

**VIRGIN MEDIA BUSINESS
CLOUD VOICE**

**PHONE CONFIGURATION GUIDE
PANASONIC KX-TGP500**

VERSION 2

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Introduction

This document shows an IT Manager or Administrator how to configure supported IP Phones to enable them to retrieve configuration files from Cloud Voice. All IP Phones used on Cloud Voice need to be on the authorised equipment list and must meet the firmware criteria. Any phone not listed will not work with the service. Please refer to the Service Description.

IP Phones purchased from Virgin Media Business do not require any configuration of the phone itself, as this activity is automated by us.

Overview

This Guide will provide you with the information needed to provision and configure the Cloud Voice service when you use your own devices. It will also provide you with troubleshooting to diagnose potential configuration issues.

Audience

This document is intended for IT Managers or Administrators and their CPE fulfilment teams as it contains elements of installation and configuration.

Supported Devices

The following Panasonic device types are supported by this Guide:

- Panasonic KX-TGP500 (UK model is B02)

The available device customisations are as follows:

- G711 – Prioritises the G711 standard voice codec
- G729 – Enforces the G729 low bandwidth codec
- HD – Prioritises the G722 HD voice codec
- DC – Configures the device to operate on Cloud Voice services

If you want to change the codec preferences or add HD voice, please refer to the Business Portal Company Administrator Guide, available from Virgin Media Business.

Network, Firewall and Security Considerations

Requirements specific to the Panasonic KX-TGP00 are as follows:

Protocol	Destination	Destination Port
HTTPS	https://dm.yourwhc.co.uk/dms/phone	TCP 80/443
	193.113.11.10	
	193.113.10.10	

Virgin Media Business recommends that the device is placed behind a router/firewall for security reasons. This is particularly important in situations where the device is issued on a public IP making it easily accessible from the Internet. In these cases we recommend that the device's position is hardened to reflect this public accessibility as per standard industry practices.

Provisioning and Configuration

All provisioning activity takes place by Virgin Media Business unless explicitly stated. And all configuration activity takes place on the Configuration Portal (Business Portal) unless explicitly stated.

Overview

The supported handsets use HTTPS to retrieve software and configuration files. The manual provisioning process requires the use of a PC or laptop connected to the same network.

Provisioning a user with own device

If you wish to configure and use your own handset with the Cloud Voice service, please ensure that you inform Virgin Media Business during the order process.

You'll need to tell us of:

- The handset variant, e.g. Panasonic KX TGP500
- The MAC of the handset
- The user the handset will be used by

We'll now activate the user and store the details on our provisioning server. As part of this activation we will:

- Create a configuration and firmware file using the template configuration file and firmware that we have for that device
- Insert the MAC address into that configuration file
- Insert the firmware version into the firmware file
- Insert the user's phone number into that configuration file

The user and device are provisioned and the physical device can now be configured. The above needs to be completed for all users and handsets. Modification to devices is done on the Business Portal. Please refer to the Business Portal Company Administrator User Guide if you need to alter a device type or MAC address.

Once the device is configured the following behaviour will occur:

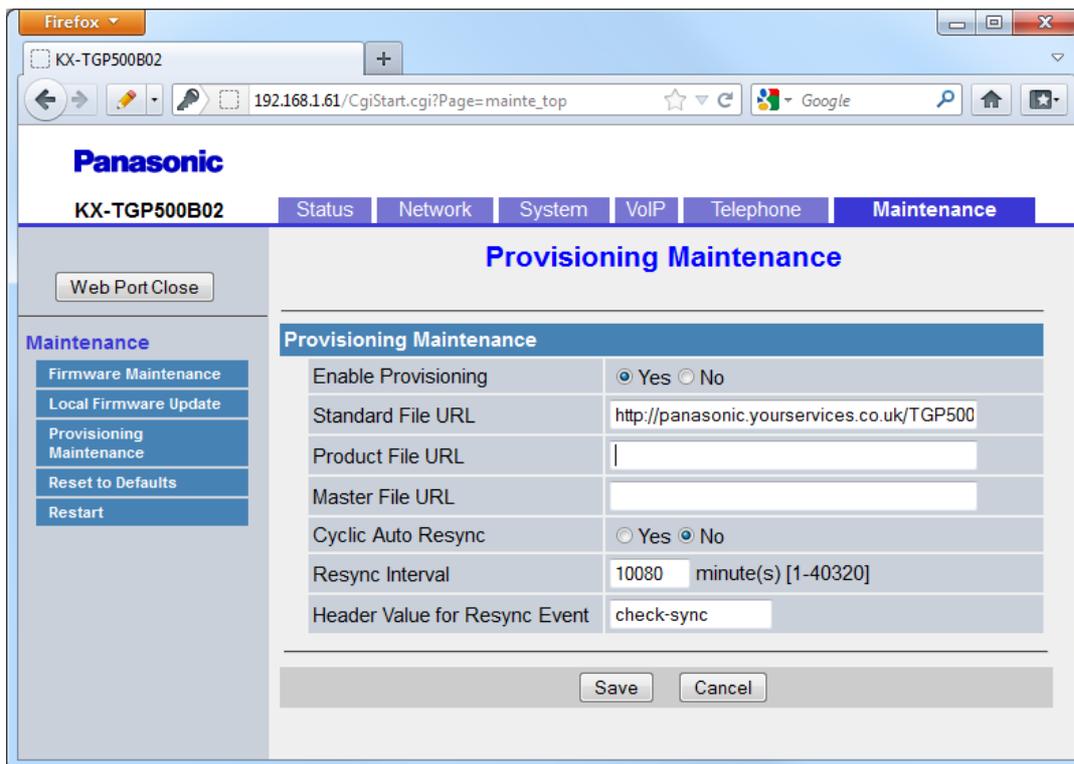
- Phone will redirect to our Provisioning Server
- Phone will present its MAC address to our Server and authenticate
- Server will look up MAC address and locate configuration file
- Configuration file will download files to the phone (approx. 3-10 minutes)
- Phone will now be configured and working

Device Configuration – Web-Interface

This process assumes that DHCP is in use on the network and requires the use of the web interface to enter the Provisioning Server address.

We also recommend that a valid NTP server is set, such as europe.pool.ntp.org. Please note that a DHCP served Provisioning Server address will not be committed to the flash memory.

1. Connect the base station to the network and power and register a handset to the base station
2. From a handset that is registered to the base station, enable the Web Configuration tool by selecting **Menu>>IP Service>> Network Settings >> Embedded Web >> On**
3. Locate the private IP address of the base station and enter this into your internet browser on a PC ensuring it's connected to the same LAN
4. The Web Configuration tool will prompt for a username and password. Enter the default admin username and password which are **admin** and **adminpass** respectively
5. A page similar to the below should be displayed:



6. Click the **Maintenance** tab on the top menu and then click the **Provisioning Maintenance** link on the left hand menu

Replace the contents of the Standard File URL box with:

<https://dm.yourwhc.co.uk/dms/phone/TGP500.cfg> and replace the contents of the Product File URL box with:

<https://dm.yourwhc.co.uk/dms/phone/Config{mac}.cfg>

7. Click the **Save** button
8. The base station will now request its software and configuration files

Please note that on successful retrieval of the configuration, the Web Configuration Utility will no longer be available and the default admin password will be changed.

Configuring Handsets and Lines on the TGP 500

The Panasonic KX-TGP500 allows you to use up to 6 handsets and provision up to 8 lines.

The default configuration is:

- Each user/line provisioned will use a specific handset for inbound and outbound calls
- Line 1 is used by handset 1, Line 2 is used by handset 2 and so on

Default configuration – Each User has a DDI and Handset:

- 1 x KX-TGP500 B02
- 5 x KX-TPA50 B02



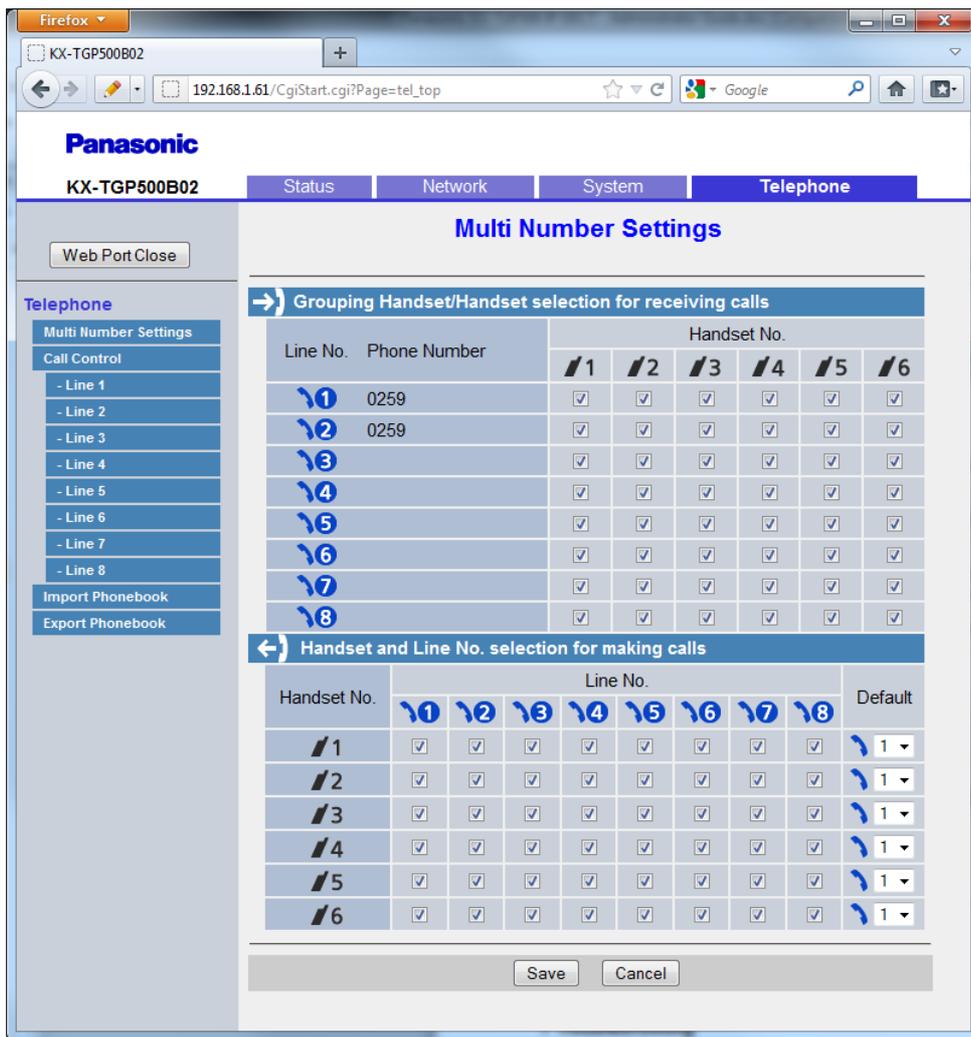
Example alternative configuration – 6 Handset, 3 Line ‘Key’ System:

- 1 x KX-TGP500 B02
- 5 x KX-TPA50 B02



The Web Configuration tool allows you to specify which handsets use which line for inbound and outbound calls. Each of the above settings can be changed to suit the deployment. To manage the handsets and lines options:

1. Enable the Web Configuration tool from a handset using Menu >> IP Service >> Network Setting >> Embedded Web >> On
2. Browse to the private IP address of the base station from a browser on the same network
3. The Web Configuration tool will prompt for a username and password. Enter the username 'user' and the password **2fhjm7vX**
4. Click the **telephone** tab on the top menu and then click the **Multi Number Settings** link on the left hand menu



The first table allows you to select which handsets receive calls for each line/user provisioned. The lower table allows you to select which lines handsets can use to make outbound calls and the default line to be used.

The following programming example shows a default configuration where 6 handsets have their own user accounts and phone numbers for inbound and outbound calls:

Panasonic
KX-TGP500B02

Status | Network | System | **Telephone**

Multi Number Settings

Web Port Close

Telephone

- Multi Number Settings
- Call Control
- Line 1
- Line 2
- Line 3
- Line 4
- Line 5
- Line 6
- Line 7
- Line 8
- Import Phonebook
- Export Phonebook

→ Grouping Handset/Handset selection for receiving calls

Line No.	Phone Number	Handset No.					
		/1	/2	/3	/4	/5	/6
1	01234567890	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	01234567891	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	01234567892	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	01234567893	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	01234567894	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	01234567895	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
7		<input type="checkbox"/>					
8		<input type="checkbox"/>					

← Handset and Line No. selection for making calls

Handset No.	Line No.								Default
	1	2	3	4	5	6	7	8	
/1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
/2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
/3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
/4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
/5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5
/6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6				

Save Cancel

Click the **Save** button to save and apply the settings.

Trouble Shooting

Device Fails to Register

- Check that you have provided the correct details to Virgin Media Business
- Check that you have entered the correct MAC address of the handset
- Check that the Standard Provisioning URL is set to <https://dm.yourwhc.co.uk/dms/phone/TGP500.cfg> and that the Product file is set to [https://dm.yourwhc.co.uk/dms/phone/Config\[mac}.cfg](https://dm.yourwhc.co.uk/dms/phone/Config[mac}.cfg).
- Ensure the device can access 193.113.11.10 and 193.113.11.10 over HTTP (TCP port 80) and HTTPS (TCP port 443)
- Check that the network meets the requirements in the Cloud Voice Service description firewall considerations
- Check that the device has power and network connectivity
- If all of the above fails, please reset the phones configuration as per the steps identified below

Inbound or Outbound Calls Fail

- Check that the device is registered as above
- Check that the correct telephone number and/or extension are provisioned for the user
- For inbound calls check that you do not have an unwanted divert in place or “Do Not Disturb” configured in the Business Portal