

# QUICK INSTALL GUIDE

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**Purpose** This document is part of the user's guide to the installation and configuration of BinTec gateways running software release 7.1.1 or later. For up-to-the-minute information and instructions concerning the latest software release, you should always read our **Release Notes**, especially when carrying out a software update to a later release level. The latest **Release Notes** can always be found at [www.bintec.net](http://www.bintec.net).

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**Guidelines and standards** BinTec routers comply with the following guidelines and standards:

R&TTE Directive 1999/5/EC

CE marking for all EU countries and Switzerland

You will find detailed information in the Declarations of Conformity at [www.bintec.net](http://www.bintec.net).

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# 1 Introduction

Your **VPN Access Gateway** is extensively equipped for encrypted data transfer and Internet access for both single users and companies.

Essential system requirements:

- Windows 95, Windows 98, Windows ME, Windows NT 4.0, Windows 2000 or Windows XP  
(The instructions on testing/installing the TCP/IP protocol and configuring the PC apply to Windows 2000 or Windows XP. For Windows 95, Windows 98, Windows ME or Windows NT 4.0, please see the instructions in the User's Guide **Basic Configuration Compact Routers**, which you will find on your BinTec Companion CD or can download from [www.bintec.de](http://www.bintec.de).)
- Network card installed (Ethernet)
- CD-ROM drive
- Microsoft TCP/IP protocol installed (See "Checking the TCP/IP protocol" on page 14.)
- High color display (more than 256 colors) for correct display of graphics

## HTML Setup Tool

Your **VPN Access Gateway** is supplied with a predefined IP configuration (192.168.0.254/255.255.255.0). This enables simple access to the HTML Setup Tool with any current Web browser (java script must be activated). Enter `http://192.168.0.254/setup` to start a Setup Tool session.

Enter `192.168.0.254/wizard` to start the HTML configuration assistant (**HTML Wizard**). This guides you through a basic configuration, which includes all the important settings of the gateway, access to the Internet via an Internet Service Provider (ISP) and connection to a WAN partner (e.g. a head office). Detailed knowledge of networking is not necessary. A detailed online help system gives you extra support.

You can also start both configuration tools from the HTML status page of the gateway. To access the status page, just enter 192.168.0.254 in your Web browser.

Other means of access and configuration information are described in **Access and Configuration** which you find on the Companion CD, too.

This Quick Install Guide shows you how to set up a basic configuration for your **VPN Access Gateway** step by step using the **HTML Wizard**.

Congratulations on your new purchase and have fun!

## 2 Taking into Operation

The basic requirements for taking your **VPN Access Gateway** into operation are described below.

You can integrate your gateway into a local area network (LAN):

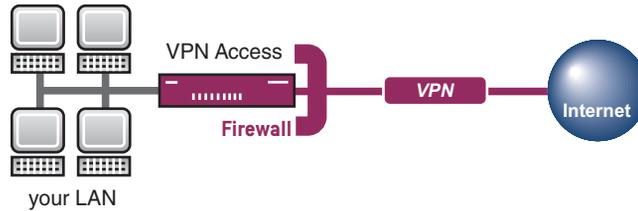


Figure 2-1: Basic scenario



Please read the safety precautions carefully before installing and taking your **VPN Access Gateway** into operation. These are supplied together with the gateway. The current version is also available at [www.bintec.de](http://www.bintec.de).

### 2.1 Connections

All connections on **VPN Access 5**, **VPN Access 25** and **VPN Access 100** are located at the rear of the unit. With the exception of the power supply, the connections on **VPN Access 250** and **VPN Access 1000** are at the front.

#### VPN Access 5

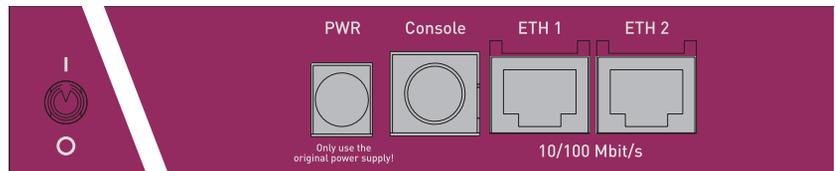


Figure 2-2: Rear of **VPN Access 5**

## VPN Access 25

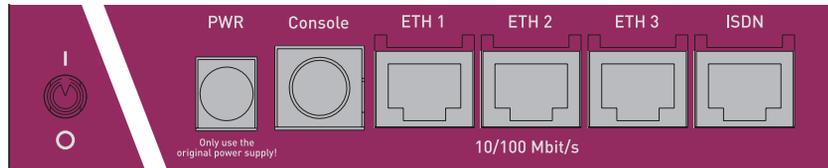


Figure 2-3: Rear of VPN Access 25

## VPN Access 100

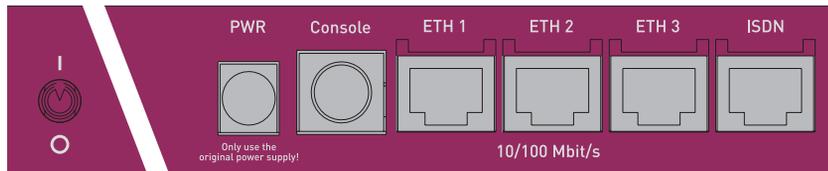


Figure 2-4: Rear of VPN Access 100

## VPN Access 250

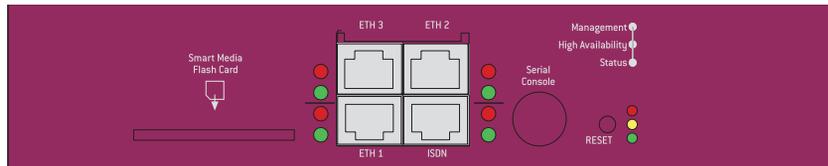


Figure 2-5: Front of VPN Access 250

## VPN Access 1000

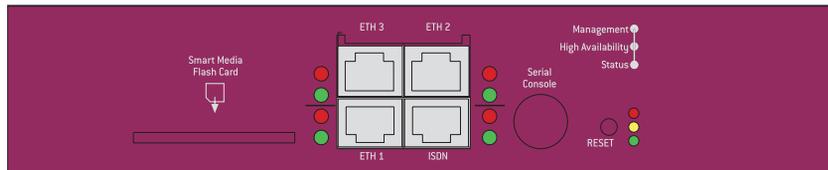


Figure 2-6: Front of VPN Access 1000

## 2.2 Setting Up and Connecting

After you have carried out the following steps, the gateway is ready for configuration with the [HTML Wizard](#).

All you need for this is the cables supplied with the equipment. Only **VPN Access 250** and **VPN Access 1000** are supplied without cables. If you wish to set up a WAN connection immediately, you need a second Ethernet cable, if the connection is not to be set up over ISDN. This second cable is not supplied with the equipment.



Attention!

**The use of the wrong mains adaptor may damage your gateway! Use only the mains adaptor supplied with the equipment!**

**Incorrect cabling of the ISDN and LAN interfaces may also damage your gateway! Make sure you connect the LAN interface of the gateway to the LAN interface of the PC/hub and the ISDN interface of the gateway to the ISDN connection.**

Set up and connect the gateway in the following order:

1. Place your **VPN Access Gateway** on a firm, level base or mount it in a 19-inch cabinet.
2. Connect the serial port of your PC (COM1 or COM2) to the serial port of your gateway. Use only the serial cable (gray) supplied with the equipment. This step can be left out if you do not need a serial connection to the gateway.
3. LAN: Connect the preconfigured Ethernet interface (ETH1) of your gateway to your LAN using the LAN cable supplied. The device detects automatically whether it is connected to a switch or directly to a PC. (**VPN Access 250** and **1000** do not automatically detect the connection type. Connecting to a PC requires a crossover cable.)
4. WAN: If applicable, connect another Ethernet interface (ETH2 or ETH3) of your gateway to your WAN connection via an Ethernet cable.
5. Connect the ISDN interface of the gateway to your ISDN socket using the black ISDN cable supplied. (**VPN Access 5** is not equipped with an ISDN interface.)
6. Optional: Connect the remaining Ethernet interface (ETH2 or ETH3) of your gateway to any other desired LAN or WAN interface.
7. Connect your gateway to a mains socket using the mains adaptor or IEC AC power cord supplied (**VPN Access 250** and **VPN Access 1000**).
8. Switch the gateway on with the on/off switch.

The gateway is now prepared for configuration using the **HTML Wizard**.

## 3 Configuration

**The initial configuration of your gateway and the preparations are described below. On completion of configuration work your gateway is ready for operation in accordance with the configuration elements you have selected.**

As preliminary preparation for the configuration, you should collect certain data and check whether the PC from which you wish to make the configuration meets the necessary requirements. You can also install **BRICKware**, which provides additional tools for working with your gateway. This installation is optional and not essential for the configuration or operation of the gateway.

Once you have made all the preparations you can configure your gateway. You may then need to adjust a few settings on your PC, after which you can finally check the configuration and operability of your gateway.

### 3.1 In Advance of Configuration

**You can select various configuration steps for configuring your gateway with the **HTML Wizard**. After configuration the gateway is only integrated into your local network, or it is ready for Internet access or for a corporate network, depending on your selection.**

#### 3.1.1 Gathering Information

**The essential information for basic configuration with the **HTML Wizard** is soon gathered, as no information is required that needs in-depth network knowledge. If applicable, you can use the example values.**

Before you start the configuration, you should gather the data for the following purposes:

- Basic configuration (obligatory if your gateway is in the ex works state)
- Internet access (optional)

- Connecting to a corporate network (optional).

The following table shows examples of possible values for the necessary access data. You can fill in the table with your personal data under the heading "Your value", so that you can refer to these values later when needed.

**Basic configuration** For the basic configuration of your gateway, you need information about your ISDN connection and network environment:

Access data	Example	Your value
ISDN extensions	967310	
You received the ISDN extensions with your ISDN connection.	967311 967312	
IP address of your gateway	192.168.0.254	
Netmask of your gateway	255.255.255.0	

Table 3-1: Basic information



**Note**

If you do not want to configure your gateway for ISDN access to the Internet or another ISDN service, you do not need the ISDN-specific information.

The **HTML Wizard** assumes the settings for the connection of your gateway to the NTBA adaptor. If you are connecting to a PABX, note the special characteristics of your connection and refer to your PABX documentation if necessary.

If you configure a new network, you can use the given example values for IP addresses and netmask. If in doubt, ask your system administrator.

**Internet access** If you want to configure an Internet access, you will need an Internet Service Provider (ISP). You also receive your personal access data from your ISP. The terms used for the required access data may vary from provider to provider, but the type of information you need for dialing in is basically the same.

The following table lists the access data that your gateway needs for a connection to the Internet.

Access data	Example	Your value
Provider name	GoInternet	

Access data	Example	Your value
Access number, if applicable The ISDN extension you use to dial in to your ISP. Not necessary for a DSL connection.	<i>1234567</i>	
Your user name	<i>MyName</i>	
Password	<i>TopSecret</i>	

Table 3-2: Data for Internet access

Some Internet Service Providers such as T-Online require additional information:

Access data	Example	Your value
T-Online number	<i>081512345678</i>	
Joint user account (other user code)	<i>0001</i>	

Table 3-3: Additional information for T-Online

You will need the following additional information for a DSL connection. You can obtain this from your ISP:

Access data	Example	Your value
Protocol	<i>PPP over Ethernet (PPPoE)</i>	
Encapsulation	<i>bridged-no-fcs</i>	
VPI	<i>8</i>	
VCi	<i>32</i>	

Table 3-4: DSL parameters

### Corporate network connection

To connect to a WAN partner (e.g. head office), you will need some information about the remote terminal that is to take your call. The remote terminal must also know your details. These data must be agreed between both ends of the connection.

Your gateway and the gateway at your head office check the incoming data before every connection to see if they should take the call from the partner. To protect the network against unauthorized access, the call is accepted only after correct authentication. This authentication is based on a common password and two codes that you and your partner use for the connection.

Access data	Example	Your value
Partner's name Code of head office	<i>BigBoss</i>	
Access number Number of head office gateway	<i>0911987654321</i>	
Local name Your own code. Your partner (at head office) must enter this name as partner name on his gateway.	<i>LittleIndian</i>	
Password Common password for this connection (enter on both gateways)	<i>Secret</i>	
Network address(es) of your head office	<i>10.1.1.0</i>	
Netmask(s) of your head office	<i>255.255.255.0</i>	

Table 3-5: Data for connection to a corporate network

### 3.1.2 Checking the PC

**A number of conditions must be fulfilled before you can reach your gateway over the network and make a configuration using the [HTML Wizard](#). These are generally fulfilled by all current PCs.**

#### Checking the TCP/IP protocol

Make sure the TCP/IP protocol is installed before you start the configuration. Proceed as follows to check whether you have installed the protocol:

1. Click **Settings** → **Network Connections** in the Start menu.

2. Double click **LAN Connection**.
3. Click **Properties** in the status window.
4. Look for **Internet Protocol (TCP/IP)** in the list of network components.
5. Close the dialog box and start the gateway configuration (See [“Installing BRICKware” on page 15.](#)).

### Installing the TCP/IP protocol

If you cannot find the entry **TCP/IP**, install the TCP/IP protocol as follows:

1. First click **Properties**, then **Install** in the status window of the **LAN Connection**.
2. Select the **Protocol** entry.
3. Click **Add**.
4. Select **Internet Protocol (TCP/IP)** and click **OK**.
5. Follow the instructions on the screen and finally restart your PC. Repeat the installation on all PCs with which you need to access the Internet or corporate network.

Your PC should now fulfill all the conditions for the configuration of your gateway using the **HTML Wizard**.



#### Note

If your PC is not yet configured for use in the network, you may need to make more settings. The configuration of a network connection is described in the Windows help system.

## 3.2 Installing BRICKware

**BRICKware** contains a number of programs to help you when working with your gateway. The installation is optional.

You only need the Companion CD supplied with your gateway for the installation. Your PC should also fulfill the conditions stated in see [“Introduction” on page 5.](#)

Proceed as follows to install the software:

1. Close all Windows programs on your PC.

2. Place your BinTec Companion CD in the CD-ROM drive of your PC. The Start window appears automatically after a short time. If the Start window does not open automatically, click your CD-ROM drive in Windows Explorer and double-click **setup.exe**.
3. Click **BRICKware**. The setup program starts.
4. Specify the directory in which **BRICKware** should be installed.
5. Select your gateway, i.e. **VPN Access 5**, **VPN Access 25**, etc.
6. Select the software components you wish to install.  
The Activity Monitor monitors your gateway connections. The DIME Tools comprise mainly configuration assistants, which are not necessary for the basic configuration of a **VPN Access Gateway**.

The installed programs are available for use immediately after the installation of **BRICKware**; it is not usually necessary to restart the PC.

### 3.3 Configuring the Gateway

**Your gateway can be configured quickly and easily with the [HTML Wizard](#). Please note: If you have already created a configuration with the Wizard, the Wizard can use the preset values. You are informed about this possibility during configuration.**

You can carry out the configuration in either Quick Mode or Advanced Mode. If you are unfamiliar with networking technologies, choose Quick Mode. Your gateway is ready for operation when you have completed the configuration.

You can select from the following configuration items: basic configuration, Internet access and corporate network connection (LAN-LAN connection). The basic configuration is essential if your gateway is still in the ex works state, as it integrates the gateway into your local network.

Proceed as follows:

1. Select the desired items and follow the instructions on the screen.
2. If you have set up a new network and installed the TCP/IP protocol on the PC as described above, you can configure your gateway as a DHCP server.

In this case, the PC must be assigned an IP address at the end of configuration.

3. Update the DHCP configuration of the PC using the command `ipconfig`. How to do this is described in the Windows help system.

The configuration of the gateway and its integration into your network are now completed.

## 3.4 Configuring a PC

**To be able to use your gateway in your local network, it may be necessary to make a few more settings on the PCs connected in the network.**

You can set up Internet access over your gateway for all PCs in the same network as your gateway. To do this, you must configure your **VPN Access Gateway** as a gateway and as a DNS server on all PCs that have not been configured as DHCP clients.

Proceed as follows:

1. Click the Windows Start button and then **Settings** → **Network and DCN Connections**.
2. Double click **LAN Connection**.
3. Click **Properties** in the status window.  
(See “Checking the PC” on page 14..)
4. Select **Internet Protocol (TCP/IP)** in the list and click **Properties**.
5. If the PC is not configured as DHCP client, i.e. if the option **Obtain an IP address automatically** is not activated: Enter the IP address of your gateway under **Use the following IP address**.
6. Enter the IP address of your DNS server under **Use the following DNS server addresses**.
7. Click **OK**.
8. Close the status window with **OK**.

The PC now has an IP configuration and like the PCs configured with DHCP can access the Internet via the gateway.

## 3.5 Testing the Configuration

**You have completed the configuration of your gateway and can now test the connection in your LAN and to the Internet.**

Carry out the following steps to test your gateway:

1. Remove the serial cable from your gateway if you no longer need the serial connection.
2. Test the connection to your gateway. Click **Run** in the Start menu and enter `ping`, followed by a space and the IP address of your gateway (192.168.0.254). A window appears with the response "Reply from...".
3. Test the Internet access by entering **www.bintec.de** in the Internet browser. BinTec's Internet site offers you the latest news, updates and documentation.



**Attention!**

**Incorrect configuration of the devices in your LAN may result in unwanted connections and increased charges! Monitor your gateway and make sure it does not set up unwanted connections (and charges). Watch the LEDs on your gateway (LED L1/L2 and the Ethernet interface to which you have connected your WAN; see manual for meaning of LEDs) or use the Activity Monitor (see [BRICKware](#) for Windows).**