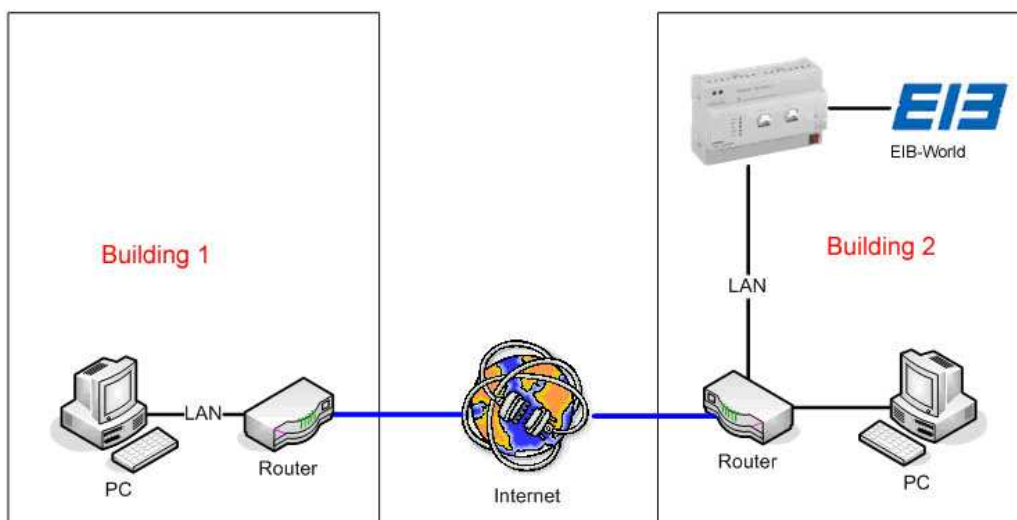


Connecting the eibPort to the Internet

The eibPort gets connected to the internet by a local router. To contact the eibPort from the internet, you have to know the external IP address of the router.



Static IP address

Some internet providers offer a static IP address to the customer. In this case the router always gets the same IP address when it is connecting to the internet.

Dynamic IP address

Every device, that is connecting to the internet (and doesn't have a static IP address), gets a dynamic IP address from the internet provider. This address changes with every new connect. So the eibPort is not accessible via the dynamic IP address.

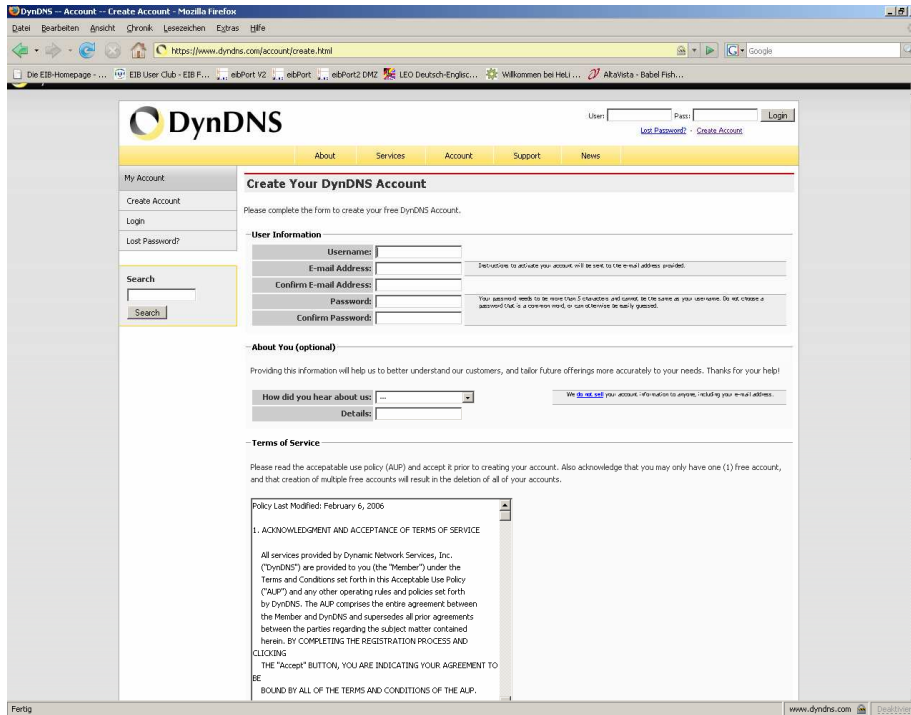
There are some providers, that connect a dynamic IP address to a domain for free. You get your own domain (yourname.com for example), that you can contact your eibPort with. For this service, you need a router that is able to connect itself to the internet and a dynamic-dns provider.

On the following pages, based on an example, we will explain you how to connect an eibPort to the internet via a dynamic IP address.

Connecting an eibPort to the internet via dyndns.org

1. Create an account at DynDNS.org

First you have to create an account on www.dyndns.org. Click “Create Account”, type in your user-information, accept the license-agreement and confirm with “Create Account”.

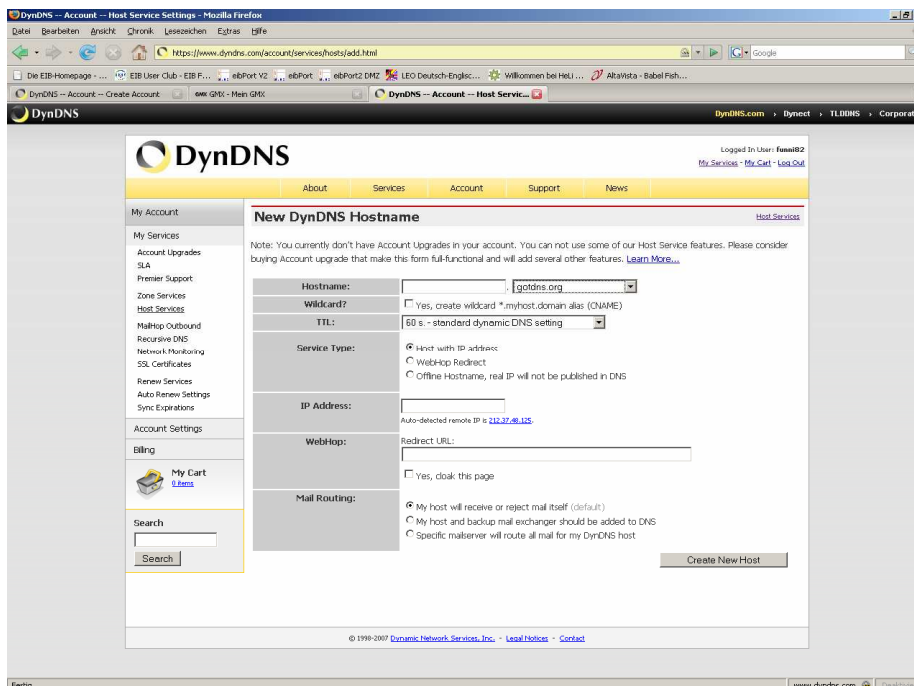


The screenshot shows the DynDNS registration page in a Mozilla Firefox browser. The page title is "Create Your DynDNS Account". It contains a form with the following sections:

- User Information:** Fields for Username, E-mail Address (with a note: "Inclusive to activate your account will be sent to the e-mail address provided."), Confirm E-mail Address, Passwords, and Confirm Passwords.
- About You (optional):** A dropdown menu for "How did you hear about us?" and a "Details:" field.
- Terms of Service:** A section titled "Policy Last Modified: February 6, 2006" containing the text: "1. ACKNOWLEDGMENT AND ACCEPTANCE OF TERMS OF SERVICE. All services provided by Dynamic Network Services, Inc. ('DynDNS') are provided to you (the 'Member') under the Terms and Conditions set forth in this Acceptable Use Policy ('AUP') and any other operating rules and policies set forth by DynDNS. The AUP comprises the entire agreement between the Member and DynDNS and supersedes all prior agreements between the parties regarding the subject matter contained herein. BY COMPLETING THE REGISTRATION PROCESS AND CLICKING THE 'Accept' BUTTON, YOU ARE INDICATING YOUR AGREEMENT TO BE BOUND BY ALL OF THE TERMS AND CONDITIONS OF THE AUP."

After finishing the registration, you get an email with a weblink, that confirms your account.

When you got the email and confirmed your account, you can log in and create your own hostname.



The screenshot shows the DynDNS "New DynDNS Hostname" configuration page. The user is logged in as "fuuuu82". The page contains the following configuration options:

- Hostname:** A dropdown menu showing "lgotdns.org".
- Wildcard?:** A checkbox labeled "Yes, create wildcard *.myhost.domain alias (CNAME)".
- TTL:** A dropdown menu showing "60 s. - standard dynamic DNS setting".
- Service Type:** Radio buttons for "Inet with IP address" (selected), "WebHop Redirect", and "Offline Hostname, real IP will not be published in DNS".
- IP Address:** A text input field with "Auto-detected remote IP is 112.37.48.135".
- WebHop:** A "Redirect URL:" text input field and a checkbox "Yes, cloak this page".
- Mail Routing:** Radio buttons for "My host will receive or reject mail itself (default)" (selected), "My host and backup mail exchanger should be added to DNS", and "Specific mailserver will route all mail for my DynDNS host".

A "Create New Host" button is located at the bottom right of the form.

2. Configure the ddns service in your router

To be accessible via the internet, the router has submit its external IP address to dyndns.org everytime it gets connected to the internet. Many routers have an option for that service in their configuration pages.

Here you have to enter the dyndns-provider, the domain-name you choosed, your username and password.

Using the example of a Linksys Router here:

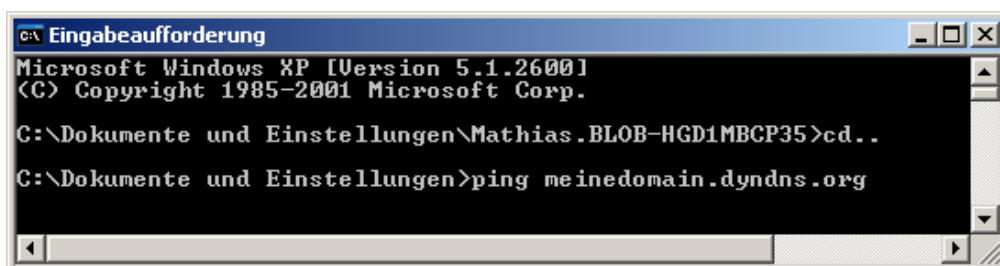


The screenshot shows the DDNS configuration page of a Linksys router. The navigation tabs at the top are Setup, Wireless, Security, Access Restrictions, and Applications & Gaming. Under the Setup tab, the sub-tabs are Basic Setup, DDNS, and MAC Address Clone. The DDNS configuration fields are as follows:

- DDNS Service: Dyndns (selected in a dropdown menu)
- User Name: testuser
- Password: [masked with asterisks]
- Host Name: meinedomain.dyndns.org
- Internet IP Address: 82.141.55.185
- Status: DDNS is updated successfully

After saving the new configuration, the router submits its ip to dyndns.org everytime it connects itself to the internet and gets assigned to the domain-name.

You can test that with the „ping“ command from a windows command window. Type “ping <yourdomain>” and confirm with <ENTER>.



```
C:\Eingabeaufforderung
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Dokumente und Einstellungen\Mathias.BLOB-HGD1MBCP35>cd..
C:\Dokumente und Einstellungen>ping meinedomain.dyndns.org
```

If you get an answer from the router, the assigning of the domain-name was successful.

3. Enabling the necessary ports and „port forwarding“

To access to the eibPort from the internet, you have to enable the ports 1735 (tcp and udp), 22(ssh) and 80 (http) in the firewall of your router.

Connects on these ports will be routed to the eibPort by the process of “port forwarding”.

That means: On these ports you can only access the eibPort, but no other pc in your local network. That increases the security of your local network.

LINKSYS®
A Division of Cisco Systems, Inc. Firmware Version : v4.00.7

Wireless-G Broadband Router WRT54G

Applications & Gaming

Setup Wireless Security Access Restrictions Applications & Gaming Administration Status

Port Range Forward Port Triggering DMZ QoS

Port Range Forward

Port Range					
Application	Start	End	Protocol	IP Address	Enable
http	80 to	80	http	192.168.13.10	<input checked="" type="checkbox"/>
tcp	1735 to	1735	tcp	192.168.13.10	<input checked="" type="checkbox"/>
udp	1735 to	1735	udp	192.168.13.10	<input checked="" type="checkbox"/>
ssh	22 to	22	ssh	192.168.13.10	<input checked="" type="checkbox"/>

Port Range Forwarding : Certain applications may require to open specific ports in order for it to function correctly. Examples of these applications include servers and certain online games. When a request for a certain port comes in from the Internet, the router will route the data to the computer you specify. Due to security concerns, you may want to limit port forwarding to only those ports you are using, and uncheck the Enable checkbox after you are finished. More...

Save Settings Cancel Changes

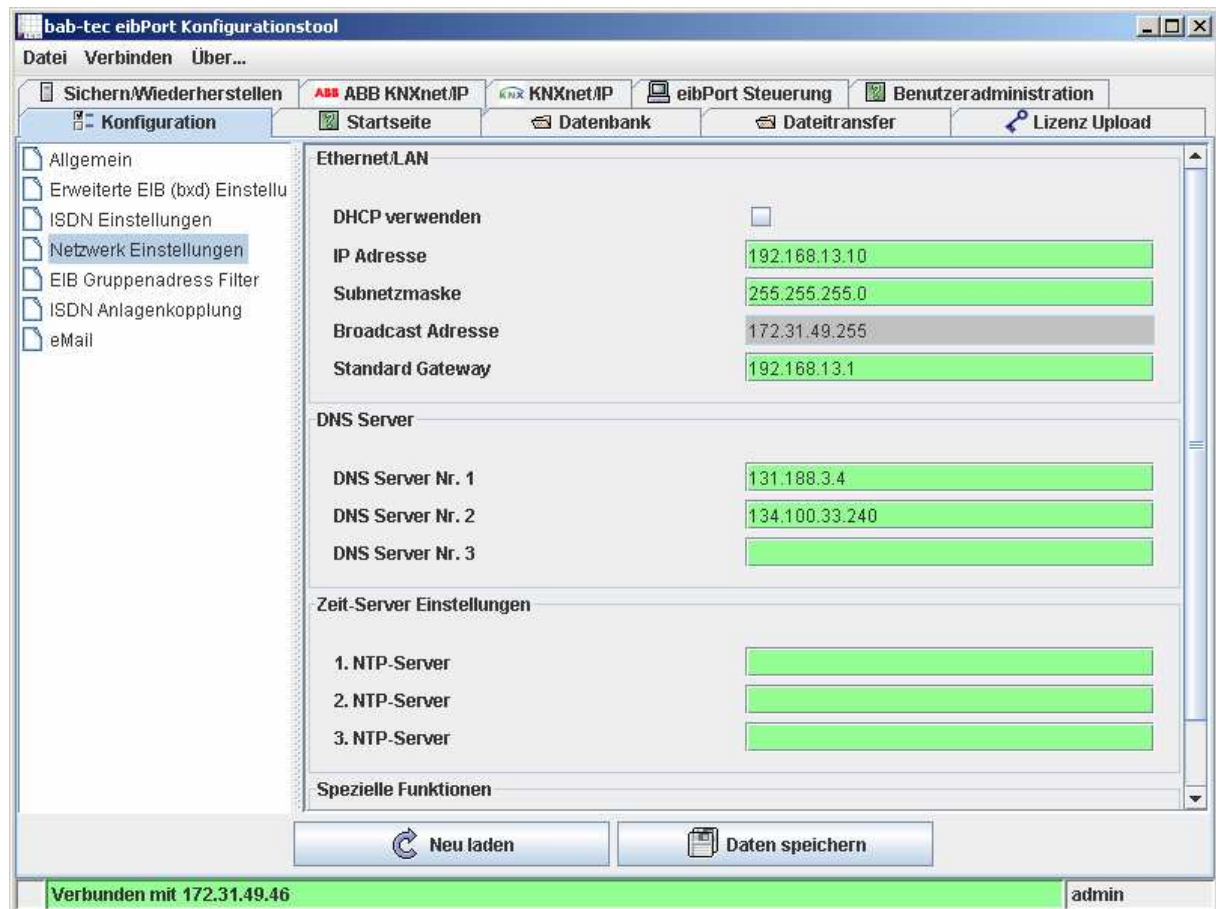
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The above mentioned ports have to be entered in the table of the “port forwarding” page of your router.

4. Adding the router's IP address as gateway to your eibPort

At the end you have to define your router as the default gateway of the eibPort.

In this example our router has the IP address: 192.168.13.1.



From now on you can connect to your eibPort from every pc worldwide.