Panasonic

Operating Instructions
MEW00460
Revision 4

TLON Manager V1.2

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1   Introduction

TLON Manager is an installation and maintenance tool for the TLON Network used for the fire alarm system EBL512.

This Operating Instruction describes the most common tasks used when installing and maintaining a TLON network. It is not a complete description of the TLON Manager. Basic knowledge of windows and windows applications is required.

This document describes how to install the LonWorks drivers, the PCMCIA card (for a laptop PCMCIA-slot) and the PC program TLON Manager. An example describes how to create and install a "Project".

1.1   Definitions

PCC-10 card:

> An Echelon card that fits in the PCMCIA slot in the laptop (PC). (PCMCIA = Type II PC Card.)

Unit:

> A physical device connected to the network, e.g. an EBL512 unit.

Node:

> A logical part of the network.

Channel:

> A physical part of the network, i.e. the wires to which up to six units (nodes) are connected.[1] (Compare with a COM loop and the connected loop units.)

Subnet:

> A logical group of nodes (units) on a subnet.[1] (Compare with loop unit grouping into zones.)

Router / Repeater:

> Normally a repeater will forward all valid data and a router will forward all valid data based on its destination address. It is normally the same unit, configured as a repeater or a router. In a TLON Network it doesn't matter because all valid data will be forwarded.

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[1] In a TLON Network is grouping not used, i.e. a subnet = a channel (one group). On each "side" of a Router is a Channel / Subnet.

2   TLON Manager kit 1595 / 1595SE

The kit contains the following:

❶   PCMCIA card PCC-10 Network interface
       (PCMCIA = Type II PC Card).

❷   PCC-10 card cable.

❸   (1595**SE** only) Patch coupler.

❹   (1595**SE** only) Cable with flying leads.

❺   USB Memory stick containing TLON drivers, TLON Manager,
       documentation, etc.
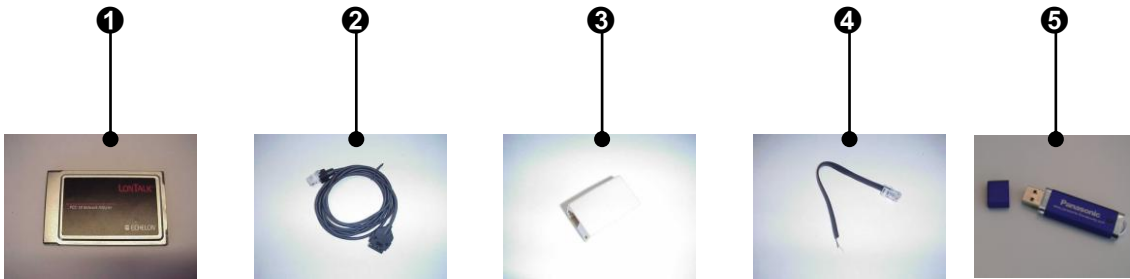
The PCC-10 card ❶ is connected to the modular RJ45 connector in
EBL512 via the PCC-10 card cable ❷.

NOTE!

1595**SE** only:

When the card cable ❷ is to be connected to an EBL512 with old
hardware (i.e. a terminal block instead of a modular RJ45 connector),
the Patch coupler ❸ and the Cable with flying leads ❹ have to be
used.

3   Installation of the LonWorks PCC-10 card

3.1   Installation of the PCC-10-drivers

Before installation, be sure that no other application is running on your PC.

The USB Memory stick contains the PCC-10-drivers, the TLON Manager software and documents according to the following tree view:
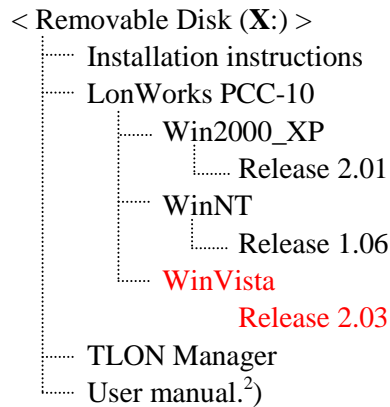
```
< Removable Disk (X:) >
    ┈┈ Installation instructions
    ┈┈ LonWorks PCC-10
            ┈┈ Win2000_XP
                    ┈┈ Release 2.01
            ┈┈ WinNT
                    ┈┈ Release 1.06
            ┈┈ WinVista
                        Release 2.03
    ┈┈ TLON Manager
    ┈┈ User manual.² )
```

(**X**: = E: / F: etc. depending on which USB connector you use).

Put the USB Memory stick in one of your PC's free USB connectors. Select the folder and the ***.exe** file for **your type** of Windows (e.g. F:\LonWoks PCC-10**Win2000_XP**\Release 2.01**pcx10_20Win.exe**) or F:\LonWoks PCC-10**WinVista**\Release 2.03**153-0212-01A_OpenLDV340.exe**).

Double click the file name (e.g. **pcx10_20Win.exe**) and the following dialog box displays (not for Windows Vista):
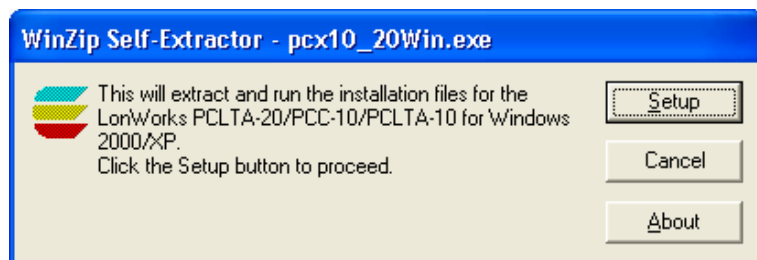
Click "Setup".

NOTE!   The dialog boxes can look a bit different or be omitted depending on the Windows type, language, version, etc. that you use.

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² **1595**: Operating Instructions TLON Manager V1.2, MEW00460 (i.e. this document in PDF format.

  1595SE: Swedish document "TLON-handbok" in PDF format.

The following windows displays (not for Windows Vista):
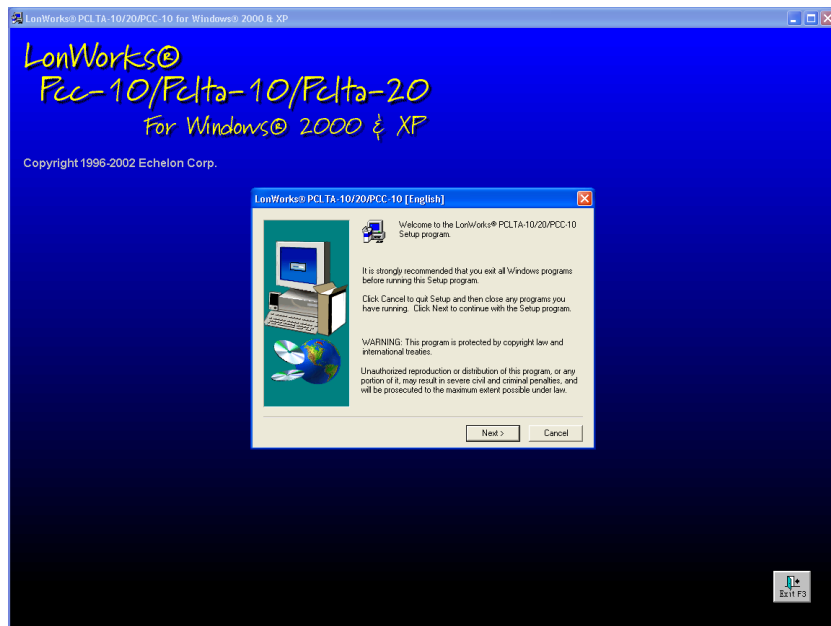
Click "Next".

Accept the Software License Agreement, i.e. click "Yes".
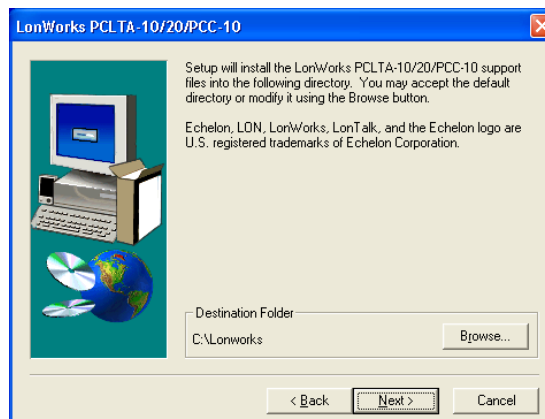
It is recommended to use the default path for the LonWorks files.

Click "Next >". The installation process starts.
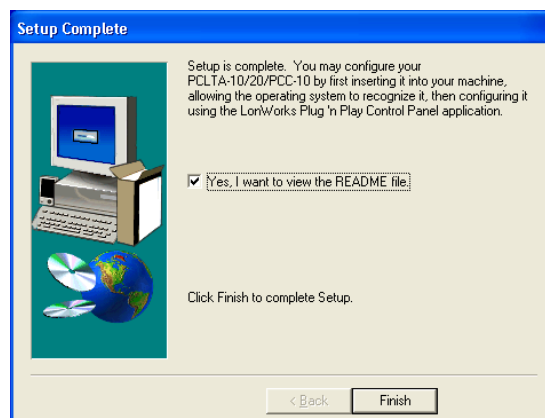
If you do not want to view the README file, un-mark the check box
and then click "Finish" to complete the Setup.

Select "**No, I will restart my computer later.**" and click "Finish".

Click "OK".

Shut down the PC (power off). See next chapter.

3.2   Installation of the PCC-10 PCMCIA card

First install the PCC-10-drivers, see chapter "Installation of the PCC-10-drivers", page 5.

- **With the PC turned off**, insert the PCMCIA card "PCC-10" into the PCMCIA slot in the PC. (PCMCIA = Typ II PC Card.)

- **Turn on the PC.** Windows will now find the new hardware device. (Follow any wizard instructions.)
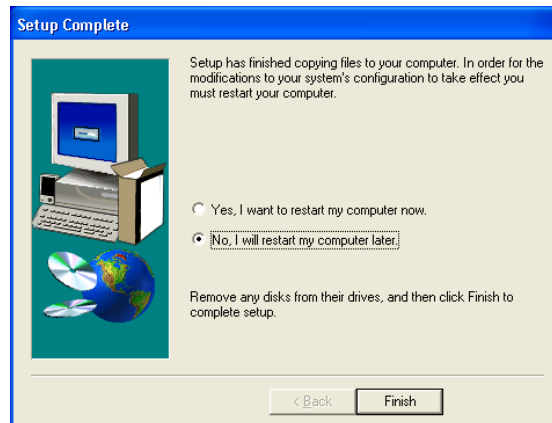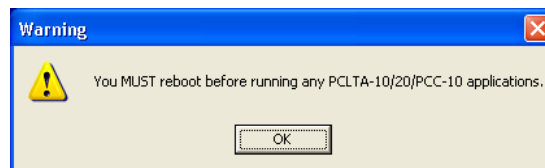
- Check in the Control Panel that the LonWorks® Plug 'n Play icon

   is created.

- Double click the icon to open the following dialog box.
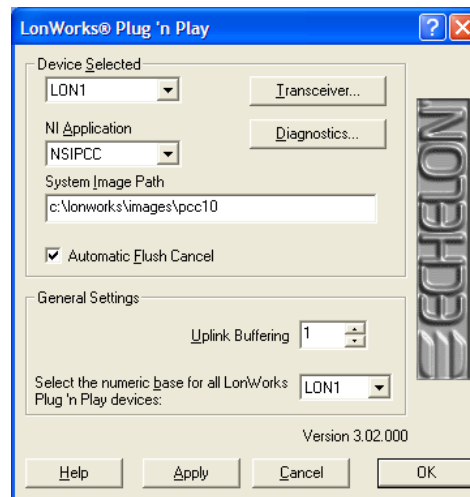
The "NI Application" shall for a laptop PC with PCMCIA slot be **NSIPCC**, else **NSIPCLTA**. For Windows Vista the "Uplink Buffering" is "6" and the Version is 3.05.000.

Click "Diagnostics…". The following information box shall be displayed (or a similar depending on the Windows type, etc.):
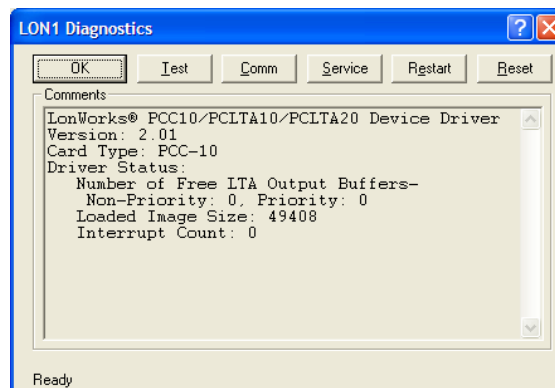
For Windows Vista the Version: 2.03 and Loaded Image size: 57344.

If "negative" information is displayed, it might depend on a device collision, etc. Check IRQ addresses and make changes when required.

Click "OK".

Click "Transceiver…" in the "Plug 'n Play" dialog box.
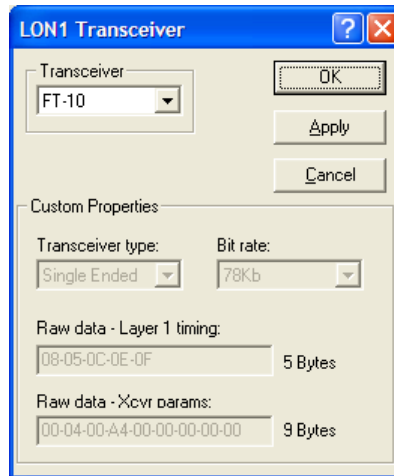
Transceiver type shall be **FT-10**.

Click "OK" in the "Plug 'n Play" dialog box.

If the following displays, click "Yes".
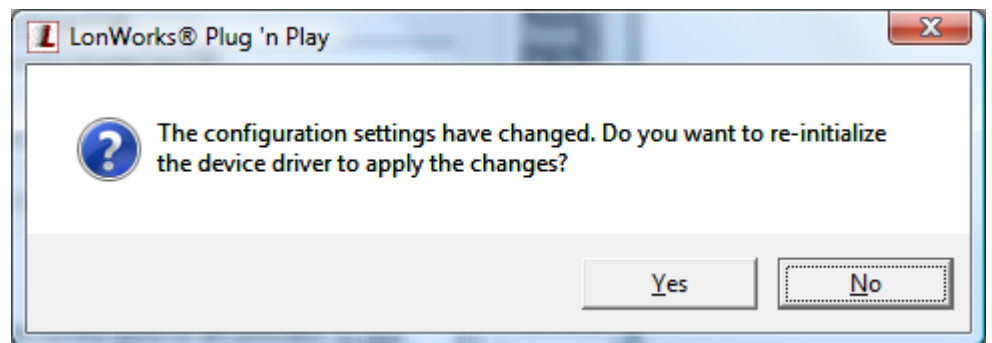
4   Installation of TLON Manager

Before installation, be sure that no other application is running on your PC.

Before installation of this version, uninstall any other version of TLON-Manager.

First install the PCC-10-drivers and the PCC-10 PCMCIA card, see chapter "Installation of the LonWorks PCC-10 card", page 5.

The USB Memory stick contains the PCC-10-drivers, the TLON Manager software and documents according to the following tree view:

```
< Removable Disk (X:) >
    ⋯⋯ Installation instructions
    ⋯⋯ LonWorks PCC-10
            ⋯⋯ Win2000_XP
                    ⋯⋯ Release 2.01
            ⋯⋯ WinNT
                    ⋯⋯ Release 1.06
            ⋯⋯ WinVista
                        Release 2.03
    ⋯⋯ TLON Manager
    ⋯⋯ User manual.³)
```

(**X**: = E: / F: etc. depending on which USB connector you use).

Put the USB Memory stick in one of your PC's free USB connectors. Select the "TLON Manager" folder and the **SETUP.EXE** file (i.e. F:\TLON Manager**SETUP.EXE**).

Double click the file name (**SETUP.EXE**):

If the following displays, click "OK".

---
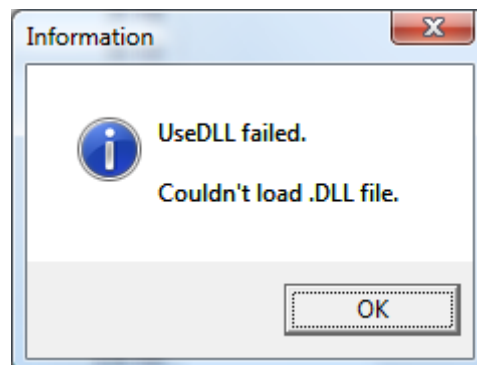
³ **1595**: Operating Instructions TLON Manager V1.2, MEW00460, i.e. this document in PDF format.

  1595SE: Swedish document "TLON-handbok" in PDF format.
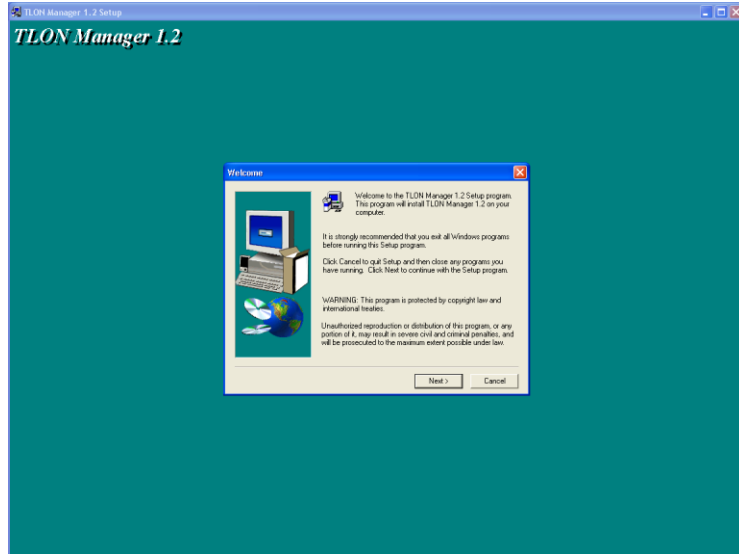
NOTE! The dialog boxes can look a bit different or be omitted depending on the Windows type, language, version, etc. that you use.

Click "Next".
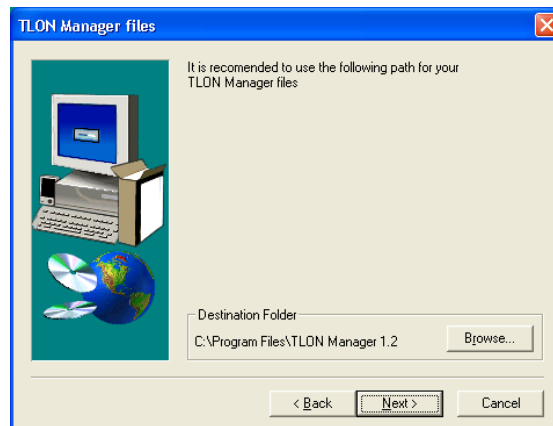
It is recommended to use the default path for the TLON Manager files.

Click "Next".
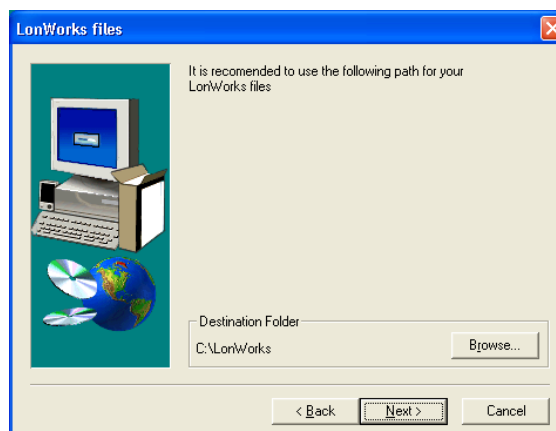
It is recommended to use the default path for the LonWorks files.
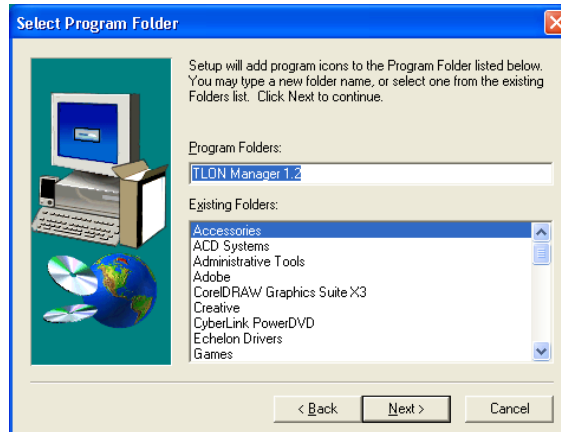
Click "Next".

Click "Next".
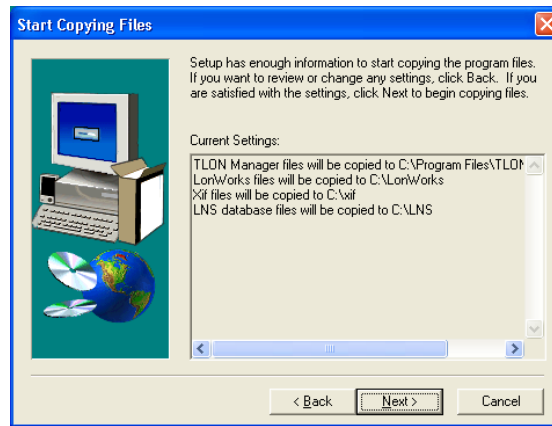
Click "Next".
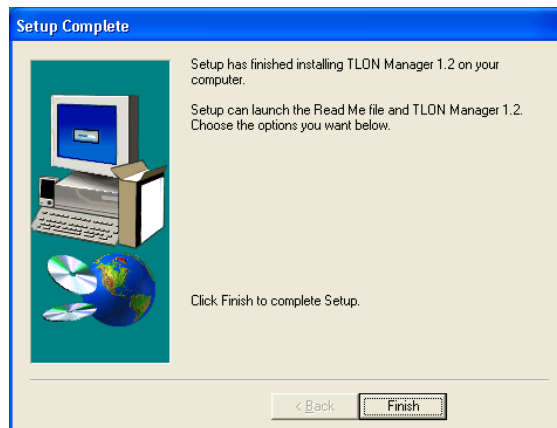
Click "Finish" to finish the TLON Manager installation.

In the following folder you will find a Shortcut to TLON Manager 1.2 and TLON Manager 1.2 Help respectively:

C:\Documents and Settings\All Users\Start Menu\Programs\TLON Manager 1.

It is possible to send the "Shortcuts" to the desktop.

NOTE!

After a program installation it is always recommended to restart the PC.

It is also recommended to check that the path is correct, i.e. do as follows:

In Windows Explorer, use the right mouse button and click "(My) Computer", in the menu select (System) Properties. Open the "Advanced" (System Settings) tab and click "Environment Variables". Check in "User variables" that the **Path** is: **C:\LonWorks\bin**

(If not, change it.)
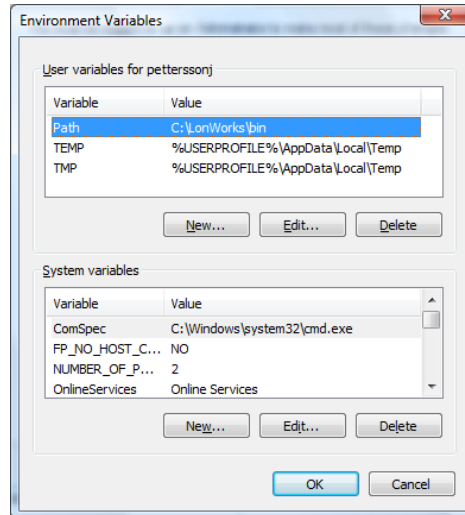
The following message might appear:
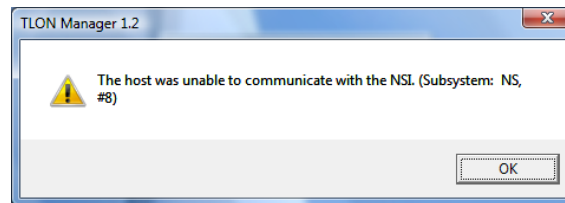
If this message appears:
- Open "Control Panel".
- Open "LonWorks Plug 'n Play".
- Change something, click "Apply", click "OK".
- Open "LonWorks Plug 'n Play" again and change back to correct settings, click "Apply", click "OK".

For Windows Vista the following is valid:

Right click the "TLON Manager 1.2" icon on your Desctop.

Select "Properties" | "Shortcut" | "Advanced".

Put a check mark in the "Run as Administrator" checkbox.

Click "OK" | "OK".

Double click the "TLON Manager 1.2" icon to start "TLON Manager 1.2".

5   Project

Normally (often), the network planning is carried out "in your office" before the installation "on site" is finished. Afterwards, during the commissioning, the TLON network "installation" can be performed. Naturally, the network planning and the "installation" can be carried out at the same time ("on site").

TLON network "installation" = download of the project / network data to the network units (EBL512 and Routers).

5.1   Planning a Project

A TLON Network can consist of two EBL512 units or up to thirty EBL512 units plus a number of Routers connected via a Backbone net. In rough outline, there are three types of network:

a) Up to six EBL512 units (nodes).[4]

b) One Router and up to twelve EBL512 units (nodes) or
one Router because the total cable length (for a channel) can then be two times the normal length.

c) Two or more Routers, connected via a Backbone net, and up to thirty EBL512 units (nodes).

Make a schematic drawing of the network, i.e. a drawing showing all the EBL512 units (nodes), cables and required Routers. (The fire alarm system's installation drawings can be useful as well as the planning made with Win512, e.g. system name, control unit numbers, cables, etc.)

For safety reasons, it is recommended to place all the Routers and the backbone net together, in a locked cabinet / room.

See also chapter "Examples", page 53.

5.1.1   Channels / Subnets

The EBL512 units (nodes)[5] are physically connected to each other via a network cable. In the LonWorks vocabulary this is called a **Channel**. (Compare with a COM loop and the connected loop units.)

The nodes, connected to a Channel, can be logically "grouped" into **Subnets**. (Compare with loop unit grouping into zones.)

NOTE!   In the TLON Network is only one group used, i.e. a group = a Channel = a Subnet. In the TLON Manager window (the tree view) is each Channel / Subnet shown as a Subnet only.

In a network type **a)** there is only one Channel (Subnet), i.e. Channel_1. No Channel has to be added.

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[4] For safety reasons, it is recommended not to have more than six nodes in a channel / subnet.

[5] A TLON connection board 1590 is required in each EBL512 unit.

In a network type **b)** there is one Channel (Subnet) on each side of the Router, i.e. Channel_1 and Channel_2. Channel_2 has to be added.

In a network type **c)** there is one Channel (Subnet) for each Router and one for the **Backbone net** between the Routers (normally Channel_2), i.e. Channel_1, Channel_2, Channel_3 and so on. Required numbers of Channels have to be added.

How to add Channels to the Project, see chapter "Add a Channel", page 24.

5.1.2   Routers

After the Channels have been added, the Routers have to be added to the Project if it is a type **b)** or **c)** network. See chapter "Add a Router", page 26. **Use Channel_2 for the Backbone net.**

NOTE! In the TLON Manager window (the tree view), the Routers are not shown (i.e. no icon and no text).

5.1.3   EBL512 units (nodes)

After the Channels and the Routers have been added, the EBL512 units (nodes) have to be added to the Project, see chapter "Add a Unit", page 30.

5.2   Planning / Creating a project

Here follows a rough **overview**:

Create a New Project. (File | New)

Add required Channel(s). (Network | Channel) Note, the Subnet(s) will be automatically added when you add the Channel(s).

Add required Router(s). (Network | Router)

Add the nodes. (Subnet_x_x | New unit) Normally **EBL512 units** but a Security Management system can also be added.

Installation. All the data will be downloaded in the units (EBL512, etc.). Installation order:

1. Routers. (Router | Install)

2. Nodes. (Node | Install)

Update all and **Save all.** All network data will be updated and saved in all the units, i.e. all the units will get information about all other units.
NOTE! In EBL512 some data will be saved in the TLON connection board 1590 and some data in the Main board 1556.

Wink. This is a way to check if a unit is correctly connected and installed in the network.

6   Create a New Project

This example will show how to connect <u>two EBL512 units</u> (CU00 and CU01) in a TLON network.

Start TLON Manager, i.e. double click the [icon] icon on your PC's desktop.
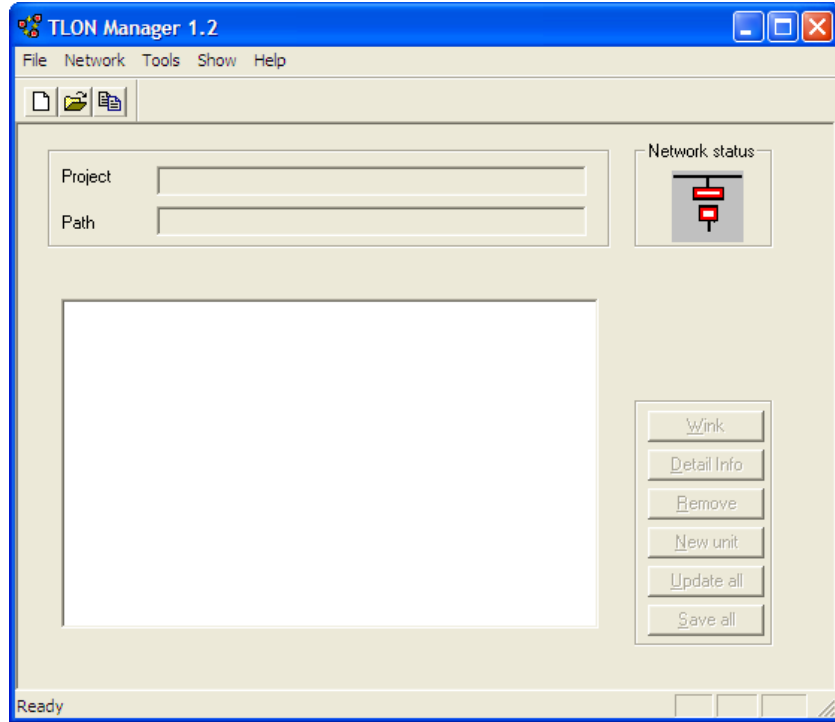
1.   Select "New" in the File menu.
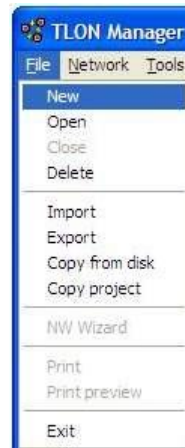
A dialog box displays:
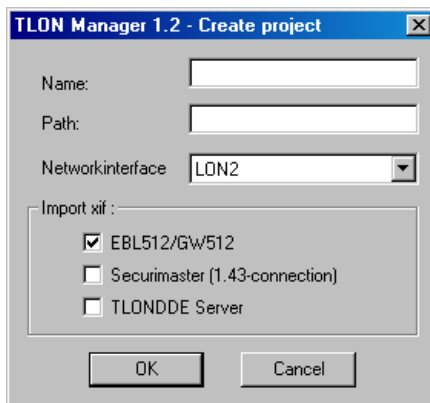
Name

Type a name for the project. Normally, use the same name as the "System Name" in Win512, e.g. System_xyz. Max. 23 characters.

Path

The path will be automatically created when you type the name, e.g. C:\LNS\System_xyz.

Network interface

Look in the Control Panel | Lon Works Plug 'n Play dialog box (Device selected). Select the same here (normally "LON1").

Import xif

In a TLON network where only EBL512 units[6] shall be connected, mark the EBL512/GW512 checkbox (default).

If a Security Management system also shall be used in the TLON network, mark the check box respectively.

NOTE!   Development and improvement may result in new units / Security Management systems that can be connected in the TLON network. New .xif files can be imported and .xif files can be removed via the "Network" menu.

2.   Click "OK" to save the settings and close the dialog box.[7] The TLON Manager window displays:

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[6] EBL512 units only or EBL512 units and Router(s).

[7] An information box "Initiating network" will be shown.
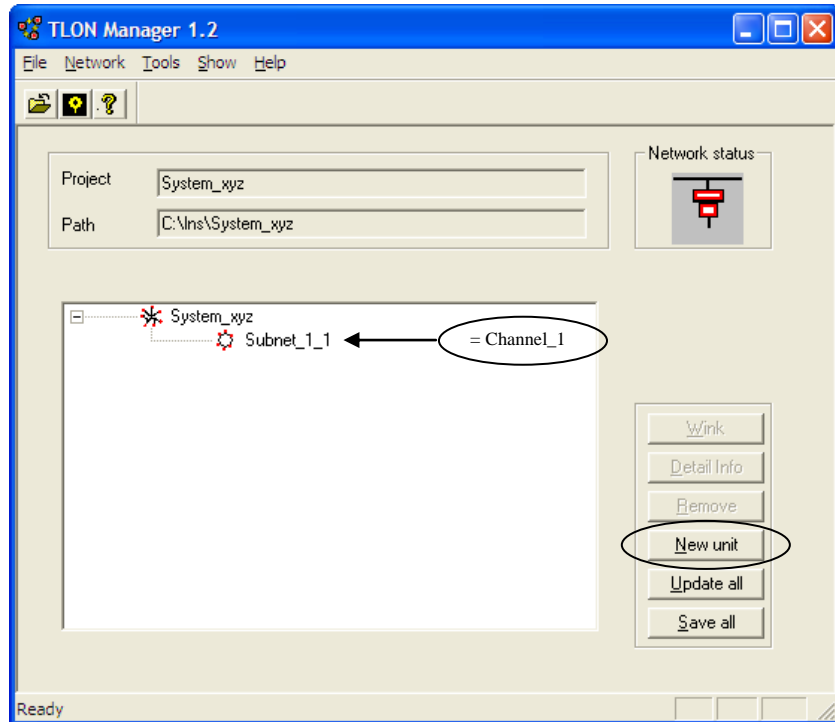
3. In this example, no Channels or Routers shall be added. Now the units (i.e. EBL512) have to be added. Select the **Subnet_1_1** icon and click "New unit".[8]

4. The following dialog box displays:
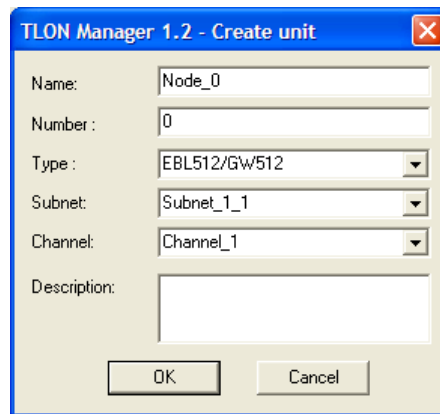
Name

Type a name. Normally can the default name (Node_n) be used. Max. 14 characters.

Number

The number can be 00-29, i.e. CU00-CU29. Normally use the same number as the node number.

Type

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[8] **Or** click the right mouse button to get a pop-up menu (select "New unit") **or** select "Unit" in the "Network" menu.

Depending on what is selected in the "Create Project" dialog box (Import xif) and if xif files have been imported, see chapter "Import xif files", page 37, there might be one or more types available. Normally only:

EBL512 / GW512

For an **EBL512** unit select "EBL512 / GW512"

Subnet

See chapter "Planning a Project" ("Channels"), page 14.

Select a subnet. In this example, select "Subnet_1_1" (default).

Channel

See chapter "Planning a Project" ("Channels"), page 14.

Select a Channel. In this example, select "Channel_1" (default).

Description

A description of the node may be written here. Max. 64 characters divided on three rows.

5.   Click "OK" to save the settings and close the dialog box.
The following dialog box displays:
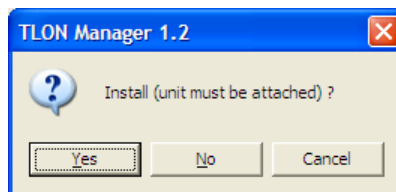
6.   **a)** If you are going to carry out the installation instantly, i.e. if you are "on site" and <u>your PC is connected to an EBL512 unit connected (attached) to the TLON Network</u>, jump to chapter "Installation of a Project", page 21.
b) If you are going to carry out the installation later, i.e. if you are "in your office", click **"No"**. (This is probably the most frequently used alternative when creating a new project.)

7.   TLON Manager starts a "binding" process.[9] After that, a new EBL512 unit ("Node_0") is added to the Subnet_1_1 icon (Channel_1) in the tree view:

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[9] The binding time is depending on the number of nodes in the network.
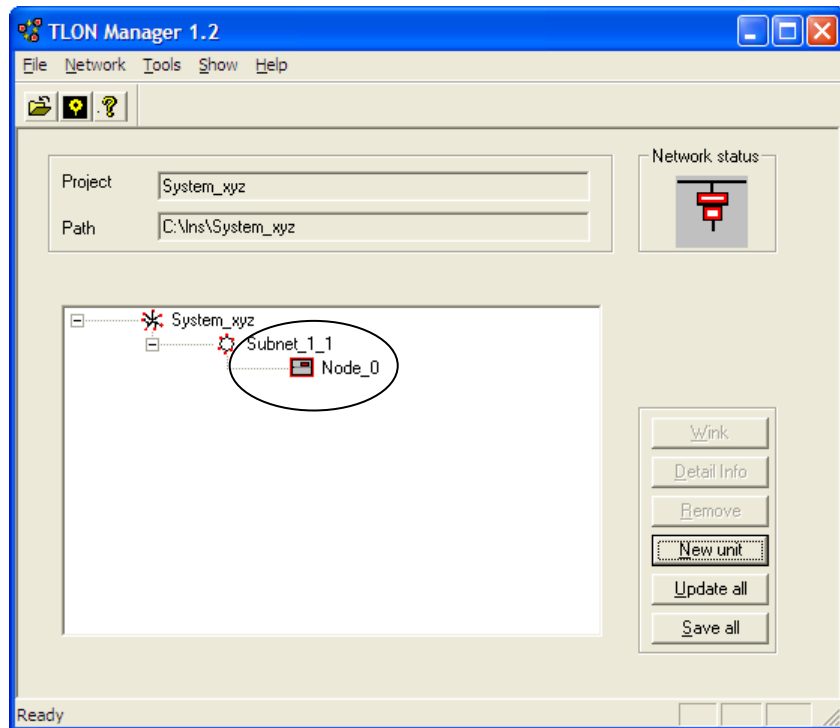
Regarding the red frame around the EBL512 unit (Node_0), see below.

8.   Add the wanted number of EBL512 units (nodes) the same way. In this example, add one more unit (Node_1):
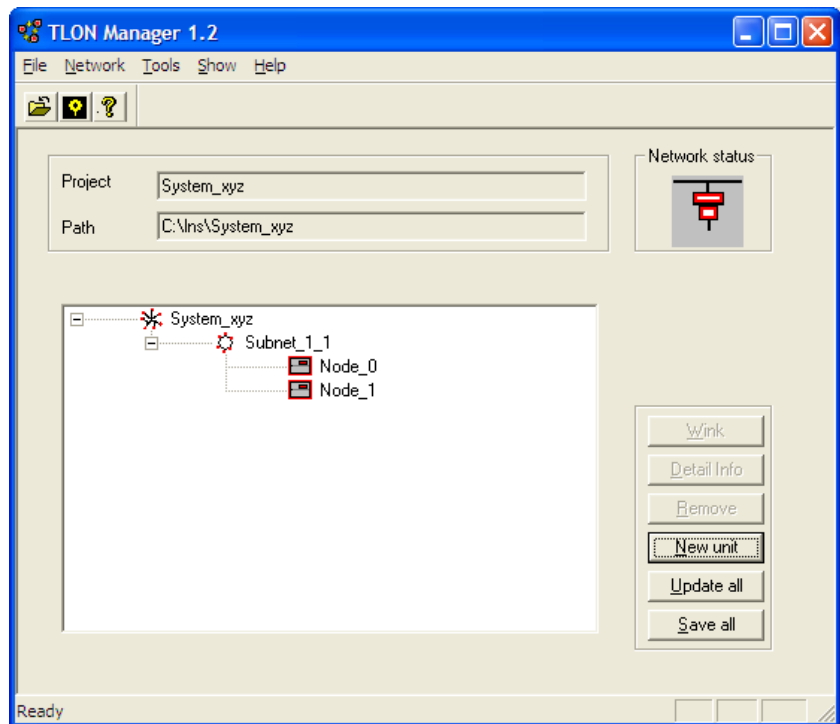
The window shows the Project name "System_xyz" and that you have one Channel (= Subnet_1_1) with two EBL512 units (Node_0 and Node_1).

The red frame around each EBL512 unit indicates that the unit is not installed.

9.   The "project" is now created and can be closed or installed (see "Installation of a Project" below).

6.1   Installation of a Project

The TLON Network cable installations have to be finished and the EBL512 units have to be connected to the network.[10]

NOTE! In a Project with Routers, they have to be installed before the nodes, see chapter "Installation of Routers", page 28.

Plug the PCC-10 card cable into any of the EBL512 units on Channel_1.[11] The modular connector "J2" (RJ45) is to be used.[12]

10.   Start TLON Manager and **Open** the "Project" (e.g. "System_xyz").

11.   In the dialog box select the **Node_0** icon and click the right mouse button to get a pop-up menu.

12.   Select "Install"

If you have made a jump from "6 a)" at page 19:
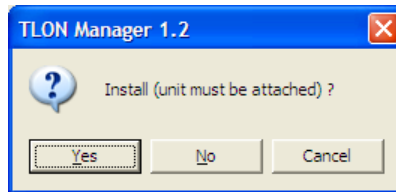
Click **"Yes"**.

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13.   A dialog box displays:
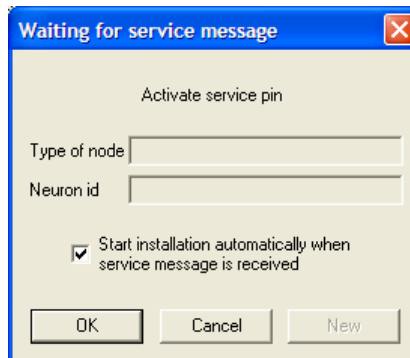
("Activate service pin" is blinking.)

In the EBL512 unit that is intended to be number zero (CU00), shunt momentarily the "Service" pins (JP 3) on the main board. An "id-number" will be transmitted and (for a second) be shown

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[10] A TLON connection board 1590 is required in each EBL512 unit.

[11] From now on, use the same EBL512 unit at all times or another EBL512 unit on the same Channel.

[12] It is situated close to the connector "J1" (for PC / Win512 connection), i.e. below and to the right of the keypad on the EBL512 front.

in the "Neuron id" field and the type of node (EBL512 / GW512) will be shown in the "Type of node" field.

Since the check box is marked[13], TLON Manager will automatically start binding the node in the database.[14]

The EBL512 unit "Node_0" is now created and installed in the network.[15] When the binding process is completed, there shall be an EBL512 unit icon with <u>no</u> red frame around it.

14.   Do the same for the EBL512 unit "Node_1".
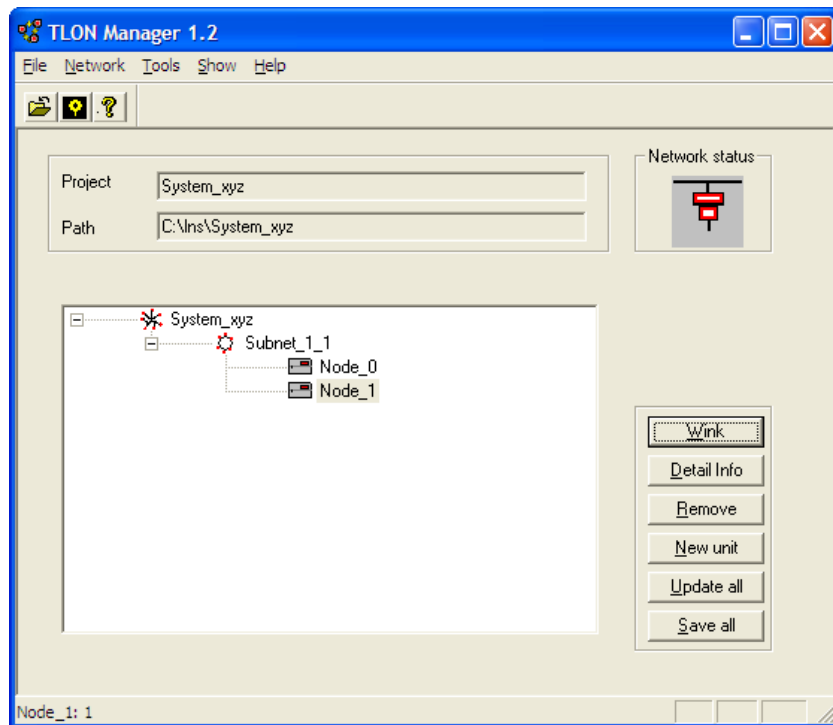
15.   In this example are now all nodes installed. <u>Click "Update all"</u>. TLON Manager will now re-connect and update all the nodes installed in the network. In the "Status line" you will get information regarding which unit (node) is being updated and finally "All units updated".

If one or more nodes failed to be updated, the following box displays:

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[13] If the check box is un-marked you will have to click "OK" to continue.

[14] The time is depending on the number of nodes.

[15] To check this you can select the EBL512 unit and click "Wink". The buzzer in the EBL512 unit shall sound for approx. one second.
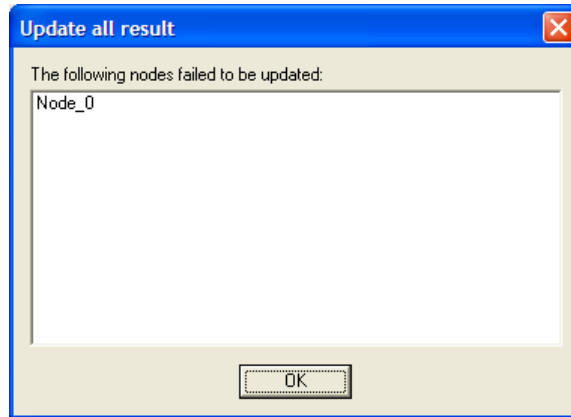
Write down the nodes in the list, so that you can update the nodes later. In this example is only "Node_0" not updated. Click "OK".

16. All the nodes that were <u>not</u> updated (by "Update all") have now to be manually updated, one by one. Select the **`Node_x`** icon respectively and click the right mouse button to get a pop-up menu. Click "Update".

17. When **ALL** nodes are updated, <u>click "Save all"</u>. The Network information will now be saved in each EBL512 unit, one by one.[16] (Some information will be saved in the "TLON connection board" memory and some in the "Main board" memory.)

18. It is highly recommended to restart each EBL512 unit.

---

[16] In the "Status line" you will get information regarding which unit is being saved and finally "All units saved".

7   Add a Channel

Regarding Channels in a TLON Network, see chapter "Planning a Project" ("Channels"), page 14.

1.   Select "Channel" in the Network menu.
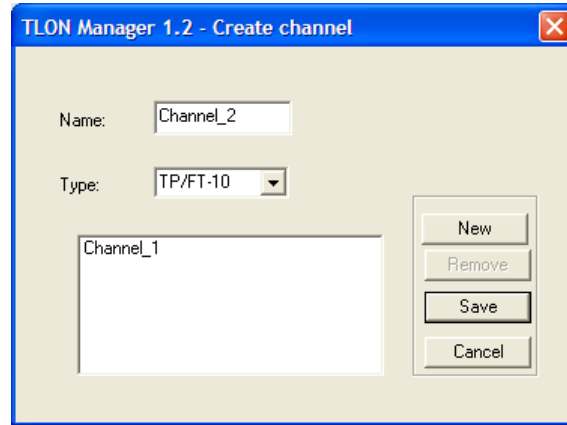
Name

A default name for the "next" Channel to be added. Normally the default name is used but information can be added.[17]

Type

The type used with EBL512 units is TP/FT-10 (default). If a fibre optic network is to be used (via Fibre Optic/Twisted Pair LonWorks Routers), the type is FO-10. Other units may use other types of communication.

"List field"

A list of the existing Channels in the Project.

New

Adds the "next" Channel in the "Name:" field (e.g. Channel_2).

Remove

Removes a selected Channel.

Save

Adds the Channel in the "Name:" field (e.g. Channel_2) to the list.

Cancel

Closes the dialog box when the required number of channels is added.

NOTE! In the TLON Manager window (the tree view) the Channels are not shown, only the Subnets. (Channel_1 = Subnet_1_1)

---

[17] E.g. Channel_2_Backbone.

8   Subnet

Regarding Subnets in a TLON Network, see chapter "Planning a Project" ("Channels"), page 14. **Normally you do not add any Subnets.** When you add the required Channels and Routers, the Subnets will be automatically added and shown in the tree view.

E.g.   Subnet_1_1 = Subnet_*Subnet 1_Channel 1* (i.e. Channel 1)
        Subnet_1_2 = Subnet_*Subnet 1_Channel 2* (i.e. Channel 2)
        Subnet_1_3 = Subnet_*Subnet 1_Channel 3* (i.e. Channel 3)
        …and so on.

Use the dialog box "Create subnet", only to view the list of Subnets in the Project.

1. Select "Subnet" in the Network menu.
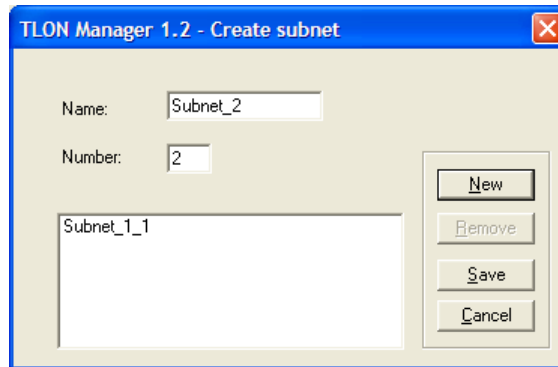
Name

A default name for the "next" subnet to be added. Normally the default name is used but information can be added.[18].

Number

A default number for the "next" subnet to be added.

"List field"

A list of the existing Subnets in the Project.

New

Adds the "next" subnet in the "Name:" field (e.g. Subnet_2).

Remove

Removes a selected subnet.

Save

Adds the Subnet in the "Name:" field (e.g. Subnet_2) to the list.

Cancel

Closes the dialog box.

---

[18] E.g. Subnet_1_2_Backbone.

9 Add a Router

Regarding Routers in a TLON Network, see chapter "Planning a Project" ("Routers"), page 14.

Two or more Routers have to be connected via a "Backbone net". **Use Channel_2 for the Backbone net.**

Select "Router" in the Network menu. A dialog box displays:
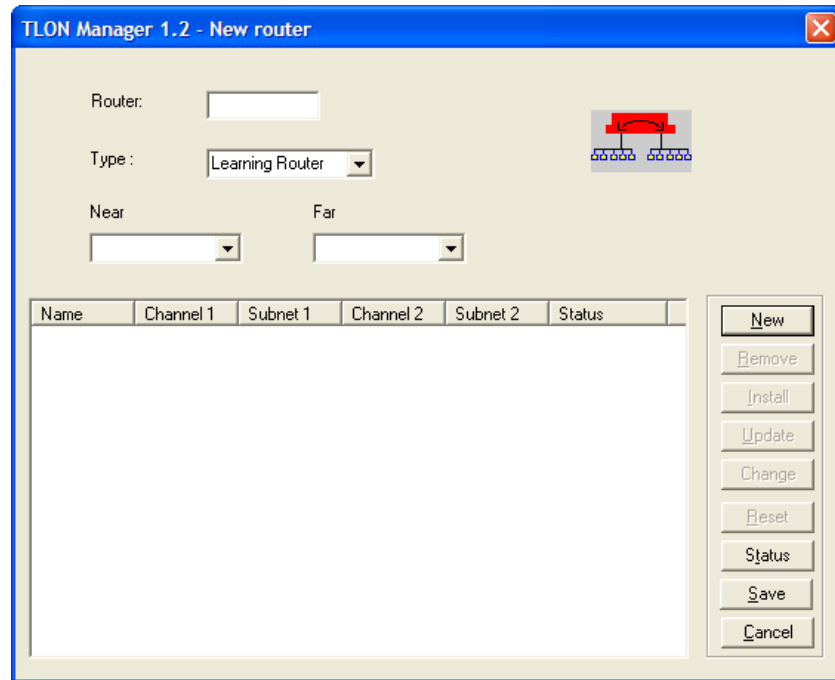
Router

Write a name (and/or a number) for the router (e.g. Router 1).

Type

In a TLON Network is normally the type "Learning Router" used (default) but it is also possible to use the type "Configured router" or the type "Repeater".[19]

Near, Far

A router must be installed between two channels. If there is only one channel in the list field (see below), required new channels must be created, see "Channel" in the Network menu, before any router(s) can be added.

A router has connections for one **Near** channel (e.g. Lon A) and one **Far** channel (e.g. Lon B).

Select a channel in the drop-down list respectively.

---

[19] This is the same intelligent hardware, set for one of the types. Do not use a Repeater, which has no intelligence.

Near: On the first router, the channel where the TLON Manager PC is to be connected (Channel_1). On any other router, the channel nearest the first router.

Far: On the first router, the backbone net channel (Channel_2). On any other router, the channel on the other side of the router respectively.

"List field"

A list of the existing Routers in the Project. (The Subnets will be automatically added for the Channel respectively.)

New

Clears the field / resets it to the default value.

Remove

Removes the selected router (in the "Name" column).

Install

Select a Router (in the "Name" column). Click "Install". A dialog box "Install" displays.   See "Installation of Routers" below.

Update

Updates the selected router. See "Update" below.

Change

When an existing Router has to be replaced, you do not have to add a new Router and install it. Yet, follow the same procedure as for "Install" but click "Change" instead of "Install". See "Installation of Routers" below.

Reset

Sends a reset message that will clear some statistics and configuration data.

Status

Select a Router (in the "Name" column). Click "Status" and the status will be shown in the "Status" column (e.g. "Not installed").

Save

A dialog box "Install" displays.
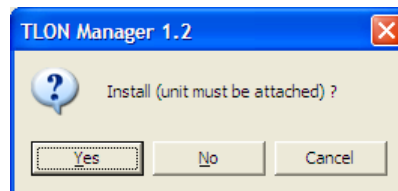
a) If you are going to carry out the installation instantly, i.e. if you are "on site" and your PC is connected to an EBL512 unit connected (attached) to the TLON Network, jump to chapter

"Installation of Routers" below.

b) If you are going to carry out the installation later, i.e. if you are "in your office", click **"No"**. (This is probably the most frequently used alternative when creating a new project.). The specified Router will be added to the list.

More Routers can now be added.

For installation of Routers, see the chapter below.

Cancel

Closes the dialog box.

NOTE! In the TLON Manager window (the tree view), the Routers and Channels are not shown (i.e. no icons and no text). Only the Subnets are shown.

9.1   Installation of Routers

The TLON Network cable installations have to be finished and the Routers have to be connected to the network.

> **NOTE!** The Routers have to be installed before the nodes can be installed otherwise there will be no communication with the nodes connected on the Channels "on the other side" of the Router(s).

Plug the PCC-10 card cable into any of the EBL512 units.[20]   The modular connector "J2" (RJ45) is to be used.[21]

1. Start TLON Manager and **Open** the "Project".
2. In the Network menu select "Router".
3. In the dialog box select a Router (in the "Name" column) and click "Install".

> **If you have continued from page 27,** i.e. chapter "Add a Router" "Save" alt. **a)**, the following dialog box will be displayed:
>
>
>
> Click **"Yes".**
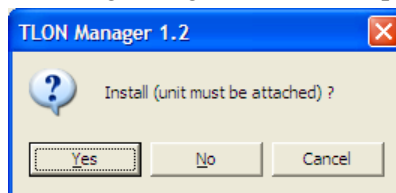
4. A dialog box displays:

---

[20] From now on, use <u>the same EBL512 unit</u> at all times or an EBL512 unit on the same Channel (Channel_1).

[21] It is situated close to the connector "J1" (for PC / Win512 connection), i.e. below and to the right of the keypad on the EBL512 front.
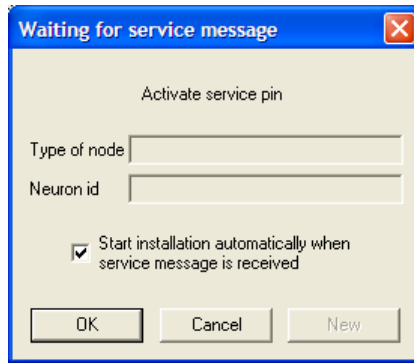
("Activate service pin" is blinking.)

On the specified Router, push the "Service" button. An "id-number" will be transmitted and (for a second) be shown in the "Neuron id" field and the type of node will be shown in the "Type of node" field.

Since the check box is marked[22], TLON Manager will continue, i.e. to start the binding process.[23]
The router is now created and installed in the network.[24]

5. When the Router is installed, <u>click "Update"</u>.
    If a Router fails to be updated, a message will be displayed. Click "Update" again (until it is correctly updated).

6. When **all** the Routers are installed, the EBL512 units (nodes) can be installed, see chapter "Installation of a Project", page 21.

---

[22] If the check box is un-marked you will have to click "OK" to continue.

[23] The time is depending on the number of nodes.

[24] To check this you can select the EBL512 unit and click "Wink". The buzzer in the EBL512 unit shall sound for approx. one second.

10   Add a Unit

Regarding EBL512 units (nodes) in a TLON Network, see chapter "Planning a Project" ("EBL512 units (nodes)"), page 14.

In the TLON Manager window's tree view, select a subnet icon[25] (e.g. Subnet_1_1) and click "New unit".[26]

The following dialog box displays:
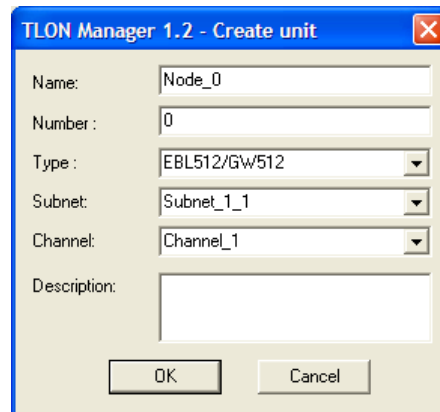
The dialog box and the following actions are described in the example in chapter "Create a New Project", page 18 and continues in chapter "Installation of a Project", page 21.

NOTE! When all the EBL512 units (nodes) have been installed, it is very important that you click "Update all" and "Save all" as described in the example. After that it is recommended to restart each EBL512 unit.

---

[25] **NOTE!** In a network with two or more Routers, Channel_2 is normally used for the Backbone net and **no** EBL512 units (nodes) must be connected.

[26] **Or** click the right mouse button to get a pop-up menu (select "New unit") **or** select "Unit" in the "Network" menu.

11   File menu

11.1   New

Creates a new Project. Se chapter "Create a New Project", page 16.

11.2   Open

Opens an existing Project in TLON Manager's common data base. Select a project in the list and click "OK".

11.3   Close

Closes the project that is open.

11.4   Delete

Deletes an existing Project in TLON Manager's common data base. Select a project in the list and click "OK".

11.5   Import

To be able to open a Project that for example has been copied from another PC (see chapter "Copy from disk", page 33) <u>or</u> **to be able to open an "old Project" when a new version of TLON Manager has been installed**, the Project has to be imported to TLON Manager's common database.

Select "Import" in the File menu. The following dialog box displays:
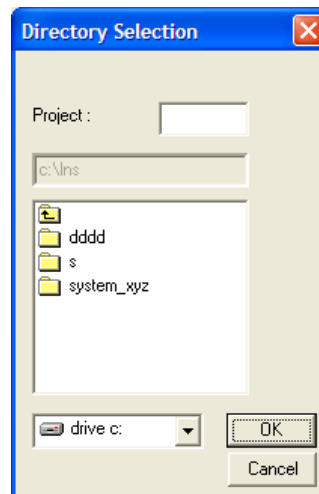
Find and select the folder (Project) to be imported. As default, TLON Manager saves all projects in: **C:\LNS**

The Project name will be the same as the folder name. You may use this name or change it.

11.6   Export

Used when you want to export a Project. You will get a copy of the Project in another folder. From this folder it is possible to copy the project to e.g. a floppy disk / CD. Export can be used if you want a backup of the project[27] or want to use the Project in another PC.

Select "Export" in the File menu. The following dialog box displays:

Select the Project to export. Click "OK".

Find and select the folder to which the Project is to be exported. (As default, TLON Manager suggests: **C:\LNS**)

The "File name" (Project name) will be the same as the folder name. You may use this name or change it.

Click "Save".

The project will now be copied to the selected folder.

---

[27] NOTE! It is not possible to "upload" data from the TLON Network to TLON Manager.

11.7   Copy from disk

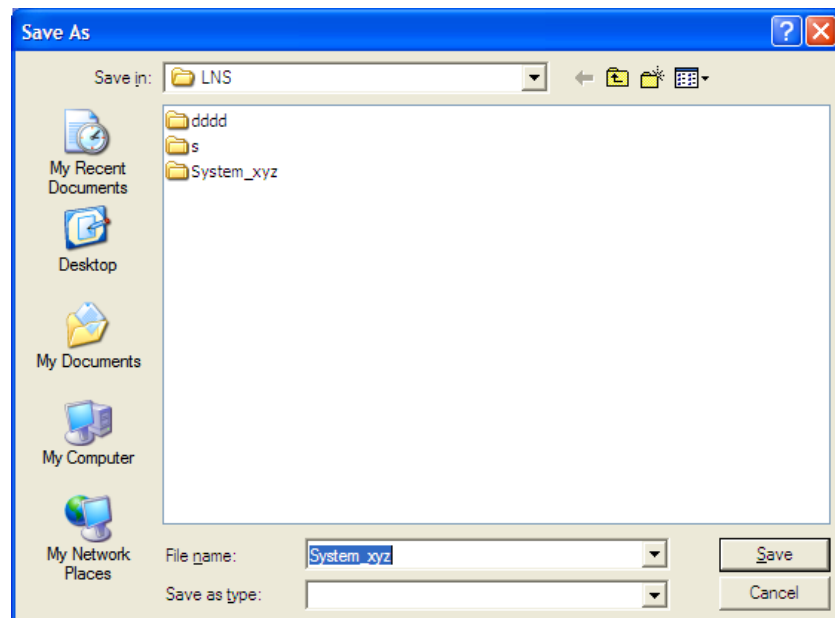Used when you want to copy a Project from a disk (e.g. a disk /CD made in another PC) to the hard disk drive in your PC. To open the Project, it has to be imported to TLON Manager's common database, which you will be asked after the copying.

Select "Copy from disk" in the File menu. The following dialog box displays:
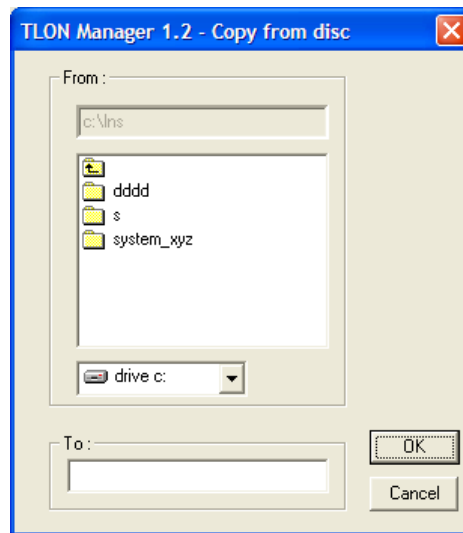
From

Select the drive. (Default is always C:\lns selected.)

To

In the selected drive, select the folder (Project) to be copied. The program chooses the same folder name as the name of the Project and suggests a destination folder. You may use the name or change it but it is not recommended to change the destination folder.

Click "OK". The selected project will now be copied and after that, a dialog box displays:
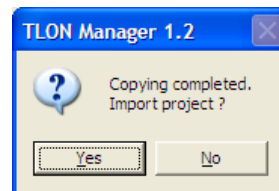
To be able to open the Project, it has to be imported to TLON Manager's common database. You can do it instantly by clicking "Yes" or later, see chapter "Import", page 31.

If you click "Yes" the following dialog box displays:
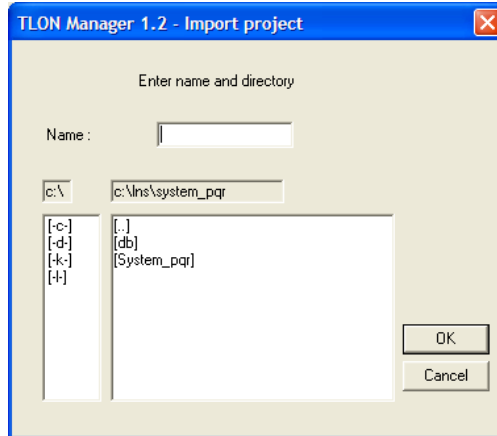
Write the name (and directory). Click "OK". The project will now be imported.

11.8 Copy project

Used when you want a copy of an existing Project, but with a new name. This is useful when a new similar Project is to be created.

Select "Copy project" in the File menu. The following dialog box displays:
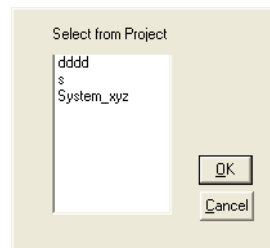
Select the Project to copy. Click "OK". The following dialog box displays:
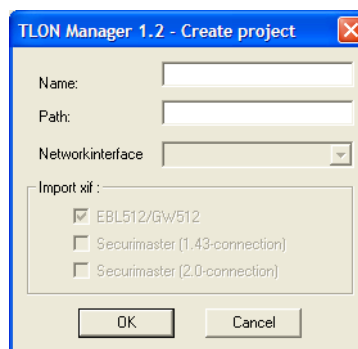
Name

Enter the name of the new project (up to 23 characters).

Path

The path will be automatically created when you write the name.

Click "OK". The project will now be copied.

11.9   NW Wizard

Creating large projects may be time consuming since the node binding time increases in relation to the number of nodes and is also depending on the PC. If a large project shall be created the "NW Wizard" is a good help. Here you can define **all nodes** before binding them. It doesn't make the process faster, but the bindings for the whole project are made "all at the same time", which makes the user free for other activities during the ("long") binding time.

NOTE!   <u>The required channels (subnets) and routers have to be created before NW Wizard can be used</u>.

1.   Select "NW Wizard" in the File menu. The following dialog box displays:
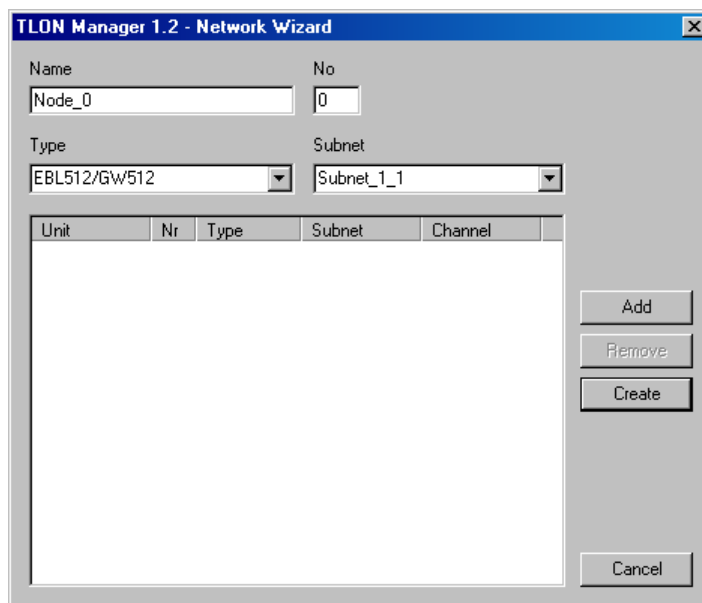
Name

Type a name. Normally the default name (Node_n) can be used. Max. 14 characters.

No (Number)

The number can be 00-29, i.e. CU00-CU29. Normally use the same number as the node number.

Type

For an **EBL512** unit select "EBL512 / GW512"

Subnet

See chapter "Planning a Project" ("Channels"), page 14.

2.   Fill-in / select the data for a node (Name, No, Type and Subnet).

3.   Click "Add" to add the specified node to the list.
     NOTE! The Channel will be automatically added in the list.

(To remove a node, select the node in the list and click "Remove".)

4. Add all the wanted nodes to the list.
Here is an example with two EBL512 units (Node_0 and Node_1) and a Security Management system (Node_29) in two Subnets / Channels (i.e. there is also a Router in the Project):
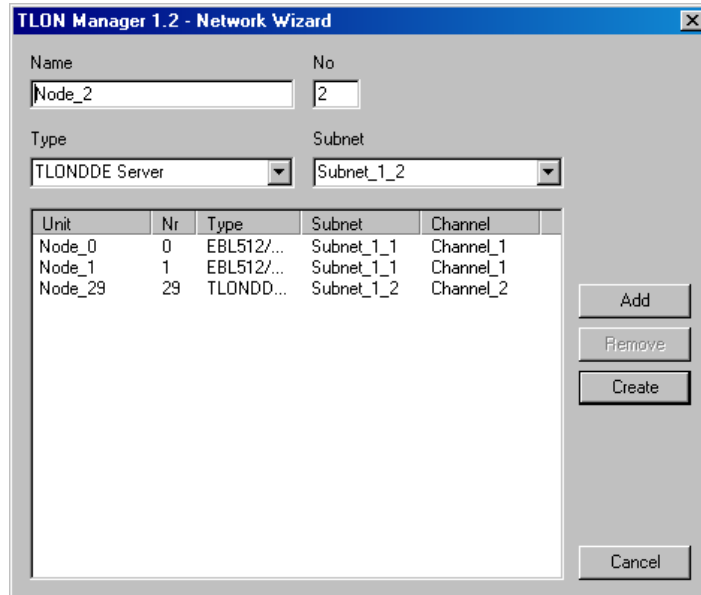
5. Click "Create" to start binding all the nodes in the list to the Project. (Click "Cancel" to close the dialog box without binding any nodes.). The binding process might take some time.

After the binding process, in the TLON Manager window's tree view there will, in this example, be added three nodes (EBL512 units).

11.10   Print

It is possible to print some information about the project, e.g.:

Project Name
Path
Number of nodes
Number of subnets
Number of routers
Individual node information

11.11   Print preview

A preview of the information that will be printed.

12   Import xif files

Development and improvement may result in new units, Security Management systems, etc. that can be connected as a node in the TLON network. New xif files can be imported to each Project.

Select "Import xif" in the Network menu. The following dialog box displays:
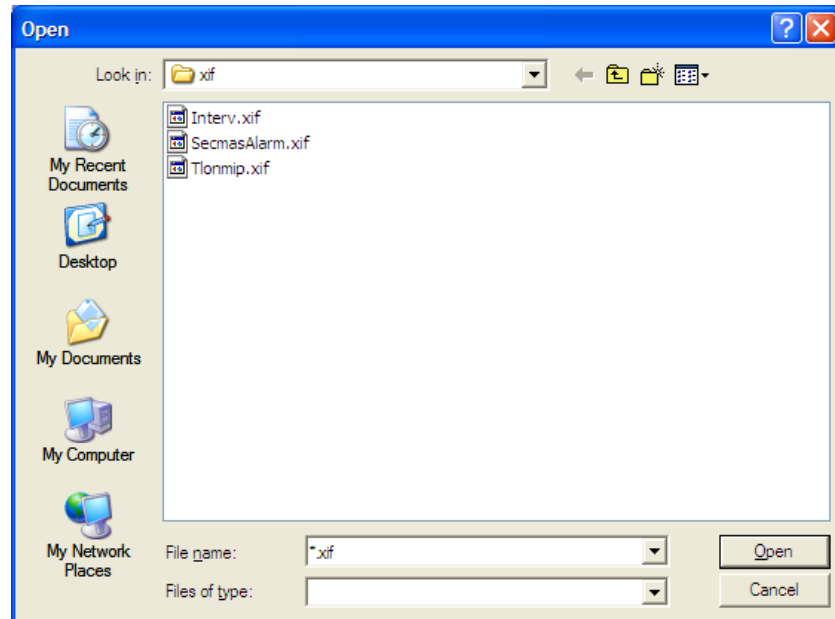
Select the folder and the xif file to import.

The following are available "today":

> Tlonmip.xif   for EBL512 / GW512
>
> SecmasAlarm.xif   for TLONDDE Server
>
> Interv.xif   for Securimaster Alarm (1.43-connection)

Click "Open" and the selected xif file will be imported.

It will now be possible to select this new type of node in the "Create unit" dialog box.

13   Remove xif files

From each Project, xif files can be removed.

Select "Remove xif" in the Network menu. A dialog box with a xif file list displays.

In the list, select the xif file to be removed. Click "OK"

It will now <u>not</u> be possible to select this type of node in the "Create unit" dialog box.

14   Remove

Everything added to the network, i.e. nodes, Channels, Routers, etc. may also be removed.

NOTE!! After removing a node you have to do "Update all" units. It is recommended to do so also after removing a Channel or Router.

14.1   Nodes

There are two ways to remove a node:

a) Select the node to be removed and double click the right mouse button to get a pop-up menu. Select "Remove".

b) Select the node and click "Remove".
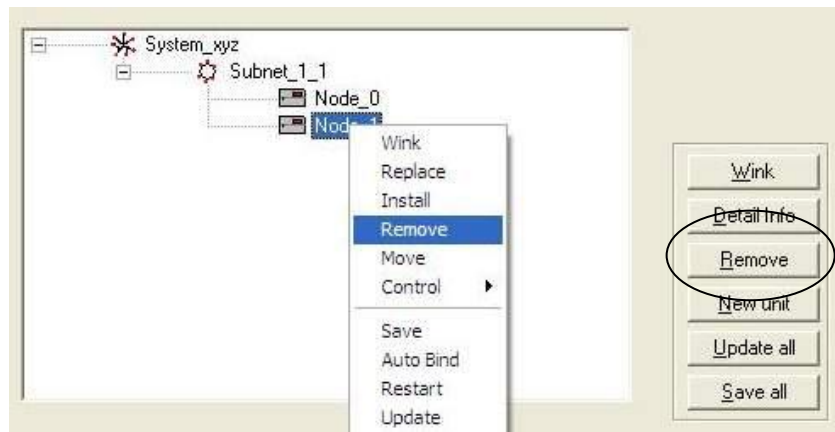
You will be asked if the node really shall be removed. Click "Yes" (or "No").

14.2   Channels

Select "Channel" in the Network menu. The following dialog box displays:
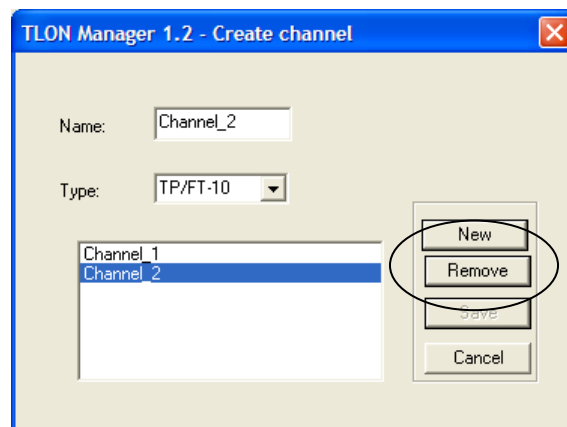
Select the channel to remove and click "Remove".

You will be asked if the Channel really shall be removed. Click "Yes" (or "No").

14.3   Routers

Select "Router" in the Network menu.   The following dialog box displays:
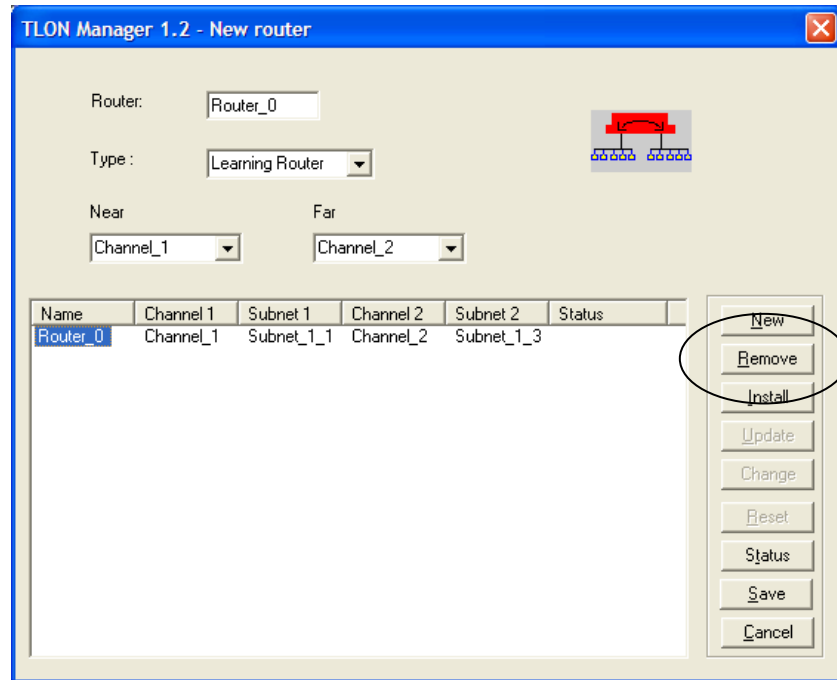
Select the router to remove and click "Remove".

You will be asked if the Router really shall be removed. Click "Yes" (or "No").

15   Maintenance and troubleshooting

Some TLON information is saved in the EBL512 TLON connection board (1590) memory and some in the EBL512 Main board (1556) memory.

If only the Main board (1556) is replaced: Do **Update** and **Save**, for the node.

If only the TLON connection board (1590) **or** if both the boards are replaced: Do **Replace**, **Update** and **Save**, for the node.

There are a number of functions that are useful for network maintenance and troubleshooting. The most common are described below. See also chapters "Network troubleshooting", page 51 and "Network maintenance", page 52.

15.1   Wink

With "Wink" you can check that the node (e.g. EBL512) corresponds to the selected node in the TLON Manager window's tree view. A not connected node, not installed, etc. can not receive a wink message.

There are two ways to send a wink message:

**a)** Select the node and double click the right mouse button to get a pop-up menu. Select "Wink".

b) Select the node and click "Wink".
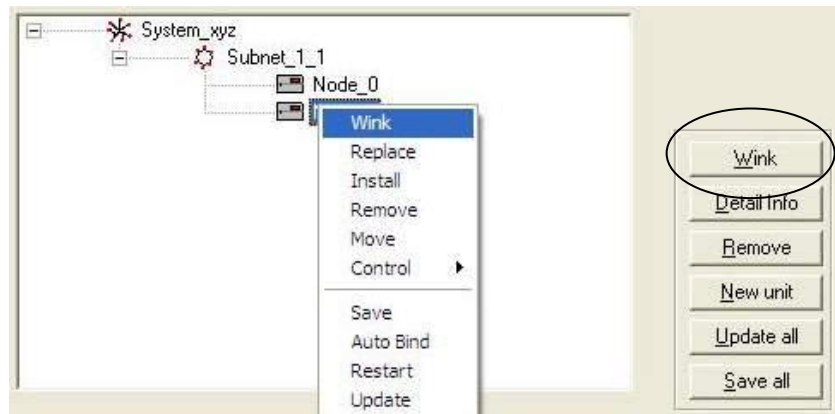
The wink message turns on the buzzer (for approx. 1 second) in the selected EBL512 unit.

If TLON Manager can not communicate with the node (see the status line), the following message displays:
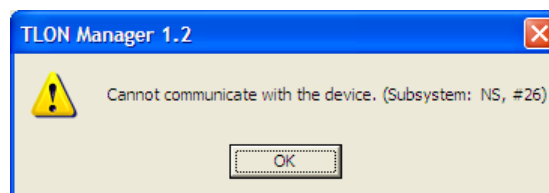
Click "OK" to close the message box.

15.2   Replace

When the TLON connection board 1590 is replaced in an EBL512 unit, select the unit and click "Replace". After that you have to "Update" and "Save", see below.

15.3   Install

The unit will be installed in the network, see chapter "Installation of a Project", page 21 and chapter "Installation of Routers", page 28.

15.4   Remove

The unit will be removed from the project.

15.5   Move

A node can be moved from a channel / subnet to another. In the dialog box, specify the "New location" and click "OK".

15.6   Control

Normally not used in TLON Manager.

15.7   Save

After "Update" (see below) you shall click "Save" so that the updated data is saved in the unit respectively.

15.8   Auto Bind

Normally not used since it is already set as default in "Settings".

15.9   Restart

You can restart a node in the network with the restart command. In the TLON Network this command works only on EBL512 units.

Select the node and click the right mouse button to get a pop-up menu. Select "Restart".

The following dialog box displays:
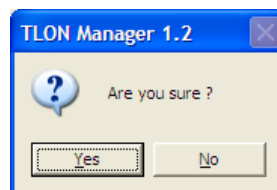
Click "Yes" (or "No"). If TLON Manager can not communicate with / restart the node, the following message displays:
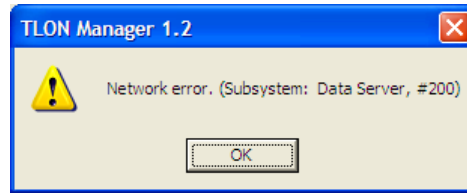
Click "OK" to close the message box.

15.9.1   Restart subnet

You can restart (see above) all the nodes on a Subnet (Channel).

Select the Subnet and click the right mouse button to get a pop-up menu. Select "Restart". The following dialog box displays:
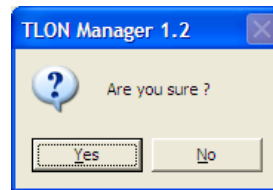
Click "Yes" (or "No"). If TLON Manager can not communicate with / restart a node (see the status line), the following message displays:
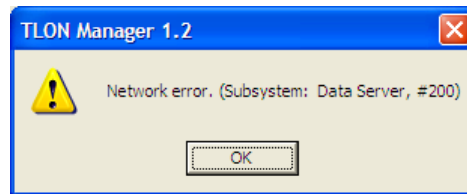
Click "OK" to close the message box.

15.9.2   Restart network

You can restart (see above) all the nodes in a TLON Network.

Select "Restart network" in the Network menu. The following dialog box displays:
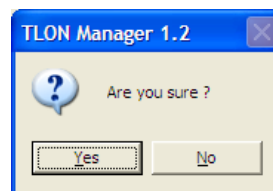
Click "Yes" (or "No"). If TLON Manager can not communicate with / restart a node (see the status line), the following message displays:

Click "OK" to close the message box.

15.10   Update

Normally you update a node (i.e. you download the network configuration data to the physical node) after it has been installed, see chapter "Installation of a Project", page 21. Update can also be used when you suspect that the configuration data in a node is incorrect.

When the TLON connection board 1590 (see "Replace" above) and/or the Main board 1556 is/are replaced in an EBL512 unit, you have to update the node.

Select the node and click the right mouse button to get a pop-up menu. Select "Update".

If TLON Manager can not update the node, the following message displays:

Click "OK" to close the message box.

After "Update" you shall click "Save" or "Save all".

### 15.10.1   Update all

All the nodes in the network can be updated (see above) with only one command. Click "Update all". (See also chapter "Installation of a Project", page 21.)
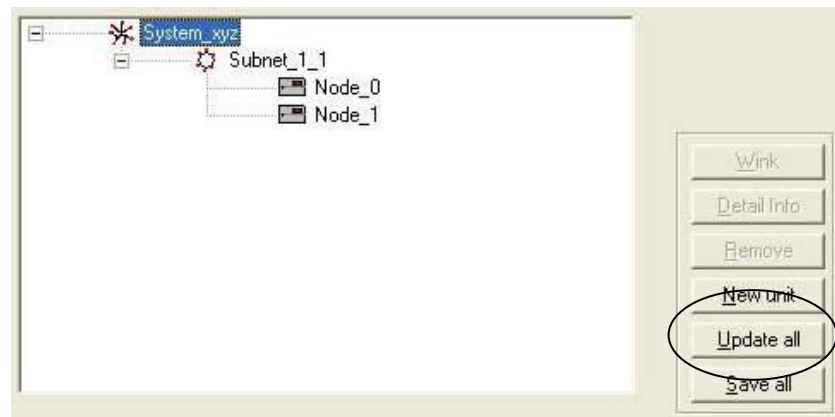
15.11   Detail Info

This command asks a node in the network a series of questions, which will be presented in a dialog box.

There are two ways to get the detailed information:

a) Select a node and double click the right mouse button to get a pop-up menu. Select "Detail Info".

b) Select a node and click "Detail Info".
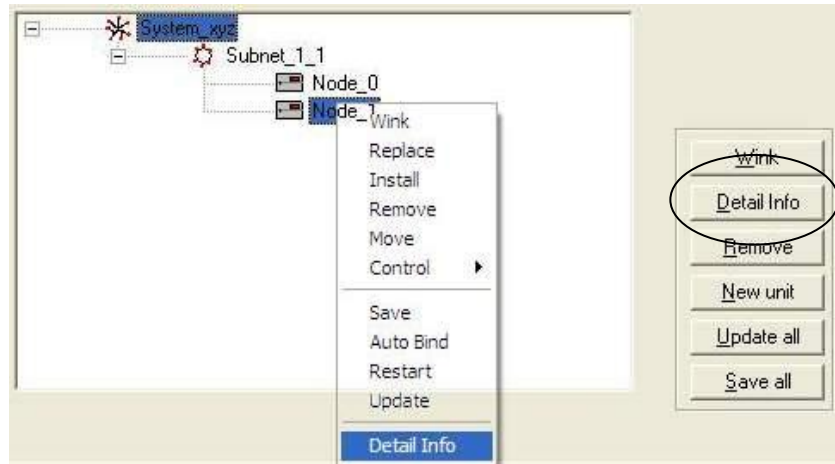
The following dialog box displays:
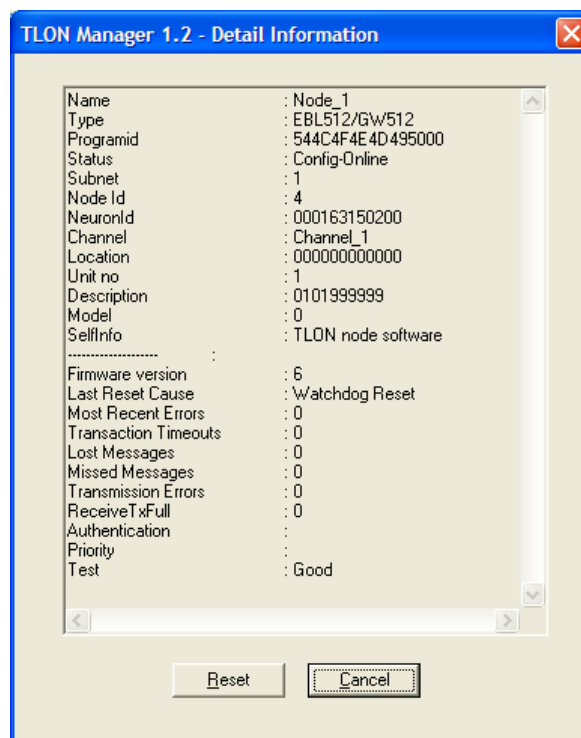
The dialog box contains a lot of information and a deeper knowledge of the TLON Network is required to be able to understand some of it. The information of interest for the average user is explained below. (In case of no contact, the information is: "No contact with node".)

Name

The name given to the node when it was created.

Type

The type given to the node when it was created (see page 18).

Status

Shows the status of the node. The normal status is "Config-Online".

Channel

Shows the Channel the node is installed on.

Unit no.

The number given to the node when it was created.

Description

Starts with a number for the unit, followed by the Description given in the "Create unit" dialog box (if any).

Last reset cause

Shows the reason for latest restart of the node.

Transaction timeouts

Shows the number of messages sent but not acknowledged by all other nodes in the network. The number should be 0 after the node has been installed. The number may increase if new nodes are installed. Reset the value (and all the others) by clicking "**Reset**".

Transmission errors

Must not increase during a 10-minutes interval.
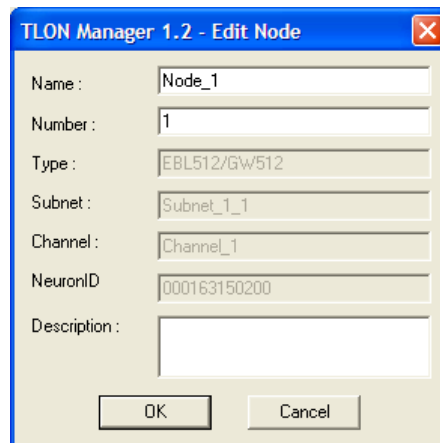
Test

Shall normally be "Good".

15.12   Property

Use the "Edit node" dialog box to edit the name, number and/or description of the node.

Select a node and double click the right mouse button to get a pop-up menu. Select "Property". The following dialog box displays:

NOTE! If the number is changed, the program will "ask" if the node shall be updated. If the node is not updated, the number in the node and the number in the program will be different. The node may be updated later, see chapter "Update", page 44.
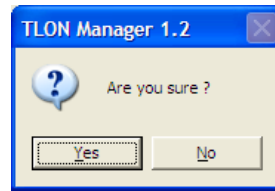
Click "Yes" (or "No"). If TLON Manager can not communicate with / restart a node (see the status line), the following message displays:
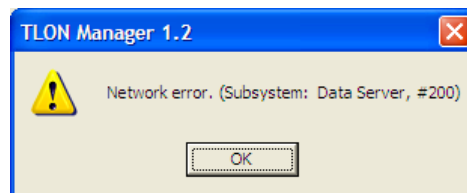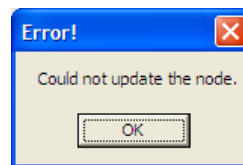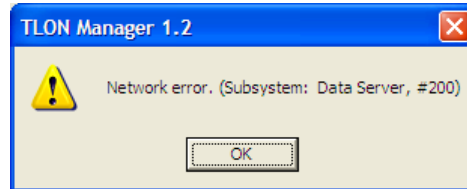

Click "OK" to close the message box.

Update", page 43.

Click "OK" to save and close the dialog box.

16   Flowcharts

The following flowcharts will help you creating a TLON Network as well as TLON network troubleshooting and maintenance. The text in the command blocks refers to the chapters in this document.

16.1   Create a TLON Network

Continued

What shall be added?
1. Channel
2. Router
3. Unit

Unit

Channel

Router

Need to import an xif-file?

Yes

No

Import xif

Is there need for an additional channel?

Yes

No

Unit
(New unit)

Channel

Router

Add more?

Yes

No

Continue

Continued

Remove xif

Is there need to
remove an xif-
file?

Yes

No

Should the
project be used in
another PC?

Yes

No

Export

Finished!
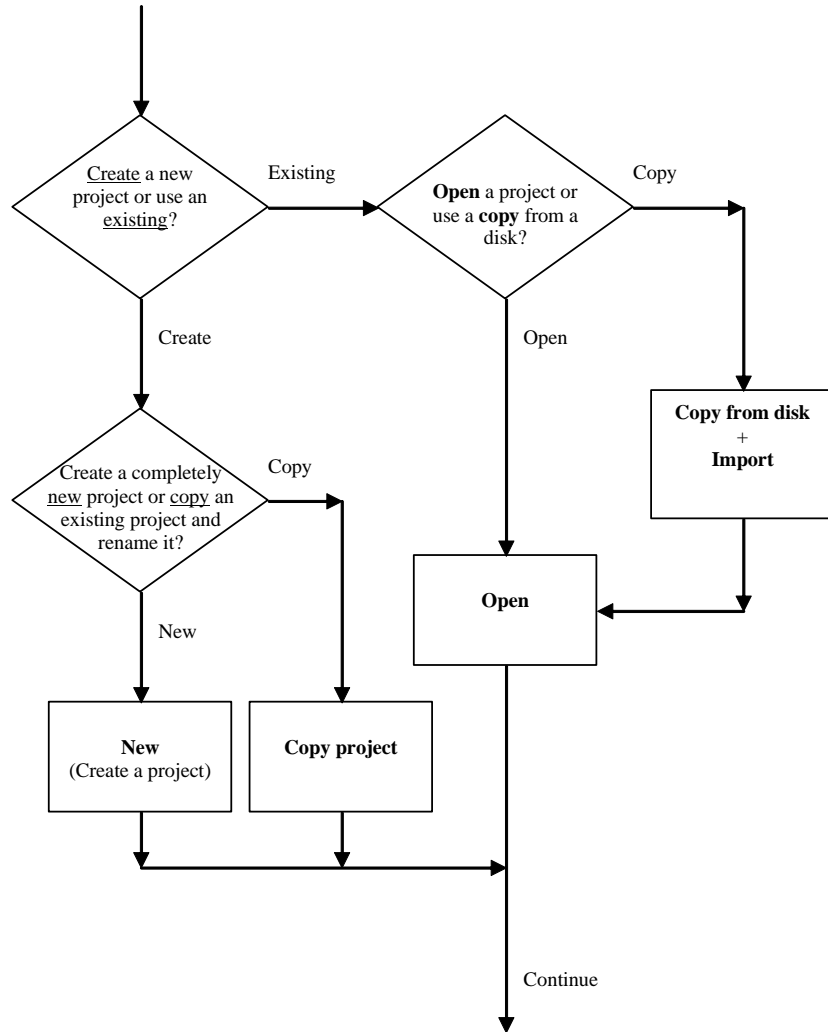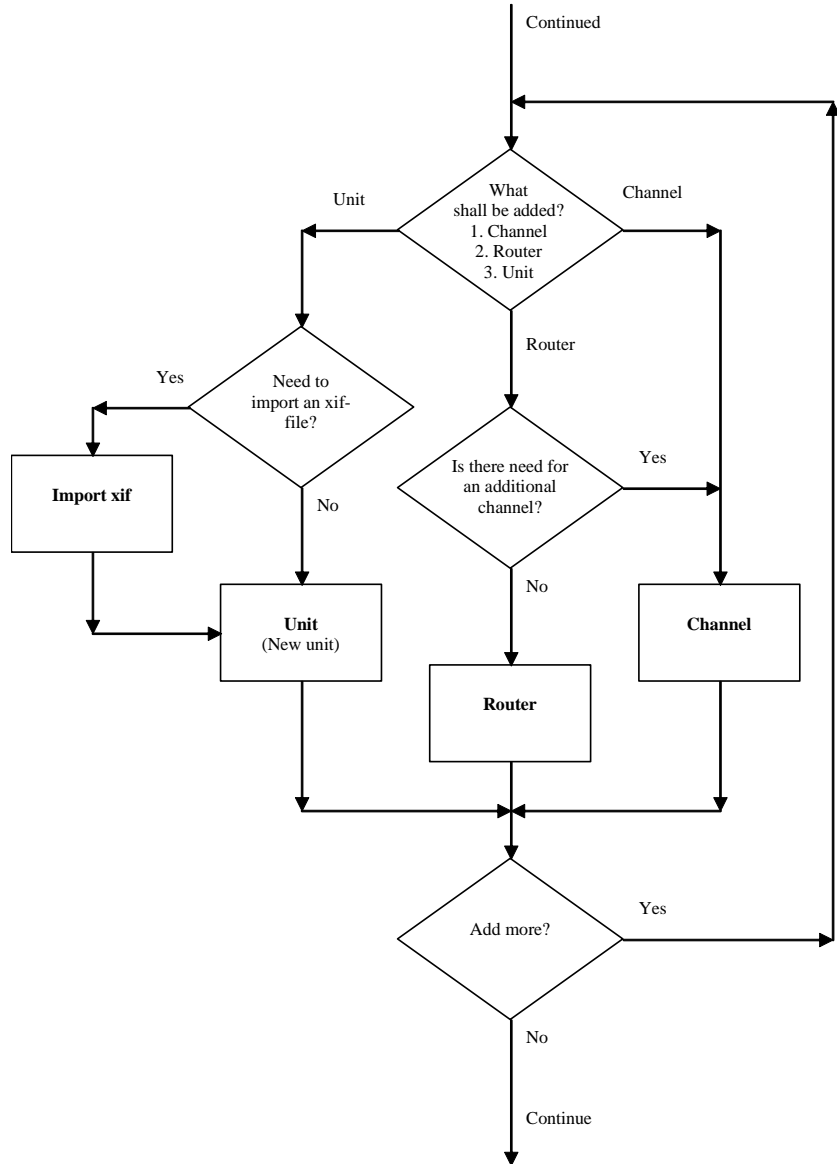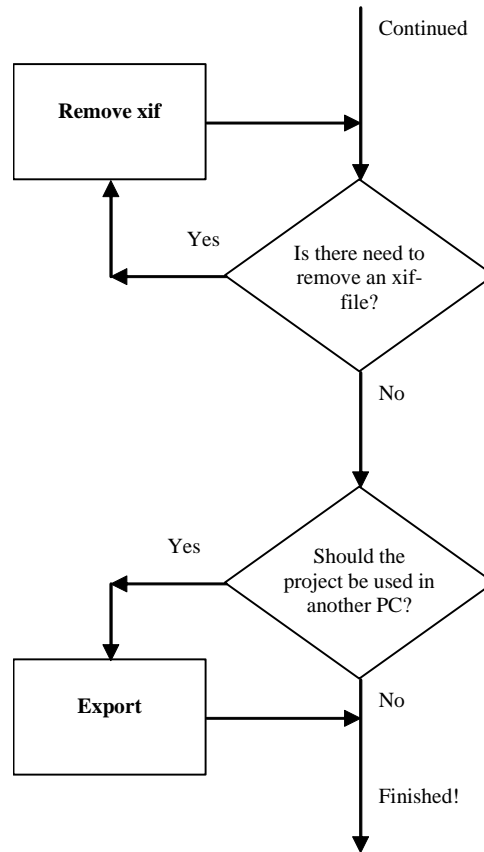
16.2   **Network troubleshooting**

Most of the functions in the flowchart below are described in chapter
"Maintenance and troubleshooting", page 41.

```
                                    │
                                    │
                                    ▼
        ┌──────────┐               ◇
        │   Wink   │──────────────►│
        └──────────┘               ◇
             ▲          Yes    What physical
             └──────────────── unit (EBL512) is
                               programmed in
                               TLON Manager?
                                    │ No
                                    ▼
        ┌──────────┐               ◇
        │Detail info│─────────────►│
        └──────────┘               ◇
             ▲          Yes     Detailed
             └──────────────── information about
                               the node and its
                               status?
                                    │ No
                                    ▼
        ┌──────────┐               ◇
        │  Update  │──────────────►│
        └──────────┘               ◇
             ▲          Yes    Download the
             └──────────────── network config.
                               data to a physical
                               node?
                                    │ No
                                    │
                               Finished!
                                    ▼
```

16.3 Network maintenance

Most of the functions in the flowchart below are described in chapter "Maintenance and troubleshooting", page 41.

```
                                                      │
                                                      ▼
   ┌─────────────┐                          ◇
   │             │            Yes          ╱ Remove a Node, ╲
   │   Remove    │◀────────────────────────  Channel or
   │             │                          ╲    Router?    ╱
   └─────────────┘                             ◇
                                                │ No
                                                ▼
   ┌─────────────┐                          ◇
   │             │            Yes          ╱ Restart a physical ╲
   │   Restart   │◀────────────────────────     node (EBL512)?
   │             │                          ╲                   ╱
   └─────────────┘                             ◇
                                                │ No
                                                ▼
   ┌─────────────┐                          ◇
   │             │            Yes          ╱  Change the name,  ╲
   │  Property   │◀────────────────────────    number or
   │             │                          ╲  description for a  ╱
   └─────────────┘                          ╲      node?       ╱
                                                ◇
                                                │ No
                                                ▼
                                            Finished!
```
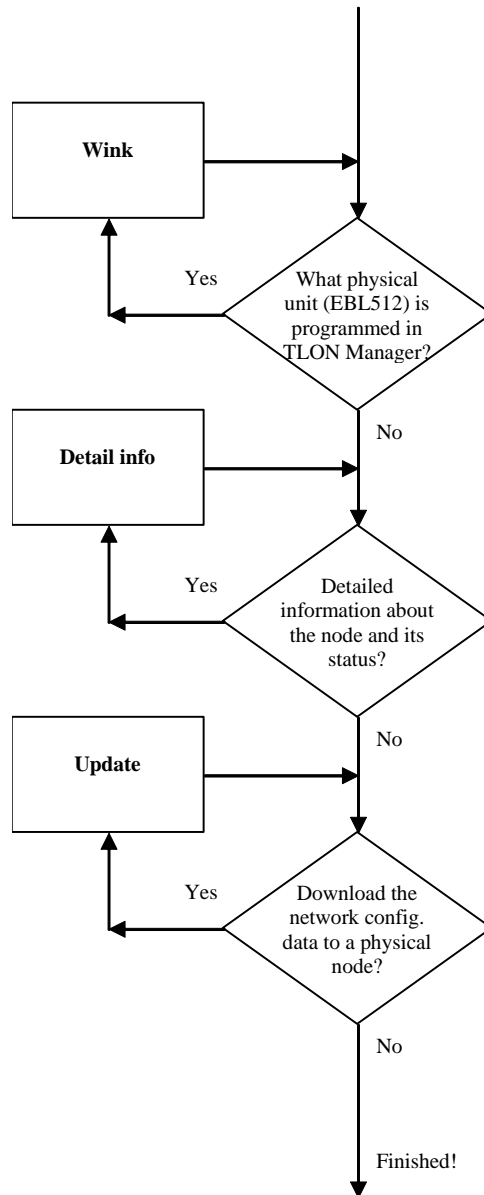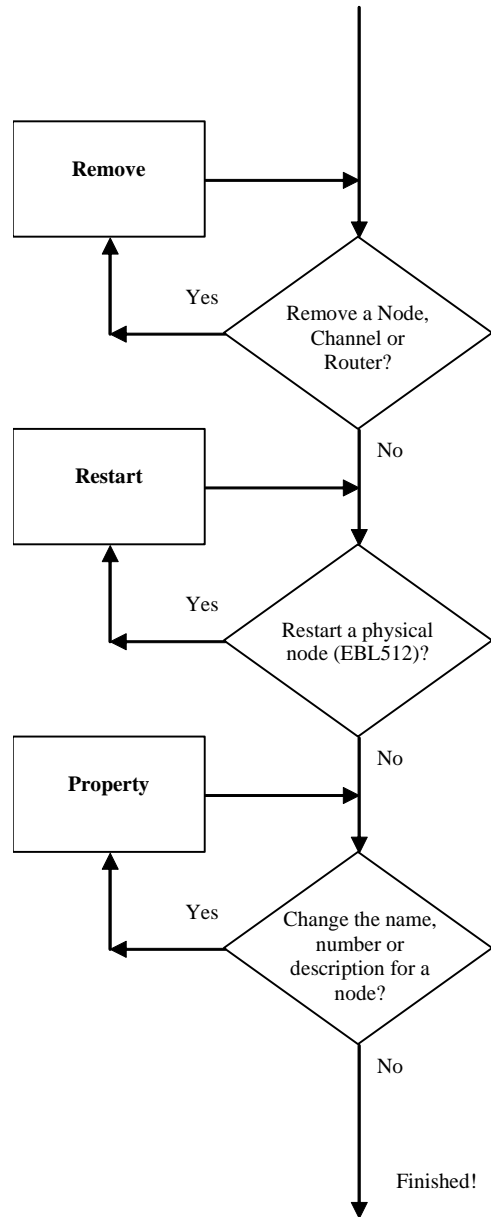
17   Examples

An example of a network with eight EBL512 units (> six units), i.e. a Router is required:

An example of a network with twenty EBL512 units, connected via four Routers and a Backbone net. (100R in the figure should be **105R**, 1%, 1/8W.)

For safety reasons, put all routers together in a locked cabinet/room.

Backbone net, Channel_1
Keep wires shorter than 1 meter

Routers type FT-10<->FT-10
The SysMik GmbH Universal Router is recommended

Far

Near

100R

Near

Near

Near

100R

Channel_2   100R   Channel_3   100R   Channel_4   100R   Channel_5   100R

1

Near   Far   Far   Far

100R   100R

up to 2700 m
(depending of type of cable)

PC

100R   100R

18   Revision history

Revision 1

- Company name and logotype changed to Panasonic

- Elucidations and small corrections in the document.

- Chapter 4. Information added (red font colour).

Revision 2

- Chapter 3. Drivers for Windows 95/98 have been removed.

- Chapter 4. Installation via Floppy disk has been removed.

Revision 3

- Info revised, added or deleted in the following chapters:
    1, 1.1
    2
    3.1, 3.2
    4
    6, 6.1
    7
    8
    9
    10 (footnote 25)
    15.11
    17

Revision 4

Some Windows Vista information.

- Info revised, added or deleted in the following chapters:
    3.1, 3.2
    4

This page has deliberately been left blank.

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