FIU 19E Ethernet interface IP address can be, for example, 192.168.1.50.

4. Set the FIU 19E Ethernet interface Subnet mask

The FIU 19E Ethernet interface subnet mask can be, for example, 255.255.255.0.

5. Set the FIU 19E 2K protocol user name and password

For instructions, see *Configuring 2K protocol settings*.

Expected outcome

The FIU 19E Ethernet connection parameters are set.

3.3.3 Setting Nokia Connection Tool Ethernet connection parameters

Steps

1. Start Nokia Hopper Manager

For instructions, see *Starting Nokia Hopper Manager*.

2. On the Hopper Manager menu, select Manage → Connect

The **Nokia Connection Tool** dialogue box opens.

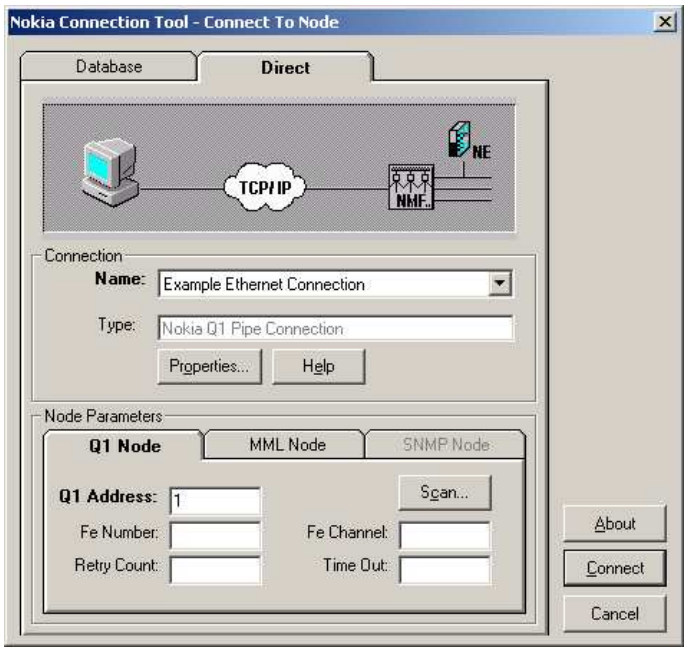

Figure 4. Nokia Connection Tool dialogue box

3. To start configuring the connection, click the Properties button

The **Connection Properties** dialogue box opens.

Figure 5. Connection Properties dialogue box

4. In the Name text box, type in the name for the new connection

The name can be FIU 19E - 192.168.1.50, for example.

5. In the Type drop-down list, select the connection type

For the connection type select *Nokia Q1 Pipe Connection*.

6. In the Connection Definition list, click first the Network Parameters text, and then the Properties button

The **Properties** dialogue box for network parameters opens.

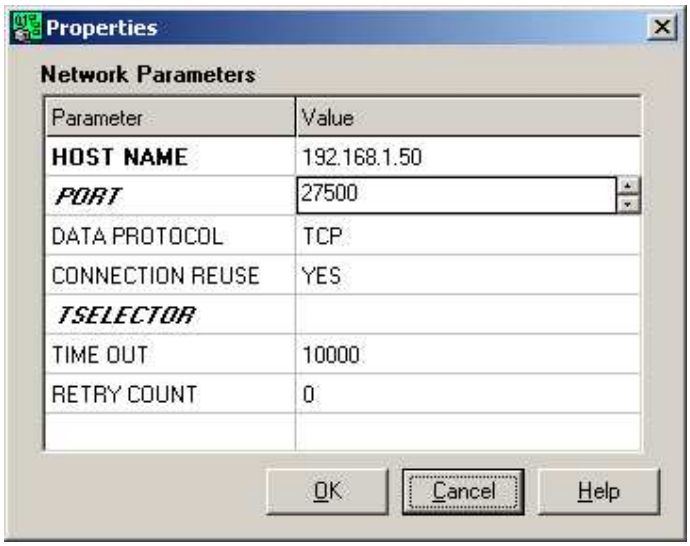

Figure 6. Properties dialogue box for the network parameters

7. In the Host Name field, type in the FIU 19E IP address

The FIU 19E IP address can be 192.168.1.50, for example.

8. In the Port field, type in the FIU 19E TCP port number

The FIU 19E TCP port number can be 27500, for example.

9. In the Properties dialogue box, click OK

The dialogue box closes.

10. On the Connection Definition list in the Connection Properties dialogue box, click the Q1 Pipe Parameters text and then click the Properties button

The **Properties** dialogue box for Q1 pipe parameters opens.

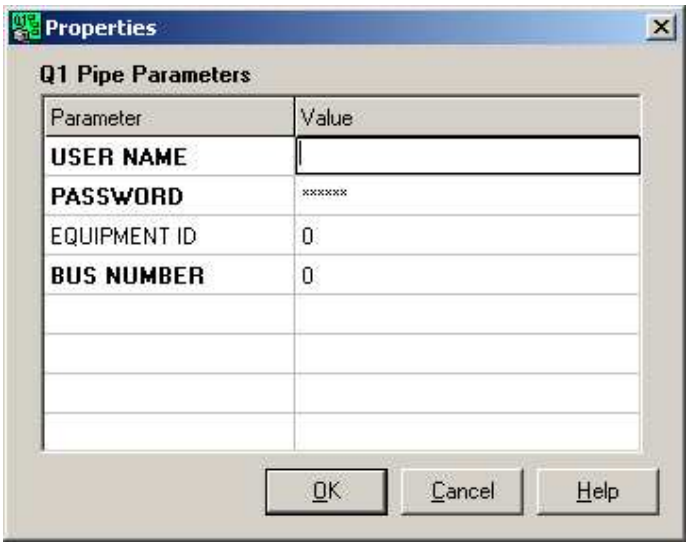

Figure 7. Properties dialogue box for Q1 pipe parameters

11. In the User Name field, type in the FIU 19E 2K protocol user name

12. In the Password field, type in the FIU 19E 2K protocol password

13. In the Bus number field, type in 0 for bus number

14. In the Properties dialogue box, click OK

The **Properties** dialogue box closes.

15. In the Connection Properties dialogue box, click the Save button

Expected outcome

The Nokia Connection Tool Ethernet connection parameters are set.

3.3.4 Connecting via Nokia Ethernet connection

Before you start

Connect the PC and FIU 19E with a crossed Ethernet cable or using Ethernet hub.

The PC IP address must be set to the same subnet as the FIU 19E IP address.

Steps

1. **Start Nokia Hopper Manager**

   For instructions, see *Starting Nokia Hopper Manager*.

2. **On the Hopper Manager menu, select Manage → Connect**

   The **Nokia Connection Tool** dialogue box opens.

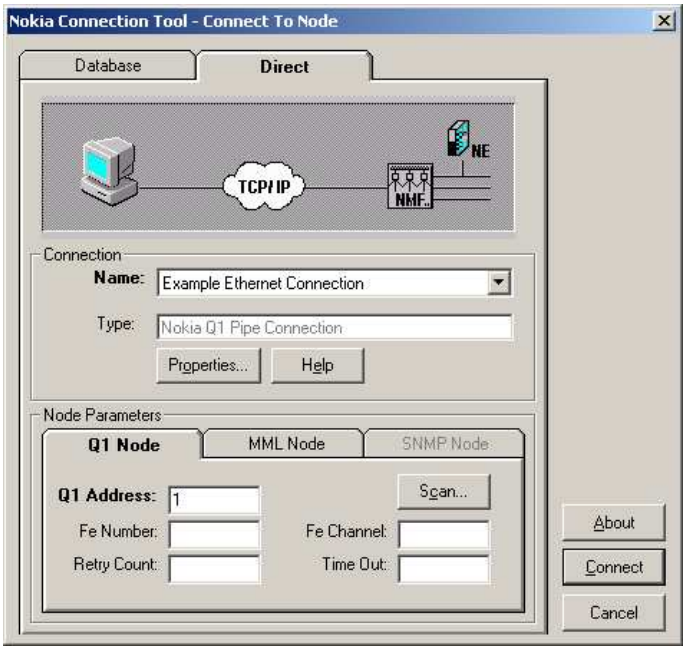

Figure 8. Nokia Connection Tool dialogue box

3. **In the Connection part of the dialogue box, select the connection in the Name drop-down list**

4. **In the Node Parameters part of the dialogue box, enter 1 (one) in the Q1 address field**

5. **Click the Connect button**

Expected outcome

Nokia Ethernet connection has been established.

3.4 Connecting via Nokia Q1 address

Purpose

The purpose of this procedure is to access the network element when you know its Q1 address.

Steps

1. On the Hopper Manager menu, select Manage → Connect

The **Nokia Connection Tool** dialogue box opens.

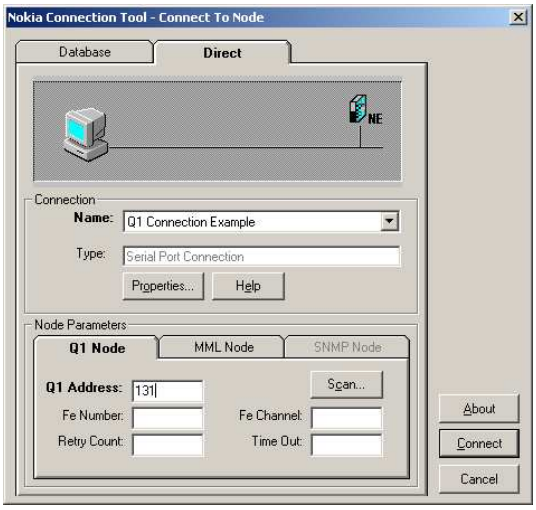

Figure 9. Nokia Connection Tool dialogue box

2. In the fields in the dialogue box, define the needed parameters

Or

select a previously configured connection according to your network configuration

3. **In the Node Parameters part of the dialogue box, enter the Q1 address of the Network Element**

4. **Click the Connect button to establish a Nokia Q1 connection**

Expected outcome

A connection is established via Nokia Q1 address.

Further information

Detailed information on using the Nokia Connection Tool is available in the *GCS User's Manual*.

3.5 Managing far-end via LMP

Purpose

Note

Management of the far-end via the local management port (LMP) is not supported by all indoor unit types. Only units directly involved in the radio hop can be managed.

Steps

1. **To display the graphical status in the Equipment view (LEDs, Rx level, Tx/Rx activity), in the Equipment view check the Polling checkbox**

2. **To read current alarms**

   For more information, see *Reading alarms* in document *Troubleshooting Nokia FlexiHopper (Plus)*.

3. **To manage basic identifications (for example, HW and SW product codes and versions)**

   For more information, see *Configuring identifications* in document *Commissioning Nokia FlexiHopper (Plus)*.

4. **To configure radio hop (parameters, capacity, frequency, and interleaver status), select Configure → Settings on the Hopper Manager menu**

   For more information, see *Viewing and changing unit settings* in document *Commissioning Nokia FlexiHopper (Plus)*.

5. **To manage 2M loops**

   For more information, see *Setting a loopback point* in document *Troubleshooting Nokia FlexiHopper (Plus)*.

6. **To view performance management results (measurements, counters, and G.826 statistics)**

   For more information, see *Configuring FIU 19 (E) performance management settings* in document *Commissioning Nokia FlexiHopper (Plus)*.

7. **To download new software releases**

   For more information, see *Upgrading software with Nokia Hopper Manager* in document *Installing and Upgrading Software for Nokia FlexiHopper (Plus)*.

Expected outcome

The far-end is managed via the LMP port.

3.6 Closing the connection to a node

Before you start

Nokia Hopper Manager is running on your computer and a connection to the node has been established.

Steps

1. **If necessary, save the changes you have made**

2. **On the Hopper Manager menu, select Manage → Disconnect**

   A confirmation dialogue box appears asking whether you want to disconnect the connection. Click **Yes** to close the connection to the node.

Expected outcome

The connection to the node is closed.