

**VIRGIN MEDIA BUSINESS  
CLOUD VOICE  
PHONE CONFIGURATION GUIDE  
POLYCOM VVX SERIES**

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 **Polycom** device types are supported by this Guide:

- Polycom VVX 300
- Polycom VVX 301
- Polycom VVX 310
- Polycom VVX 400
- Polycom VVX 410
- Polycom VVX 411
- Polycom VVX 500
- Polycom VVX 600
- Polycom VVX 601
- Polycom VVX 1500

The available device customisations are as follows:

- ACD – Provides Call Centre ACD Soft Key integration
- BLF – Provides Busy Lamp Field integration
- G711 – Prioritizes the G711 standard voice codec
- G729 – Enforces the G729 low bandwidth codec
- HD – Prioritizes the G722 HD voice codec
- DC – Configures the device to operate on a VPN Service. Only change this is advised to.
- MCN – Disables Missed Call Notification

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.

## Supported Attachments

The above Polycom VVX devices optionally support additional pieces of equipment that can be attached to the devices to utilise some of the network features.

### Busy Lamp Field

The above Polycom VVX devices optionally support the **Busy Lamp Field (BLF)** feature, allowing you to monitor the status of users within your organisation. This can also double up as speed dials. If you wish to use the phone for monitoring of users, please ensure you purchase a BLF license, available on the order journey as a user add-on and enable the BLF setting against the device in the Business Portal. In addition the user will need to configure BLF from their features page.

Alternatively, where you need to monitor more users than the phone can support, you can attach up to three **VVX Colour or VVX Paper expansion modules** to the side of the phone. An expansion module is only required when monitoring many users that would not all fit on the native phone display. If you wish to use the sidecars for monitoring of users, please ensure you purchase one the modules from Virgin Media Business.

## Point-2-Point Video

The Polycom VVX 500, 600 and 601 support the attachment of a Polycom VVX USB camera. This attachment will enable the user to conduct a video call with one another individual using any of the following devices/applications:

- Polycom VVX 500 with VVX USB Camera
- Polycom VVX 600 with VVX USB Camera
- Polycom VVX 601 with VVX USB Camera
- Polycom VVX 1500
- Office UC Desktop
- Office UC Smartphone
- Office UC Tablet

If you wish to conduct video calls from the VVX 500, 600 or 601 then please ensure you purchase a VVX USB Camera, available on the order journey as a CPE accessory. Contained within the box is a Quick Install Guide to show you how to install it. For guidance on how to use the camera, please download the user guides from the Polycom [website](#).

The VVX 1500 supports video directly from the device, with no need for a USB camera attachment.

## *Energy Saving*

When not in use, the phones will ever so slightly reduce the brightness of their screens in order to conserve energy. In addition to this policy, during the hours of 19.00 – 07.00, 7 days a week, the phones' screens will further reduce their brightness. This is an additional energy saving policy but does not affect calls or features. Simply touching a button, or its screen on touchscreen variants, picking up the handset or receiving a call, will immediately bring the screen back to its full brightness.

## *Firmware Upgrades*

The latest firmware introduces a platform polling capability which will see the phones periodically contact our provisioning server to check for new firmware. Where new firmware is found, the handset will automatically update the phone. Polling will automatically occur once a week, and outside the contracted business hours.

Any handset on firmware prior to this update will need to be rebooted to get the new firmware updates including the polling capability.

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## *Network, Firewall and Security Considerations*

Requirements specific to the Polycom VVX Series are as follows:

Protocol	Destination	Destination Port
HTTPS	<a href="https://dm.yourwhc.co.uk/dms/phone">https://dm.yourwhc.co.uk/dms/phone</a>	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. Polycom VVX 301
- 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 steps need 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

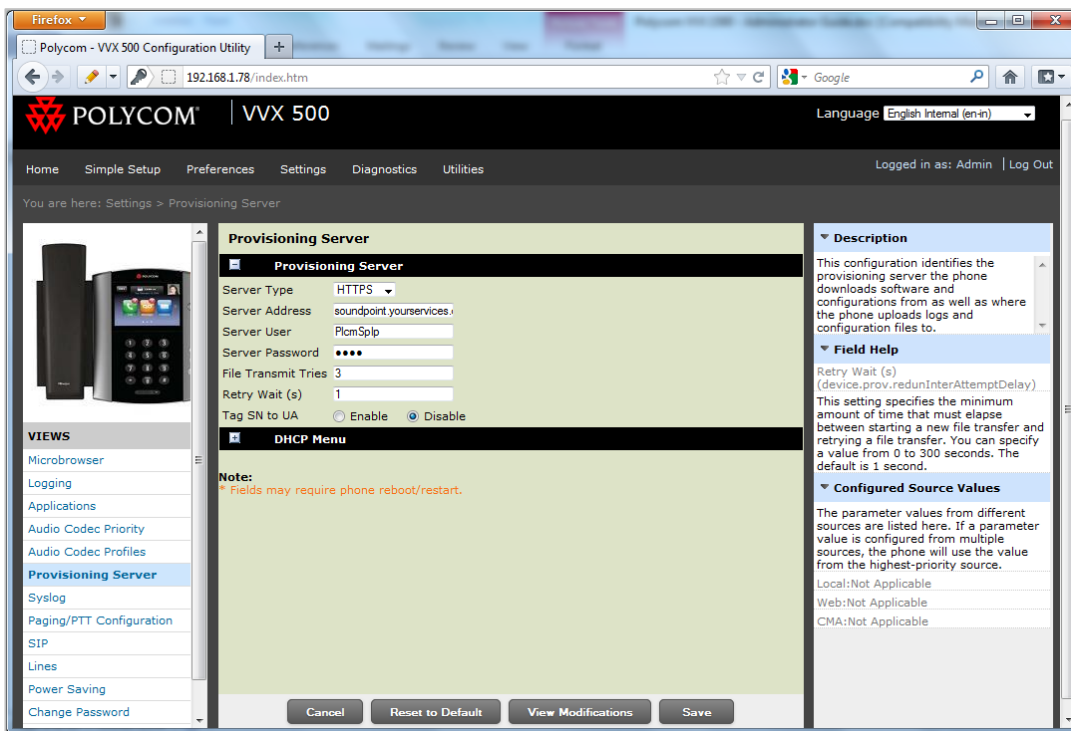
## Device Configuration – Web Interface

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. DHCP Option 66 can also be used to set the Provisioning Server address:

<https://dm.yourwhc.co.uk/dms/phone>

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 phone as required and power on
2. Locate the private IP address of the phone and enter this into your internet browser on a PC ensuring it's connected to the same LAN
3. The Web Configuration tool will prompt for a password. Enter the default admin password **456**
4. A page similar to the below should be displayed:



5. Click the Settings tab on the top menu and then click the Provisioning Server link
6. Select the Server Type as HTTPS from the drop down box
7. Replace the contents of the field “Server address” with the following <https://dm.yourwhc.co.uk/dms/phone>
8. Click **Save**
9. Reboot the phone and it will now redirect to the Cloud Voice provisioning servers to collect its configuration. The device may power cycle several times whilst installing software and processing its configuration

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

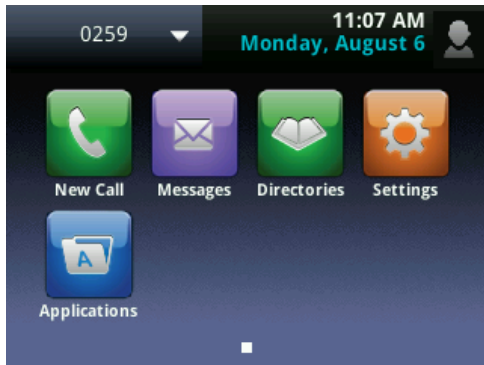


## Device Configuration – Manual

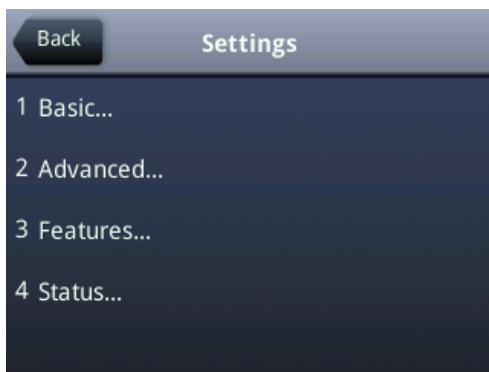
This process requires the use of the handsets menu to enter the Provisioning Server address.

The example below shows the configuration for a VVX 500. The same principal applies for all of the VVX range. The only difference being the VVX 500 is a colour touchscreen device.

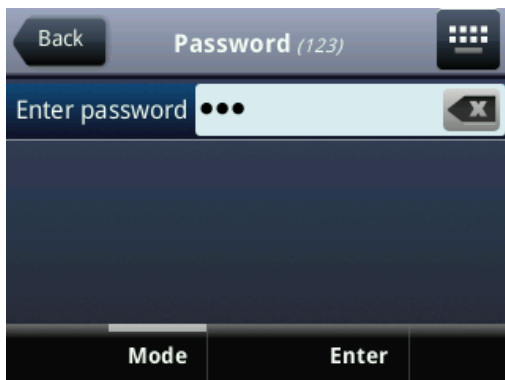
1. Connect the phone as required and power on
2. On the Home screen locate the **Settings** icon/button



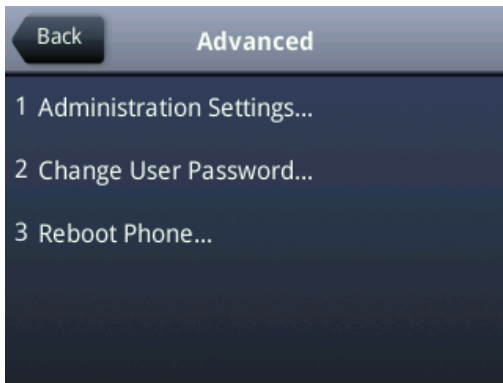
3. Select **Advanced**



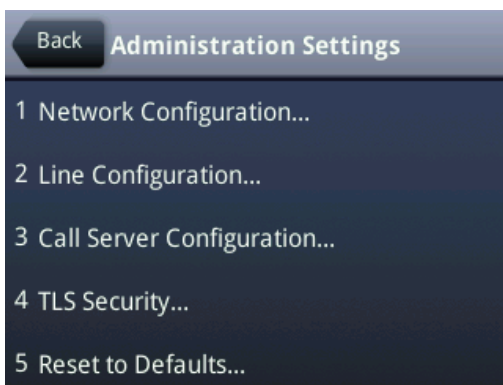
4. Enter the password **456** and select **Enter**



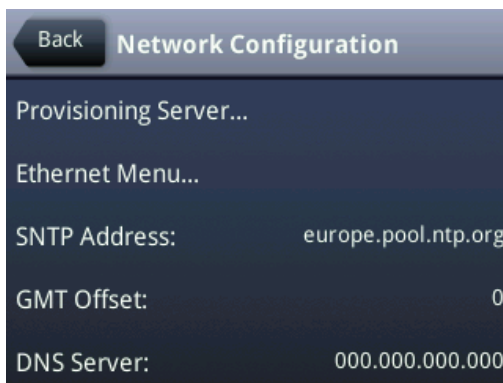
5. Select **Administration Settings**



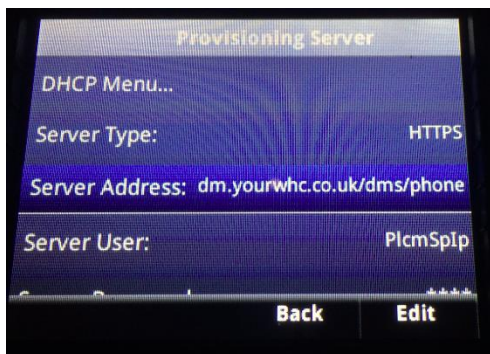
6. Select **Network Configuration**



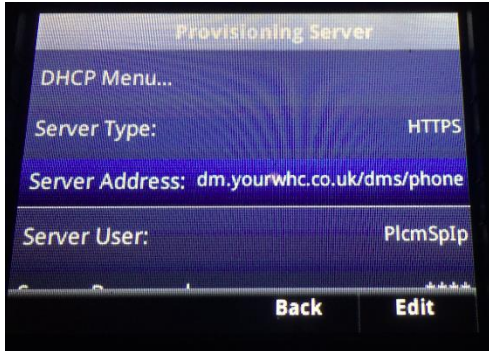
7. Select **Provisioning Server**



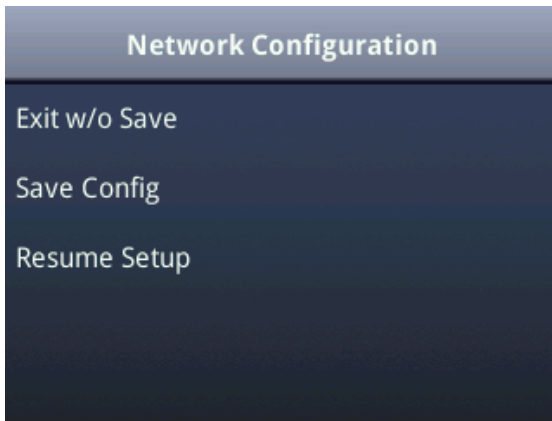
8. Select **Server Type** and set **HTTPS**



9. Select **Server Address** and enter **dm.yourwhc.co.uk/dms/phone**



10. Tap Back until you are presented with the below options and choose **Save Config**



11. The phone will now reboot and it will now redirect itself to the Cloud Voice provisioning servers to collect its configuration. The device may power cycle several times whilst installing software and processing its configuration

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

## 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 Provisioning URL is set to <https://dm.yourwhc.co.uk/dms/phone> and 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 configurations
- Check that the device has power and network connectivity
- Check that the phone has a valid date and time stamp which must be after January 2016. If not, then please change the date and time on the phone
- 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

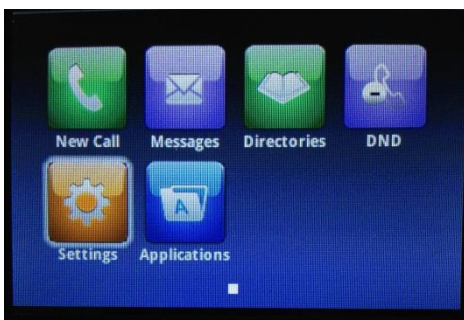
### *Factory Reset with Cloud Voice Configuration URL*

If you need to get the device back to the specification it arrived in, without any user configuration set, but with the Cloud Voice provisioning URL, please follow the below procedure.

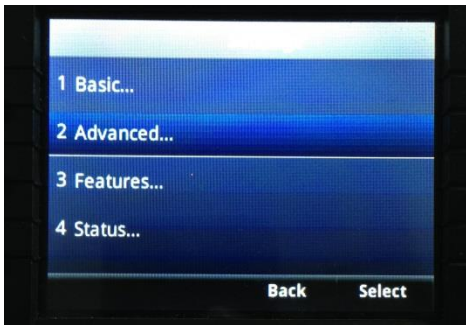
#### **Reset To Factory**

This step will take approximately **5 minutes**:

1. Press the **Menu** (Home Button), move to and select the **Settings** option



2. Scroll to the **Advanced** option and press **Select**



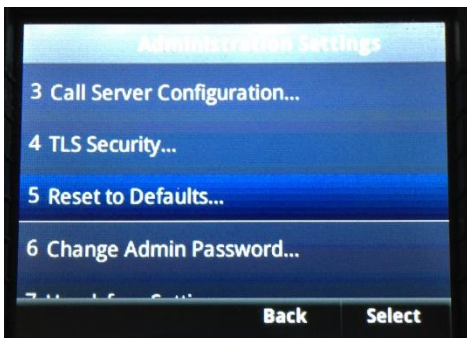
3. Enter the handset password and press **Enter**. To obtain this password, please contact the Cloud Voice helpdesk or raise a fault ticket. When entering the password you'll need to select 'Mode' followed by '1 Abc' to allow you to enter text characters



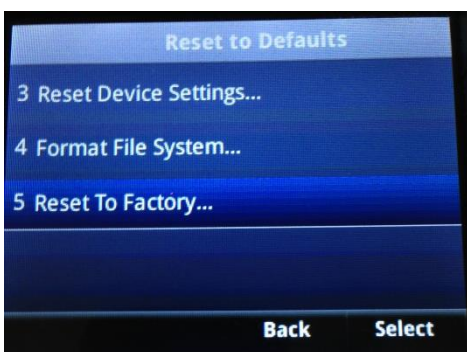
4. Scroll to **Administration Settings** and press **Select**



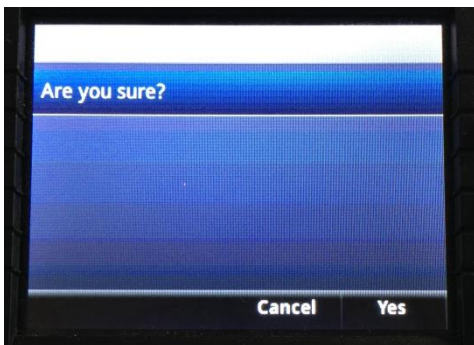
5. Scroll to **Reset to Defaults** and press **Select**



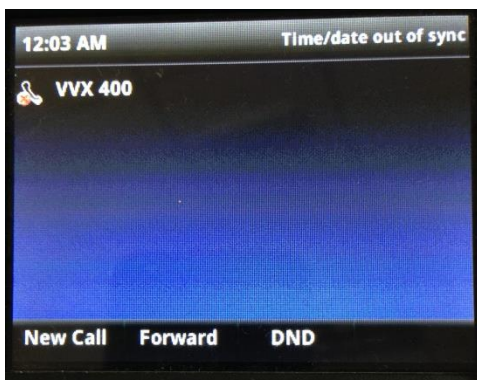
6. Scroll to **Reset To Factory** and press **Select**



7. Press **Yes**



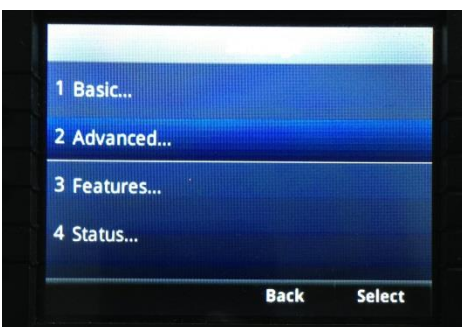
8. The phone will reboot. Once reboot complete the following screen will be presented:



9. Press the **Menu** (Home Button), move to and select the **Settings** option



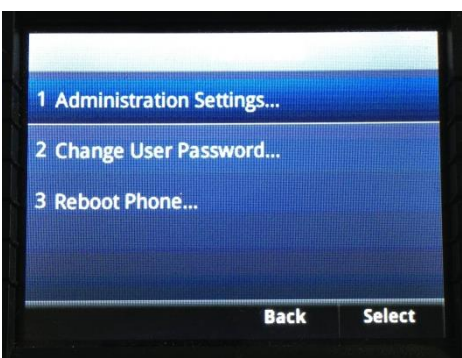
10. Scroll to the **Advanced** option and press **Select**



11. Enter the default handset password **456** and press **Enter**



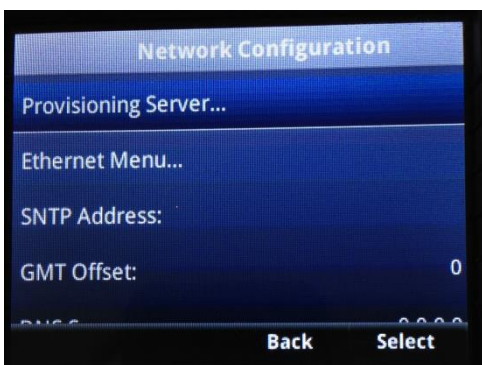
12. Scroll to **Administration Settings** and press **Select**



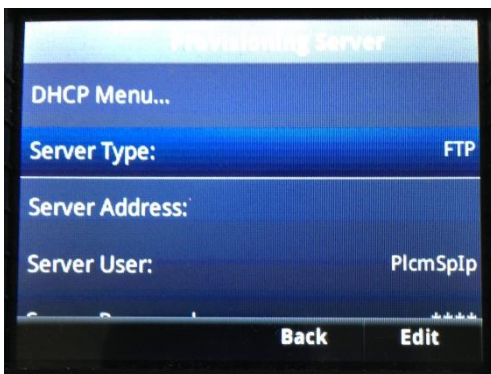
13. Scroll to **Network Configuration** and press **Select**



14. Scroll to **Provisioning Server** and press **Select**

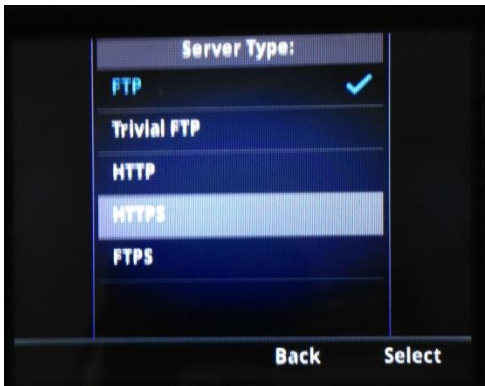


15. Scroll to **Server Type:** and press **Edit**

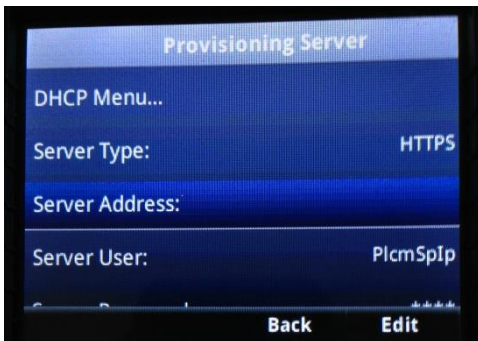




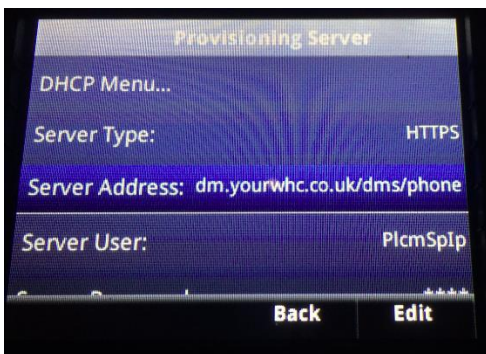
16. Scroll to **HTTPS** and press **Select**



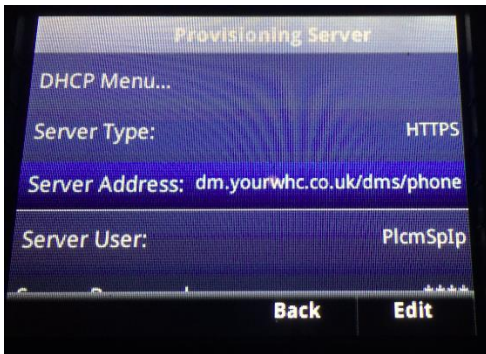
17. Scroll to **Server address** and press **Edit**



18. Type in the provisioning URL using the keypad, **dm.yourwhc.co.uk/dms/phone**, and press **OK**.  
Please note, to enter a . (dot) character use the \*(star) key and to enter a / (slash) character use the # (hash) key



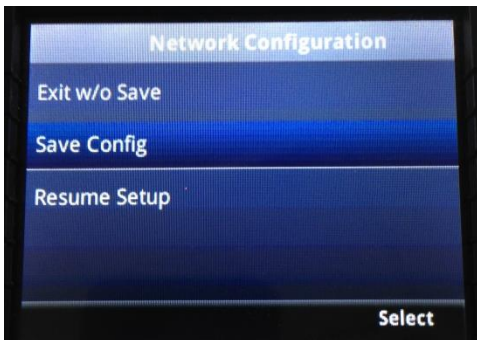
19. Press **Back**



20. Press **Back** again



21. Scroll to **Save Config** and press **Select**



22. The phone is now reset and ready to be assigned to another user

23. If already assigned to a user, then the phone will now attempt to download any user configuration that you have built on Cloud Voice