SIEMENS

Preliminary

2002-02-15

User Guide

and notes on safety ▱

Safety precautions

- **Only** use the power supply unit provided with this device, numbered as follows !:

  part number: N4 EFS3 3W 4.4V (EU-variant !)
  N4 GFS3 3W 4.4V (UK-variant !)
  N4 UFS3 3W 4.4V (US-variant !)

- The socket outlet for the power supply shall be installed near to the device and shall be easily accessible by the user.

- Medical equipment can be affected by the use of the device. Observe the conditions in your environment (e.g. doctor's practice).

- Do not install the blue2net in bathrooms or shower rooms.

- Do not operate the device in environments where there is risk of explosion (e. g. paint shops).

- Ensure that the operating instructions are included when passing on your blue2net to a third party.

- Dispose of device in an environmentally friendly manner.

- The devices should not be opened under any circumstances. Any modifications will invalidate its approval for use.

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Quick Install

Connecting blue2net

For quick installation on a TCP/IP based, Ethernet network, follow the instructions below.

The blue2net supports DHCP server management and terminal IP address management. By default, the IP address of the blue2net , as well as the IP adresses of the Bluetooth terminals, are set automatically. No configuration is therefore necessary and you can follow the instructions below.

If you do not have a DHCP server, IP addresses must be assigned manually. Please go through the instructions 1-2 below and the refer to " blue2net Web Interface ".

1.   Connect first to the network with an Ethernet cable and then to the power supply unit.

Mounting Holes

Power Supply Connector

Ethernet Cable Connector
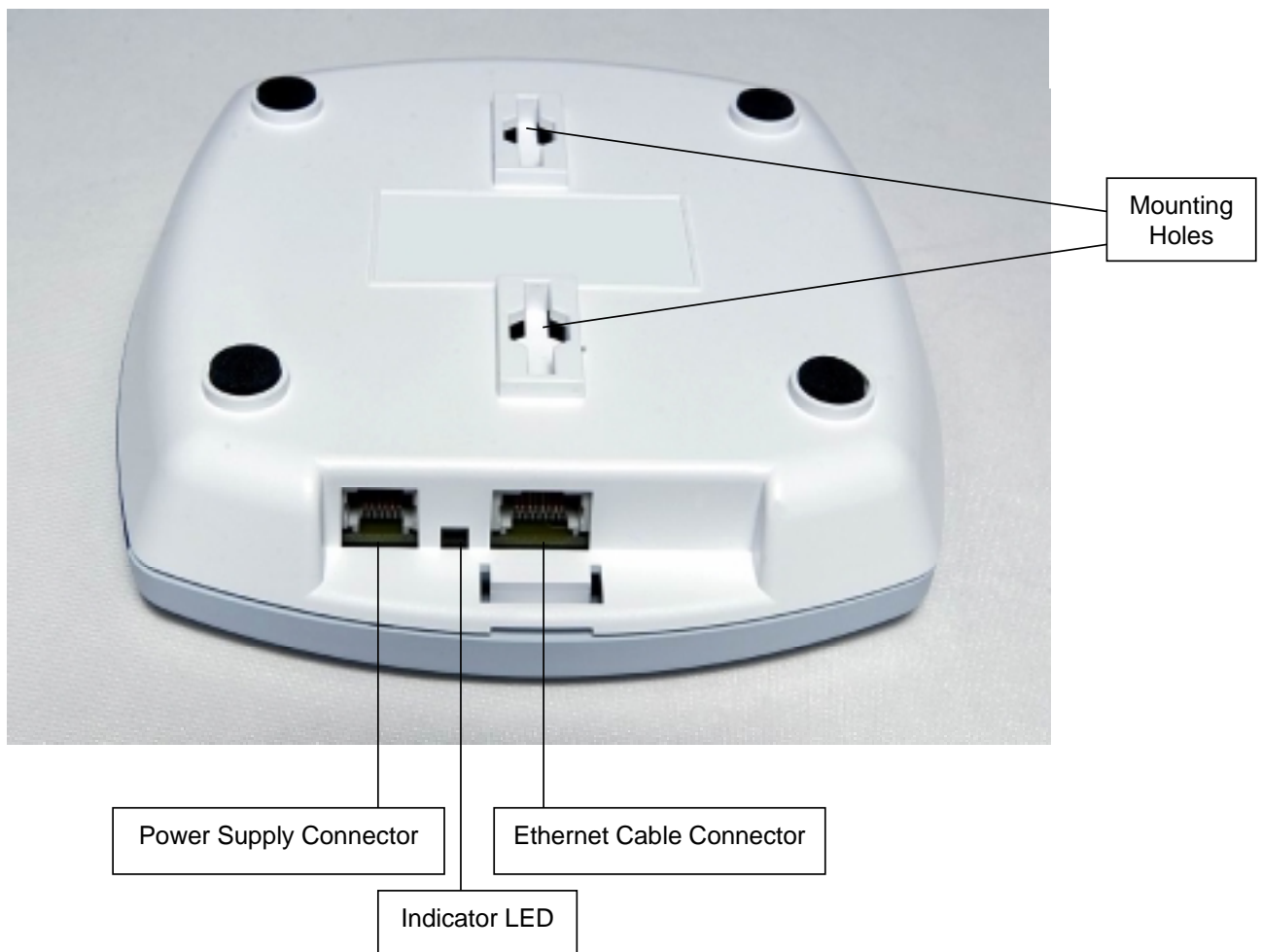
Indicator LED

2.   Check after about 30 seconds if the indicator LED displays a steady green light.

Notice: for the first configuration it can last about 2 minutes if you are not connected to DHCP server.

Your blue2net is now ready to use.

Using blue2net

Make sure that your Bluetooth terminal, such as a Laptop or a PDA, operates with this technology and is fully compliant for LAN access profile.
Follow the steps in the User Guide of your Bluetooth terminal.
On principle just do the following steps:

- Start the Bluetooth application on your terminal

- Make an inquiry and scan for Bluetooth devices

- Choose your blue2net from the list of alternatives and connect

- By default, the Bluetooth Passkey ist set to '1234' on blue2net. This means if a log on window appears on your terminal before you have set up a Bluetooth connection, the Bluetooth

Accessing blue2net

First, it is necessary to deactivate the proxy server on the Web browser of your PDA or Laptop. Then you can access the internal Web interface by typing https://192.168.2.2 in the location field of your Web browser. This is the default IP address. If you have changed the IP address before, use it correspondingly.

Default Settings

The blue2net comes with following factory settings. all of these settings are changeable.

Setting	Factory Setting	Needs to be changed
Name	blue2net	
Type (Profile)	LAN Access	
Server Channel	2	
Multipoint Mode	enabled	
Discoverability Mode	discoverable	
Connectability Mode	connectable	
Max Terminals Connected	7	
Default Access Mode	yes	
blue2net IP Address	192.168.2.2	
blue2net Netmask	255.255.255.0	
TerminalDnsSrv1	192.168.3.11	
TerminalDnsSrv2	192.168.3.12	
TerminalWinsSrv1	192.168.3.13	
TerminalWinsSrv2	192.168.3.14	
TerminalDomainName	my.domain.at	
blue2net GateWay	192.168.2.254	
Password	changeme	Yes, for security

Default Pin Key	1234	Yes, for security

Product Overview

Package Contents

- 1 blue2net
- 1 power supply unit, EU-variant: N4 EFS3 3W 4.4V
  or 1 power supply unit, UK-variant: N4 GFS3 3W 4.4V
  or 1 power supply unit, US-variant: N4 UFS3 3W 4.4V
- 1 booklet, blue2net User Guide
- 4 adhesive rubber feet
- 2 screws and 2 dowels

Views of blue2net

Explanation of LED

| Behavior	Explanation
Not lit	No power
Fast flashing	Starting up
Slow flashing	Trying to get ethernet connection
Steady green	Ready for operation

Installation notes

- Install only in covered areas with a temperature range of 0 to +40 °C (+32 to +104°F)
- A 220/230V~ (110/120V~) mains socket and ethernet connection must be available nearby were blue2net is installed and shall be easily accessible.
- Only use the original power supply, delivered in the package.
- Install it in a central location, e.g. in a hallway. Try to avoid placing the blue2net where the Bluetooth radio signals can be shadowed by nearby obstacles.
- The installation site should not be located in the immediate vicinity of other devices, such as microwave ovens, that use the same or adjacent frequencies.
- The blue2net can be placed horizontally on a flat, but non slipery, surface or mounted on a wall or ceiling. Do not stand it directly on the floor.
- The device feet do not leave marks on the installation surface. However, due to the variety of varnishes and polishes in use, marks could be left at points of contact.

blue2net Web Interface

blue2net supports a built-in Web server with a Web interface for configuration of parameters, checking the settings and device information, and also performing a software upgrade.

Accessing the Web Interface

To access the Web interface, simply type https://192.168.2.2 (or if you have already changed the blue2net IP address, respectivly) in the location field of a Web browser. You will see the following page:
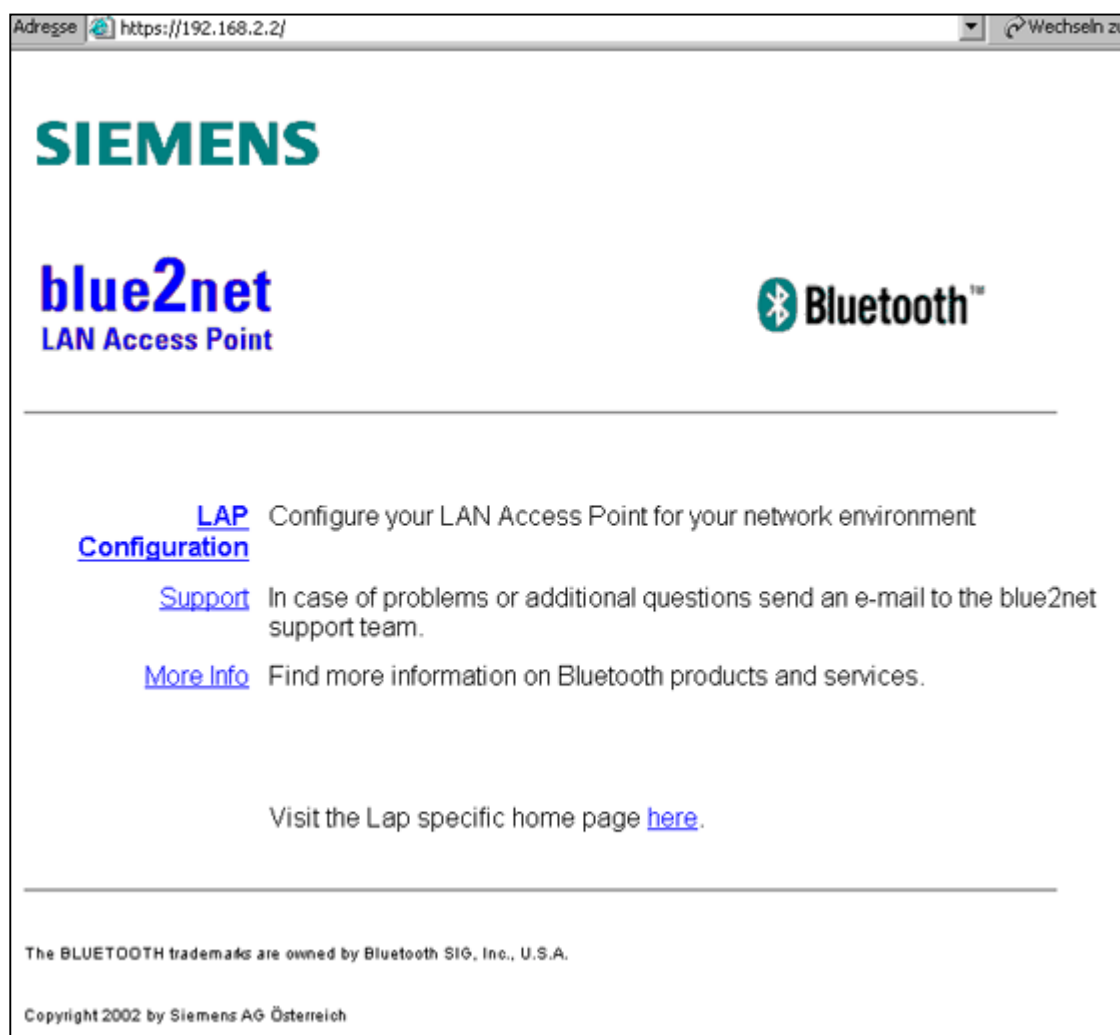
Click to **LAP Configuration** to see this overview:
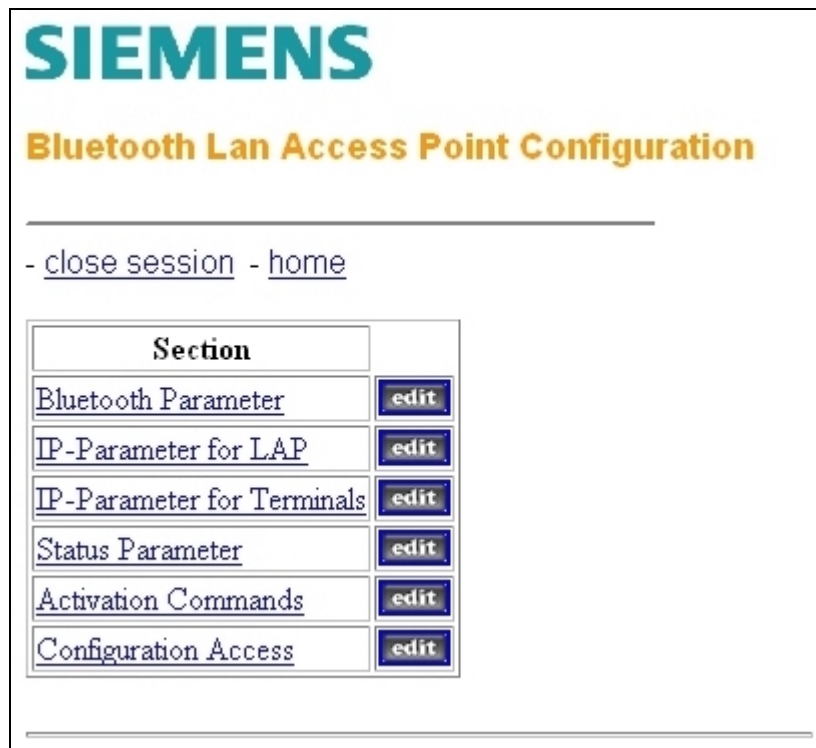
When you click one of the "edit" buttons, you will be prompted for the configuration password. The initial password is "**changeme**". After you press the button < Send Password to LAP > the site changes automatically to the home directory. For security reasons, you should change the password immediately.
Notice:
Make sure you remember your new password or store it on a save place. Once the password is changed, configuration access is only possible with the new password **!**

Explanation

Bluetooth Parameter	All Bluetooth relevant parameters can be changed here.
IP-Parameter for LAP	The IP-parameter settings like predefined or DHCP are there.
IP-Parameter for Terminals	The IP-parameter settings for the the connected terminals are there.
Status Parameter	The current blue2net IP values and version information.
Activation Commands	To activate the new settings just for one session or permanently.
Configuration Access	The configurations settings like password.

Bluetooth Paramter Setting

The values indicated with an "edit" button or with Table can be changed, the other are informative. Click to one of the objects name for a detailed online description.

Bluetooth Configuration

Object	Value
LAP Device Name	blue2net [edit]
Bluetooth Address	08:00:06:53:72:23
Multipoint Mode	enabled [edit]
Discoverability Mode	discoverable [edit]
Connectability Mode	connectable [edit]
Max Terminals Connected	5 [edit]
Number of Services	1
Service Table	Table
Number of Terminals	10
Terminal Table	Table
Default Access Mode	enabled [edit]
Default PIN Key	1234 [edit]

blue2net IP Setting
Overview

LAP IP Configuration

Object	Value
LAP IP Address Resolution	dhcp [edit]
Fixed LAP IP Configuration	Objects
DHCP LAP IP Objects	Objects
Time Server IP	0.0.0.0 [edit]
IP Masquerading	192.168.2.2 [edit]
Firewall Settings	Objects

Settings

Objects	Value	Needs to be changed
LAP IP Address Resolution	dhcp	Yes, if DHCP is not supported
Fixed LAP IP Configuration	Objects	Yes. E.g. if you are not supported from a DHCP server
DHCP LAP IP Objects	Objects	tbd.
Time Server IP	0.0.0.0	For internal use only.
IP Masquerading	192.168.2.2	Yes, if you use the masquerading mode.

Bluetooth Terminal IP Setting

All these settings are communicated to the terminal via ppp. If you have default settings at the terminal, these settings are ignored by the terminal.

Terminal Configuration

Object	Value
Terminal IP Address Resolution	masquerading [edit]
Number of Terminal IP Address Pool Entries	7
Terminal IP Address Pool Table	Table
Terminal Net Mask	255.255.255.0 [edit]
Terminal Fixed Servers	Objects

Objects	Value	Needs to be changed
Terminal IP Address Resolution	masquerading	Yes, if you want to change to prededined IP-Tables.
Terminal IP Address Pool Table	Table	Yes, if you change to predefined at the point before.
Terminal Net Mask	255.255.255.0	Yes, Netmask is necessary to change for the correct Network.
Terminal Fixed Servers	see lines below	see lines below
Terminal DNS Server 1	192.168.3.11	Yes
Terminal DNS Server 1	192.168.3.12	Optional
Terminal WINS Server 1	192.168.3.13	Yes
Terminal WINS Server 1	192.168.3.14	Optional
Terminal Domain Name	my.domain.at	Optional

Activation Configuration

In this window you get all the mighty tools for blue2net, such as:

Save your Settings

Restart blue2net

Software Upgrade

Default Settings

Configuration Access

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Regulatory Statement

General

- In this equipment is the Siemens Bluetooth^{TM} Radio Module *SieMo S50037* integrated.
- This equipment has to be installed and used in accordance with this instruction manual.
- This equipment is intended to be placed on market in all States, where the Bluetooth^{TM} technologie and the used frequency band is released.
- For detail information concerning type approval of this equipment (eg. in wich States this equipment is already approved) please contact the authorised local distributor or the manufacturer.

European Union (EU) and EFTA Member States

Based on the assessed Siemens Bluetooth^{TM} radio module *SieMo S50037* inside this equipment complies with the R&TTE directive 1999/5/EC and has been provided with the CE mark accordingly. It is conform to the following specifications/Standards:

Applied specifications/Standards	Essential Requirement (Corresponding article of R&TTE)
EN 60950/ IEC 60950:2000	**Safety** (Art. 3.1a)
EN 300 328 (ETS 300 328): Part 1, V1.1.1 and Part 2, V1.2.2 (2000-07) **EN 301 489-17 (ETS 300 826):** V1.1.1 (2000-09)	**Electromagnetic Compatibility** (Art. 3.1b)
EN 300 328 (ETS 300 328): Part 1, V1.1.1 and Part 2, V1.2.2 (2000-07)	**Radio Frequency Spectrum Efficiency** (Art. 3.2)

Note that the radio frequency band used by this equipment is not harmonized throughout the European Community. According to the R&TTE directive 1999/5/EC is this equipment a 'Class 2' equipment and marked accordingly with the assigned Class Identifier.

CE Conformity Marking:

$C\epsilon$ **0682**   Ⓘ

United States of America (USA)

This equipment complies with part 15 of the Federal Communications Commission (FCC) rules and labeled in accordance with the FCC rules.

FCC ID: P6L-blue2net

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Note that any changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Bluetooth **Trademark**

BLUETOOTH is a trademark owned by Bluetooth SIG, Inc., U.S.A, and licensed to Siemens AG.

This product is a qualified Bluetooth^{TM} product and compliant to the Bluetooth^{TM} specifications version 1.1.

Appendix

Technical Data

Radio Technology:	Bluetooth V1.1, power class 2
Frequency Range:	2.402 to 2.480 GHz
Transmission Range:	10m, typical
Data rates:	asymmetric 723 kbit/s downlink
	57 kbits/s uplink
	symmetric 434 kbits/ downlink and uplink
Point to multipoint:	connecting up to 7 simulteneous data users
Bluetooth Profiles:	LAN Access, Generic Access and Serial Port Profile:
Receiver Sensitivity:	-85 dBm
Antenna:	patch antenna integrated
Processor:	Power PC
Memory:	16 MB DRAM/
	2 MB Flash PROM
Operating System:	Embedded Linux
Ethernet:	10 Mbit/s RJ45
Power Supply:	4.5 V, 1 A / LAN power feed capability
Power Consumption:	<2,5 W
Dimensions:	150 x 140 x 32 mm (5.90 x 5.51 x 1.26 inches)
Weight:	200 g (7.05 oz)
Operating Conditions:	Indoor use only
	Temperature : 0 to +40 °C (+32 to +104 °F)
	Humindity : 20 – 80% RHG, non condensing humidity
Built-in Web Server:	For easy configuration

Access point IP address assignment: DHCP or manually
Terminal IP address assignment from blue2net: automatically, via masquerading or manually

Security	Web interface – password
	Bluetooth passkey
	Firewall option
Software Upgrades	Free software upgrade is available at
	"http://www.siemens.at/bluetooth"

Parameters

Bluetooth Parameter Explanation

Parameters	Explanation
LAP Device Name	This is the user friendly name of the blue2net. SIZE 1..16
Bluetooth Address	Is the unique Bluetooth address of your blue2net
Multipoint Mode	If Multipoint Mode is set to enabled, up to 7 clients can establish a connection to blue2net simultaneously. If Multipoint Mode is disabled, only one client can connect in this mode, because no Master-Slave switch is forced from blue2net.
Discoverability Mode	The blue2net can be in discoverable mode or in non-discoverable mode. When the blue2net is "discoverable", it is visible to other devices on inquiry. When the blue2net is in non-discoverable mode it is not visible to other devices on inquiry.
Connectability Mode	When the blue2net is in connectable mode,. a terminal can establish a connection to the blue2net. When the blue2net is in non-connectable mode it is not possible to establish a connection from any Bluetooth terminal.
Max Terminals Connected	This specifies the maximal number of terminal which can be connected to the blue2net simultaneously. If this value is set to 0, no terminal can establish a connection to the blue2net.
Number of Services	This is the number of services, which is presented to the Terminals.
Service Table	A list of service entries. The number of entries is given by the value of "Number of Services".
Number of Terminals	The number of Terminals contained in the terminal list of this blue2net.
Terminal Table	A list of terminal entries. The number of entries is given by the value of "Number of Terminal".
Default Access Mode	If Default Access Mode is set to enabled, also terminals not contained in the Terminal Table can establish a connection to the blue2net. For Bluetooth authentication "Default Pin Key" is used. If Default Access Mode is set to disabled, only terminals contained in the Terminal Table can establish a connection to the blue2net.
Default PIN Key	Bluetooth PIN Key, assigned to terminals not listed in the Terminal Table. SIZE 1..15 .

blue2net IP Parameter Explanation

LAP IP Address Resolution	This parameter controls the mechanism for assigning IP address values to the LAP. In cases of dhcp, the LAP sends DHCP-Request in order to receive values during boot phase. In cases of predefined, the LAP uses the value set in *Fixed LAP IP Configuration.*
Fixed LAP IP Configuration	The IP address assigned to the blue2net, if *LAP IP Address Resolution* is set to *predefined.*
DHCP LAP IP Objects	The IP address presented to the ppp terminals, in cases where *LAP IP Address Resolution* is set to masquerading.
Time Server IP	IP address of the time server (for internal use only).
IP Masquerading	IP address presented to the ppp terminals in cases where Terminal IP Address Resolution is set to masquerading
Firewall Setting	If Default Firewall is set to enabled, a default set of firewall rules is activated.

PRELIMINARY !

Service

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Email: mailto:bts.support@siemens.at

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