

# NLFACILITIES MANUAL



## **NEWRON SYSTEM**

25-27 Boulevard Victor HUGO

31770 COLOMIERS (France)

T: +33 (0)5 61 15 18 45

F: +33 (0)5 61 15 16 44

---

# SUMMARY

---

<b>Introduction .....</b>	<b>7</b>
General information .....	7
Benefit .....	8
<b>Installation of programs .....</b>	<b>10</b>
Configuration requirements .....	10
Installation.....	10
Installation of program .....	10
<b>Network interface .....</b>	<b>13</b>
Valid interfaces .....	13
Driver for interface .....	13
Verifying interface function .....	14
Verifying PCC10, PCLTA10, PCLTA20.....	14
Verifying SLTA10.....	14
Verifying LonDongle .....	14
Verifying LPP.....	14
<b>Start with NLFacilities .....</b>	<b>15</b>
Starting NLFacilities .....	15
<b>NLFacilities overview .....</b>	<b>16</b>
Generals views .....	16
Graphical View .....	17
Object properties view.....	18
Browser view .....	19
Project hierarchy view .....	20
Objects browser view.....	20
Output traces view .....	21
Zoom map view .....	22
<b>Designer menu.....</b>	<b>23</b>
Project menu.....	23
Map menu .....	24
Edit menu.....	25
Graphic tools menu.....	25
Sub menu Drawings mode.....	26
Sub menu zoom.....	27
Sub menu Coordinates .....	27
Sub menu Grid .....	28

Sub menu Walls.....	28
Graphic designer menu.....	29
Sub menu Align .....	30
Sub menu Center.....	31
Sub menu Space .....	31
Sub menu Flip .....	32
Sub menu Size .....	32
View menu .....	33
Designer menu .....	33
? (Help) menu .....	33
<b>Designer toolbars.....</b>	<b>34</b>
Project toolbar .....	34
Tools toolbar .....	34
Graphics mode toolbar .....	35
Graphics tools toolbar .....	35
Unassigned objects.....	36
<b>Runtime menu.....</b>	<b>37</b>
Project menu.....	37
Map menu .....	38
Edit menu.....	38
Graphic tools menu.....	38
View menu .....	39
Runtime menu.....	39
<b>Runtime toolbars.....</b>	<b>40</b>
Project toolbar .....	40
Tools toolbar .....	40
<b>Create first NLFacilities project.....</b>	<b>41</b>
Before start .....	41
Limited version .....	41
First Database .....	41
Step 1 create project.....	42
Start project creation .....	42
Set new project.....	42
Choose modeller database .....	43
Choose office profile .....	43
Choose object profile.....	44
Summarize project .....	44
Message traces .....	45
Step 2 Add a map.....	45
Add a new map.....	45
Set a map.....	45
Step 3 Add network module on map .....	46
Open a map.....	46
Zoom on map .....	46
Place module on map.....	47
Step 4 place walls.....	47

Place walls on map .....	47
Adjust wall on map .....	48
Step 5 Start NLFacilities runtime .....	48
Switch working mode to Runtime .....	48
Step 6 Create an office on map .....	49
Create an office .....	49
Set office properties .....	49
Draw an office zone .....	50
Select network object in office .....	50
Step 7 Update network .....	51
Update network .....	51

---

# PICTURES

---

Picture 1 Software and Database organization.....	7
Picture 2 Install Step 1 .....	11
Picture 3 Install Step 2 .....	11
Picture 4 Install Step 3 .....	11
Picture 5 Install Step 4 .....	11
Picture 6 Install Step 5 .....	12
Picture 7 Install Step 6 .....	12
Picture 8 Driver installation Step 1 .....	13
Picture 9 Driver installation Step 2 .....	13
Picture 10 SLTA10 connected .....	14
Picture 11 SLTA10 unconnected.....	14
Picture 12 Valid LPP windows .....	14
Picture 13 General views of NLFacilities .....	16
Picture 14 Menu show views .....	16
Picture 15 Graphical view .....	17
Picture 16 Object properties view.....	18
Picture 17 Browser view.....	19
Picture 18 Project hierarchy view .....	20
Picture 19 Browser view network tab.....	21
Picture 20 Browser view object tab .....	21
Picture 21 Browser view office tab .....	21
Picture 22 Output trace view.....	21
Picture 23 Zoom view.....	22
Picture 24 Designer mode Project menu .....	23
Picture 25 Designer mode Map menu .....	24
Picture 26 Designer mode Edit menu .....	25
Picture 27 Designer mode Graphic tools menu .....	25
Picture 28 Designer mode Sub menu Drawings .....	26
Picture 29 Designer mode Sub menu Zoom .....	27
Picture 30 Designer mode Sub menu coordinates .....	27
Picture 31 Designer mode Sub menu Grid.....	28
Picture 32 Designer mode Sub menu Walls.....	28
Picture 33 Designer mode Graphic designer menu .....	29
Picture 34 Designer mode Sub menu Align.....	30
Picture 35 Designer mode Sub menu Center .....	31
Picture 36 Designer mode Sub menu Space.....	31
Picture 37 Designer mode Sub menu Flip.....	32

Picture 38 Designer mode Sub menu Size.....	32
Picture 39 Designer mode View menu.....	33
Picture 40 Designer mode Designer menu.....	33
Picture 41 Designer mode Set Default paths.....	33
Picture 42 Designer mode Help menu .....	33
Picture 43 Runtime mode Project menu .....	37
Picture 44 Runtime mode Map menu .....	38
Picture 45 Runtime mode Edit menu .....	38
Picture 46 Runtime mode Graphic tools menu .....	39
Picture 47 Runtime mode View menu.....	39
Picture 48 Runtime mode Runtime menu .....	39
Picture 49 Order label settings .....	39
Picture 50 NLFacilities Limited version .....	41
Picture 51 Warning in creation LNS Database DEMO .....	41
Picture 52 Set path for Network Database .....	41
Picture 53 Start New project.....	42
Picture 54 Create dialog box.....	42
Picture 55 Modeler database dialog box .....	43
Picture 56 Office profile dialog box .....	44
Picture 57 Object profile dialog box .....	44
Picture 58 Project summarize .....	45
Picture 59 Traces view after create project .....	45
Picture 60 Add a new map.....	45
Picture 61 Settings on map creation .....	46
Picture 62 Open a map .....	46
Picture 63 Select network object.....	47
Picture 64 Drag and Drop network object on map .....	47
Picture 65 Place walls on map.....	48
Picture 66 Choose rotation tool.....	48
Picture 67 Rotate wall .....	48
Picture 68 Project properties views settings .....	49
Picture 69 Create new office.....	49
Picture 70 Settings properties name.....	49
Picture 71 Before office polygon is drawn .....	50
Picture 72 After office polygon is drawn .....	50
Picture 73 Network object automatically selected .....	50
Picture 74 All objects are selected .....	50
Picture 75 Settings office appearance properties .....	51
Picture 76 Traces view.....	51

# INTRODUCTION

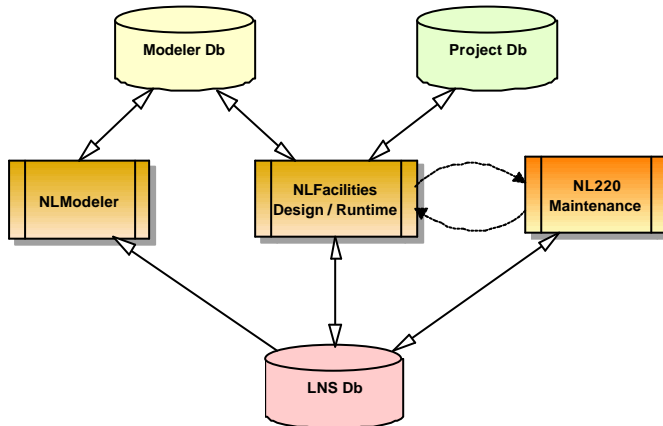
Thank you for choosing NLFacilities software member of NLSuite.

We are happy to help you in your LonWorks integration job. All softwares of NLSuite are often updated for correcting bugs and improve performances. We propose to you to check version on Web site [www.newron-system.com](http://www.newron-system.com).

## General information

---

In this package you have different tools describe follow.



Picture 1 Software and Database organization

**NLModeler** is a tool for managing relation between Nodes or LonMark objects in LNS Database. It defines network objects, space template for NLFacilities.

**NLFacilities** is a tool in two versions for managing map, network object and space template. In designer mode you draw a map and you put network object in it. In Runtime mode you draw office and other living space and it apply a space template in LNS Database and on Network.

**NL220** is a complement for maintaining your LonWorks network.

# Benefit

---

Save integration time and configure graphically your installation using NLFacilities

NLFacilities is an **LNS based program**, which allows integrators to develop graphics applications for the management and layout of living space. It works with all LNS databases created with any installation tools. This program **complements supervision** and is aimed at the same clients: integrators and end customers.

It is composed of two tools: the “**designer**” which allows creation of the application according to the site and the “**runtime**” which allows the functions to be used. This program manipulates binding models (relations between the products) and setup libraries of office models. Each of the latter consists of equipment, and the links between and layout of this.

NLFacilities offers a **powerful graphics editor** allowing individual management of each site plan. The developer imports the outline plan, defines the equipment graphics, inserts and positions the equipment on the plan, adds on any drawn elements required and finally defines possible positions for partitions.

The developer and the user have **advanced graphics functions**, an analogue or zone zoom, an automatic scale up or down and cut and paste graphics. In addition, the developer has all the draw functions: alignment, rotation, symmetry, spacing, multi selection, etc.

Once the **space has been defined** in the “designer”, the user can **then exploit the building**. Partitions can be added or taken out and NLFacilities will automatically register the new living space. In addition, equipment network variables can be visualized and plug-in made.

This program also has all the **network maintenance functions** associated with the equipment: test, reset, online, offline, and it also allows replacement or repair of faulty units. In addition we offer the possibility of downloading a new application program.



In conclusion,



**NLFacilities is a tool, which is essential for optimizing exploitation of buildings.**

**It ensures secure installations,**

**facilitates development and**

**gives intuitive and outstanding operation.**

NLFacilities belongs to a major software suite broadly used all over Europe including LNS manager tool, OPC server and node utility and will be available for download in our Web page.

See on [www.newron-system.com](http://www.newron-system.com).

# INSTALLATION OF PROGRAMS

This section explains how to install the NLFacilities program

## Configuration requirements

---

The table below shows the minimum configuration and the recommended configuration for the installation and correct functioning of the program.

Equipment	Minimum	Recommended
Operating system	Windows NT, 2000, Xp	Windows NT, 2000, Xp
Computer	Pentium III 350 Mhz, 800 x 600 screen	Pentium III 750 Mhz, 1024 x 768 screen
Memory	64 M octets	128 M octets
Hard disk	100 Mo - 50 Mo for program - 0,5 to 8 Mo per project	200 M octets
CD ROM	Required for installation	Required for installation
Software	- LNS 3.0 or greater - NL220	- LNS 3.0 or greater - NL220
Interface network	Type NSI or VNI card	Type NSI or VNI card

Table 1 The equipment

## Installation

---

A setup program will guide you through the installation procedure and will ask you for any information necessary.

### Installation of program

1. Insert the CDROM in the CD reader
2. If no window appears on the screen open: D:\index.htm
3. Picture 2 will appear on the screen.
4. Select **Software** on main Menu
5. Picture 3 will appear on the screen.
6. Select **NLFacilities** on center of screen.

7. Picture 4 will appear on the screen.
8. Select **Click to install NLFacilities on your PC**, Picture 5 will appear on the screen.
9. Select **run this program from its current location** and click on **OK** button.



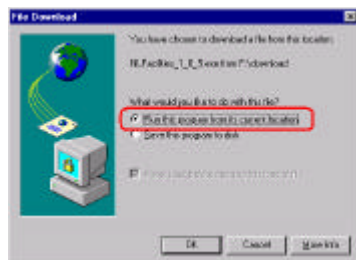
Picture 2 Install Step 1



Picture 3 Install Step 2

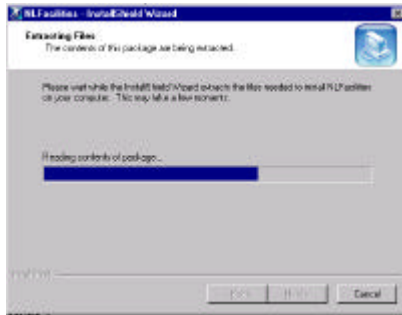


Picture 4 Install Step 3

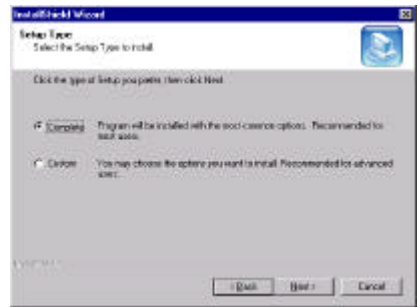


Picture 5 Install Step 4

The installation program will now be readied and Picture 6 will appear on the screen. Follow the instructions until you arrive at type of installation choice on Picture 7.



Picture 6 Install Step 5



Picture 7 Install Step 6

You have the choice between the following installations:

Installation	Details
Complete	Complete installation of NLFacilities and NLModeler.
Custom	You can choose the module to be installed

Table 2 Type of installation

You should restart your PC at the end of the installation, according to the instructions

# NETWORK INTERFACE

The network interface allows a physical link to be created between the PC and LonWorks network.

## Valid interfaces

Type of interface	Maker	Connection	NSI	VNI
PCC10	Echelon	Slot PCMCIA	X	X
PCLTA10	Echelon	Slot ISA	X	X
PCLTA20	Echelon	Slot PCI	X	X
SLTA10	Echelon	Port RS232	X	
LonDongle	D&H gmbh	Parallel port	X	
LPP	Gesytec	Slot ISA	X	
LPC	Gesytec	Slot PCI	X	

Table 3 Type of PC interface

To work, NLFacilities needs a Firmware NSI or VNI interface

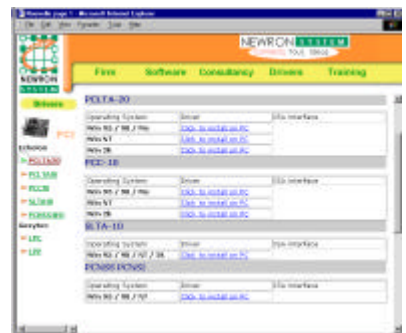
## Driver for interface

Some drivers are available on CD on **Driver** main menu see: Picture 8.

Choose you network interface in the selection grid. Click on the appropriate interface in the vertical left menu. In Picture 9 we have selected PCLTA20. Choose the good operating system and follow instruction for setup.



Picture 8 Driver installation Step 1



Picture 9 Driver installation Step 2

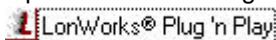
## Verifying interface function

---

To function correctly, NLFacilities must have a type NSI or VNI interface as shown in Table 3.

### Verifying PCC10, PCLTA10, PCLTA20

1. Open the configuration panel and launch the icon



### Verifying SLTA10

1. Activate: *Start/Programs/LonWorks SLTA10/SLTALink Manager*
2. The SLTA Link Manager menu bar must be as in Picture 10 with a green warning light, if it is red, or if the menu bar is like Picture 11, the interface is not working. Repeat the configuration steps, following the instructions carefully




Picture 10 SLTA10 connected




Picture 11 SLTA10 unconnected

### Verifying LonDongle

3. Plug the NLFacilities Dongle in first, the LondonGle in second position.
4. Open the configuration panel and launch the icon «LondonGle Configuration Utility» 
5. Launch Diagnostics.. option.

### Verifying LPP

1. Open the configuration panel and launch the icon  Easylon PCI Interface
2. If a check box is valid, the interface is show by the system like in Picture 12



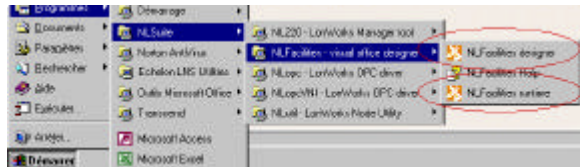
Picture 12 Valid LPP windows

# START WITH NLFACILITIES

## Starting NLFacilities

---


To Start NLFacilities, go to the **NLFacilities - visual office designer** folder from the Start menu of windows.



Picture 1 Start NLFacilities

Then you are able to start NLFacilities in runtime or design mode.

To start in **runtime** mode click on  NLFacilities runtime.

To start in **designer** mode click on  NLFacilities designer.

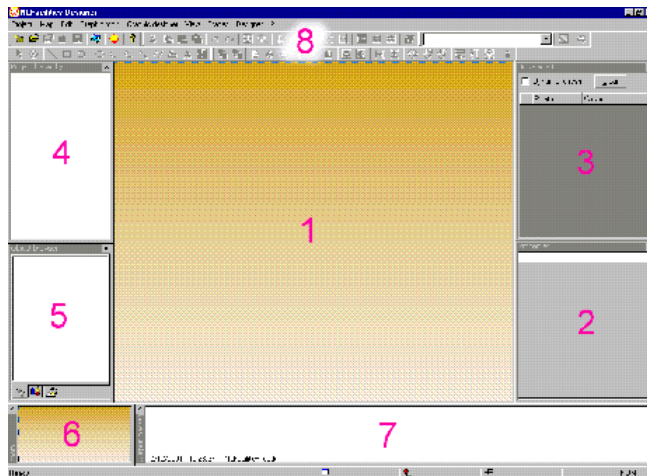
# NLFACILITIES OVERVIEW

## Generals views

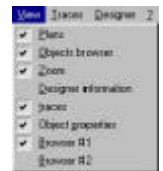
---

NLFacilities uses docking windows of seven types to display project's content.

NLFacilities is a strongly contextual-mouse-featured oriented application.



Picture 13 General views of NLFacilities



Picture 14 Menu show views

For instance, menu View manages displayed windows see Picture 14.

As shown, two other extra windows are available for display.

### 1 Graphical view

Allow map-based graphical edition.

### 2 Object properties

Displays properties related to any object selected from other windows.

### 3 Net points browser

Displays values of net points to be observed.

A second browser window is also available from the menus.

### 4 Project hierarchy



Active project is displayed in this window as a tree.

### 5 Objects browser

Displays properties related to objects available from the project.

### 6 Output traces

Execution messages and alerts are listed to this window.

### 7 Zoom map

Displays a snapshot of the whole map to allow quick positioning in the main map window.

### 8 Toolbars and menus

Give access to any function.

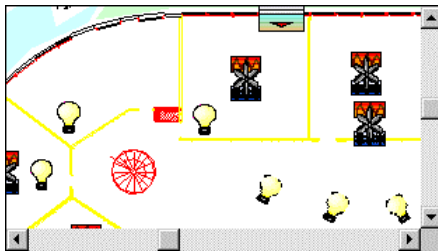
## Graphical View

---

The NLFacilities or graphical view, is the only view that can't be hidden. It is used to display the map that is opened in a project.

The view can contain:

- ☐ Graphical objects.
- ☐ Network object.
- ☐ Walls.
- ☐ Offices.
- ☐ Common areas.



Picture 15 Graphical view

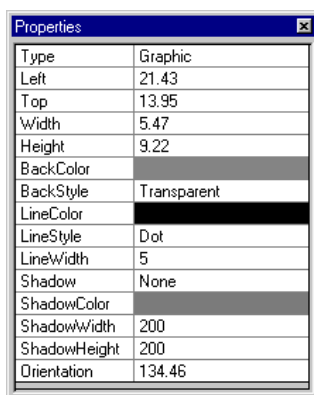
By right clicking on a network object, an office or a common area, the user can use its contextual menu.

## Object properties view

This view provides information only when NLFacilities is in runtime mode.

It displays the properties of the objects selected on the currently opened map.

The number of properties available and their functionalities depend on the graphical type of the selected object(s).



Picture 16 Object properties view

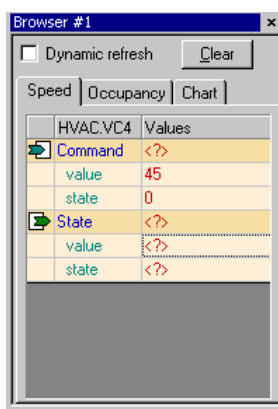
Name	Read / Write	Description
Type	R	Type of the selected object (Graphic, Name of a category, Wall,...)
Left	R/W	Left position on object.
Top	R/W	Top position on object.
Width	R/W	Width on object.
Height	R/W	Height on object.
BackColor	R/W	Back Color on object.
BackStyle	R/W	Indicate if the back of object is transparent or opaque.
Shadow	R/W	Set shadow on object.
ShadowColor	R/W	Set shadow color on object.
ShadowWidth	R/W	Set width of shadow on object.
ShadowHeight	R/W	Set height shadow on object.
LineColor	R/W	Set the color of the line.
LineWidth	R/W	Set the width of the pen used to draw the line.
LineStyle	R/W	Set the style used to draw the line (None, Solid, Dash, Dot, ...).
Orientation	R/W	Orientation of the line.
FillColor	R/W	Set the color of fill.

FillStyle	R/W	Set the style of fill (Solid, transparent, horizontal,...)
Picture	R/W	Set name of picture file.
FontBold	R/W	Indicate if the bold of text is enabling.
FontItalic	R/W	Indicate if the bold of text is enabling.
Fontunderline	R/W	Indicate if the underline of text is enabling.
FontName	R/W	Indicate font name of text.
FontSize	R/W	Indicate the size of text.
FontStrike	R/W	Indicate if the strike of text is enabling.
FontWidth	R/W	Indicate if the width of text.

## Browser view

NLFacilities provides 2 browsers views. Each of these views can browse network variables values from the network. The browser works with profile files. These profile files is created from the NLFacilities modeler. Each profile file can be set to an object, a group of objects, a node or a LonMark object.

If in the browser view, a tab called Chart is visible, it means that values can be viewed on a graph with all their modifications in the time.



Picture 17 Browser view

**Dynamic refresh** Check this option if you want to set the Browser view to dynamically displayed the browsed value of the objects selected on the map.



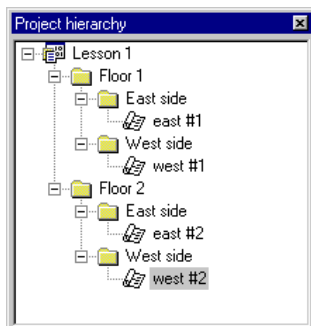
To clear the browser and stop the browsing of the view.

## Project hierarchy view

---




This view displays and allows management of the hierarchy of maps and folders of a project.

It has two ways of running: **Runtime / Designer**



Picture 18 Project hierarchy view

Different icons are available in this view.

Icons	Representation
	Project
	Folder
	Map

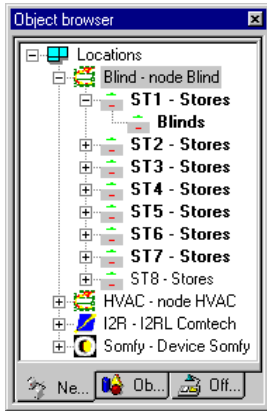
## Objects browser view

---

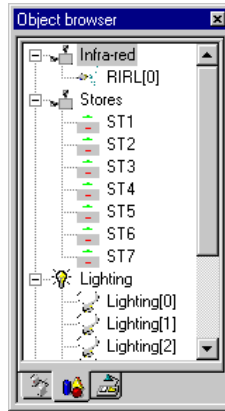
This view displays the network objects available for a map, and allows management for these objects.

This view is empty if no map is opened.

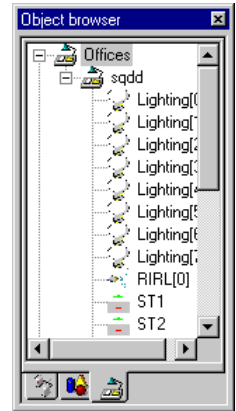
The objects browser view contains 3 different tabs:



Picture 19 Browser view  
network tab



Picture 20 Browser view  
object tab



Picture 21 Browser view  
office tab



Network

The network tab shows you modules in LNS Database available with the proper NLModeler database. Picture 19



Objects

The network tab shows you network object available and used in Project database. Picture 20

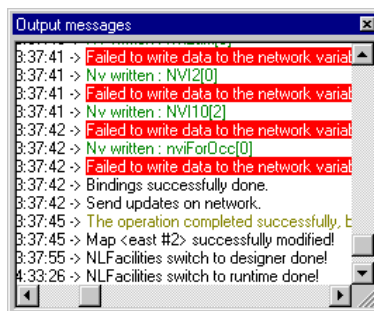


Offices

The office tab shows you offices and common areas available in Project database. Picture 21

## Output traces view

This view displays all the traces generated by NLFacilities. The traces displayed are configured in designer mode with the Traces tab in project settings.



Picture 22 Output trace view

**Color details:**

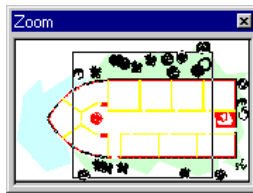
- ☐ Error traces are in red.
- ☐ Warning traces are in brown.
- ☐ Information traces are in black.

## **Zoom map view**

---

The zoom view represents a small view of the opened map.

The square drawn on the zoom view corresponds to the part of the map that is visible in the NLFacilities graphical view.



Picture 23 Zoom view

When you move the square in zoom view, the graphical view change automatically. If you draw a new square, you set a zoom property for graphical view.

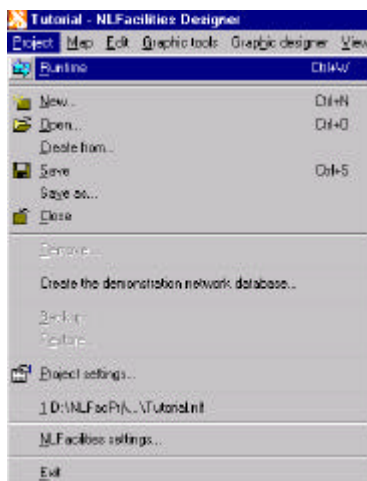
# DESIGNER MENU










## Project menu


---

Many functions for manage projects.



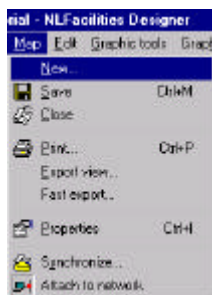
Picture 24 Designer mode Project menu

Menu option	Icon	Description
Runtime		Switch NLFacilities in runtime mode. The mode where user can create offices and common areas.
New		Create a new NLFacilities project.
Open		Open an existing NLFacilities project.
Create from ...		Allows selecting manually a project with an explorer. If this project is not a member of the already existing projects, it is automatically added.
Save		Save the currently opened project. If a map is currently opened, it is also saved.
Save as ...		Make a copy of a project at a new location.
Close		Close the currently opened project. Close opened map if necessary.







Remove		Remove closed project.
Create the demonstration network database		Create the demonstration LNS database of NLFacilities on the PC.
Backup		Make a backup of closed NLFacilities project.
Restore		Make a restore of closed NLFacilities project.
More recent files		Display the more recent projects opened by NLFacilities.
Project settings...		Display the NLFacilities settings dialog.
Exit		Quit application.

## Map menu

Many functions for manipulate Map into Hierarchical Project view.



Picture 25 Designer mode Map menu

Menu option	Icon	Description
New		Create a new map in the project. The map is located at the root of the project.
Save		Save the current opened map.
Close		Close the current opened map.
Print		Print the map on printer.
Export view		Export the graphical map in BMP file.
Fast export		Can export with same properties a precedent file.
Properties		Display the map properties dialog.
Synchronize		Launch synchronization of the map with the network database.
Attach to network		Show you if the network interface can be used by update network.






## Edit menu

---

Many function for search Database object on Map view.



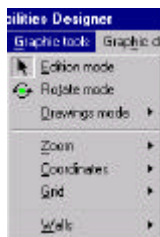
Picture 26 Designer mode Edit menu

Menu option	Icon	Description
Find...		Find an assigned object on the map from its name
Find next		Equivalent of clicking <input type="button" value="Mark all"/> in the "Find object in view dialog".
Full screen		Switch NLFacilities from full screen mode to normal mode and vice versa.






## Graphic tools menu

---

Many function for drawing graphical object, zooming on map and managing walls.

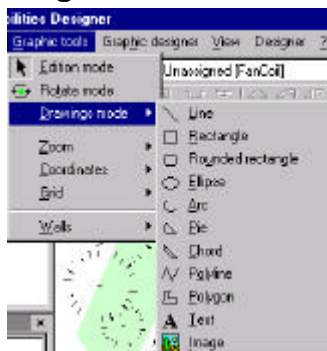


Picture 27 Designer mode Graphic tools menu

Menu option	Icon	Description
Edition mode		Set the cursor to work in selection mode on the graphical view.
Rotate mode		Set the cursor to work in rotate mode on the graphical view.
Drawings mode		This menu contains functionality for drawn object on graphical view see Picture 28
Zoom		This menu contains functionality for zoom on graphical view see Picture 29
Coordinates		This menu contains functionality for coordinates system of the graphical view. These settings are saved for each map

		see Picture 30.
Grid		Options to define the grid properties. The grid is useful to place with precision the objects on the graphical view. These settings are saved for each map. See Picture 31.
Walls		Commands to define properties of walls on the map. See Picture 32

## Sub menu Drawings mode

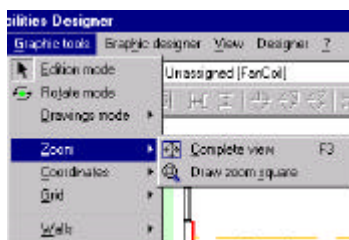


Picture 28 Designer mode Sub menu Drawings

Menu option	Icon	Description
Line		Set the cursor to draw lines in the graphical view.
Rectangle		Set the cursor to draw rectangles in the graphical view.
Rounded		
Ellipse		Set the cursor to draw ellipses in the graphical view.
Arc		Set the cursor to draw arc in the graphical view.
Pie		Set the cursor to draw pies in the graphical view.
Chord		Set the cursor to draw chord in the graphical view.
Polyline		Set the cursor to draw poly lines in the graphical view.
Polygon		Set the cursor to draw polygon in the graphical view.
Text		Set the cursor to place text in the graphical view.
Image		Set the cursor to place image in the

		graphical view.
--	--	-----------------

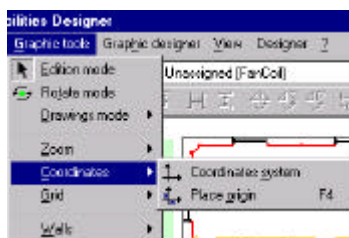
## Sub menu zoom



Picture 29 Designer mode Sub menu Zoom

Menu option	Icon	Description
Complete view		Process the size of the map to make it entirely visible in the view.
Draw zoom square		Set the cursor in draw zoom square mode. Then, the user can draw on the view the square where he wants to zoom.

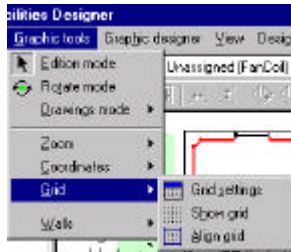
## Sub menu Coordinates



Picture 30 Designer mode Sub menu coordinates

Menu option	Icon	Description
Coordinates system		Display the Coordinates system settings dialog.
Place origin		Set cursor of graphical view to place the origin of the map.

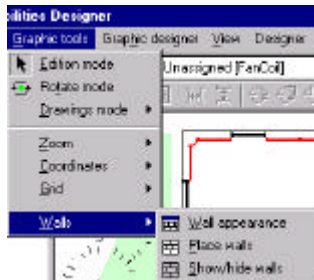
## Sub menu Grid



Picture 31 Designer mode Sub menu Grid

Menu option	Icon	Description
Grid settings		Define settings available for the grid in the graphical view.
Show grid		Equivalent to the <b>grid height</b> option in the Grid settings dialog.
Align grid		Equivalent to the <b>grid active</b> option in the Grid settings dialog.

## Sub menu Walls

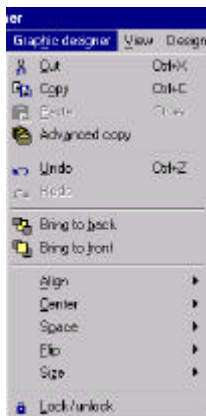


Picture 32 Designer mode Sub menu Walls

Menu option	Icon	Description
Wall appearance		The grid on the right of the window, is used to define appearance of the wall (Backcolor, Backstyle, ...) Select the category on the left side to set appearance for each of these categories.
Place walls		Set cursor of the graphical view to define the walls on the map.
Show/hide walls		Set the walls visible/invisible on the graphical view.


## Graphic designer menu

Many function for managing graphical object like cut, copy and arrange on Map.

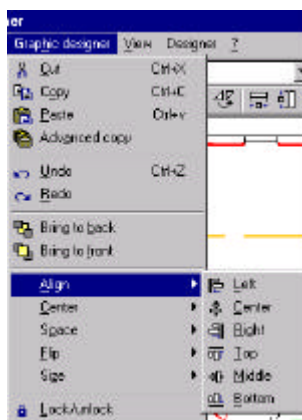


Picture 33 Designer mode Graphic designer menu

Menu option	Icon	Description
Cut		Remove all the selected objects on the graphical view and put them in the clipboard.
Copy		Copy all the selected objects on the graphical view in the clipboard.
Paste		Copy all the selected objects on the graphical view in the clipboard.
Advanced copy		Display the advanced paste window. This window is very useful to reproduce a sequence of graphical objects on the graphical view.
Undo		Undo commands that have been previously done. (up to 50 operations)
Redo		Redo commands that have been previously undo. (up to 50 operations)
Bring to back		Bring all the selected objects at the background of the view.
Bring to front		Bring all the selected objects at the foreground of the view.
Align		Commands to provide alignment functionality on the graphical objects.
Center		Commands to center all the selected objects. (the reference is the last selected objects)
Space		Commands to space evenly all the







		selected objects.
Flip		Commands to apply flip operation on selected objects.
Size		Commands to work on the size of selected objects.
Lock/Unlock		Lock/Unlock the position of a graphical object on the graphical view.

## Sub menu Align

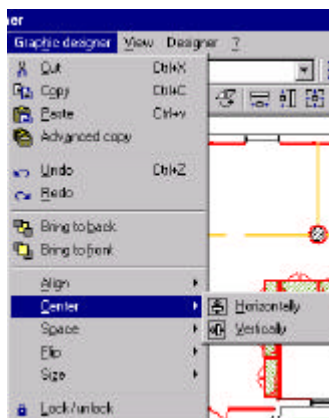


Picture 34 Designer mode Sub menu Align

For all options the reference is the last selected objects.

Menu option	Icon	Description
Left		Align all the left sides of the selected objects.
Center		Align all the center of the selected objects.
Right		Align all the right sides of the selected objects.
Top		Align all the tops of the selected objects.
Middle		Align all the middles of the selected objects.
Bottom		Align all the bottom of the selected object.

## Sub menu Center

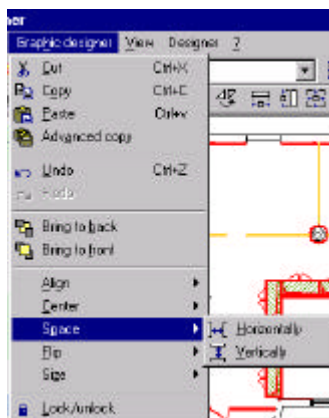


Picture 35 Designer mode Sub menu Center

For all options the reference is the last selected objects.

Menu option	Icon	Description
Horizontally		Center all selected object horizontally.
Vertically		Center all selected object vertically.

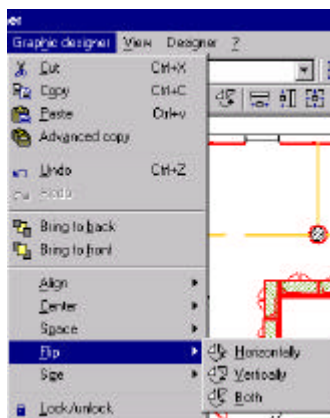
## Sub menu Space



Picture 36 Designer mode Sub menu Space

Menu option	Icon	Description
Horizontally		Center all selected object horizontally.
Vertically		Center all selected object vertically.

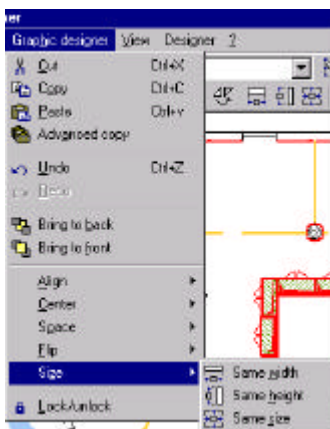
## Sub menu Flip



Picture 37 Designer mode Sub menu Flip

Menu option	Icon	Description
Horizontally		Flip all the selected objects both horizontally.
Vertically		Flip all the selected objects both vertically.
Both		Flip all the selected objects both horizontally and vertically.

## Sub menu Size





Picture 38 Designer mode Sub menu Size

For all options the reference is the last selected objects.

Menu option	Icon	Description
Same width		Size all the selected objects to get same width.



Same height		Size all the selected objects to get same height.
Same size		Size all the selected objects to get same width and height.

## View menu

---

Many option for set the different view active.



Picture 39 Designer mode View menu

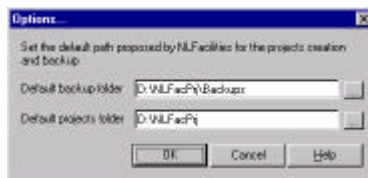
## Designer menu

---

Configuration of path for general option on NLFacilities.



Picture 40 Designer mode Designer menu

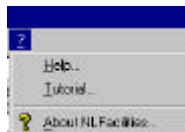


Picture 41 Designer mode Set Default paths

## ? (Help) menu

---

Helps and tutorial about NLFacilities.



Picture 42 Designer mode Help menu










# DESIGNER TOOLBARS

## Project toolbar

---

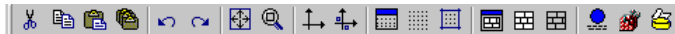


This toolbar provides general tools for project and map.

Icon	Short cut	Description
	Ctrl + N	Create a new NLFacilities project.
	Ctrl + O	Open an existing NLFacilities.
	Ctrl + R	Display the project properties.
	None	Close the current opened project.
	Ctrl + S	Save the project and its opened map if any.
	Ctrl + P	Print map
	None	Switch NLFacilities in Runtime mode.
	None	Call NL220 for maintenance use.
	None	Display the About box of NLFacilities.










## Tools toolbar











---



This toolbar provides general tools for the current opened map.














It is used to define the graphical properties of the map (wall definition, origin placement,...), and also to work on the network database (launch general plugins, synchronization).

Icon	Short cut	Description
	Ctrl + X	Cut the object selected on the map.
	Ctrl + C	Copy the selected object in the clipboard.
	Ctrl + V	Paste the previous Copy or Cut object. (Available for pure graphical object and Unassigned network objects).
	None	Advanced paste command. (useful to create offices in serial).
	Ctrl + Z	Undo functionality.
	None	Redo functionality.
	F3	Fit the map to the size of the view.
	None	Allow to draw a square for the zoom.
	None	Display coordinates system properties.

	F4	Place the origin of the map.
	None	Display grid settings window.
	None	Show/Hide the grid.
	None	Active the Align grid mode for objects placement on the map.
	None	Set wall appearance.
	None	Start wall definition.
	None	Show/Hide walls
	None	Show/Hide Label of network objects.
	None	Display network database plug-ins.
	None	Launch synchronization of the network and map database.







## Graphics mode toolbar
















Icon	Short cut	Description
	None	Set graphical <b>edition</b> mode.
	None	Select the <b>rotate</b> objects mode.
	None	Select the <b>line</b> drawing pen.
	None	Select the <b>rectangle</b> drawing pen.
	None	Select the <b>round rectangle</b> drawing pen.
	None	Select the <b>circle</b> drawing pen.
	None	Select the <b>arc</b> drawing pen.
	None	Select the <b>pie</b> drawing pen.
	None	Select the <b>chord</b> drawing pen.
	None	Select the <b>polyline</b> drawing pen.
	None	Select the <b>polygon</b> drawing pen.
	None	Select the <b>text</b> mode.
	None	Select the <b>image</b> mode.

## Graphics tools toolbar






Icon	Short cut	Description
	None	Bring the selected object to the background.
	None	Bring the selected object to the foreground.
	None	Align the left side of all selected objects.
	None	All selected objects have the same vertical center.
	None	Align the right side of all selected objects.
	None	Align the top of all selected objects.

	None	All selected objects have the same horizontal center.
	None	Align the bottom of all selected objects.
	None	Center horizontally all selected objects.
	None	Center vertically all selected objects.
	None	Space horizontally selected objects.
	None	Space vertically selected objects.
	None	Flip selected objects horizontally.
	None	Flip selected objects vertically.
	None	Flip horizontally and vertically selected objects.
	None	Set same width for all selected objects.
	None	Set same height for all selected objects.
	None	Set same width and height for all selected objects.
	None	Lock position of all selected objects.

## Unassigned objects



Icon	Short cut	Description
	None	Select the category of the objects that NLFacilities must localize.
	None	Select all the unassigned objects, of the previously selected category, on the map.
	None	Select the following unassigned object, of the previously selected category, on the map (First, Next).

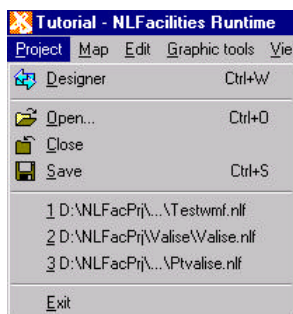
# RUNTIME MENU







## Project menu

---

Functions that open and close project.

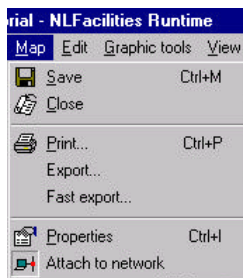


Picture 43 Runtime mode Project menu

Menu option	Icon	Description
Designer		Switch NLFacilities in designer mode.
Open		Open an existing NLFacilities project.
Close		Close the currently opened project. Close opened map if necessary.
Save		Save the currently opened project. If a map is currently opened, it is also saved.
More recent files		Display the more recent projects opened by NLFacilities.
Exit		Quit application.

## Map menu

---



Picture 44 Runtime mode Map menu

Menu option	Icon	Description
Save		Save the current opened map.
Close		Close the current opened map.
Print		Print the map on printer.
Export view		Export the graphical map in BMP file.
Fast export		Can export with same properties a precedent file.
Properties		Display the map properties dialog.
Attach to network		Show you if the network interface can be used by update network.

## Edit menu

---

Many function for search Database object on Map view.



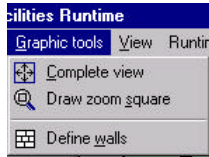
Picture 45 Runtime mode Edit menu

Menu option	Icon	Description
Find...		Find an assigned object on the map from its name
Find next		Equivalent of clicking <input type="button" value="Mark all"/> in the "Find object in view dialog".




## Graphic tools menu

---

Many function for drawing graphical object, zooming on map and managing walls.

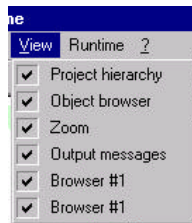


Picture 46 Runtime mode Graphic tools menu

Menu option	Icon	Description
Complete view		Fit map to the view size.
Draw zoom square		Allow to draw rectangle to zoom on a part of the map.
Define walls		Start walls definition.

## View menu

---

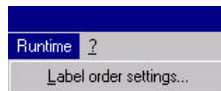


Picture 47 Runtime mode View menu

## Runtime menu

---

Configuration of label order settings.



Picture 48 Runtime mode Runtime menu



Picture 49 Order label settings








# RUNTIME TOOLBARS

## Project toolbar

---



This toolbar provides general tools for project and map.







Icon	Short cut	Description
	Ctrl + O	Open an existing NLFacilities.
	None	Close the current opened project.
	Ctrl + S	Save the project and its opened map if any.
	Ctrl + P	Print map
	None	Switch NLFacilities in Runtime mode.
	None	Call NL220 for maintenance use.
	None	Display the About box of NLFacilities.

## Tools toolbar

---



This toolbar provides general tools for the current opened map.

Icon	Short cut	Description
	F3	Fit the map to the size of the view.
	None	Allow to draw a square for the zoom.
	None	Start wall definition.
	None	Send offices and common areas updates on the network.
	None	Display network object plug-ins.
	None	Launch synchronization of the network and map database.



# CREATE FIRST NLFACILITIES PROJECT

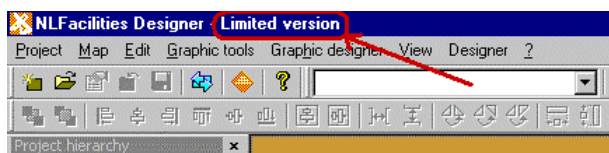
## Before start

---

### Limited version

Before you start, check if you have a LNS 3.0 manager tool installed on your PC.

The limited version is show on title.



Picture 50 NLFacilities Limited version

If you start NLFacilities in demonstration mode for the first time, you can work **ONLY** on "**DEMO**" project with LNS database "**DEMO**".

### First Database

If the DEMO LNS Database doesn't exist, NLFacilities can create it automatically like with option PROJECT/CREATE THE DEMONSTRATION NETWORK DATABASE.



Picture 51 Warning in creation LNS Database DEMO

You click on button **OK** for following instruction on Picture 52.



Picture 52 Set path for Network Database

Choose a location for restoring Network Database.

# Step 1 create project

---

## Start project creation

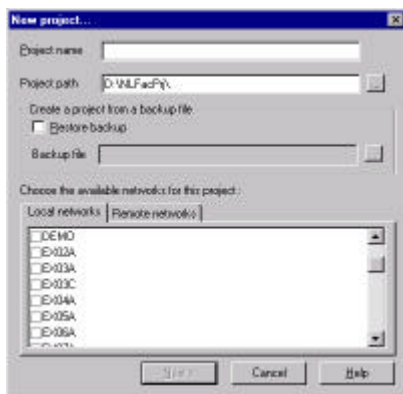
Select in menu Project/new



Picture 53 Start New project

## Set new project

The windows appear and you must fill the requested fields.



Picture 54 Create dialog box

Type **Lesson1** as your new project's name in the first line:



A default path for this new project is proposed, that might be altered if needed.

This will create the directory named **Lesson1** in NLFacilities projects folder:



All project data will be stored as files in a tree built upon this folder.

An option allows to **Create a project from a backup file**. This is very useful as NLFacilities allows backing up projects as standalone files, which may be easier manipulating than project trees.


Leave it unchecked to create a brand new project.

Dialog's bottom displays currently available networks, locally in the first tab and remotely (TCP-IP meaning) in the second tab.


**Note that many networks, local and remote, should be involved at the same time in a project**, as shown below as an example:



For our purpose, just select one: DEMO.

Once one or more networks have been selected, the  button becomes valid.

## Choose modeller database

Choose a Modeler database. And follow request by pressing  button.



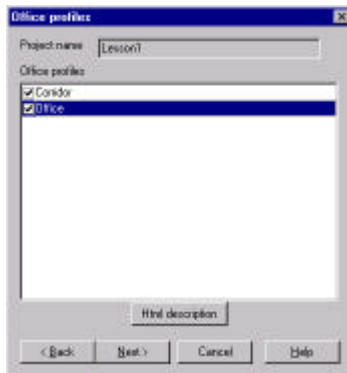
Picture 55 Modeler database dialog box

## Choose office profile

Choose the office profiles you intend to work with in your project.

The options provided depend on the networks you've selected just before.

Here again, you must select something to proceed.



Picture 56 Office profile dialog box

Html description

When a profile is selected, you can click on it to display its HTML description

Note that a profile belongs to two families: **office** and **common areas**.

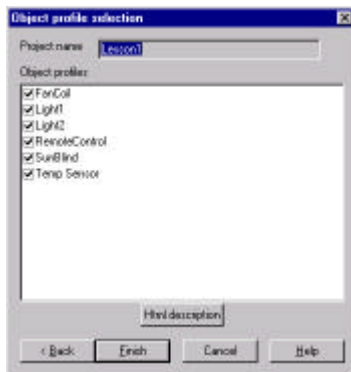
These profiles will act as templates to design your working spaces.

Next >

Check all profiles available and go on by clicking.

## Choose object profile

The office profiles selected at the previous used object profiles. The next dialog will shows all the object profiles used by the selected office profiles as checked. These object profiles can't be unchecked.



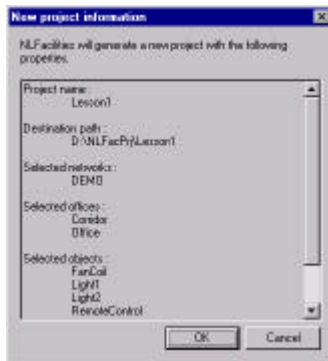
Picture 57 Object profile dialog box

The objects checked are already used in office template. The list of object profiles can be display other independent object profiles. Selecting such a profile allows the user to put single module on the map that can't be assigned to any offices or common area.

Click on **Finish** when selection is done.

## Summarize project

NLFacilities summarizes all project options entered in a text window.



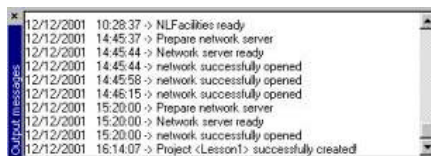
Picture 58 Project summarize

This is the last step before creating the new project, and may be validated or cancelled.



## Message traces

Message window traces new project's creation steps, and concludes on its success:

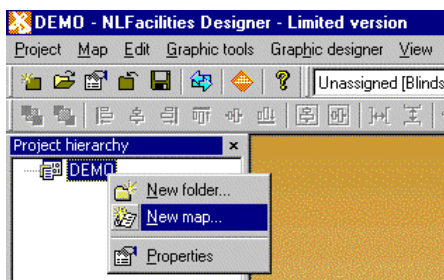


Picture 59 Traces view after create project

## Step 2 Add a map

### Add a new map

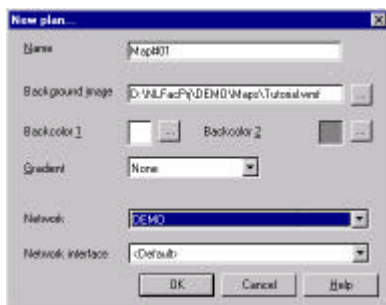
In Project hierarchy view, create a new map.



Picture 60 Add a new map

### Set a map

Fill the dialog with information about example.



Picture 61 Settings on map creation

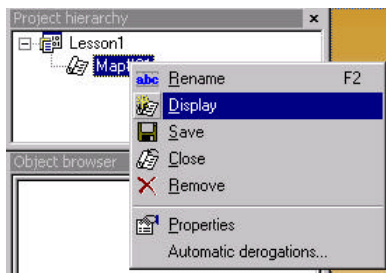
- Name** Set the name of your map. This name will be shown in project hierarchical view. : **Map#01**
- Background image** The most useful thing in this window is the pick-up button related to the right of the field, allowing you to select a picture through your machine. Click it now and fetch. **D:\NLFacPrj\DEMO\Maps\Tutorial.wmf**
- Network** Then a network must be associated to the map Ex : Select **DEMO**

## Step 3 Add network module on map

---


### Open a map


Open a map by double click on "Map#1" in project hierarchy view or by contextual menu. See Picture 62.



Picture 62 Open a map

### Zoom on map

With button  on toolbars you can fit the map to the size of the graphic view.

Zoom on map with  button where the network object will be place.

Move the map with right click for locate zone with precision.

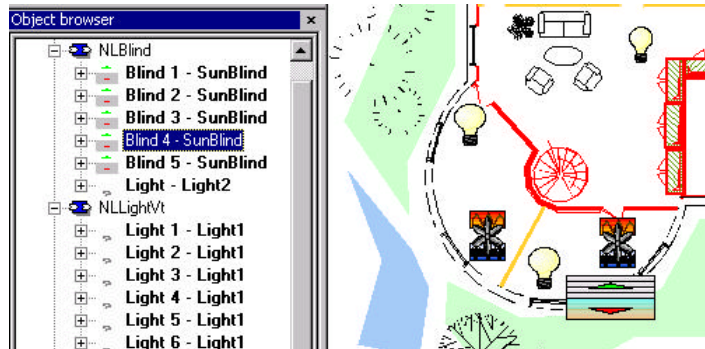


If you have mouse with wheel, you can play with it for zoom in and zoom out. With **CTRL** and **CTRL + SHIFT** the speed of zooming change.

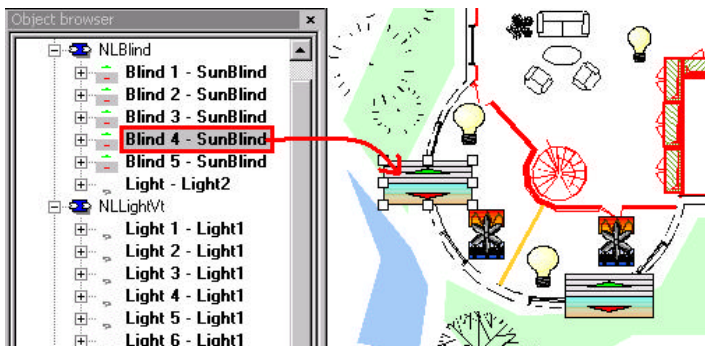
## Place module on map

Choose the network tab in **object browser view**.

Drag and drop object showed in this tree directly on map. For each first module, you resize it's representation for future placing module of this kind.




Picture 63 Select network object



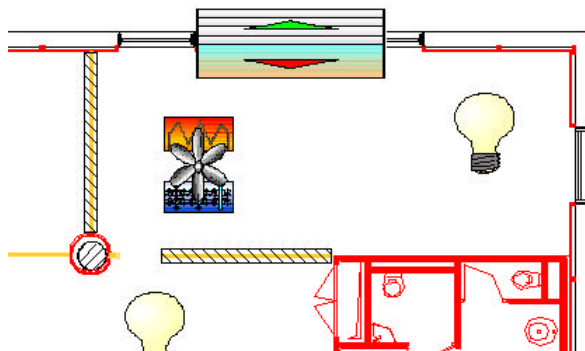
Picture 64 Drag and Drop network object on map

## Step 4 place walls

### Place walls on map

On tools toolbar, this  button, change the edition mode in drawing wall on map.

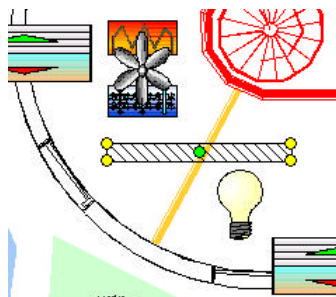
Place the wall directly other the yellow lines on map.



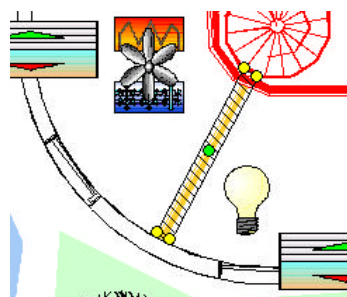
Picture 65 Place walls on map

## Adjust wall on map

For wall in non horizontal or vertical position, you draw a wall and you modify orientation like in Picture 66



Picture 66 Choose rotation tool



Picture 67 Rotate wall

## Step 5 Start NLFacilities runtime

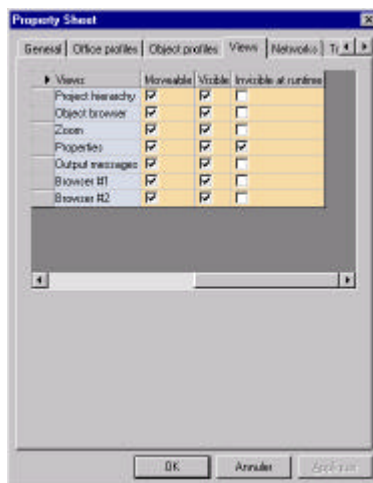
### Switch working mode to Runtime

To pass from the Design mode to Runtime mode use the  button.

In the **Project** menu, the options  Runtime have the same rule.

Views probably changes between Designer mode and Runtime mode. This is define in project settings. See Picture 68





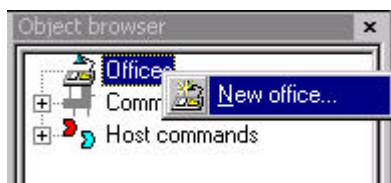
Picture 68 Project properties views settings

## Step 6 Create an office on map

### Create an office

In object browser, select the "Office tab".

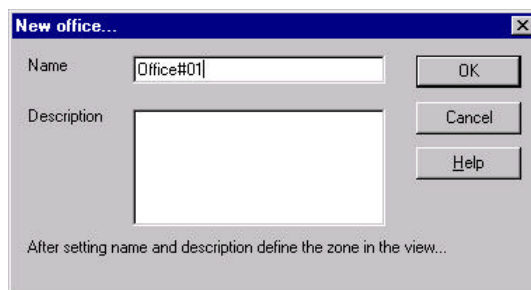
Choose action "**New office**" like Picture 69 and answer to the question.



Picture 69 Create new office

### Set office properties

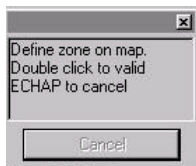
Set the name of office like in Picture 70



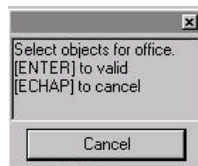
Picture 70 Settings properties name

## Draw an office zone

When you click on button **OK** NLFacilities is waiting the end of office drawn. The dialog box in Picture 71 is showed.

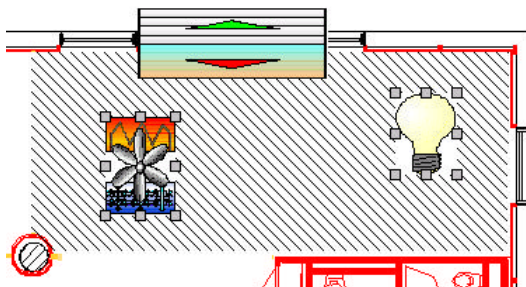


Picture 71 Before office polygon is drawn



Picture 72 After office polygon is drawn

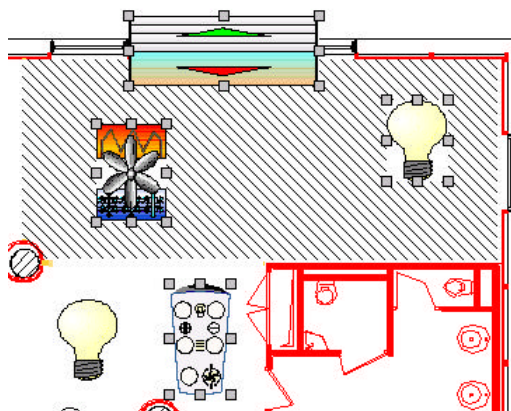
When the office is validate by double click. NLFacilities select all network objects inside to the zone like in Picture 73.



Picture 73 Network object automatically selected

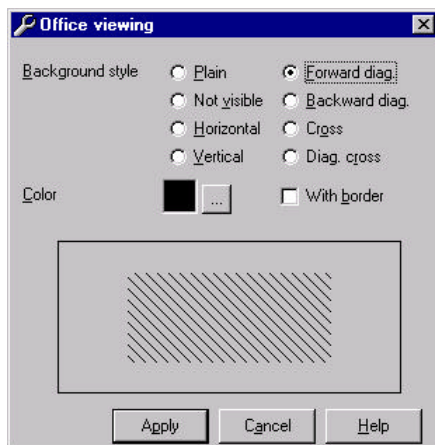
## Select network object in office

For adding a network object you press the **SHIFT** key and your left click on each network object you want to add like in Picture 74.



Picture 74 All objects are selected

When it is done, you press **RETURN** key for validation.



Picture 75 Settings office appearance properties

When you are right with properties you click on **Apply** and the office is prepared on Project database.

## Step 7 Update network

### Update network

To send the updates on the network click on button .



Picture 76 Traces view

Watch to the traces view to follow the network update progression.

When the message "**Office <NAME> successfully created**" is displayed in upper traces view, the office has been successfully created and all network objects are updated.



You can move or change office and common area without apprehension. Your work is controlled by NLFacilities.