RedPort

Setup and Use of
RedPort Optimizer Voice
with Inmarsat IsatHub (iSavi)

Information and easy-to-follow instructions on how to set up your Optimizer Voice and iSavi IsatHub terminal to connect to the Internet, send and receive SMS and phone calls, and enable VoIP service for affordable voice calling all over the world.

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Optimizer Voice for iSavi: Airtime Control and VoIP at Your Fingertips

Out of the box, the iSavi allows you basic control over data usage by configuring firewall rules (up to 10) and by setting caps on data consumption. It doesn't allow you to configure what programs or software can have access to the Internet, and doesn't compress anything. You are likely to exceed your desired limit without accomplishing all you require. This wide-open "pipe" to the Internet can cause large airtime bills.

Optimizer Voice allows you precise control over who can access your iSavi satellite Internet connection, as well as how they can use that connection. This gives you great flexibility to control your satellite airtime, and helps prevent unwanted airtime bills. Optimizer Voice helps prevent bill shock in the following ways:

1. Its built in firewall blocks all internet activity except XGate and RedPort Email, XGate Phone, and XWeb browsing
2. Email with XGate is compressed up to 95% of its original size, meaning lower data usage and faster data transfer.
3. Web browsing with XWeb compression web-browsing is compressed by a factor of 3 to 5, allowing for faster data transfer and lower data usage.
4. It turns your iSavi into a multi-user unit. Up to four users can be sending/receiving phone calls and/or text messages at the same time when using RedPort VoIP service.
5. With its RedPort VoIP Service (optional), Optimizer Voice allows you to make voice calls for considerably less than traditional iSavi phone rates. These VoIP calls consume approximately 15 minutes of talk time for each Mb of data. (Compare this with service like Skype which only offer about 1 minute of talk time per MB of data).
6. You can also make simple analog voice calls with traditional satellite airtime by using the VoIP-to-circuit-switch capabilities of the Optimizer Voice.
7. Its built-in Captive Portal (optional) allows you to restrict web activity. You can generate PIN-codes that can be given away or sold to control web access.

Setup Requirements

The following hardware and software is required:

- Inmarsat iSavi satellite terminal
- RedPort Optimizer Voice
- Optimizer Voice WiFi Bridge plugged into the USB port of the Optimizer Voice (this may have already been done by your dealer).
- IsatHub Control App for your iOS or Android device
- XGate Phone App for your iOS or Android device (Required to use RedPort VoIP service. Without the XGate phone app, you can only connect to the iSavi for standard Inmarsat voice calling).
- XGate and XWeb apps (optional)

For iSavi operational information please refer to the iSavi User Guide.

NOTE: The Optimizer Voice ships pre-configured for use with XGate and RedPort Email service and XWeb Web Browsing service. These services are not included with your Optimizer Voice and must be purchased separately. Contact your satellite service provider for details.

Configure the Optimizer Voice to Pair with the iSavi

Using your PC, Mac, iOS, or Anroid device, connect to the WiFi hotspot created by the Optimizer Voice:

- On a Windows PC, go to: Windows Start > Control Panel > Network Connections
- On a Mac, go to: Apple > System Preferences > Network
- On an iOS device, go to: Settings > Settings > Wi-Fi
- On an Android device, go to: Settings > Connections > Wi-Fi

The Network Name will look something like: 'wxa-153-xxxx' where 'xxxx' may represent the last four digits of the Optimizer Voice Mac address. Select this wireless network.

Open any web browser and enter this URL: http://192.168.10.1
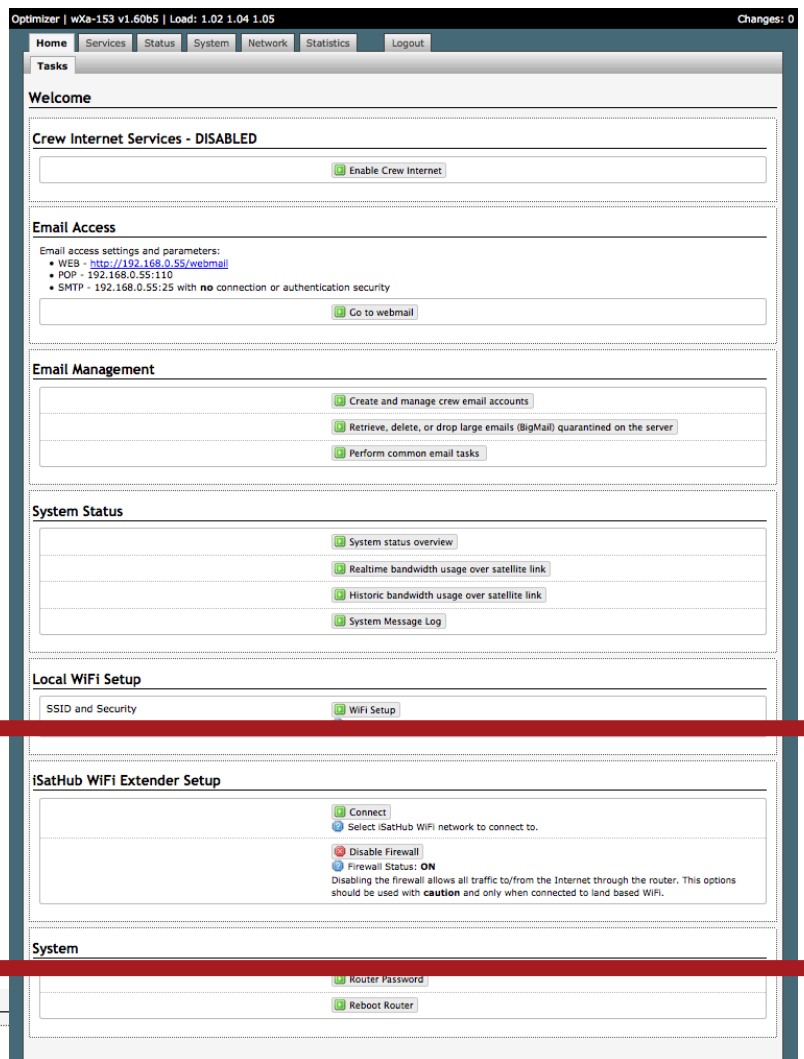
Login with:
Username: superadmin
Password: webxaccess

Scroll down to the iSatHub WiFi Extender Setup section
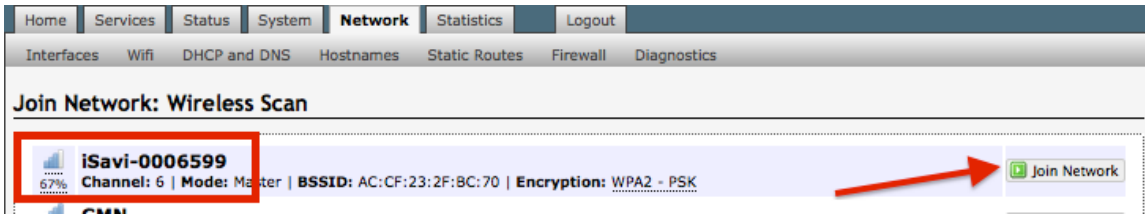
Select <Connect> button

You should be taken to the Wireless Overview tab.
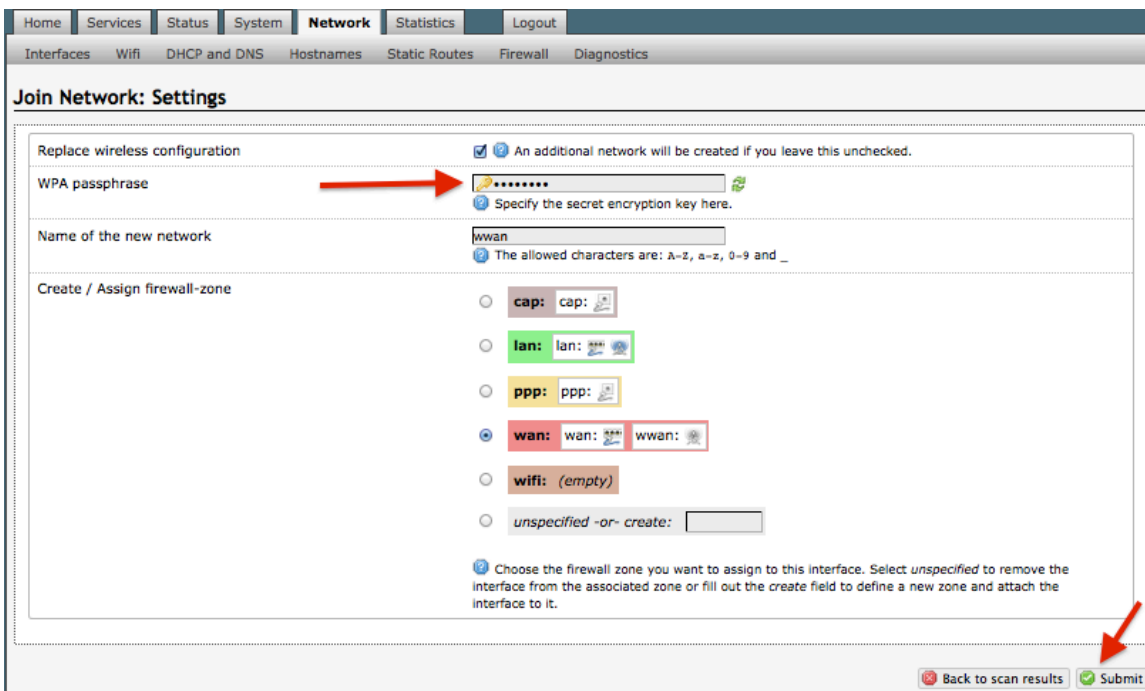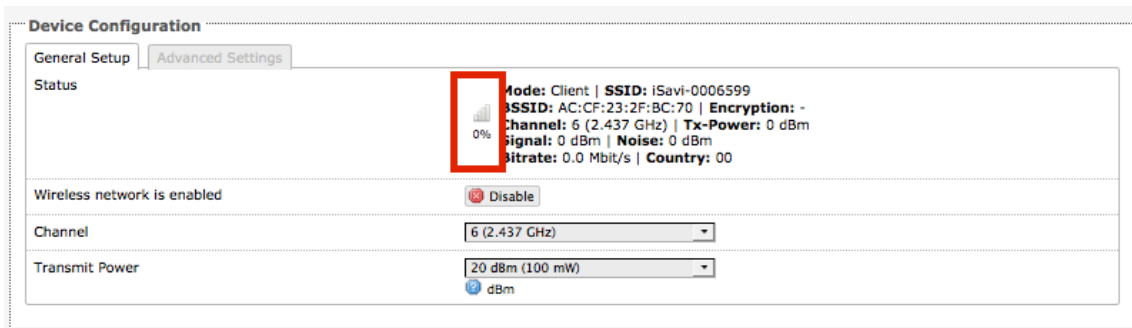
Select <Scan>

Once the scan has completed, locate the iSavi Wireless Network and select <Join Network>

Enter the password to access the iSavi (the default password appears on the iSavi unit). Select <Submit>.


Notice the signal strength is 0% as you are not yet connected to the iSavi network. Select <Save & Apply>

NOTE: If the signal status remains 0% or is blinking from 0% to 100% this typically means that the WPA Passphrase was entered incorrectly. Return to the Join Network Settings page and enter the correct password and <Submit>.

Once you've successfully connected to the iSavi, you'll see that the signal strength now registers greater than 0%.
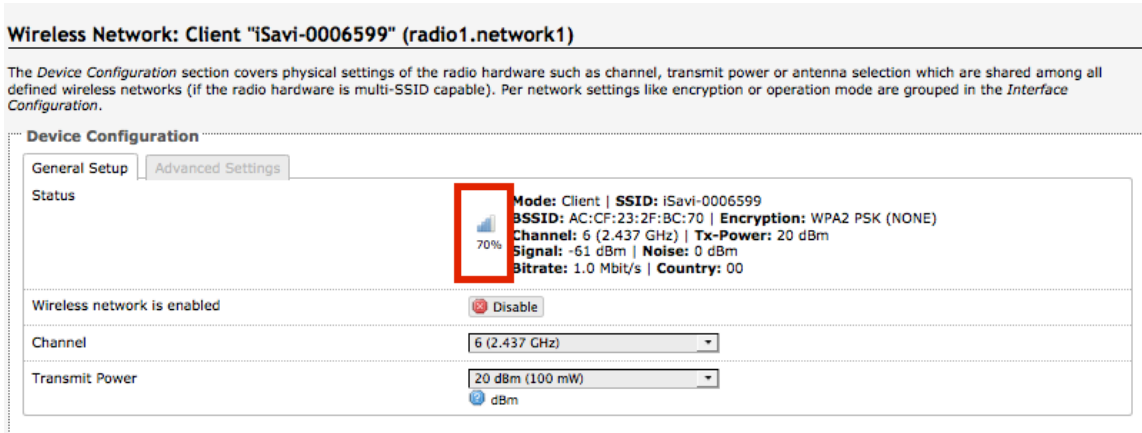
Now that the Optimizer Voice and the iSavi are paired, you are protected against runaway airtime. In this state, you will use:

- IsatHub Control App to establish your data connection.
- XGate Satellite Email App or RedPort Email for sending/receiving email.
- XGate XWeb or RedPort Web Compression for web browsing.
- XGate Phone App for voice calls and SMS messaging.

NOTE: The Optimizer Voice ships pre-configured for use with XGate and RedPort Email service and XWeb Web Browsing service. These services are not included with the Optimizer and must be purchased separately. Contact your satellite service provider for details.

IMPORTANT - for iSavi units running firmware version 1.0.2 or earlier
For Voice Users: Changing the Voice Protocol on iSavi
(Not applicable if you are only going to use data over iSavi)

After you've successfully paired your RedPort Optimizer Voice and iSavi, you need to modify the voice codec in the iSavi in order to make voice calls over the RedPort Optimizer Voice.

1. Open up a web-browser on your smartphone, tablet, or computer and enter in this in the URL bar: http://192.168.1.35
2. Login to the unit:
   Username: admin
   Password: 1234
3. Go to click on the Telephony tab > SIP Settings > Sip Server
4. Select the **g711u** codec

How to Start a Data Connection

A data connection is required for email and web browsing and RedPort VoIP Service.

Using your smartphone or tablet Settings, connect to the Optimizer Voice wireless network 'wxa-153-xxxx'.

Open the IsatHub Control App on your smartphone or tablet.

At first launch you must enter a username and password. The default credentials are:
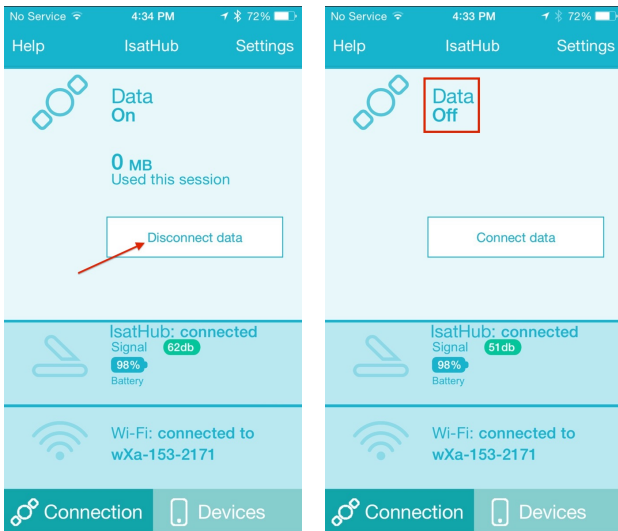
      username = admin
      password = 1234

Select <Connect to network> and wait for display of IsatHub: connected

Select <Connect data> and wait for display of Data On.

How to Stop a Data Connection

Open the IsatHub Control App on your smartphone or tablet.

Select <Disconnect data> and wait for display of Data Off.

How to Send/Receive Email

A data connection is required for a successful email session.

Using your smartphone or tablet Settings, connect to the Optimizer Voice wireless network 'wxa-153-xxxx'.

Using the IsatHub Control App, start a data session (see How to Start a Data Session above)

Open the XGate App and send/receive email.

Close the data session when complete (see How to Stop a Data Session above)

Remember, email can be created and read offline. It is only necessary to initiate a Data Session when you are ready to connect to the mail server over your satellite link.

(Note: there is a 100kb billing increment for the iSavi – you may find it economical to leave your data connection open if you will use it again in short notice).

How to Web Browse

A data connection is required for a successful web browsing session.

Using your smartphone or tablet Settings, connect to the Optimizer Voice wireless network 'wxa-153-xxxx'.

Using the IsatHub Control App, start a data session (see How to Start a Data Session above)

Open the XGate App and select <Web> to start a web browsing session.

Close the data session when complete (see How to Stop a Data Session above)

How to Send/Receive SMS Messages

Using your smartphone or tablet Settings, connect to the Optimizer Voice wireless network 'wxa-153-xxxx'.

Using the IsatHub Control App, confirm that you are connected to the IsatHub:

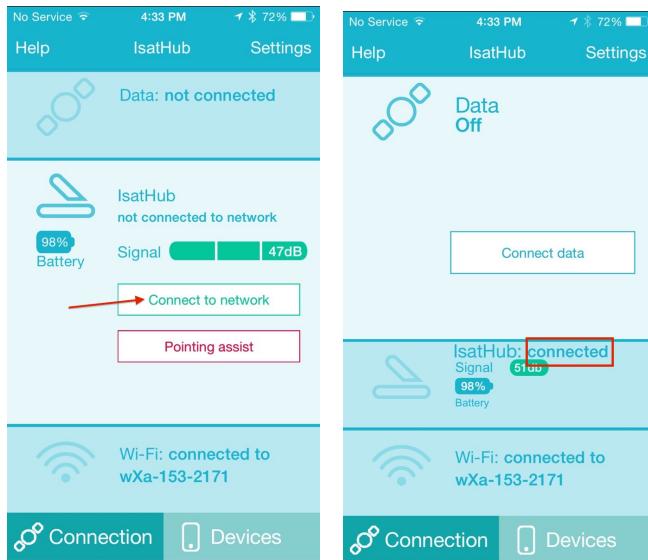Select <Connect to network> and wait for display of IsatHub: connected
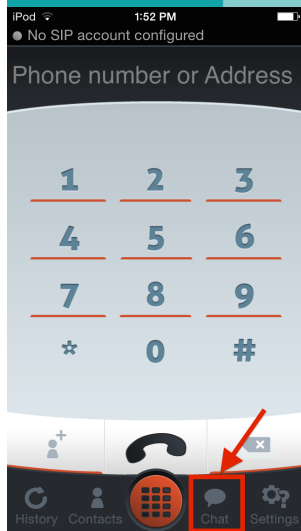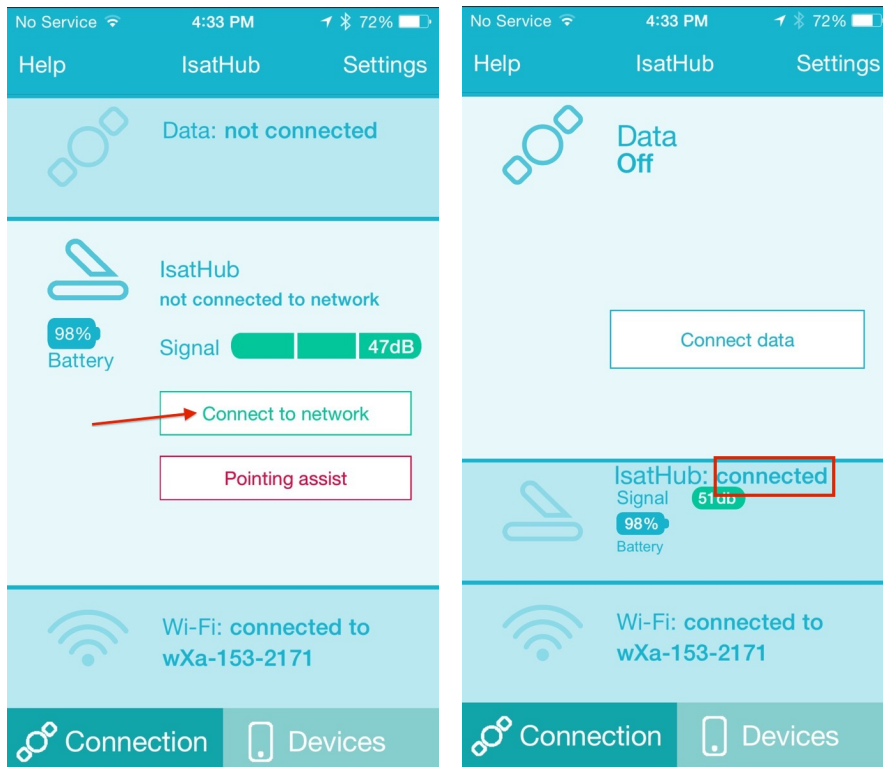
Open the XGate Phone App. Select <Chat> to send an SMS message or to view the SMS message received.

Note: Only one SMS message can be sent at a time. Standard SMS message rates apply. (For multi-users see Multi-User Voice and SMS with RedPort VoIP service below)

How to Make/Receive Voice Calls

Using your smartphone or tablet Settings, connect to the Optimizer Voice wireless network 'wxa-153-xxxx'.

Using the IsatHub Control App, confirm that you are connected to the IsatHub Network:

Select <Connect to network> and wait for display of IsatHub: connected

Open the XGate Phone App to make and receive calls. Note: standard voice calling rates apply.

Optimizer Voice Extension Setup

Incoming calls will ring on those extensions with Ring enabled in the Optimizer Voice user interface on the Services > VOIP PBX > Extensions screen:
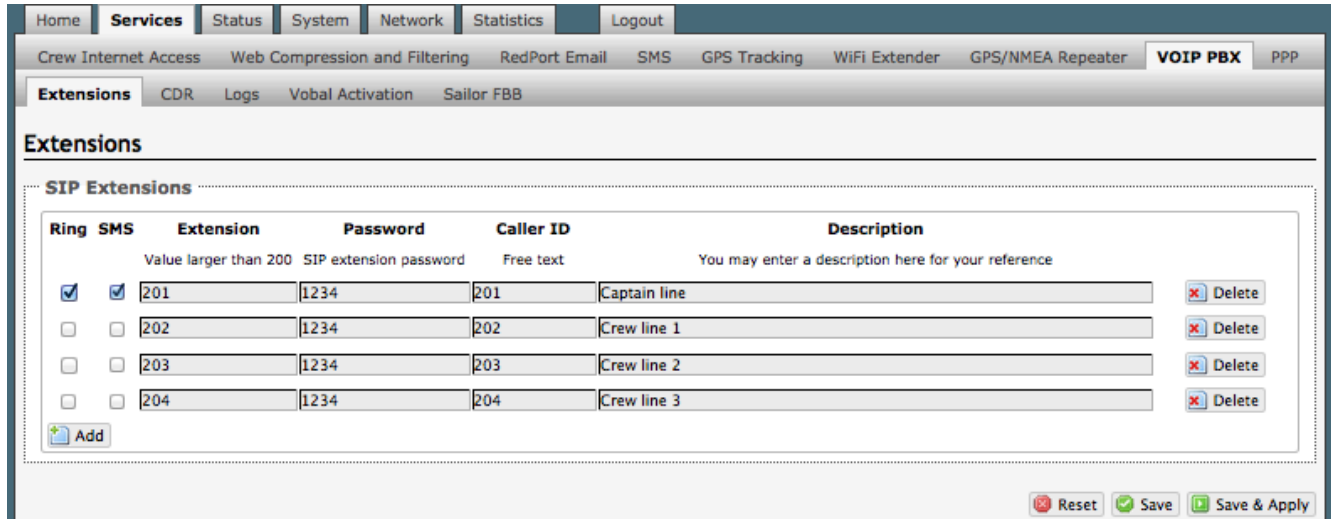
To enable Ring or SMS on an extension simply check the box for the service you want enabled.
When Ring is checked, the smartphone configured with the corresponding Extension will Ring with every incoming call.

When SMS is checked, that smartphone will receive every incoming SMS message.

Multi-User Voice and SMS with Optional RedPort VoIP Service

Why use the RedPort VoIP service?

Out of the box, the iSavi allows one phone call or one SMS message at a time. Phone calls via the smartphone app are standard circuit switch (PSTN) calls, not VoIP, therefore standard satellite airtime rates apply.

With the RedPort VoIP service you can make inexpensive outbound VoIP calls at a significant price reduction over standard satellite airtime fees. You have the choice of enabling a standard US land-based phone number so that land-based callers can call you quickly and easily.

Up to four people can be on calls or sending SMS messages at the same time. 15 minutes of talk time = about 1 Mbyte of data per channel (SIP extension).

Call payment methods include:
  • Prepaid pincodes to help you stay on budget and/or support revenue generation. Pincodes can be given away or sold to crew/guests.
  • Postpaid lines are billed monthly for actual usage.
  • No charge for calls and text among local SIP extensions when on the Optimizer Voice WiFi network.

How to Enable the RedPort VoIP Service

Contact your satellite service provider to purchase the RedPort VoIP service.

When the service is activated you will be given a "Key". This key is a long alpha-numeric string that must be entered into the Optimizer Voice user interface.

Login to the Optimizer Voice user interface and select Services > VOIP PBX > Vobal Activation.

Enter the Key and select <Save & Apply>

With RedPort VoIP service activated, the new RedPort VoIP telephone number is displayed.

Once enabled, configure the SIP extensions for Ring and/or SMS by selecting the checkbox next to the SIP extension.

Select the payment method of each SIP extension (prepaid or postpaid). By default, Line 1 is always Postpaid.

On this same page, you can also:

- change the SIP extension password
- change the outgoing CallerID display
- enter a description for your reference

In the example above, when an incoming call arrives, only the phones of the Captain, John, and Mary will ring. Incoming SMS messages will appear on the phones of the Captain, Mary, and Bill.

When the configuration of the SIP extensions is complete, select <Save & Apply>

Captive Portal Setup and Use

With the Captive Portal enabled, you can generate PIN-codes that can be given away or sold to control web access. This allows controlled access to the Internet by requiring users to enter pincodes before being granted permission to browse the web. In addition, the speed of access can be restricted and/or the duration or timing of the session. User sessions are logged in Call Data Records (CDR) for tracking the amount of time on the service and the amount of data transferred.