CLOUD VOICE

SERVICE DESCRIPTION

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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 built in full on servers hosted in secure data centres allowing for resiliency. When you wish to take the service, you're provided with an instance on the servers. By creating customer instances on the pre-built servers, this avoids the need for any costly capex hardware to be purchased by you, instead, you'll only be charged the ongoing opex for the scale of your usage on the servers in a subscription basis. An additional advantage is that you can flex your usage on the servers quickly with it being reflected in your next monthly bill. The service is hosted (stored remotely in data centres) 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

You can achieve the following benefits through Cloud Voice:

- Consolidation of communications spend
- Business transformation
- Untethor networks / get more out of your network investments
- Workforce mobility / flexible working
- Moving to the Cloud
- Opex cost model
- Enable a collaboration strategy
- Moving to Hosted Voice / VoIP
- Controlling real estate or facilities costs
- Control spending on mobile and fixed voice calls

- Address the government's drive to promote more flexible working policies
- Reducing an organisation's carbon footprint
- Monitor what your workforce is doing
- Address telephony equipment that is no longer supported or is shortly going to be out of support

The Product Overview

Cloud Voice is made up of a number of components that need to be bundled to together to provide the solution to the end-user of the service. You can purchase all of the individual components directly from us.

The core components are:

- Licences – feature packs and add-ons (User Licenses)

- Numbers – new and ported

- Calls – voice and video calls

- CPE – IP phones
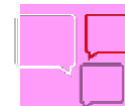
The Cloud Voice service can be enhanced if we deliver your:

- IP connectivity – IPVPN / MIA / Business Broadband

- Professional services – Audits / Remedial works / Installation

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 user type. There are 3 different user types available:

- Functional user
- Fixed user
- Mobile user

Functional user

Ideal for users that require a basic communications service

This could be a reception phone, lift phone or a 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 user

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

By fixed usage 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. This pack is the most common pack and generally suits the majority of all users.

Mobile user

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

By mobile usage 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. The app is not available for Blackberry and Windows devices.

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 workplace 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, beyond that of a basic user.

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

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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 D.

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 add-ons

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

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:

- Call Analytics iCS Insights – Enables you to use a web portal to review your call statistics displayed on dashboards and/or wallboards within the portal. The dashboard provides visual call activity, updated every 15 minutes, which includes:

    o Hourly/daily call distribution
    o Call activity by DDI/extension/user
    o Missed call summary
    o Unreturned missed calls by caller ID

    The wallboard provides a number of pre-configured visual displays which include:

    o DDI summary
    o User summary
    o Business summary

- Call Analytics - iCS Reports – Enables you to use a web portal to review all of your call statistics in near real-time using pre-defined or customisable reports, dashboard and/or wallboards within the portal. 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:

  o Schedule reports for 'yesterday', 'last week', 'last month' or use custom dates
  o 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, talktime and ringtime
  o Incoming call analytics measure call volumes, targets, grade of service, percentage calls answered, call abandoned, longest waiting and unreturned missed calls
  o Executive reports collate data from multiple reports, and provide observations and recommended actions
  o Customised dashboards and wallboards

- Call Analytics - iCS Premier Reports – Enables you to use web portals to review all of your call statistics in real-time using pre-defined or customisable reports, dashboard and/or wallboards. 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:

  o Real-time reporting – live calls waiting and call handling statistics by agent and ACD call queue
  o Report on total calls, destination, talktime, ringtime, grade of service, percentage calls answered, number of calls in queue, call abandoned, longest waiting and unreturned missed calls
  o At a glance dashboards and wallboards display group performance parameters on a live tile
  o Live call statistics for queues and agents, such as number / duration of calls and availability
  o Supervisor management tools including agent presence monitoring
  o Review performance and use "what if" calculations to forward plan contact centre agent shifts

Within each of the chargeable Company features, different feature components can purchased:

- Call Analytics - iCS Insights

  o Set up – to initially install the service
  o Supervisor (min. 1 for all ICS services purchased) – a senior user to review all insight analytics
  o Monitored user – a user who's calls are captured by the analytics
    - Note: If this feature is purchased, all users within your company will be catagorised as 'monitored users'

- Call Analytics - iCS Reports

  o Set up – to initially install the service
  o Supervisor (min. 1 for all iCS services purchased) – a senior user to review all insight analytics
  o Monitored user – a user who's calls are captured by the analytics
    - Note:If this feature is purchased, all users within your company will be catagorised as 'monitored users'

- Call Analytics - iCS Premier Reports

- o Set up – to initially install the service
- o Supervisor (min. 1 for all iCS services purchased) – a senior user to review all insight analytics
- o Monitored user – a user who's calls are captured by the analytics
  - ▪ Note: If this feature is purchased, all users within your company will be catagorised as 'monitored users'
- o Contact Centre Agent – enhances monitored user by reporting on a call centre agent's status and queue availability
- o Dashboard Supervisor – allows a user to login and access their own data
- o Console user – a limited view of the reports to that of the Insight Dashboard only

Please note, an additional order form (part of the order pack) needs to be completed for orders to be provisioned by Toll Ring.

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

Site add-ons

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:

- Auto attendant (IVR) – additional

  - o Please note, each of your sites already comes with an auto attendant and therefore these additional auto attendants can be purchased to provide IVR capability beyond the core 1-9 options

- Call Centre ACD – 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:

  - o Call queuing with comfort announcements
  - o Comfort announcements
  - o Overflow to alternate destinations
  - o Redirection of calls outside business hours
  - o Music on hold
  - o Uniform call distribution

  A statistics report is generated at the end of each day and sent to email addresses. Please note this feature provides comfort music for one agent distribution group 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.

- Call Recording storage – secure voice recording storage in the Cloud. Before being deleted after the expiration point, recordings can be downloaded and archived.

  - o 30 Day – standard as part of a user Voice Recording package
  - o 180 Day –
    - ▪ Please note, this is purchased in a per GB basis
  - o 7 Year –
    - ▪ Please note, this is purchased in a per GB basis

  Call recording storing times are designed to meet PCI compliance.

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

User add-ons

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

The chargeable user features available are:

- CRM Connect – integration of call controls and voice system (e.g. one-click) to CRM systems (e.g. Salesforce). Comes in Standard and Lite versions. The Lite version can only be integrated into Microsoft Outlook or Lotus Notes. CRM Connects allows:

  - Automatic screens pop up when inbound calls are received
  - Call control from PC
  - Click-to-dial from CRM file/Office or Lotus Notes

- Voice Recording – ability to record all calls for future playback.

  - Please note, there is a separate order form for voice recording as part of the order pack

- Reception Console – Web application allowing monitoring of users and call transfer

  - Small Business variant – monitoring 30 users
  - Enterprise variant – monitoring 200 users

- Busy Lamp Field – users, such as receptionists, have a phone extension (sidecar) to view other user's status using lights indicating availability

- Fax Messaging – receive faxes over email using a new dedicated fax number

- Unified Communications

  - Desktop – softclient on a desktop application
  - Business – IM and presence, softclient on app or desktop application
  - Team – IM and presence, softclient, desktop sharing, 8 person audio conferencing on app or desktop application

The full list of chargeable user features available, the description and benefits and the user types available for the Cloud Voice service can be found within Appendix E.

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

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.

CPE – IP phones / devices

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
  - 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. 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:

Yealink model		Polycom model
T42 W52P Dect	Standard phone	VVX 301
T46 W60 Dect	Enhanced phone	VVX 411
T48	Premium phone	VVX601
CP920	Conference phones	5000 7000

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

Available		Available
✓	Additional dect handset	✗
✗	Paper expansion	✓
✓	Digital expansion	✓
✗	USB camera	✓
✓	Bluetooth adaptor	✗
✓	Electronic hookswitch	✗

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.

From time to time, we'll update the handsets we offer. Please review the latest service description to ensure you can see the latest handsets we have to offer.

Devices

As well as a handset, you can utilise other devices, as long as they have the correct user type (mobile license) and add-on. By using a 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.

For mobile and UC users, they can download the Cloud Voice application called 'Office UC'. The application allows the user to have access to the Cloud Voice features over their smartphone and/or tablet.

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Portals

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:

  - Company level
  - Site level
  - User level

- Review stats for inbound, outbound and missed calls which can be exported at:

  - Company level
  - Site level
  - User level

- Introduce and amend Non-Chargeable features for:

  - 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 https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/ support pages including guides for admin users and end-users.

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Professional Services

Introducing VoIP, such as Cloud Voice, can be transformational for a business. To ensure they get the desired deployment of the solution that is most suited to them, 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

    o This is where the Data Service Engineer (DSE) will review your current estate set-up and advise whether it's Cloud Voice / VoIP ready, making suggestions on improvements

- Remedial Works

    o 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
    o The DSE will also do a live test of the service (on one handset) to ensure that it's working correctly

Note: A separate order form must be completed to purchase Professional Services.

Features & Packaging

Due to the multiple variations available through Cloud Voice including user types, features, handsets and call charges, you can often get inundated with which solution is right for you.We have therefore put together some attractive bundles that will remove some of these decisions for you.

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 ratio. 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
Functional user	Standard	Bundled call package
	Enhanced	
	Premium	
Fixed user	Standard	Bundled call package
	Enhanced	
	Premium	
Mobile user	Standard	Bundled call package
	Enhanced	
	Premium	

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Technical configurations

Platform components

Cloud Voice is made up of a number of hardware and software service components that work together to provide the service. The main components are:

- Application Servers – These operate at the core and handles users, groups and subscription services
- Media Servers – These enable a broad range of media features including, auto attendant, music on hold, service announcements etc
- Network Servers – These enable massive scalability and geographic redundancy, dial plans and voice VPNs
- Profile Servers – These store your user data
- XSPs – These provide additional services such as toolbars, softclients, device management and APIs
- Collaborate Servers (UMS/USS) – These provide instant messaging and collaboration services
- Voicemail Servers – These allow storing and retrieval of voicemail messages
- Session Border Controllers (SBC's) – These control the phone entry points into the platform. The SBCs take care of things like security, NAT traversal and call routing
- Business Zone – This web-based application server enables users to be easily added to the platform. Business Zone is the key piece of software that enables us to set-up and deliver service
- Business Portal – All authorised users can access and change personal and group features via a friendly web interface
- Voice Recording Portal – End customers and users access this through the business portal to listen to and manage voice recordings
- Call Analytics Portal (through toll ring) – End customers and users access this to view and manage call statistics through dashboards and wallboards, as well as run and schedule reports

IP connectivity

All our access types – IPVPN, MIA and Business Broadband (cable), will 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. It should be noted that certain back-up options are unsuitable for carrying VoIP traffic (e.g. 3G back-up) and therefore the full Cloud Voice benefits cannot be achieved.

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, jeopardising the quality. For certain users, this may be acceptable, but if you wish to push 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.

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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

Broadband Access Circuits	D/S Mbps (Up to)	U/S Mbps (Up to)	Max No of G.711 & G.722 calls	Max No of G.729 calls
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
Cable*	Any	35	60	60
Cable*	Any	40	60	60

* 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.

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.

BUSINESS

CPE port requirements

Device	Protocol	Destination	Destination port
IP phone & ATA Signalling	SIP	_sip_udp.ipcomms-btwbslnws09.bt.com 147.152.35.102/29 147.152.35.110/29 centrex-bslnws09.yourwhc.co.uk centrex-lnwsbs09.yourwhc.co.uk ipcomms-route62- bs11lnws13.yourwhc.co.uk ipcomms-route62- bs12lnws14.yourwhc.co.uk 62.7.201.128/27 62.7.201.160/27 _ipcomms-btwbslnws09.bt.com 147.152.35.96/29 147.152.35.104/29	UDP/TCP 5060
IP phone & ATA Media	RTP	62.7.201.128/27 62.7.201.160/27 _ipcomms-btwbslnws09.bt.com 147.152.35.96/29 147.152.35.104/29	UDP 32767 to 65535
IP phone & ATA	NTP	0.uk.pool.ntp.org europe.pool.ntp.org	UDP/TCP 123
IP phone & ATA	DNS	Supplied locally	UDP/TCP 53
Cisco Linksys download and configuration	HTTPS	dm-linksys.yourwhc.co.uk 193.113.10.34 193.113.11.36	TCP 443
Cisco Small Business download and configuration	HTTPS	dm-csb-yourwhc.co.uk 193.113.10.33 193.113.11.35	TCP 443
Panasonic download and configuration	HTTPS	dm.yourwhc.co.uk 193.113.10.10 193.113.11.10	TCP 443

Polycom download and configuration	HTTPS	dm.yourwhc.co.uk 193.113.10.10 193.113.11.10	TCP 443

Web portal port requirements

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

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.

BUSINESS

Customer Premise Equipment (CPE)

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, i.e. 8-Port Ethernet switch. This could be the handset purchased from us
- ATA/IAD to make and receive calls using a non-IP phone, analogue dect 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 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.

Authorised / Pending IP phones

Manufacturer	Model	Firmware	Notes
Cisco	SPA 501G	7.6.1	
Cisco	SPA 502G	7.6.1	
Cisco	SPA 504G	7.6.1	
Cisco	SPA 508G	7.6.1	
Cisco	SPA 509G	7.6.1	
Cisco	SPA 512G	7.6.1	
Cisco	SPA 514G	7.6.1	
Cisco	SPA 525G	7.6.1	
Panasonic	KX-TGP500	WHC 22.85	
Polycom	IP 5000	4.0.11 WHC	Can be ordered from us
Polycom	IP 6000	4.0.11 WHC	
Polycom	IP 7000	4.0.11 WHC	Can be ordered from us
Polycom	VVX 201	5.5.1 WHC	
Polycom	VVX 300	5.5.1 WHC	
Polycom	VVX 301	5.5.1 WHC	Can be ordered from us
Polycom	VVX 310	5.5.1 WHC	
Polycom	VVX 400	5.5.1 WHC	
Polycom	VVX 411	5.5.1 WHC	Can be ordered from us
Polycom	VVX 410	5.5.1 WHC	
Polycom	VVX 500	5.5.1 WHC	Can be ordered from us
Polycom	VVX 600	5.5.1 WHC	
Polycom	VVX 601	5.1.3 WHC	
Polycom	VVX 1500	5.1.3 WHC	
Polycom	IP 321	4.0.11 WHC	
Polycom	IP 331	4.0.11 WHC	
Polycom	IP 335	4.0.11 WHC	
Polycom	IP 450	4.0.11 WHC	
Polycom	IP 650	4.0.11 WHC	
Yealink	T42G	36.73.179.4 WHC	Can be ordered from us
Yealink	T46G	28.73.179.5 WHC	Can be ordered from us
Yealink	T48G	35.73.179.5 WHC	Can be ordered from us
Yealink	W52P	25.73.179.4 WHC	Can be ordered from us
Yealink	W52H	26.73.179.1 WHC	

BUSINESS

End of life IP phones

The phones in the table below can no longer be used alongside the Cloud Voice product as they are now end of life.

Manufacturer	Model
Cisco (Linksys)	SPA 921 UK
Cisco (Linksys)	SPA 922 EU
Cisco (Linksys)	SPA 941 UK
Cisco (Linksys)	SPA 942 EU
Cisco (Linksys)	SPA 962 EU
Panasonic	KX-TGP550
Panasonic	KX-TPA50
Panasonic	KX-UT113
Panasonic	KX-UT123
Panasonic	KX-UT133
Panasonic	KX-UT136

Authorised IP phone sidecars

Manufacturer	Model	Firmware	Notes
Cisco	Cisco SPA 500s Digital Expansion Module	n/a	
Polycom	IP650 Digital Expansion Module	n/a	
Polycom	VVX Paper Expansion Module	n/a	Works with VVX IP phones
Polycom	VVX Digital Expansion Module	n/a	Works with VVX IP phones
Yealink	T46/T48 Digital Expansion Module	n/a	

Authorised IAD/ATAs

Manufacturer	Model	Firmware
Cisco	Cisco SPA 112	1.3.1 WHC
Cisco	Cisco SPA 122	1.3.1 WHC

BUSINESS

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3. 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

Further guidance can be found in the below FAQs:

Ahead of sale

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
   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

   If you wish to have hunt groups or attendant consoles, you must purchase/port additional telephone numbers for these. As a general rule, we suggest 10% extra telephone numbers.

2) 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

3) 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

4) What is the maximum numbers of users I can have at my site?

    a. We have set a recommended maximum number of concurrent calls for each connectivity type and access technology (based on Cloud Voice HD calls):

        o Ethernet:

            1. 10Mbps upload – 36 calls
            2. 20Mbps upload – 71 calls
            3. 30Mbps upload – 107 calls
            4. 40Mbps upload – 143 calls
            5. 50Mbps upload – 150 calls
            6. 100Mbps upload – 357 calls
            7. 200Mbps upload – 714 calls
            8. 500Mbps upload – 750 calls
            9. 1Gbps upload – 1000 calls

5) 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

6) 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

7) 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

    b. You can also purchase training modules. The training can be 'Train the Trainer' and/or 'Floorwalking'

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. 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)
   c. 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 below tables. Further guidance may be required from your firewall vendor:

      o Business Portal access:

Device	Protocol	Destination	Destination port
Business Portal	HTTPS	Vmbcloudvoice.[yourdomain].co.uk/businessportal 193.113.10.13 193.113.11.13	TCP 443
Call Analytics portal (where relevant)	HTTPS	icscallanalytics.[yourdomain].co.uk 40.115.5.58	TCP 443
Voice Recording portal (where relevant)	HTTPS	callrecorder.[yourdomain].co.uk 193.113.10.32 193.113.11.34 Note browser access is via a redirect from the Business Portal.	TCP 443

o   Virgin Media Business provided handsets:

Device	Protocol	Destination	Destination port
Polycom download and configuration	HTTPS	dm.yourwhc.co.uk 193.113.10.10 193.113.11.10	TCP 443
Yealink download and configuration	HTTPS	dm.yourwhc.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

o   Customer provided handsets:

Device	Protocol	Destination	Destination port
IP phone and ATA signalling	SIP	_sip_udp.ipcomms-btwbslnws09.bt.com 147.152.35.102/29 147.152.35.110/29	UDP/TCP 5060 to 5075
IP phone and ATA Media	RTP	147.152.35.100/29 147.152.35.108/29	UDP16384 to 32766
IP phone and ATA	NTP	europe.pool.ntp.org	UDP/TCP 123
IP phone and ATA	DNS	Supplied locally	UDP/TCP 53
Cisco Linksys download and configuration	HTTPS	dm-linksys.yourwhc.co.uk 193.113.10.34 193.113.11.36	TCP 443
Cisco Small Business download and configuration	HTTPS	dm-csb-yourwhc.co.uk 193.113.10.33 193.113.11.35	TCP 443
Panasonic download and configuration	HTTPS	dm.yourwhc.co.uk 193.113.10.10 193.113.11.10	TCP 443

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

    b.   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 www.virginmediabusiness.co.uk 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. Company or site admins will have the ability to amend user's calling accordingly

    b.   If you already have Virgin Media Business call handling rules, these will not be migrated from your existing services

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-to-date 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 representative who will arrange this for you

    b.   You must make sure you have sufficient upload bandwidth to accommodate the additional users

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

7) Can I change my chargeable features?

   a. All chargeable 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 www.virginmediabusiness.co.uk 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?

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

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.

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, ParcelForce. Please ensure that the handsets can be received from ParcelForce 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.

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 –** http://www2.magratheatelecom.co.uk/industry_porting/

  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: https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/

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 https://www.virginmediabusiness.co.uk/help-and-advice/products-and-services/voice-over-ip-support-guides/ support pages.

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 willl 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 PPPM 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.

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.

If you'd like to 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.

If you make any amends to the service, you and the end-user will receive a modification email identifying the change.

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4. Glossary

Acronym	Definition
ACD	Automatic Call Distributor; a call centre function
ADSL	Asymetric 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
OTT	Over the Top
PBX	Private Branch Exchange
PCI	Payment Card Industry
PPPM	Per 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

Acronym	Definition
TDM	Time-Division Multiplexing
UC	Unified Communications
VoIP	Voice over IP
4G	4th Generation (mobile network)

5. Appendix A – Chargeable company features

The below chargeable features are available to all users within your company. Applied and amended through Virgin Media Business and could affect all users of the company.

Optional user features	Description	Benefit
iCS Insight - Set-up	Provides a business with a near real-time analytics portal that provides pre-defined dashboards and wallboards reporting for all your calls.	Installation of service
iCS Insight - Supervisor	Provides 1 mandatory unrestricted login to the ICS Insight analytics portal.	A user can review the details of the analytics portal
iCS Insight - Monitored user	Monitors and captures the user's call statistics for the ICS Insight product.	A user can monitor the analytics portal

Optional user features	Description	Benefit
iCS Report - Set-up	Provides a business with a near real-time analytics portal that provides customisable reports, dashboards and wallboard reporting for all your calls.	Installation of service
iCS Report - Supervisor	Provides 1 mandatory unrestricted login to the ICS Report analytics portal. Additional logins can be ordered and restricted.	A user can review the details of the Reports portal
iCS Report - Dashboard supervisor	Monitors and captures the user's call statistics for the ICS Report product.	A user can monitor the Reports portal dashboard
iCS Report - Monitored user	Provides a simple restricted login to just the Insight Dashboard.	A user can monitor the Reports portal
iCS Report - Console user	Allows an individual user access to their own call statistics.	A user can see their reports on the portal

Optional user features	Description	Benefit
iCS Report Premier - Set-up	Provides a business with a real-time analytics portal that provides customisable reports, dashboards and wallboard reporting for all your calls.	Installation of service
iCS Report Premier - Supervisor	Provides 1 mandatory unrestricted login to the ICS Report Premier analytics portal. Additional restricted logins can be ordered.	A user can review the details of the Reports portal
iCS Report Premier - Dashboard supervisor	Provides a simple restricted login to just the Insight Dashboard.	A user can monitor the Reports portal dashboard
iCS Report Premier - Monitored user	Monitors and captures the user's call statistics for the ICS Report Premier product.	A user can monitor the Reports portal
iCS Report Premier - Contact centre agent	Enhances the user monitoring capability by reporting on a call centre agent's status and queue availability.	A contact centre agent will have their actions captured on the report portal
iCS Report - Console user	Allows an individual user access to their own call statistics.	A user can see their reports on the portal

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6. Appendix B – 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.

Site/group features	Description	Benefit
Account codes	The account code feature allows your users to assign certain calls outside of the site with a specified account code for tracking and auditing purposes. For example, if you want to track long distance calls in order to charge them to certain internal customer accounts, you can create a different account code for each internal customer and each type of call.	Tracks un-allowed, non-internal calls being made for easier spend allocation
Authorisation codes	The authorisation code feature allows the Group or Company Administrator to select specific users who must enter a valid Authorization Code, when making a call outside the site e.g. '9' followed by the DDI.	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 dialling 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 centres or users.	Ensures the dialler 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	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.	User can be contacted wherever they are using one number
Call logging	Call logging is a set of call analysis features in the Business Portal that allow Company Administrators and Site/Group Administrators to view and analyse call logging information.	Review usage to manage costs
Call park	The Call Park feature allows a User to suspend, or 'park', a call for an extended period of time. During this time, the User can freely make and receive other calls and invoke other features without limitation. When ready, the User can retrieve the parked call from any extension.	Optimise user's time by making multiple calls at the same time
Call pick up	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	The calling plan feature allows the Group or Company Administrator to restrict the type of calls users can make and/or receive. Calling plans can be applied to both incoming and outgoing calls.	Prevent unwanted calls being made and therefore reduce costs
Company contacts	The company contacts feature provides the ability to create custom companywide internal contact directories.	Address book to optimise user's time as they don't have to scan for a contact

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Site/group features	Description	Benefit
Configurable extension Dialling	The configurable extension dialling feature provides the ability to map a user's DDI or public directory number to a unique extension to allow abbreviated extension only dialling between the users of a site.	Optimise user's time as users can be reached using a shortened number (e.g. 1234) reducing time to find a specific DDI
Configurable feature access codes	Cloud Voice allows the Group or Company Administrator to select the Feature Access Codes (FAC) used to activate, deactivate, and configure various features. This may be required to duplicate functions users are familiar with from legacy systems or to avoid conflicts with your required numbering plan.	Optimise user's time as they can turn on features using a shortened sequence e.g. *15 for call bridge
Device management	The device management feature provides the Group or Company Administrator with an inventory of all devices in a site and the ability to manage and customise these devices. These devices may include integrated access devices (IAD), gateways, softphones, and IP phones. In addition, this feature provides the capability to assign users directly to an existing device without the need for deprovisioning the user. The Group or Company Administrator can use the device inventory to create, modify, and delete the IP telephones that are used within a given site.	Easily manage your users and their device estate
Group calling line ID	Use the group calling line ID feature if you want to use a single default calling line identity for:- • All users within a given site If you assign a calling line identity to a site, the identity will be displayed to external parties who receive calls from users at the site. It provides a similar end-user experience to the traditional ISDN 'Bearer Number'. A group calling line identity is composed of a valid public phone number that is authorised for use by all users within the site. For a given site, the Group or Company Administrator can enable a group phone number, referred to as the 'Group Calling Line ID'.	Identify your business rather than the user's DDI for improved customer experience, e.g. "Virgin Media Business" not "0161xxxxx"
Group contacts	The group contacts feature provides the ability to create custom contact directories for use by your site or employee group.	Address book to optimise user's time as they don't have to scan for a contact within a specific group
Group paging	Group paging is effectively a tannoy type service that enables a 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.	Optimise time by a mass-pushed message rather than multiple calls to make the same message
Holiday schedule	As a Group or Company Administrator, you can define holiday schedules that can be associated with the auto attendant feature. Create a holiday schedule if you intend to configure an auto attendant so that it behaves differently during business hours and after hours and you if you want the auto attendant to use its "after hours" behaviour during designated holiday periods.	Reduce manual labour as the phone system will follow rules based on timings
Hunt group	The hunt group feature processes high volumes of incoming calls received by a single phone number by distributing them among a specific set of users or "members" assigned to the hunt group according to the configured hunting policy. Based on the configured call distribution (hunting) policy, an incoming call hunts for an idle user in the hunt group to terminate the call to that user.	Optimise user's times by spreading calls across multiple users. If one doesn't answer, pass it onto a free user

Site/group features	Description	Benefit
Music on hold	The music on hold feature allows a Group or Company Administrator to set up and maintain an audio source that can be broadcast to held callers in various scenarios. For example, call park and call hold etc. You can use the music on hold feature to broadcast music, (or any other specific audio message, such as advertising, to callers who are put on hold using the call hold and call park features.	Improve your customer's experience whilst they wait with music or a business message
My room bridge (conferencing)	Requires user to have UC team. My room audio conferencing provides personal audio conferencing for up to 8 attendees per conference. It's a reservation-less audio conferencing service that can be accessed from any phone, anywhere. You conduct the conference as the chairperson.	Bridge location for 'UC team' users to have up to 8 people conference improving team collaboration
Phone services	This feature provides a method of pushing down common contacts (in company and/or group directories) to the devices of one or many users under a site.	Reduce manual labour by importing phone contacts to all users
Series completion	The series completion feature allows you to create a "call forward busy chain" that handles calls to lines that are busy by hunting for a free line using a specified, ordered list of users. When it encounters a call to a user whose line is busy, it uses the order of names in the list to hunt for a user whose line is idle. When a call attempts to terminate on one of these users and finds a user busy, the call overflows to the next user on the list, until an idle user is found or the end of the list is reached.	Optimise users times by auto forwarding a call away from a busy user to a free user
Time schedule	The time schedule feature can be used to define time schedules that can be applied to the features used by the site. The time schedules you create for a site are visible to and can be used by its site features and end-users. Create a time schedule if you want a feature to use different behaviour during business and non-business hours, or at different times during the day, or times where users are routinely unavailable, differently. For example, if you apply a time schedule to an auto attendant you can present different menu options or capabilities to incoming callers based on what day and/or time of day they called.	Similar to holiday, have call features apply to specific times in a day to reduce manual labour
Voice portal	The voice portal provides an Interactive Voice Response (IVR) application that can be called by users of the site from any phone, to manage some of their features. The Group or Company Administrator can also use the voice portal to record new greetings for a site's auto attendants.	Reduce manual labour by changing features through voice control

7. Appendix C – Chargeable site features

The below chargeable features are available to all users at different sites. Applied and amended through Virgin Media Business and will affect all users at the site affected.

Optional Site/Group Features	Description	Benefit
Auto attendant (additional)	Added to one available on site already. Provides a business with a 1 level IVR call routing service, offering 1-9 options, i.e. push 1 for Sales or 2 for Support.	The business can support customers with more than one auto attendant
Call centre ACD	Use the call centre ACD feature if you want to allow a site to distribute incoming calls to multiple users from a single central phone number. Cloud Voice provides support for call centre ACD allowing multiple users, called agents, to receive calls from a central phone number. Incoming calls to a call centre are presented to the next available agent according to the call distribution policy configured. Each call centre can be configured to enable use of sophisticated call-handling features such as queuing, music on hold and periodic comfort announcements.	End customers can call a single number to access multiple users and then will be directed to the next available agent improving customer experience
Call recording 30 day storage	Enables all users of a site to store their call recordings in the Cloud for 30 days. A site can only have one storage policy which all users inherit.	Stored recordings can be used for business improvements
Call recording 180 day storage	Enables all users of a site to store their call recordings in the Cloud for 6 months to meet FSA storage requirements. A site can only have one storage policy which all users inherit.	Stored recordings can be used for business improvements and regulation
Call recording 5 year storage	Enables all users of a site to store their call recordings in the Cloud for 5 years to meet FSA storage requirements. A site can only have one storage policy which all users inherit.	Stored recordings can be used for business improvements and regulation

8. Appendix D – Non-chargeable user features

The below non-chargeable features are available to all users. These are applied and amended by you through the Business Portal.

User features – all users	Functional	Fixed	Mobile	Feature description	Customer benefit
Auto hold/retrieve	x	x	x	Automatic Hold/Retrieve (AHR) provides users with the ability to automatically hold and retrieve incoming calls without having to use a feature access code or flash key. It's 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.	The user can manage all calls coming in as they all start on hold so the dialler gets 'answered' and remains on the line
Basic call logs	x	x	x	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 forwarding always	x	x	x	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	x	x	x	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	x	x	x	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
Call forwarding not reachable	x	x	x	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 hold (inc. flash)	x	x	x	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 park	x	x	x	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

User features – all users	Functional	Fixed	Mobile	Feature description	Customer benefit
Call pick-up	x	x	x	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 return	x	x	x	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 (consultative & 3-Way conference)	x	x	x	This feature enables a user to consult with an add-on party before either transferring the caller to the add-on party or initiating a 3-way conference call with the original caller and the add-on party.	Improve your customer's experience by handling the call as required and explain the call to the new recipient without losing the phone connection
Call waiting	x	x	x	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'
Calling line ID blocking	x	x	x	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	x	x	x	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	x	x	x	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	x	x	x	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
Intercept user	x	x	x	Allows a user's phone number to be taken out of service while providing callers with informative announcements and alternative routing options.	Ensure dialler is informed why they cannot reach that number
Last number redial	x	x	x	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.	Redial the last missed call, even if you don't have their number

User features – all users	Functional	Fixed	Mobile	Feature description	Customer benefit
Personal contacts	x	x	x	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
Phone services	x	x	x	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
Three-way call	x	x	x	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
Video calling	x	x	x	Video calling is available on a limited range of devices allowing video calls to be conducted on desktop phones, tablets, mobile phones, PCs and laptops whether in a meeting room, office or travelling.	Have video rather than voice for a personal touch

The below non-chargeable features are available to fixed and mobile users only. Applied and amended by you through the Business Portal.

Fixed & Mobile user features	Functional	Fixed	Mobile	Feature description	Customer benefit
Alternate numbers		x	x	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		x	x	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		x	x	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 restricted callers. The user's phone does not ring and the user does not see or hear any indication of the attempted call.	Reduce unwanted calls impacting business time
Automatic Call-back		x	x	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. The ACB service can *only* be activated against a destination within the same group.	Optimise user's time by auto-calling any missed calls
Call barge-in exempt		x	x	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

Fixed & Mobile user features	Functional	Fixed	Mobile	Feature description	Customer benefit
Call director		x	x	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 forward selective		x	x	This feature enables a user to define criteria that causes certain incoming calls to be redirected to user-specified destinations. Call forwarding selective provides the capability to forward calls intended for a user to another destination, when the incoming call matches pre-specified 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 notify		x	x	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
Comm pilot express		x	x	CommPilot express is a feature of the toolbar.	Toolbar - set 'available', 'out of office' 'busy' etc
Directed call pick-up with barge in		x	x	Allows the user to pick up a call or barge into a call on another user. Unlike group call pick-up, where a feature access code is used to pick up a call on a pre-define list of users, directed call pick-up with barge in uses a feature access code plus the extension number of the phone to pick up or barge into a call on any phone on your site. Note: Barge in cannot be completed if you have barge in exempt set as a feature.	Enter an existing call without permission to create a three-way call
Distinctive and priority ringing		x	x	Allows you to make your phone ring with a different ring cadence. Use this service if you want to know when a specific person calls such as your manager or spouse or when you would like to easily tell when a call is from inside your group or outside your group.	Change ringtone so you know of 'important' calls
Do not disturb		x	x	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		x	x	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 WHC 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
Push to talk		x	x	Push to Talk allows people to call each other and have the call answered automatically (intercom service).	Save time calling for a 1:1 conversation

Fixed & Mobile user features	Functional	Fixed	Mobile	Feature description	Customer benefit
Remote office		x	x	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 'WHC' CLI not the devices CLI for business continuity when you're away from your office.	Redirect calls to you if you're in a different location
Selective call acceptance		x	x	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		x	x	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		x	x	Ring multiple phones sequentially when calls are received.	Multiple phones are called one after the other to improve efficiency
Simultaneous ringing		x	x	Ring multiple phones simultaneously when calls are received.	Multiple phones are called at the same time to improve efficiency
Speed dial 100		x	x	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
Speed dial 8		x	x	Allows a user too dial another telephone number by simply dialling a single digit.	Save time inputting a phone number with a single digit
Voice messaging inc. voice portal calling		x	x	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
Shared call appearance 5		x	x	Shared call appearance 5 allows users to share multiple call appearances of their line number (CLI) over multiple devices, a maximum of 5. For example, a Personal Assistant can take calls for multiple Executives and identify each line on their handset. Each Executive will share their CLI on the Personal Assistant's device.	Identify who is calling

BUSINESS

Fixed & Mobile user features	Functional	Fixed	Mobile	Feature description	Customer benefit
Toolbar		x	x	The toolbar user feature is an application that enables a user to control calls and turn WHC features on or off from the application within Outlook, Internet Explorer or Firefox, and no longer needing to log into the configuration portal (the Business Portal). With the toolbar, users have access to the main functionality of the service and can control this at the click of a button. The toolbar can only be installed on Windows PCs and must be used in conjunction with Internet Explorer 7 or later or Firefox Version 3, 10 or 11. The toolbar will also integrate with Microsoft Outlook if installed.	Save time by not having to go into the portal when the call control can be done from a browser toolbar

The below non-chargeable features are available to mobile users only. Applied and amended by you through the Business Portal.

Mobile user features	Functional	Fixed	Mobile	Feature description	Customer benefit
Hot desking guest			x	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 WHC account, to other users.	Users in remote locations can log into a phone and have their own profile on that phone

9. Appendix E – Chargeable user features

The below chargeable features are available to all users. These are applied and amended by Virgin Media Business.

Optional user features	Functional	Fixed	Mobile	Feature description	Customer benefit
CRM connect	x	x	x	Enables a user to see the customer's information in the CRM files and click-to-dial from approved CRM systems.	Use data stored in a CRM tool, e.g. Salesforce, to identify callers or call out, saving time and improving your customer's experience
Office UC desktop (inc SfB plug-in)	x	x	x	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. Introduces softphone voice and video calling and integrates with Skype for Business.	Allows a user's desktop to become their phone (softclient) using their telephone number to improve business device management. Integrate to SfB to use existing UC services
Call recording user	x	x	x	Enables a user to record their calls and store them in the Cloud for 30 Days (PCI compliant). Or add on 6 months/5 years for additional storage.	Capture all conversations of a user to be played back at a later date for training/regulatory purposes
Reception console - small business	x	x	x	Provides you with a receptionist console software that can monitor up to 30 users.	Control, monitor and manage calls of your employees from a PC based tool to optimise usage
Reception console - enterprise	x	x	x	Provides you with an enterprise software receptionist console that can monitor up to 250 users.	Control, monitor and manage calls of your employees from a PC based tool to optimise users

BUSINESS

The below chargeable features are available to all fixed and mobile users only. These are applied and amended by Virgin Media Business.

Optional user features	Functional	Fixed	Mobile	Feature description	Customer benefit
UC business (inc Skype for Business plug-in)		x	x	UC features inc: desktop softphone, instant messenger and presence. Can be integrated with Skype for Business	Users can collaborate using instant messenger and presence, whilst also using their desktop as their phone (softclient). Can be integrated with Skype for Business
UC team (inc Skype for Business plug-in)		x	x	UC features inc: Desktop softphone, instant messenger and presence, audio conference up to 8 users, web collaboration and desktop sharing. Can be integrated with Skype for Business.	Users can collaborate using instant messenger and presence, whilst also using their desktop as their phone (softclient). Up to 8 users can partake in an audio conference with screen sharing capabilities. Can be integrated with Skype for Business
Busy Lamp Field (BLF)		x	x	The Busy Lamp Field (BLF) feature allows another user to monitor another user's call state, through BLF LED's, available on an IP phone or IP phone attendant console (sidecar). Users can be subscribed to a list of users to monitor, and receive notifications of the busy/idle state of the monitored users.	Receptionists can see who is free to ensure they pick up a unanswered call
Fax messaging		x	x	This feature allows users to receive a fax and email it to the message store along with their other messages (voicemails). A notification is sent for fax messaging – this is separate from voice messaging. From the telephony user interface, fax messages are treated like voice messages.	Receives fax as an email

The below chargeable features are available to mobile users only. This is applied and amended by Virgin Media Business.

Optional user features	Functional	Fixed	Mobile	Feature description	Customer benefit
UC office for Smartphone / tablet			x	Office UC to be used on a mobile device e.g. Android or iPhone.	Have smartphone through your mobile/table
UC Office for iPad			x	Office UC to be used on an iPad.	Have smartphone through your iPad