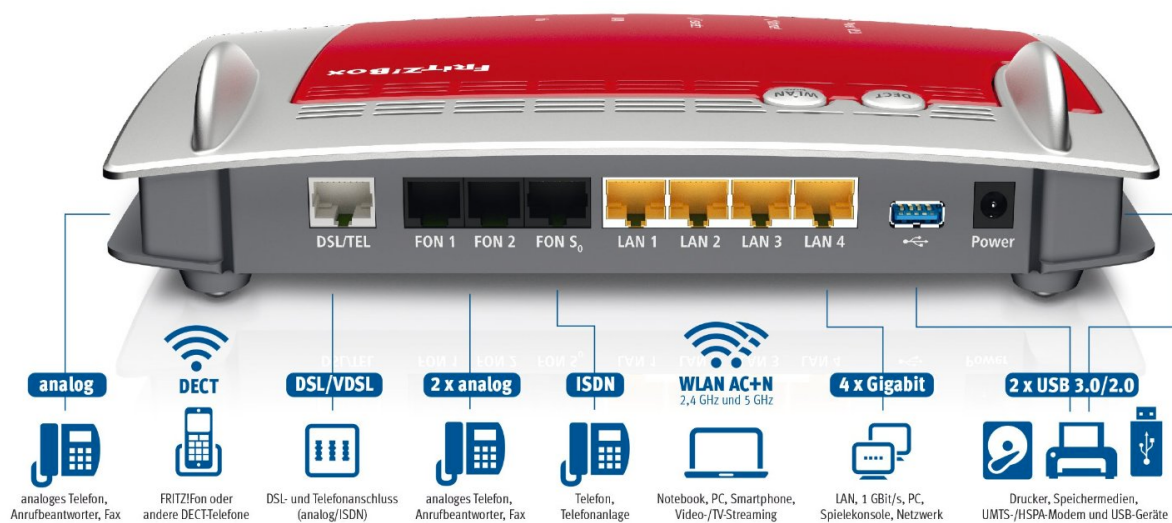


AVM Fritz!Box 7490



Sept 2016

Version 1.00

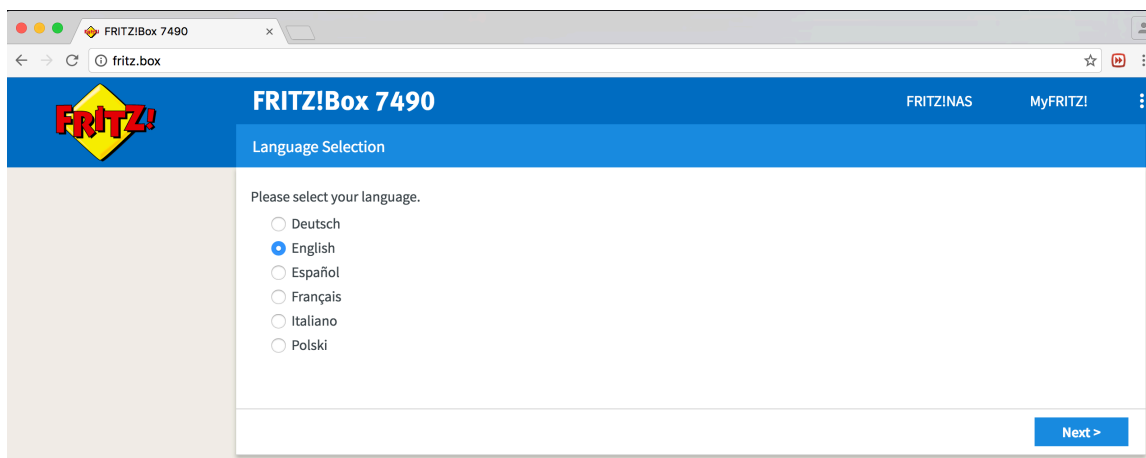
Prerequisites

This guide is for congregations with ADSL or VDSL connections. Before starting this step by step process, please power up your router and connect to the default WiFi connection provided. These details can be found in the product box. If you have a Fibre connection, please see the note under Step 8.

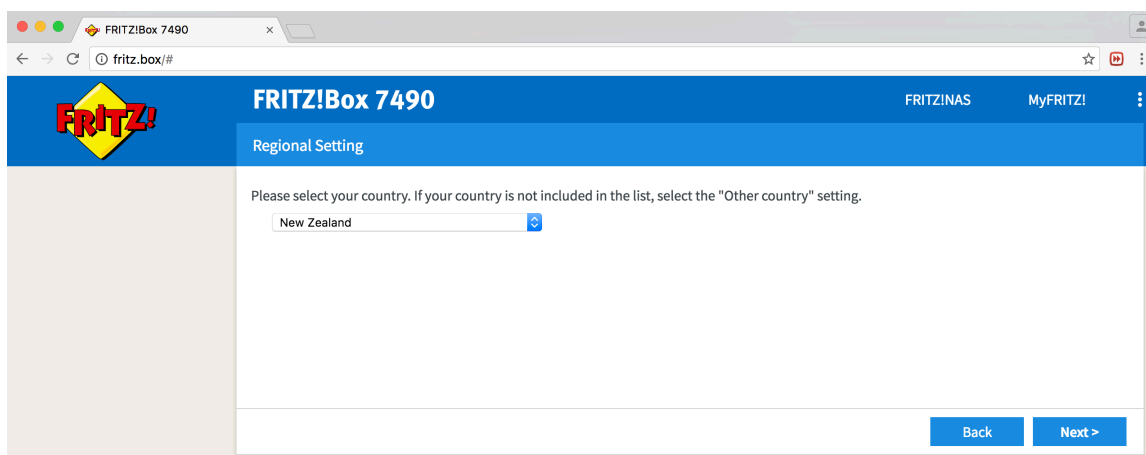
The following configuration steps will provide you with an optimized configuration for your Kingdom Hall. This process will:

1. Ensure that Vattendance VoIP traffic is prioritized, allowing the clearest sound possible.
2. Provide separate SSID's for Administrators and Guests (everyone else) to ensure that network traffic that is critical to the meeting is separated from general traffic.
3. Employ a basic web content filtering system that blocks explicit material.

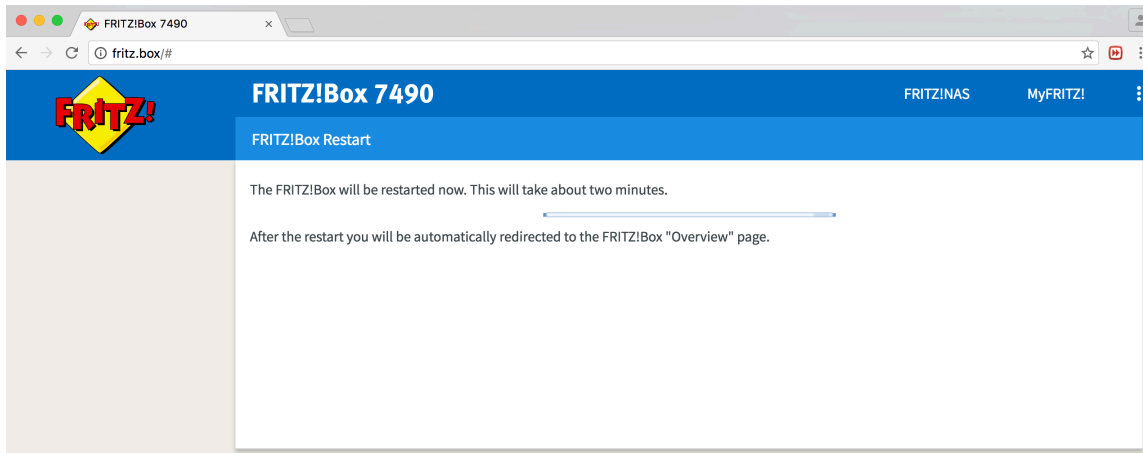
1 In your internet browser, browse to address "<http://fritz.box>". Select "English" and click "Next".



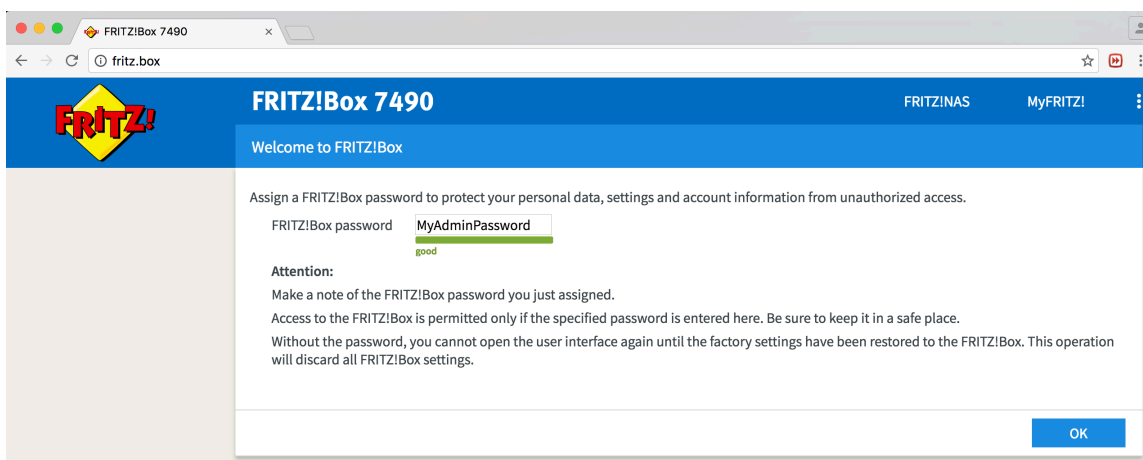
2 Select your country and click "Next"



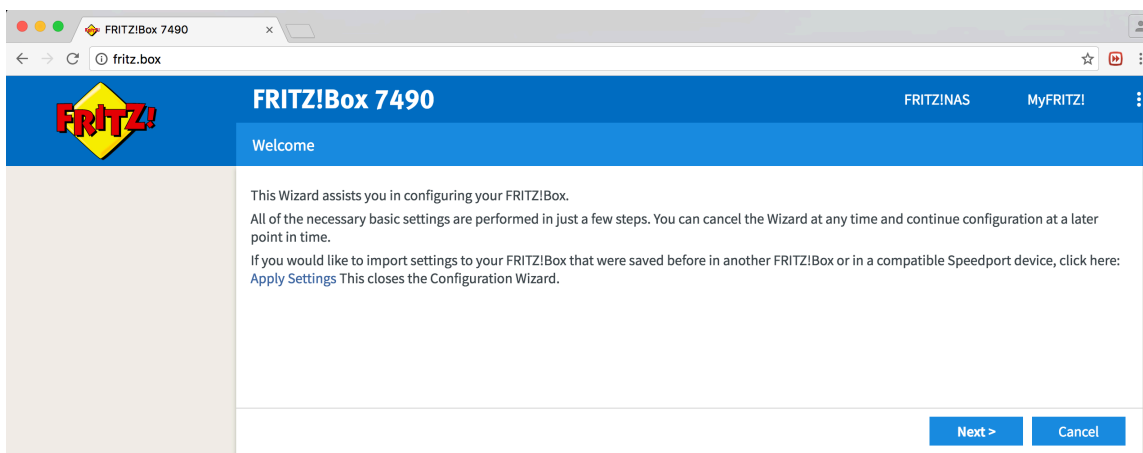
3 Router will now restart. Wait two minutes and connect again.



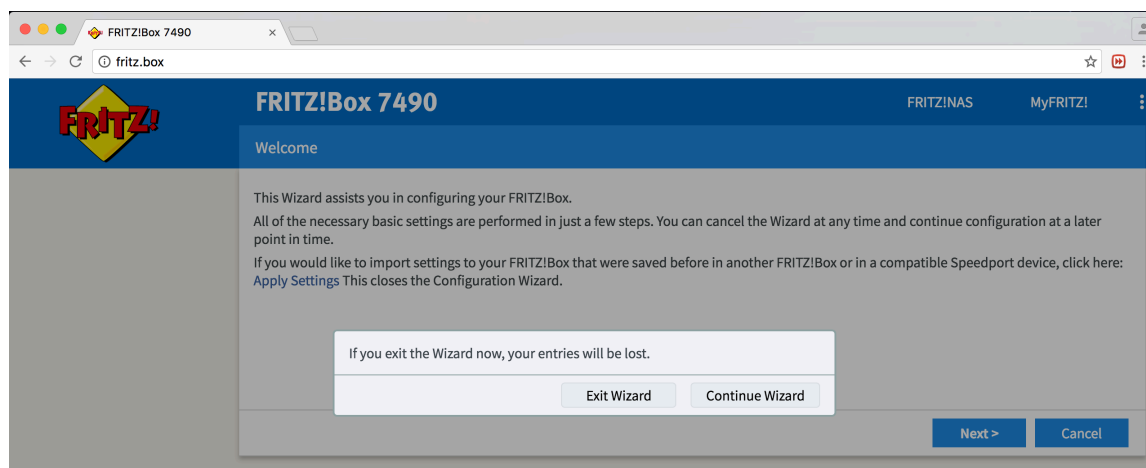
4 Enter your chosen Administrator password and click "OK".



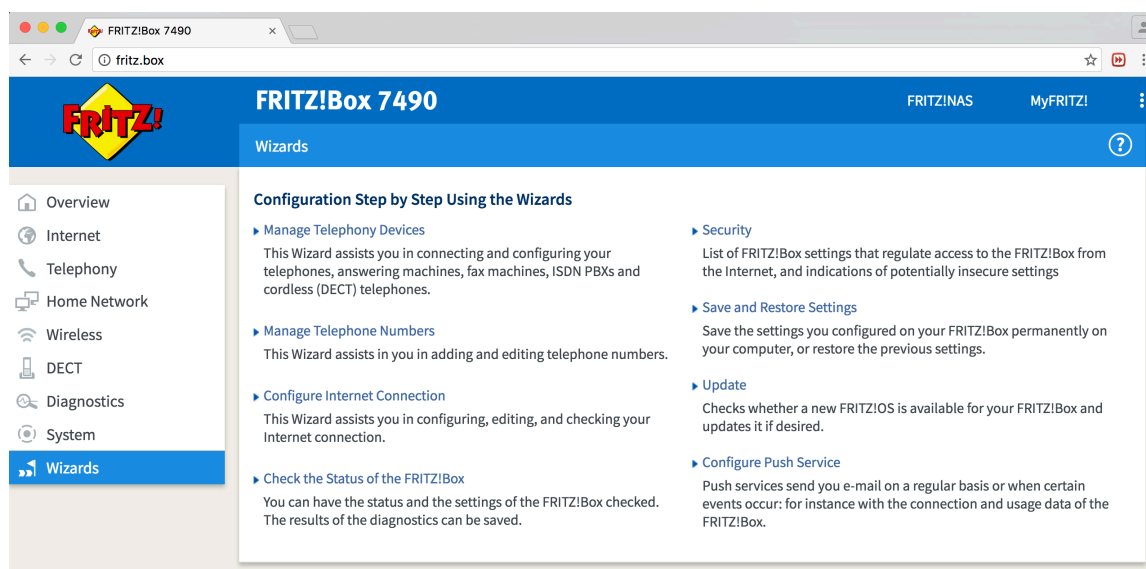
5 Click "Next"



6 Click “Exit Wizard”

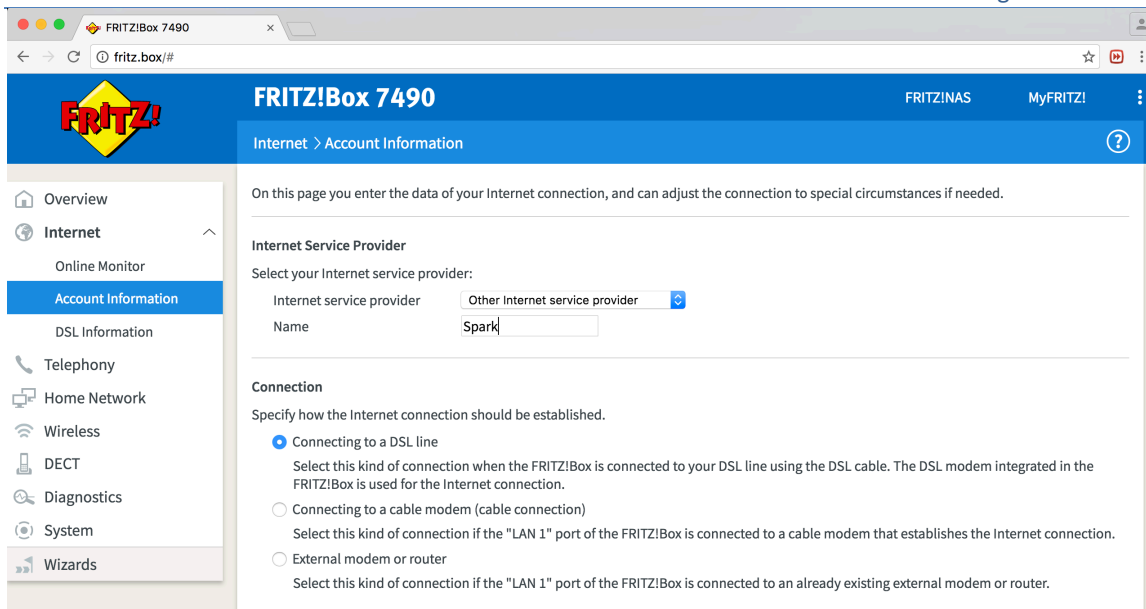


7 You will see this page. On the left menu select “Internet” then “Account Information”



8 Enter the name of your ISP and select “Connecting to a DSL line”.

NOTE FOR THOSE WITH FIBRE: This guide is only for those with ADSL or VDSL. If you have a Fibre connection, select “External modem or router” instead. Please refer to your ISP for configuration details required for this. You will need a VLAN ID (normally “10”).



FRITZ!Box 7490 FRITZ!NAS MyFRITZ!

Internet > Account Information

On this page you enter the data of your Internet connection, and can adjust the connection to special circumstances if needed.

Internet Service Provider

Select your Internet service provider:

Internet service provider Other Internet service provider

Name

Connection

Specify how the Internet connection should be established.

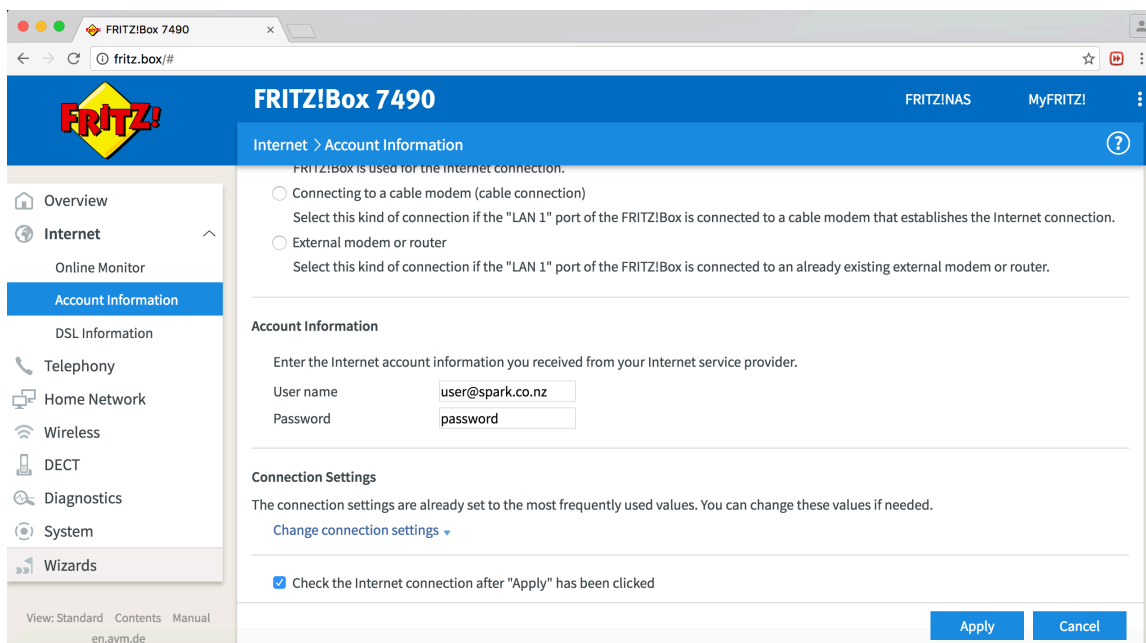
☒ Connecting to a DSL line
Select this kind of connection when the FRITZ!Box is connected to your DSL line using the DSL cable. The DSL modem integrated in the FRITZ!Box is used for the Internet connection.

☐ Connecting to a cable modem (cable connection)
Select this kind of connection if the "LAN 1" port of the FRITZ!Box is connected to a cable modem that establishes the Internet connection.

☐ External modem or router
Select this kind of connection if the "LAN 1" port of the FRITZ!Box is connected to an already existing external modem or router.

9 On the same page scroll down and enter your ISP Username and password.

NOTE: If your ISP is Spark New Zealand, you may enter the same username and password that is shown in the below screenshot.



FRITZ!Box 7490 FRITZ!NAS MyFRITZ!

Internet > Account Information

FRITZ!Box is used for the Internet connection.

☐ Connecting to a cable modem (cable connection)
Select this kind of connection if the "LAN 1" port of the FRITZ!Box is connected to a cable modem that establishes the Internet connection.

☐ External modem or router
Select this kind of connection if the "LAN 1" port of the FRITZ!Box is connected to an already existing external modem or router.

Account Information

Enter the Internet account information you received from your Internet service provider.

User name

Password

Connection Settings

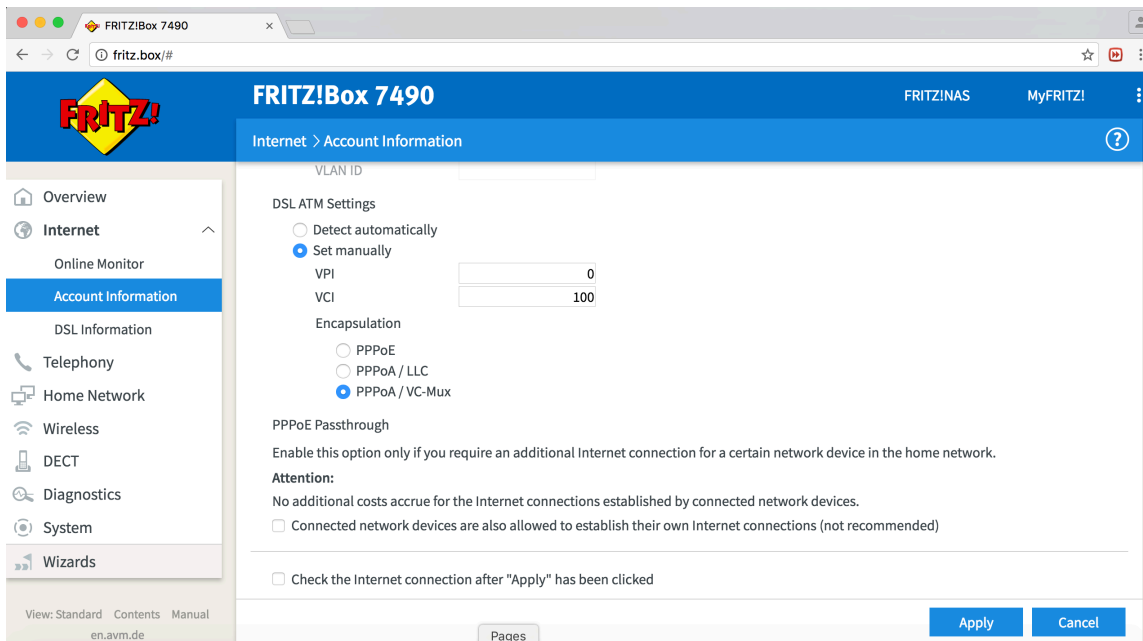
The connection settings are already set to the most frequently used values. You can change these values if needed.

[Change connection settings](#)

☒ Check the Internet connection after "Apply" has been clicked

[Apply](#) [Cancel](#)

10 On the same page, click “Change connection settings”. You can either select “Detect Automatically” or enter your ISP’s DSL settings manually as below. When finished, click “Apply”.



FRITZ!Box 7490

Internet > Account Information

VLAN ID

DSL ATM Settings

☐ Detect automatically

☒ Set manually

VPI

VCI

Encapsulation

☐ PPPoE

☐ PPPoA / LLC

☒ PPPoA / VC-Mux

PPPoE Passthrough

Enable this option only if you require an additional Internet connection for a certain network device in the home network.

Attention:

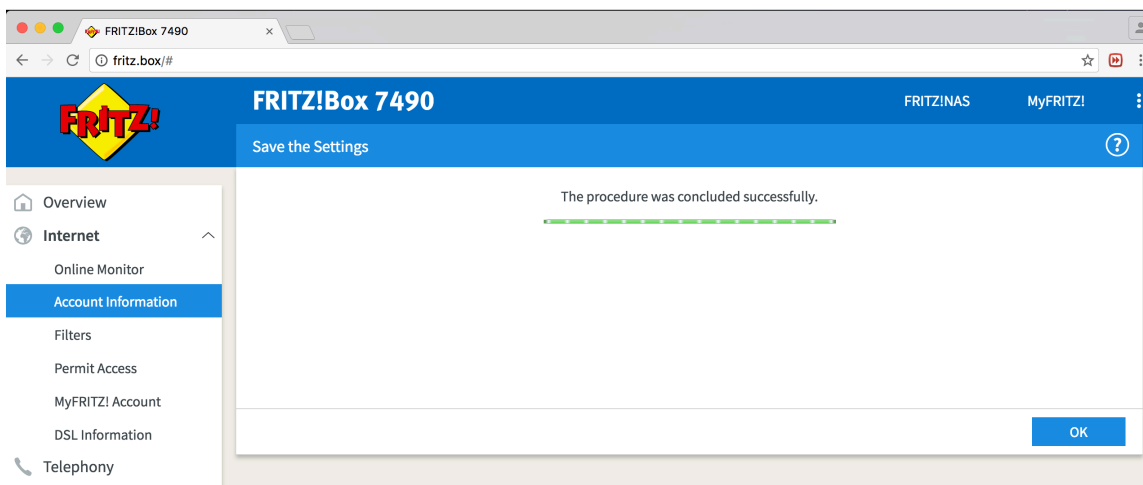
No additional costs accrue for the Internet connections established by connected network devices.

☐ Connected network devices are also allowed to establish their own Internet connections (not recommended)

☐ Check the Internet connection after "Apply" has been clicked

Apply Cancel

11 Click “OK”.



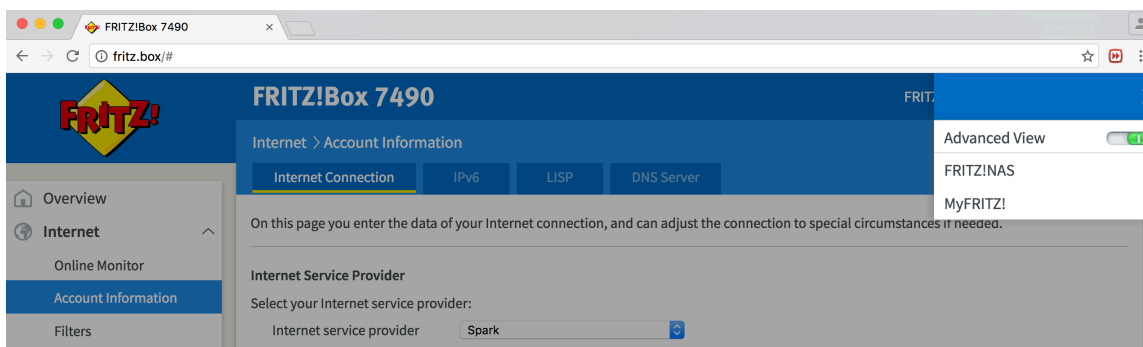
FRITZ!Box 7490

Save the Settings

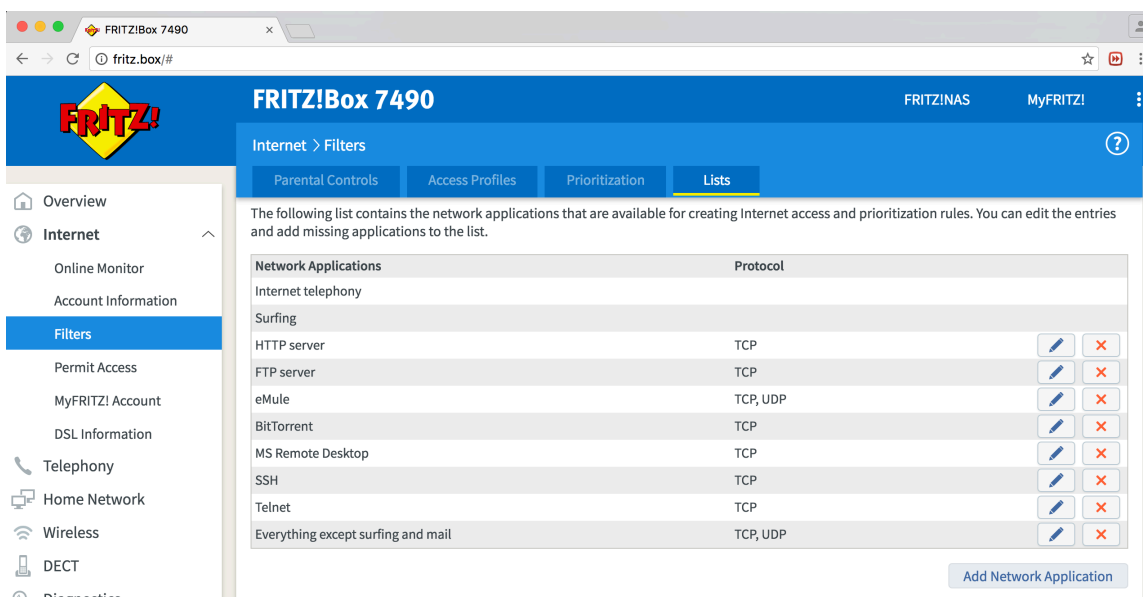
The procedure was concluded successfully.

OK

12 In the top right of the page, click the three vertical dots icon to the right of “MyFRITZ!” and turn on “Advanced View”.



13 On the left menu Select “Internet”, “Filters” then select the “Lists” TAB. Then click “Add Network Applications”.



FRITZ!Box 7490

FRITZ!Box 7490 MyFRITZ!

Network Application for Prioritization Rules

Here you set up and edit the network application. Give the application a name and assign it the protocols and ports it uses when it sends data to the Internet.

Network application

Specify which protocols and ports the network application uses when it sends data to the Internet.

Protocol	Source Port	Destination Port
Currently no protocol is assigned to this application.		

[New Protocol](#) [OK](#) [Cancel](#)

FRITZ!Box 7490

fritz.box/#

FRITZ!

Overview

Internet

Online Monitor

Account Information

Filters

Permit Access

MyFRITZ! Account

DSL Information

Telephony

Home Network

Wireless

DECT

Diagnostics

System

FRITZ!Box 7490

FRITZ!NASMyFRITZ!

Protocol

Protocol:

☐ TCP

☒ UDP

☐ ESP

☐ GRE

☐ ICMP

Source port:

☐ any

☐ Port

☒ Port to

Destination port:

☒ any

☐ Port

☐ Port to

The packets are regarded from the FRITZ!Box network in the direction of the Internet.


OK

Cancel

FRITZ!Box 7490

← → ↺ fritz.box/#

☆ ⓘ

 **FRITZ!**

FRITZ!Box 7490

FRITZINAS MyFRITZ!

Overview

Internet

Online Monitor

Account Information

Filters

Permit Access

MyFRITZ! Account

DSL Information

Telephony

Network Application for Prioritization Rules

Here you set up and edit the network application. Give the application a name and assign it the protocols and ports it uses when it sends data to the Internet.

Network application

Specify which protocols and ports the network application uses when it sends data to the Internet.

Protocol	Source Port	Destination Port
UDP	50600-50700	any

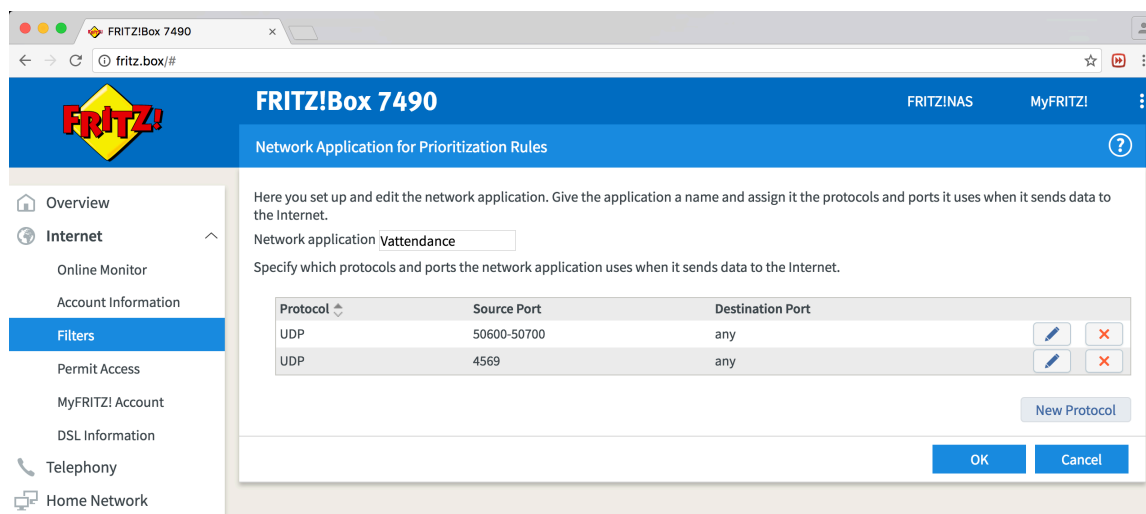
New Protocol

OK

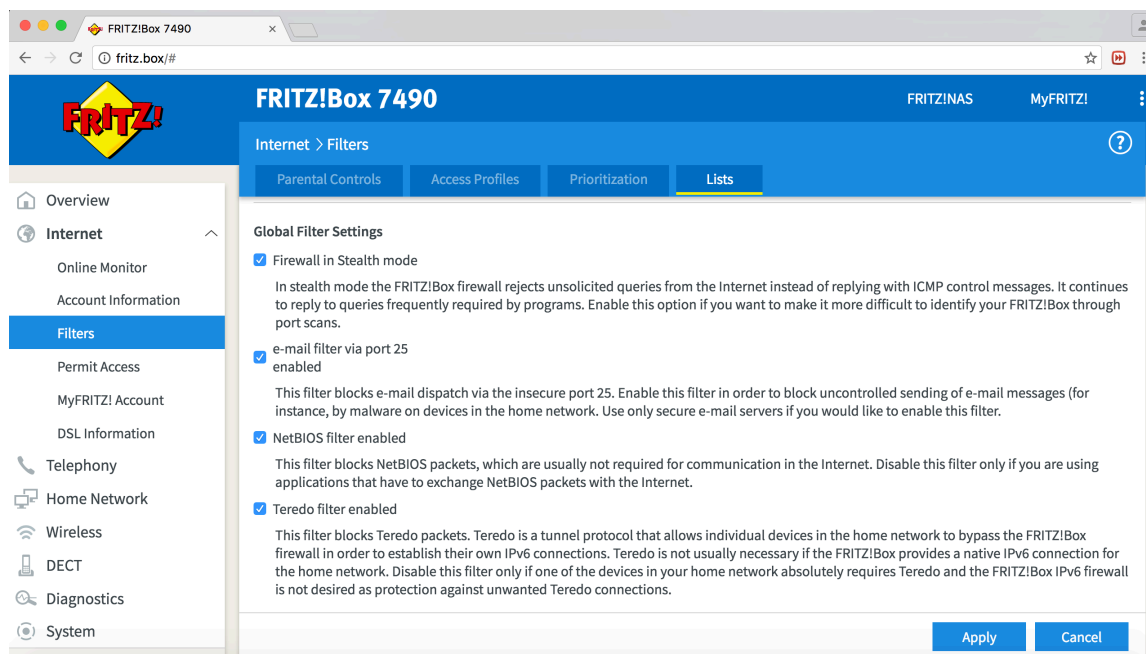
Cancel

The screenshot shows the FRITZ!Box 7490 web interface. The top navigation bar is blue with the FRITZ! logo on the left and 'FRITZ!Box 7490' in the center. On the right, there are links for 'FRITZ!NAS' and 'MyFRITZ!'. Below the navigation bar, there is a sidebar on the left with a list of menu items: Overview, Internet (selected), Filters, Permit Access, MyFRITZ! Account, DSL Information, Telephony, Home Network, Wireless, DECT, Diagnostics, and System. The main content area is titled 'Protocol' and contains a dropdown menu set to 'UDP'. Below this, there are two sections: 'Source port' and 'Destination port'. In the 'Source port' section, the 'Port' option is selected with the value '4569'. In the 'Destination port' section, the 'any' option is selected. At the bottom of the main content area, there is a note: 'The packets are regarded from the FRITZ!Box network in the direction of the Internet.' At the very bottom, there are two buttons: 'OK' and 'Cancel'.

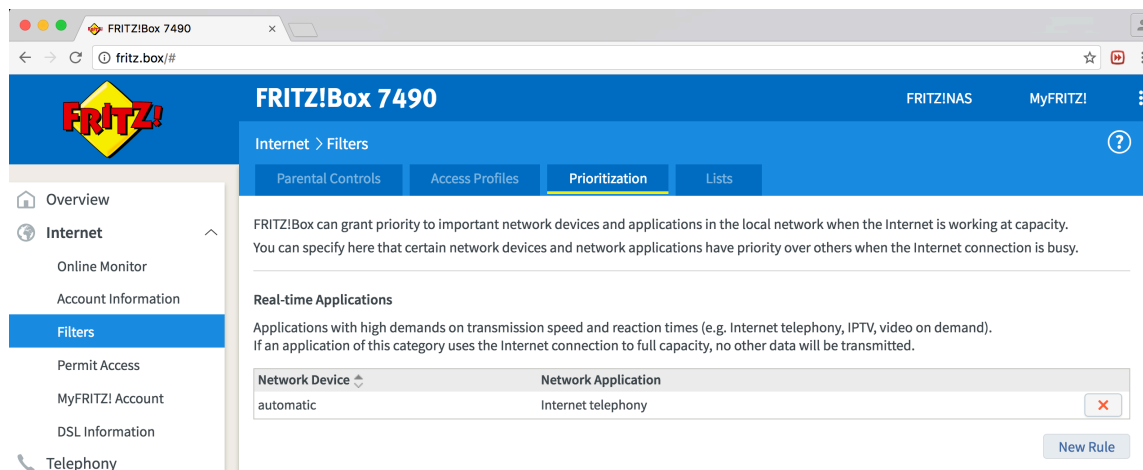
18 Click “OK”



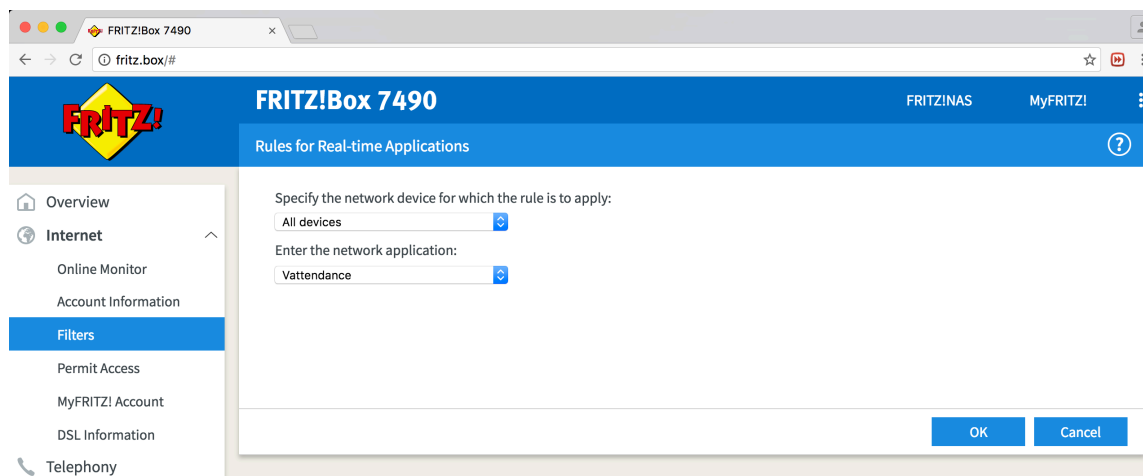
19 On the same page scroll down and select options as shown below and click “Apply”.



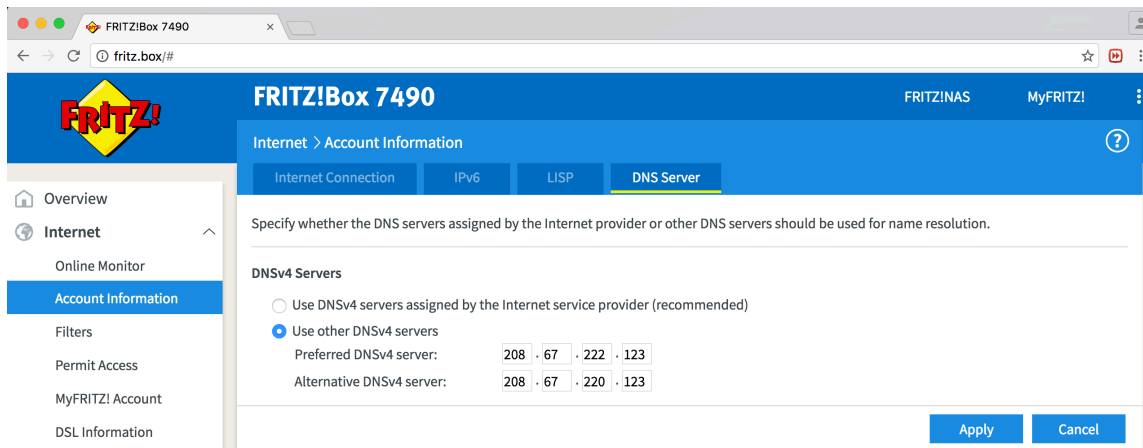
20 Select the “Prioritization” TAB and click “New Rule”.



21 Select the options shown below and click “OK”.



22 On the left hand menu select “Internet” then “Account Information”. Then select the “DNS Server” TAB. Configure this page as shown and click “Apply”.



The screenshot shows the FRITZ!Box 7490 web interface. The left-hand menu is expanded, showing the 'Internet' section with 'Account Information' selected. The 'DNS Server' tab is active. The page title is 'FRITZ!Box 7490' and the breadcrumb is 'Internet > Account Information'. The 'DNS Server' tab is selected, and the page content is as follows:

Specify whether the DNS servers assigned by the Internet provider or other DNS servers should be used for name resolution.

DNSv4 Servers

☐ Use DNSv4 servers assigned by the Internet service provider (recommended)

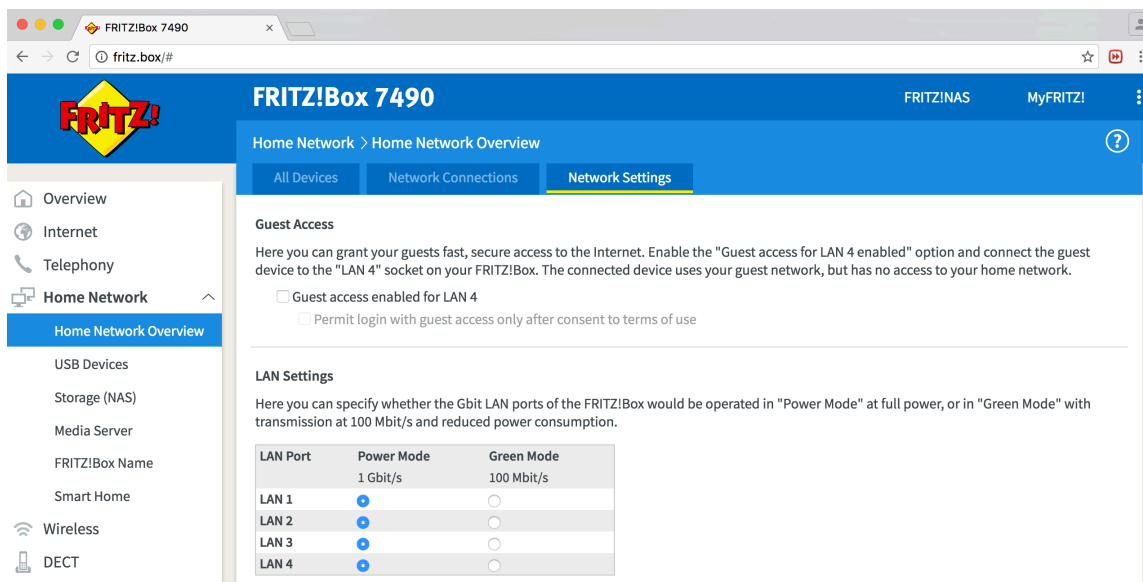
☒ Use other DNSv4 servers

Preferred DNSv4 server: 208 . 67 . 222 . 123

Alternative DNSv4 server: 208 . 67 . 220 . 123

Buttons: Apply, Cancel

23 On the left hand menu select “Home Network” then click the “Network Settings” TAB. Configure page as shown below.



The screenshot shows the FRITZ!Box 7490 web interface. The left-hand menu is expanded, showing the 'Home Network' section with 'Home Network Overview' selected. The 'Network Settings' tab is active. The page title is 'FRITZ!Box 7490' and the breadcrumb is 'Home Network > Home Network Overview'. The 'Network Settings' tab is selected, and the page content is as follows:

Guest Access

Here you can grant your guests fast, secure access to the Internet. Enable the "Guest access for LAN 4 enabled" option and connect the guest device to the "LAN 4" socket on your FRITZ!Box. The connected device uses your guest network, but has no access to your home network.

☐ Guest access enabled for LAN 4

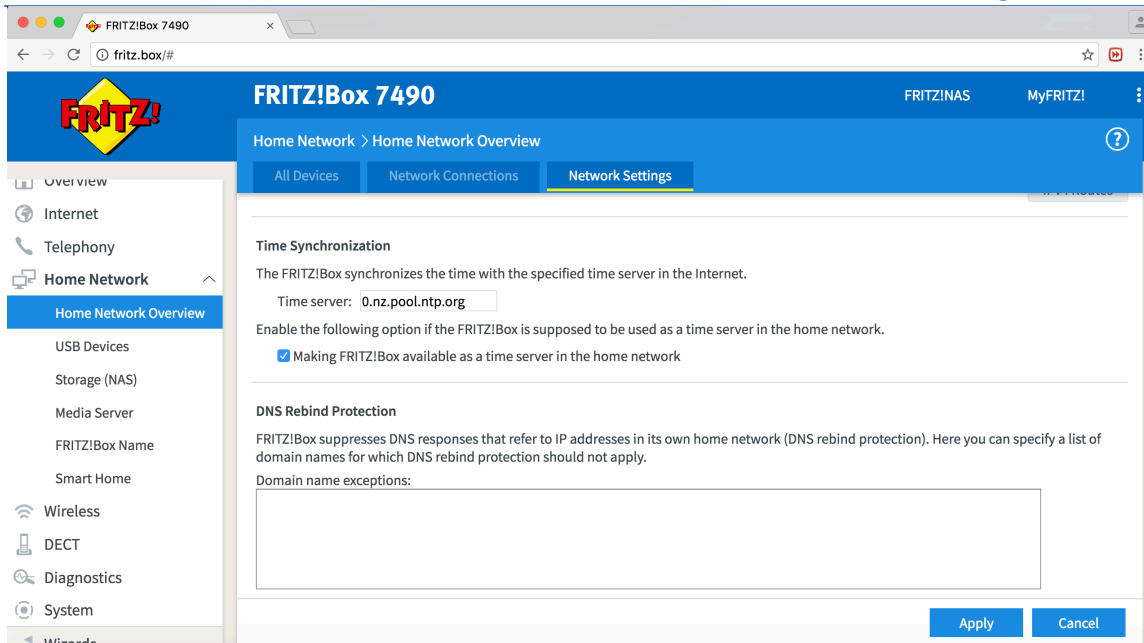
☐ Permit login with guest access only after consent to terms of use

LAN Settings

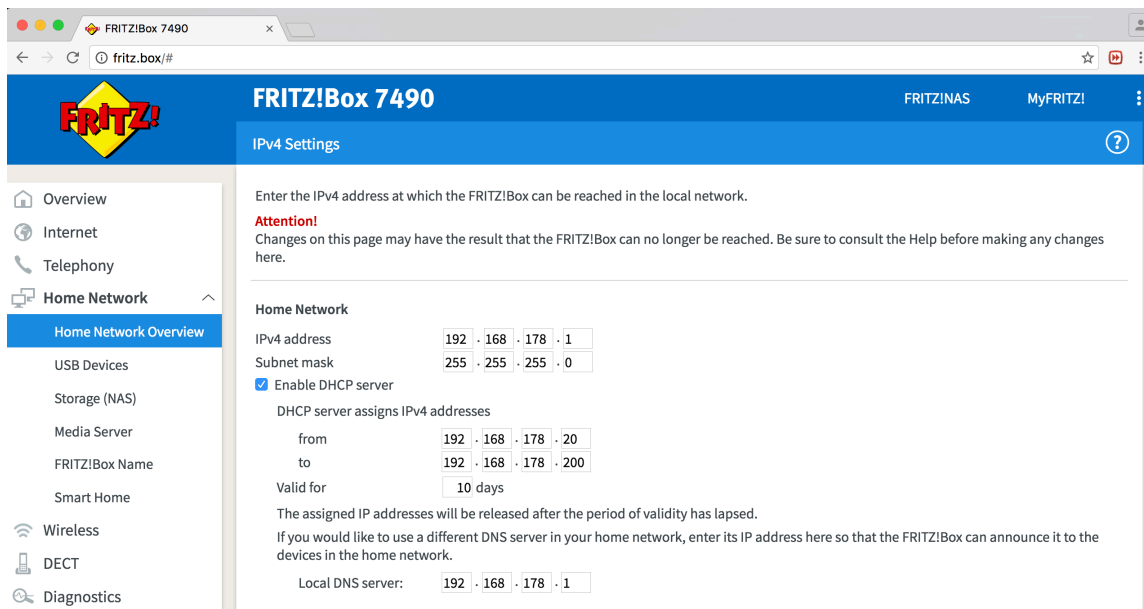
Here you can specify whether the Gbit LAN ports of the FRITZ!Box would be operated in "Power Mode" at full power, or in "Green Mode" with transmission at 100 Mbit/s and reduced power consumption.

LAN Port	Power Mode 1 Gbit/s	Green Mode 100 Mbit/s
LAN 1	<input checked="" type="radio"/>	<input type="radio"/>
LAN 2	<input checked="" type="radio"/>	<input type="radio"/>
LAN 3	<input checked="" type="radio"/>	<input type="radio"/>
LAN 4	<input checked="" type="radio"/>	<input type="radio"/>

24 On the same page scroll down and configure the time server. In New Zealand, enter “0.nz.pool.ntp.org”. In Australia enter “0.au.pool.ntp.org”. Click “Apply” when done.

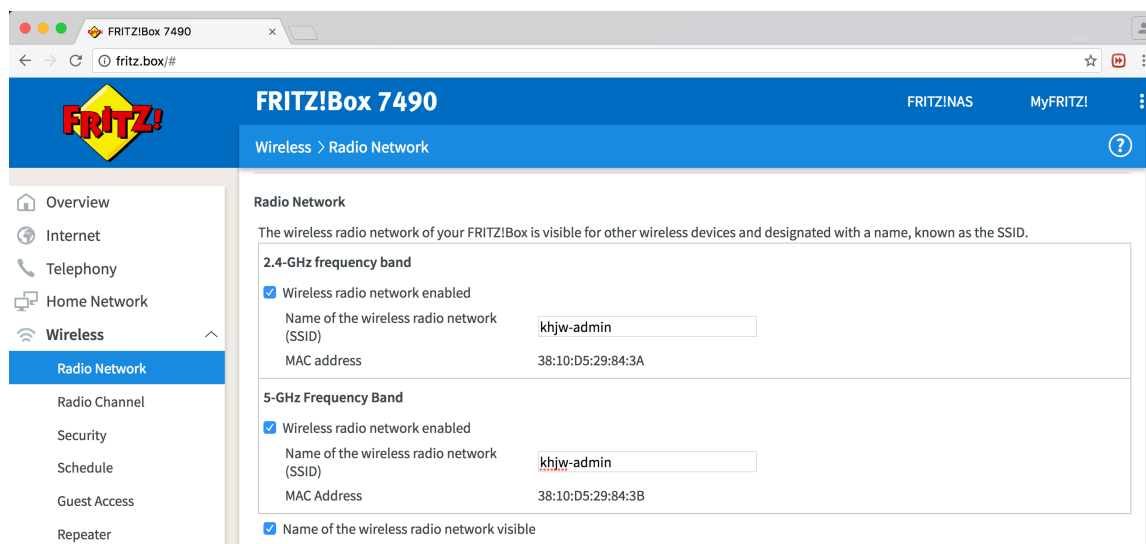


25 You can specify your network IP address settings on this page however the default settings will suffice.



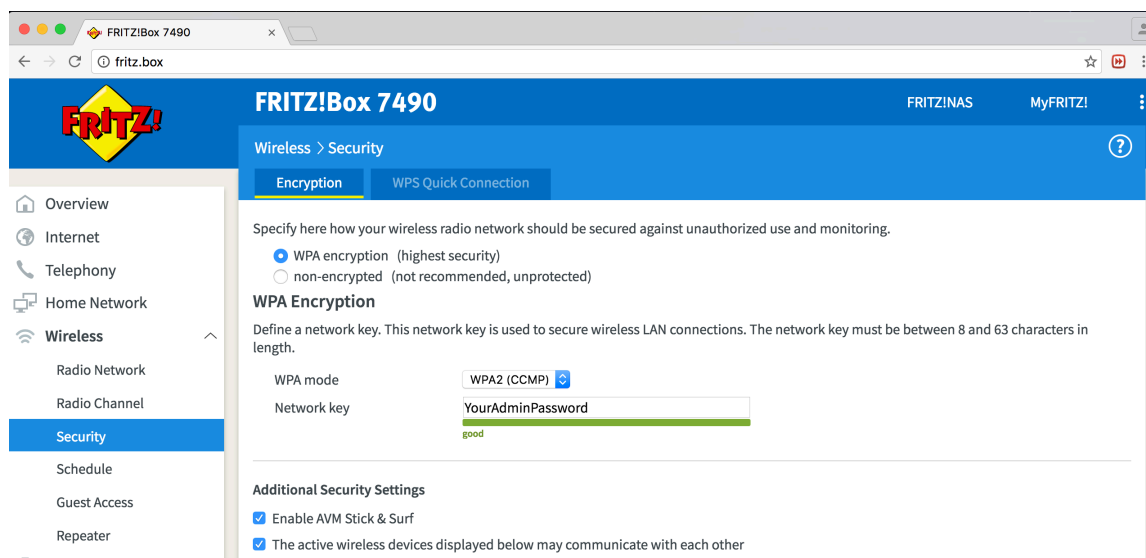
26 On the left hand menu, select “Wireless” then “Radio Network”. Configure a different name for your admin WiFi network if desire. Otherwise the default name is fine.

NOTE: This WiFi SSID is for devices perform admin functions. Devices connected to this network can connect to any other devices and have full internet access. If you change this SSID name, the router will restart and you will need to reconnect to continue these configuration steps.



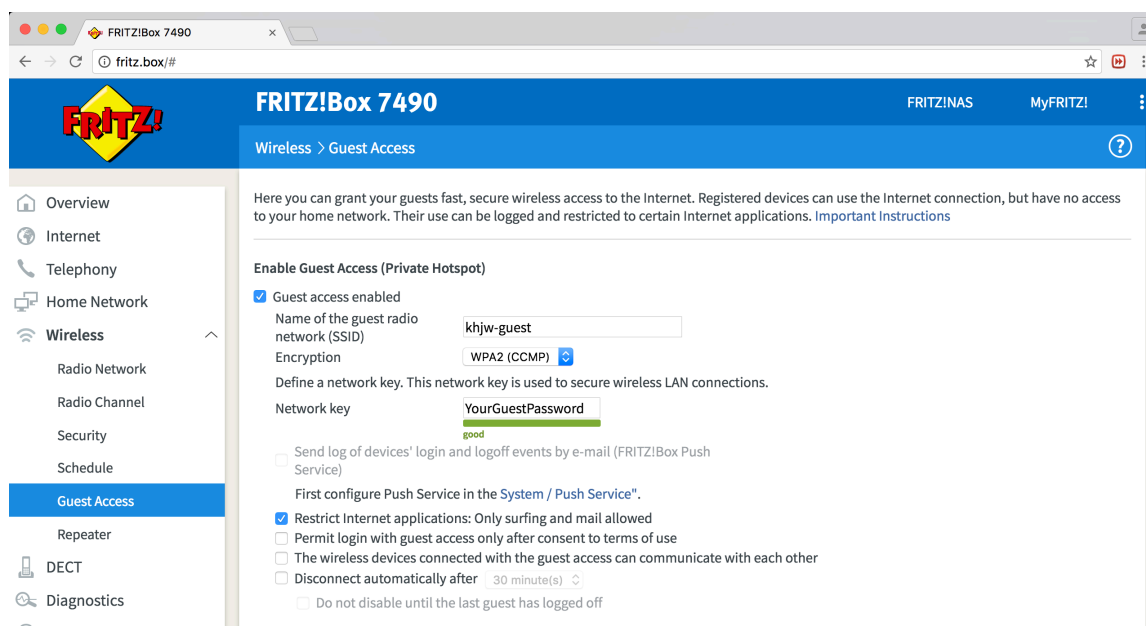
27 On the left hand menu, select “Wireless” then “Security”. Configure as below but specify your own Network Key.

NOTE: The router will restart and you will need to reconnect to the router.

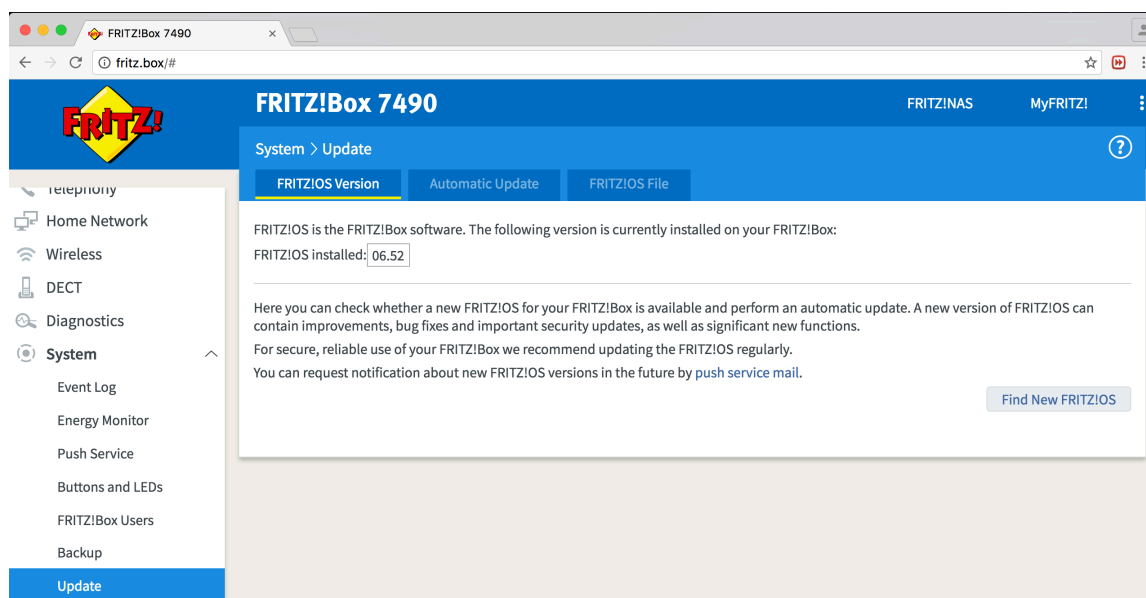


28 On the left hand menu, select “Wireless” then “Guest Access”. Configure page as shown below, using your own unique SSID and Network key (password). Then click “Apply”.

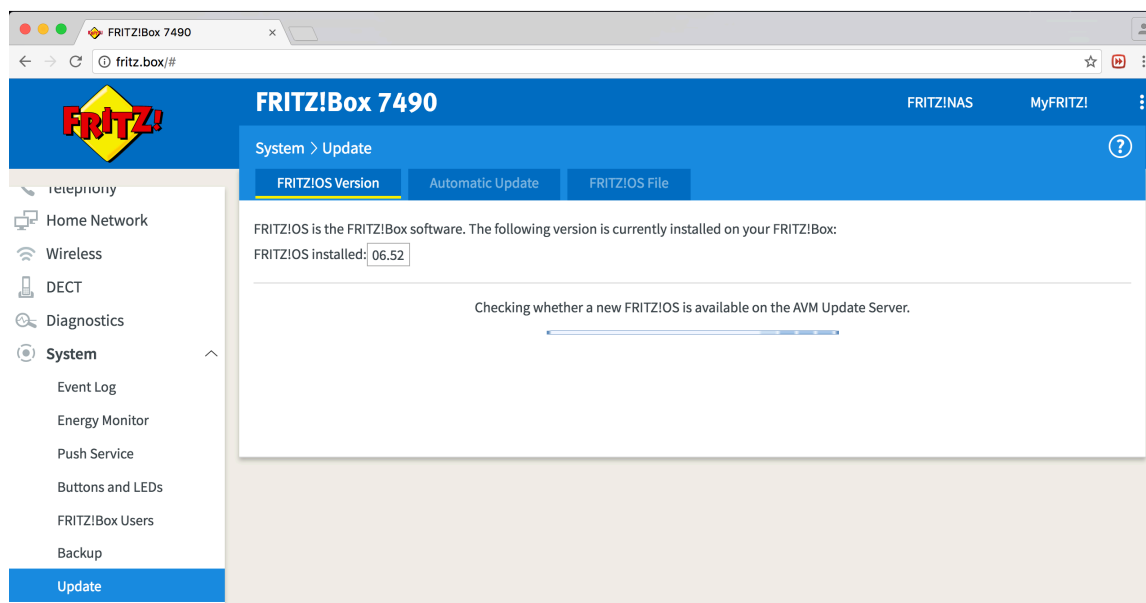
This is the SSID that most in the congregation will use. Devices using this network cannot access other devices on the network and have access only to websites and email. There is also a basic Web Content Filter applied that blocks explicit material.



29 On the left hand menu, select “System” then “Update”. Click “Find New FRITZ!OS”.

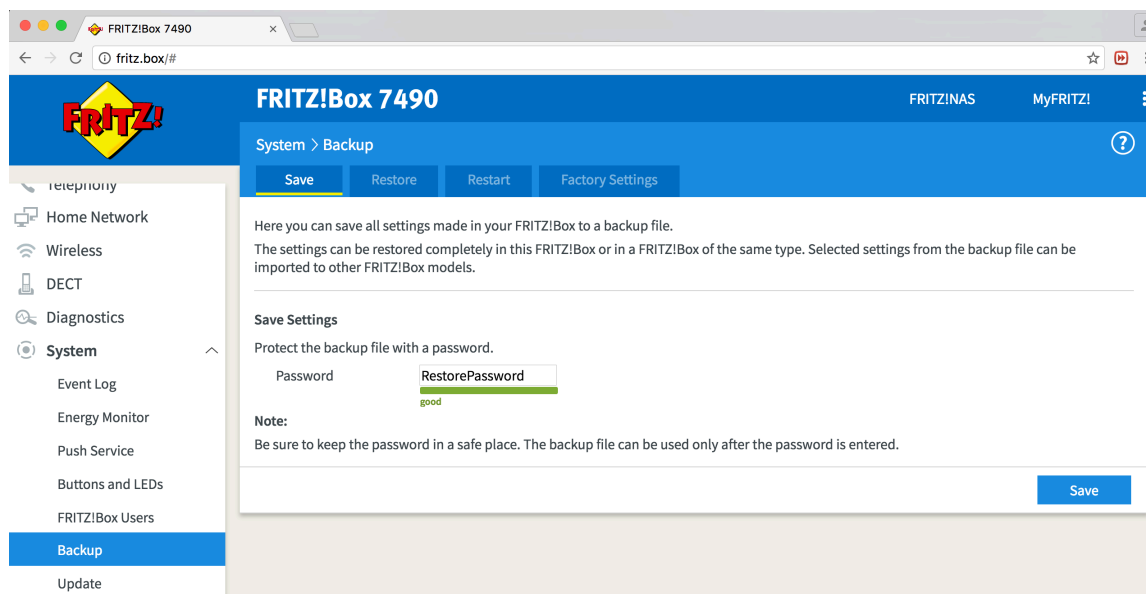


30 The router will search for the latest firmware version and install automatically.

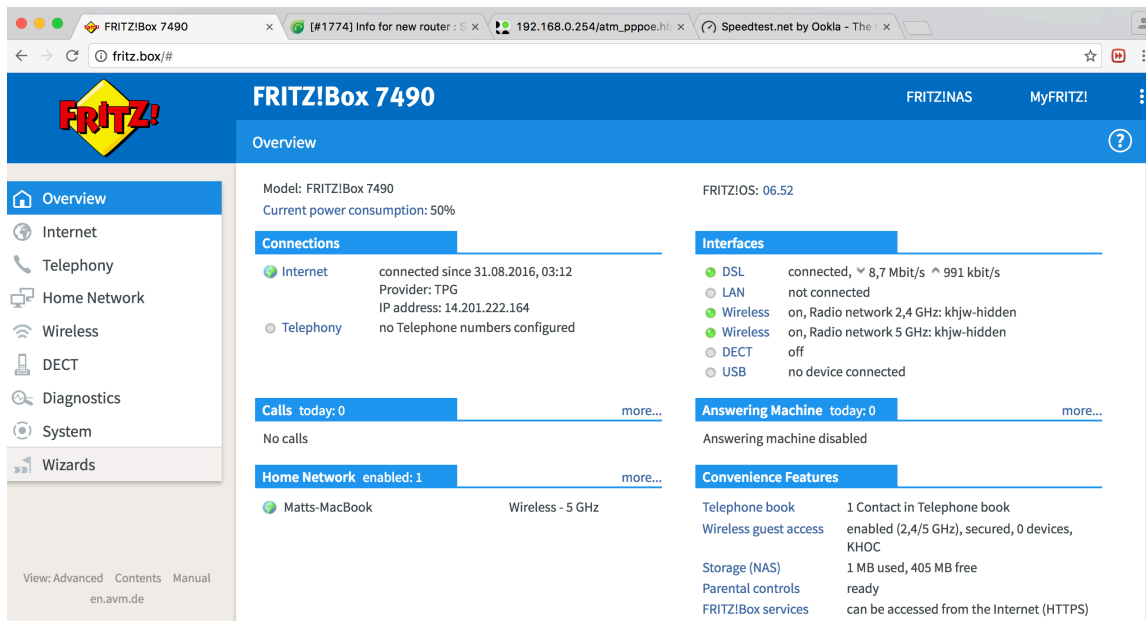


31 On the left hand menu select “System” then “Backup”. Enter a password of your choice and click “Save”.

This is a backup of your configuration if you ever need to configure your router again. Store this on your computer and remember the password.



32 And that's it! Enjoy your new router.



The screenshot shows the FRITZ!Box 7490 web interface in a browser. The browser tabs include 'FRITZ!Box 7490', '[#1774] Info for new router', '192.168.0.254/atm_pppoe.html', and 'Speedtest.net by Ookla'. The address bar shows 'fritz.box/#'. The interface has a blue header with the FRITZ! logo and 'FRITZ!Box 7490'. On the left is a navigation menu with 'Overview' (selected), 'Internet', 'Telephony', 'Home Network', 'Wireless', 'DECT', 'Diagnostics', 'System', and 'Wizards'. The main content area is titled 'Overview' and shows the following information:

- Model:** FRITZ!Box 7490
- Current power consumption:** 50%
- FRITZ!OS:** 06.52
- Connections:**
 - Internet:** connected since 31.08.2016, 03:12; Provider: TPG; IP address: 14.201.222.164
 - Telephony:** no Telephone numbers configured
- Interfaces:**
 - DSL:** connected, 8,7 Mbit/s ^ 991 kbit/s
 - LAN:** not connected
 - Wireless:** on, Radio network 2,4 GHz: khjw-hidden
 - Wireless:** on, Radio network 5 GHz: khjw-hidden
 - DECT:** off
 - USB:** no device connected
- Calls today: 0** (more...)
- No calls**
- Home Network enabled: 1** (more...)
- Matts-MacBook** (Wireless - 5 GHz)
- Answering Machine today: 0** (more...)
- Answering machine disabled**
- Convenience Features:**
 - Telephone book:** 1 Contact in Telephone book
 - Wireless guest access:** enabled (2,4/5 GHz), secured, 0 devices, KHOC
 - Storage (NAS):** 1 MB used, 405 MB free
 - Parental controls:** ready
 - FRITZ!Box services:** can be accessed from the Internet (HTTPS)

At the bottom left, there are links for 'View: Advanced', 'Contents', and 'Manual en.avm.de'.