



REAL Mobile, Inc.

Wired Telecommunication Services (Business Lines)
Wireless Telecommunication Services

2018

Table of Contents

Executive Summary..... 3

Overview of Network Services..... 4

 Denial of Service (DoS) attack:..... 5

 Rapid and Flexible deployment with full features 6

 Key Features include 7

Hosted PBX office..... 8

 Virtual Office Solutions 10

 Business VoIP 11

 Audio-Conferencing Solution 12

 SIP Trunking Solutions..... 13

 PC Softphone Solution 14

 Virtual Phone Number Solutions 15

 Call Center / Contact Center Solutions 16

 Click to Call Voice Solutions 17

 Voice VPN..... 18

 WebRTC..... 19

 Video 20

 Facimile (eFAX) solutions 20

 Mobile softphone (virtual dialer) 21

 REALShield..... 22

 Wireless Connectivity 23

 Wireless Router..... 24

 Remote location signal booster option..... 25

 Additional Deliverables (IP Desksets) 26

 Mobile Travel SIM (Global Roaming) 27

Executive Summary

REAL Mobile offers **full service hosted business PBX service** with a full complement of Class 5 features including dial by name directory, customizable IVR, conferencing, **Call Center**, flexible call routing, virtual office, VPN (Virtual Private Network), and more.

The combined services of a Cloud Hosted Business VoIP system for office allows for interconnectivity to remote and foreign location offices, along with hard wire internet install, wireless internet install (for failover or remote locations) and mobile capabilities makes REAL Mobile an attractive and complete solution for your communications needs.

REAL Mobile is also a **cellular phone service provider** (MVNO) which uses nationwide LTE networks as its backbone. You get nationwide wireless coverage for voice, sms (text) and data throughout the US, including Alaska, Hawaii, Puerto Rico and Virgin Islands.

In addition to domestic connectivity REAL Mobile offers multiple International Calling solutions through our cloud business phone system. Call from your REAL Mobile wireless phone worldwide (to fixed or mobile devices) using your office connection. Use your REAL Mobile deskset to call anywhere in the world, or from any location around the world. Select features allow remote locations (anywhere in the world) as part of your office extension. Our REAL Mobile Travel SIM makes your smartphone Global allowing calls to or from your wireless device worldwide. Inclusive, through our VPN connections these communications can be made more secured.

Other services include mobile hotspot and LTE Routers allowing internet connection from remote or difficult to cable spots.

The company can provide new devices from the latest selection of IP desksets, including video capable, conference phones, smartphones, heavy duty rugged PTT (push to talk) field devices to simple feature phones for basic voice/text communications.

Through partnerships and support REAL Mobile can offer related communications services as listed in this presentation such as PRI/T-1 installs, the latest technology SD-WAN (Software Defined – Wide Area Network) offering secured and highly optimized communications and Data transfer, analog phone lines, and more.

REAL Mobile is a **certified Minority company, DBE, ACDBE and SBE firm**

Overview of Network Services

REAL Mobile operates a managed VoIP platform.

The softswitch and billing platform is hosted in Data Center in Newark, New Jersey using Cogent, Level3 and Lighttower tier 1 carriers to interconnect the switch with the Internet backbone, and several independent power lines for redundancy.

Automated redundancy includes things like power feeds (all servers have two independent power supplies connected to independent power feeds), network cards (all servers have multiple network cards that will automatically fail over), network switches (all network gear is redundant and automatically fails over), network uplinks (use of independent providers connected to independent routers that automatically fail over). The information from "master" DB is being constantly copied to several "slave" replication servers to ensure that everything has an up-to-date backup copy.

There is also has additional infrastructure in the New York area, plus facilities in Europe, in particular RTP proxies.

In addition, all servers have redundant parts (all disks are in RAID, redundant power supplies, redundant fans, multiple processors, and ECC protected memory). In the same racks, there are running identical servers to the ones that run our services. When hardware components have failed in the past, they were typically been replaced on the live system with zero downtime. If a server swap is ever necessary, they have successfully practiced this procedure with nearly zero downtime multiple times.

We have a detailed monitoring system in place that monitors server health (temperature, disks, fans, etc.) and software health (running, has recent records, no errors in logs,...). Any time that a failure is detected, automated alarms are sent to all technical staff, anyone who is on or off duty is instantly notified. Our system detects software problems (not just errors, but also warning conditions), and in practically all cases the issues are resolved by our staff long before any of our customers become aware of them.

Backup - we perform daily snapshot backups of all servers and billing database. In case disaster recovery becomes necessary, all of our data is replicated in multiple places and immediately available.

REAL Mobile, through its support team offers experienced and trained IT experts operating the various server centers and monitoring systems. In addition, the PortaOne team is also on a 24/7 availability to our support. With European server centers online as well competent and experienced staff are available 24/7.

Built into the REAL Mobile platform are multiple termination carriers providing termination service, both domestically and to all locations worldwide. Multiple channels ensure multiple failover support so all calls are routed one way or another to their destinations.

Inbound direct terminations are handled via REAL Mobile DID vendors and are instantly scalable to compensate for any increase in traffic. Inbound 800 – toll free traffic is handled in a similar manner in coordination with DID vendor support.

As noted previously, network management is coordinated with the Telinta support team which also coordinates with the PortaOne support team of experience professionals. See above for more detailed description of the Telinta/PortaOne platform and its infrastructure.

Conference services and billings services are built into the general platform and are part of the services available. See more detailed description within this presentation.

Denial of Service (DoS) attack:

- * Our engineers blocked the majority of popular tools used to send brute-force requests and keep extending the list in case new attempts appear.
- * REGISTER messages are processed by a separate billing instance, so in case there is a flood of register attempts, legitimate users will be able to make calls without issues.
- * REGISTER messages are cached for some time, so in case some user agent sends them too frequently, SIP proxy will use previously received and cached reply from billing engine.
- * Our engineers can configure limits for number of REGISTER/OPTIONS/etc. requests sent from the same IP address. These restrictions are disabled by default since can cause issues for misconfigured devices, however, they can be enabled on demand if needed.
- * TeliCore uses powerful servers which can process huge number of attempts.
- * TeliCore uses multiple servers to distribute load or for fail over purposes.
- * TeliCore have direct peering with large providers that can help to block traffic from some areas flood requests are coming from.
- * Telinta engineers can configure email notifications to your email address in case there are frequent attempts in logs.

Rapid and Flexible deployment with full features

REAL Mobile's solution for Hosted PBX has the all features you need.

Our full feature PBX system operates "in the cloud". There is no expensive telecom equipment to install at the customer site. This not only eliminates any equipment failure at the customer site (eg, lightning strikes, power failure, etc.) which could cause communications disruptions and expense, but any system adjustments (IVR greeting, call routing, call forwarding, etc.) can easily and quickly be done from a remote location "over the internet".

IP phones, dial plan mapping (eg, Greeting, call transfer, email message, music on hold or custom message, etc.) is completed before phones are installed. System installation is as easy as connecting the IP deskset to an internet outlet.

Adding and/or moving an extension is just as simple.

With our highly-customizable solutions, you have a full range of services in addition to Hosted PBX, all under your fingertips programmable at the individual office location, if desired.

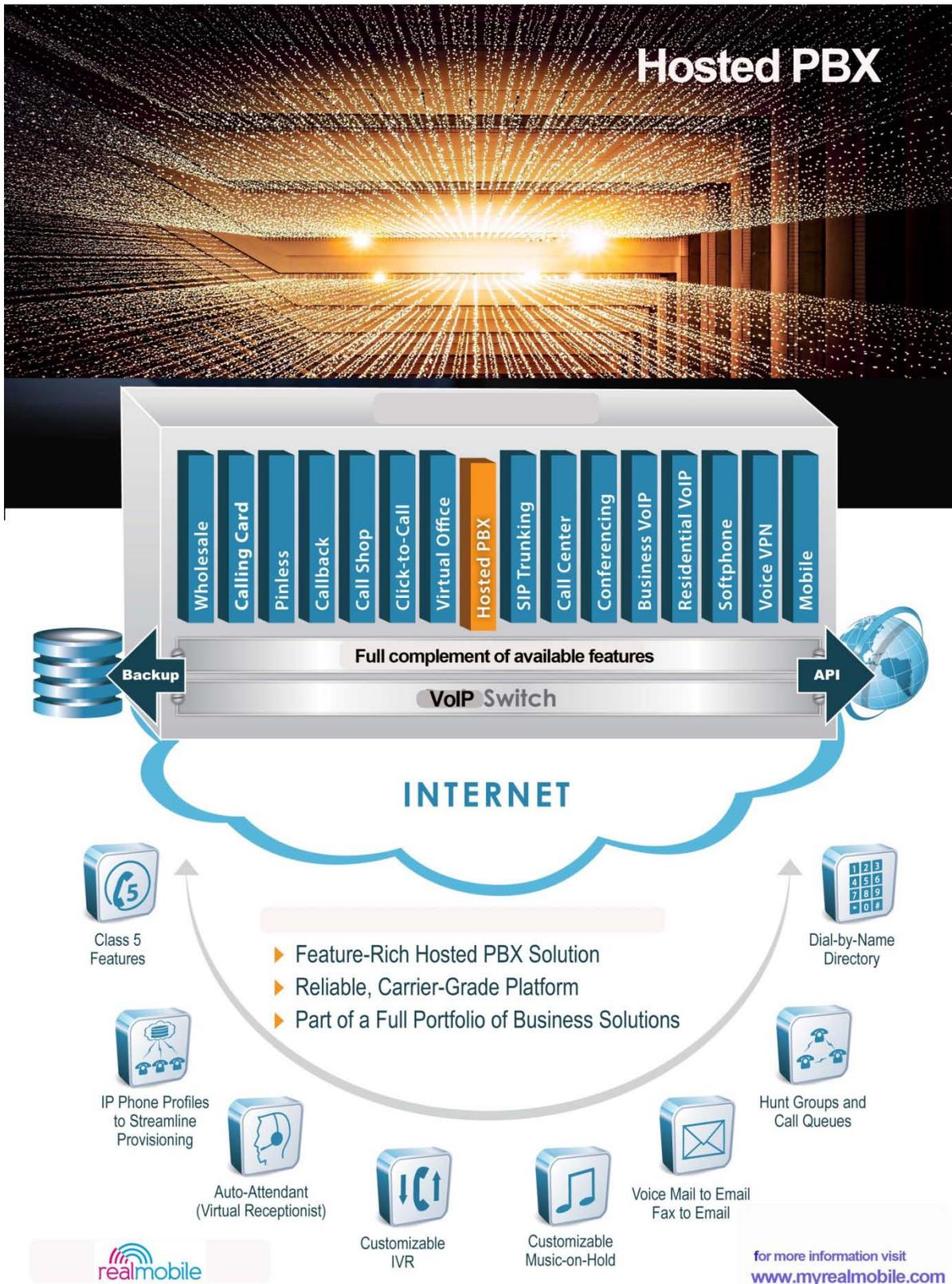
There is no hardware on customer site with the exception of the IP desksets (if desired).

The REAL Mobile PBX service is easily operational with virtual dialers on PC/Tablets, as well as smartphones with our provided APPS

Key Features include

<p>Cloud-based,</p> <p>Rapid deployment</p> <p>Best-of-breed Hosted PBX technology</p> <p>Highly stable,</p> <p>Scalable and customizable platform</p> <p>Full portfolio of ready to use turn-key solutions</p> <p>Comprehensive training and Around-The-Clock Technical Support</p> <p>Auto-Attendant and Dial by Name</p> <p>Voice Mail</p> <p>Music on Hold and customizable announcements on hold</p> <p>Customizable Self-Service Web Portals and management access</p> <p>Self-Service Billing and real time CDR</p> <p>Call Forwarding</p> <p>Audio and Video conferencing</p> <p>Inbound direct termination services (Calls within our network by-pass PSTN / LEC)</p>	<p>Call Center / Contact Center</p> <p>SIP Trunking - Replaces Costly ISDN PRIs and T1/E1 Lines</p> <p>Domestic and International voice service</p> <p>Optional Voice VPN</p> <p>PC Softphone Solution</p> <p>Virtual Phone Number Solutions</p> <p>Click to Call Voice Solutions</p> <p>WebRTC</p> <p>Facimile (FAX) solutions (efax and analog)</p> <p>REALShield - an innovative suite of fraud prevention tools</p> <p>Stability and reliability - All servers have redundant parts</p> <p>Wireless Connectivity</p> <p>Inbound 800 toll free service</p> <p>Disaster recovery</p> <p>International Travel options</p>
--	---

Hosted PBX office



REAL Mobile's solution for Hosted PBX has the all features you need. With REAL Mobile you have highly stable business telephony services that you can rely on. This includes REAL Mobile's Auto-Attendant, Class 5 features, IP Phone profiles to streamline provisioning and more. Our robust carrier-grade platform, integrates cutting-edge VoIP solutions with world-class Switching and Billing capabilities. With our highly-customizable solutions, you have a full range of services in addition to Hosted PBX, all under your fingertips programmable at the individual office location, if desired.

Key Features include

Cloud-based,

Rapid deployment

Best-of-breed Hosted PBX technology

Highly stable,

Scalable and customizable platform

Full portfolio of ready to use turn-key solutions

Comprehensive training and Around-The-Clock Technical Support

Virtual Office Solutions

With REAL Mobile's Virtual Office solution, you can easily assemble your own feature-rich hosted telecom solutions in the Cloud via our customizable Virtual Office web portals. You can choose from a variety of highly cost-effective self-service functions, adding extensions, setting up voice mail, configuring an auto-attendant, personalizing IVR, call forwarding and more.

This solution is perfect for meeting the unique needs of a small business while streamlining the provisioning processes. With Virtual Office, you do not need to use IP phones, but instead can use regular analog phones with an ATA, including regular mobile phone line.

Virtual Office's self-service capability lets you easily expand your business across the country or around the world, without installer visits or shipping phone equipment.

Key features

Auto-Attendant and Dial by Name

Voice Mail

Music on Hold or your custom message

Customizable Self-Service Web Portals

Self-Service Provisioning by End Users

Call Forwarding

Business VoIP

REAL Mobile's Business VoIP solutions enable you with a robust portfolio of telephony services. This includes a full range of Class 5 features, Voice Mail, Hosted PBX, SIP Trunking, Call Centers, Audio Conferencing and more.

With REAL Mobile, you can select the solutions you need to serve any size office, with locations anywhere in the world. Our carrier-grade platform provides the security and reliability that you can count on.

Our highly-scalable cloud-based Business VoIP solutions allow you to quickly and easily enable world-class services, without additional capital investment.

Key options

Class 5 Softswitch features

Voice Mail

Hosted PBX

Call Centers

Audio Conferencing

SIP Trunking

Customizable Multi-Language IVR

Customizable Web Portals

Personalized Music on Hold (MOH) and Announcements

Audio-Conferencing Solution

Our feature-rich audio-conferencing solution for VoIP is fully integrated into our world-class hosted VoIP Softswitch and Billing platform . Our solution includes web portals, customizable multi-language IVR, virtually unlimited number of conference rooms, with all the features and controls you can rely on.

The Audio-Conferencing is part of a complete suite of VoIP solutions focused on your needs. With REAL Mobile, you can have a full range of enterprise telephony services anywhere in the world.

Key features

Moderated or Non-Moderated Conferences

Access Code Generation

Select flexible dial-in number (domestic and/or international)

Send out emails to invite attendees

Virtually Unlimited Number of Conference Rooms

Invite 300+ attendees at one conference

Mute/Unmute Capabilities

Customizable Portals,

Customizable Multi-Language IVR, with Ability to Record your Own

Conference Recording with Immediate Download

Easily Integrated with REAL Mobile's Solutions for Hosted PBX and other Services

SIP Trunking Solutions

REAL Mobile enables VoIP service customers the ability to quickly deploy SIP Trunking for either IP PBXs or legacy PBXs. Our hosted SIP Trunk solution enables you to successfully transform your enterprise operations into a streamlined all-IP network.

Key features

- Interoperable with the leading SIP trunking equipment vendors
- Replaces Costly ISDN PRIs and T1/E1 Lines
- Highly Scalable
- Virtual Number Forwarding
- Real-time CDRs
- Flexible Routing
- Optional Voice VPN
- APIs to Access your Third Party E911 Providers

PC Softphone Solution

Our softphone for Windows is an impressive SIP softphone solution. The softphone can be customized for you and with your choice of skin. REAL Mobile's PC softphone solution includes two customizable buttons that you can define for important end user functions such as browsing Call Detail Records (CDRs), logging into the account self-care interface and more.

This highly flexible PC softphone solution can be easily integrated into REAL Mobile's other hosted VoIP solutions.

Key features

Compatible with Windows 10, Windows 8, Windows 7, Vista and XP

Make or Receive Calls

Adaptive Echo Canceller (AEC)

NAT Support

Automatic Adjustable Jitter Buffer

Simple Setup using only Phone Number and Password

Displayed Balance/Credit

Customizable Soft Buttons

Integrated VPN for increased privacy and security

Virtual Phone Number Solutions

A Virtual Phone Number is a real telephone number that is not associated to a physical phone line. These numbers are programmed to be forwarded to either a VoIP service or to a different phone line.

Our hosted softswitch and billing VoIP platform, providing the DID forwarding capabilities you need to forward calls to any phone number, anywhere in the world. Virtual Number solutions from REAL Mobile allow any person or business to be easily reachable via local calls, no matter where they are.

Our Virtual Phone Number solutions enable you to create a local presence for your support and sales call centers. You can enjoy local numbers in other countries, making calls easy and economical for local business, friends and family.

For example, get a local Paris, France phone number and have it ring at your desk or mobile anywhere in the world. At the same time, get an addition local New York and Los Angeles number and have it ring at your desk as well, or another number. This option allows you to be where your customers are in a seamless manner.

Key features

Redirect Virtual Numbers to any Phone

Calls can Ring at Multiple Phone Numbers in a Specific Order or Simultaneously

Easily Integrated with Voice Mail

Easy Call Routing by End Users via Web Portal

Route Calls by Time of Day, Day of Week

View Call Detail Records Online in Real Time

Call Center / Contact Center Solutions

REAL Mobile offers a software suite that is designed to interact with our PBX Phone system to create a complete inbound/outbound contact center solution with inbound email support as well.

The Call Center can be offered as a stand-alone service.

The agent interface is an interactive set of web pages that work through a web browser to give real-time information and functionality with nothing more needed than your internet browser. There is no hard line phone equipment needed as calls are made and received from the web browser.

The management interface is also web-based and offers the ability to view many real-time and summary reports as well as many detailed campaign and agent options and settings.

The REAL Mobile Call Center can function as an ACD (Automatic Call Distribution) for inbound calls or for outbound calls campaigns. The flexibility even allows for remote agents logging in from remote locations, as well as, remote agents that may only have a phone.

The software and platform is proven and stable.

The software suite also includes documentation, full English and Spanish versions of the web-clients and admin pages (and functional versions of several other languages), and is designed to work with telco lines or VOIP (IAX or SIP) trunks and many different kinds of softphones and hardphones.

REAL Mobile Call Center FEATURES Summary:

- Inbound, Outbound and Blended call handling and Inbound Email handling
- Outbound agent-controlled, broadcast and predictive dialing
- Full USA, Canada and UK regulatory compliance capability
- Web-based agent and administrative interfaces
- Ability to have agents operate remotely
- Integrated call recording
- Three-Way calling within the agent application
- Scheduled Callbacks: Agent-Only and Anyone
- Web-configurable IVRs and Voicemail boxes
- Scalable to hundreds of seats

Click to Call Voice Solutions

REAL Mobile's unique Click-to-Call voice solution enables connecting your website visitors with a live agent. Callers click on a website icon embedded into your website and are immediately connected with your sales or service agents, without leaving your webpage.

With Click to Call Solutions, you can turn website visitors into sales prospects and satisfied customers.

Key features

Easy Set-Up Wizard

Quick, Easy Toll Free Calls from Website Visitors

Entered Number Validation

Call Queues and Follow-Me Features

Anti-Bot Security

Call Limits by IP Address or Destination

Call Logging and Comprehensive Reporting

Voice VPN

REAL Mobile offers our customers the option of adding a Virtual Private Network (VPN) to safeguard their voice traffic signaling. Voice VPN is especially useful in geographic areas where VoIP service customers prefer the utmost privacy and protection. REAL Mobile's Voice VPN solution provides you and your customers with the peace of mind that your traffic is protected by state of the art encryption technology. This helps you meet the high standards of security that some enterprise customers and VoIP termination carriers may require.

Key features

Fully integrated with REAL Mobile's hosted softswitch solutions

Virtually unlimited number of VPN tunnels

IPsec tunnels for secure VoIP interconnection

PPTP and L2TP secure tunnels support for VPN L2 capable end-points

WebRTC

With our WebRTC solution you can make and receive calls using their web browser, without needing to install software. You can provide VoIP calling via our multi-language self-serve web-based WebRTC portal. WebRTC is fully integrated with REAL Mobile's robust portfolio of VoIP solutions, so that you can create WebRTC as a stand-alone service or as part of a bundle of services.

Key Features

Voice Mail

Call Forwarding

Balance Indicator

Online Recharge

Phone Book

Call History

Messaging

Video

With REAL mobile, VoIP service customers can quickly and easily integrate video calling without investing in their own infrastructure. Our codec-transparent softswitch gives you a powerful carrier-grade switching enabling you to have video calling as well as voice over IP. End users can make video calls via any video-capable end-points which can negotiate a codec in common with one another. It's as simple as that!

Our unique Auto-Provisioning Profiles enable you to streamline the provisioning of any IP phone, including video-capable end-points. When the device is connected to an IP network at the end user's location — anywhere in the world — it reaches out to our cloud-based platform and automatically downloads a complete provisioning profile, without the need for manual provisioning.

Looking for a mobile solution where you can use video calling? Our mobile softphone solution enables you to use both voice and video calling via any iOS or Android device.

Facimile (eFAX) solutions

We support fax and e-mail to fax (eFAX).

Connect your existing FAX machine or, create an eFAX solution whereby all emails are received and send via your email.

Get your emails anywhere in the world you are on your PC, tablet or smartphone.

Mobile softphone (virtual dialer)

REAL Mobile offers a mobile solution combined with the VoIP PBX system. Download a free softphone APP (virtual dialer) to your Android or iPhone and connect directly to the REAL Mobile VoIP platform enabling you to connect to any phone worldwide and direct connect with your PBX environment. Your mobile phone becomes another extension on the PBX system.

Key features:

Automatic configuration with user login

Maximum battery life

Full range calling features

Speed dial

Call forwarding

Call waiting

Voice mail

Video

Call recording

Address book

Ring tone

Number re-writing (for easy dialing)

Multiple languages

REALShield

REALShield is an innovative suite of fraud prevention tools provided as a standard part of REAL Mobile's cloud-based softswitch solutions. REAL Shield is a powerful fraud deterrent that combines REAL Mobile's real-time traffic monitoring, rapid alerting, automated protection and expert engineering methodologies. REAL Shield automatically scans system logs for potential fraud activity, such as suspicious login attempts, and instantly notifies the REAL Mobile support team. REALShield helps protect your business, without the need for human intervention.

REALShield can not only detect common threats like Brute Force attacks for unauthorized calling, but it can also allow REAL Mobile customers to proactively restrict access to REAL Mobile's switch to a pre-defined set of IP addressed, such as their home or office.

Key Features:

Fully automated protection, without the need for human interaction

Scanning of system logs

Rapid notification via email and SMS alert

Real-time analysis of number of calls and destinations

Identification and blocking of automated password attacks

Algorithm analysis to quickly detect unusual activity

Unique graphical interface

White list and black list of individual destinations

Option to limit administrative access to a pre-defined set of IP addresses

Wireless Connectivity

REAL Mobile can offer wireless connections through the continental US, Alaska, Hawaii, Puerto Rico and the Virgin Islands. We can attach a further breakdown by ZIP code which is a more detailed geographic area than the NPA which covers a broader footprint.

The REAL Mobile wireless connection is offered as 4G-LTE where service is available. When 5G is available the service will convert to that. The wireless connectivity is a REAL Mobile product offered as an MVNO . Once wireless is available to an office location the office has access to voice, sms (text), mms and data.

Wireless Router

Where applicable a wireless router is installed in the office location to administer and distribute the signal to the individual phone lines requested. The routers can be hard wired to the individual phone (desk or handset) or, wireless (WIFI). These multitask routers can also be used with a hard wire internet connection and have the wireless component as a failover in the event the cable internet fails.



Figure 1 Sample Wireless LTE router with SIM card



A wireless router is an excellent solution as a stand-alone for remote locations where hard wire DSL, PRI, T-1 or fiber is not available or as a “fail-over” in the event the hard wire connect is interrupted. In the event of fail-over the internet connection immediately converts to the wireless connect and service is un-interrupted.

Remote location signal booster option

In situations where the office is located in a remote location and wireless internet connectivity is required REAL Mobile recommends a signal booster to amplify and strengthen the connection for both the VoIP business PBX system, as well as any wireless device in use.



Additional Deliverables (IP Desksets)

REAL Mobile provides many options for IP desksets. In addition, you have the ability to retain your own existing phone equipment while enjoying the benefits of the cloud business phone solutions.

 A black Grandstream GP1610 IP deskset featuring a handset on the left, a small LCD screen at the top, and a standard 12-button numeric keypad below.	 A black Grandstream 1760 multiline WiFi phone with a handset on the left, a larger LCD screen displaying call information, and a numeric keypad with additional function buttons on the right.
<p>Grandstream GP1610</p>	<p>Grandstream 1760 multiline WIFI phone</p>
 A black Grandstream GS GXV 3275 Video conference phone with a handset on the left and a large screen displaying a video call with two participants.	 A black Grandstream GS GAC2500 conference phone with a circular base and a screen on the right side displaying a colorful interface.
<p>Grandstream GS GXV 3275 Video conference phone</p>	<p>Grandstream GS GAC2500 conference phone</p>

Mobile Travel SIM (Global Roaming)

REAL Mobile uses an entirely new methodology that brings GSM technology into our cloud-based system. Enjoy Global Roaming services while you travel at incredibly lower prices. Our solution includes cellular voice calling, mobile data and SMS.

REAL Mobile Travel SIM is not an Over the Top (OTT) solution, and does not require installing any apps. It does not require WiFi or mobile data for voice calling. REAL Mobile Travel SIM works virtually anywhere in the world where you can get a GSM cellular signal. REAL Mobile Travel SIM includes low cost roaming agreements with over 500 mobile operators around the world, with no roaming fees charged by mobile operators in over 150 countries. Multiple local phone numbers from virtually anywhere in the world, available from REAL Mobile, can be linked to a REAL Mobile Travel SIM card. Users dial normally without needing access numbers or PINs, and without having to rely upon WiFi or mobile data.

As an alternative, REAL Mobile offers a FREE mobile APP which can be an extension of your office PBX system. The APP is available for iPhone and Android. With an internet or WIFI connection you already have your office phone line active and can call and receive calls anywhere in the world like you are at your office. There is no additional charge for this option.