# CLOUD VOICE

**Service Description** 

**May 2020** 



## **Contents**

1.	Introduction	3
2.	Product description and features	3
	The Benefits of Cloud Voice	3
	The Product Overview	2
	Licences – feature packs and add-ons	2
	Licences – add-ons	8
	Numbers	15
	Number Presentation	16
	Calls	17
	IP phones / devices & Software	18
	Portal	23
	Professional Services.	24
	Features & Packaging	25
3.	IP connectivity	26
	Bandwidth	26
4.	Firewall and security	29
5.	Customer responsibilities	31
6.	FAQs:	32
	Ahead of Purchase	32
	Ahead of deployment	33
	Day of deployment	34
	In-life service	34
7.	Order pack	36
8.	Provisioning	37
9.	Moves, Adds and Changes (MACs)	41
10.	. Glossary	42
11.	. Appendix A: Non-chargeable Site Features	43
12.	. Appendix B: Non-chargeable User Features	47
13.	. Appendix C: Authorised Equipment	5



### 1. Introduction

Cloud Voice gives your business the ability to move and adapt at an ever-increasing rate. Using its power, you can finally unlock the flexible, mobile working environment your teams need to be more productive, collaborative and efficient.

It gives your business one seamless, flexible, cost-saving voice platform, reducing the need for multiple supplier relationships and on-site maintenance. It's a revolution if you have lots of aging equipment, contracts and systems – helping you to de-clutter your ICT infrastructure.

## 2. Product description and features

The Cloud Voice product from Virgin Media Business is a Hosted IP Centrex service based on Broadsoft technology.

IP Centrex, from Internet Protocol Centralised Exchange, allows voice services to be delivered over IP access and removes the need for you to have a PBX (Public Branch Exchange) and voice networking on each of your working sites. In practice, it allows you to address your voice telecommunications needs through your existing data access, without the need for any additional equipment on your estate.

A hosted platform allows you to enjoy the full suite of services without adding any additional equipment to your site. The service is hosted in secure resilient data centres in the UK with a direct connection to our network and the Internet, you can therefore access the service over a variety of access types – from your secure IPVPN through to internet access via your mobile data connectivity.

To ensure you get the best from Virgin Media Business, we want you to know how we stand out from the competition:

- We own our network Unlike many of our competitors, so we can guarantee service quality end to end
- We pride ourselves on our customer experience Our continually improving NPS score demonstrate that our customers are at the heart of everything we do
- We offer unbeatable reliability Our key differentiator is resilience, providing every customer
  with geographic resilience as standard. Further resilience options are available to increase service
  reliability even further i.e. Access Resilience and DDI resilience

#### THE BENEFITS OF CLOUD VOICE

- Increase productivity through enabling collaboration from anywhere: Leveraging unified communications; soft clients for desktop and mobile devices, you can work and communicate from anywhere and enhance your customer's experience.
- Move to the Cloud: Remove the need for on premise telephony systems, and take advantage of cloud benefits
- Easy web portal administration: Take control of your solution and configure as you require
- **Simple per user per month pricing model:** with bundled options including a phone, or inclusive calls allowing you to consolidate your communications spend.



#### THE PRODUCT OVERVIEW

Cloud Voice is made up of a number of components that are bundled to together to provide a solution

The core components are:

- Licences Feature packs and add-ons (User Licenses)
- Numbers new and ported
- Calls voice and video calls
- IP phones where required
- Administrator Training

The Cloud Voice service can be enhanced if we deliver:

- Your IP connectivity IPVPN / MIA / Business Broadband
- Professional services Audits / Remedial works / Installation and Training

#### LICENCES - FEATURE PACKS AND ADD-ONS

Unlike the traditional voice services where you would have a phone line into your handset and plug into the switch/wall taking the calls out to the traditional telephony network, with Cloud Voice, you can use your existing IP network. Therefore, you can use your existing Ethernet infrastructure and LAN switches or, for smaller businesses, plug an Ethernet cable into your broadband modem/router and the Cloud Voice service will work.

The service works because the pre-configured handsets/devices – discussed later in this document – are assigned to a user. As soon as the handset/device has Internet and IP connectivity, the user is connected to the Cloud Voice platform and can make use of the Cloud Voice functionality including make/receive a call.

The level of functionality depends on the type. There are 3 different types available:

- Functional
- Fixed
- Mobile

#### **FUNCTIONAL**

#### Ideal for a basic communications service

This could be a lobby, lift, or hot desk phone. Alternatively it could be for a user that only uses their phone infrequently so they do not need the plethora of features available in the other packs. The key feature not available in this pack is voicemail, and therefore we are finding that many customers chose the 'Fixed user' license to meet the needs of most of their users.

#### **FIXED**

#### Ideal for users that work from a single fixed location with occasional homeworking

This generally means that the user works from a single geographic location for the majority of their working week. This feature pack has all the features of the functional user but benefits from voicemail and various call forwarding features to ensure they never lose calls.



#### MOBILE

#### Ideal for users that roam around the office or work from multiple locations and from home

This generally means that the user is regularly mobile and works between different offices, likely to be their own company's, as well as their customer's offices. This feature pack has all the features of the fixed user but benefits from an inclusive set of softphone applications that work on smartphones and other devices (Android and iOS only).

These applications enable the users to make and receive calls on their single business number, when away from their primary device. This pack also benefits from a hot desking capability, allowing the user to log into other phones where Cloud Voice is deployed. As mobile working grows, demand for this usage will also increase. The Cloud Voice app to be downloaded is called Office UC.

Note: The Office UC app is not available for Blackberry and Windows devices.

#### **USER FEATURE MATRIX**

For a full description of each feature please see appendix B

Feature Name	Functional	Fixed	Mobile
Additional Line	✓	✓	✓
Alternate Numbers		✓	✓
Answer Confirmation		✓	✓
Anonymous Call Rejection		✓	✓
Automatic Callback		✓	✓
Automatic Hold/Retrieve		✓	✓
Basic Call Logs	✓	✓	✓
Call Barge-in Exempt		✓	✓
Call Centres (Agent)	✓	✓	✓
Call Director		✓	✓
Call Forwarding Always	✓	✓	✓
Call Forwarding Busy	✓	✓	✓
Call Forwarding No Answer	✓	✓	✓
Call Forwarding Not Reachable	✓	✓	✓
Call Forward Selective		✓	✓
Call Hold	✓	✓	✓
Call Notify		✓	✓
Call Park	✓	✓	✓
Call Pick Up Groups	<b>√</b>	✓	✓
Call Policies	✓	✓	✓
Call Return	✓	✓	✓



Feature Name	Functional	Fixed	Mobile
Call Transfer	✓	✓	✓
Call Waiting	✓	✓	✓
Calling Line ID Blocking	✓	✓	✓
Calling Line ID Delivery – External Calling Line ID Delivery	<b>√</b>	<b>√</b>	<b>√</b>
Calling Line ID Delivery – Internal Calling Line ID Delivery	<b>✓</b>	✓	✓
Client Call Control	✓	<b>√</b>	✓
Comm Pilot Express		✓	✓
Connected Line Identification Restriction	✓	✓	✓
Directed Call Pickup with Barge In		✓	✓
Distinctive and Priority Ringing		✓	✓
Last Number Redial	<b>✓</b>	✓	✓
LDAP Directory	<b>✓</b>	✓	✓
Local Number Dialling	✓	✓	✓
Do Not Disturb		✓	✓
Hot Desking Host		✓	✓
Hot Desking Guest			✓
Office UC for Smartphone	Available as Add-On	Available as Add-On	✓
Office UC for Tablet	Available as Add-On	Available as Add-On	✓
Personal Contacts	<b>✓</b>	✓	✓
Phone Services	✓	✓	✓
Pre-alerting Announcement		✓	✓
Push to Talk		✓	✓
Remote Office		✓	✓
Selective Call Acceptance		✓	✓
Selective Call Rejection		✓	✓
Sequential Ringing		✓	✓
Simultaneous Ringing		✓	✓
Shared Call Appearance 5	Available with any Office UC Add-On	<b>√</b>	<b>√</b>
Speed Dial 8		✓	✓



Feature Name	Functional	Fixed	Mobile
Speed Dial 100		✓	<b>√</b>
Time Schedule	✓	✓	<b>√</b>
Three-Way Call	✓	✓	<b>√</b>
User Intercept	✓	✓	<b>√</b>
Video Calling	✓	<b>√</b>	<b>√</b>
Voicemail	Available as Add-On	<b>√</b>	<b>√</b>
Voice Portal		✓	<b>√</b>

#### NON-CHARGEABLE ADDITIONAL FEATURES

Within the user types, there are non-chargeable features and functionality that you can configure to suit your business needs. These features can be at a site level, e.g. head office, or down to the specific user level. We offer two types of non-chargeable features:

- Site features
- User features

#### SITE FEATURES

Cloud Voice gives you a wealth of free configurations that you can use to tailor-make your service. The amendments enable you to create call handling rules that can ease and enhance the work place efficiency of a business.

The control and amendment of the features are performed by us or directly by you via the Business Portal. Further details around the Business Portal can be found in the portal section below.

Some of the features available can be configured to affect all users at a particular customer site e.g. the head office, or span multiple sites to increase capabilities of all relevant users. These features include hunt groups and auto-attendants (IVRs) and ease the way all users at that site receive and make calls. The introduction and configuration of site features are to be performed by Business Portal users with site access rights.

The full list of non-chargeable site features available for the Cloud Voice service can be found within Appendix A.

#### **USER FEATURES**

As part of the basic voice service on Cloud Voice, you'll have a wealth of free configurations you can make to your service, comparable to and beyond that of a traditional PBX. The configurable features enable you to create call handling rules that can ease and enhance the workplace efficiency of your business.

The control and amendment of the features are performed directly by you via the Business Portal or by us if required. Further details around the Business Portal can be found in the portal section below.

Some of the features available can be configured to affect an individual user. These features include call divert and simultaneous ring, easing the way a user receives and makes calls. The introduction and configuration of user features are to be performed on the Business Portal by that specific user, or a user with company or site rights, superior to that of the user. Please note, some features are dependent on the user type a user has, therefore, a mobile user will have a greater array of features than that of a functional user.



The full list of non-chargeable user features available for the Cloud Voice service can be found within Appendix B.

#### LICENCES - ADD-ONS

Alongside the non-chargeable features available to sites and users, you may also purchase additional functionality to impact specific users, users at a particular site, or all users within a company. The chargeable features enhance the Cloud Voice capability taking the Cloud Voice product beyond that of a traditional voice service.

#### The chargeable features are split into:

- Company add-ons adding functionality to all users within your company
- Site add-ons adding functionality to all users at a particular site e.g. head office
- User add-ons adding functionality to a specific user

#### **COMPANY WIDE ADD-ONS - CHARGEABLE**

The Company add-ons can be purchased directly from us and these features will be available to all users within your company. These features can only be added by us.

The chargeable Company features available allow you to have enhanced reporting for your product, beyond that native to the Cloud Voice service within the Business Portal. The enhanced reporting, titled Call Analytics iCS service, is provided by Toll Ring. The various Call Analytics iCS types available are:

Feature	Feature Name		
±	Call Analytics – iCS Insight Set-Up		
Insight	Call Analytics – iCS Insight Supervisor		
7	Call Analytics – iCS Insight Monitored User		
+	Call Analytics – iCS Report Set-Up		
Report	Call Analytics – iCS Report Supervisor		
Œ	Call Analytics – iCS Report Monitored User		
nier	Call Analytics – iCS Report Premier Set-Up		
Report Premier	Call Analytics – iCS Report Premier Supervisor		
oort F	Call Analytics – iCS Report Premier Monitored User		
Call Analytics – iCS Report Premier – Contact Centre Agent			
Call A	Call Analytics – iCS Dashboard Supervisor		
Call A	Call Analytics – iCS Console User		



Feature	Description
Call Analytics – iCS Insight	Enables businesses to use web portal to review all of their call statistics in near-time from pre-defined dashboard and/or wallboards.
	The dashboard provides visual call activity, updated every 15 minutes, which includes:
	Hourly/daily call distribution
	Call activity by DDI/extension/user
	Missed call summary
	Unreturned missed calls by caller ID
	The wallboard provides a number of pre-configured visual displays which include:
	DDI summary
	User summary
	Business summary
	Each setup requires 1 mandatory supervisor admin login to be allocated.
Call Analytics – iCS Insight Supervisor	One supervisor is assigned by default and this admin login will have access to all functionality for this product. This is a single login but can be shared amongs users.
Call Analytics – iCS Insight Monitored User	Once this pack has been allocated to a Company, by default, all Users are monitored and their call statistics captured.
Call Analytics – iCS Report	Enables businesses to use web portal to review all of their call statistics in near-time using pre-defined or customisable reports, dashboard and/or wallboards.
	iCS Report offers additional reports, dashboards and wallboards on top of the iCS Insight product, as well as offering customisation. iCS Report also provides a reporting function and the following additional functions:
	Schedule reports for 'yesterday', 'last week', 'last month' or use custom dates.

Call Analytics – iCS Report	Enables businesses to use web portal to review all of their call statistics in near-time using pre-defined or customisable reports, dashboard and/or wallboards.		
	iCS Report offers additional reports, dashboards and wallboards on top of the iCS Insight product, as well as offering customisation. iCS Report also provides a reporting function and the following additional functions:		
	<ul> <li>Schedule reports for 'yesterday', 'last week', 'last month' or use custom dates.</li> </ul>		
	<ul> <li>Browse an extensive catalogue of reports or use filters to customise your own. Report on call activity by extension, department, hunt group, DDI and user, including total calls, destination, talk time and ring time.</li> </ul>		
	<ul> <li>Incoming call analytics measure call volumes, targets, grade of service, percentage calls answered, calls abandoned, longest waiting and unreturned missed calls.</li> </ul>		
	<ul> <li>Executive reports collate data from multiple reports, and provide observations &amp; recommended actions.</li> </ul>		
	<ul> <li>Customised dashboards and wallboards.</li> </ul>		
	Each setup requires 1 mandatory supervisor admin login to be allocated.		
Call Analytics – iCS Report Supervisor	One supervisor is assigned by default and this admin login will have access to all functionality for this product. This is a single login but can be shared amongst users.		
	Additional login can be provided and enables a restricted view to be set-up against departments or sites for other users		



Feature	Description
Call Analytics – iCS Report Monitored User	Once this pack has been allocated to a Company, by default, all Users are monitored and their call statistics captured.
Call Analytics – Report Premier	Enables businesses to use a web portal to review all of their call statistics in real-time using pre-defined or customisable reports, dashboard and/or wallboards. Real-time provides live call data,
	The dashboard, wallboards and reporting function provides the same functionality as the iCS Report product, but does this in real-time and allows call centre queues and agents to be monitored. With iCS Report Premier you get the following additional functions:
	<ul> <li>Real time reporting; live calls waiting and call handling statistics by agent and ACD call queue.</li> </ul>
	<ul> <li>Report on total calls, destination, talk time, ring time, grade of service, percentage calls answered, number of calls in queue, calls abandoned, longest waiting and unreturned missed calls.</li> </ul>
	<ul> <li>At a glance dashboards and wallboards display group performance parameters on a live tile.</li> </ul>
	<ul> <li>Live call statistics for queues and agents, such as number / duration of calls and availability.</li> </ul>
	Supervisor management tools including agent presence monitoring.
	<ul> <li>Review performance and use "what if" calculations to forward plan contact centre agent shifts.</li> </ul>
	Each setup requires 1 mandatory supervisor admin login to be allocated.
Call Analytics – iCS Report Premier Supervisor	One supervisor is assigned by default and this admin login will have access to all functionality for this product. This is a single login but can be shared amongst users.
	Additional login can be provided and enables a restricted view to be set-up against departments or sites for other users.
Call Analytics – iCS Report Premier Monitored User	Once this pack has been allocated to a Company, by default, all Users are monitored and their call statistics captured.
Call Analytics – iCS Report Premier – Contact Centre Agent	Enhances the User monitoring capability by reporting on a Call Centre agent's status and queue availability. Only available on the Report Premier pack.
Call Analytics – iCS Dashboard Supervisor	Allows a single user login to be set-up to access a user's own data.
Call Analytics – iCS Console User	Provides a simple restricted view to just the iCS Insight Dashboard, and not the other features that come with these reporting packs. Can only be added where iCS Report or Report Premier have been ordered.



#### SITE BASED ADD ONS - CHARGEABLE

The site add-ons can be purchased from us and these features will be available to all users within the specific site the add-on is purchased for, e.g. head office.

The chargeable site features available are:

Feature Name	
Call Analytics** – iCS Insight Set-Up	See company add-ons
Call Analytics – iCS Insight Supervisor	See company add-ons
Call Analytics – iCS Insight Monitored User	See company add-ons
Call Analytics** – iCS Report Set-Up	See company add-ons
Call Analytics – iCS Report Supervisor	See company add-ons
Call Analytics – iCS Report Monitored User	See company add-ons
Call Analytics** – iCS Report Premier Set-Up	See company add-ons
Call Analytics – iCS Report Premier Supervisor	See company add-ons
Call Analytics – iCS Report Premier Monitored User	See company add-ons
Call Analytics – iCS Report Premier – Contact Centre Agent	See company add-ons
Call Analytics – iCS Dashboard Supervisor	See company add-ons
Call Analytics – iCS Console User	See company add-ons
Call Centres (ACD) inc. ACD Plus	Description below
Voice Recording	Description below
Voice Recording 30 Day Storage*	Description below
Voice Recording 180 Day Storage*	Description below
Voice Recording 7 Year Storage*	Description below

Description of chargeable site based add-ons, please note that call analytics is described in companywide add-ons.

Feature Name	Description
Call Centres (ACD)	Enables business to have access to a very basic Call Centre ACD service that allows incoming calls to be received by a single phone number and distributed among a group of users, or agents.  The following basic functionality is supported:
	<ul><li>Call Queuing with comfort announcements</li><li>Comfort Announcements</li></ul>
	<ul> <li>Estimated wait messages including queue position and wait time, as well as different high volume messages</li> </ul>
	<ul> <li>Overflow to alternate destinations for unanswered and stranded calls</li> <li>Redirection of calls outside business hours</li> <li>Music on Hold</li> <li>Uniform call distribution</li> </ul>
	<ul> <li>A statistics report is generated at the end of each day and sent to e- mail addresses.</li> </ul>
	Please note this feature provides comfort music for one set of agents only.  Where the ACD is used behind an Auto Attendant, one instance will be required for each Auto Attendant option requiring a different comfort message/using different agents.
Voice Recording 30 Days Storage	Enables businesses to securely store their Users Voice Recording for 30 days. After 30 Days, recordings will be deleted from the cloud. Before this deletion period these recordings can be downloaded and archived.



Feature Name	Description
Voice Recording	Enables an Administrator to prevent their users from changing their own recording policy, i.e. stop a user turning their recording setting off
Voice Recording 180 Days Storage	Enables businesses to securely store their Users Voice Recording for 180 days. After 180 Days, recordings will be deleted from the cloud. Before this deletion period these recordings can be downloaded and archived.
Voice Recording 7 Year Storage	Enables businesses to securely store their Users Voice Recording for 7 Years.  After 7 Years, recordings will be deleted from the cloud. Before this deletion period these recordings can be downloaded and archived.

#### **USER BASED ADD ONS - CHARGEABLE**

The User add-ons can be purchased from us and these features will be available to specific user that it's allocated to.

The chargeable user features available are:

User Add-Ons	Description
Busy Lamp Field (BLF)	Enables users to become receptionists when using a hardware (sidecar)
	console that can be attached to an IP phone. The BLF license enables
	this hardware to monitor user's status through a series of illuminated lights
	on the sidecar.
Call Centre Agent	Enables users to log in and out of Call Centre ACD queues using a web
	application.
Call Centre Supervisor	Enables users to monitor and supervise Call Centre ACD queues using a
	web application.
Fax Messaging	Enables users to receive faxes over email using a new dedicated fax
	number.
Go Integrator DB (CRM	Enables users to integrate call control into a number of CRM systems,
Connect)	providing the following functionality:
	<ul> <li>Automatic screen popping of customer files when inbound calls are received</li> </ul>
	Call Control from Windows or MAC
	Click-to-dial from CRM file
	In addition the application will allow:
	Configuration/control of a number of features
	Monitoring of a User's presence status



User Add-Ons	Description
Go Integrator Lite (CRM	Enables users to integrate call control into Lotus Notes and Microsoft
Connect)	Outlook, providing the following functionality:
	<ul> <li>Automatic screen popping of customer contact details from Lotus Notes and Microsoft Outlook when inbound calls are received</li> <li>Call Control from Windows or MAC</li> <li>Click-to-dial from Lotus Notes and Microsoft Outlook</li> <li>In addition the application will allow:</li> <li>Configuration/control of a number of features</li> </ul>
	Monitoring of a User's presence status
Go TAPI	Enables users to integrate call control into particular CRM systems that
GUTAFT	are Microsoft TAPI compliant, where the Go Integrator DB or Lite versions
	are not able to provide this function.
	The functionality available to use is dependent on what the CRM
	application is able to support and varies from system to system. This
	may offer more or less than what Go Integrator can offer, i.e. screen
	popping, call control, click-to-dial etc.
Office UC Desktop inc Skype	Enables user to make and receive voice and video calls, using their
for Business Plug-In	number, on Personal Computers, Windows and Apple based O/S. Users
	are able to use this device as either a Primary or shared Secondary device.
	Users that already use Microsoft Skype for Business or Lync 365 cloud
	version for Instant Messaging, can use our Skype for Business plug-in
	application, available in this pack.
0// 110.0	Included
Office UC Smartphone	Enables user to make and receive voice and video calls, using their WHC
	number, on Smartphones, Apple iOS and Android O/S. Users are able to
	use this device as either a Primary or shared Secondary device.
	Included as part of the mobile license
Office UC Tablet	Enables user to make and receive voice and video calls, using their WHC
	number, on Tablets, Apple iOS and Android O/S. Users are able to use
	this device as either a Primary or shared Secondary device.



User Add-Ons	Description		
Reception Console - Small	Enables users to become receptionists by providing them with a web		
Business	application that allows them to monitor users and easily transfer calls. The		
	console can actively monitor up to 30 users at a time.		
Reception Console -	Enables users to become receptionists by providing them with a web		
Enterprise	application that allows them to monitor users and easily transfer calls. The		
	console can actively monitor up to 200 users at a time.		
UC Business, inc. UC	Enables users to have Instant Messaging (IM) and presence from a		
Desktop application and	desktop application. This application is the same application used for		
Skype for Business Plug-In	Office UC Desktop., Please note this bundle includes the UC Office		
	Desktop application so you do not need to order that separately.		
	This feature includes an inclusive desktop application that enables:		
	Voice and Video calling (including inbuilt softphone)		
	Instant Messaging and presence     Contacts and basic feature research.		
	Contacts and basic feature management		
	Users that already use Microsoft Skype for Business or Lync 365 cloud		
	version for Instant Messaging, can use our Skype for Business plug-in		
	application, available in this pack.		
UC Team inc My Room inc.	Enables users to have Instant Messaging (IM), presence, desktopsharing		
UC Desktop application and	and audio conferencing from a desktop. This application is the same		
Skype for Business Plug-In	application used for Office UC Desktop. Please note this bundle includes		
	the UC Office Desktop application so you do not need to order that		
	separately.		
	This feature includes an inclusive desktop application that enables:		
	Voice and Video calling (including inbuilt softphone)		
	Instant Messaging and presence		
	Contacts and basic feature management		
	<ul><li>8 person audio conferencing facility</li><li>Desktop sharing</li></ul>		
	Desktop sharing		
	Users that already use Microsoft Skype for Business or Lync 365 cloud		
	version for Instant Messaging, can use our Skype for Business plug-in		
	application, available in this pack.		



User Add-Ons	Description		
Voice Recording User	Enables a User's calls to be recorded and stored in a secure cloud		
	environment. The Voice Recording User add-on can be added to all 3		
	User license types; Functional, Fixed and Mobile.		
	A Voice Recording User will have their recordings stored for either 30		
	days, 180 days or 7 years, depending on what policy has been set-up on		
	the initial order form.		

#### **NUMBERS**

For a user to utilise the Cloud Voice service, they must be allocated an individual telephone number aka DDI. All users require a telephone number and some site features require telephone numbers to work i.e. hunt groups.

You can either:

- Keep your existing numbers and arrange to port your user's existing telephone numbers and/or
- Purchase new numbers from Virgin Media Business

For hosted solutions, like Cloud Voice, the numbers are not restricted to local phone switches. Therefore, you can have any geographical number (as long as you own it, or it's available as new) regardless of your location, e.g. you can have a London 0203 number even if you're based in Aberdeen.

#### **NEW NUMBERS**

We can request new geographic numbers for you at the point of your order. Contiguous blocks of up to 100 numbers can be ordered. Please note, number ranges added to a company can only be moved between sites and users. New numbers are charged on a per number basis.

#### **NUMBER PORTING - IMPORTS**

We're able to request geographic number(s) porting on your behalf. Number porting has two variants:

- Single line porting (SL) and
- Multi line (ML) porting

Once number porting requests have been placed and accepted by the Losing Communications Provider (LCP), these numbers can be added to your company, site(s) and users. These will not be activated against individual users until the port completion date.

The rules surrounding number portability are complex and most business lines are classified by the industry as being 'Multi line' installations. Number porting is therefore charged on a per-request basis, and will be based on your individual requirements.

#### **SINGLE LINE**

Single line porting typically caters for an individual line that terminates onto a socket where one number is provided, i.e. a PSTN line.



#### **MULTI LINE**

Multi line porting caters for PBX groups or single lines that terminate on equipment, i.e. ISDN or 11+ single lines at a single address. There are three types of DDI porting requests that come under multi line requests:

- Multi line (30 lines or less) the main billing numbers and associated numbers terminate on ML equipment, i.e. PBX. In this scenario the numbers have not been built as a DDI range
- Multi line Simple DDI (31 lines or greater) the entire block of numbers is ported over. This
  includes the main billing number and associated DDIs
- Multi line Complex DDI as per Simple DDI but the block is broken up, with some lines being ported, some being ceased and some remaining on a TDM service such as ISDN

#### **NUMBER PRESENTATION**

Cloud Voice provides number presentation flexibility needed for each of the following requirements:

- Individual User DDI: By default, outbound calls for Cloud Voice Users will present the DDI configured for that User. Any new numbers or ported numbers assigned to the Cloud Voice Site can be assigned to a User.
- **Single DDI for all Users:** The Group Calling Line ID (GCLID) Site feature can be configured to use a single DDI for all User calls from a Site. As standard any number assigned to the Site can be set as the presentation number.
- Non Cloud Voice Numbers: We are able to configure additional numbers not assigned to the Cloud Voice Site within the GCLID feature. Numbers added to the GCLID feature can then also be set as the presentation number for all calls or groups of users. The following numbers can be set:
  - o Geographic numbers
  - o Non-geographic numbers (excluding Premium rate and 070 numbers)
  - International numbers.

If you would like a new non geographic number (03,08), we can offer this to you as part of our Inbound Service – please speak to your account manager for more details.

It is your responsibility to ensure that any number presented using the GCLID feature, in summary abides by following Ofcom requirements:

- a Valid E.164 dialable number that you have permission to use
- Not a PRS (premium rate service) number or 070 personal numbering service number
- Uniquely identifies you as the caller

Please refer to the Cloud Voice Special Terms for more information and see further detail from Ofcom below:

https://www.ofcom.org.uk/ data/assets/pdf file/0021/116670/cli-guidance.pdf

#### Original Callers calling line identity on Call Divert

Call diverted using features within Cloud Voice will present the original callers CLI as default.



#### **CALLS**

Cloud Voice behaves no differently to current PBX systems, old or new, in today's traditional voice world. The user still gets dial-tone as normal and still makes telephone calls in the same way as they do today, but with access to more advanced call control features. The headline statement for the Cloud Voice product is that it can do what today's phone systems can do, with more, is hosted in the Cloud and can provide cost efficiencies.

#### **ON-NET VOICE**

Cloud Voice enables users from multiple sites to make on-net voice calls directly with each other, either on-site or off-site, without the call touching the legacy voice telecommunications network. This enables us to offer these calls at zero cost as the number is routed via the Cloud network to its end destination and over your data networks, without touching the legacy voice networks.

On-net calling will allow users of the service to reduce their outlay on inter-company calls from any geographic location. Whether using a fixed handset or a soft-client, as long as the user is connected to a wired or wireless network, IP or 4G, they can call their colleagues whom are using Cloud Voice, free of charge, anywhere in the world. The Office UC add-on applications enable existing smartphones, tablets and PCs to be used to make these on-net calls. Businesses with nomadic workers, workers that travel internationally, and homeworkers can significantly benefit from on-net calling.

#### **OFF-NET VOICE**

When users of the service make or receive voice calls from non-IP networks, PSTN / Mobile / International, or alternative IP networks, we call these off-net. For users of the service, calls are made and received in the same way as they are today so they will not have to adapt their way of working.

Outgoing calls to non-Cloud Voice numbers, PSTN / Mobile/International/other VoIP etc are routed to the Cloud Voice switches. This routes the call out to ensure the call makes it to its end destination. Likewise incoming calls from non-cloud voice numbers are routed through the Cloud Voice platform to their IP destination with the end-user.

Off-net calls are charged at a call rate tariff. We'll constantly review our tariffs and call bundle packages to ensure they're competitive within the market.



#### **ON-NET VIDEO**

Cloud Voice enables users to make point-to-point, one-to-one, on-net video calls between two parties. Both users need to be using one of the following video ready client applications (detailed later) available from Cloud Voice:

- Office UC Desktop softphone
- Office UC Smartphone softphone
- Office UC tablet

In addition to these soft-clients video calling is also enabled on certain handsets.

On-net video calling is available as standard at no extra cost on the applications and devices but please be aware of the extra bandwidth required to make a video calls. As a general rule of thumb, video calls will use a maximum of 500kbps per call but depending on the device used and quality selected may use less. Further detail on bandwidth calculations are detailed below.

#### **CALL PACKAGES / TARIFFS**

For the Cloud Voice product you'll be making and receiving telephone calls. As mentioned above, on-net calls between user and user will be free of charge. Where off-net calls are made there will be a charge. The charge for this call may be part of a bundled call package, or charged at a per minute and or per call rate as defined in your rate card.

#### IP PHONES / DEVICES & SOFTWARE

In order to use our Cloud Voice service, you'll need Customer Premise Equipment (CPE) which will be the channel for the communication to be delivered. In practice these CPEs come in two primary forms:

- Handsets IP phones (purchased from Virgin Media Business)
- Devices (provided by you)
  - Desktop laptop/PC's
  - Smartphones
  - Tablets

#### **HANDSETS - IP PHONES**

The handsets required for Cloud Voice are not standard telephones. The handsets are SIP enabled or IP phones. These phones have been future-proofed to ensure that they work for VoIP services and therefore will not work on traditional analogue telephony.

When you order our Cloud Voice service, a handset can be allocated against each user. To enable this allocation, a level of configuration is required against the handset itself. As IP handsets come in many shapes and sizes, we offer handsets that remove the need for any configuration and you can receive the phone in the post, connect it to your data/access service (via the Internet) and the phone will auto-load the configuration for a particular user and will be ready to work within minutes.

We offer market leading and price competitive handsets. We work with two market leading IP handset vendors — Polycom and Yealink. Also, to make your decisions easier, we have split the handsets in grades based against the calibre of those handsets — standard, enhanced and premium. When purchasing your handsets from us, it's posted to your site and includes the handset itself, stand and Ethernet cable.



For each of the devices, a power supply unit can be purchased if you don't have Power over Ethernet (PoE). On top of the usual telephone handsets, we also offer conference phones and DECT phones (mobile handsets linked to a base station).

#### The handsets available are detailed below in their grading as an example:

Yealink models		Polycom models
T42 W52P DECT	Standard phone	VVX 301
T46 W60 DECT	Enhanced phone	VVX 411
T48	Premium phone	VVX601
CP920	Conference phones	IP 5000 Trio 8500 Trio 8800

Available handsets can change from time to time as the vendors release new models, and end support for older models.

#### On top of the handsets, you can purchase handset accessories, as detailed below:

Yealink models		Polycom models
✓	Additional dect handset	×
X	Paper expansion	<b>✓</b>
✓	Digital expansion	✓
×	USB camera	✓
✓	Bluetooth adaptor	×
<b>√</b>	Electronic hook switch	×

Further detail and imagery of the different phones, including how they're set up, can be found within the individual Customer Handset User Guides found on our customer care pages.

#### **MINIMUM IP PHONE REQUIREMENTS:**

In order to provide a working Cloud Voice solution, the following CPE must be available at your site:

- Router to terminate an IP circuit, i.e. broadband router
- Switch to connect IP phones into the router, i.e. 8-Port Ethernet switch, if you have insufficient LAN
  ports on your router. Note: these can be purchased from us
- IP phone to make and receive calls. This could be the handset purchased from us
- ATA/IAD to make and receive calls using a non-IP phone, i.e. analogue DECT phone/lift phone

IP phones and IAD/ATAs can only be used on the service if they appear on the Authorised Equipment list below which will mean they have been tested and approved for the Cloud Voice service. Part of this testing procedure also involves the development of 'Configuration' files which ensures we're able to pre-configure the phones. This pre-configuration on phones purchased from us ensures that the phones will 'work out of the box' without any need for you to adjust the settings.



#### **AUTHORISED EQUIPMENT LIST:**

Below is the list of all authorised equipment that can be used with the Cloud Voice service.

**Please note:** that the configuration and allocation of non-Virgin Media Business provided handsets is your responsibility and we don't currently support this.

All equipment listed has undertaken extensive and rigid interoperability testing to ensure that firmware and feature sets are compatible with Cloud Voice service.

Items available to purchase are clearly identified in the table. Items that we sell will be pre-configured in the factory and once shipped, the MAC address, needed for configuration, is automatically fed into the relevant systems. If the item is listed below but is not available to purchase packaged with the Cloud Voice product then it will be a 'Supported Device'. You then need to purchase this from an alternative source or from us via a separate order rather than Cloud Voice order pack.

Supported devices will still need to be selected by us on ordering and you need to provide the MAC address, as well as arrange for the device to be configured with our provisioning server URL.

For a list of supported devices please see Appendix C

#### **DEVICES & SOFTWARE CLIENTS**

As well as a handset, you can utilise other devices, as long as you have the correct user type (mobile license) and add-ons. By using a mobile device, this detaches the user from being at the desk with a handset and allows them to use the Cloud Voice service and benefits wherever they go using their laptop, smartphone and/or tablet.

#### **OFFICE UC MOBILE CLIENT**

For mobile and UC users, they can download the Cloud Voice application called 'Office UC' from the applicable app store (Andriod/Apple). The application allows the user to have access to the Cloud Voice features over their smartphone and/or tablet.

**Supported operating systems:** The application is supported on both Apple iOS (iOS 10 or later), and Google Android (v4.4 or later)

This feature is included in the Mobile license, and is available as an add-on for Functional and Fixed licenses.

We strongly recommend that you use a known, stable, secure and correctly configured Wireless LAN and use the application over this Wi-Fi connection. If you are unsure please contact your system administrator for advice and assistance.

The application allows you to choose between a native call and a VoIP Call, there is also an Always Ask option available. The phone dialling service is recommended for use over a 3G connection. If you choose the 'VoIP Call' setting, then when a Wi-Fi connection is not available, the app will attempt to use the cellular data channel. Service and Voice quality may be impacted and data charges with your mobile carrier will apply.

If a User is provided UC Business (Add-on) then the following additional functionality is provided:

- Voice and Video Calling using inbuilt softphone or via hard-phone
- Instant Messaging and Presence (IM&P) from the provided applications
- Microsoft Skype for Business Plug-In

If a User is provided UC Team (Add-on) then the following additional functionality is provided:

Personal Audio Conferencing for up to 8 people



Desktop Sharing

#### OFFICE UC DESKTOP CLIENT

An application is used to control an existing feature, or provide new features to Sites or Users. An application is typically downloaded onto a local device, whether it be a PC or laptop.

Office UC provides Users with an application and series of features to enable Unified Communications across one or many devices.

The Desktop application will work across computers running Windows and MAC iOS. This application is available through the following add-ons:

- UC Office Desktop
- UC Business added to a Fixed or Mobile User License
- UC Team added to a Fixed or Mobile User License

#### Supported operating systems:

- Microsoft Windows:
  - Windows 7
  - Windows 8/8.1
  - Windows 10 (classical view only)
- Apple OS:
  - o MAC OS 10.11 El Capitan
  - o MAC OS 10.12 Sierra
  - o MAC OS 10.13 High Sierra
  - MAC OS 10.14 Mojave

This application when taken standalone as the Office UC Desktop add-on provides Users with the following:

- Desktop softphone application enabling:
  - o Voice and Video Calling using inbuilt softphone or via hard-phone
  - Call Centre Agent Login when agent is assigned to an ACD

If a User is provided UC Business, either on the Fixed or Mobile licenses, then the following additional functionality is provided:

- Instant Messaging and Presence (IM&P) from the provided applications
- Microsoft Skype for Business Plug-In

If a User is provided UC Team, either on the Fixed or Mobile User licenses, then the following additional functionality is provided:

- Personal Audio Conferencing for up to 8 people
- Desktop Sharing



#### **Hardware Requirements**

The hardware requirements for the Desktop application include:

- Minimum of 1.5 GHz is recommended, dual core CPU is recommended for video calls at a minimum.
- Minimum: 4 GB RAM.
- Approx. 125 MB on OSX and 215 MB on Windows.
- Open Graphics Library (OpenGL) 1.5 or higher is recommended
- Minimum: IP network connection (broadband, LAN, wireless) Recommended: A 2.0 Mbps connection.
- Full-duplex, 16-bit or use USB headset

#### **Software Requirements**

The software requirements include:

- Local admin rights are required to carry out the installation so you must use a Windows user account with administrator-level access.
- Some anti-virus software can cause problems when installing other software so consider temporarily disabling your anti-virus application for the duration of this installation; remember to enable it again as soon as the installation is complete.

#### Multimedia Requirements

Office UC requires both speakers and a microphone to make calls. Any of the following are acceptable:

- External speakers and microphone
- Built-in speakers and microphone
- Dual-jack multimedia headset
- Bluetooth® multimedia headset
- USB multimedia headset
- USB phone.
- Calls made with Office UC will work without a video camera, but a video camera is necessary to allow other parties to see your image. Office UC will work with most built in and USB video cameras.

The application can be downloaded as part of the provisioning process once the user is setup with the functionality.



#### **PORTAL**

The Cloud Voice product is controlled and managed by a browser based Cloud Voice business portal. Here, you can manage and configure the non-chargeable features of your company, sites and users. The Business Portal gives company administrators the ability to manage their own features putting you in control.

#### This portal allows you to:

- Have multiple levels of admin rights to make changes to the service at:
  - o Company level
  - Site level
  - User level
- Review stats for inbound, outbound and missed calls which can be exported at:
  - o Company level
  - Site level
  - User level
- Introduce and amend Non-Chargeable features for:
  - o Sites
  - Users

#### The Business Portal provides 3 levels of access:

- Company Administrator typically used by a Customer Administrator such as an IT manager.
   Enables the user to administer and manage all sites within the company they are assigned to. A Company Administrator is only able to make non-chargeable changes
- Group Administrator typically used by end-user department administrators. Enables the user to
  only administer and manage the sites/groups that the Company Administrator has assigned to
  them. A Group Administrator is only able to make non-chargeable changes
- **End-user** used by the end-user to manage their personal features

**Note:** We have Senior Company level administrator privileges for the portal to support you if you struggle with your configurations.

Further details can be found within the customer facing portal user guides which can be found on <a href="https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/">https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/</a> including guides for admin users and end-users.



#### PROFESSIONAL SERVICES

Introducing VoIP, such as Cloud Voice, can be transformational for a business. To ensure you get the desired deployment of the solution, Professional Services can be critical within the pre-sales consultation, build of the solution and adoption of the service.

You can purchase Professional Services from us to ensure the Cloud Voice service is effectively delivered in the correct estate setup and used in the right manner. We offer 4 Professional Services to accompany Cloud Voice:

- LAN Audit: This is where the Data Service Engineer (DSE) will review your current connectivity
  estate set-up and advise whether it's Cloud Voice / VolP ready, making suggestions on
  improvements
- Remedial Works: Based on recommendations, the DSE can implement the changes to your estate to ensure they're Cloud Voice/VoIP ready
- Installation:
  - o The DSE will take the ordered handsets and install them within your premises
  - We will also do a live test of the service to ensure that it's working correctly
- Project Management: Our Project Management service ensures that your project to introduce the new Cloud Voice service is delivered to the agreed scope to the required standards of quality and timeline. Our service provides communications to you on the plan, progress, actions and escalations.
- Administrator Training: it is recommended as part of your initial purchase of the Cloud Voice service that you also purchase training from us, an expert professional will train your administrators and or end users on how to get the most out of the service, and how to use commonly used features allowing you to extract maximum business value. Training is available in 2 offerings
  - Virtual: Our training partner will remotely train your administrator, and or end users over a 2hr session.
  - Face to Face: Our training partner can spend a day or two at your premises and deliver training to your administrators, and or end users, normally in batches.

Note: A separate order form may be completed to purchase certain Professional Services



#### **FEATURES & PACKAGING**

Due to the multiple variations available through Cloud Voice including user types, features, handsets and call charges, it is often difficult to understand which solution is right for you. We have therefore put together some attractive bundles to simplify this.

Our bundles include ready-to-go handsets for simple plug and play and an online portal to help you auto-configure setup. Cloud Voice is priced on a per user per month basis. This means you can match your communication needs to the exact requirements of your ever-changing business. It's the kind of flexibility that allows you to constantly grow, disrupt, surprise – and thrive.

The user, handset and calls bundle includes a user type, with an IP handset and bundled call package at a discounted rate all on a 2 year (24 month) or more term. The bundle will have multiple sub-sets based against the various variations within, including:

User license	Handset	Call package	
	Standard		
Functional user	Enhanced	Bundled call package	
	Premium		
	Standard		
Fixed user	Enhanced	Bundled call package	
	Premium		
	Standard		
Mobile user	Enhanced	Bundled call package	
	Premium		



## 3. IP connectivity

All our access types – IPVPN, MIA and Business Broadband (cable), can be used for the Cloud Voice service.

We have geographically resilient connections into the Cloud Voice platform. It's recommended that resilience is considered into your sites because, if you lose connectivity, you'll also lose access to the Cloud Voice service for that site.

If you have internet access via a 3rd party e.g. BT or TalkTalk, the Cloud Voice service is still available, however, quality of the voice service cannot be guaranteed. The voice is delivered Over the Top (OTT) meaning that it's delivered like any other application over the Internet. Due to this, no Quality of Service (QoS) can be applied and priority cannot be given to voice traffic.

For certain users, this may be acceptable, but if you wish to have multiple users over the same connection at the same time, you may notice degradation. Additionally, contention can play a significant factor and, therefore, during peak usage times, you may experience further jitter and packet loss, impacting your voice conversation. Further guidance is within the bandwidth calculation section below.

QoS will be available on IPVPN services from Virgin Media Business.

**Note:** Cloud Voice services using the soft client feature will not mark packets and therefore QoS is not available on the LAN using the soft client.

#### **BANDWIDTH**

As Cloud Voice is delivered over IP services, the product will consume bandwidth on your access type. The amount of bandwidth consumed is dependent on:

- Number of simultaneous calls required during busy hours
- Traffic type inbound and outbound calling patterns
- Calls per second
- Choice of codec type, G711, G722 or G729
- If video is to be supported then considerations on bandwidth need to be carefully planned
- Available upstream speed as this determines the amount of concurrent calls supported
- Use of a separate internet connection for the voice traffic
- Use of access for both voice and date and whether QoS is applied

We'll often provide the access service alongside Cloud Voice, we want to ensure that neither product is to the detriment of the other as part of the solution. To help you determine the amount of bandwidth you required, there will be a recommended bandwidth calculator as part of the ordering process. The calculation is based against upstream as this will be the primary impacted bandwidth based on calls made from a site. The calculation is based on a site-by-site basis due to the impact on access type by those users using Cloud Voice cumulatively at a particular site.



#### **BANDWIDTH CALCULATIONS AND CONSIDERATIONS**

We've pulled together the below table to outline the bandwidth volumes and maximum user availability within the individual access technologies. Please note, the bandwidth calculations below can only provide a guideline and is not able to take into consideration existing usage of bandwidth based against non-Cloud Voice usage.

IPVPN / MIA Access Circuits	D/S Mbps	U/S Mbps	Max No of G.711 & G.722 calls	Max No of G.729 calls
Ethernet 10Mbps	10	10	36	83
Ethernet 20Mbps	20	20	71	150
Ethernet 30Mbps	30	30	107	150
Ethernet 40Mbps	40	40	143	150
Ethernet 50Mbps	50	50	150	200
Ethernet 60Mbps	60	60	150	300
Ethernet 70Mbps	70	70	150	300
Ethernet 80Mbps	80	80	150	300
Ethernet 90Mbps	90	90	150	300
Ethernet 100Mbps	100	100	357	750
Ethernet 200Mbps	200	200	714	750
Ethernet 500Mbps	500	500	750	750
Ethernet 1000Mbps	1000	1000	1000	1000
ADSL*	8	1	1	2
ADSL2.0*	24	1	1	2
FTTC*	40	10	21	50
FTTC*	80	20	43	100
3G*	7	1	2	5
Cable*	30	3	6	15
Cable*	50	5	11	25
ADSL*	8	1	1	2
ADSL2.0*	24	1	1	2
FTTC*	80	20	43	100
Legacy Cable*	30	3	6	15
Legacy Cable*	50	5	11	25
Cable*	Any	5	11	25
Cable*	Any	10	21	50
Cable*	Any	15	32	60
Cable*	Any	20	43	60
Cable*	Any	25	54	60
Cable*	Any	30	60	60



IPVPN / MIA Access Circuits	D/S Mbps		Max No of G.711 & G.722 calls	Max No of G.729 calls
Cable*	Any	35	60	60
Cable*	Any	40	60	60

<sup>\*</sup>Contended services will not have guaranteed bandwidths therefore the above user volume recommendations are provided as guidance only. Check your real-time bandwidth for more accurate calculations

For Cloud Voice a suggested maximum concurrent call limit of 100 is recommended due to the amount of private IPV4 address required in your LAN going beyond a /24.

#### CODECS

The Cloud Voice service uses G711, G722 or G729, codecs for voice and H.264 for video calling. Please be aware that codec's will define the quality of the voice call and determine the amount of bandwidth required. The difference between the codec's are as follows:

- G.722 is a high quality High Definition (HD) codec for voice compression that is used to transmit
  HD to HD voice between users making on-net calls with HD supported IP phones. All IP phones
  sold with Cloud Voice are HD capable. A G722 call provides high quality voice that is over and
  above PSTN and ISDN quality. It uses approximately 85-100kbps of bandwidth to carry one
  simultaneous call. G722 HD voice does not have a proposed MOS score yet as it is new
  technology but does exceed G711 quality
- **G.711** is a codec used for voice compression and is comparable to PSTN quality calls. It uses approximately 85-100kbps of bandwidth to carry one simultaneous call. Typically a G711 call will provide a MOS score of 4.0 and above
- G.729 is a codec used for voice compression and is comparable to ISDN quality calls. It uses
  approximately 24-35kbps of bandwidth to carry one simultaneous call. Typically a G729 call will
  provide a MOS score of 3.7 and above
- **H.264** is a codec used for recording, compression and distribution of High Definition (HD) video. It uses a maximum of 500kbps of bandwidth to carry one simultaneous video call but can be less, depending on the device and quality of video carried.

Please note all Cloud Voice users created are set-up with the following default codecs:

- The default codec selection for handsets and desktop devices is G711, G729 and then G722
- The default codec selection for smartphones is G729, G711, G722
- The default codec selection for Tablets is G722, G729, G711

Video calls will automatically select the H.264 codec when initiated over a video enabled device. To ensure call quality is maintained there is a built in feature on Cloud Voice during provisioning for us to limit the amount of concurrent calls placed by you to protect your bandwidth.



## 4. Firewall and security

In order for IP phones, portals and applications to access the correct service, some firewalls may need adjusting to allow the traffic through.

#### **END-USER FIREWALL SECURITY**

When deploying Cloud Voice, you must be aware of which protocols and ports the service is using. This will enable you to amend, where necessary, local firewall polices to allow voice traffic and our applications to function correctly.

#### **SIP ALG**

SIP ALG is the number one issue that will prevent phones to register to the platform and making calls. This is a setting that is quite often turned on automatically on most routers. Please ensure this is turned **off** on your router and/or firewalls.

#### **CPE PORT REQUIREMENTS**

Device	Protocol	Destination	Destination port
IP phone & ATA	SIP	centrex-bslnw s09.yourw hc.co.uk	
Signaling		centrex-lnwsbs09.yourwhc.co.uk	
		ipcomms-route62-bs11lnws13.yourwhc.co.uk	
		ipcomms-route62-bs12lnws14.yourwhc.co.uk	UDP/TCP 5060 – 5075
		IP Address Range	
		217.32.186.0 – 217.32.186.191	
		IP Address Subnets	
		62.7.201.128/27	
		62.7.201.160/27	UDP/TCP 5060
		217.32.186.0/26;	
		217.32.186.64/26;	
		217.32.186.128/26	
IP phone & ATA	RTP	IP Address Range	UDP 32767 to 65535
Media		217.32.186.0 – 217.32.186.191	
		IP Address Subnets	
		62.7.201.128/27	
		62.7.201.160/27	
		217.32.186.0/26;	
		217.32.186.64/26;	
		217.32.186.128/26	
IP phone & ATA	A NTP	0.uk.pool.ntp.org	UDP/TCP 123
		europe.pool.ntp.org	



Device	Protocol	Destination	Destination port
IP phone & ATA	DNS	Supplied locally	UDP/TCP 53
Cisco Linksys dow nload and configuration	HTTPS	dm-linksys.yourw hc.co.uk 193.113.10.34 193.113.11.36	TCP 443
Dow nload and configuration for:  Cisco Small Business  Panasonic  Polycom  Yealink	нттрѕ	dm.yourw hc.co.uk 193.113.10.10 193.113.11.10	TCP 443
Polycom Remote Provisioning Server (RPS)	HTTPS	52.0.183.240 54.86.39.219	TCP 443
Yealink Remote Provisioning Server (RPS)	HTTPS	52.71.103.102 35.156.148.166	TCP 443
2N Intercom Licensing Server	HTTPS	licenses.update.2n.cz	TCP 443

#### **WEB PORTAL REQUIREMENTS**

Device	Protocol	Destination	Destination port
Business Portal	HTTPS	portal.yourw hc.co.uk/businessportal	TCP 443
		193.113.10.13	
		193.113.11.13	
Call Analytics Portal	HTTPS	icscallanalytics.yourw hc.co.uk	TCP 443
		40.115.5.58	
Service Assurance	HTTPS	https://svmpnwv1.nat.bt.com	TCP 443
(Empirix)		10.35.138.148	
Voice Recording Portal	HTTPS	callrecorder.yourw hc.co.uk	TCP 443
		193.113.10.32	
		193.113.11.34	
		Note brow ser access is via a redirect from the Business Portal.	



## 5. Customer responsibilities

This section helps to outline the areas that remain your responsibility.

#### CONNECTIVITY

- Ensuring that the necessary LAN equipment is available and able to support the site connectivity requirements of users (capacity, performance, power etc)
- Ensuring adequate rack space, desktop space and electrical power for all CPE (including phones) that need to be racked and installed
- Providing access necessary for Virgin Media Business and assigned personnel to fulfil deployment services to all sites and coordinating schedules
- Ensuring that you have internet connectivity for your IP phones which will enable the phones to auto-configure. If you're an IPVPN customer, you'll still need internet break out.

#### **SUPPORT**

- Making desired configurations on your portal using the user guides ahead of contacting us
- Supporting all handsets (out of warranty) and end-user devices
- Delegating a single administrative point of contact for Virgin Media Business service issues
- Serving as the life-cycle maintenance contact. The customer administrator will be responsible for conducting the on-going activities required to maintain and administer the account. Activities include, but are not limited to, submitting feature account changes, user profile/parameter updates such as name and office location changes
- Contacting Virgin Media Business concerning all service issues
- Assigning the Default Calling Number (DCN) to a person/agent who will be available to answer emergency calls from public safety personnel at each location
- Contacting Virgin Media Business if a user changes their associated site location in order for us to update the Emergency Services Database



## 6. FAQs:

#### **AHEAD OF PURCHASE**

- 1. Do you wish to keep your telephone numbers and therefore need numbers to be ported?
  - a. If yes, you'll need to complete a Letter of Authority to authorise us to port the numbers away from your existing telecoms provider. The LoA form is within the order pack which can be provided to you in most cases it helps by completing an LoA prior to finalising your numbers and contract as it allows us to double check all your numbers.
  - **b.** Even if you have existing numbers or voice services with Virgin Media Business, the numbers need to be ported. The porting enables the services to move from traditional voice telephony to new Voice over IP services
- 2. If you wish to use hunt groups or attendant consoles, you will need purchase/port additional telephone numbers for these. As a general rule, we suggest 10% extra telephone numbers.
- 3. How many users can use the Cloud Voice service?
  - a. The volume of users of the Cloud Voice service is unlimited
  - **b.** Service quality to users is restricted by the connectivity/access technology and bandwidth available at the particular site/office those users are located at
- 4. How much bandwidth is required to optimise the Cloud Voice service?
  - a. You must have sufficient upload bandwidth to provide the service at a particular site
  - b. The amount of bandwidth required is dependent on how many concurrent calls are made, i.e. what is the maximum number of phone calls made at any one time. This is typically the same as the number of users in an office where employees are constantly on the phone or a third of the number of users in an office where call usage is infrequent
  - c. Typically 140kbps is needed per concurrent call
  - d. Please see the Bandwidth section in this document for more information
- 5. What is the maximum numbers of users I can have at my site?
  - The number of users you can support at each site will only be limited by your connectivity bandwidth
  - **b.** We have set a recommended maximum number of concurrent calls for each connectivity type and access technology (based on Cloud Voice HD calls): please see the Bandwidth section of this document for more detail.
- 6. Do you have sufficient ports on your router or LAN?
  - **a.** Each handset must be plugged into an Ethernet port, whether directly into your router (i.e. a Broadband Superhub) or into a switch as part of a LAN infrastructure
  - **b.** If you have insufficient ports for the volume of handsets purchased, it's possible to purchase switches and structured cabling, if required, from us
- 7. Do you have Power over Ethernet?
  - **a.** If not, you need to purchase a power supply unit for each handset to power the handsets which will need to be within a metre of each handset
  - b. We recommend for sites with more than 4 users, that a Power over Ethernet switch is purchased
- 8. Will all users know how to use the Cloud Voice service?



- **a.** The telephony functions of Cloud Voice are designed to suit all users and replicate that of traditional telephone services, and therefore is intuitive to use.
- **b.** We can also training on the service to maximise adoption and business value.

#### AHEAD OF DEPLOYMENT

#### 1. Do you need Quality of Service (QoS) on your LAN?

- **a.** Though QoS is not mandatory for the Cloud Voice service, any potential quality degradation can be reduced drastically by enabling end-to-end QoS
- **b.** If you're concerned about your LAN infrastructure, a LAN audit Professional Service can be purchased from us
- c. Note: LAN QoS is not available when using the soft client.

#### 2. Do you need Quality of Service (QoS) outside of your LAN?

- **a.** Though QoS is not mandatory for the Cloud Voice service, any potential quality degradation can be reduced drastically by enabling end-to-end QoS
- b. QoS is only available over Ethernet based circuits within a WAN. Introductions/amendments of QoS on the WAN must be completed via the usual Virgin Media Business IPVPN alteration methods, completing a CR3 form
- c. QoS is not available over MIA and Business Broadband access circuits

#### 3. Will the handsets be configured correctly?

- **a.** It's advised that handsets are plugged in as you receive them to ensure a smooth handover from us and all configurations can be applied
- b. It is important that all required firewall additions are done prior to plugging in your handsets
- c. All handsets purchased alongside the Cloud Voice product will already be provisioned and allocated against a user and therefore it's possible to plug the phone into the router/LAN port and it will auto-download the correct configurations and be ready to use within minutes, so long as internal networking allows Cloud Voice traffic (see internal firewall instructions above)
- **d.** All handsets not purchased alongside the Cloud Voice product will need to be configured against a user for the Cloud Voice product to work. The handset must be on our approved handset list and configuration of the handset can be completed using the respective user guide found on the www.virginmediabusiness.co.uk support pages

#### 4. Do you have an internal firewall?

- **a.** If so, the firewall must follow your firewall instructions to allow the Cloud Voice traffic using the information available in the Firewall and security section of this document.
- **b.** If your firewall is managed by another provider, it is important to request the required changed in advance to avoid any delays to your service going live.



#### DAY OF DEPLOYMENT

#### 1. Will the service work straight away?

a. Once you plug in your Virgin Media Business handsets, they'll auto-configure. If you have new numbers on your service, they'll be available on configuration. If you're porting numbers, on completion of the porting, the handsets can make calls

#### 2. Will all handsets work?

**a.** Please install all handsets to check they're working correctly. If a handset is found to be Dead on Arrival (DoA), please inform your Order Manager as soon as possible so we can replace the phone as part of our Warranty policy

#### 3. Will all users know what to do with the phones?

- **a.** The Cloud Voice SIP phones look very similar to traditional phones and therefore users should feel comfortable using them
- If floor walking training has been purchased, the floorwalkers will be on hand to support the end-users

#### 4. Will all users know what to do with the portal?

- **a.** The Cloud Voice portal has been designed to be user friendly. User guides can be found on <a href="www.virginmediabusiness.co.uk">www.virginmediabusiness.co.uk</a> help and support pages on how to use the portal at a user and administrator level
- b. If floor walking training has been purchased, the floorwalkers will be on hand to support the end-users

#### 5. What should you do if you have call handling rules, e.g. hunt groups?

- **a.** You can configure all call handling rules, including hunt groups, on the Business Portal.
- b. Company or site admins will have the ability to amend user's calling accordingly
- **c.** If you already have Virgin Media Business call handling rules, our delivery team can work with you to replicate these on the network.

#### 6. How will my phones keep their configuration and remain live on the service?

**a.** A constant internet connection is required for the phones to maintain their configuration to the Cloud Voice service

#### **IN-LIFE SERVICE**

#### 1. How does the service stay up-to-date?

- a. Virgin Media Business and our partners ensure the Cloud Voice product remains up-todate and supported. We strive to develop the service to meet current market demands
- **b.** Most changes can be made unnoticed. However, any amendments that may impact your service will be communicated to you following the correct change procedure and providing sufficient notice

#### 2. What happens if Cloud Voice doesn't work?

a. Please call Virgin Media Business with a fault on 0800 052 0800

#### 3. Can I add users?

a. Please contact your sales or account representative who will arrange this for you, once added you are able to configure



#### 4. Can I add users to an existing service for a short period?

- **a.** It's possible to add users to an existing service for less than a full year long contract term at a slightly higher monthly rate
- b. Please contact your sales representative to discuss this
- c. If you'd like to have additional users for less than a month, please let us know the start and end dates of the licenses
- **d.** If you'd like to have additional users for between one month and one year, please indicate the start date. They'll then continue on a daily rolling term until you provide us with a minimum of 5 days' notice ahead of the end date

#### 5. Can I change users?

- **a.** It's possible to amend user names within the Business Portal. Please note that the telephone number will remain the same
- b. Please contact your sales representative if you'd like to change a User license

#### 6. Can I remove users?

- **a.** It's possible to remove users from the Cloud Voice services. If the user is still in contract term, early termination charges may be applied based on the user monthly charge and the remaining term left of that user
- b. Please again get in touch with your account manager who can arrange this for you.

#### 7. Can I change my chargeable features?

- **a.** All chargeable add-on features are contracted on a rolling monthly term and therefore can be amended monthly
- b. Please contact your sales representative to add, change or remove chargeable features
- **c.** All non-chargeable features can be amended on the Business Portal on a company, site and user level depending on portal user permissions

#### 8. Can I end the service if it's no longer wanted?

**a.** Please inform your sales representative or visit <a href="www.virginmediabusiness.co.uk">www.virginmediabusiness.co.uk</a> and request to cease the service. If you're still in contract, for any of your users, you may face early termination charges

#### 9. What do I do with unwanted handsets?

 You own the handsets therefore it's your responsibility to dispose of the handsets as per WEEE regulations



## 7. Order pack

Once you're satisfied that the Cloud Voice product is right for you and understand your responsibilities, a quote can be generated as part of the Cloud Voice pack. In order to provide you with an accurate quote we need to capture some high-level requirements from you:

- User volumes
- Users types
- Numbering
- Handsets
- Service add-ons
- Professional Services

#### Site feature pack

As part of the provisioning process, it must be identified whether the Cloud Voice sites are an office or home site to aid our Emergency Services obligations:

- Office site is set when the business premises is that of a typical office environment. Employees attend this company site to carry out their day-to-day activities. This site will typically have a company name plaque outside the building. When this site is selected we'll update our Emergency Services database, for every user, with the name of the company and site address
- **Home site** is set when the business premises is that of a typical residential environment. Employees carry out their day-to-day activities from their home. When this site is selected we'll update our Emergency Services database, for every user, with the name of the user and site address

A site pack contains a set of features that are set/managed by an administrator and inherited by a user. They can be classified as a 'Group' set of functionality. Typically these features, once configured, will set a global policy for all users that sit under a site, i.e. music on hold. In some instances, a site feature can set a global policy for all users, but can then be configured individually for certain users, i.e. international call barring.

In addition some site features are capable of working across multiple sites, i.e. hunt groups. Further detail on site feature capabilities can be read in the sections above.

#### User feature packs

As discussed above, the Cloud Voice service is made up of 3 types of users – Functional, Fixed and Mobile. During the data capture stage within the order pack, we'll capture:

- The name of the user
- The DDI allocated to that user (telephone number)
- The handset of that user to be ordered
- The site they're based at
- Any add-ons attributed to that user

Once all information is captured, the order can be processed.



### 8. Provisioning

If the Cloud Voice is delivered over a new access service, the access service will be prioritised to be installed ahead of the Cloud Voice service. This is to ensure the correct provisioning of the service and actual use of the service can be obtained when live.

On submission of the Cloud Voice order, Virgin Media Business will send a welcome email to your nominated recipient.

Throughout the order delivery, the Cloud Voice Order Manager will advise you of the order progress.

#### **DATA SERVICES**

If you have ordered Professional Services to be performed, we'll engage with you to arrange a time, date and location for the Professional Services to be performed.

#### **IP HANDSETS**

If you have purchased handsets from us, these will be delivered by our delivery partners. Please ensure that the handsets can be received at all sites/locations indicated on the Cloud Voice order.

Unless you have purchased installation as a Professional Service, the installation of handsets will be your responsibility. On receipt of the handsets, please ensure at least one is powered up and plugged in to the router (ensuring all LAN/firewall configurations are completed) for us to complete the deployment of the service.

**Note:** Call our customer handset support telephone number to offer you IP handset help and guidance on 0800 052 0085.

#### **WELCOME EMAIL**

When the service has been provisioned, each user will receive two welcome emails from us. There are two welcome emails:

- New Communications Service
- Business Portal Access

The New Communications Service email will import the following details for that specific user for all orders placed in the order pack and takes data from the following fields:

- First name
- Last name
- Telephone number
- Extension number
- Device type this lists the phone device name & MAC address
- Business Portal URL
- Username
- Domain

The Business Portal Access email is automatically generated and provides the password you need to login to the customer portal used in conjunction with the details provided in the New Communications Service email.



#### **NUMBERING**

If you're porting numbers, Virgin Media Business are regulated and obliged to comply with the OFCOM number porting rules.

#### Number porting process - import

Porting orders will be accepted or rejected within 3 working days and it's not uncommon for ports to be rejected several times before being accepted and a port date issued. The most common reject reasons are due to:

- Single line request placed, but the line turns out to be a Multi line request
- Incorrect installation address
- Additional numbers on the line that you're not aware of
- Additional product on the line, e.g. Redcare or a Featureline Equinox range

Please note, we may ask you to provide the CUPID code of your existing service provider. This can be achieved through asking your existing voice service provider.

Any ports that are submitted with incorrect information will incur a rejection charge, and may as a result delay your delivery.

We can cancel or make date changes to a port up to midday, 2 working days before the port date. However, changes of the port type or information will lead to a cancellation and resubmission of the port request.

Please note all quoted lead-times are the minimum amount of days required to progress the number import. We recommend that you allow at least a further 3 days on top of these lead-times.

Installation type	Minimum lead time (working days)	
Single line	10	

The above lead-times are based on us having a porting agreement in place with the provider (CP) who is losing the number, losing CP (LCP). If this is not in place then please allow an extra 80 days for service establishment to be setup.

**Please note** if you ask for a number to be ported, the existing telephone line for that number will cease as a result of the number being ported away from the service. Please ensure that any DSL services are moved before a porting request is made.

Installation type	Minimum lead time (working days)
Multi line (ISDN + PBX)	10
Simple DDI (ISDN + PBX)	20
Complex (ISDN + PBX)	25

#### Number porting emergency restore – import

In the event of fault occurring during the porting process we will use reasonable endeavours to attempt to restore the port through liaison with Openreach and the Losing service provider.

Emergency restoration requests can be submitted up to 13.00 (1pm) following the day of the port.



**Please note:** It is not mandatory for the losing service provider to restore ports and there is no agreed lead-time for this process. A restoration order can take many days and may result in a loss of service for a period of time. We will use reasonable endeavours to ensure a restore happens but cannot guarantee full co-operation from the losing service provider. Other restrictions and limitations may apply on a case by case basis. If additional services, broadband, were on this line then we cannot guarantee that these will be reinstated.

#### Useful websites for number porting

There are a number of websites that you can use to ensure the porting process runs as smoothly as possible:

- Ofcom Numbering Site http://www.ofcom.org.uk/static/numbering/index.htm
  - This site enables you to check who the original range holder of the number is and check the CUPID reference numbers. CUPID numbers are the unique reference which details who the range holder is, and is needed when you place a port request on Business Zone.
- Number Portability Industry Processes <a href="http://www2.magratheatelecom.co.uk/industry\_porting/">http://www2.magratheatelecom.co.uk/industry\_porting/</a>
  - This site provides full detail on the end-2-end number portability process that has been agreed by industry.

#### **IN-LIFE SERVICE**

Once the order has been completed and handsets have been deployed, the Cloud Voice service will be deemed in-life. Billing will begin here and if you require support you must follow the customer service guidelines.

#### **CUSTOMER SERVICE**

Once in-life you will be supported via multiple routes:

- Self-care (user guides)
- Virgin Media Business Customer Care
- Fault Management Centre (FMC)

#### Self-care

The Cloud Voice product has been designed for customer independence. The Business Portal can be used to configure and amend all call handling and service amendments required at a company, site and user level.

For support and guidance on how to use the Business Portal, user guides have been created for company administrators and end-users. The guides can be found at: <a href="https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/">https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/</a>

**Note**: If you would like to add or remove your users or sites, this must be completed by Virgin Media Business therefore please engage your sales representative.

**User guides:** As part of the Cloud Voice service, we'll provide comprehensive user guides. The guides will enable support of the Cloud Voice product in reference to service overview, feature descriptions, handsets and portal support. The guides will be available on <a href="https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/">https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/</a>



#### VIRGIN MEDIA BUSINESS CUSTOMER CARE

If you have a non-fault customer care query, you can contact the customer care team via www.virginmediabusiness.co.uk or call 0800 052 0800.

The Customer Care team will be able to support you with all customer care portal elements.

**Note:** If you'd like to make a chargeable change to your Cloud Voice service, you must go through your Account Manager or sales teams.

#### **FAULT MANAGEMENT CENTRE (FMC)**

If you experience a fault, please contact our Fault Management Centre (FMC). The FMC will log and track faults and are managed against Service Level Agreements (SLAs).

Given the various potential faults on the Cloud Voice service, there are specific questions you should answer when you make your initial contact with the FMC team.

Based on the response to the questions, the FMC team will perform diagnostics on the access which the Cloud Voice product is running over. If proven that the access service is working fine, the Cloud Voice support process is followed.

#### **CPE SUPPORT - HANDSET**

**Warranty:** All Cloud Voice handsets sold by Virgin Media Business are provided with a 1 year warranty. Items that fail during this period will be replaced with a new unit. Requests for replacement phones are to be raised to the FMC.

**Dead on Arrivals (DOA) and warranty replacements:** If the unit is delivered and found to be faulty or damaged, then under the terms of the 1 year warranty, we will replace the unit. Just call us, log the fault and we'll look to replace the handset for you.

#### **BILLING**

You will be billed for 3 elements:

- Monthly recurring rental charges such as user licenses and service add-ons
- Monthly call tariff this may be all-inclusive or a PPM tariff
- One off charges such as Professional Services or Early Termination Charges

All billing queries will come via the Customer Care team and requested onto the billing query team.



### 9. Moves, Adds and Changes (MACs)

Occasionally, you may want to perform a Move, Add or Change (MAC) of your Cloud Voice service. Due to the flexible nature of the Cloud Voice service, you have the opportunity to grow or shrink the product to suit your business needs.

If you'd like to increase your number of users for a year onwards, it's recommended that you purchase those licences on a minimum year term for cost efficiencies. However, if you'd like to add users for less than a year, it's possible to buy daily licenses:

- For users to be added for up to 1 month, you must set a start and end date
- For users to be added for over 1 month, you must set a start date, but then inform us separately 5
  days before you wish to end your service to avoid over charging

#### If you'd like to:

- Add chargeable features: you can do so on a rolling monthly basis following the rules of the particular add-ons. Chargeable features can be removed so long as sufficient notice of minimum 5 days is provided.
- **Fully cease the service:** this is possible. And if you'd like to reduce your volume of users, you must inform us which users should be removed. If those users are still within the minimum contracted term, early termination charges may apply.
- Make any amends to the service: you and the end-user will receive a modification email identifying the change.



## 10. Glossary

Acronym	Definition
ACD	Automatic Call Distributor; a call centre function
ADSL	Asymmetric Digital Subscriber Line – the method which older off-net broadband is provided
CRM	Customer Relationship Management
DDI	Direct Dial In
FMC	Fault Management Centre
FTTC	Fibre to the Cabinet (aka VDSL) – the method which newer off-net broadband is provided
GB	Gigabyte
HD	High Definition
IAD	Integrated Access Device
IM	Instant Messaging
IP	Internet Protocol
IPVPN	Internet Protocol Virtual Private Network
IP Centrex	Internet Protocol Central Exchange
ISDN	Integrated Services Digital Network
IVR	Interactive Voice Response
iOS	Apple Operating System
LAN	Local Area Network
LoA	Letter of Authority
MAC	Media Access Control
MIA	Managed Internet Access
MOS	Mean Opinion Score
NAT	Network Address Translation
NPS	Net Promoter Score
ОТТ	Over the Top
PBX	Private Branch Exchange
PCI	Payment Card Industry
PPM	Pence Per Minute
PSTN	Public Switch Telephony Network
QoS	Quality of Service
SBC	Session Border Control
SIP	Session Initiation Protocol
SIP ALG	SIP Application Layer Gateway
TDM	Time-Division Multiplexing
UC	Unified Communications
VoIP	Voice over IP
4G	4th Generation (mobile network)



## 11. Appendix A: Non-chargeable Site Features

The below non-chargeable features are available to all your users at sites. These are applied and amended by you through the Business Portal and will affect all users at the affected site.

Features	Description	Benefit
Account codes	Enables businesses to track and allocate calls expenditure to different departmental groups by prompting users for an account code which can be between 2 to 14 digits long.  Please note that groups cannot have Account Codes and Authorisation Codes enabled at the same time.	Tracks un- allowed, non- internal calls being made for easier spend allocation
Authorisation codes	Enables businesses to request a code before allowing the completion of particular calls. These codes can be between 2 to 14 digits in length.  Please note that groups cannot have Authorisation Codes and Account Codes enabled at the same time.	Restricts un- allowed, non- internal calls being made to reduce unwanted costs
Auto attendants	The auto attendant feature serves as an automated receptionist that callers can reach by dialing a specific phone number or extension. Once connected to an auto attendant, the caller is played a greeting that provides a menu of options used to complete the routing of the call. Callers have the option to connect to the operator, dial by name or extension, or connect to configurable extensions that may be other auto attendants, hunt groups, call centers or users. Please note the Auto Attendant does not queue calls or provide comfort music/announcements. Businesses requiring this will need to add a Call Centre ACD onto each option that requires alternative queuing/announcements. Included within this feature is a 'Plus' pack that enables enhanced call forwarding functionality which includes:  • Alternate Numbers, Call Forwarding Always, Call Forwarding Selective, Do Not Disturb, Selective Call Acceptance, Selective Call Rejection, Voicemail	Ensures callers can be directed to their desired destination within the business
Call capacity management	The call capacity management feature can be used to control the call traffic associated with a specific site and/or group of users by limiting the number of concurrent calls that can be made to or from the site.	Reduces impact on bandwidth because the volume of calls at any one time is limited
Call director / FMC	Enables users to evoke a number of FMC solutions which includes: Make and receive 'One Number' calls from any device Control when secondary devices can be called Seamless transfer calls between devices To set this feature up a central 'Call Director' portal has to first be established at a Site level.	User can be contacted wherever they are using one number
Call logging	Enables Customers to monitor, view and compare real-time/historical call records across their Company, Site and Users. Also enables Users to see the same statistics but for their own traffic. Records are displayed in a simple graph and all data can be exported to a CSV file.  Call Logger allows a Customer to monitor and categorise the different call types	Review usage to manage costs



Features	Description	Benefit
Call park	Enables a user to hold a call and to retrieve it from another phone station within the group.	Increased productivity
Call Pickup Groups	The call pick-up feature allows users to answer any ringing call within their call-pick-up group. A call-pick-up group is defined by the Group or Company Administrator and is defined as a subset of the users in the site that can pick up each other's calls. Each site can have multiple call-pick-up groups but any user can only be a member of a single call pick-up group.	The call will ring for multiple users and the first one to pick- up will answer the call
Calling plans	Enables administrators to block specified incoming calls to their company, department and/or individual users by number type.  Enables administrators to block users from making certain types of outgoing calls by number type. Typically outgoing call types to International and Premium rate numbers are blocked.  Also enables administrators to link authorisation codes to outgoing calls and/or have calls transferred to a nominated department to connect calls.	Prevent unwanted calls being made and therefore reduce costs
Company contacts	Enables administrators to create custom contact directories that contain all or a subset of Users from the Company. This directory pulls the details from existing Users on the platform built under the specified Company.	Address book to optimize user's time as they don't have to scan for a contact
Configurable Extension Dialling	Enables users at different sites to call one another using abbreviated dealing instead of requiring their whole public number to be dialled. This can range between two to six digits in length, but does have in built restrictions to prevent certain numbers being used, i.e. 999, 112 etc.	Increased productivity
Configurable Feature Access Codes	Provides administrators with the option to specify the feature codes (i.e. star codes) associated with their services (e.g., Last Number Redial, Call Return) via the Group web portal. Administrators have the option to configure two different feature access codes for the same service. For example, *69 and #81 could both be used to enable Call Return.	Great if end users were used to using specific codes in a previous solution
Custom Ring back Group	Enables an administrator to play alternative audio, in place of ringing, to callers contacting either Users or Hunt Groups on a Site.	Increased productivity
Device Management	Enables administrators to inventory their Integrated Access Devices (IAD) and IP Phones.	Increased visibility and administration
Group Calling Line ID / Number Presentation	Enables users to present a single outbound Calling Line ID (CLI) from within a site, for all users or a set of users, including a single user. This feature will allow you to present out UK Geographic or Non Geographic numbers built on the platform. In addition you can present out non-platform numbers as a configurable number, which includes UK and International Numbers, but does exclude Premium rate numbers.	Allows you to present a single number for your business, and for return calls to go via your reception or intended incoming call routing plan.
Group Contacts	Enables administrators to create custom contact directories that contain contacts (Name & Number) that are common to the Site (e.g. Suppliers Customers etc.). This feature allows external contacts, not on the Cloud Voice systems, to be imported into the Directory.	Increased productivity



Features	Description	Benefit
Group Paging	Enables administrators to create a tannoy service by enabling a	Group
	message to be sent/paged to multiple users/devices. This is different to Push-to-Talk which is a one to one paging service only.	communication
Holiday Schedule	Enables administrators to build bespoke Holiday schedules that can be associated with the Auto Attendant add-on feature. A holiday schedule allows you to designate up to twenty different date ranges as holiday periods.	Simplified administration
	The system as standard contains the following 3 pre-built schedules; England & Wales, Northern Ireland and Scotland.	
Hunt Groups	Enables users within a group to be included in a specified sub-group to handle incoming calls received by an assigned Hunt Group phone number.  Users assigned to a Hunt Group can be located across different sites. Administrators can choose from any of the following "hunt" schemes, each of which rings the specified phones in a different manner:	Increased productivity and call routing options
	<ul> <li>Regular: sends calls to users in the order listed by an administrator</li> <li>Circular: sends calls to a user following on from the last user to receive a call</li> <li>Uniform: send calls to a user that has been idle for the longest time</li> <li>Simultaneous: rings all of the users in the group simultaneously; the first user to pick up the ringing phone is connected.</li> <li>Weighted rings Members in a pseudo-random fashion according to their relative weight/skillset (configured as % by administrator).</li> </ul>	
Music On Hold	Enables businesses to upload an audio file (.wav file containing music, advertising, etc.) to particular site and user features, including:  Call Centre ACD Call Hold Call Park	Improved customer experience
My Room Bridge (Conferencing)	Enables users to view and manage their Audio Conferencing settings (when they have taken UC Team Add-on pack), including;  Personal Audio Conferencing for up to 8 attendees per conference. Provides one click access to the conference, the ability to invite attendees and to manage active conferences. End conference when Chairperson (you) departs Mute all attendees on entry Select an options for when attendees join/leave the conference	Improved productivity
Phone Services	Enables administrators to push Company and Group Contacts to supported IP Handsets so that users can dial contracts from the handset. Where both Company and Group Contacts are pushed to these handsets, they will be merged as one directory.	Employee experience and productivity



Features	Description	Benefit
Series Completion	Enables administrators to create a "call forward busy chain". Calls to lines that are busy will then forward to the next free line using a predetermined order, set by the administrator.  This feature is configurable by CP Administrators, Company or Group administrators in the BP.	Improved customer experience
Site Intercept	Enables incoming calls to a site to be intercepted and an announcement can be played that provides alternate routing options to callers. This feature is typically used to decommission phone lines, either temporarily or permanently and can be used to suspend service for non-payment.	
Time Schedules	Enables administrators to define time schedules that can be applied to Site or User features. Typically used for controlling Auto Attendants and other features outside of business hours. Time schedule can be applied to:	Improved customer experience and reachability
Voicemail	Enables Administrators to configure whether Voicemail is enabled or disabled for each Site, regardless of whether the User has this feature in their license pack. By default this is set to on.	
Voice Portal	Enables users to phone a central 'Voice Services' number, from any device/location, to configure and change certain Site and User features The following features can be changed: Auto Attendant greetings CommPilot Express profile	

End of Appendix A



## 12. Appendix B: Non-chargeable User Features

Fun = Functional, Fix = Fixed, Mob = Mobile

Feature Name	Fun	Fix	Mob	Description	Benefit
Additional Line	<b>A</b>	<b>A</b>	¥	Enables a user to have more than 1 inbound/outbound line. These additional lines can be added to an existing IP Phone to provide the User with different identities	Increased productivity and flexibility
Alternate Numbers		<b>A</b>	<b>A</b>	The Alternate numbers feature allows users to specify the alternate numbers they can use with their phone service. Users can configure up to ten alternate numbers. The alternative number will call the user's primary line appearance and a distinctive ring pattern is applied to differentiate the call.	For users with multiple phones, they can be reached at all times following the call pattern of the phones. E.g. call office phone first, home phone second, mobile third
Answer Confirmation		<b>Φ</b>	Ā	This feature enhances the existing simultaneous ring, sequential ringing and call director features to (optionally) prompt the called party to enter a digit to confirm the acceptance of the call.	Reduce unwanted calls as only desired ones can be accepted
Anonymous Call Rejection		<b>ቝ</b>	Ā	This service enables a user to reject calls from anonymous parties who have explicitly restricted their identities. By activating the service, callers who have restricted their identities are informed that the user is not accepting calls from	Reduce unwanted calls impacting business time
Automatic Callback		¥	<b>A</b>	The Automatic Call-back (ACB) service allows users to monitor a busy party and automatically establish a call when the busy party becomes idle. Upon reaching a valid ACB busy condition, the user will hear an announcement asking if they would like to monitor the line and be called back when it is idle.	Optimise user's time by auto- calling any missed calls



Feature Name	Fun	Fix	Mob	Description	Benefit
Automatic Hold/Retrieve		<b>ው</b>	¥	Enables users to automatically hold and retrieve incoming calls without having to use a feature access code or flash key. It is useful for users who manage a large volume of incoming calls as it enables them to hold calls by simply transferring them to dedicated parking stations. A dedicated parking station is a separate user license reserved for holding or retrieving calls.	Increase productivity
Basic Call Logs	¥	¥	¥	Basic call logs provide users with call logs for received, missed, and placed calls.	The user can see the calls they have made/received/missed
Call Barge-in Exempt		¥	¥	Call barge-in exempt is used by users wanting to stop other users from barging in on an active call.	Prevent others in a call group 'barging in' whilst on the phone
Call Centres (Agent)	¥	¥	¥	Enables users (agents) to use the Business Portal, IP Phone, or soft clients to login/out of queues as well as update their status	
Call Director (FMC)		<b>安</b>	<b>A</b>	Call director is a fixed-mobile convergence (FMC) solution that allows users to make and receive calls using one number on any device and move calls between devices. Call director is a site level feature. Configuration of the site level features are covered in the 'site features reseller guide'	Users can be contacted from one number
Call Forwarding Always	<b>A</b>	<b>A</b>	¥	Call Forwarding Always (CFA) feature provides the capability to automatically redirect all incoming calls intended for a user, to another phone destination.	Ensure DDIs have their calls forwarded to a number that will be answered
Call Forwarding Busy	Φ.	Φ.	Ā	This feature enables a user to redirect incoming calls to another phone destination when the user is busy.	Ensure unanswered DDIs due to a busy line have their calls forwarded to a number that will be answered
Call Forwarding No Answer	¥	¥	¥	This feature enables a user to redirect incoming calls to another phone destination when the user does not answer within a specified number of rings.	Ensure unanswered DDIs have their calls forwarded to a number that will be answered



Feature Name	Fun	Fix	Mob	Description	Benefit
Call Forwarding Not Reachable	<b>A</b>	<b>A</b>	¥	This feature enables a user to redirect incoming calls to another phone destination when the user's device fails to respond to an incoming call request or is not registered with the service.	Ensure lines with no responding phone have their calls forwarded to a number that will be answered
Call Forward Selective		<b>ઝ</b>	Ф.	This feature enables a user to define criteria that causes certain incoming calls to be redirected to userspecified destinations. Call forwarding selective provides the capability to forward calls intended for a user to another destination, when the incoming call matches prespecified criteria. Normal call handling is applied to all calls that do not match any of the criteria you define.	Ensure certain calls forwarded based on their DDI
Call Hold	<b>ች</b>	¥	¥	Call hold enables a user to place an existing call on hold for a period of time, and then retrieve the call to resume conversation. While the calling party is held, the user can choose to make a consultation call to another party or invoke one of the other options listed below.	Optimise user's time by having a call on hold to complete required tasks without the need to then call them back
Call Notify		¥	¥	This service enables a user to define criteria and specify rules that cause certain incoming calls to trigger an email notification to a user-specified address.	Receive an email if a particular call has been received
Call Park	<b>ው</b>	Ψ	Ā	The call park feature allows a user to suspend, or 'park', a call for an extended period of time.	Optimise user's time by having a call on hold to call others without the need to then call the original dialler back



Feature Name	Fun	Fix	Mob	Description	Benefit
Call Pick Up Groups	<b>ቝ</b>	<b>ው</b>	<b>A</b>	The call pick-up feature allows users to answer any ringing call within their call-pick-up group. A call-pick-up group is set up by the Group or Company Administrator. This group is defined as a subset of the users in the site that can pick up each other's calls. Each site can have multiple call-pick-up groups but any user can only be a member of a single call pick-up Group. Call Pick Up Group is a site level feature Please refer to the Site Features Guide for a full description.	The call will ring multiple users and the first user to pick-up will answer the call
Call Policies	<b>፵</b>	<b>A</b>	Ā	Enables a user to allow or restrict whether they display their number to on-net callers when they forward their call to another number, i.e. Mobile number.	User privacy
Call Return	ቚ	<b>ઝ</b>	<b>A</b>	This feature enables a user to call the last party that called. To call back the last party that called, the user dials a recall feature access code. The system stores the number of the last party that called and attempts to connect the user to that party.	Call a missed caller back even if you don't have their number
Call Transfer (Blind, Consultative, Recall and Camp)	<b>A</b>	¥	<b>A</b>	Enables a user to transfer a call to another user and offers consultative or blind options. Consultative allows the user to confer with the user before transferring and blind enables automatic transfer of the call. Both methods can be done by using one of the following options: IP Handset, Toolbar.  With a Recall, if a User transfers a call and it is not answered then it will be recalled to the originating transferee, ensuring the call always get answered by an individual. With Camp, this allows calls to be camped on a User who have busy tone, a feature available in the Call Centre and Receptionist applications.	Business productivity
Call Waiting	A	A	Ā	This feature enables a user to answer another incoming call while already engaged in a call.	Answer important calls whilst already on the phone so it isn't 'missed'



Feature Name	Fun	Fix	Mob	Description	Benefit
Calling Line ID Blocking	¥	¥	¥	This feature enables a user to block delivery of his/her identity on all outgoing calls to a called party outside of the Site. There are 2 types of blocking, 'Persistently' block or block on a per call basis.	Prevent unwanted calls impacting your business
Calling Line ID Delivery – External Calling Line ID Delivery	<b>ઝ</b>	<b>ቝ</b>	<b>Ф</b>	Allows the user to view the incoming caller ID information for a call coming from outside the customer's organisation.	Identify your business rather than the user's DDI for improved customer experience, e.g. "Virgin Media Business" not "0161xxxxx"
Calling Line ID Delivery – Internal Calling Line ID Delivery	Ā	<b>ው</b>	¥	Allows the user to view the incoming caller ID information for a call coming from inside your organisation.	Identify your deprt rather than the user's DDI for improved customer experience, e.g. "Billing" not "0161xxxxx"
Client Call Control	Ā	Ā	¥	This is not a configurable service but a feature that is bundled into the toolbar to enable control of calls.	On the toolbar, the user can amend their call
Comm Pilot Express		Ā	¥	CommPilot express is a feature of the toolbar.	Toolbar - set 'available', 'out of office' 'busy' etc
Connected Line Identification Restriction	Ā	¥	¥	Enables a user to allow or restrict whether they display their number to on-net callers when another person forwards a call to them.	Used in specific scenario's where privacy is important
Directed Call Pickup with Barge In		<b>ው</b>	¥	Enables users to also barge in on a call in progress, thereby creating a three-way call. Administrators can configure whether or not a warning tone is played when a barge-in occurs.	Userful for managers and supervisors
Distinctive and Priority Ringing		<b>A</b>	¥	Enables users to set distinctive ringing tone for incoming calls if they meet set criteria, which can be based on Holiday/Time Schedules, or particular numbers.	Change ringtone so you know of 'important' calls
Last Number Redial	¥	<b>A</b>	¥	This feature allows users to redial the last number that they previously dialled. Users can only redial calls where the call type is allowed in the outgoing calling plan.	Improved productivity



Feature Name	Fun	Fix	Mob	Description	Benefit
LDAP Directory	Ā	Ā	Ā	Enables Administrators to integrate their end user Polycom VVX or Yealink T4x phone/s into an external LDAP directory.	
Local Number Dialling	<b>A</b>	<b>ው</b>	¥	Enables a user to make local calls within the same area code, without having to dial the area code. This is based on users with phone numbers on our platform sharing the same area code of the recipient that they intend to dial, and has no relevance to their actual geographic location.	
Do Not Disturb		¥	¥	Allows you to send your calls directly to your voice messaging box without ringing your phone.	Phone won't ring if busy
Hot Desking Host		<b>A</b>	<b>A</b>	Hot desking host, included in the fixed or mobile user license, allows a phone device to become a host to another user's phone number.  Another user, with the guest feature, can then log onto this existing phone with their own credentials and receive all their calls to this device. They can also make calls from this device which will present their own number, from their pre- existing account, to other users.	For users in various offices, they can sit by a phone on a desk and download their profile so all calls then made from that phone will be presented as the new user
Hot Desking Guest			¥	Hot desking guest, included in the mobile user license, allows a user to temporarily log onto another user's phone, providing it has the hot desking host license enabled. They can also make calls from this device which will present their own number, from their pre-existing account, to other users.	Users in remote locations can log into a phone and have their own profile on that phone
Office UC for Smartphone	Avail able as Add- On	Avail able as Add- On	¥	Enables user to make and receive voice and video calls, using their number, on Apple IOS and Google Android IOS Smartphones. Users are able to use this device as either a Primary or shared Secondary device.	Great for keeping traveling or mobile users in contact with the wider organisation
Office UC for Tablet	Avail able as Add- On	Avail able as Add- On	¥	Enables user to make and receive voice and video calls, using their number, on Apple and Android tablets. Users are able to use this device as either a Primary or shared Secondary device.	Great for keeping traveling or mobile users in contact with the wider organisation
Personal Contacts	<b>A</b>	<b>A</b>	Æ	The personal contact directory feature provides the ability to create custom contact directories for your employees to use.	Optimise time by having contacts directories rather than searching for their DDI



Feature Name	Fun	Fix	Mob	Description	Benefit
Phone Services	<b>ው</b>	<b>ው</b>	Æ	This feature provides a method of pushing down personal and company contacts (in personal and/or company directories) to a user's devices.	Reduce manual labour by sending phone contacts to all users. Done at site/company level
Pre-alerting Announcemen t		<b>A</b>	¥	Enables a user to play a pre- announcement message to callers, prior to alerting the user, and before any ringing is heard.	Used in specific scenario's
Push to Talk		¥	¥	Push to Talk allows people to call each other and have the call answered automatically (intercom service).  Save time calli 1:1 conversations in the call service in the call answered automatically (intercom service).	
Remote Office		¥	<b>A</b>	Allows a user to define a phone number, any working phone number, mobile or land line. This device can then be used to make and receive calls. Outgoing calls will present the users Cloud Voice CLI not the devices CLI for business continuity when you're away from your office.	Great for home working where you as if you were in the office.
Selective Call Acceptance		¥	¥	Accept calls when pre-defined criteria, such as phone number, time of day or day of week, are met.	Only receive the calls you want
Selective Call Rejection		¥	¥	Reject calls when pre-defined criteria, such as phone number, time of day or day of week, are met.	Reject calls you don't want to answer
Sequential Ringing		Ð	¥	Ring multiple phones sequentially when calls are received.	Multiple phones are called one after the other to improve efficiency
Simultaneous Ringing		Ā	Ā	Ring multiple phones simultaneously when calls are received.	Multiple phones are called at the same time to improve efficiency
Shared Call Appearance 5	Avail able with any Offic e UC Add- On	<b></b>	<b>Ф</b>	Enables a user to share their number across 5 different additional devices, enabling them to receive calls on these other devices. This feature is typically used in conjunction with any of the Office UC applications and other handsets. Outbound calls can be made from any of the configured devices but only one call at a time is supported from a user's account	
Speed Dial 8		¥	¥	Allows a user too dial another telephone number by simply dialling a single digit.	Save time inputting a phone number with a single digit
Speed Dial 100		Ā	¥	Allows a user to dial another telephone number by dialling a speed prefix access code and two digits.	Save time inputting a phone number with 3 digits



Feature Name	Fun	Fix	Mob	Description	Benefit
Time Schedule	<b>ቝ</b>	<b>ው</b>	¥	Enables users to select an existing time schedule, or create a new one that they can then apply to their features. Time schedule can be applied to:  • Auto Attendant  • Call Notify  • Call Forwarding Selective  • Distinctive and Priority Ringing  • Selective Call Acceptance  • Selective Call Rejection	Pre set business hours and treat calls differently outside of core business hours.
Three-Way Call	<b>X</b>	¥	¥	Three-way calling enables a user to make a three-way call with two parties, in which all parties can communicate with each other.	Collaborate and save time with 3 people rather than 2
User Intercept	ሉ	<b>ઝ</b>	Ā	Enables the user to intercept incoming calls and play an announcement that provides alternate routing options to callers.	This feature is typically used to decommission phone lines, either temporarily or permanently.
Video Calling	<b>ઝ</b>	Ā	Ā	Enables two users under the same organisation to make and receive On Net Video calls using one of the following soft clients: Office UC Smartphone, Office UC Tablet and Office UC Desktop.	Save on travel and allows a more personal experience between users
Voicemail	Avail able as Add- On	<b>ጅ</b>	<b>A</b>	Voice messaging provides a user with a voicemail service which they can access from any device, as well as have all voicemails emailed to a central email address as a MP3 file. Users can also access and listen to their voicemail from any device by calling their own number. Users can then listen to, save, and delete each message, as well as move to next message or skip back to the beginning or current message.	If a call is missed, a message can be left and an emailed sent
Voice Portal		<b>A</b>	函	Enables users to phone a central 'Voice Services' number, from any device/location, to configure and change certain Site and User features The following features can be changed:  • Auto Attendant greetings  • Automatically Login To Voice Portal from the Phone	

End of Appendix B



## 13. Appendix C: Authorised Equipment

The tables below show all IP Phones, IP Conference Phones and IADs/ATAs authorised for use with Centrex Sites and Users on Cloud Voice. .

#### **IP Phones**

Manufacturer	Model	Α	Description	Firmware
	IP Solo		A SOHO/small office door entry intercom/phone.	2.24
2N	IP Force		A ruggerdised industrial door entry intercom/phone.	2.24
	IP Verso		A medium to large office door entry intercom/phone.	2.24
Algo	8180 G2		A SIP compliant alerter/speaker.	1.7.5
	SPA 501G			7.6.2.f
	SPA 502G			7.6.2.f
	SPA 504G			7.6.2.f
Cisco	SPA 508G			7.6.2.f
CISCO	SPA 509G			7.6.2.f
	SPA 512G			7.6.2.f
	SPA 514G			7.6.2.f
	SPA 525G			7.6.2.a
Panasonic	KX-TGP500			22.85
	IP 5000	•	Small room conference device	4.0.11
	IP 6000			4.0.11
	IP 7000		Large room conference device	4.0.11
	Trio 8500	•	Small room conference device	5.9.0.11368
	Trio 8800	•	Large room conference device	5.9.0.11368
	VVX 201	•	Basic device for use with Foundation License	5.9.2.3690
	VVX 300			5.9.2.3690
	VVX 301	•	Entry level device	5.9.2.3690
	VVX 310		·	5.9.2.3690
Dolygom	VVX 400			5.9.2.3690
Polycom	VVX 410			5.9.2.3690
	VVX 411	•	Mid-entry device	5.9.2.3690
	VVX 500		,	5.9.2.3690
	VVX 600			5.9.4.3247
	VVX 601	•	Executive device	5.9.4.3247
	VVX 1500			5.9.2.3690
	IP 321			4.0.11
	IP 331			4.0.11
	IP 335			4.0.11
	IP 450			4.0.11
	IP 650			4.0.11
	T23			44.80.179.11
	T40G	•	Basic device for use with Foundation License	76.82.179.4
	T40P			54.80.179.11
	T41P			36.80.179.11
	T42G			29.80.179.11
	T42S (VDM)	•	Entry level device	66.82.179.6
	*			29.81.179.5
	T46G			28.80.179.11
Yealink	T46S (VDM)	•	Mid-entry device	66.82.179.6
	T46G (VDM)		•	28.81.179.5
	T48G `			35.80.179.11
	T48G (VDM)	•	Mid-entry device	35.81.179.5
	T48S (VDM)	•	Mid-entry device	66.82.179.6
	W52P	•	IP DECT base station	25.80.179.4
	W52H	•	IP DECT phone use with W52P	26.73.179.4
	W60P	•	IP DECT base station	77.81.179.3
	W56H	+	IP DECT phone used with W60P	61.81.0.30
	W80B	+	IP Multi-Cell DECT base station	103.83.179.3
	1 11005		I Hall ook beer base station	100.00.170.0



Manufacturer	Model	Α	Description	Firm w are
	W52H	•	IP DECT phone used with W80B	88.83.0.91
	W56H	•	IP DECT phone used with W80B	61.83.0.91
	CP860		Conference device	37.80.179.11
	CP920	•	Conference device	78.81.179.1

#### IAD/ATA's

Manufacturer	Model	Α	Description	Firmware
Cisco	Cisco SPA 112			2.24
O SCO	Cisco SPA 122			2.24

#### **IP Phone Accessories**

Manufacturer	Model	Α	Description
Cisco	Cisco SPA 500s Digital Expansion Module		
	VVXGeneric PSU	•	Power cable
	7000 PSU	•	Power cable
	VVXPaper Expansion Module	•	BLF Expansion module
Polycom	VVXDigital Expansion Module	•	BLF Expansion module
l olyoom	VVXUSB Camera	•	Point-2-point video camera
	IP650 Digital Expansion		
	Module		
	VVX Paper Expansion Module		Works with VVXIP Phones
	VVXDigital Expansion Module		Works with VVXIP Phones
	T41/42 PSU	•	Power cable
	T46/48 PSU	•	Power cable
	W52H	•	Spare IP DECT handset for the W52P
Yealink	W56H	•	Spare IP DECT handset for the W60
I Gaillik	Bluetooth Adaptor		Bluetooth adaptor
	Electronic Hook Switch	•	Electronic Hook Switch
	T46/T48 Digital Expansion Module	•	BLF Expansion module
	WF40	•	Wi-Fi Dongle for use with the S range

#### Headsets

Manufacturer	Model	Α	Description
	Jabra BIZ 2300 - Mono NC/Phone	•	Single Ear corded headset with GN1200 coiled phone headset cable
	Jabra BIZ 2300 - Duo NC/Phone		Double Ear corded headset with GN1200 coiled phone headset cable.
	Jabra BIZ 2300 - Mono NC/USB	•	Single Ear corded headset with Link 230 USB headset cable.
	Jabra BIZ 2300 - Duo NC/USB	•	Double Ear corded headset with Link 230 USB headset cable.
Jabra	Jabra PRO 920 - Mono for Polycom	•	Single Ear cordless DECT headset with Polycom EHS cable.
	Jabra PRO 920 - Duo for Polycom	•	Double Ear cordless DECT headset with Polycom EHS cable.
	Jabra PRO 920 - Mono for Yealink		Single Ear cordless DECT headset with Yealink EHS cable.
	Jabra PRO 920 - Duo for Yealink	•	Double Ear cordless DECT headset with Yealink EHS cable.
	Jabra Motion UC MS Plus	•	Bluetooth wireless headset.



# Thank you

#### **Registered Office:**

Virgin Media Business

500 Brook Drive Reading RG2 6UU T: 0800 052 0800

Registered in England and Wales No. 01785381

