

# SpeedTouch™580

Wireless Residential ADSL Gateway













# SpeedTouch<sup>TM</sup> 580

User's Guide R4.3.1





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#### About this User's Guide

#### **Used Symbols**



A note provides additional information about a topic.



A tip provides an alternative method or shortcut to perform an action.



A *caution* warns you about potential problems or specific precautions that need to be taken.

#### Terminology

Generally, the SpeedTouch™580(i) will be referred to as SpeedTouch™ in this User's Guide.

# Typographical Conventions

In interactive input and output, typed input is displayed in a bold font and commands are displayed like this.

Comments are added in italics.

Example:

=>language list

CODE LANGUAGE VERSION FILENAME en\* english 4.2.0.1 <system>

Only one language is available

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# 1 Your SpeedTouch™

#### Introduction

With the SpeedTouch™580(i) Wireless Residential ADSL Gateway you can build a secure home or small office network, seamlessly connecting wired and wireless devices and surf the Internet at high speed, all combined in one device.

#### Installation

For more information on how to set up your SpeedTouch™, installation and wiring and how to do a first Internet connection setup, refer to the provided Installation and Setup Guide.

Contents

This User's Guide will assist you in configuring your SpeedTouch™.

#### Safety instructions

Before connecting the SpeedTouch™, please read the SpeedTouch™ Quick Installation Guide and the Safety Instructions and Regularity Notices.



# 1.1 SpeedTouch™ Features

#### Introduction

Your SpeedTouch™ offers you a wide range of outstanding features.

In this section you will find a comprehensive overview of the:

- ▶ Hardware Specifications
- Software Features



### 1.1.1 Hardware Specifications

#### Gateway

Integrated multi-mode ADSL modem, supporting:

- ADSL over POTS for a SpeedTouch™ADSL/POTS variant)
- ADSL over ISDN for a SpeedTouch™ ADSL/ISDN variant)

#### Physical interfaces

- WAN:
  - One RJ-11 port for ADSL/POTS or ADSL/ISDN connection
  - •
- LAN:
  - A USB 1.1 port to connect one PC over USB
  - Four RJ-45 ports to connect up to 4 PCs to a 10/100 Base-T Ethernet network
  - Wireless LAN: IEEE 802.11b/g Wi-Fi compliant access point
- Power inlet

#### **LEDs**

LED indicators for all interfaces

#### Reset button

One recessed reset button for restoring the default settings

#### Association button

One push button for wireless association and registration

#### Wireless performance

- Typical indoor coverage: 60m
- Dynamic rate switching
- Manual / Automatic channel selection
- Manual / Automatic selection of pure 802.11g, pure 802.11b or mixed mode (802.11b/g) network
- Wireless Distribution System (WDS)
- ▶ WPA-PSK / WEP data encryption

#### Power requirement

Power supply: 15V AC, 1000mA



#### 1.1.2 Software Features

#### ADSL compliance

- If POTS in overlay: G. handshake, Full Rate ADSL, G.dmt, G.lite (splitterless ADSL)
- If ISDN in overlay: G.handshake, G.dmt

#### ATM features

- ▶ Up to 16 simultaneous PVCs, allowing multiple simultaneous destinations
- ATM QoS per PVC: CBR, VBR-rt, VBR-nrt, UBR
- RFC 1483 / 2684 multiprotocol encapsulation over AAL5 / ATM: both LLC / SNAP and VC-based multiplexing supported

#### Bridging features

- Multiport self-learning transparent bridge per IEEE 802.1D for LAN interconnect
- Remote bridge ports are isolated from each other
- Pre-defined bridge filters to WAN (no filter, no CPE-to-WAN broadcast, PPPoE only) and to LAN (no filter, multicast filter)

#### Routing features

- Multi-port (up to 16 PVCs) router
- Static routing, automatic routes (PPP, LAN)
- ▶ IP address multi-homing

#### Services

- UPnP with NAT traversal capability:
  - enables game technologies (Xbox live, Direct X, and many others)
  - enables conferencing functions of Microsoft Messenger
- ▶ Transparent bridging (IEEE802.1D)
- PPPoE routing/bridging with integrated PPP Relay
- ▶ PPPoA routing, PPPoA-to-PPTP relaying
- ▶ IP routing with static routing, packet classified routing and residential RIP
- Hyper-NAT with virtual server mapping (for instance for Web, FTP, Mail servers) and ALGs (such as NetMeeting, MSN Messenger, VPN passthrough, and others)
- Quality of Service:
  - IP QoS
- Integrated Dynamic DNS client

#### Security

- PAP (RFC1334), CHAP (RFC1994) for PPP session
- Integrated Stateful Inspection Firewall, Intrusion Detection
- Parental Control, URL Filtering
- Wireless security:
  - ▶ 64/128bit WEP encryption, WPA-PSK
  - Wireless client registration/access control (with physical push button)
- Multi-level SpeedTouch™ access policies, Digest Authentication



#### Configuration

- Home Install Wizard, Easy Setup wizard
- Intuitive web-based GUI (HTTP/HTTPs)
- Advanced configuration via telnet Command Line Interface (CLI)
- ▶ Remote management access control

#### Management

- Multi-level user protection, Event logging
- DHCP server, client and relay, DHCP-to-PPP spoofing
- DNS server, client and relay
- ▶ Time synchronization:
  - SNTPv1, SNTPv2, SNTPv3 and SNTPv4
- System logging
- SNMPv1 agent with MIB-II
- Firmware upgradeable via upgrade wizard on Setup CD





### 1.2 SpeedTouch™ LED Behaviour

Front panel LEDs

The SpeedTouch™ is equipped with a number of LEDs on its front panel, indicating the state of the device during normal operation.



Following table shows the meaning of the different LEDs:

Indicator			Description
Name	Colour	State	
Power	Green	On	Power on, normal operation
	Red	On	Power on, self-test failed, indicating device malfunction
	Orange	On	Bootloader active
	Off		Power off
Ethernet	Green	Flashing	Ethernet activity
		On	Ethernet connection, no activity
	Off		No Ethernet connection
USB	Green	Flashing	USB activity
		On	USB connection, no activity
	Off		No USB connection
WLAN	Green	Flashing	Wireless activity, WPA encryption
		On	No wireless activity, WPA encryption
	Amber	Flashing	Wireless activity, WEP encryption
		On	No wireless activity, WEP encryption
	Red	Flashing	Wireless activity, no security
		On	No wireless activity, no security
	Off		WLAN disabled





Indicator			Description
Name	Colour	State	
DSL	Green	Flashing	Pending DSL line synchronisation
		On	DSL line synchronised
	Off		No DSL line
Internet	Green	Flashing	Internet activity
		On	Internet connectivity, no activity
	Red	On	Internet connection setup failed
	Off		No Internet connection

#### Ethernet LEDs

A LED may be provided per Ethernet port to indicate link integrity (or activity). Depending on the SpeedTouch™ product you are using, a second LED (A) may be provided to indicate the 10/100Base-T selection:



Indicator		Description	
Name		LED Status	
A (Ontinual)	Integrity	Off	No connection on this port
(Optional)	(Activity)	On	Ethernet link up
		Flashing	Data is flowing from/to this port
В	10/100Base-T	Off	10Base-T Ethernet connection
		On	100Base-T Ethernet connection





# 1.3 How to Access your SpeedTouch™

#### Access methods

Your SpeedTouch™ is accessible in one of following ways:

Access Method	Can be used to:
Web	Configure your SpeedTouch™ via HTTP or HTTPS.
	For more information, see "1.3.1 Access via the Web Interface" on page 11.
Command Line Interface (CLI)	Fine tune your SpeedTouch™ configuration. For more information, see "1.3.2 Access via CLI" on page 12.
File Transfer Protocol (FTP)	Backup and restore data on your SpeedTouch™. For more information, see "1.3.3 Access via FTP" on page 14.
Remote Assistance	Allow a remote user to help you configuring your SpeedTouch™. For more information, see "1.3.4 Remote Assistance" on page 17.



#### 1.3.1 Access via the Web Interface

#### Procedure

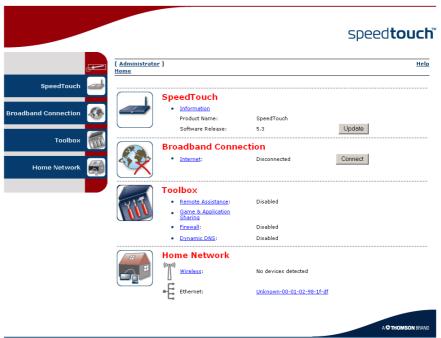
To access the SpeedTouch™ via the web interface:

- 1 Open a web browser.
- In the address bar type your SpeedTouch™'s IP address or DNS host name, by default that is 'http://speedtouch.lan' or '192.168.1.254'.



You can access the pages via the http protocol. For remote assistance the secure version, https, in combination with certificates is used; provide your ISP with the https link, user name and password before he can log on to the pages. For more information, see "1.3.4 Remote Assistance" on page 17.

3 As a result the SpeedTouch™ Home page appears, from where you can navigate to all the configurable aspects of the SpeedTouch™.



For more information on the web pages, see "4 SpeedTouch™ Web Interface" on page 47.





#### 1.3.2 Access via CLI

#### Command Line Interface (CLI)

You can access the Command Line Interface (CLI) via:

A Telnet session

This requires that TCP/IP connectivity exists between the host from which the Telnet session is opened and the SpeedTouch™. Your SpeedTouch™ and the connected PC must have an IP address in the same subnet.

Quote site commands (over FTP)

For more information, see " Quote site command" on page 16.

For information on CLI commands, see the SpeedTouch™ CLI Reference Guide.



#### Telnet session

#### Proceed as follows:

1 Open a telnet application.



You can use the Command Prompt window.

In Windows XP for instance:

- 1 On the Windows task bar, click **Start**.
- 2 Select (All) Programs > Accessories > Command Prompt.
- 2 Connect to your SpeedTouch™. .



In the Command Prompt window:

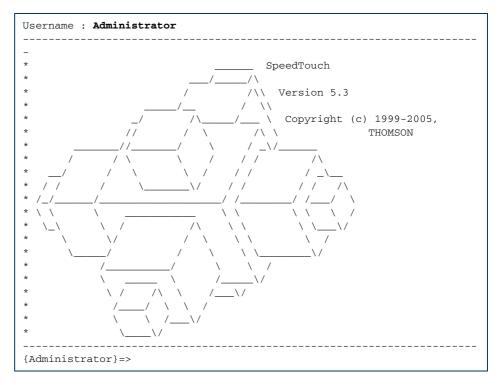
At the prompt, type **telnet** followed by the IP address of your SpeedTouch $^{\text{m}}$  (default is 192.168.1.254).

3 Enter your SpeedTouch™ security user name and password.



The default user is 'Administrator' and the default password is blank.

4 As soon as you've opened a session to the CLI, the SpeedTouch™ banner is displayed, followed by the CLI prompt, as shown in the example below:







#### 1.3.3 Access via FTP

# File Transfer Protocol (FTP)

You can access the file system of the SpeedTouch™ via the File Transfer Protocol (FTP), in order to:

- Restore or backup configuration files, templates or language packs.
- Upgrade your configuration or firmware.

#### File system

The SpeedTouch™ file system is stored on nonvolatile memory, and contains the SpeedTouch™ software, service template files and (optionally) default setting files.

#### FTP session

To open an FTP session:

1 Open a Command Prompt window.



In Windows XP for instance:

- On the Windows task bar, click Start.
- 2 Select (All) Programs > Accessories > Command Prompt.
- 2 At the prompt, type ftp followed by the IP address of your SpeedTouch™ (default is 192.168.1.254).
- 3 Enter your SpeedTouch™ security user name and password.



The default user is 'Administrator' and the default password is blank.

4 The example below shows an FTP session to the SpeedTouch™ file system:

```
C: C:\WINDOWS\system32\cmd.exe-ftp 192.168.1.254

Microsoft Windows XP [Uersion 5.1.2600]

(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\nielsenv\ftp 192.168.1.254

Connected to 192.168.1.254.

220 Inactivity timer = 120 seconds. Use 'site idle \langle secs\' to change.

User \langle (192.168.1.254:\langle (none)\rangle : Administrator \overline{\sigma}

331 SpeedTouch \langle (00-0E-50-5A-D9-A0) Password required.

Password:

230 OK

ftp\
```

#### File system structure

The structure of the file system is very simple: It consists of a single root directory called *root* and a subdirectory called *dl*.

- The *root* directory contains:
  - all the necessary files for the SpeedTouch™ to boot correctly
  - the dl directory
- The **dl** (download) directory contains the software image.



If you made changes to the SpeedTouch $^{\rm m}$  configuration and saved them, a user.ini configuration settings file is created in the  $\emph{dl}$  subdirectory.





# File system access rights

On the different directories you have following privileges:

Directory	Access rights	
root	NO read/write	
dl	read/write	

# Common FTP commands

Depending on the access rights you have on a directory, you can use one of following commands:

Command	You can use to
cd	access another directory than the one currently open. Example: ftp>cd dl.
dir	list the directory files. Example: ftp>dir.
bin	set the transfer mode to 'binary'.
hash	turn on the hashing option.
put	upload files.  Example: ftp>put C:/MyBackupFiles/user.ini.  A configuration file must be uploaded to the dl directory.
get	download files.  Example: ftp>get user.ini.  Downloading the configuration file must be done from the dl directory.
delete	delete files.
bye	quit FTP.





#### FTP file transfer

To allow correct file transfers, set the transfer mode to "binary": At the ftp prompt, type **bin** and press Enter.



Turn on the hashing option to see the progression of the file transfer: At the ftp prompt type **hash** and press Enter.

#### Example:

```
/home/doejohn{1}$ftp 192.168.1.254
Connected to 192.168.1.254
220 Inactivity timer = 120 seconds. Use 'site idle <secs>' to change.
Name (192.168.1.254:doejohn):
331 SpeedTouch™ (00-90-D0-01-02-03) User 'doejohn' OK. Password requir
ed.
Password : #####
330 OK
ftp>
ftp>bin
200 TYPE is now 8-bit binary
ftp>
ftp>hash
200Hash mark printing on (8192 bytes/hash mark).
ftp>cd dl
250 Changed to /dl
ftp>put C:\user.ini
200 Connected to 192.168.1.10 port 1271
150 Opening data connection for user.ini
226 File written successfully
ftp: 256 bytes sent in 0,000Seconds 256000,000Kbytes/sec.
ftp>
```

#### Quote site command

All the CLI commands can be executed from within an FTP session. Only complete CLI commands (in other words, the complete command syntax with all the parameters already specified) can be executed.

Example: To execute the CLI command **:software cleanup**: At the FTP prompt type 'quote site software cleanup' and press Enter.

```
ftp> quote site software cleanup
200-
200 CLI command "software cleanup" executed
ftp>
```

For more information on CLI commands, see the CLI Reference Guide.



#### 1.3.4 Remote Assistance

#### Remote access

You can make your SpeedTouch accessible from the Internet with regard to remote support. This way, you can allow your helpdesk to access your SpeedTouch $^{\text{\tiny{M}}}$  remotely.

#### Enabling remote access

To enable remote assistance:

- 1 Go to the SpeedTouch™ pages, as described in "1.3.1 Access via the Web Interface" on page 11.
- 2 In the menu select Toolbox > Remote Assistance.
- 3 Click Enable Remote Assistance.
- 4 Provide the following parameters to your helpdesk:
  - URL (the HTTPS link)
  - User name
  - Password
- Your ISP is now able to access your SpeedTouch™ via the secure HTTPs link in combination with the provided certificate (a secure authentication mechanism).



For security reasons, after 20 minutes of inactivity, or on reboot, Remote Assistance will be automatically disabled.

# Disabling remote access

To disable remote assistance:

- 1 Go to the SpeedTouch™ pages, as described in "1.3.1 Access via the Web Interface" on page 11.
- 2 In the menu select Toolbox > Remote Assistance.
- 3 Click Disable Remote Assistance.



#### **Chapter 1**

Your SpeedTouch™





### 2 Local Network Setup

#### Introduction

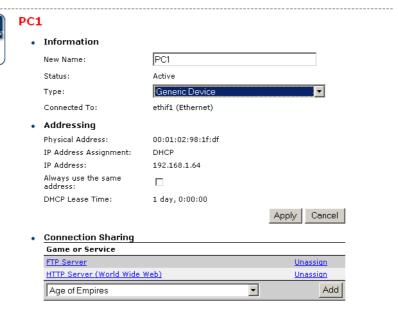
The SpeedTouch™ offers you following local networking solutions:

- Wired Ethernet
- ▶ USB (1.1)
- Wireless Ethernet

#### Device settings

Once you've connected a device, you are able to personalise its settings:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select Home Network > Devices.
- 3 Click the name of your device, or if the device's settings haven't been personalised yet, click the MAC address of the device.
- 4 On the top right, click **Configure**.
- 5 Now you can change the device's name, lock its IP address and assign applications and services to the device.







#### 2.1 Wired Ethernet

#### Local network

The Ethernet ports on the backpanel allow you to connect the SpeedTouch™ to an existing 10 or 100 Base-T Ethernet network or one (or more) computer(s) with installed Ethernet card.

Using the SpeedTouch™ Ethernet switch, you can create a local Ethernet network of up to four devices, without needing extra networking devices.



In the SpeedTouch™ package, a yellow full-wired straight-through RJ-45/RJ-45 Ethernet cable is included.

# Standard wiring procedure

Use the yellow Ethernet cable provided to wire your computer's Ethernet port to one of the SpeedTouch $^{m}$ 's Ethernet ports.

The Ethernet cable can also be used to wire any Ethernet port of your SpeedTouch™ to an external hub or switch.



Please follow the installation instructions supplied with the external hub or switch for connections and Ethernet cabling.

#### Ethernet link check

LED indicators allow you to check your Ethernet. See "1.2 SpeedTouch™ LED Behaviour" on page 8 for more information.

#### Device settings

Once you've connected a device, you are able to personalise its settings.

For more information, see " Device settings" on page 19.





#### 2.2 USB

# Supported operating systems

Installing and using the SpeedTouch™ USB connection on the SpeedTouch™ is supported for following operating systems:

- Microsoft Operating Systems:
  - MS Windows 98SE
  - MS Windows Millennium
  - MS Windows 2000
  - MS Windows XP

You may need the Windows installation CD-ROM during installation.



The installation procedures might be slightly different depending on the MS Windows OS you are using.

- Mac Operating Systems:
  - Mac OS X Jaguar (10.2)
  - Mac OS X Panther (10.3)

#### System requirements

- For Windows 98SE/ME:
  - Pentium processor 166 MHz or compatible
  - > 32 megabytes (MB) of memory
  - > 30 MB of free disk space
- For Windows 2000/XP:
  - Pentium II processor or compatible
  - 64 MB of memory
  - 30 MB of free disk space
- For Mac OS X:
  - ▶ 128 MB of memory
  - 30 MB of free disk space

#### Prerequisites

It is strongly advised to remove any SpeedTouch<sup> $\mathbb{M}$ </sup> USB driver installation that may reside on your PC before you install USB drivers from the SpeedTouch<sup> $\mathbb{M}$ </sup> Setup CD delivered with your SpeedTouch<sup> $\mathbb{M}$ </sup> product.

Make sure both your PC and SpeedTouch $^{\text{\tiny{TM}}}$  are turned on and operational.



In the SpeedTouch<sup>m</sup> package, a blue USB cable is included to connect a single computer to your SpeedTouch<sup>m</sup>.





# Installing Windows USB driver

The installation is plug and play, meaning that installation will require almost no effort.

Proceed as follows:

1 Insert the blue USB cable provided into the SpeedTouch™ USB port marked with the USB logo:



2 The other end of the USB cable fits in (one of) the USB port(s) of your PC. In most cases your PC's USB port is marked with the same USB symbol.



You can also connect your PC to the SpeedTouch™ via a USB hub.

3 Windows will automatically recognise the Thomson USB Remote NDIS device:



4 The Windows Found New Hardware Wizard appears:

This wizard will guide you through the installation procedure of the USB drivers. Click **Next** to continue.



The Windows Found New Hardware Wizard may ask your authorisation to connect to Window Update to search for software. If this is the case, select **No, not this time** and click **Next**.

- 5 Select Install the software automatically (Recommended), and click Next.
- **6** The USB driver is being installed. After a while a completing dialogue will appear. Click **Finish** to complete the installation.
- 7 As a result your USB connection is installed and ready for use.

# Verifying USB connectivity in Windows

The SpeedTouch™ USB connection is represented as a local network interface. You can easily check this interface by opening the Network Connections window from Windows' Control Panel:



# Installing Mac USB drivers

The USB driver will be installed automatically on your Mac.



On the Setup CD, the Mac USB driver is located in **stinstall.app > Contents > MacOS > CDCdriver**.

#### Device settings

Once you've connected a device, you are able to personalise its settings. For more information, see "Device settings" on page 19.





#### 2.3 Wireless Ethernet

#### Introduction

The SpeedTouch™ Wi-Fi® certified IEEE 802.11g compliant wireless access point allows multiple computers to connect wirelessly to your local network over the SpeedTouch™ Wireless LAN environment. The SpeedTouch™ is backward compatible with IEEE 802.11b, which means 802.11b and 802.11g devices can coexist in the same wireless network.

The Wireless Distribution System (WDS) on your SpeedTouch™ allows you to extend the range of your wireless network. To be able to use WDS, you will need to introduce an additional WDS-enabled access point into your wireless network.

To be able to connect the computers, make sure that a wireless client adapter (WLAN client) is installed on each computer you want to connect via the WLAN.

# Wireless client requirements

All wireless client adapters compliant to 802.11g and/or 802.11b, will be able to communicate with the SpeedTouch™ and other members of the SpeedTouch™ (W)LAN environment. However, be aware that only 802.11g compliant wireless clients are able to gain full profit of the 54 Mb/s (Max) bandwidth delivered by the SpeedTouch™.

It is highly recommended to use only wireless client adapters that are Wi-Fi™ certified to ensure smooth interoperability with the SpeedTouch™'s WLAN.





#### 2.3.1 Wireless Basics

#### Introduction

In this section some key wireless concepts are explained.

#### 802.11b/g

802.11b is an IEEE standard, operating at 2,4 GHz at a speed of up to 11 Mb/s.

802.11g, a newer IEEE standard also operating at 2,4 GHz, gives you up to 54 Mb/s speed, more security and better performance.

#### Wireless Fidelity

The Wi-Fi certification ensures that your SpeedTouch™ will interoperate with any Wi-Fi certified 802.11g and 802.11b compliant wireless device.

#### Access Point

The SpeedTouch™ Wireless LAN Access Point (AP) behaves as a networking hub allowing to wirelessly interconnect several devices to the local (W)LAN and to provide access to the Internet.

#### Network Name or SSID

The WLAN's 'radio' link is a shared medium. As no physical connection exists between the SpeedTouch and wireless clients, a name must be given to allow unique identification of your WLAN radio link. This is done by the Service Set ID (SSID), also referred to as Network Name. Wireless clients must be part of this SSID environment in order to be able to communicate with other clients on the (W)LAN - including the SpeedTouch.

#### Radio channels

The 802.11g standard allows several WLAN networks using different radio channels to be co-located. The SpeedTouch™ supports multiple radio channels and is able to select the best radio channel at each start-up.

You can choose to set the channels automatically or manually.



The different channels are overlapping. To avoid interference with another access point, make sure that the separation (in terms of frequency) is as high as possible. It's recommended to keep at least 3 channels between 2 different access points.

The SpeedTouch™ supports all channels allowed for wireless networking. However, depending on local regulations, the number of channels actually allowed to be used may be additionally restricted, as shown in the table below:

Regulatory Domain	Allowed Radio Channels
China	1 to 13
Europe	1 to 13
Israel	5 to 8
Japan	1 to 14
Jordan	10 to 13
Thailand	1 to 14
USA	1 to 11



#### **Antennas**

Direct the external antenna to allow optimization of the wireless link. If for example the antenna is erect, wireless links in the horizontal plane are favoured. Please note that the antenna characteristics are influenced by the environment, that is by reflections of the radio signal against walls or ceilings. It is advisable to use the received signal strength as indicated by the wireless client manager to optimize the antenna position for the link to a given client.

Concrete walls will die down the radio signal strength and thus affect the connection.





### 2.3.2 Connecting First-time Wireless Clients

# Wireless default settings

After every Reset-to-Defaults, the SpeedTouch™ wireless access point configuration is returned to its initial default settings.

These default settings are:

- Security level is low (security disabled) for an easy first use, meaning the data will not be encrypted. Wireless security settings are described in "2.3.3 Wireless Security" on page 29.
- ▶ The SpeedTouch™ is broadcasting its network name (SSID).

This default network name (SSID) is printed on the identification label located on the bottom of your SpeedTouch™ and is unique for each device. It consists of the concatenation of the word "SpeedTouch" and 6 hexadecimal characters, without any spaces, for example SpeedTouch123456.

- The radio channel number is set to 'automatically scan for the best radio channel'
- Registration is not activated. New stations are allowed automatically. The Access Control List is open and empty. No wireless client will be denied access to the SpeedTouch™ based on its physical hardware address.



The default wireless settings may differ from the settings listed above depending on your Service Provider's requirements. If this is the case, refer to the installation/configuration instructions provided by your Service Provider.

# Preparing first-time wireless clients

#### Make sure that:

- The SpeedTouch™ is powered on and ready for service.
- The SpeedTouch™ is in its default configuration.

If needed, reset the SpeedTouch™ to its default configuration (See "6.3 Reset to Factory Defaults" on page 115 for more information).

- A wireless client adapter is installed on your computer.
- The wireless client adapter's IP configuration is set to dynamically obtain its IP configuration (DHCP) this is usually the default. For more information, see the documentation of your wireless client adapter.

# Configuring first-time wireless clients

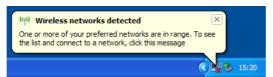
The wireless client must be correctly configured for the default network name. As the SpeedTouch™ broadcasts its network name to the wireless clients, you can select the SpeedTouch™ wireless network from a list of available networks. Depending on your wireless client a wireless icon may become green or a message similar to the following may pop up: "Successfully joined Wireless network SpeedTouch123456".



Some wireless clients do not automatically join a wireless network. If so, follow the instructions for the wireless client software to initiate association.

# First-time association example

In the example below is shown how the SpeedTouch™ wireless network is presented towards an MS Windows XP Service Pack 2 system:



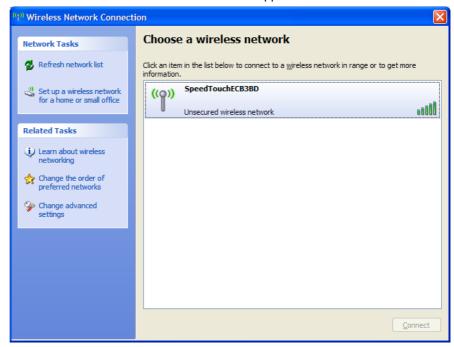


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To associate your wireless client to the SpeedTouch™:

- 1 Click the network icon in the notification area:
- 2 The Wireless Network Connection window appears:



In the **Choose a wireless network** list, select the SpeedTouch™ wireless network and click **Connect**.

3 Following window appears:



#### Click Connect Anyway.

4 Your computer is now connected to the SpeedTouch™ wireless network.





For other Operating Systems the wireless client will in most cases be configured via dedicated client managers.

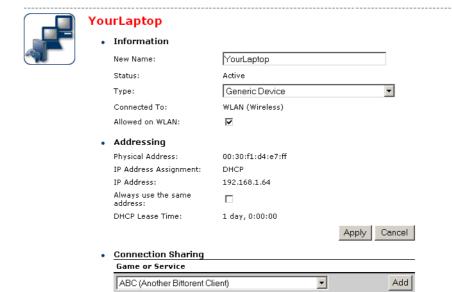




# Wireless device settings

Once you've connected a device, you are able to personalise its settings.

For more information, see " Device settings" on page 19.





To add a wireless device to the Access Control List (ACL), select **Allowed on WLAN**.



### 2.3.3 Wireless Security

#### Introduction

Since the SpeedTouch™ wireless environment is a radio environment, precautions must be taken to ensure that your wireless network is safe from malicious intruders.

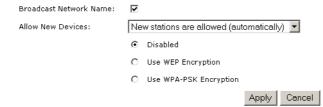
To secure your wireless network, following wireless access point settings can be personalised:

- Your Network Name (SSID)
- ACL setting
- Data encryption

#### Security settings

To personalise the wireless security settings on your SpeedTouch™:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select Home Network.
- 3 Click your WLAN.
- 4 On the top right, click Configure.
- 5 On the Wireless Access Point page, you can modify the Security settings.
- Security



#### Network Name (SSID)

On the Wireless Access Point page, you can give a new name to your Network Name (SSID).

Under **Security**, you can clear **Broadcast Network Name (SSID)**, to prohibit the Network Name from being broadcasted.

## Access Control List (ACL)

The SpeedTouch™ features a managed Access Control List (ACL) front .

On the Wireless Access Point page, you have following options for the ACL: New stations are

- ▶ Allowed (automatically): All new stations can access the SpeedTouch™.
- Allowed (via registration): Only allowed stations in the ACL have access.
- Not allowed: Only allowed stations in the ACL have access.





#### Data encryption

To setup wireless connectivity, you can choose different levels of security:

- Low (Security disabled, the default): No security; the data will not be encrypted, no authentication process will be used.
- Medium: Use WEP (Wired-Equivalent Privacy) to encrypt the traffic between the SpeedTouch™ and the clients by sharing a pre-defined 64-bit or a 128-bit Network key for secure communication with legacy 802.11b clients.



The default 64 bits hexadecimal WEP key is printed on the identification label located at the bottom of the SpeedTouch™ and is unique for each device.

High: Use WPA-PSK (Wi-Fi Protected Access Pre-Shared Key) encryption, the highest form of security available, but make sure that your wireless client and client manager are compatible with it.



The default WPA-Personal passphrase is printed on the identification label located at the bottom of the SpeedTouch™ and is unique for each device.

The WPA-Personal passphrase must consist of 8 to 63 ASCII characters or 8 to 64 HEX digits.





### 2.3.4 Connecting Additional Wireless Clients

#### **Preconditions**

#### Make sure that:

- The SpeedTouch™ is powered on and ready for service.
- The SpeedTouch™ has been configured as DHCP server (default).
- The wireless client adapters have been installed on all computers you want to connect to the WLAN.

#### Security issues

Depending on the personalised wireless settings:

- Make sure to use the same encryption or security level on the client as on your SpeedTouch™. If for instance WPA-PSK is enabled on the SpeedTouch™, you must also configure the wireless client to use WPA-PSK and configure the same WPA-PSK passphrase.
- In case the Network Name (SSID) is not broadcasted, you must configure the wireless client for the SpeedTouch™ Network Name. Refer to the documentation of your wireless client for more information.
- Depending on the ACL settings:
  - In case **New stations are allowed (automatically),** your device will be able to access the SpeedTouch™ WLAN.
  - In case New stations are allowed (via registration), you will need to register.
  - In case New stations are not allowed, you will not be able to access the SpeedTouch™.

## Registering wireless clients

In case 'New stations are allowed (via registration), you can add a wireless client to the ACL via:

- Registering clients
- Registering clients via association button

#### Registering clients

You can add a wireless client to the ACL as follows:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select Home Network > Devices.
- 3 Under Pick a task..., click Search for wireless devices.
- 4 The SpeedTouch™ searches for new wireless stations that use the encryption key of the SpeedTouch™ Access Point.
- The SpeedTouch™ takes you to the Home Network. The new station will be shown next to the name of the SpeedTouch™ WLAN.
- 6 Click the name of the new station.
- 7 Click Configure.
- 8 Select Allowed on WLAN and click Apply.
- 9 Now the device is added to the ACL and will always be allowed to connect to the SpeedTouch™.





## Registering clients via association button

You can easily register new wireless network clients as follows:

Push the Association / on the SpeedTouch™front panel for at least two seconds. The WLAN LED will toggle between green and red.

The ACL will be unlocked for a time frame of one minute. Any new wireless client successfully attempting to connect to the SpeedTouch™ (having the correct wireless settings, that is the network name and, if required, the network key) within the time frame of one minute, will be added to the table. The SpeedTouch™ automatically saves your current configuration at the end of the registration phase.



Some WLAN clients do not automatically join a WLAN. If so, follow the instructions for the WLAN client software to initiate the association.

- Successfully registered stations are associated to the SpeedTouch™ WLAN. Depending on your WLAN client adapter, a wireless icon may become green or a message similar to the following may appear: "Successfully joined Wireless network SpeedTouch123456".
- 2 The wireless clients will be added to the SpeedTouch™ ACL.
- 3 After one minute the ACL is locked.



The registration procedure can be repeated as often as needed.

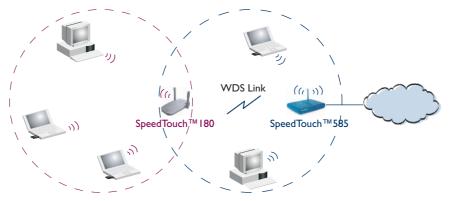


### 2.3.5 Extending the Range of Your Wireless Network

#### **WDS**

The SpeedTouch™ features Wireless Distribution System (WDS) functionality. This feature allows you to extend the range of your wireless network by introducing one or more WDS-enabled devices into your wireless network.

The Wireless Distribution System (WDS) enables data packets to pass from one wireless access point to another, just as if the access points were ports on a wired Ethernet switch. WDS allows you to extend the range of your SpeedTouch™ by means of one or more wireless repeaters, like for instance a SpeedTouch™ 180. The following illustration depicts two WDS-enabled devices communicating via WDS:





The SpeedTouch™ allows you to add up to four wireless repeaters.



Repeaters extend the coverage area of your wireless LAN, however bear in mind that throughput is reduced for wireless clients that are connected through a repeater.

#### Preconditions

#### Check on following:

- Your wireless repeater must be WDS enabled.
- Both your SpeedTouch™ and your wireless repeater must use:
  - The same WEP key if WEP is enabled.



WPA encryption is not supported when using WDS.

The same *fixed* channel.



The SpeedTouch<sup>m</sup> and your wireless repeater do not necessarily need to use the same SSID. Using different SSIDs allows you to force your wireless clients to use either the access point of the SpeedTouch<sup>m</sup> or the one of your wireless repeater.





#### Configuring WDS

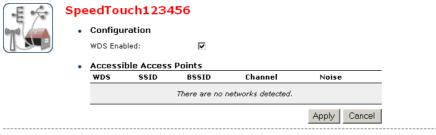
To configure your WDS on the web pages:

- f Go to the SpeedTouch™ web pages.
- 2 In the menu select Home Network.
- 3 Click your WLAN.
- 4 On the top right, click **Configure**.



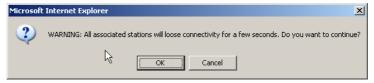
If not already done, set a *fixed* channel and check whether the security settings (WEP encryption or no encryption) on your SpeedTouch<sup> $\mathrm{IM}$ </sup> are the same as on the repeater.

On the Wireless Access Point page, in the Pick a task... list, click Configure WDS.



#### Pick a task...

- Scan for wireless accesspoints
- 6 Select WDS Enabled.
- 7 In the Pick a task... list, click Scan for wireless access points.
- 8 A warning will be displayed:.



Click OK.

- 9 The SpeedTouch™ will scan for access points on the same radio channel.
- 10 Select your repeater in the List of Accessible Access Points and click Apply.







### 3 Internet Connectivity Dial-In Clients

#### Introduction

For setting up initial Internet connectivity, using the Home Install Wizard on the Setup CD or the embedded Easy Setup, refer to the provided Installation and Setup Guide.

#### Access methods

Depending on the configuration of the SpeedTouch™ you may have:

#### Direct access:

As soon as the initial configuration has been done, immediate and uninterrupted WAN access is provided.



In case of direct access, the remote organisation might ask for a user name and password on an Internet welcome page.

#### Dial-in access:

Access must be explicitly established, that is by "dialling" into a Broadband Remote Access Server (BRAS).

Depending on the SpeedTouch™ configuration, dial-in access is provided via the SpeedTouch™'s Routed PPPoA or Routed PPPoE packet services with embedded PPP client.

#### Connection protocols

The applied connection protocol model depends on the service profile you selected to configure the SpeedTouch™ and should correspond with the Service Provider's requirements. If your ISP provides PPPoE for instance, you should configure PPPoE.

More information on connection protocols can be found in the Internet Connection Configuration Guide.

#### Dial-in clients

There are different ways of dialling in, depending on the operating system on your PC and your preferences.

Dial-in method:	can be used on following operating system:	For more information, see:	
Embedded PPP dial-in clien	pedded PPP dial-in client:		
Dial-in client on embedded pages	MS Windows, Mac, unix, other	"3.1 SpeedTouch™ Web Pages"	
MS Windows XP IGD Control Agent for UPnP	MS Windows XP	"3.2 IGD Control Agent" on page 39	
Host PPP dial-in client for a SpeedTouch™ configured in pure bridging		pure bridging mode:	
MS Windows XP Broadband connection	MS Windows XP	"3.3 MS Windows XP BroadBand Connection"	
Mac OS X PPPoE dial-in client	Mac OS X	"3.4 Mac OS X PPPoE Dial-in Client"	





## Embedded PPP dial-in clients

The SpeedTouch™'s embedded PPP dial-in client allows you to establish an Internet connection for computers residing on your local network, using only one computer of the network to control the client.

If this computer runs:

- Any Operating System
  you can always use the SpeedTouch™ web pages.
   See "3.1 SpeedTouch™ Web Pages" on page 37 to proceed.
- MS Windows XP you can use MS Windows XP's Internet Gateway Device Control Client. See "3.2 IGD Control Agent" on page 39 to proceed.

## Broadband host PPPoE dial-in clients

You can also connect to the Internet using a Broadband PPPoE dial-in application. The PPP over Ethernet connection scenario provides PPP-like dial-in behaviour over the virtual Ethernet segment.

To be able to use a broadband dial-in application on your computer for connecting to the Internet, the SpeedTouch™ needs to be configured for Bridged Ethernet or Routed PPPoE (with PPPoE relay) via the SpeedTouch™ Home Install Wizard on the Setup CD or the embedded Easy Setup.

If this computer runs:

- MS Windows XP you can use the MS Windows XP broadband dial-in client. See "3.3 MS Windows XP BroadBand Connection" on page 41 for more information.
- Mac OS X

you can use a Mac OS X broadband dial-in client. See "3.4 Mac OS X PPPoE Dial-in Client" on page 45 for more information.

- or -

 A broadband PPPoE dial-in client provided by your Service Provider to connect to the Internet



Upon availability of OS-specific PPPoE dial-in client applications, the latter method is Operating System independent.

For PPPoE session connectivity from a Mac OS 8.6/9.x, an MS Windows 95/98(SE)/ME/2000 or a Linux system, a host PPPoE dial-in application is mandatory.





### 3.1 SpeedTouch™ Web Pages

#### Introduction

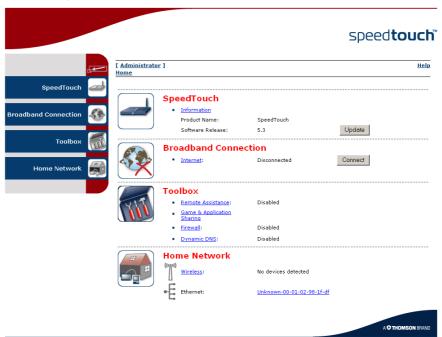
As the SpeedTouch™ web pages are controllable from any Operating System with an installed web browser, the method to establish PPP sessions described below you can use on any computer system.

For more information on Internet connection setup, see the provided Installation and Setup Guide.

## Starting an Internet session

#### Proceed as follows:

Open a web browser on your computer and browse to the SpeedTouch™ web pages (see "1.3.1 Access via the Web Interface" on page 11 for more information):



By default the SpeedTouch™ shows you the **Home** page.

2 Click **Connect** at the appropriate broadband connection.

You might be requested to enter your user name and password.

3 Now you can surf the Internet.

#### Monitoring your Internet connection

You are able to overview and monitor your Internet connectivity as long as the session is running via:

- The SpeedTouch™ System Information page: see "4.3.1 Information" on page 56.
- ► The SpeedTouch™ Diagnostics task: see "4.4.1 Connectivity Check" on page 65.

speed**touch**™



## Terminating an Internet session

To close an active PPP connection:

- **1** Go to the SpeedTouch<sup>™</sup> Home page.
- 2 Click **Disconnect** at the appropriate broadband connection.

As a result the SpeedTouch™'s embedded PPP dial-in client will close the Internet connection. The Internet Link status will change to **Disconnected** and your PC is off-line.





### 3.2 IGD Control Agent

#### Introduction

MS Windows XP users can easily establish PPP sessions, thanks to MS Windows XP's Internet Gateway Device (IGD) Discovery and Control Client that allows you to control the SpeedTouch™ directly from you PC.



The IGD control client only allows to connect or to disconnect a fully configured connection.

#### **Preconditions**

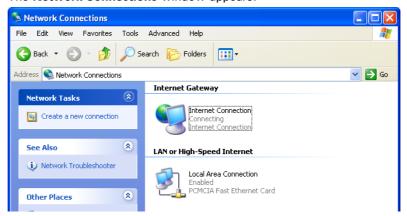
Following conditions must be met:

- Following subcomponents of Windows XP's Networking Services must be added to your Windows XP system:
  - UPnP™ (see "SpeedTouch™ not detected by UPnP™ or IGD Control Client" on page 113).
  - IGD Discovery and Control Client (see "Adding IGD Discovery and Control" on page 114).
- UPnP™ must be enabled on your SpeedTouch™. To enable UPnP, see "4.5.2 Game & Application Sharing" on page 71.

## Starting an Internet session

Proceed as follows:

- 1 In the Windows task bar, click Start.
- 2 Select (Settings >) Control Panel.
- 3 The Control Panel window appears. Go to (Network and Internet Connections >) Network Connections.
- 4 The **Network Connections** window appears:



You will find an **Internet Gateway** icon, representing the SpeedTouch™ IGD Internet connection ability.

5 Double-click the Internet Connection icon.

As a result the SpeedTouch™'s embedded PPP dial-in client establishes the Internet connection. The **Internet Gateway** icon displays **connected** and your PC is online.

You can open a web browser and surf the Internet.





## Internet connection status

As long as the SpeedTouch™'s embedded PPP dial-in client is connected, you are able to overview the connection status and some counters by double-clicking the **Internet Connection** icon in your PC's **Network Connections** window:



## Terminating an Internet session

Proceed as follows:

- 1 In the Windows task bar, click Start.
- 2 Select (Settings >) Control Panel > (Network and Internet Connections >) Network Connections.
- 3 In the Network Connections window, right-click the Internet Connection icon and select Disconnect to close the session.



You can also double-click the icon. Then the **Internet Connection Status** window will appear on which a **Disconnect** button is available to close the session.

As a result the SpeedTouch™'s embedded PPP dial-in client will close the Internet connection. The **Internet Gateway** icon displays **Disconnected** and your computers are off-line.





### 3.3 MS Windows XP BroadBand Connection

#### Prerequisites

To be able to use the MS Windows XP BroadBand Connection, your SpeedTouch™ must be configured for either:

- Bridging, or
- PPPoE Relay

## Configuring a broadband connection

#### Proceed as follows:

- 1 On the Start menu, click (Settings >) Control Panel.
- 2 The Control Panel window appears. Go to (Network and Internet Connections >) Network Connections.
- 3 In the Network Tasks menu, click Create a new connection.

The **New Connection** Wizard appears:



#### Click Next.

- 4 Select Connect to the Internet and click Next.
- 5 Select Set up my connection manually and click Next.
- 6 Select Connect using a broadband connection that requires a user name and password and click Next.
- **7** Give a name to the connection you are creating, for example YourlSP:







8 Select whether the connection will be available to any user or only to yourself:



**9** Fill in the Internet account information. This information should be provided by your service provider:



10 At the end of the configuration the following window appears:



Click Finish to complete the configuration.

The Connect YourISP window (see below) appears.





#### Starting a broadband Internet session

#### Proceed as follows:

On the Start menu, point Connect To and click the name of the connection you've created, for example YourISP.



If you are using the Classic Start menu click Start > Settings > Network (and Dial-up) connections > YourISP.

2 The Connect YourISP window appears:



- 3 If requested, enter user name and password for your user account at the Service Provider.
- 4 Click Connect.
- As soon as the connection is established, the **Connection** message box and **Dialup** window are minimised into an icon in the notification area:



6 You can open your web browser and surf the Internet.



44



#### Terminating a broadband Internet session

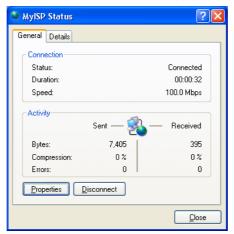
Proceed as follows:

On the Start menu, point Connect To and click the name of the connection you've created, for example YourISP.



If you are using the Classic Start menu go to Start > Settings > Network (and Dial-up) connections > YourISP.

The YourISP Status window appears: 2



- 3 Click Disconnect.
- The connection is released. As a result no Internet connectivity exists any more.





### 3.4 Mac OS X PPPoE Dial-in Client

#### Prerequisites

To be able to use the MS Windows XP BroadBand Connection, your SpeedTouch™ must be configured for either:

- Bridging, or
- PPPoE Relay

## Configuring a broadband connection

#### Proceed as follows:

- On the Apple menu, click System Preferences.
- 2 In the System Preferences window, click the Network icon.
- 3 The Network window appears. Make sure Built-in Ethernet is selected in the Show list and click the PPPoE tab:



4 Enter the Account Name and Password provided by your Service Provider.



Select **Save password** in case you want the computer to remember the password for this account name.

Optionally you can enter a name for this connection in the **Service Provider** field. All other fields may stay empty.

5 Click Apply Now.





#### Starting a broadband Internet session

#### Proceed as follows:

1 Click the Internet Connect dockling.



If the **Internet Connect** dockling is not available, go to the **Applications** folder on the system startup disk and double-click **Internet Connect**.

2 The following window appears:



Make sure Built-in Ethernet is selected in the Configuration list.

- 3 If needed, enter user name and password for your user account at the Service Provider.
- 4 Click Connect.
- 5 As soon as the connection is established you can open your web browser and surf the Internet.

# Terminating a broadband Internet session

#### Proceed as follows:

1 Click the Internet Connect dockling.



If the **Internet Connect** dockling is not available, go to the **Applications** folder on the system startup disk and double-click **Internet Connect**.

2 The following window appears:



Make sure Built-in Ethernet is selected in the Configuration list

- 3 Click Disconnect.
- 4 The connection is released. As a result no Internet connectivity exists any more.





### 4 SpeedTouch™ Web Interface

#### Introduction

The SpeedTouch™ comes with embedded HTML pages, providing an interface to the software installed on the device. It allows easy setup and management of the SpeedTouch™ via your web browser form any PC connected to the SpeedTouch™.

See "1.3.1 Access via the Web Interface" on page 11 to access the pages.

## SpeedTouch™ documentation

#### Consult:

The SpeedTouch™ Installation and Setup Guide for more information on setup and installation procedures.



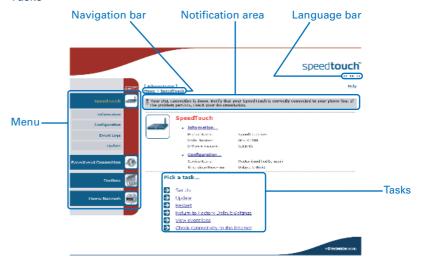


## 4.1 Navigation

#### Navigation components

The SpeedTouch  $^{\mathtt{m}}$  web interface consists of following components:

- Menu
- Language Bar
- Navigation Bar
- Notification Area
- Tasks







### 4.1.1 Menu

#### Menu items

The menu is located on the left side of the page and consists of the following menu items:

#### SpeedTouch:

Provides basic information on the SpeedTouch™.

#### ▶ Broadband Connection:

Allows you to view/configure your broadband connections.

#### Toolhov:

Allows you to assign games or applications to a device and secure your Internet connection.

#### ▶ Home Network:

Allows you to manage your local network.

## Collapsing and expanding the menu

You are able to collapse/expand the menu by clicking the arrow located on the top of the menu.







### 4.1.2 Language Bar

Language bar

The language bar is located under the SpeedTouch $^{\text{\tiny{IM}}}$  logo and allows you to change the language of the SpeedTouch $^{\text{\tiny{IM}}}$  web interface.



The language bar will only be shown if more than one language is available.





### 4.1.3 Navigation Bar

#### Navigation bar

The navigation bar is located on the top of the page and allows you to:

- View the current user name.
   Click this name to change your password or switch to another user.
- View the current position on the SpeedTouch™ web interface.
- ▶ Get context related **Help** information.

#### Display level

Depending on the page you are viewing following buttons will be available:

- **Overview** to view a summary of the current status or configuration.
- Details to view more detailed information on the current status or configuration.
- **Configure** to change the current settings.





### 4.1.4 Notification Area

#### Notification area

The notification area is located under the Navigation Bar and is used to display:

- Error messages indicated by a red traffic light.
- Warnings indicated by an orange traffic light.
- Information indicated by a green traffic light.



If none of these events occur, the notification area will not be shown.





### 4.1.5 Tasks

Tasks

To allow a swift configuration of your SpeedTouch™, some pages may offer you a number of related tasks. These tasks will guide you to the page where you can perform the selected task.



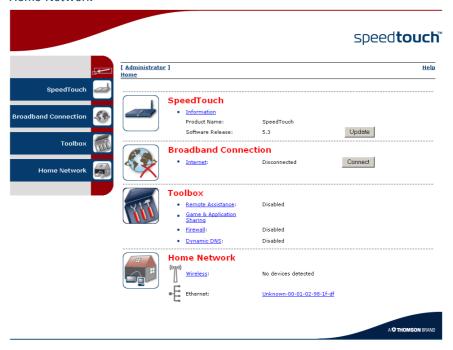


### 4.2 Home

## SpeedTouch™ home page

The SpeedTouch<sup> $\mathbb{M}$ </sup> home page gives you a short overview of all the configurable aspects of the SpeedTouch<sup> $\mathbb{M}$ </sup>:

- SpeedTouch
- ▶ Broadband Connection
- Toolbox
- ▶ Home Network







### 4.3 SpeedTouch

#### The SpeedTouch menu

The **SpeedTouch** menu consists of following items:

- Information
- Configuration
- Event Logs
- Update

#### The SpeedTouch page

The **SpeedTouch** page gives you some basic information on the SpeedTouch™:

- Product Information
- Configuration







### 4.3.1 Information

#### Information

The **Information** page summarizes important information on your SpeedTouch $^{\text{\tiny{TM}}}$ . You may need this information when you contact your helpdesk.



#### **System Information**

This page summarizes important information on your SpeedTouch. You may need this information when you contact your helpdesk.

 Product Name:
 SpeedTouch 585

 Serial Number:
 0452DT108

 Software Release:
 5.3.0.15

 Software Variant:
 AA

 Boot Loader Version:
 1.0.16

 Product Code:
 35723430

 Board Name:
 BANT-K





### 4.3.2 SpeedTouch™ Easy Setup

#### Easy Setup Wizard

This wizard helps you configure your SpeedTouch™ Internet connection.

To configure the SpeedTouch™ using the SpeedTouch™ Easy Setup wizard:

- 1 On the left menu, click SpeedTouch.
- 2 In the Pick a task... list, click Set up.
- 3 The Easy Setup wizard will now guide you through the configuration of your SpeedTouch™.







### 4.3.3 Restart

#### Accessing the Restart page

#### Proceed as follows:

- 1 On the left menu, click SpeedTouch.
- 2 In the Pick a task... list, click Restart.



Warning: System Restart
You are about to restart your SpeedTouch. All active connections will be restarted.

Do you want to proceed?

Yes, restart my SpeedTouch

#### Restarting your SpeedTouch™

#### Proceed as follows:

- 1 Click Yes, restart my SpeedTouch.
- 2 The SpeedTouch™ restarts.
- 3 The SpeedTouch™ returns to the Home page.





### 4.3.4 Configuration

Overview

The **Overview** page displays the current configuration of your SpeedTouch™.

Details

The **Details** page displays more detailed information on the current configuration of your SpeedTouch™.

#### Configure

The **Configure** page allows you to change the current configuration.



#### **System Configuration**

This page lets you configure your SpeedTouch.

• Service Configuration

You cannot directly edit the service settings of your SpeedTouch. In order to modify those settings, you must use the <u>Configuration Wizard</u> and follow the instructions appearing on the screen.

Service Name:	Router
Time Configuration	
Auto-configuration:	
Date (dd-mm-yyyy):	
Time (hh:mm:ss):	: :
Timezone:	(UTC+01:00) Amsterdam, Bern, Rome, Stc
Summer Time:	
System Configuration	
Web Browsing Interception:	⊽
	Apply Cancel

#### If you want to:

- Reconfigure your SpeedTouch™: Click Configuration Wizard under Service Configuration. For more information, see "4.3.2 SpeedTouch™ Easy Setup" on page 57.
- Configure the time settings of your SpeedTouch™:
  - Select Auto-configuration if you want the SpeedTouch™ to use a time server to synchronise its clock to a dedicated time server.
  - Clear Auto-configuration to manually configure the SpeedTouch™ time settings.
- Disable/enable web browsing interception or set it to automatic.
  - If you disable web browsing interception or set it to automatic you will not be able to use Parental Control.

Click Apply to save your settings.





### 4.3.5 Backup & Restore

#### Introduction

This page allows you to:

- Save your current configuration.
- Restore a previously saved configuration.



#### Backup & Restore

This page enables you to save and restore the configuration of your SpeedTouch. Follow instructions below...

· Backup current configuration

In order to store the current configuration of your SpeedTouch, click on the `Backup Configuration Now...' button. You will be prompted by your web browser to store the configuration file locally on your hard disk. Choose a location and store the file on your computer.

Backup Configuration Now...

· Restore saved configuration

You can restore a configuration file you have previously stored on your computer.

Click on `Browse', choose the configuration file you want to restore on your SpeedTouch and click on `Restore Configuration Now...' to restore the configuration.

Configuration File:		Browse
Restore Configuration N	low	

## Accessing the Backup & Restore page

Proceed as follows:

- 1 On the SpeedTouch menu, click Configuration.
- 2 Click Configure
- 3 In the Pick a task... list, click Save or Restore Configuration.

## Saving your current configuration

Proceed as follows:

- 1 Click Backup Configuration Now.
- 2 Click Save.
- 3 Choose a location to save your backup file and click **Save**.

## Restoring a previously saved configuration

Proceed as follows:

- 1 Click Browse.
- 2 Select the configuration file you want to restore and click **Open**.
- 3 Click Restore Configuration Now....
- 4 The SpeedTouch™ loads your configuration and restarts.
- 5 At the end of the procedure, the SpeedTouch™ returns to the Home page.





### 4.3.6 Reset to Factory Defaults

#### Introduction

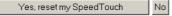
This page allows you to reset the SpeedTouch™ to return to the initial configuration of your SpeedTouch™. All your changes will be deleted.



#### Warning: Reset to Factory Defaults

You are about to reset your SpeedTouch to factory default settings. All active connections will be disconnected.

Do you want to proceed?



## Accessing the Reset to Factory Defaults page

#### Proceed as follows:

- On the left menu, click **SpeedTouch**.
- 2 In the Pick a task... list, click Return to Factory Default Settings.

#### Resetting the SpeedTouch™ to factory defaults

If you want to reset your SpeedTouch™ to factory defaults, click **Yes, reset my SpeedTouch**.



If you reset your SpeedTouch  $^{\mathtt{m}}$  to factory default settings, all active connections will be disconnected.

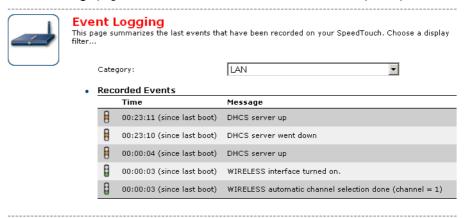




### 4.3.7 Event Logs

#### **Event Logging**

The **Event Logs** page summarizes the latest events recorded on your SpeedTouch™.



#### Recorded Events table

The **Recorded Events** table gives you an overview of the latest event logs that have been recorded since power on. The first column of the table indicates the importance of the event log

Indicator	Description
8	Informational
	Warning
8	Error

The **Category** list allows you to filter the events shown in the **Recorded Events** table. For example, by clicking **Security** you can view all security related events, for example generated by the SpeedTouch™ firewall.





### 4.3.8 Update

# Updating the SpeedTouch™ system software

The **Update** page allows you to:

- View System Information.
- View information on the current System Firmware.
- Update your SpeedTouch™ from a remote server.
  Use this option if you want to have yourSpeedTouch™ check on the internet for new firmware and update if it found one.
- Update from a PC. Use this option if you want to install on your SpeedTouch™ that is located on the PC.



#### System Update

This page allows you to update your SpeedTouch with the latest software version available. Choose a way to update your SpeedTouch and follow the instructions.

System Information

 Product Name:
 SpeedTouch 585

 Serial Number:
 0452DT108

 Boot Loader Version:
 1.0.16

 Product Code:
 35723430

 Board Name:
 BANT-K

System Firmware

Current Software Version: 5.3.0.15
Current Software Variant: AA

Available Software Version: No update available

#### Update SpeedTouch from remote server...

To check if a new software version is available click on 'Check For Updates...'

Check For Updates

#### **Upgrade from PC**

To update your SpeedTouch from your PC, you may follow the three steps described below.

1-Download the latest software to your PC.

You may update your SpeedTouch by downloading the latest software from the <u>SpeedTouch Support</u> <u>Site</u> to your PC's hard drive.

2-Upload software to your SpeedTouch

Select the update file you have placed on your PC's hard drive.

Browse...

3-Load the new software and restart your SpeedTouch

Note: uploading the new software takes several minutes to complete.

Proceed





### 4.4 Broadband Connection

## The Broadband Connection menu

The Broadband Connection menu consists of following menu items:

- DSL Connection
- ▶ Internet Services

## The Broadband Connection page

The **Broadband Connection** page gives you a short status overview of the connections configured on the SpeedTouch $^{\text{TM}}$ .



Click View more to see more information on the selected broadband connection.



If you configured a dial-up connection, you are able to establish/terminate the connection by clicking **Connect/Disconnect**.





# 4.4.1 Connectivity Check

## Introduction

This page enables you to perform a connectivity check on an Internet service of your  $\mathsf{SpeedTouch}^\mathsf{m}$ .



# Accessing the Connectivity Check page

#### Proceed as follows:

- 1 On the left menu, click Broadband Connection.
- 2 In the Pick a task... list, click Check connectivity to the Internet.

# Checking you Internet Connectivity

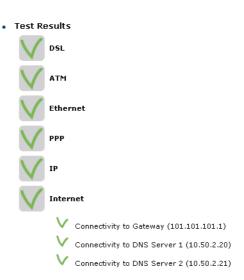
#### Proceed as follows:

- In the Internet Service to Check list, click the Internet service that you want to check.
- 2 Click Check Connectivity.
- 3 The SpeedTouch™ lists the test results in the **Test Results** list.

# Analysing the test results

If the test is successful, you will get a list of green check marks. Otherwise a red cross will indicate which tests have failed.





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# 4.4.2 DSL Connection

Overview

Click **Overview** to view brief information on your DSL connection.

Details

Click **Details** to view a more detailed information on your DSL connection.



## **DSL Connection**

Link Information

	Uptime:	0 days, 0:43:10
	Modulation:	G.992.1 Annex A
	Bandwidth (Up/Down) [kbps/kbps]:	544 / 2.272
	Data Transferred (Sent/Received) [KB/KB]:	0,00 / 0,00
	Output Power (Up/Down) [dBm]:	11,5 / 7,5
	Line Attenuation (Up/Down) [dB]:	2,0 / 0,0
	SN Margin (Up/Down) [dB]:	5,0 / 6,5
	Vendor ID (Local/Remote):	TMMB / ALCB
	Loss of Framing (Local/Remote):	0/0
	Loss of Signal (Local/Remote):	0/0
	Loss of Power (Local/Remote):	0/0
	Loss of Link (Remote):	0
	Error Seconds (Local/Remote):	0/0
	FEC Errors (Up/Down):	0/0
	CRC Errors (Up/Down):	0/0
	HEC Errors (Up/Down):	0/0
-		





# 4.4.3 Internet Services

# Internet Services information

The Internet Services page displays information on your Internet Connection(s).



## Internet

Disconnect

• View more...

 
 Type:
 PPP0E

 Uptime:
 0 days, 0:21:48

 IP Address:
 101:101:101:39

 Data Transferred (Sent/Received) [KB/B]:
 3,39 / 282



If you configured a dial-up connection you are able to establish/terminate the connection by clicking **Connect/Disconnect**.

To view more detailed information on a specific connection, click the **View more**... link of the corresponding connection.





# 4.4.4 Internet Service Settings

# Accessing the Internet Service Settings page

Proceed as follows:

- On the Broadband Connection menu click Internet Services.
- 2 Click the View more link of the internet service you want to view.

#### Overview

The Overview page gives you basic information on the selected Internet Service.



If you configured a connection you are able to establish/terminate the connection by clicking **Connect/Disconnect**.

#### Details

The **Details** page gives you more detailed information on the selected Internet Service.



#### Internet

Disconnect

• Connection Information

Uptime: 0 days, 0:22:44
Data Transferred
(Sent/Received) [KB/B]: 3,39 / 282

Connection Settings

PVC Info (VPI.VCI): 8.35 Type: PPPoE

PPP Settings

Username: cpesit@rednet
Password: \*\*\*\*\*\*\*\*
Connection Mode: Always-On
Service Name: -

Concentrator Name: 15031100007146-Redback

TCP/IP Settings

IP Address: 101.101.101.39/32
Default Gateway: 101.101.101.1
Primary DNS: 10.50.2.20
Secondary DNS: 10.50.2.21



If you configured a dial-up connection you are able to establish/terminate the connection by clicking **Connect/Disconnect**.





# 4.5 Toolbox

#### The Toolbox menu

The Toolbox menu consists of following menu items:

▶ Remote Assistance:

Allows you to make your SpeedTouch™ accessible for remote support.

▶ Game & Application Sharing:

Allows you to share services and games that you run in your private network towards the internet.

Parental Control:

Allows you to block/allow access to specific web sites.

Firewall:

Allows you to configure the security level of the SpeedTouch™ firewall.

Intrusion Detection:

Allows you to view the intrusions you are protected against.

Dynamic DNS:

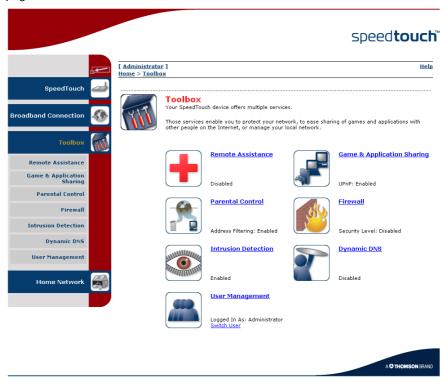
Allows you to assign a DNS host name to your broadband connection(s).

User Management:

Allows you to manage the users configured on your SpeedTouch $^{\mathtt{m}}$ .

## The Toolbox page

The **Toolbox** page gives you an overview of the available services and their current status. You can click on the names of these services to go to the corresponding web page.







# 4.5.1 Remote Assistance

# Enabling Remote Assistance

This page allows you to make your SpeedTouch™ accessible for remote support.



#### Remote Assistance

Remote assistance is currently disabled.

By clicking on the 'Enable Remote Assistance' button your SpeedTouch will be accessible from your broadband connection. After 20 minutes of inactivity, or on reboot, remote assistance will be automatically disabled.

Provide the following parameters to your ISP:

 URL:
 https://101.101.101.39;51003

 Username:
 tech

 Password:
 yhxj3mtq

Enable Remote Assistance



You must be connected to the Internet to be able to enable remote assistance.

To use remote assistance:

- 1 If needed, type a password in the Password box.
- 2 Click Enable Remote Assistance.
- 3 Pass the information listed under:
  - **URL**
  - Username
  - Password

to your technical support, in order for them to be able to access your  $\mathsf{SpeedTouch}^{\mathsf{TM}}.$ 



Once the technical support is connected, no other connections are possible.

- 4 The remote assistance session ends:
  - If the technical support disables remote assistance.
  - After 20 minutes of inactivity, or after a reboot, remote management.





# 4.5.2 Game & Application Sharing

### Overview

The **Overview** page summarizes the games and applications on a particular host on your network, for which the SpeedTouch™ accepts connections coming from the Internet.

### Configure

The Configuration page allows you to:

Select Use UPnP to enable UPnP on the SpeedTouch™.



Universal Plug and Play is an architecture for transparent peer-to-peer connectivity of PCs, intelligent appliances, and (wireless) devices. It enables seamless operation of a wide range of games and messaging applications.

- Select Use Extended Security to only allow the creation of port maps.
- Assign a game or application to a specific network device.



# **Game & Application Sharing**

This page summarizes the games and applications defined on your SpeedTouch. Each game or application can be assigned to a device on your local network.

Universal Plug and Play

Universal Plug and Play (UPnP) is a technology that enables seamless operation of a wide range of games and messaging applications.

Use UPnP:	V
Use Extended Security:	

Apply	Cancel
-------	--------

Assigned Games & Applications

Click on 'Unassign' to disable a game or a application or use the last row in the table to assign a game or application to a local network device.

If the game or the application you are looking for does not exist, <u>click here</u> to create it (you will be asked for game or application details).

Choose 'User-defined' in the device list and enter its IP address if the device you are looking for does not appear in the device list.

Game or Application	Device	Log		
FTP Server	<u>YourPC</u>	Off	<u>Edit</u>	<u>Unassign</u>
HTTP Server (World Wide Web)	<u>YourPC</u>	Off	<u>Edit</u>	<u>Unassign</u>
NetMeeting	<u>YourPC</u>	Off	<u>Edit</u>	<u>Unassign</u>
ABC (Another Bittorent Client)	▼ YourPC ▼	] [		Add

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# 4.5.3 Defined Games & Applications

Accessing the Defined Games & Applications Proceed as follows:

- In the Toolbox menu, click Game & Application Sharing.
- In the Pick a task... list, click Modify a game or application.

# The Defined Games & Applications page

This page gives you an overview of the games and applications defined on your SpeedTouch™. Each game or application can be assigned to a device on your local network.



Defined Games & Applications
This page summarizes the games and applications defined on your SpeedTouch. Each game or application can be assigned to a device on your local network.

Client Server Server Client Server Server Client Server Client Server Server Client Server	Edit Edit Edit Edit Edit Edit Edit Edit	Delete Delete Delete Delete Delete Delete Delete Delete
Server Client Server Server Client Server Server Client	Edit Edit Edit Edit Edit Edit Edit Edit	Delete Delete Delete Delete Delete Delete
Client Server Server Client Server Server Client	Edit Edit Edit Edit Edit Edit Edit Edit	Delete Delete Delete Delete
Server Server Client Server Server Client	Edit Edit Edit Edit Edit	Delete Delete Delete
Server Client Server Server Client	Edit Edit Edit Edit	Delete Delete Delete
Client Server Server Client	Edit Edit Edit	Delete Delete
Server Server Client	Edit Edit	Delete
Server Client	<u>Edit</u>	
Client		Distant.
	e-304	<u>Delete</u>
Server	<u>Edit</u>	Delete
	<u>Edit</u>	Delete
Server	Edit	Delete
Server		
	Server	Server Edit

## To:

- View the translation rules of a game or application, click the name of the rule.
- Change the translation rules of a game or application, click the Edit link of the the game or application.





# 4.5.4 Game or Application Definition

# Accessing the Game or Application Definition page

#### Proceed as follows:

- In the Toolbox menu, click Game & Application Sharing.
- 2 In the Pick a task... list, click Modify a game or application.
- 3 Click the name of the game or application you want to view/change.

### Overview

This page gives you an overview of the port mappings used to allow this service or game to be initiated from the Internet.



Consult the user's guide or support pages of your application to know which ports are being used by this application.

A service is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

## Configure

#### Under:

- Game or Application Name you can: Change the name of the game or application.
  - Game or Application Definition you can: Change the TCP/UDP port definition for this game or application.



#### **Lotus Notes**

• Game or Application Name

New Name:	Lotus Notes		
		Apply	Cancel

Game or Application Definition

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

Protocol	Port Range	Translate To	Trigger Protocol	Trigger Port	
Any	1352 - 1352	1352 - 1352	-	-	Edit Delete
Any 🔻	to		Any		Add

## Adding a Port Translation rule

#### Proceed as follows:

- 1 In the **Protocol** list, click the protocol the game or application uses.
- 2 In the **Port Range** box, type the port range the game or application uses.
- 3 In the **Translate To...** box, type the port range to which the SpeedTouch™ has to translate the ports specified under **Port Range**.
- 4 If you want to make a dynamic translation rule you must specify a trigger protocol and port.



As soon as the SpeedTouch™ receives outgoing traffic on this trigger port, it will activate this translation rule.

5 Click Apply.





# 4.5.5 New Game or Application

# Accessing the Game or Application Definition

#### Proceed as follows:

- 1 On the Applications page, click Game & Application Sharing.
- 2 In the Pick a task... list, click Create a new game or application.



# Creating a new game or application

#### Proceed as follows:

- 1 Type the name of the game or application in the **Name** box.
- 2 Click:
  - ▶ Clone Existing Game or Application if you want to start from the port mappings of the selected game or application.
  - ▶ Manual Entry of Port Maps if you want to manually configure the port mapping for this game or application.
- 3 The SpeedTouch™ creates the game or application and takes you to the Game or Application Definition page to configure the port mappings for this game or application.
- 4 Enter the necessary port mappings and click **Add**.





# 4.5.6 Parental Control

#### Parental Control

The SpeedTouch™ allows you to block/allow particular web sites:

Based on the web site's URL.



As within a web site lots of references can be made to other URLs, it is recommended to use this feature in combination with content based filtering.

- Based on the web site's content.
- Redirect a web site to another web site.



If your administrator account is configured as default user, make sure to configure a password for this account or change the default user. Otherwise users on your local network can surf to your SpeedTouch $^{\text{m}}$  to disable your filtering rules.

For more information, see "4.5.13 User Management" on page 85 and "4.5.15 Change Default User" on page 87.

#### Overview

The Overview page displays:

- The current Address Based Filtering rules.
- The current Content Based Filtering configuration. To view which content types are blocked/allowed, click Details. For more information, see "4.5.8 Content Level" on page 79.



Address based filtering rules have priority over content based filtering rules.

## Configure

The Configure page allows you to:

- Deny access to a specific web site.
- Allow access to a specific web site.
- Redirect a web site.
- Configure content based filtering settings.

## Content levels

Following content levels are available:

All:

Allow all categorized web sites.

Legal:

Allow all except illegal, extreme, spam and spyware web sites.

Teenagers:

Block illegal, adult, extreme, online ordering/gambling, spam and spyware web sites.

▶ Children:

Only allow children-save web sites.

▶ BlockAll:

Block all categorized web sites.





# Deny access to a specific web site

#### Use this feature if:

- Allow is selected under Action for Unknown Sites.
- **Block** is selected under **Action for Unknown Sites** and you want to make an exception on an allow rule. For example: you are allowing "provider.com" but you want to deny access to "mail.provider.com".
- A content category/group is allowed by Content Based Filtering and you want to make an exception. For example: you are allowing **Web Mail** content but you want to deny access to "mail.provider.com".

#### Proceed as follows:

- Type the URL of the web site you want to block (for example "mail.provider.com") in the Web Site box.
- 2 In the Action list, click:
  - **Block** if you want to block this web site.
  - Redirect if you want to redirect to another page. Type the address of the redirect page in the Redirect box.
- 3 Click Add.

# Allow access to a specific web site

#### Use this feature if:

- Block is selected under Action for Unknown Sites
- Allow is selected under Action for Unknown Sites and you want to make an exception on a block/redirect rule. For example: you are blocking "bank.com" but you want to allow access to "netbanking.bank.com".
- A content category/group is blocked by Content Based Filtering and you want to make an exception. For example: you are blocking **Finance / Investment** content but you want to allow access to "netbanking.bank.com".

### Proceed as follows:

- 1 Type the URL of the web site you want to allow (for example "netbanking.bank.com") in the Web Site box.
- 2 Click Allow in the Action list.
- 3 Click Add.

# Redirect a web site

#### Proceed as follows:

- 1 Type the URL of the web site you want to redirect (for example "cracks.am") in the **Web Site** box.
- 2 Click Redirect in the Action list.
- **3** Type the URL of the web site you want to redirect to (for example "mycompany.com/internetpolicy.htm") in the **Redirect** box.
- 4 Click Add.





# Redirecting all web sites

#### Proceed as follows:

- 1 Type "\*" in the Web Site box.
- 2 Click Redirect in the Action list.
- **3** Type the URL of the web site you want to redirect to (for example "mycompany.com/internetpolicy.htm") in the **Redirect** box.
- 4 Click Add.
- 5 Type the URL of the web site you want to redirect to (for example "mycompany.com/internetpolicy.htm") in the **Web Site** box.
- 6 Click Allow in the Action list.
- 7 Click Add.

# Configure content based filtering settings

### Under Content Based Filtering you are able to:

- Enable/disable content based filtering.
- Allow/block uncategorized web sites.
- Select a content level in the Content Level list.



To change a content level definition, click the **Edit** link of the content level you want to change. For more information, see "4.5.8 Content Level" on page 79.





# 4.5.7 Web Filtering Activation

# Accessing this page

### Proceed as follows:

- 1 On the Toolbox menu, click Web Site Filtering.
- 2 In the Pick a task... list, click Activate Web filtering License.

# Web Filtering Activation page

# This page allows you to:

- Activate a Web Filtering evaluation license.
- Activate a free 30-days Web Filtering evaluation license.

# Standard license activation

## Proceed as follows:

- 1 Click Standard.
- 2 In the License Key box, type the license key provided by your ISP.
- 3 Click Apply.





# 4.5.8 Content Level

# Accessing this page

Proceed as follows:

- 1 On the Toolbox menu, click Web Site Filtering.
- 2 Click Configure.
- 3 Click the Edit link of the content level you want to edit.

### Overview

This page gives you an overview of the different categories and their rules.

Following icons indicate whether the content type is allowed or not:

Icon	Description
>	The category/group is allowed
×	The category/group is not allowed.
M	The group is partly allowed.

# Configure

This page allows you to change:

- ▶ The content level name.
- The content level description.
- ▶ The content level configuration.





# 4.5.9 New Content Level

### Introduction

This page allows you to create a new content level. To access this page:

- 1 On the Toolbox menu, click Web Site Filtering.
- 2 In the upper right corner, click **Configure**.
- 3 Under Pick a task..., click Create a new content level.

#### Procedure

To apply a new content level following actions must be performed:

- 1 Content level creation
- 2 Content level configuration
- 3 Content level definition
- 4 Content level activation



You can create up to 16 content levels.

### Content level creation

#### Proceed as follows:

- 1 In the **Name** box, type a name for the new content level.
- In the **Description** box, type a short text to describe what this security level will do.
- 3 Click Next.

# Content level configuration

## Proceed as follows:

- 1 The Configuration section becomes available.
- 2 Click:
  - Clone Existing Level to start from a previously created content level.



If no levels have been defined before, this option will not be shown.

- **Black List** to allow all web sites by default.
- White List to block all web sites by default.
- 3 Click Next.

#### Content level definition

Only web sites that match the selected content level will be allowed. Proceed as follows:

- 1 If you want to:
  - Allow a category:

Select the check box next to the category name.

- Allow an entire group:
   Select the check box next to the group name.
- Block a category: Clear the check box next to the category name.
- Block an entire group:Clear the check box next to the group name.
- 2 Click Apply.





# Content level activation

To activate your new content level:

- 1 On the Toolbox menu, click Web Site Filtering.
- 2 In the upper right corner, click **Configure**.
- 3 In the Content Level list, select your new content level.
- 4 The new content level is now active.





# 4.5.10 Firewall

## Overview

The **Overview** page summarizes the overall security policy configured on your SpeedTouch™.

#### Configure

The **Configure** page allows you to select the security level of the SpeedTouch™.



#### **Firewall**

This page summarizes the overall security policy configured on your SpeedTouch.

Security Settings

Security Level:

C BlockAll

Use this Security Level to block all traffic from and to the Internet. Game & Application sharing is not allowed by the firewall.

Standard

Use this Security Level to allow all outgoing connections and block all incoming traffic. Game & Application sharing is allowed by the firewall..

O Disabled

Disable the firewall. All traffic is allowed to pass through your SpeedTouch. Game & Application sharing is allowed by the firewall.



Select one of following security levels:

- Block All: to protect your network from all attempts of incoming (from untrusted site) connection requests and to perform checks on outgoing (from trusted site) connections. This level is meant to prevent incoming malicious traffic.
- Standard: to protect your network from all incoming (from untrusted site) connection requests while permitting safe outgoing connections. This is the default
- Disabled: to allow all incoming and outgoing traffic. This does not mean the complete SpeedTouch™ firewall is disabled. It means all traffic coming in on one interface and going out on another is allowed, but access to the embedded services of the SpeedTouch™ (as telnet, web interface,...) is only allowed for clients residing on the LAN side, so the SpeedTouch™ itself stays protected.
- High:

Use this Security Level to block all outgoing connections except well known applications (DNS, HTTP, HTTPS, FTP, TELNET, IMAP, POP) and block all incoming connections. Game & Application sharing is not allowed by the firewall.





# 4.5.11 Intrusion Detection

### Intrusion Detection

Your SpeedTouch $^{\text{m}}$  is protecting your network against malicious intrusions. This page shows you the intrusions you are protected against.

The **Protected Intrusions** table shows the number of times the SpeedTouch™ actively protected your network against each intrusion since last statistics reset.



## **Intrusion Detection**

Your SpeedTouch is protecting your network against malicious intrusions. This page shows you the intrusions you are protected against.

### Protected Intrusions

The table shows the number of times the SpeedTouch actively protected your network against each intrusion since last statistics reset.

Intrusion Name	Count
fragment_sweep	0
zero-length_fragment_size	0
small_fragment_size	0
fragment_size_overrun	0
fragment_overlap	0
fragment_out-of-order	0
ip_protocol_scan	0
tcp_port_scan	0
tcp_syn_scan	0
stealth_tcp_null_scan	0
stealth_tcp_fin_scan	0
stealth_tcp_xmas_scan	0
stealth_tcp_full_xmas_scan	0
stealth_tcp_vecna_scan	0
stealth_tcp_syn-fin_scan	0
udp_port_scan	0
ping_sweep_scan	0
tcp_syn_flood	0
udp_flood	0
ping_flood	0
icmp_unreachable_storm	0
smurf_broadcast_attack	0
smurf_storm_attack	0
fraggle_broadcast_attack	0
fraggle_storm_attack	0
land_attack	0
spoofed_packet	0
tcp_null_port	0
tcp_data_on_syn_segment	0
tcp_invalid_urgent_offset	0
udp_null_port	0
icmp_type_unknown	0
icmp_code_unknown	0
ip_zero_payload	0
ton rate limiting	n





# 4.5.12 Dynamic DNS

## What is Dynamic DNS

The Dynamic DNS service allows you to assign a dynamic DNS host name (e.g. john.dyndns.org) to a broadband connection even if it is using a dynamic IP address. As soon as the device gets a new IP address, the dynamic DNS server updates its entry to the new IP address.

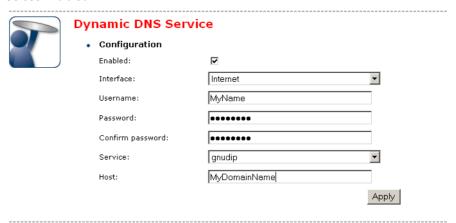
#### Overview

Click **Overview** to view the different Dynamic DNS clients with their name, hostnames, interface and IP address.

## Configure

The **Configure** page allows you to assign a Dynamic DNS host name to a broadband connection:

- 1 Create an account at the Dynamic DNS service of your choice, for example:
  - www.dyndns.org
  - www.no-ip.com
  - www.dtdns.com
  - GnuDIP for Linux
- 2 On the Dynamic DNS page, click Configure.
- 3 Select Enabled.



- 4 If needed, click the broadband connection to which you want to assign the Dynamic DNS hostname in the **Interface** list.
- 5 Type the user name and password of your Dynamic DNS service account in the corresponding fields.
- 6 In the **Service** list, click your Dynamic DNS service.
- 7 In the Host box, type the host name you want to assign to this interface (for example myspeedtouch.dyndns.org).
- 8 Click Apply.





# 4.5.13 User Management

### Overview

The **Overview** page gives you an overview of the currently configured users and their privileges.

Clicking the name of a user allows you to edit his user account.

# Configure

The **Configure** page allows you to:

- Click Add to create a new user account.
- Click Delete to remove a user.
- ▶ Click **Edit** to change a user account.



#### User Management

This page provides you with information regarding the users configured on your SpeedTouch.

Local User Data

The table below shows the configured users who are able to access your SpeedTouch. You need to configure user privileges if you want to differentiate between people using your SpeedTouch. The current privileges of the user are mentioned in the privileges column.

Username	Privileges	Default User		
Administrator	Administrator	<b>V</b>	<u>Edit</u>	
<u>Jon</u>	User		<u>Edit</u>	<u>Delete</u>
<u>Melissa</u>	User		<u>Edit</u>	<u>Delete</u>
				Add





# 4.5.14 Edit User

# Accessing the User Edit page

Proceed as follows:

- 1 On the Toolbox menu, click User Management.
- Under Local User Data, click on the name of the user you want to edit.



### **Edit User**

This page allows you to edit the user settings. Besides resetting your password you're not allowed to change your own settings. If you want to have your settings changed, ask someone with higher privileges.

 User definition Name: Administration Privileges:



# Editing a user account

The **Edit User** page allows you to:

- Click Reset Password to reset the password of the selected user to the user name. So, if you reset the password of John his password will be "John".
- Change the administration privileges of the selected user.



You can not change the administration privileges of the account you are logged on to.





# 4.5.15 Change Default User

# Changing the default user

This page allows you to change the default user. If users browse to the SpeedTouch $^{\text{\tiny{M}}}$  web pages, they will be automatically logged in under this account.





To allow users to automatically log on under this account, this default user account must be configured with a blank password.

speed**touch**™



# 4.5.16 Add User

# Adding users

This page allows you to add a new user.



### Under **User definition** you can configure:

The name of the new user.



The password of the new user will be equal to the user name; for example if the user name is John Doe, the password will be John Doe. Also when resetting a user, the password will be changed into the user name.

The administration privileges of the new user



You can only add users with less than or equal administration privileges as yourself.





# 4.6 Home Network

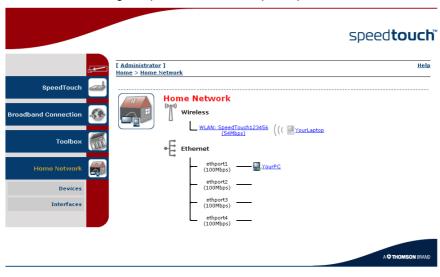
#### Home Network Menu

This menu consists of following items:

- Devices
  - Allows you the view/configure the devices detected on your local network.
- Allows you to view/configure the interfaces that are available on the SpeedTouch™.

# The Home Network page

The Home Network gives you an overview of your SpeedTouch™ network.



# Viewing (wireless) client information

If you click a on (wireless) client you will be able to:

- View the (wireless) client's network settings.
- Configure the (wireless) client's network settings by clicking **Configure**.





# 4.6.1 Devices

#### Overview

The **Overview** page gives you an overview of the devices that are currently connected to the SpeedTouch™ network. Click on a device name to get more information on a specific device.



### **Local Network Devices**

Detected Device(s)

The table below contains the list of devices the SpeedTouch detected on your local network. Click on a device name to get more information on a device.

Name	IP Address	Interface
M dsldevice	10.0.0.138	
YourPC	192.168.1.10	ethport1
YourLaptop	192.168.1.64	'√' WLAN

### Configure

The **Configure** page gives you an overview of the devices that are currently connected to the SpeedTouch™ network.

#### To:

- Get more information on a specific device, click on the name of the device. See "4.6.2 Device Settings" on page 91 for more information.
- ▶ Edit a device from the **Detected Device(s)** list, click **Edit**.
- ▶ Delete a device from the **Detected Device(s)** list, click **Delete**.



Once a device connects to the SpeedTouch™ network, it will remain listed in the **Detected Device(s)** list until you delete it.





# 4.6.2 Device Settings

# Accessing the device settings page

#### Proceed as follows:

- 1 On the Home Network menu, click Devices.
- 2 In the **Detected Device(s)**, click the name of the device you want to view.

#### Overview

The **Overview** page displays following information:

- Information allows you to view:
  - Status shows whether the device is currently connected to the SpeedTouch™ network.
  - **Type** shows the device type.
  - Connected To shows the interface to which the device is currently connected.
- Addressing allows you to view:
  - Physical Address shows the MAC address of the device.
  - IP Address Assignment shows whether the device is using a static or dynamic IP address.
  - **IP Address** shows the current IP address of the device.

#### Connection Sharing:

Gives you an overview of the games or services that are currently assigned to this device. Click the name of the game or service to view the used port mappings.

For more information, see "4.5.4 Game or Application Definition" on page 73.

## Configure

The **Configure** page allows you to:

- Change the device information.
- Allow a game or service running on this device to be initiated from the Internet.







# 4.6.3 Assign Public IP

## Introduction

This page allows you to assign the public IP address of your Internet Connection(s) to a specific device on your local network. You might want to do this if:

- You do not want to use the Network Address Translation engine of your SpeedTouch™.
- This device is running server applications (web server,...) and you want it to be accessible from the Internet.



You can also achieve this by creating a port mapping for the specified server, as described in "4.5.2 Game & Application Sharing" on

This device has to be considered as the unique access point to your local network (DMZ).



It is not recommended to use this feature as this device will loose all security offered by the SpeedTouch™.

# Accessing the Assign Public IP page

#### Proceed as follows:

- On the Home Network menu, click Devices.
- 2 In the Pick a task... list, click Assign the public IP address of a connection to a device.

## Assigning the public IP address to a device

#### Proceed as follows:

- Click the **Edit** link of your Internet connection.
- 2 In the **Device** list, select the device you want to assign the public address to.



# Assign the public IP address of a connection to a LAN

This page allows you to assign the public IP address of your Internet Connection(s) to a specific device on your local network...

You might want to do this if:

- You encounter issues with some applications through the Network Address Translation engine of
- your SpeedTouch.

  This device is running server applications (web server, ...) and you want it to be accessible from the internet.

  This device has to be considered as the unique entry to your local network (DMZ).



- 3 Click Apply.
- The SpeedTouch™ prompts you that you will have to make some adjustments as a result of the new configuration, click **OK**.
- 5 Release and renew the IP address of the device.



For more information, see your operating system's user guide or help.

6 If needed, reassign server applications to this device.





# 4.6.4 Wireless Device Settings

# Accessing the wireless device settings page

#### Proceed as follows:

- 1 On the Home Network menu, click Devices.
- In the Detected Device(s), click the name of the wireless device you want to view.

### Overview

The **Overview** page displays following information:

- Information allows you to view:
  - **Status** displays whether the device is currently connected to the SpeedTouch™ network.
  - **Type** displays the device type.
  - Connected To displays the interface to which the device is currently connected.
  - Allowed on LAN indicates whether the wireless client is allowed to connect to the SpeedTouch™ WLAN.
- Addressing allows you to view:
  - Physical Address displays the MAC address of the device.
  - IP Address Assignment displays whether the device is using a static or dynamic IP address.
  - ▶ IP Address displays the current IP address of the device.
  - Always use the same address indicates whether the wireless client has a static DHCP lease or not.
  - DHCP Lease Time displays the time for which the wireless client can use this IP address.

#### Connection Sharing:

Gives you an overview of the games or services that are currently assigned to this device. Click the name of the game or service to view the used port mappings.

For more information, see "4.5.4 Game or Application Definition" on page 73.

## Configure

The **Configure** page allows you to:

- Change the device information.
- Assign a static DHCP server lease to this device by selecting the Always use the same address check box.
- Allow a game or service running on this device to be initiated from the Internet.





# 4.6.5 Access Point Settings

# Accessing the Access Point settings

#### Proceed as follows:

- 1 On the left menu, click Home Network.
- 2 Under Wireless, click the name of the Access Point you want to view or configure.



The Access Points names are of the following format: "WLAN: " + Network Name, for example "WLAN: SpeedTouch123456".

#### Overview

The **Overview** page displays a brief overview of the current configuration.

#### Details

The **Details** page displays a more detailed overview of the current configuration.

## Configure

Under **Configuration** following fields are available:

#### Interface Enabled:

Allows you to enable/disable the wireless interface.

### Physical Address:

Displays the Base Service Set Identifier (BSSID) of the selected Access Point.

### Network Name (SSID):

Allows you to change the network name of your WLAN.

#### Interface Type:

Allows you to choose between:

- ▶ 802.11b
- ▶ 802.11b(legacy)/g
- ▶ 802.11b/g
- ▶ 802.11g

## Actual Speed:

Displays the current transmission speed.

#### Channel Selection:

Allows you to select a fixed channel or let the SpeedTouch  $^{\mathtt{m}}$  automatically select a channel for you.

#### Region:

Displays your region.

#### Channel

Displays the channel that is currently used by the Access Point.

### Allow multicast from Broadband Network:

Allows you to allow/deny multicast messages from the Internet.



Large bandwidth streams like video streams, have a large impact on your wireless performance.





Under Security following fields are available:

#### Broadcast Network Name:

By default the SpeedTouch™ broadcasts its network name, allowing you to easily recognise your wireless network in the list of available networks. Once you have configured your wireless clients, it is recommended to disable this feature by clearing this check box.

#### Allow New Devices:

Allows you to change the access control used by the SpeedTouch™.

#### Encryption:

Allows you to select an encryption level for your wireless network. Following encryption methods are supported by the SpeedTouch™:

- ▶ The Wired Equivalent Protocol (WEP)
- ▶ WPA-Pre Shared Key (WPA-PSK).



The default WEP key and the default WPA key is printed on the SpeedTouch  $^{\!\scriptscriptstyle\mathsf{TM}}$  bottom label.



Before configuring the SpeedTouch™ encryption, make sure you know which encryption methods are supported by your wireless client.

## **WEP**

The Wired Equivalent Privacy (WEP) algorithm protects wireless communication from eavesdropping.

WEP relies on a secret key that is shared between the wireless client (e.g. a laptop with a wireless ethernet card and the SpeedTouch™. The fixed secret key is used to encrypt packets before they are transmitted. I.e. during transmission between client and AP ("in the air") the information in the packets is encrypted.



If your wireless client(s) supports WPA-PSK we recommend you to use WPA-PSK, because WEP encryption has been proven to have some security issues.

### To enable WEP:

- 1 Select Use WPA-PSK Encryption
- 2 In the **WEP Key Length** list, click the desired Data Security level (either 64-bit or 128-bit and Alphanumeric or Hexadecimal).
- 3 In the **Encryption key** box, type a Network key of your choice. In case of:
  - ▶ 64 bits, Alphanumeric:

The 40-bits Network key must consist of 5 alphanumeric characters.

▶ 64 bits, Hexadecimal:

The 40-bits Network key must consist of 10 hexadecimal digits.

▶ 128 bits, Alphanumeric:

The 104-bits Network key consists of 13 alphanumeric characters.

128 bits, Hexadecimal:

The 104-bits Network key consists of 26 hexadecimal digits.

- 4 Click **Apply** to immediately apply your changes.
- 5 Configure your wireless client(s) with the same settings.





## WPA-PSK

The SpeedTouch™ supports WPA-PSK which has 3 improvements regarding to WEP:

- Authentication via a 4-way handshake to check whether the Pre-Shared Keys (PSKs) are the same.
  - Stronger encryption types:
    - Temporal Key Integrity Protocol (TKIP) (default): Instead of using a fixed WEP key, TKIP uses in pairs temporary session keys which are derived from the PSK during the 4-way handshake. For each packet it uses a different key. TKIP also provides a message integrity check (MIC) and a rekeying mechanism (in seconds).
    - Advanced Encryption Standard (AES): State-of-the-art encryption; can only be used if all wireless devices in your WLAN support AES.
- Message Integrity Check (MIC). Which is a strong mathematical function in which the recipient and transmitter each compute and compare the MIC. If they don't match it is assumed that a third person has been trying to read the data.

To enable WPA-PSK:

- 1 Select WPA-PSK Encryption.
- In the WPA-PSK Encryption Key box, type a passphrase (aka Pre-shared key) of your choice. The passphrase must consist of 8 to 63 ASCII characters or 64 HEX digits.
- 3 In the Encryption list, click select the desired Encryption method (either TKIP or AES).



AES is not yet implemented in most clients but AES is implemented in the SpeedTouch™ because it will be the future security standard.

- 4 Optionally select the rekeying interval.
- 5 Click **Apply** to immediately apply your changes.
- 6 Configure your wireless client(s) with the same settings.

# Access control on the SpeedTouch™

Following modes are available:

- New stations are allowed (automatically): All New stations can access the SpeedTouch™ WLAN.
- New stations are allowed (via registration):

Only allowed stations in the Access Control List (ACL) have access. You can add new stations via registration.

For more information, see "Registering new wireless clients" on page 96

New stations are not allowed:

Only allowed stations in the Access Control List (ACL) have access.

# Registering new wireless clients

Proceed as follows:

- 1 On the Home Network menu, click Devices.
- 2 Under Pick a task..., click Search for wireless devices.
- 3 The SpeedTouch™ searches for new wireless stations that use the encryption key of the SpeedTouch™ Access Point.
- **4** The SpeedTouch<sup>™</sup> takes you to the **Home Network**. The new station will be shown next to the name of the SpeedTouch<sup>™</sup> WLAN.



To view the device settings, click the name of the new station. For more Information, see "6 If needed, reassign server applications to this device." on page 92.





# 4.6.6 Configuring WDS

## What is WDS

The **Wireless Distribution System** (WDS) allows you to extend the range of your wireless network by introducing one or more WDS-enabled devices into your wireless network.



You can only establish WDS links with WDS enabled devices.

# Accessing the WDS page

To access the WDS pages on the SpeedTouch™:

- 1 On the left menu, click Home Network.
- 2 Under Wireless, click the Access Point you want to configure for WDS.



The Access Points names are of the following format: "WLAN: " + Network Name, for example "WLAN: SpeedTouch123456.

- 3 Click Configure.
- 4 Under Pick a task... list, click Configure WDS.

# SpeedTouch™ configuration

#### Proceed as follow:

- 1 Under Pick a task..., click Scan for wireless accesspoints.
- The SpeedTouch™ prompts you that all associated stations will loose connectivity for a few seconds. Click OK.
- 3 The SpeedTouch™ lists the results in the Accessible Access Points table.
- 4 Select the Access Point to which you want to establish a WDS connection.
- 5 Click Apply.
- 6 Configure this Access Point with:
  - The same WEP key if WEP is enabled.
  - The same **fixed** channel.

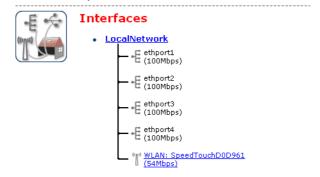




# 4.6.7 Interfaces

## Interfaces overview

This page gives you an overview of the interfaces used on your SpeedTouch™. If you want to know more on the network settings of a specific interface, click the name of the interface you want to view.







# 4.6.8 Interface Settings

#### Overview

The **Overview** page gives you an overview of the current interface settings.



## Interface - LocalNetwork

Interface Information

Interface Group: lan

TCP/IP Configuration

Auto-IP: Disabled Use DHCP Server: Enabled

IP Addresses

IP Address/Mask	Туре
10.0.0.138/24	Static
192.168.1.254/24	Static

 DHCP Pools
 Address Range
 Gateway

 LAN\_private
 192.168.1.64 - 192.168.1.253
 192.168.1.254

## Configure

The Configure page allows you to:

- Change the IP address settings of the SpeedTouch™.
- ▶ Change the DHCP IP address pool settings.



Before changing the DHCP pools, make sure that at least one IP address of the SpeedTouch $^{\rm m}$  uses the same subnet as the IP addresses in the DHCP pools.

# Assigning a new IP address to the SpeedTouch™

## Under IP Addresses:

- 1 Type the IP address of your choice (for example 192.168.1.1) in the left text box.
- 2 Type subnet mask in the right text box (for example 255.255.255.0).
- 3 Click Add.
- 4 Network devices using the same subnet mask can now access the SpeedTouch™ using this IP address.





# 4.6.9 DHCP Pool

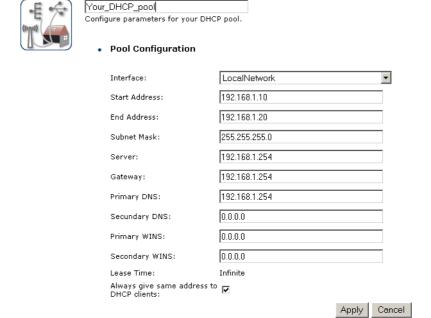
**DHCP Pool** 

This page allows you to create/change a DHCP pool.

# Accessing the DHCP Pool page

#### Proceed as follows:

- 1 On the Home Network menu, click Interfaces.
- 2 Click on the name of the interface of which you want to change the DHCP pool settings.
- 3 Click Configure.



## 4 Under DHCP Pools click:

- Add if you want to add a new DCHP pool.
- **Edit** if you want to edit an existing DHCP pool.
- **Delete** if you want to delete an existing DHCP pool.



This link will only be shown if there are more than one DHCP pools.





### The DHCP Pool page

Following settings are available for configuration:

#### Interface:

The SpeedTouch™ interface for which the DHCP pool applies.

### Start Address:

The start IP address of the DHCP server's address pool.

#### **▶** End Address:

The end IP address of the DHCP server's address pool.



Both the start and end IP address define the IP address range used by the DHCP server to assign leases.

#### Subnet Mask:

The subnet mask of the DHCP server's address pool.

#### Server:

The SpeedTouch $^{\mathsf{TM}}$  IP address used as DHCP server address.

### ▶ Gateway:

The IP address that will be assigned to the DHCP clients as their default gateway.

### Primary DNS:

The IP address of the primary DNS server.

### Secondary DNS:

The IP address of the secondary DNS server.

#### Primary WINS:

The IP address of the primary WINS server.

### Secondary WINS:

The IP address of the secondary WINS server.

### Lease Time:

The time for which the DHCP client is allowed to use the assigned IP address:



If **Always give same address to DHCP clients** the lease time will be automatically set to **Infinite**.

### Always give same address to DHCP clients:

Select this check box if you always want to use the same IP address for the DHCP clients.



**Chapter 4** SpeedTouch™ Web Interface





### 5 Software Upgrade

### Introduction

This chapter describes how to upgrade the SpeedTouch™ system software or firmware.

## System software upgrades availability

For the availability of new system software version packages you can:

- Click the **SpeedTouch Maintenance** link, available on the Setup CD menu.
- **▶** Check for SpeedTouch™ upgrades at http://www.speedtouch.com/upgrade.

## System software packages and security

All system software packages for the SpeedTouch™ are digitally signed and encrypted. Packages that may have become corrupted, or been altered in any way, will not be accepted by the SpeedTouch™.

This way the SpeedTouch™ or its service can never be corrupted or lost.

## System software upgrades

Depending on the Operating System your computer is running, you can upgrade your SpeedTouch™ via:

The SpeedTouch™ Upgrade Wizard (Microsoft Windows or Mac OS X); see "5.1 Upgrade Wizard on Setup CD" on page 104 for more information.

### Preliminary steps

Before you start with upgrading the SpeedTouch™, always make sure:

- To inform all people relying on the SpeedTouch™ services, that service may be down for some short period.
- The new system software file is stored on your local disk or another storage device.



It is NOT possible to upgrade your SpeedTouch™ over a wireless connection.





### 5.1 Upgrade Wizard on Setup CD

### Introduction

The procedures described in this section are valid only in case:

- You run an MS Windows Operating System or Mac OS X.
- Your SpeedTouch™ and computer are properly connected through Ethernet or USB.



It is NOT possible to upgrade your SpeedTouch  $^{\mbox{\tiny M}}$  over a wireless connection.

During the upgrade procedure in most cases configuration settings are backed up by the wizard and restored after uploading the system software.

### Starting the Upgrade Wizard

To launch the SpeedTouch™ Upgrade Wizard:

Insert the Setup CD in your computer's CD-ROM or DVD-ROM drive. The SpeedTouch™ CD menu will pop up automatically.



#### If not:

In MS Windows:

Click **Run** on the **Start** menu and enter the following path: **D:\Setup.exe** where D stands for the drive letter of your CD-ROM or DVD-ROM drive.

On Mac OS X

Double-click the CD icon and then double-click Menu.

- Optionally, in the Choose Language window, select the language of your choice and click OK.
- 3 The SpeedTouch™ safety instructions will be displayed in your default web browser. Close the window.
- 4 Select I have read and I fully understand the Safety Instructions and Regularity Information and click Continue.
- 5 In the SpeedTouch™ CD Menu, click SpeedTouch Maintenance.
- 6 Click **Upgrade My SpeedTouch**, to start the SpeedTouch™ Upgrade Wizard.
- 7 See "Upgrade procedure" on page 105 to continue.



### Upgrade procedure

1 In the Welcome to the SpeedTouch Upgrade Wizard window, click Next.



2 The SpeedTouch™ Software License Agreement window appears.

You must accept before continuing. Click Yes to accept.



If you accepted this License Agreement in a previous upgrade, this window will not be shown.

- 3 The SpeedTouch™ Upgrade Wizard will search for the SpeedTouch™ on the network. A progress bar is displayed.
- **4** The SpeedTouch™ Upgrade Wizard should find your SpeedTouch™ device on the local network. This is indicated by the following window:



If more than one device is found, a list of available devices will be provided. If this is the case, select your SpeedTouch $^{\text{\tiny{M}}}$  device and click **Next**.



If the wizard does not find any SpeedTouch™ on the network an error window appears, refer to "6.1.3 Upgrade Troubleshooting" on page 111.



It is NOT possible to upgrade your modem over a wireless connection.

5 Enter your SpeedTouch™ security User name and Password.





The following window shows the system software version currently active on the SpeedTouch™ as well as one or more system software versions available on the CD:



For more information on a found software version, click Firmware Details.

Select the appropriate system software version and click Next.



If your Service Provider has included a separate disk with dedicated upgrade system software, click **Have Disk** to navigate to the location of the appropriate file.

- 7 The following window will allow you to overview your selection. Click Next to continue.
- 8 A progress bar will be displayed.
- 9 Finally, click **Finish** to close the wizard.

## System software downgrade

Via the identical procedure it is also possible - although not recommended - to downgrade the SpeedTouch $^{\text{m}}$  by uploading an older system software than the current running version.

However, be aware that functionality added by previous upgrades may be lost, that system password settings may be lost as well as end-to-end connectivity and other configuration settings.



In case of a system software downgrade, in step 6, you must specifically acknowledge your decision before being able to proceed.



### 6 Troubleshooting

### Introduction

This chapter suggest solutions for problems you may encounter while installing or configuring your SpeedTouch $^{\text{\tiny{M}}}$ .

If the suggestions do not resolve the problem, look at the support pages on http://www.speedtouch.com/support or contact your service provider.

For Internet connection troubleshooting, refer to the provided Installation and Setup Guide.



### 6.1 General SpeedTouch™ Troubleshooting

### SpeedTouch™ does not

If none of the LEDs light up, make sure that:

- The SpeedTouch™ is plugged into a power socket outlet.
- You are using the correct power supply for your SpeedTouch™ device, that is 15V AC.
- The power on the SpeedTouch™ is turned on via the push button on the back panel.

## SpeedTouch™ unreachable

In case your SpeedTouch™ is unreachable due to misconfiguration, you might consider a hardware reset to factory defaults as described in "6.3 Reset to Factory Defaults" on page 115.



However, note that resetting the SpeedTouch $^{\text{m}}$  to its factory settings will revoke all the changes you made to the configuration.

## Poor SpeedTouch™ performance

Make sure that the SpeedTouch™ is installed and configured as instructed in the Installation and Setup Guide or as instructed by the Service Provider.





### 6.1.1 Wired Ethernet Troubleshooting

### LAN LED does not light

Make sure that:

- The LAN cable is securely connected to the 10/100Base-T port.
- You are using the correct cable type for your Ethernet equipment, that is UTP CAT5 with RJ-45 connectors.





### 6.1.2 Wireless Ethernet Troubleshooting

### Not able to connect wireless clients

#### Check following:

- In case registration is enabled, you must search for wireless devices via the embedded web pages.
- Make sure the SpeedTouch™ Association Control List is not locked. You can check this on the web pages. On the Wireless Access Point settings, make sure New stations are not allowed is NOT selected.

### No wireless connectivity

#### Make sure that:

- Both wireless client adapter and SpeedTouch™ are allowed to connect through wireless channels as defined for local regulatory domain.
- The WLAN client is configured for the correct wireless settings (SSID, security settings).
- Check the signal strength, indicated by the wireless client manager. If the signal is low, try to place the SpeedTouch™ or to direct the SpeedTouch™'s antenna for optimal performance.
- Make sure that the wireless client adapter is enabled (message like "radio on").

## Poor wireless connectivity or reach

#### Check following:

- Choose automatic channel selection or carefully select a radio channel that does not interfere with other radio channels.
- Make sure both WLAN client adapter and SpeedTouch™ are allowed to connect through wireless channels as defined for local regulatory domain.
- Check the location of the SpeedTouch™ in the building.
- Check the signal strength, indicated by the wireless client manager. If the signal is low, try to place the SpeedTouch™ or to direct the SpeedTouch™'s antenna for optimal performance.





### 6.1.3 Upgrade Troubleshooting

Introduction

While upgrading your SpeedTouch  $^{\mathtt{m}}$  via the Upgrade Wizard on the Setup CD, you might encounter one of following problems.





### Upgrade via Setup CD

If the Upgrade Wizard in step 4, as described in "Upgrade procedure" on page 105, does not find any SpeedTouch $^{\text{M}}$  on the network, an error window will appear, stating your SpeedTouch $^{\text{M}}$  has not been found.

In this case check that:

- The SpeedTouch™ is turned on and fully initialised.
- Your PC is correctly connected to the SpeedTouch™.
- Your PC has a valid IP address. To check this in MS Windows:
  - 1 In the Windows task bar, click Start.
  - 2 Select Run...
  - 3 Type cmd in the Open field.
  - 4 Click **OK**. A black window will appear with a flashing cursor.
  - 5 Type **ipconfig** and then press Enter.
  - Verify that your computer has a valid IP address, that is any address but 0.0.0.0.
- No dedicated firewall device or router is placed between your PC and the SpeedTouch™.
- No personal firewall software is running on your PC.

To repeat the search for your SpeedTouch™, click **Back** or restart the wizard. As soon as the wizard finds your SpeedTouch™, you can continue with the Upgrade Wizard.





### 6.2 UPnP™ on Windows XP Systems

# SpeedTouch™ not detected by UPnP™ or IGD Control Client

#### Check on following:

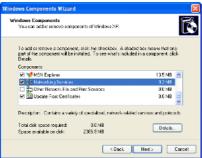
- Make sure the UPnP™ and Internet Gateway Device Control Client Networking components are added to your MS Windows XP system.
- Your computer doesn't support UPnP™ if you run an operating system other than MS Windows XP and MS Windows Millennium.
- Make sure that UPnP™ is not disabled in the SpeedTouch™ web page; see "4.5.2 Game & Application Sharing" on page 71.

### Adding UPnP™

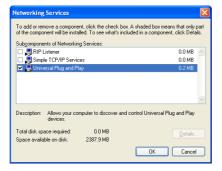
If you are running Microsoft Windows XP, it is recommended to add the UPnP™ component to your system.

#### Proceed as follows:

- 1 On the Start menu, click (Settings >) Control Panel.
- 2 The Control Panel window appears. Click Add or Remove Programs.
- 3 In the Add or Remove Programs window appears, click Add/Remove Windows Components.
- 4 In the Windows Components Wizard, select Networking Services in the Components list and click Details.



In the Networking Services window, select Universal Plug and Play or UPnP User Interface and click OK.



- 6 Click Next to start the installation and follow the instructions in the Windows Components Wizard.
- 7 At the end of the procedure the wizard prompts you that the installation was successful. Click Finish to quit.





## Adding IGD Discovery and Control

Your MS Windows XP system is able to discover and control Internet Gateway Devices (IGD), like the SpeedTouch™ on your local network. Therefore it is recommended to add the IGD Discovery and Control client to your system.

#### Proceed as follows:

- 1 On the Windows task bar, click Start.
- 2 Select (Settings >) Control Panel > Add or Remove Programs.
- 3 In the Add or Remove Programs window, click Add/Remove Windows Components.
- 4 The Windows Components Wizard appears:



Select Networking Services in the Components list and click Details.

In the Networking Services window, Select Internet Gateway Device Discovery and Control Client and click OK.



- 6 Click Next to start the installation and follow the instructions in the Windows Components Wizard.
- **7** At the end of the procedure the wizard prompts you that the installation was successful. Click **Finish** to quit.



### 6.3 Reset to Factory Defaults

## Resetting your SpeedTouch™

You might consider a reset to factory defaults as described below.



Be aware that a reset to factory defaults will revoke all configurational changes you made to the SpeedTouch™.

You can choose between:

- Hardware reset
- Software reset

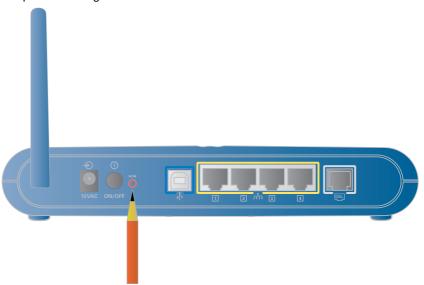
A reset to factory default settings deletes the configuration profile settings. Therefore, after the reset, a reconfiguration of your SpeedTouch™ will be needed.

Also your WLAN clients will have to be re-associated, as described in "2.3.2 Connecting First-time Wireless Clients" on page 26.

### Hardware reset

### Proceed as follows:

- Make sure the SpeedTouch™ is powered on.
- Use a pen or an unfolded paperclip to push the recessed reset button on the back panel. The reset button is marked with a red circle. Keep it pushed until the power LED lights red - this will take about 7 seconds.



- 3 Release the reset button.
- 4 The SpeedTouch™ restarts.

### Software reset

### Proceed as follows:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select **SpeedTouch > Configuration**.
- 3 In the Pick a task... list, click Reset my SpeedTouch to default settings.
- 4 The SpeedTouch™ restarts.
- The SpeedTouch™ returns to the SpeedTouch™ Home page (unless the IP address of your computer is not in the same subnet as the default IP address of the SpeedTouch™, being 192.168.1.254).

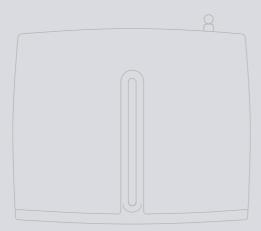
speed**touch**™

### **Chapter 6**

Troubleshooting







### Need more help?

Additional help is available online at www.speedtouch.com

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