

USER MANUAL

TG-1 Broadband Gateway



Copyright

Copyright ©1999-2015 Technicolor. All rights reserved.

Distribution and copying of this document, use and communication of its contents is not permitted without written authorization from Technicolor. The content of this document is furnished for informational use only, may be subject to change without notice, and should not be construed as a commitment by Technicolor. Technicolor assumes no responsibility or liability for any errors or inaccuracies that may appear in this document.

TECHNICOLOR WORLDWIDE HEADQUARTERS

1-5 rue Jeanne d'Arc
92130 Issy les Moulineaux
France

<http://www.technicolor.com>

Trademarks

The following trademarks may be used in this document:

- AutoWAN sensing™ is a trademark of Technicolor.
- Qeo™ is a trademark of Qeo LLC, a subsidiary of Technicolor.
- Adobe®, the Adobe logo, Acrobat® and Adobe Reader® are trademarks or registered trademarks of Adobe Systems, Incorporated, registered in the United States and/or other countries.
- Apple® and Mac OS® are registered trademarks of Apple Computer, Incorporated, registered in the United States and other countries.
- Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc.
- CableLabs® and DOCSIS® are registered trademarks of CableLabs, Inc.
- DECT™ is a trademark of ETSI.
- DLNA® is a registered trademark, DLNA disc logo is a service mark, and DLNA Certified™ is a trademark of the Digital Living Network Alliance. Digital Living Network Alliance is a service mark of the Digital Living Network Alliance.
- Ethernet™ is a trademark of the Xerox Corporation.
- EuroDOCSIS™, EuroPacketCable™ and PacketCable™ are trademarks of CableLabs, Inc.
- HomePNA™ and HPNA™ are trademarks of HomePNA, Inc.
- Linux™ is a trademark of Linus Torvalds.
- Microsoft®, MS-DOS®, Windows®, Windows NT® and Windows Vista® are either registered trademarks or trademarks of the Microsoft Corporation in the United States and/or other countries.
- MoCA® and the MoCA logo are registered trademarks of the Multimedia over Coax Alliance.
- UNIX® is a registered trademark of UNIX System Laboratories, Incorporated.
- UPnP™ is a certification mark of the UPnP Implementers Corporation.
- Wi-Fi Alliance®, Wi-Fi®, WMM® and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance. Wi-Fi CERTIFIED™, Wi-Fi ZONE™, Wi-Fi Protected Access™, Wi-Fi Multimedia™, Wi-Fi Protected Setup™, WPA™, WPA2™ and their respective logos are trademarks of the Wi-Fi Alliance.

Other brands and product names may be trademarks or registered trademarks of their respective holders. All other logos, trademarks and service marks are the property of their respective owners, where marked or not.

Document Information

Status: v1.0 (June 2015)

Reference: DMS3-CTC-25-115

Short Title: User Manual TG-1 Broadband Gateway (TGiiNet-1) R15.2 LIME



1	Getting started	1
1.1	Components	2
1.1.1	Power	3
1.1.2	Local network connection	4
1.1.3	Broadband connection	5
1.1.4	Voice connection	6
1.1.5	Buttons	7
1.1.6	Status LEDs	8
2	Setup.....	11
2.1	Connecting the TG-1 Gateway to your service provider's network	12
2.2	Powering on the TG-1 Gateway	14
2.3	Connecting your wired devices	15
2.4	Setting up your telephone network.....	16
2.5	Configure your MediaAccess Gateway	17
3	Wireless networking.....	18
3.1	Connecting your wireless client via WPS	19
3.2	How to manually connect a wireless client.....	21
3.3	Connecting your wireless client by scanning a QR code	22
3.4	Changing the wireless security settings	24
3.4.1	Configuring WPA-PSK encryption	25
3.4.2	Configuring WPA encryption	26
3.5	Using the guest access point	27
4	The TG-1 Gateway GUI.....	28
4.1	Access from your local network.....	29
4.2	Remote assistance	30
4.3	Account settings	31
4.4	Cards	32
4.4.1	Gateway	34
4.4.2	Broadband	35
4.4.3	Internet	36
4.4.4	Wireless	37
4.4.5	Local Network	38
4.4.6	Devices	39
4.4.7	WAN Services	40
4.4.8	Firewall	41
4.4.9	Telephony	42
4.4.10	Diagnostics	43
4.4.11	Assistance	44
4.4.12	Mobile 3G/4G.....	45
4.4.13	Management.....	46
5	Sharing content	47
5.1	Accessing the Samba server.....	49





CONTENTS

5.2 Accessing the DLNA server	50
6 Internet security.....	52
6.1 Time of Day (ToD) access control.....	53
6.2 DMZ.....	54
7 Troubleshooting	55
7.1 General TG-1 Gateway troubleshooting.....	56
7.2 Ethernet connection troubleshooting.....	57
7.3 Wireless connection troubleshooting.....	58
7.4 Reset to factory defaults.....	60
Support.....	61

1 Getting started

Introduction

This section provides a brief overview of the main features of your TG-1 Gateway.

Internet connection features

- **Broadband Internet access** via the integrated DSL modem.
The first chapters describe how to connect your TG-1 Gateway to the Internet.
- **Broadband Internet access** via the Gigabit WAN port.
The first chapters describe how to connect your TG-1 Gateway to the Internet.
- **Internet security** for your entire network.
For more information, see “6 Internet security” on page 52.

Local networking features

- **Wireless access** for your local network devices via the integrated IEEE 802.11n wireless access point.
For more information, see “3 Wireless networking” on page 18.
- **Wired access via Ethernet cable** for your local network devices via the Ethernet interface.
For more information, see “2.3 Connecting your wired devices” on page 15.

Telephony features

The TG-1 Gateway offers **Voice over IP** (VoIP) connectivity for corded phones.

TG-1 Gateway GUI

The **TG-1 Gateway GUI** allows you to configure your TG-1 Gateway via your web browser.
For more information, see “4 The TG-1 Gateway GUI” on page 28.

1 GETTING STARTED

1.1 Components

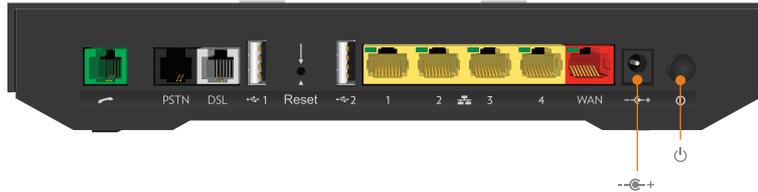
Overview

This section provides an overview of the different components of the TG-1 Gateway:

Topic	Page
<i>1.1.1 Power</i>	3
<i>1.1.2 Local network connection</i>	4
<i>1.1.3 Broadband connection</i>	5
<i>1.1.5 Buttons</i>	7
<i>1.1.6 Status LEDs</i>	8

1.1.1 Power

Overview



Power inlet

The power inlet (⚡) allows you to connect the power supply.



Only use the power supply delivered with your TG-1 Gateway.

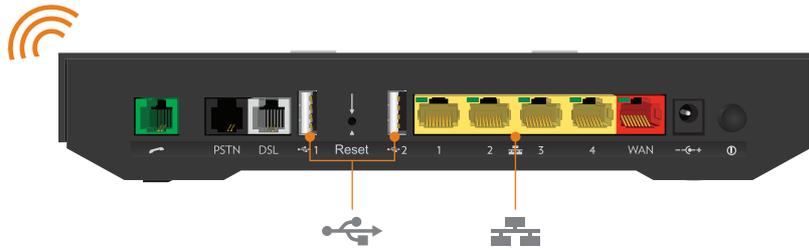
Power switch

The power switch (⏻) allows you to power on/off your TG-1 Gateway.

1 GETTING STARTED

1.1.2 Local network connection

Overview



Wireless access point

The built-in Wi-Fi certified wireless access point provides wireless access to your Wi-Fi certified wireless clients.

For more information, see “3 Wireless networking” on page 18.

Ethernet switch

The Ethernet switch (🔌) allows you to connect an Ethernet device (for example, a computer) to your local network. For more information, see “2.3 Connecting your wired devices” on page 15.

All Ethernet ports on the TG-1 Gateway are Gigabit Ethernet ports and have a maximum speed of 1 Gbps (Gigabit per second).

Each of the Ethernet port has a LED to indicate link integrity (or activity).

LED Status	Description
Solid on	Device connected.
Blinking	Device connected and sending/receiving data.
Off	No device connected.

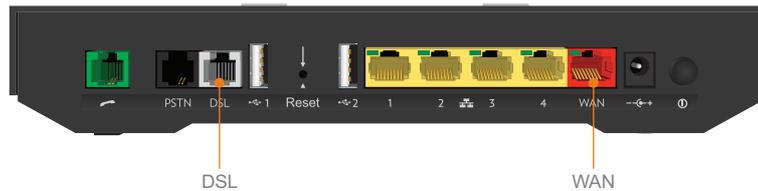
USB Port

The USB port (🔌) can be used to connect a USB mass storage device to **share your content** (for example, music, movies,...).

For more information, see “5 Sharing content” on page 47.

1.1.3 Broadband connection

Overview



DSL port

This port can be used to connect your TG-1 Gateway to your service provider's network for ADSL, VDSL, Naked broadband or NBN Fibre to the Node (FTTN) and Fibre to the Building (FTTB).

For more information, see *"2.1 Connecting the TG-1 Gateway to your service provider's network"* on page 12.

WAN port

The Gigabit Ethernet WAN port allows you to use your TG-1 Gateway as a local router this is used for NBN Fibre and Fibre to the Home (FTTH) services.

For more information, see *"2.1 Connecting the TG-1 Gateway to your service provider's network"* on page 12.

1 GETTING STARTED

1.1.4 Voice connection

Overview



Phone Port

The **Phone** (📞) port allows you to connect a corded phone to your TG-1 Gateway. This way you will be able to make phone calls over the Internet and save on communication costs, especially for long-distance calls.

For more information, see “2.4 Setting up your telephone network” on page 16.

PSTN Port

The **PSTN** port allows you to connect the TG-1 Gateway to the traditional telephone network, i.e. the Public Switched Telephone Network (PSTN). When the VoIP connection is not available, the TG-1 Gateway will automatically switch from VoIP to the traditional telephone network.

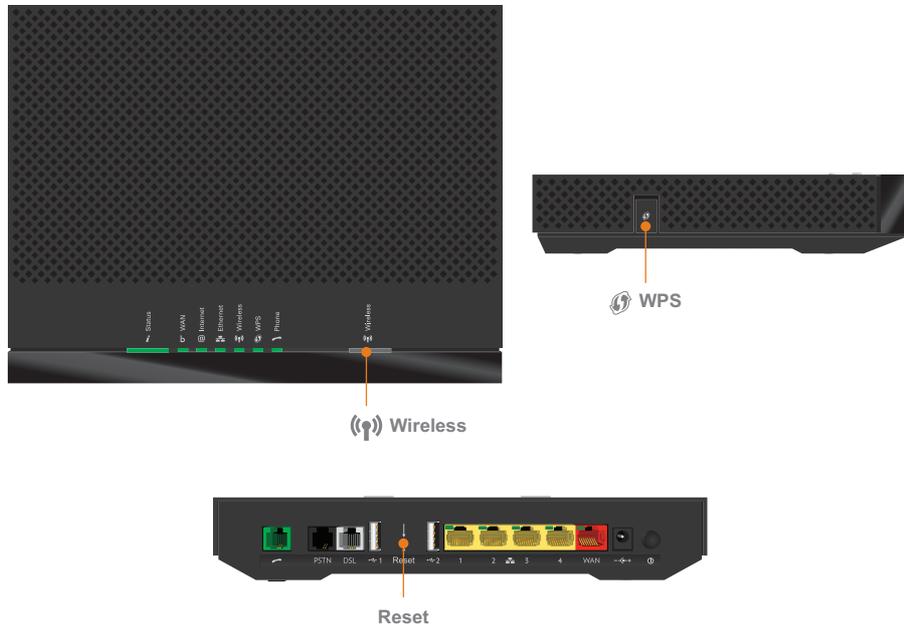


Be aware that, if you are not connected to the traditional telephone network, emergency calls will not be possible when your Internet connection is down or your TG-1 Gateway is powered off.

For more information, see “2.4 Setting up your telephone network” on page 16.

1.1.5 Buttons

Overview



WPS button

The WPS () button allows you to add new wireless clients to your network in a swift and easy, yet secure way, without the need to enter any of your wireless settings manually.

For more information, see “3.1 Connecting your wireless client via WPS” on page 19.

Wireless button

The **Wireless** () button allows you to disable your wireless access point. You can do this when you are not using the wireless access point. This allows you to save the energy that the TG-1 Gateway would be using for the wireless access point.

To turn the wireless interface on or off briefly press the **Wireless** button. When the wireless interface is turned:

- **Off**, the **Wireless** () LED is off.
- **On**, the **Wireless** () LED is on.

Reset button

The **Reset** button allows you to reset your TG-1 Gateway to factory defaults.

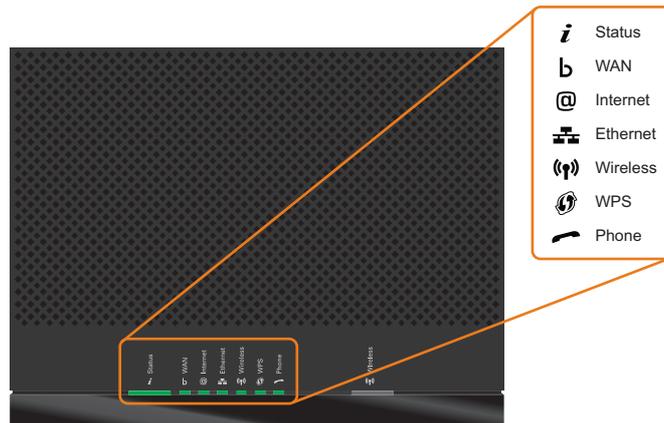
For more information, see “7.4 Reset to factory defaults” on page 60.

1 GETTING STARTED

1.1.6 Status LEDs

Introduction

On the TG-1 Gateway, you can find a number of status LEDs, indicating the state of the device.



Status LED

The **Status** (*i*) LED provides information about the overall state of your TG-1 Gateway:

Colour	State	Description
Green	Solid on	All services are available. The wireless access point is enabled .
Red	Solid on	Some services are not available.
Orange	Solid on	Bootloader selftest.
	Blinking	Bootloader active (during upgrade).
Off		The TG-1 Gateway is powered off.

WAN LED (if you are using the DSL gateway scenario)

Colour	State	Description
Green	Solid on	DSL line synchronised.
	Blinking	Trying to detect carrier signal or pending DSL line synchronisation.
Off		DSL line synchronised and operating in single line mode. - or - TG-1 Gateway powered off.

WAN LED (if you are using the local router scenario)

Colour	State	Description
Green	Solid on	Connected to the WAN device
Off		Not connected to the WAN device

Internet LED

Colour	State	Description
Green	Solid on	Connected to the Internet, no activity.
	Blinking	Connected to the Internet, sending/receiving data.
Red	Solid on	Failed to setup the Internet connection.
Off		No Internet connection.

Ethernet LED

Colour	State	Description
Green	Solid on	Network device(s) connected to the Ethernet switch.
	Blinking	Network device(s) connected to the Ethernet switch and sending/receiving data.
Off		No Ethernet connection on your local network

Wireless LED

Colour	State	Description
Green	Solid on	The wireless interface is enabled, no wireless activity.
	Blinking	The wireless interface is enabled, wireless activity.
Off		The wireless interface is disabled.

WPS LED

Colour	State	Description
Green	Solid On	Client successfully registered via WPS.
Orange	Blinking	WPS registration ongoing.
Red	Blinking	Error occurred.

For more information about WPS, see “3.1 Connecting your wireless client via WPS” on page 19.

1 GETTING STARTED

Phone LED

Colour	State	Description
Green	Solid on	Registered at your VoIP provider, no activity.
	Blinking	Registered at your VoIP provider, activity.
Off		Not registered to your VoIP provider.

2 Setup

Introduction

Proceed as follows:

- 1 Connect the TG-1 Gateway to your service provider's network.
For more information, see *"2.1 Connecting the TG-1 Gateway to your service provider's network" on page 12.*
- 2 Power on the TG-1 Gateway.
For more information, see *"2.2 Powering on the TG-1 Gateway" on page 14.*
- 3 Connect your network devices. To do this using:
 - ▶ A wireless connection, see *"2.3 Connecting your wired devices" on page 15.*
 - ▶ A wired connection, see *"3 Wireless networking" on page 18.*

We recommended you to first connect one computer/tablet (if possible via a wired connection), then secure your wireless connection first and as a final step connect the other devices.
For more information, see *"Secure your wireless connection!" on page 18.*
- 4 Connect your phones, see *"2.4 Setting up your telephone network" on page 16.*
- 5 After completing the setup procedure, the TG-1 Gateway is ready for use. Optionally, you can further configure the TG-1 Gateway to your needs (for example, change the wireless security) using the TG-1 Gateway GUI.
For more information, see *"4 The TG-1 Gateway GUI" on page 28.*

2 SETUP

2.1 Connecting the TG-1 Gateway to your service provider's network

Introduction

This section helps you to connect the TG-1 Gateway to your service provider's network.

Choose your setup

To connect the TG-1 Gateway to the Internet you can either:

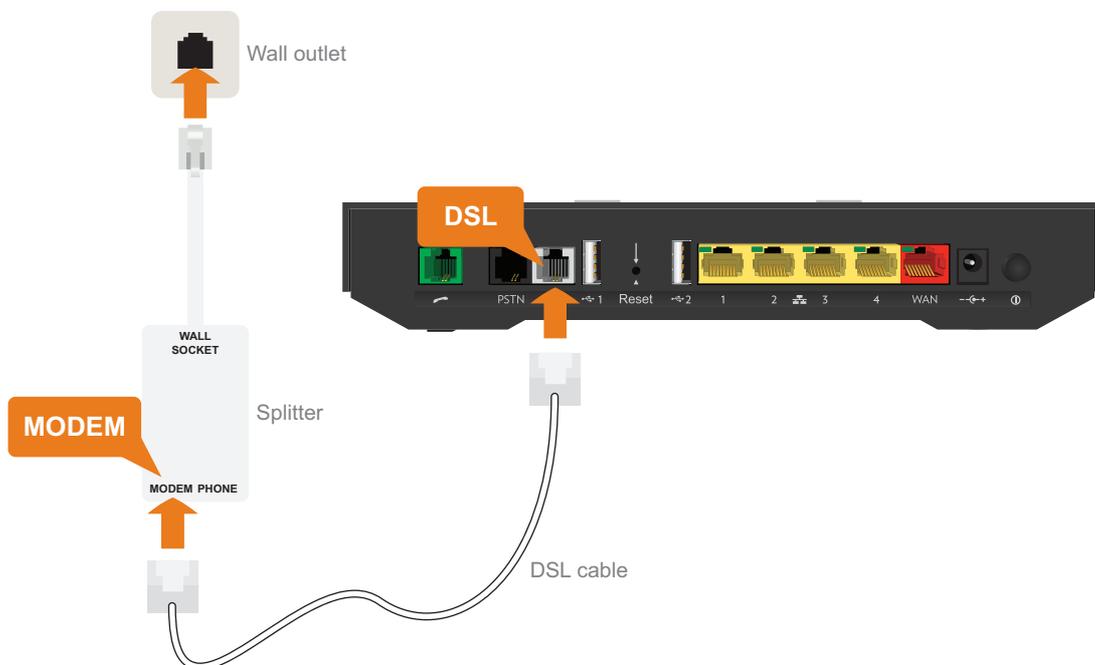
- Directly connect the TG-1 Gateway to your operator's DSL network. In this setup the TG-1 Gateway is used as a **DSL gateway**. Follow the instructions from "*Option A: Setup the TG-1 Gateway as DSL Gateway*" on page 12.



- Place the TG-1 Gateway behind another Internet access device (for example, an optical network terminal for NBN Fibre). In this setup the TG-1 Gateway is used as **local router**. Follow the instructions from "*Option B: Setup the TG-1 Gateway as local router*" on page 13.



Option A: Setup the TG-1 Gateway as DSL Gateway



Proceed as follows:

- 1 Take the DSL cable. This is the grey cable that is included in your box.
- 2 Plug one end of the cable in the grey **DSL** port on the back of your TG-1 Gateway.

3 If your service:

- ▶ Does **not** include landline telephony:

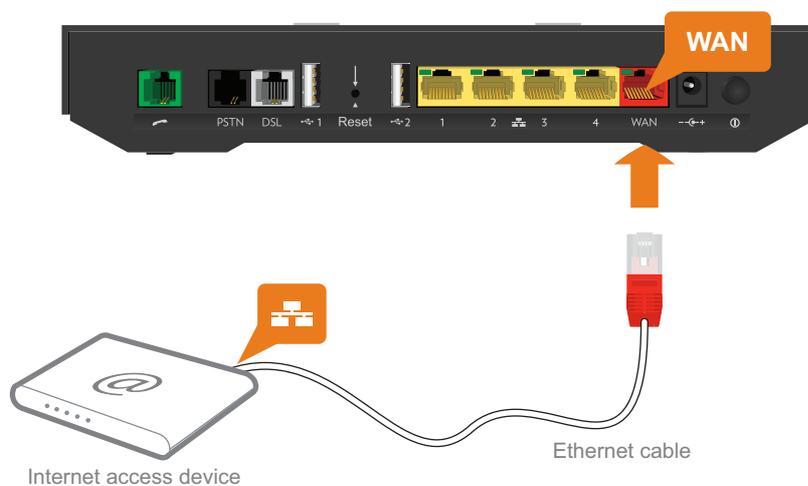
Plug the other end of the DSL cable directly into your telephone wall socket.

- ▶ Includes landline telephony:

Plug the other end of the DSL cable into the **MODEM** port of your filter/splitter and then plug the cable end of the splitter into your telephone wall socket.

4 Continue with “2.2 Powering on the TG-1 Gateway” on page 14.

Option B: Setup the TG-1 Gateway as local router



Proceed as follows:

- 1 Take an Ethernet cable. If your box contains an Ethernet cable with red connectors, you can use that cable.
- 2 Plug one end of the cable in the **red** WAN port on the back of your TG-1 Gateway.
- 3 Plug the other end of the cable into the Ethernet port of your Internet access device (for example, an optical network terminal for NBN or Fibre).



The **WAN** port can only be used to connect your TG-1 Gateway to an Internet access device. You can not use it to connect other devices (for example, a computer) to the TG-1 Gateway.

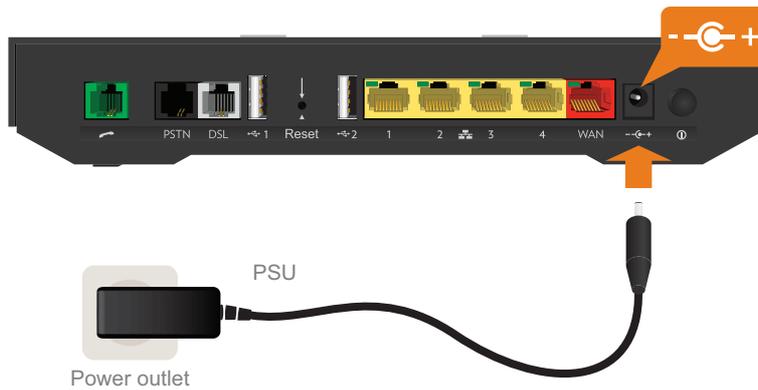
2 SETUP

2.2 Powering on the TG-1 Gateway

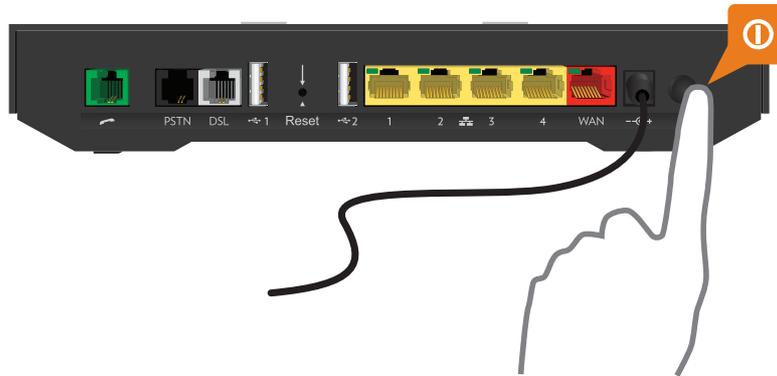
Procedure

Proceed as follows:

- 1 Plug the connector of the electric Power Supply Unit (PSU) into the TG-1 Gateway power inlet port (⎓). Plug the PSU into a nearby power outlet.



- 2 Press the power button (⏻) to turn on the TG-1 Gateway.



- 3 The **Status** (i) LED lights up. Wait two minutes to allow the TG-1 Gateway to complete the start up phase.

2.3 Connecting your wired devices



To connect a wireless devices, see “3 Wireless networking” on page 18.

Requirements

- Both your network device (for example, a computer, a gaming console,...) and TG-1 Gateway must have a free Ethernet port.
- Your network device must be configured to obtain an IP address automatically. This is the default setting.

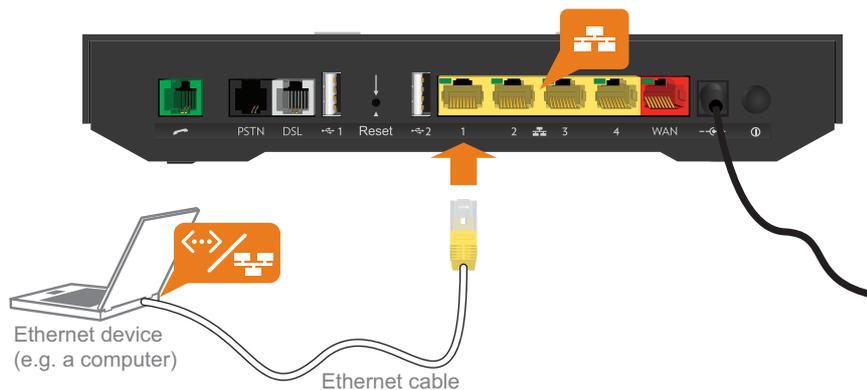
Ethernet cable

In your package, you will find a cable with yellow connectors. This is the Ethernet cable.

Procedure

Proceed as follows:

- 1 Connect one end of the Ethernet cable to one of the **yellow** Ethernet ports of your TG-1 Gateway:



- 2 Connect the other end of the Ethernet cable to your network device.



The TG-1 Gateway does not support Power over Ethernet (PoE). All network devices that are connected to the TG-1 Gateway must be powered by their own power source.

- 3 Your device is now connected to your network.

2 SETUP

2.4 Setting up your telephone network

Procedure

To set up your telephone network, follow these steps:

- 1 Connect your corded phone, DECT base station or fax to the green **Phone** port(s) on the back panel of your TG-1 Gateway.
- 2 Optionally, you can connect your TG-1 Gateway to the traditional network as a fall-back solution when the Internet connection is down. To do this, connect the **PSTN** port to the **Phone** output of your filter or splitter.

2.5 Configure your MediaAccess Gateway

Proceed as follows:

- 1 Browse to <http://10.1.1.1> on a computer or device that is currently connected to you TG-1 Gateway (either wired or wirelessly).



10.1.1.1 is the default IP address of the TG-1 Gateway. If you have changed the IP address of the TG-1 Gateway, use this IP address instead.

- 2 The **Sign in** page appears.

- 3 In the user name (👤) and password (🔒) box, type **admin**.
- 4 The TG-1 Gateway web interface appears and automatically starts the **Setup Wizard**. The Setup Wizard will now guide you through the configuration of your TG-1 Gateway.
- 5 After completing the Setup Wizard your TG-1 Gateway is ready for use.

3 Wireless networking

Introduction

This section will help you set up your wireless network for your wireless devices.

What you need to set up a wireless network

To set up a wireless network, you need the following components:

- A *Wireless access point* (already integrated into your TG-1 Gateway)
- A *Wireless client* the device that you want to connect (for example, a computer, smartphone, network printer,...)

Wireless access point

The wireless access point:

- Connects your wireless devices to the TG-1 Gateway (and its services).
- Allows you to secure the data sent over wireless connection.

The TG-1 Gateway comes with two integrated IEEE 802.11n wireless access point.

- The *main access point* that allows you to connect you home network devices.
- The *guest access point* is disabled by default. If you turn it on you can provide wireless Internet access to guests. For more information see [“3.5 Using the guest access point” on page 27](#).

Wireless client

The wireless client allows you to connect a device, typically a computer, to a wireless access point. Both built-in and external (for example via USB) clients are available.



Devices like tablets, smart TVs and smartphones usually have a built-in wireless client. Check the documentation of your device for more information.

Check the documentation of your device if you are not sure if your device is equipped with a wireless client.

Configuring your wireless clients

For more information on how to establish a wireless connection to the TG-1 Gateway, see:

- [“3.1 Connecting your wireless client via WPS” on page 19](#)
- [“3.2 How to manually connect a wireless client” on page 21](#)

Secure your wireless connection!

By default, the TG-1 Gateway secures your wireless data with WPA2-PSK encryption. This is the most secure encryption type that is currently available.

The wireless key used to encrypt the data is a unique sequence of ten random characters. You can find your wireless key on the bottom label of your TG-1 Gateway.

If you want to make changes to the security settings, see [“3.4 Changing the wireless security settings” on page 24](#).

3.1 Connecting your wireless client via WPS

WPS

Wi-Fi Protected Setup (WPS) allows you to add new wireless clients to your local network in a swift and easy way, without the need to enter any of your wireless settings (network name, wireless key, encryption type).

Requirements

- Your wireless client must support WPS. Check the documentation of your wireless client for this.
 - ✔ Windows 8, Windows 7 and Windows Vista Service Pack 1 have native WPS support.
- Your TG-1 Gateway must use **WPA2 PSK** encryption (default encryption), **WPA+WPA2-PSK** encryption, **WPA-PSK** encryption or no encryption. WPS with WEP encryption is not possible.
- The WPS function must be enabled on the TG-1 Gateway. This is the default setting.

Procedure for WPS Push Button Configuration (PBC)

Proceed as follows:

- 1 Shortly press the WPS button on the **TG-1 Gateway**:



- 2 The **WPS** LED starts blinking orange. This indicates that the TG-1 Gateway is now searching for wireless clients that are in registration mode. You now have two minutes to start WPS on your wireless client.
- 3 Start **WPS** PBC on your wireless client.
- 4 The TG-1 Gateway is now exchanging all wireless settings.
- 5 At the end of the procedure the status of the **WPS** LED on your TG-1 Gateway will change to either of the following:
 - ▶ Solid green
This indicates that you have successfully registered your wireless client. You are now connected to the TG-1 Gateway wireless network.
 - ▶ Blinking red
This indicates that the TG-1 Gateway could not find your wireless client. Use the same procedure to try again (you do not need to wait until the **WPS** LED on your TG-1 Gateway turns off).

Troubleshooting

If you are having trouble connecting your wireless client via WPS, this may be caused by one of the following reasons:

- WPS can not be correctly executed:
Try again later and if the problem persists, configure your wireless manually. For more information, see *“3.2 How to manually connect a wireless client” on page 21.*
- Your wireless client is out of range:
If possible move your wireless client closer to your TG-1 Gateway or use a wireless repeater to extend the range of your wireless network and try again.
- Another device is interfering on the selected wireless channel:
Change the radio channel of your TG-1 Gateway access point and try again. For more information, see *“Change the wireless channel” on page 59.*

3.2 How to manually connect a wireless client

Procedure

To connect a wireless client (for example, a computer) to the wireless network, configure that wireless client with the wireless settings (network name and wireless key) used by the access point.

If your TG-1 Gateway is still using the default wireless settings, use network name (SSID) and wireless key that is printed on the TG-1 Gateway's bottom panel label.



You can always find back the wireless settings via the TG-1 Gateway GUI. For more information, see *"Forgot your wireless key?"* on page 58

3.3 Connecting your wireless client by scanning a QR code

Introduction

The TG-1 Gateway allows you to generate a Quick Response (QR) code that contains all wireless settings that are needed to connect. You are then able to connect to the wireless network by scanning the generated code.

Target devices

This connection method is typically used for tablets and smartphones.

Requirements

Your wireless device must have:

- A camera to scan the code.
- An application (app) to interpret the QR code and connect to a wireless network.
For example: if you are using Android on your device, you may download **QR Droid** from **Google Play**.

Procedure

Proceed as follows:

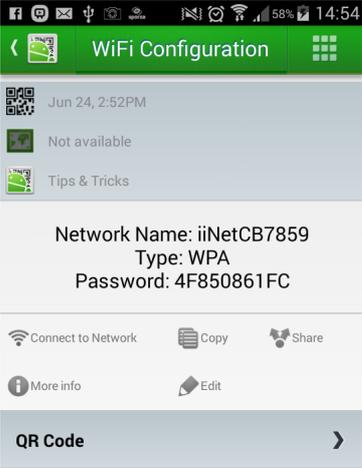
- 1 Browse to the TG-1 Gateway GUI.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Wireless**. The **Wireless** page appears.
- 3 Under **QR Code**, click **Generate QRCode**.
- 4 The wireless QR code appears.



You can now:

- ▶ Scan the code directly from your screen.
- ▶ Print this page and scan the code from the paper version.

5 Your app shows you the wireless settings used by your TG-1 Gateway and offers you to connect to its wireless network. Connect to the network.



3.4 Changing the wireless security settings

Introduction

We recommend you to protect all wireless communication between the wireless clients and your TG-1 Gateway with a wireless key. This means that:

- Only clients that use the correct Network Name (SSID) and wireless key can connect to your network.
- All data passing through your wireless access point is secured by encryption.

Encryption types

Over the years a number of encryption methods have been developed. The list below gives you an overview of the encryption types supported by the TG-1 Gateway and ordered by descending security level; you will find the highest level of security at the top of the list:

- **WPA-Personal (WPA-PSK) Encryption:**
The wireless connection is secured with a pre-shared key that has been defined by the user. Wireless clients must be configured with this key before they can connect to the TG-1 Gateway. The TG-1 Gateway supports the following WPA-PSK versions (ordered by descending security):
 - ▶ **WPA2 PSK:** the most recent and most secure version of WPA-PSK.
Choose this version if you are sure that all your wireless clients support WPA2-PSK.
 - ▶ **WPA+WPA2 PSK:** this is a mixed mode.
In this mode WPA2-PSK, is the preferred encryption type but wireless clients do not support WPA2-PSK can still use WPA-PSK as encryption type.
Choose this option if not all of your wireless clients support WPA2-PSK or if you are not sure. Wireless clients that support WPA2-PSK will use WPA2-PSK, the others will use WPA-PSK.
- **WPA-Enterprise (WPA) encryption:**
Wireless clients will authenticate to the Remote Authentication Dial In User Service (RADIUS) server. The RADIUS server then provides the wireless key that must be used to encrypt its data. The RADIUS server regularly updates this key at a specified interval. The TG-1 Gateway supports the following WPA-PSK versions (ordered by descending security):
 - ▶ **WPA2:** the most recent and most secure version of WPA-Enterprise.
Choose this version if you are sure that all your wireless clients support WPA2.
 - ▶ **WPA+WPA2:** this is a mixed mode.
In this mode WPA2, is the preferred encryption type but wireless clients do not support WPA2 can still use WPA as encryption type.
Choose this option if not all of your wireless clients support WPA2 or if you are not sure. Wireless clients that support WPA2 will use WPA2, the others will use WPA.
- **WEP Encryption:**
The least safe encryption type used for wireless connections. Like WPA-PSK it uses a user-defined key, but WEP has been proven to have security issues.
 - ⚠ Although the TG-1 Gateway allows you to use WEP or no security, we strongly advise against using one of them!

Configuration

To secure your wireless network with:

- WPA-PSK encryption, continue with *“3.4.1 Configuring WPA-PSK encryption” on page 25.*
- WPA encryption (via RADIUS), continue with *“3.4.2 Configuring WPA encryption” on page 26.*

3.4.1 Configuring WPA-PSK encryption

Procedure

Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Wireless**. The **Wireless** page appears.
- 3 In the **Security Mode** list under **Access Point**, select one of the following modes:
 - ▶ **WPA-PSK + WPA2-PSK**
 - ▶ **WPA2-PSK**For more information, see “Encryption types” on page 24.
- 4 In the **Wireless Password** box, type a the key of your choice. The key must be in one of the following formats:
 - ▶ 8 to 63 alphanumeric characters. For example: MyKey123
 - ▶ 8 to 64 hexadecimal characters (characters from 0 to 9 and from A to F). For example: C54F48A5.
- 5 Click **Save**.
- 6 Reconnect your wireless client(s) to the TG-1 Gateway using these new security settings.
For more information, see “3.1 Connecting your wireless client via WPS” on page 19 or “3.2 How to manually connect a wireless client” on page 21.

3.4.2 Configuring WPA encryption

Procedure

Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Wireless**. The **Wireless** page appears.
- 3 In the **Security Mode** list under **Access Point**, select one of the following modes:
 - ▶ **WPA+WPA2**
 - ▶ **WPA2**For more information, see “Encryption types” on page 24.
- 4 The following RADIUS settings are now available for configuration:
 - ▶ **Radius Authentication Server's IP:** enter the IP address of your RADIUS server.
 - ▶ **Radius Authentication Server's port:** enter the WPA Radius Port.
 - ▶ **Radius Authentication Server's secret:** enter the WPA Radius Key.
- 5 Click **Save** to immediately apply your changes.
- 6 Reconnect your wireless client(s) to the TG-1 Gateway using these new security settings.
For more information, see “3.1 Connecting your wireless client via WPS” on page 19 or “3.2 How to manually connect a wireless client” on page 21.

3.5 Using the guest access point

Introduction

Your TG-1 Gateway allows you to enable a second access point. This is a dedicated guest access point. Users that are connected to the guest access point can use the TG-1 Gateway's Internet connection but they can not access your home network or shared content.

Enabling the guest access point

Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
 - 2 Click **Wireless**. The **Wireless** page appears.
 - 3 On the left menu, select the **second** access point. By default it will have a “-Guest” suffix.
 - 4 Under **Access Point**, switch **Enabled** to .
 - 5 Click **Save**.
 - 6 The guest access point is now up and running. You can now connect to this access point with the wireless settings that are listed under access point.
-  By default, WPS is assigned to the main access point. If you want to assign it to the guest access point

Assigning WPS function to the guest access point

Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Wireless**. The **Wireless** page appears.
- 3 On the left menu, select the **first** access point.
- 4 Under **Access Point**, switch **WPS** to  and click **Save**.
- 5 The **Wireless** page closes. Click **Wireless** again. The **Wireless** page reappears.
- 6 On the left menu, select the **second** access point.
- 7 Under **Access Point**, switch **WPS** to  and click **Save**.
- 8 The **WPS** function is now assigned to the guest access point. If you now connect a device using WPS, the device will be connected to the guest access point.

4 THE TG-1 GATEWAY GUI

4 The TG-1 Gateway GUI

Introduction

The TG-1 Gateway web interface allows you to configure your TG-1 Gateway using your web browser.

Topics

This chapter describes the following topics:

Topic	Page
<i>4.1 Access from your local network</i>	29
<i>4.2 Remote assistance</i>	30
<i>4.3 Account settings</i>	31
<i>4.4 Cards</i>	32

4.1 Access from your local network

Proceed as follows:

- 1 Browse to <http://10.1.1.1> on a computer or device that is currently connected to your TG-1 Gateway (either wired or wirelessly).



10.1.1.1 is the default IP address of the TG-1 Gateway. If you have changed the IP address of the TG-1 Gateway, use this IP address instead.

- 2 The **Sign in** page appears.

- 3 Enter your user name (👤) and password (🔒). Click **Sign In**



If you did not change the default credentials, enter **admin** in both text boxes.

- 4 The TG-1 Gateway GUI appears.

Home page

To make it possible to quickly access the settings of specific features, the features have been grouped in a number of cards.

4.2 Remote assistance

Remote assistance allows you to grant access to your TG-1 Gateway from the Internet.

Remote assistance modes

There are two modes of remote assistance:

- **Permanent:**
The remote sessions ends when the technical support disables remote assistance or after restarting your TG-1 Gateway.
- **Temporary:**
The remote sessions ends when the technical support disables remote assistance, after restarting your TG-1 Gateway or after 30 minutes of inactivity.

How to enable remote assistance

- 1 Browse to the TG-1 Gateway GUI.
- 2 Click the **Assistance** tab.
- 3 Select the **Enabled** check box.
- 4 Under **Mode**, click either of the following:
 - ▶ **Permanent:**
The remote sessions ends when the technical support disables remote assistance or after restarting your TG-1 Gateway.
 - ▶ **Temporary:**
The remote sessions ends when the technical support disables remote assistance, after restarting your TG-1 Gateway or after 30 minutes of inactivity.
- 5 Specify the password in either if the following ways:
 - ▶ Click the **Use Random Password** check box, to let the TG-1 Gateway generate a password.
 - ▶ Clear the **Use Random Password** check box and enter the password of your choice in the **Password** box.
- 6 Click **Apply**.

How to access the TG-1 Gateway from the Internet

- 1 Open your web browser and browse to the **URL** displayed in the **Assistance** card.(for example, <https://131.141.151.161:55174>).
 -  You must:
 - Use https
 - Include the port number (the part after the colon)
- 2 Your browser may prompt you that it does not recognize the security certificate. If so, indicate that you want to continue.
- 3 The **Sign** in page appears. Enter the user name and password displayed in the **Assistance** card.
 -  If you did not choose a random password when enabling remote assistance, enter the password that you provided instead.

How to disable remote assistance

In the **Assistance** card, click the switch to put it in the  position.

4.3 Account settings

In the upper-right corner of the page, you see the user name that you used to sign in.



Setup Wizard

admin

Gateway

Broadband

Internet

Wireless

ON

When you click the arrow next to your user name, the following options appear:

- **Change password**

Click this option to change your password. The **Change Password** page appears.

Change password

Your old password

Your new password

Repeat new password

Type your current password in the first box, type your new password in the last two text boxes and then click **Change Password**.



It is recommended to change the default password settings.

Choose a password that you can easily remember or write it down. If you forget your password the only option is to reset your TG-1 Gateway. For more information, see *“7.4 Reset to factory defaults” on page 60*.

- **Sign out**

Click this option to close the session and sign out.

4 THE TG-1 GATEWAY GUI

4.4 Cards

Overview

The home page contains the following cards:

- **Gateway**
For more information, see “4.4.1 Gateway” on page 34.
- **Broadband**
For more information, see “4.4.2 Broadband” on page 35.
- **Internet**
For more information, see “4.4.3 Internet” on page 36.
- **Wireless**
For more information, see “4.4.4 Wireless” on page 37.
- **Local Network**
For more information, see “4.4.4 Wireless” on page 37.
- **Devices**
For more information, see “4.4.6 Devices” on page 39.
- **WAN Services**
For more information, see “4.4.7 WAN Services” on page 40.
- **Firewall**
For more information, see “4.4.8 Firewall” on page 41.
- **Telephony**
For more information, see “4.4.9 Telephony” on page 42.
- **Diagnostics**
For more information, see “4.4.10 Diagnostics” on page 43.
- **Assistance**
For more information, see “4.4.11 Assistance” on page 44.
- **Mobile 3G/4G**
For more information, see “4.4.12 Mobile 3G/4G” on page 45.
- **Management**
For more information, see “4.4.13 Management” on page 46.
- **Content Sharing**
For more information, see “5 Sharing content” on page 47.

Launch buttons

When pointing to a header, the following icons may appear:

Button	Description
	Click this button to view additional information.
	Click this button to view or change the settings.

Toggle buttons

Some cards have an on/off switch in the header:

Button	Description
	The service is currently enabled. Clicking this button will disable the service.
	The service is currently disabled. Clicking this button will enable the service.

4 THE TG-1 GATEWAY GUI

4.4.1 Gateway

The Gateway card



The **Gateway** card displays:

- The software version currently installed on the TG-1 Gateway.
- The serial number of your TG-1 Gateway.
- The uptime. This is the time that has elapsed since power on of the TG-1 Gateway.

The Gateway page

To open the **Gateway** page, click the **Gateway** card.

The **Gateway** page allows you to:

- View basic information about the TG-1 Gateway.
- View or change the time settings used by the TG-1 Gateway.
- Restart the TG-1 Gateway.
- Reset the TG-1 Gateway to factory defaults.
For more information, see *“7.4 Reset to factory defaults” on page 60.*
- Export your current configuration.
- Import a previously saved configuration.
- Upgrade the firmware of the TG-1 Gateway (if available).

4.4.2 Broadband

Connection types

The TG-1 Gateway allows you to connect to the Internet using one of the following methods:

- DSL
The TG-1 Gateway is directly connected to the DSL network.
- Ethernet WAN
The TG-1 Gateway is connected to an Internet Access Device (IAD). The IAD brings the Internet into your home and the TG-1 Gateway acts as a local router.

The Broadband card



The **Broadband** card displays the status of the DSL or Ethernet WAN connection.

If the DSL line is connected, the **Broadband** card will also display the upload and download bandwidth in Megabits per second (Mbps).

The Broadband page

To open the **Broadband** page, click the **Broadband** card.

The **Broadband** page displays more detailed information about your broadband connection.

4 THE TG-1 GATEWAY GUI

4.4.3 Internet

The Internet card



The **Internet** card displays:

- The current status of your Internet connection.
- The WAN IP address
This is the IP address that the TG-1 Gateway uses for communication on the Internet.

The Internet Access Page

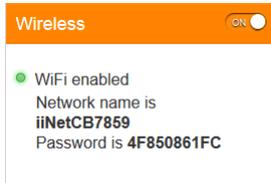
To open the **Internet Access** page, click the **Internet Access** card.

The **Internet Access** page has two tabs:

- **IPv4 Configuration** groups all the settings related to IPv4.
- **IPv6 Configuration** groups all the settings related to IPv6.

4.4.4 Wireless

The Wireless card



The **Wireless** card displays:

- The status of the wireless interface
- The network names (SSIDs) used by the wireless access points

Wireless ON/OFF switch

In the **Wireless** card header, you can see whether the wireless interface is enabled or not. If the switch is set to:

- **ON** then the wireless interface is enabled. Clicking the switch will disable all access points on the TG-1 Gateway.
- **OFF** then the wireless interface is disabled. Clicking the switch will enable all access points on the TG-1 Gateway.

The Wireless page

Click the **Wireless** card header to open the **Wireless** page.

On the left of the **Wireless** page you can select the access point that you want to configure:

- The first access point is the **main access point** and allows you to connect your home network devices.
- The second access point is the **guest access point** and allows you to provide wireless Internet access to guests. For more information see “3.5 Using the guest access point” on page 27.



The guest access point is disabled by default

For each of these access points, you can:

- View or change the wireless interface settings.
- View or change the access point settings
- Start a WPS push button configuration
- Generate a QR code to connect a wireless device.

Configuration examples

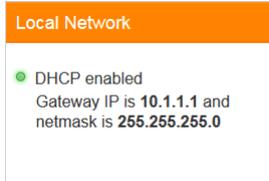
In this User Manual you can find information on how to:

- Change the wireless security settings.
For more information, see “3.4 Changing the wireless security settings” on page 24.
- Configure and use WPS.
For more information, see “3.1 Connecting your wireless client via WPS” on page 19.
- Use the QR code.
For more information, see “3.3 Connecting your wireless client by scanning a QR code” on page 22.

4 THE TG-1 GATEWAY GUI

4.4.5 Local Network

The Local Network card



The **Local Network** card displays:

- The status of the DHCP server (enabled or disabled).
- The local IP address and netmask of the TG-1 Gateway.

The Local Network page

To open the **Local Network** page, click the **Local Network** card header.

On the left of the **Local Network** page, you can select the local network that you want to configure:

- **lan** is the local network used by devices connected to:
 - ▶ The *main* access point
 - ▶ One of the Ethernet ports
 - ▶ One of the USB ports
- **Guest1** is the local network used by devices connected to the *guest* access point

For each of these networks you can:

- View or change the IP address of the TG-1 Gateway.
- View or change the DHCP settings of TG-1 Gateway

The **lan** network also allows you to add or remove static DHCP leases for devices

4.4.6 Devices

The Devices card



The **Devices** card displays the number of devices connected to:

- The Ethernet interface.
- Wireless interface.

Viewing additional settings

To open the **Devices** page, click the **Devices** card.

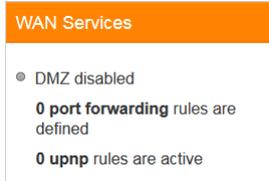
The **Devices** page allows you to:

- View a list of all devices in your local network.
- Configure Internet access rules for the devices in your local network.
For more information, see “6.1 Time of Day (ToD) access control” on page 53.

To view update the list, click **refresh date** in the upper-right corner.

4.4.7 WAN Services

The WAN Services card



The **WAN Services** card displays:

- The DMZ status
For more information, see *“6.2 DMZ” on page 54*.
- The number of port forwarding rule that are defined.
Port forwarding allows you to forward incoming Internet traffic arriving on a specific port to an local device.
- The number of UPnP rules that are active.
UPnP-enabled games and applications automatically create port the necessary forwarding rules to run services on that device.

The WAN Services page

To open the **WAN services**, click the **WAN Services** card.

The **WAN Services** page allows you to:

- View or change the port forwarding rules
- View the active UPnP rules.

Advanced WAN Services settings

On the **WAN Services** page, click **show advanced** in the upper-right corner to:

- Configure a DMZ host.
For more information, see *“6.2 DMZ” on page 54*.
- Enable or disable UPnP services
- Configure Dynamic DNS
The dynamic DNS service allows you to assign a dynamic DNS host name (for example mywebpage.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.

4.4.8 Firewall

Introduction

The TG-1 Gateway comes with an integrated firewall that helps you protect your network from attacks from the Internet. This firewall has a number of predefined levels to allow you to adjusted the firewall to your needs.

The default mode is **normal**. In **normal** mode, the firewall will:

- Allow all outbound connections and will silently drop all unknown incoming connections.
- Protect your TG-1 Gateway and local network against intrusions.

The Firewall card



The **Firewall** card displays current firewall level used.

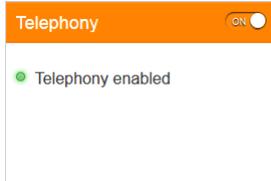
The Firewall page

Click **Firewall**. The **Firewall** page appears and allows you to:

- Change the firewall level.
- Enable or disable response to Internet pings.
- Enable or disable the SIP ALG.

4.4.9 Telephony

The Telephony card



The Telephony card displays the status of your voice subscriptions.

The Telephony page

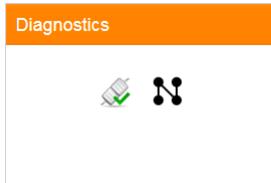
To open the **Telephony** page, click the **Telephony**.

The **Telephony** page allows you to:

- Configure your voice service and options.
- View the call log.

4.4.10 Diagnostics

The Diagnostics card



Click the **Diagnostics** card to use one of the following diagnostics tools:

- View DSL connection statistics (if applicable)
- Run ping and trace route test
- Run connection checks
- View port state and network statistics

4 THE TG-1 GATEWAY GUI

4.4.11 Assistance

Introduction

Remote assistance allows you to make the TG-1 Gateway GUI accessible from the Internet.

The Assistance card



The **Assistance** card displays whether remote assistance is enabled or not.

If remote assistance is enabled, the following information is also displayed:

- The port number that needs to be used to access the TG-1 Gateway GUI from the Internet.
- The user name and password that has to be used when signing in from the Internet.



The user name and password are randomly generated.

The Assistance switch

If the switch in these **Assistance** card header is set to:

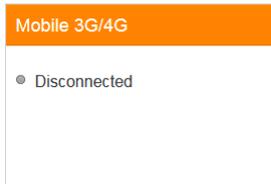
-  then the temporary or permanent remote assistance is enabled. Clicking the switch will disable it.
-  then the remote assistance is disabled. Clicking the switch will enable temporary remote assistance with a random password.

4.4.12 Mobile 3G/4G

Mobile fall-back

The TG-1 Gateway allows you to use a mobile Internet connection (for example, 3G) as fall-back connection for your Internet access. This means that the TG-1 Gateway will offer you the possibility to switch to the mobile Internet connection when your main Internet connection is down.

The Mobile 3G/4G card



The **Mobile** card displays the status of your mobile connection.

The Mobile 3G/4G page

To open the **Mobile 3G/4G** page, click the **Mobile 3G/4G** card.

The **Mobile 3G/4G** page allows you to:

- View information about the line and the mobile network status.
- Configure you mobile connection.

4 THE TG-1 GATEWAY GUI

4.4.13 Management

The Management page

To open the Management page, click the **Management** card.

The **Management** page has two tabs:

- The **User manager** tab you to manage the user accounts for the TG-1 Gateway GUI.
- The **Log viewer** tab displays the log messages of your TG-1 Gateway.

5 Sharing content

Introduction

If you connect a USB storage device to the TG-1 Gateway's USB port, you can share the content on your USB storage device(s) with other devices that are connected to your local network (mostly computers).

Features

- The TG-1 Gateway supports USB 2.0
- The following file systems are supported:
 - ▶ NTFS
 - ▶ FAT32
 - ▶ FAT16
 - ▶ HFS+
 - ▶ EXT2/3/4
- You can connect up to five USB storage devices (via a USB hub).

Content Sharing Servers

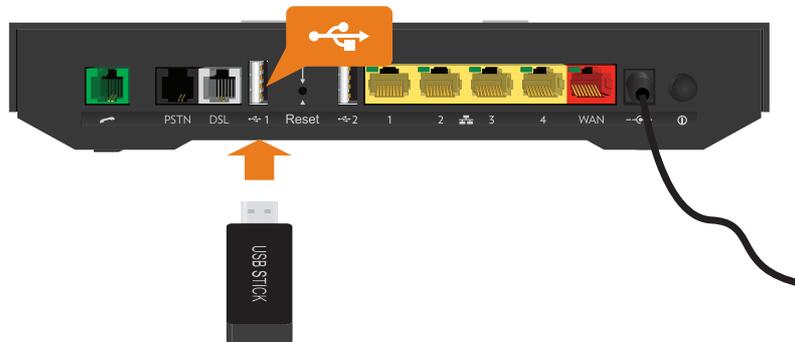
The TG-1 Gateway offers two types of services to share your content. The following table gives you a brief overview of the main functions:

	Samba server	DLNA server
Function	Store and access your data on your local network.	Make media files available for DLNA capable devices like Media players, set-top boxes from your local network.
Access	Read and write	<i>Read-only</i>
Accessible from	Local network	Local network
Type of content shared	<i>All files</i> from all partitions and disks that are connected.	Only the <i>media</i> files (music, movies and pictures) from all partitions and disks that are connected.

5 SHARING CONTENT

Configuration

Both the Samba and the DLNA server are **enabled by default**. The only thing that you need to do is to plug your memory stick or external hard disk in (one of) the USB port(s) of your TG-1 Gateway.



Customizing the settings

To change the default settings, proceed as follows:

- 1 Browse to the TG-1 Gateway GUI.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Content Sharing**. The **Content Sharing** page appears. Under **General status**, you can change the following settings:
 - ▶ **Samba enabled:**
Allows you to enable or disable the Samba file sharing server.
 - ▶ **Samba description:**
Add a short description for the TG-1 Gateway shared content.
 - ▶ **DLNA enabled:**
Select this option to enable the network file server.
- 3 If you click **show advanced** the following settings will also become available for configuration:
 - ▶ **Samba workgroup:**
Enter the same workgroup as used by your computer(s).
 - ▶ **Samba name:**
Enter the name that you want to use for the TG-1 Gateway shared content.
 - ▶ **DLNA name:**
Allows you to enable or disable the Samba server.
- 4 Click **Apply**.
- 5 All users connected to the TG-1 Gateway can now access the data stored on the storage device(s) that are connected to the TG-1 Gateway.

5.1 Accessing the Samba server

Introduction

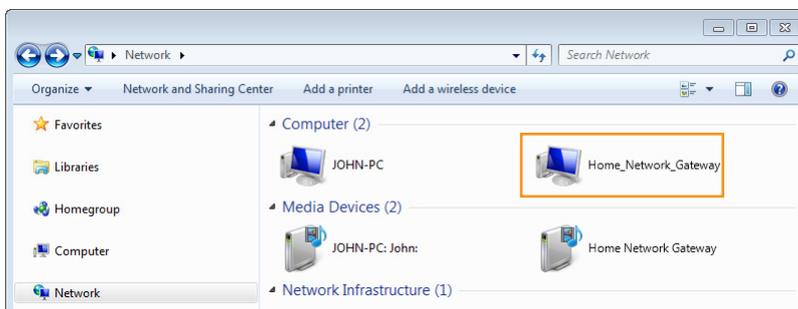
The Samba server allows you to share the content on your USB storage device(s) with other devices that are connected to your local network (mostly computers).

These devices have read and write access to e shared content.

Accessing the Samba server on Windows

Proceed as follows:

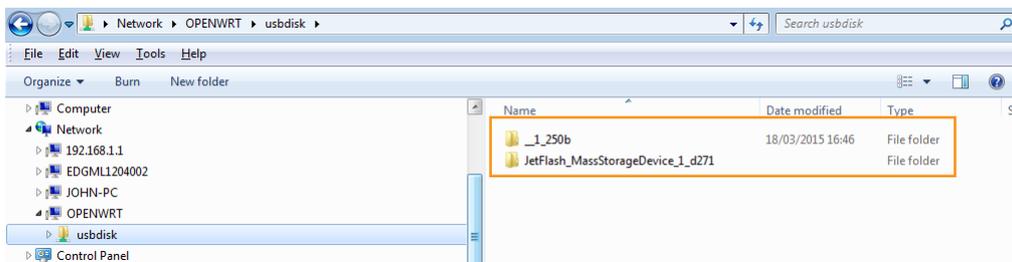
- 1 Open Windows Explorer and then click **Network**.
- 2 The **Network** window appears. Double-click **Home_Network_Gateway**.



 You can also access the device by entering `\\10.1.1.1` in the address bar.



- 3 Open the **usbdisk** folder.
- 4 The storage devices that are attached to your TG-1 Gateway are listed as folders.

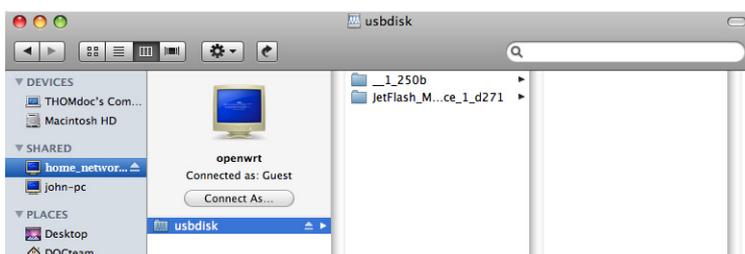


- 5 If you plan to frequently use this folder, it might be useful to map this folder as a network drive. For more information, see the help of your operating system.

Accessing the Samba server on Mac

Proceed as follows:

- 1 Open a **Finder** window. Under **SHARED** click **home_network_gat** and then click **usbdisk**.



- 2 The storage devices that are attached to your TG-1 Gateway are listed as folders.

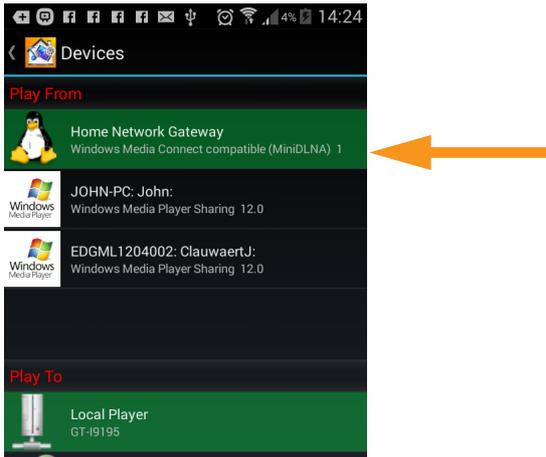
5 SHARING CONTENT

5.2 Accessing the DLNA server

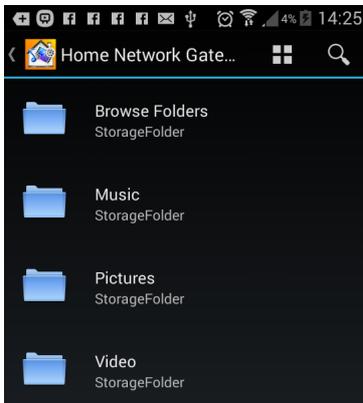
Introduction

The DLNA server lists all audio, video and picture files located on the connected USB storage device. All DLNA-certified renderers (for example, a DLNA-certified set-top box) that are connected to your network are able to view this list and play or view items from this list.

On your DLNA renderer, the TG-1 Gateway's DLNA media server will be listed as **Home Network Gateway**. Below you can find a screenshot taken on an Android smartphone with a DLNA capable app.



Via this entry, you can browse to your media files.



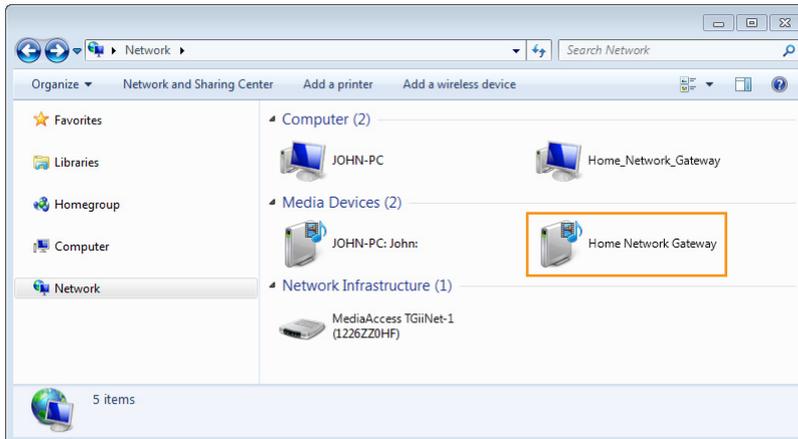
Windows 8 and Windows 7

Windows 8 and Windows 7 have native support for DLNA. They automatically detect DLNA and make your media files available for playback on your Windows Media Player and Windows Media Center.

Proceed as follows:

- 1 Open Windows Explorer and then click **Network**.

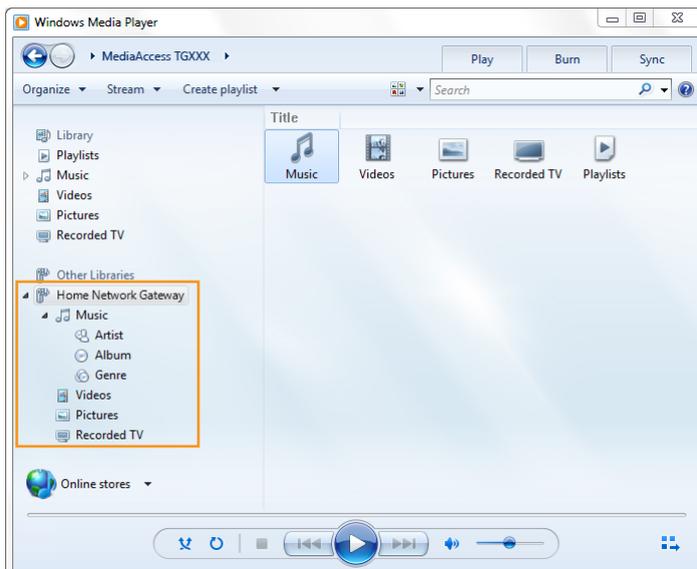
2 The **Network** window appears:



Under **Media Devices** you will find the TG-1 Gateway's DLNA media server (displayed as **TG-1 Gateway**).

3 Double-click **Home Network Gateway** to access your media files.

4 **Windows Media Player** starts up.



Your TG-1 Gateway's DLNA media server is listed in the tree structure on the left on the left. This entry allows you to browse your media files.

6 INTERNET SECURITY

6 Internet security

Overview

The TG-1 Gateway offers various options to secure your network and network connection:

Topic	Page
6.1 Time of Day (ToD) access control	53
6.2 DMZ	54

6.1 Time of Day (ToD) access control

Introduction

Time of Day allows you to create **access schedules for Internet access**.

By default, all devices have permanent access to the Internet without any restriction. Time of Day allows you to limit a device's Internet access to specific times and days.

Warning

Make sure that:

- The persons using these devices are aware of the time schedule. This to avoid the loss of data or unexpected service interruption.
- You protected the TG-1 Gateway with a password. If not, all users would be able to change the access control rules.

Creating an access control rule for a device

Proceed as follows:

- 1 Browse to the TG-1 Gateway GUI.
For more information, see *"4.1 Access from your local network" on page 29*.
- 2 Click **Devices**. The **Devices** page appears and lists all devices that have been connected to the TG-1 Gateway.
- 3 Click the  button of the device for which you want to create a rule.
- 4 The **Time of day access control** section appears.

Time of day access control

Enabled OFF

Mode

Start Time

Stop Time

Weekdays Mon. Tue. Wed. Thu. Fri. Sat. Sun.

- 5 Switch **Enabled** to ON.
- 6 In the **Mode** list, click
 - ▶ **Allow** if you want to specify when this device is allowed to access the Internet.
 - ▶ **Block** if your want if you want to specify when this device is allowed to access the Internet.
- 7 Enter the **Start Time** and **Stop Time** as h:mm (for example: **8:10, 23:59**).
- 8 Next to **Weekdays**, select the weekdays on which you want this rule to be applied.
- 9 Click .

Disabling an access control rule for a device

By removing the access control rule, the device will regain permanent access to the Internet.

Proceed as follows:

- 1 Browse to the TG-1 Gateway GUI.
For more information, see *"4.1 Access from your local network" on page 29*.
- 2 Click **Devices**. The **Devices** page appears.
- 3 Set the **ToD** switch for the device to OFF.
- 4 The device now has permanent access to the Internet.

6 INTERNET SECURITY

6.2 DMZ

Introduction

The TG-1 Gateway allows you to configure one local device as a De-Militarized Zone (DMZ) host. This means that:

- None of the TG-1 Gateway firewall rules will be applied to this device.
- All traffic originating from the Internet will be forwarded to this devices unless there is a port forwarding rule defined for this type of traffic. Port forwarding rules always have higher priority.

Use a static address for the DMZ host

Make sure that your DMZ host uses a fixed IP address. If you do not do this, the device might get a new IP address after some time and the port forwarding rule will no longer be applied to the device and another device may suddenly be acting as DMZ host.

How to configure a device as DMZ host

- 1 Browse to the TG-1 Gateway GUI.
For more information, see *"4.1 Access from your local network" on page 29*.
- 2 Click **WAN Services**. The **WAN services** page appears.
- 3 In the upper-right corner, click **show advanced**. The **DMZ** section appears.
- 4 Switch **Enabled** to **ON**.
- 5 In the **Destination** box, type the IP address of the device that you want to use as DMZ host.
- 6 Optionally, you can make exceptions on the DMZ by creating port mappings to direct specific traffic to other devices. To do this, click **Add new port mapping** under **Port forwarding table**.
- 7 Click **Save**. The DMZ is now active.

7 Troubleshooting

Introduction

This chapter suggests solutions for issues that you may encounter while installing, configuring or using your TG-1 Gateway.

If the suggestions do not resolve the problem, contact your service provider.

Topics

This chapter describes the following topics:

Topic	Page
<i>7.1 General TG-1 Gateway troubleshooting</i>	56
<i>7.2 Ethernet connection troubleshooting</i>	57
<i>7.3 Wireless connection troubleshooting</i>	58
<i>7.4 Reset to factory defaults</i>	60

7 TROUBLESHOOTING

7.1 General TG-1 Gateway troubleshooting

None of the LEDs light up (TG-1 Gateway does not work)

Make sure that:

- The TG-1 Gateway is plugged into a power socket outlet.
- You are using the correct power supply for your TG-1 Gateway device.
 -  The power requirements for your TG-1 Gateway are clearly indicated on the identification label of the TG-1 Gateway. Only use the power adaptor supplied with your TG-1 Gateway.
- The TG-1 Gateway is turned on via the push button or rocker switch on the back panel.

The WAN LED does not light up or is blinking

Make sure that:

- The DSL cable is correctly connected. For more information, see “2.1 Connecting the TG-1 Gateway to your service provider’s network” on page 12.
- The DSL service is enabled on your telephone line. For more information, contact your Internet Service Provider.
- Check the **Broadband** settings on the TG-1 Gateway GUI. Proceed as follows:
 - a Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
 - b In the **Broadband** card header, make sure that the switch is in the  position.
 - c Click **Broadband** and then click **show advanced**. If you are using the TG-1 Gateway as:
 - DSL gateway, make sure that **ADSL2+** or **VDSL** is selected. Make sure to select the correct DSL type.
 - Local router, make sure that **Ethernet** is selected.
 - d Click **Switch connection mode**.
 - e After a few minutes the **Status** should switch to connected. If needed click **refresh data** first.

The Internet LED does not light up

Make sure that Internet access is enabled.

Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 In the **Internet** card header, make sure that the switch is in the  position.

TG-1 Gateway unreachable

If you can not access your TG-1 Gateway via your web browser, you might consider a hardware reset as described in “7.4 Reset to factory defaults” on page 60.

7.2 Ethernet connection troubleshooting

Ethernet LED does not light up

Make sure that:

- The Ethernet cable is correctly connected to the Ethernet port on your TG-1 Gateway and your computer.
- You are using the correct cable type for your Ethernet equipment, that is at least UTP CAT5 with RJ-45 connectors.

7 TROUBLESHOOTING

7.3 Wireless connection troubleshooting

Forgot your wireless key?

If you have changed the wireless settings manually and you don't remember your settings, try one of the following:

- 1 Use a computer that is already connected to your network.



If none of your computers is connected to the wireless network, connect one with an Ethernet cable. For more information, see “2.3 Connecting your wired devices” on page 15.

- 2 Browse to the TG-1 Gateway GUI.
For more information, see “4.1 Access from your local network” on page 29.
- 3 Click **Wireless**. The **Wireless** page appears.
- 4 Under **Access Point**, you can find the network name (SSID) and wireless key (password).

The TG-1 Gateway does not appear in your wireless client's access point list

- Make sure that the TG-1 Gateway wireless interface is enabled.
 - a Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
 - b In the **Wireless** card header, make sure that the switch is **ON**.
- If the signal is low or not available, try to reposition the TG-1 Gateway for optimal performance.
- *Change the wireless channel.*

The TG-1 Gateway access point no longer available

If you were able to connect in the past, but can't connect anymore:

- Make sure that the wireless client adapter is enabled (message like “radio on”).
- Make sure that the wireless client is still using the correct wireless settings (network name (SSID), security settings).

Poor Wireless Connectivity or Range

Try the following:

- Check the signal strength, indicated by the wireless client manager. If the signal is low, try to reposition the TG-1 Gateway or (if available) redirect the antenna(s) of the TG-1 Gateway for optimal performance.
- *Change the wireless channel.*
- Use WPA(2)-PSK as encryption.
For more information, see “3.4 Changing the wireless security settings” on page 24.

Change the wireless channel

Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Wireless**. The **Wireless** page appears.
- 3 In the **Channel** list under **Interface**, click a channel other than displayed in **Current channel**.
- 4 Click **Save**.

Cannot connect via WPS

Make sure that WPS is enabled on the TG-1 Gateway. Proceed as follows:

To enable WPS proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Wireless**. The **Wireless** page appears.
- 3 If the **WPS** switch under **Access Point**, is switched to:
 - ▶  then WPS is already enabled, no further actions are needed.
 - ▶  then WPS is disabled, click  to switch it to  and then click **Save**.

If you are having trouble connecting your wireless client via WPS, try to configure it manually. For more information, see “3.2 How to manually connect a wireless client” on page 21.

7 TROUBLESHOOTING

7.4 Reset to factory defaults

Resetting your TG-1 Gateway

If at some point you can no longer connect to the TG-1 Gateway or you want to make a fresh install, it may be useful to perform a reset to factory defaults.



A reset to factory default settings deletes all configuration changes you made. Therefore, after the reset a reconfiguration of your TG-1 Gateway will be needed.

Also your wireless clients will have to be re-associated, as described in “3 Wireless networking” on page 18.

Methods

You can choose between:

- *Resetting the TG-1 Gateway via the TG-1 Gateway GUI*
- *Reset the TG-1 Gateway via the Reset button*

Resetting the TG-1 Gateway via the TG-1 Gateway GUI

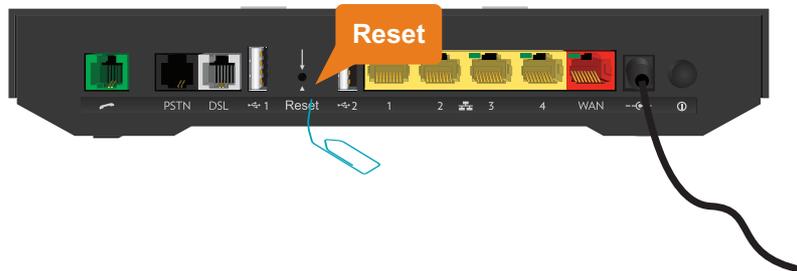
Proceed as follows:

- 1 Browse to the *The TG-1 Gateway GUI*.
For more information, see “4.1 Access from your local network” on page 29.
- 2 Click **Gateway**. The **Gateway** page appears.
- 3 Click **Reset**.
- 4 The TG-1 Gateway restores the factory default configuration and restarts.

Reset the TG-1 Gateway via the Reset button

Proceed as follows:

- 1 Make sure the TG-1 Gateway is turned on.
- 2 Push the **Reset** button for at least 7 seconds and then release it.



- 3 The TG-1 Gateway restarts.



Your system administrator may have disabled the physical reset button of the TG-1 Gateway. In this case, a hardware reset to defaults is not possible.

Support

iiNet Support

Available 24/7
13 22 58
support@iinet.net.au

Westnet Support

Available 24/7
1300 786 068
support@westnet.com.au

Adam Support

8am - 10pm (CST) Mon-Fri
9am - 5pm (CST) Weekends
1300 002 326
support@adam.com.au

Internode Support

7am - Midnight (CST) 7 days
1300 788 233
support@internode.on.net



If you have any issues with your set up or technology just isn't your strong point, you can always call our friendly staff for a hand.