



Software Manual



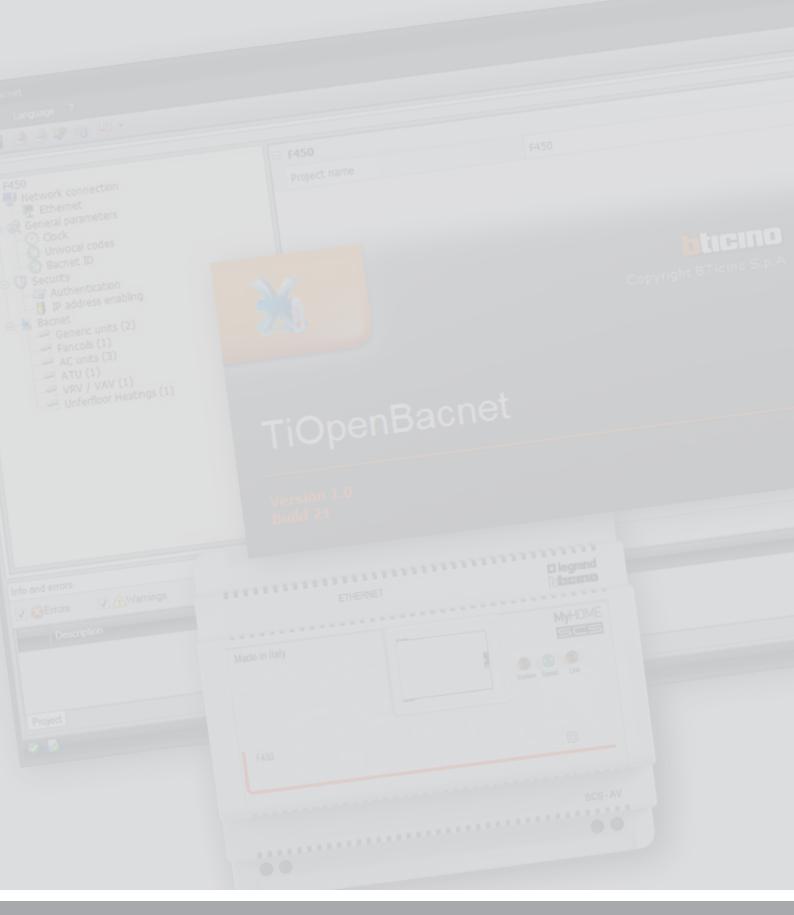
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TiOpenBacnet

Software Manual

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TiOpenBacnet

Software Manual

Contents

Hardware and Software requirements	4
Software update	4
Fundamental concepts	4
Function selection menus and pushbuttons	5
Connecting the device to a PC	6
Send the configuration	7
Receive the configuration	9
Update the Firmware	9
Request device info	10
Project configuration	11
Network connections	11
Ethernet	11
General parameters	12
Clock	12
Univocal codes	13
Bacnet ID	13
Security	14
Authentication	14
IP address enabling	14
Bacnet	15



Hardware and Software requirements

System requirement*

- PC with Pentium > 2 GHz
- CD-ROM unit
- Video resolution 800 x 600, 256 colours
- Windows XP SP2 (32 bit), Windows Vista (32 bit or 64 bit) or Windows 7 (32 bit or 64 bit)
- 1 GB RAM memory (XP)
- Hard Disk: 500 MB minimum free space available
- Framework .NET 3.5 SP1 of Microsoft™

*The updated requirements can be found on the www.legrand.com website



Warning: The TiOpenBacnet software is the fundamental tool for the configuration of the F450 Gateway Open-Bacnet, which, for convenience, will be referred to as device in this manual.

This software is protected by exclusive rights, owned by the company Legrand SNC.

Software update

Once installed, the TiOpenBacnet software will automatically search for any updated versions on line.

If any are found, the user will be asked to enter a path for saving the new updated version executable file:

1				
A new update of the software is available for download. Do you want to download it?				
Don't show this message again				
Yes No				

It will however still be possible to work using the current version and install the update at a later date.

Fundamental concepts

The TiOpenBacnet software gives the possibility of creating and modifying a project containing the configuration of the device interfaced with a Bacnet protocol based air conditioning system. The created project must be sent (Send the configuration) to the device. In the same way it will be possible to receive the project file (Receive the configuration) from the device, to check or edit the configuration contained.

Using the TiOpenBacnet program it is also possible to update the firmware version with new ones.

To create a new project

- Run TiOpenBacnet.
- Make a new project.
- Send the data to the device.



To edit an existing project

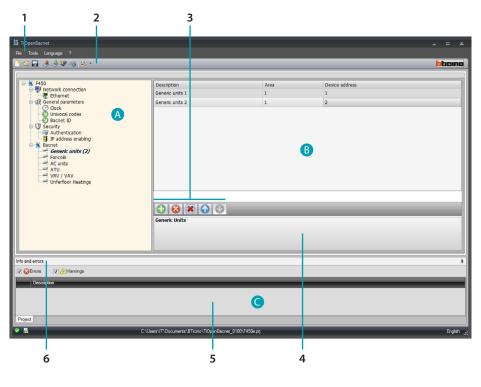
- Receive the current configuration data from the device.
- Make any modifications.
- Send the data of the project created to the device.



Attention: for the TiOpenBacnet software to work correctly, the device must be installed in agreement with the indications given in the instruction sheet supplied with the device.

Function selection menus and pushbuttons

On opening the program, the start screen is displayed, which contains all the configuration parameters. The Screen essentially consists of 3 sections: the left sections (A) lists all the parameters and functions that need to be configured in a tree menu. Based on the selection made by the user, the central section (B) will show the data fields to be selected or entered. The bottom section (C) displays any error configurations in red. These can be clicked to display which functions have been configured wrongly.



- 1. Pull-down menus
- 2. Pushbutton menu
- 3. Item management bar



- Add an object
 Delete an object
 Delete all objects
 - 4. Move objects

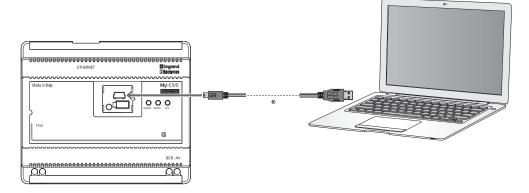
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- 4. Function description
- 5. Info and Errors area
- 6. Opens the Info and Errors area

Connecting the device to a PC

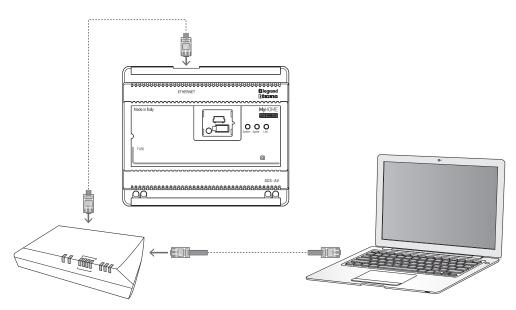
To receive/send the configuration completed using the TiOpenBacnet software, or to update the firmware, connect the device to the PC using a USB/miniUSB cable, the serial-USB adapter (3559), or an Ethernet cable.

USB connection



(*) Crossover cable for direct connection.

Ethernet connection





Send the configuration

It allows the user to send the project created to the device.

Procedure:

- 1. Connect the device to a PC as shown in the corresponding section.
- 2. From the Tools pull-down menu select Send Configuration.
- 3. A screen appears, for the selection of the mode of connection with the device. The sending operation can be performed using two different types of connection:
- Ethernet: by entering the network address, or by automatic search;
- USB: through automatic detection of the connected items.

TiOpenBacnet						
Select the mod	e of connectio	on to the devi	ce			i)
		1 2	Ethernet Serial USB			
			de Ba	ek 📦 Ne	xt	S Cancel

- 4. Select the mode
- 5. Click Next

Ethernet connection

IOpenBacnet Ethernet parameters Enter the device network addres	is and the OPEN password	i)
Automatic search Manual net-address input OPEN password	6 ¹⁹² , ,	
	Back Pext	Cancel

- 6. Enter the network address and the OPEN password
- 7. Click Next

Software Manual

USB connection

Device selection					
Searching USB devices					J.
Connected Items					
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- 6. Wait for the device to be recognised automatically.
- 7. Click Next.

The project is transferred to the device.

	1 TiOpenBacnet	
	Data Transfer	
- 1	Connecting the ftp to the device	
	Device connected	
	Downloading file	
- 1	Initialising connection	
	Connection to the device	
	Device connected, waiting for reply	
	Connection successful	
	Authentication successful	
	Waiting for writing of file to flash to complete	
	Waiting for the device to complete the current operations	
	Operation correctly completed	
.		
1 -		
- 1		
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- 1		
- 1	Retry all failed operations	
- 1		
		-
	🖳 🤝 🖨 Back 🖬 Next 🖌 🖓 Ok	
	3	

- 1. Hide the details of the current configuration forwarding operation
- 2. Display the details of the current configuration forwarding operation
- 3. Repeat the operation if unsuccessful
- 4. Export the log file

Receive the configuration

It allows the user to receive the configuration from the device; once the configuration has been acquired, this can be changed and saved, or it can be resent to the device.

Procedure:

- 1. Connect the device to a PC as shown in the corresponding section.
- 2. From the Tools pull-down menu select Receive Configuration.

A mask is displayed, for the selection of the mode of connection to the device (for the connection procedures see the Send the Configuration section).

After selecting the connection mode, Click Next to load the project currently installed on the device.

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File Tools Language ?		
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F450 Ethemet Clock Dunkcal codes Decury Authentication Padress enabling Authentication Padress enabling Authentication Padress enabling Authentication Padress enabling Authentication Padress (1) Authentication Understand Definition Authentication Understand Definition Heading Authentication Definition Authentication Definition Definition	F450 Project name F450	
	F450 Project	
Info and errors		ą
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Description		
Project		
	ers VT\Documents\BTicino\TOpenBacnet, D100%450ea.pg	English 💥
C:\Us	es un coocuments to nomo (nopembachet_onoo u 400ea.pg	Linglian 👯

Update the Firmware

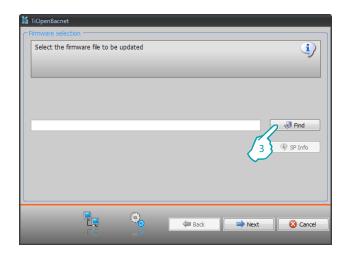
It allows the user to update the device firmware.

Procedure:

- 1. Connect the device to a PC as shown in the corresponding section.
- 2. From the Tools pull-down menu select Update Firmware.

The following screen appears, prompting the user to search for the folder containing the firmware file with extension .fwz (compressed file).





3. Click Find.

Select the file and click Open to continue.

This action will open a mask for the selection of the mode of connection to the device (for the connection procedures see the Send the Configuration section).

Request device info

It displays some information on the device connected to the PC.

Procedure:

- 1. Connect the device to a PC as shown in the corresponding section.
- 2. From the Tools pull-down menu select Request Device Info.

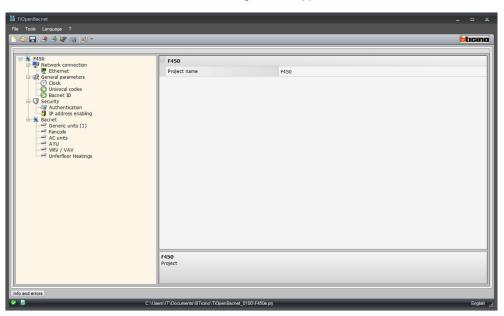
This action will open a mask for the selection of the mode of connection to the device (for the connection procedures see the Send the Configuration section). After selecting the connection mode, Click Next to display a screen showing the device hardware and software features.



Project configuration

This section can be used to configure a new project, or to change an existing one.

1. From the File menu select New. The following window appears:



2. Enter the configuration data in the various zones.

Network connections

The technical parameters for the network connections are configured in this section.

Ethernet

This screen can be used to enter the parameters for connection to the Ethernet network.



Before editing the default values, contact the network administrator. as well as making the service inactive, incorrect values could cause malfunctions in the communication of other network equipment.

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File Tools Language ?			
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Fee Tools Language ? Image: Source of the structure of the structu	Ethernet Web server IP Subnet mask Router IP Primary DNS Secondary DNS	192.168.1.40 255.255.05 192.168.1.1	
	Ethernet Ethernet configuration		
Info and errors			Contral of

	🗉 Ethernet		
Ethernet	Web server IP	192.168.1.40	
Cock Ock Onivocal codes Bacnet ID	Subnet mask	255.255.255.0	
	Router IP	192.168.1.1	
B-U Security	Primary DNS		
IP address enabling	Secondary DNS		
🖨 💥 Bacnet			

Configuration:

Web server IP and Subnet mask

Enter the typical parameters of TCP/IP protocol networks required for identifying the device within the local network. Remember that the device needs a "static" (fixed and unique) IP address to be able to work correctly.

Router IP

Enter the IP address of the router, if any. If there is a router the field must be filled in, to ensure the outgoing Services, such as sending e-mails.

Primary DNS and Secondary DNS Enter primary and secondary IP address of the Internet Service Provider (ISP) supplied at the time of subscription.

General parameters

This section is used for the configuration of the General device parameters.

Clock

This screen is used to enter the parameters for managing the time the device and the system will refer to (Master function active).

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HS0 Hetwork connection Hetwork connection H	Clock The Zone Update function	(GMT +1:00 h) Amsterdam, Berlin, Berlin, Rome, Stockholm, Vienna NO Slave	
Info and errors C:\Use C:\Use	s\IT\Documents\BTicino\TiOpenBacnet_0	100\F450e prj	English 💥

Configuration:

- **Time zone** Enter the local time zone.
- Update function

Define if the device is a system time synchronisation "Master", in which case the internal clock of the device will be used as time reference by other devices of the My Home system.

Univocal codes

This screen is used to configure the gateway ID.

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F450	Gateway identifier	
Ethernet	Gateway OPEN-Bacnet 1	
Cock		
Bacnet ID		
G V Security		
IP address enabling		
Generic units (1)		
AC units		
ATU VRV / VAV		
Unferfloor Heatings		
	Gateway identifier	
	Gateway identifier configuration	
	1	
Info and errors	ers\JT\Documents\BTicino\TiOpenBacnet_0100\F450e.prj	
C:\U	ers vir volocuments vs ricino viriopertisachet_0100 vr450e.pg	English _{ca}

Configuration:

- OPEN-Bacnet Gateway
- Enter a unique ID number for the OPEN-Bacnet gateway function.

Bacnet ID

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The Bacnet address can be entered in this screen.

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	Bacnet ID	
Ethernet	Bacnet ID 1	
General parameters		
Univocal codes		
🖶 🕕 Security		
Authentication		
Bacnet Generic units (1)		
- Fancois		
AC units ATU		
VRV / VAV		
	Bacnet ID	
	Enter the Bacnet ID	
Info and errors		
C:\Us	ers\IT\Documents\BTicino\TiOpenBacnet_0100\F450e.prj	English _{, t}

Configuration:

• Bacnet ID Enter the Bacnet address.

Security

This section is used to set the safety parameters.

Authentication

This screen can be used to set the authentication parameters for access to the device.

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	Automatic system OPEN password 12345 Automatic system 12345		
	ers/JT/Documents/8Ticino/TiOpenBacnet_0100/F450e.prj	Engle	sh,

Configuration:

OPEN Password

Enter the OPEN password for the device.



Attention: The default OPEN password in the devices is 12345.

IP address enabling

This window can be used to enter up to 10 IP address ranges with connection to the device enabled, without the need for entering the OPEN password.

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Network connection Network connection Ethernet General parameters Cock codes Bacnet ID Bacnet ID Bacnet Constanting Bacnet Constanting AuthentCation Ac units Ac units Ac units Ac units Ac units Ac units VRV / VAV Uniferfloor Heatings	IP address range 1 Enabing Vake IP address range 2 Enabing	P Yes 1-255.0-255.1-254	<u> </u>
	Value IP address range 3	1-255.0-255.1-254	2
	Enabling Value IP address range 4	1-255.0-255.1-254	
	Enabling	No 1-255.0-255.1-254	
	IP address range 5 Enabling		
	Value IP address range 6	1-255.0-255.0-255.1-254	
	Enabling Value	No 1-255.0-255.1-254	
	IP address range 7 Value		Ŧ
	Enter IP address range		
Info and errors	C:\Users\IT\Documents\BTicino\TiOpenBac	net_0100\F450e.prj	English

Procedure:

- 1. Enable the interval of IP addresses.
- 2. Click.

Software Manual

Insert the network address	1
3 1 255 255 255 255 1 255	0 • 1 255 • 254
_	Confirm 🔀 Ca

- 3. Enter the range of network addresses.
- 4. Confirm.

Bacnet

This section can be used to configure the temperature control items of the Bacnet system to be controlled from the dedicated page (HVAC) of the My Home Touch Screen.

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File Tools Language ?					
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	Description	Area	Device address		
Ethernet	Generic units 1	1	1		
General parameters	Generic units 2	1	3		
Univocal codes					
G- → → → → → → → → → →					
Authentication					
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Generic units (2) Fancois					
AC units ATU					
VRV / VAV					
Unferfloor Heatings					
	Generic Units				
	<u>It</u>				
Info and errors		1.0100 F4F0		English ,	
Solution C:\User\VT.Documents\BTicino\TiOpenBacnet_0100\F450e.pg					

Items available:

- Generic units
- Fancoils
- AC units
- ATU
- VRV / VAV
- Underfloor heating

Configuration:

- Description
- Enter the item description (15 characters max.)
- Device area / address Enter the address of the object to be used in the MyHOME_Screen configuration

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