



Librestream Onsite Mobile Collaboration with BGAN

Delivering high quality video and
audio from the field over BGAN

Version 1.3

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1. Purpose

The purpose of this document is to introduce the applications, features and benefits of Librestream's Onsight mobile collaboration system and describe how to optimally configure Onsight for the BGAN network.

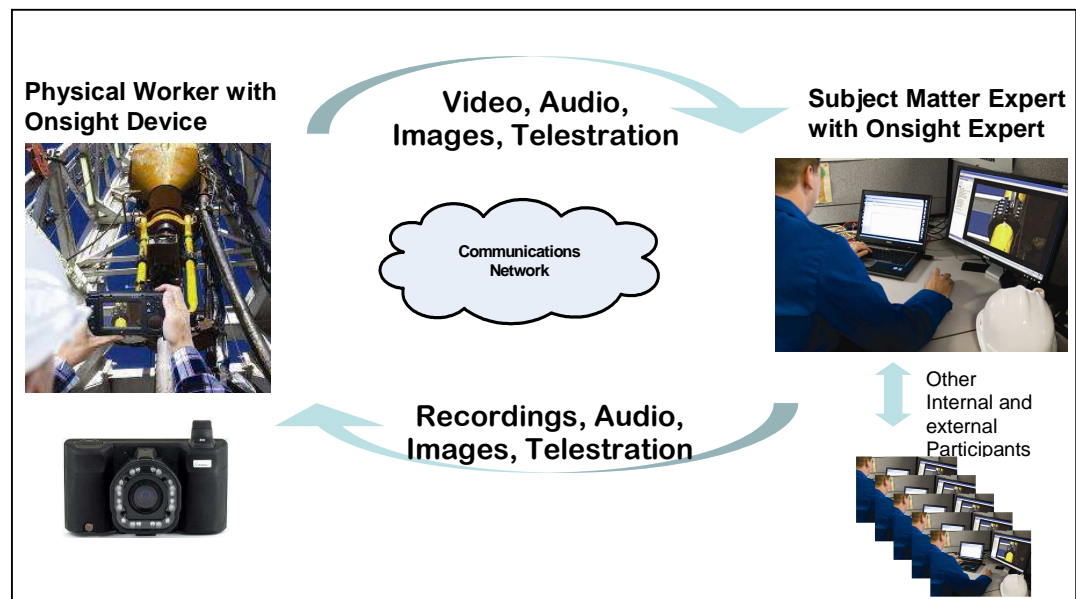
2. Solution Overview

Video has rapidly gained momentum as a mission-critical tool for the enterprise. Enterprise video communication has grown into a multi-billion dollar industry, primarily in traditional video conferencing. However, millions of "physical world" workers in locations such as oil rigs, mining sites, nursing stations, construction sites, military and emergency response locations have been unable to participate in this revolution - **until now**.

Librestream extends the power of video collaboration to these hard to reach environments through its Onsight system over BGAN networks.

2.1 Introduction to Onsight

Librestream's patented Onsight™ Mobile Collaboration System allows workers to view, diagnose, consult, and resolve issues in real time with other people in remote locations. Onsight offers a complete mobile collaboration system that includes the wireless Onsight mobile collaboration device (OD), and a companion software application, the Onsight Expert mobile collaboration application (OE).




Onsight connects colleagues, suppliers, customers, and other team members in an instant and allows them to collaborate with video, 2-way audio and 2-way telestration to bring the problem or situation to the expert as opposed to the other way around.

Key attributes of the Onsight system include the following:

- Best in class SIP endpoint with exceptional optics including macro (close-up) capability

- Integrated two-way voice and on-screen drawing called “telestration”
- Onsight Expert software with tools that facilitate remote device control and troubleshooting
- Full recording capabilities, including store & forward video options
- Wireless security and end-to-end encryption
- Bandwidth control and management
- Variable illumination for optimal lighting
- Remote management with a centralized administration tool
- Integration with WebEx and video conferencing systems
- Full support, maintenance, hosting and training services available

2.2 Products and Services

Products/Services	Description
<p>Onsight wireless mobile devices</p> <p>(stream video, audio, images and telestration)</p> 	<p>Librestream offers three Onsight device models including the Onsight 1000, Onsight 2000R and Onsight 2000Ex. The Onsight 2000R is a ruggedized device with an IP64 enclosure rating and ability to withstand 4 foot drops to concrete or steel. The Onsight 2000Ex is ruggedized and also certified for Class 1, Div 2 / Zone 2 environments.</p> <p>All the Onsight models are 802.11 b/g wireless handheld devices that stream video and engage in 2-way audio and telestration with remote subject matter experts. Device operators can interact visually through the touch panel screen on the back of the device.</p> <p>The Onsight devices include a built-in microphone, speaker and headset jack to provide full voice communication. Onsight devices also have built-in illumination, zoom and focus to ensure clear visuals. The macro capability provides amazing detail for collaboration close-ups.</p> <p>The Onsight devices were specifically designed for field workers who may be wearing gloves and operating within challenging and varied network environments.</p> <p>As SIP-based endpoints, Onsight devices can easily be added to existing video infrastructure such as Tandberg or Cisco.</p>
<p>Onsight Expert desktop collaboration software</p> <p>(view streaming video, two way audio, images, recordings and telestration)</p>	<p>Onsight Expert is a desktop software application that provides full collaboration with Onsight mobile devices. Onsight Expert operators can see video from the field and interact through voice and onscreen telestration.</p> <p>Onsight Expert can remotely control Onsight device functions such as zoom and illumination, share images and pre-recorded videos, optimize media settings for the specific bandwidth environment and record Onsight sessions for future use. Additional participants can be directly added to a call if they are running Onsight Expert, or alternately via WebEx, or by connecting with videoconference endpoints.</p>
<p>Onsight Management Suite server software</p>	<p>Onsight Management Suite is server software that provides a secure, web-based centralized administration system. Using Onsight Management Suite, administrators can centrally update, configure, and manage their Onsight device and Onsight Expert endpoints. Detailed call reports can also be generated.</p>

	This product is an essential component of Onsite, as it provides a scalable way to remotely manage all the endpoints.
Onsite Device Accessory Kits	<p>The Onsite Accessory Kits include soft or hard carrying cases, spare battery, spare stylus, SD card and various headset options including Class I, Div 2 / Zone 2 rated headsets.</p> <p>For the Onsite 2000 series, there is also an optional I/O sled to provide additional inputs/outputs including S-video, a secondary audio line input, and Ethernet connectivity. Additional accessories such as an external battery charger and PC speakerphone can also be provided separately.</p>
Librestream Services	Librestream offers a range of services for the Onsite system including technical support, user / administrator training on premise or online, and a hosted SIP service.

3. Main Applications

The Onsite System is deployed in a variety of applications in vertical markets like oil & gas, mining, manufacturing, health care, military and public safety. Traditional video conference room equipment doesn't reach the in situ equipment of oil rigs, factory floors, remote nursing stations, refineries, or remote field locations. The Onsite System over a BGAN network allows you to take mobile video collaboration to the source of the issue.

Key application examples for Mobile Collaboration today include:

- **Maintenance, repair and overhaul:** Librestream now makes it possible for a repair technician to instantly connect to and collaborate with a remote expert. These applications cross a variety of industry segments and can deliver a very strong ROI.
- **Capital project management:** Construction of a new mine or oil platform requires input from various specialists. Onsite provides these specialists with a way to review progress, inspect quality and monitor safety remotely.
- **Mobile Telemedicine:** Librestream's Onsite Mobile Collaboration System enables remote workers or citizens to get access to offsite healthcare professionals for remote video consultations to extend the access and quality of health care.
- **Situation Monitoring/assessment:** For military operations or emergency responders, being able to show remote experts the situation through video can be essential to quick, effective decision making. The Onsite mobile collaboration capability makes this possible.

The Onsite system replaces the outdated market alternatives that include the traditional methods for collaboration including travel, conference calls, and e-mailing of digital photos.

3.1 Return on Investment and Payback

The Onsite Mobile Collaboration system provides both tangible cost savings and intangible benefits such as faster and more efficient problem solving, quality improvements, and environmental site assessments. These benefits can include:

- **Travel cost avoidance** (flights, car rentals, hotels, meals, entertainment) – Travel savings are one tangible/hard benefit gained through the use of Onsite. While it is often the simplest to identify, it typically delivers just one small part of the overall ROI.

- **Productivity gain due to travel reduction** (trip to/from airport; flight; flight delays; layover; jetlag). How often could someone in your company deal with a remote issue in a matter of minutes using Onsight rather than travelling there? The productivity gain is often overlooked.
- **Decreased downtime** (prompt access to experts in real time.) Manufacturers and Energy clients identify a decrease in downtime as one of the most important cost savings related to Onsight. By visually connecting plants or field workers with remote subject matter experts, they can shrink downtime at least by hours, often by days and sometimes even by weeks.
- **Improved visibility and communications on on-going projects**, military comms on the move, new equipment installs, etc. Day-to-day video communication reduces risk of problems down the road. If project managers could see remote projects every day as if they were there what problems could be caught early or avoided all together?
- **Increased leverage of internal experts**, wherever they may be located around the world. Are your experts being leveraged across multiple important situations every day where they can provide key information and help make fast decisions or are they sitting in planes, trains and automobiles?
- **Better training tool** with video/voice/telestration for real-time feedback. Archiving capabilities allow other users to take advantage of prior recorded sessions. Experts sitting at their laptops can push out informative video recordings to Onsight Device operators in the field and coach them through what they are seeing on its VGA display. Knowledge imparted through video at the time and point of need.
- **Reduction of CO2 (carbon footprint)**. Mobile video collaboration is a “green” technology. It’s also a technology that can add to the quality of life of your employees who have to travel constantly to get their jobs done. Now they can avoid leaving Sunday on business or being away from home for the majority of their week by using Onsight.

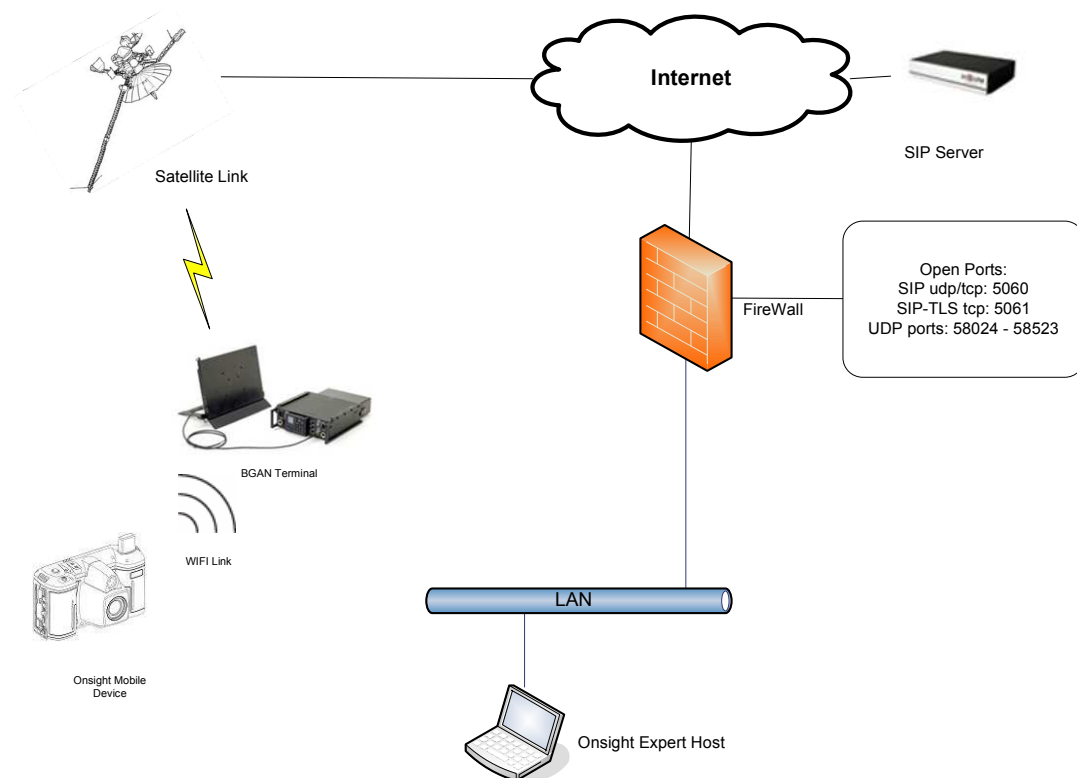
According to the Aberdeen Group, best in class companies, those that consider video collaboration a strategic tool to develop competitive advantages, calculated an average annual ROI of 94%, including a decrease of 42% in travel time after implementing the solution.

4. Onsite – BGAN Network

4.1 Network Diagram

The Onsite mobile collaboration system can be set up to make calls between the Onsite Device and Onsite Expert PC using direct IP calls or via Session Initiation Protocol (SIP). In its simplest form, the Onsite device and Onsite Expert endpoints can call each other directly within the same LAN through direct IP addresses.

When the Onsite endpoints are not located within the same LAN, firewall traversal will be required to establish an Onsite session. This firewall traversal can be accomplished using a SIP Server, which acts as a proxy and directs SIP messaging and data traffic between the endpoints. Below is a network diagram that shows how Onsite is configured when firewall traversal is required using a BGAN terminal.



5. Onsight Configuration

There are two primary components to the Onsight solution – the Onsight Device (camera) and the Onsight Expert desktop collaboration software. The following configuration information will take you through the basic, initial set-up of both Onsight components.

5.1 Onsight Device (Camera)



Front View



Back View

5.1.1 Logging in

Turn on the camera by pressing the Power button located on the back on the lower bottom-left corner. It will take approximately a minute for the device to power on and then you will see the following screen below.

A screenshot of the 'User Authentication' screen. The title is 'User Authentication'. Below the title, it says 'Please login to continue. You must enter a valid username and password.' There are two input fields: 'Username:' with a dropdown menu showing 'admin' and 'Password:' with an empty text box. At the bottom, there are two buttons: 'Skip' and 'Login'.

Use the default Username of “**admin**”.

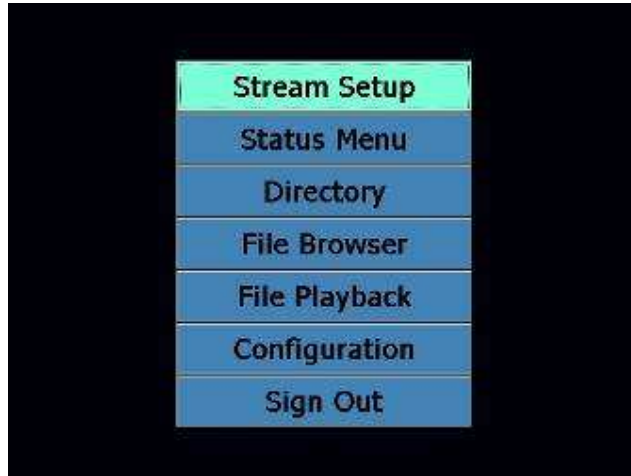
Using your stylus, tap inside the Password box. This will display the screen keypad. If you need to move the keypad, you can do this by using the stylus and grabbing the keypad from its top bar then dragging it to a better location on the screen.

The default Password is also **admin**. Once entered, click **Login**.

5.1.2 Network Set Up

Once logged in, you will need to configure the camera for network access. This would typically be performed by your IT Department or they will provide the information to enter for the camera to connect to the network. Below are steps on accessing the network settings in the camera.

Display the Main Menu by pressing the Display button **3-times**. The Display button is located on the back left-side of the Onsite Device **immediately above** the button with recording button (**RED** dot). Once the Main Menu is displayed, use the stylus to tap on **Configuration**.

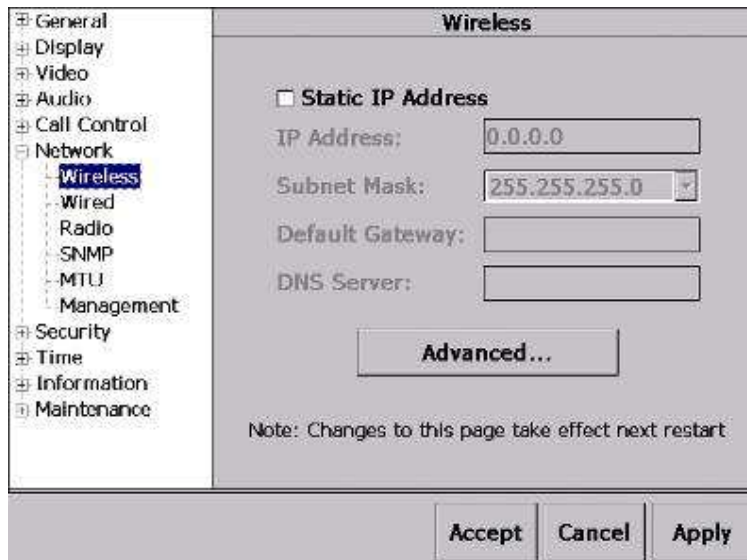


MAIN MENU

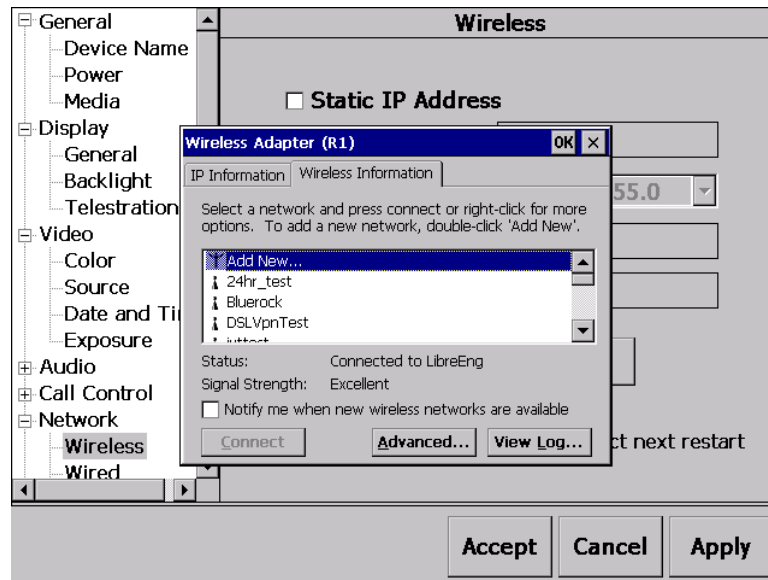
Once in the Configuration Menu, expand the **Network** section as seen on the screen below, and then tap on **Wireless**.

Note: these instructions assume the Onsite device will connect to the satellite terminal using WiFi. If the Onsite device will be connected using a wired Ethernet cable then you must tap on **Wired**.

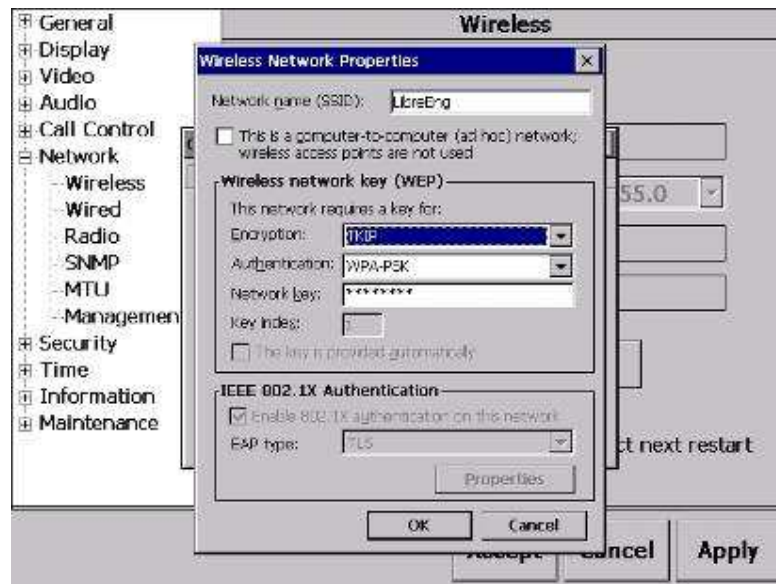
If you are using a static IP address then enter the information on this screen. Changes to the Static IP Address screen take effect on the next restart.



Once in the Wireless page, click the **Advanced** button located in the lower center of the page. This will display the **Wireless Adapter (R1)** window as seen below.

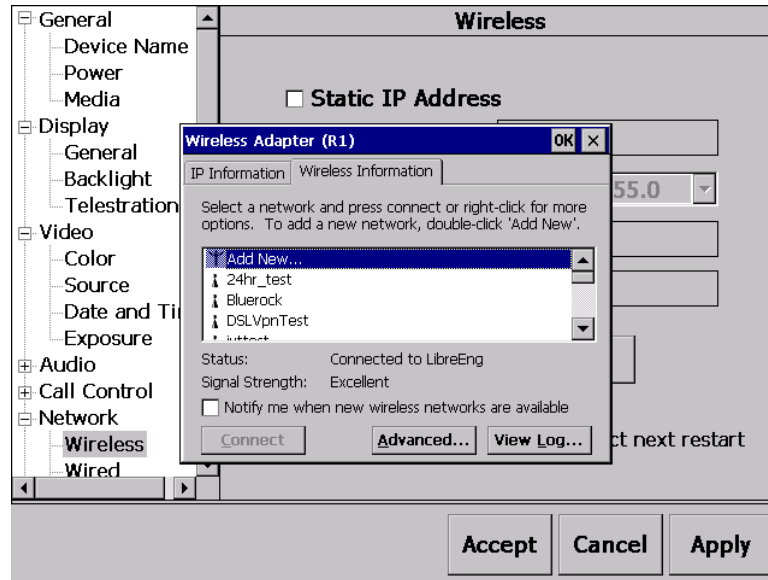


Search the list for the wireless network allocated to the satellite terminal, then double-tap the name in the list. This will open the **Wireless Network Properties** window as below.



Here you can enter the appropriate values for Encryption, Authentication and Network key. Once these parameters have been selected and entered, tap the **OK** button. This will exit **Wireless Network Properties** and return to the **Wireless Adapter (R1)** dialog.

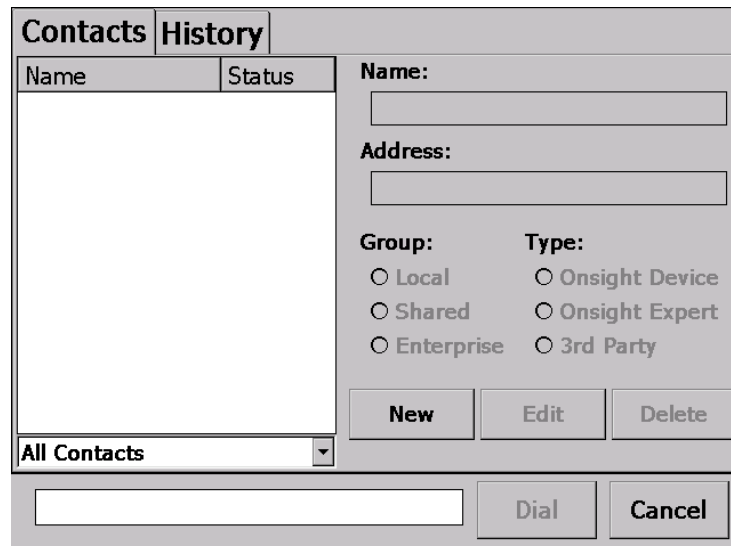
If the correct settings were selected and entered, you should see the words 'Connected to xxx' beside **Status** as in the example below. Confirm that an acceptable Signal Strength is displayed, e.g. Good to Excellent. Click **OK** at the top-right to exit, and then click **Accept** on the Wireless page.



Your Onsight Device is now ready to connect through the wireless network to your satellite terminal. You can either place a call from the Onsight Device to the Onsight Expert PC or vice versa.

5.1.3 Setting up a New Contact

If you want to call the Onsight Expert PC, you will need to enter a new contact in your Onsight camera directory. To do so, press the **Call** button. Select the **New** button, as shown in the screen below. Note: If you logged in as an 'anonymous' user by pressing the 'Skip' button on the User Authentication screen, the 'New' button will not be accessible.



You will then enter the **Name** and **Address** (SIP address) of the Onsite Expert PC, on the screen shown below.

Name	Status
------	--------

Name:

Address:

Group: Local Shared Enterprise

Type: Onsite Device Onsite Expert 3rd Party

All Contacts

5.1.4 Making a Call

After the new contact is entered, select it and press **Dial** to initiate the call:

Name	Status
John Smith	

Name:

Address:

Group: Local Shared Enterprise

Type: Onsite Device Onsite Expert 3rd Party

All Contacts

When the Onsite Expert accepts the incoming call, a two-way audio connection between Onsite Expert and the Onsite Device is established. To start the video stream from Onsite Expert, press the **Green Start Button** on the top of the Onsite camera.

5.1.5 Firewall Ports

The Onsite System relies on SIP Server technology to provide communication between endpoints that are located on different networks; this requires that Firewalls allow SIP and UDP Media traffic to pass through them. SIP Servers manage the Network Address Translation (NAT) that occurs when SIP and Media traffic pass through a Firewall/NAT. They also provide a URI addressing scheme to identify the endpoints. E.g. user@sip.com

The required SIP traffic ports are TCP 5060 and 5061(SIP-TLS, used for encrypted SIP traffic).

The UDP Media ports that are required depend on the SIP server configuration.

- The InGate SIPParator SIP Server: Default UDP Port range is **58024 - 60999**
- The Cisco (Tandberg) VCS Express SIP Server: Default UDP Port range **50000 - 52399**

The UDP ports are used by the **video/audio/data** streams when a call is established. The port range is configurable and “**may**” vary in your situation.

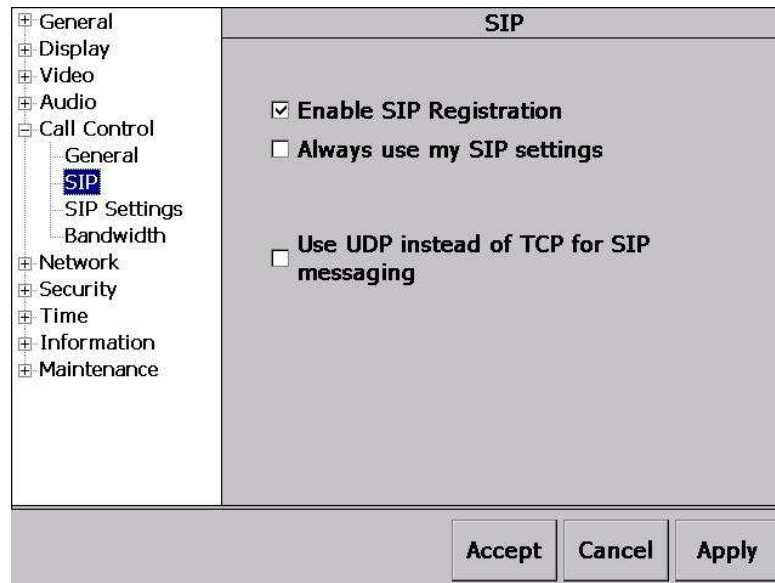
Check with your SIP Server Administrator or IT Administrator for your appropriate port range.

You may need to confirm these ports are allowed with your Satellite Service Provider.

5.1.6 SIP Settings

Your IT administrator will provide you with a SIP account. It will include a username, password and SIP address. To begin the SIP configuration of your Onsite Device you must first enable SIP Registration. Go to:

Configuration -> Call Control -> SIP, tap on the **Enable SIP Registration** box. Click **Apply**.



Under **Call Control** select **SIP Settings**. A sample window is shown below.

SIP Settings

Device Settings My Settings

URI:
johndoe@sip.somecompany.com

SIP Server Address (Registered):
sip.somecompany.com

Authentication User Name:
johndoe

Authentication Password:

Authentication Type:
 Digest

Authentication Transport:
 TCP TLS

Accept Cancel Apply

After you enter the appropriate SIP settings tap **Apply**. The Onsite Device will automatically attempt to register with the SIP Server using those settings. If successful, as in the example above, you will see **(Registered)** beside the **SIP Server Address** label. However, if for example the SIP settings are incorrect or there is not a valid network path to the SIP server, you will see **(Register Failed)**. If you continue getting **(Register Failed)** consult with your IT Administrator.

Note: the **Authentication Transport** can be either **TCP** or **TLS**. Your IT Administrator will determine which method to use. If using **TLS** supporting certificates will need to be installed on the Onsite Device, consult with your IT Administrator.

5.2 Onsight Expert

5.2.1 Onsight Expert Log In

After you have installed and launched the Onsight Expert application, the following Splash screen will appear.

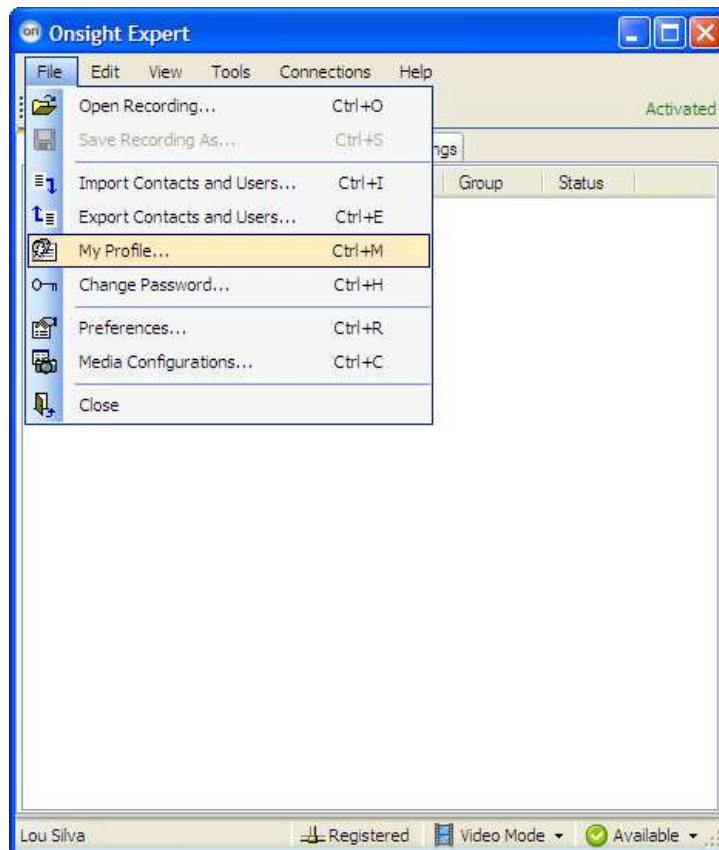


You will then get a login prompt as seen below. Log in with the default user name and password **admin/admin**.



5.2.2 SIP Settings

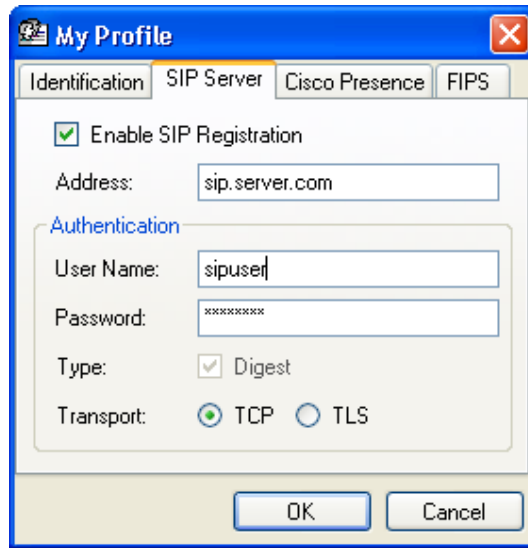
As with the Onsight Device, SIP settings need to be configured on the Onsight Expert. Follow the prompts below to configure the SIP settings. Click on the **File** menu and select **My Profile**.



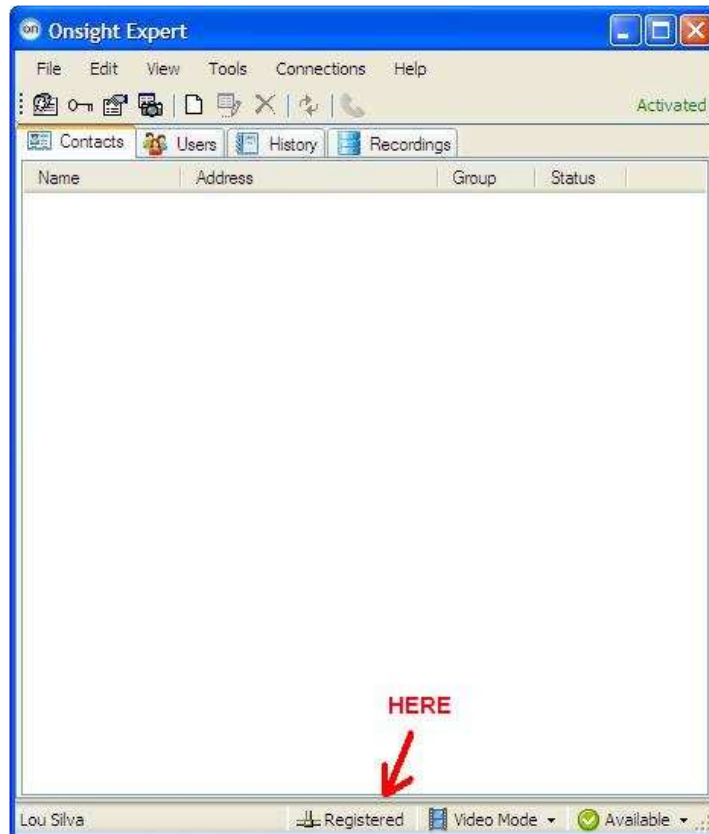
Now, enter the fields below on the **Identification** tab. The URI is the SIP Address assigned to you by your SIP Server Administrator. See the example below.

Field	Value
User Name:	username
First Name:	firstname
Last Name:	lastname
URI:	sipuser@sip.company.com

Next, click on the SIP Server tab. Enter the rest of your SIP Account information here, your SIP administrator will provide you with your SIP account information. Once all the information has been entered click **OK**.

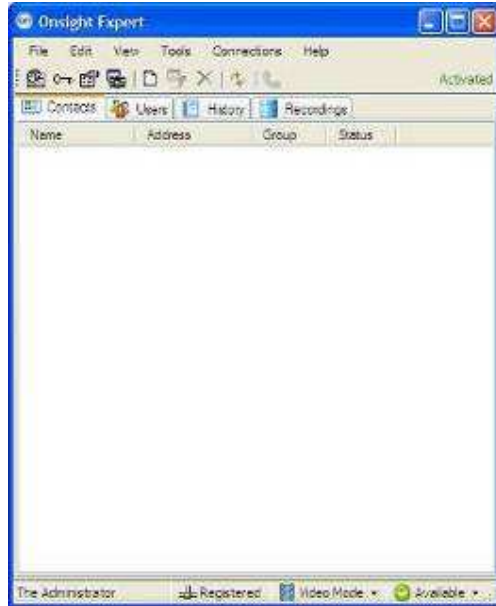


You should now see **Registered** on the bottom of the screen as seen below.

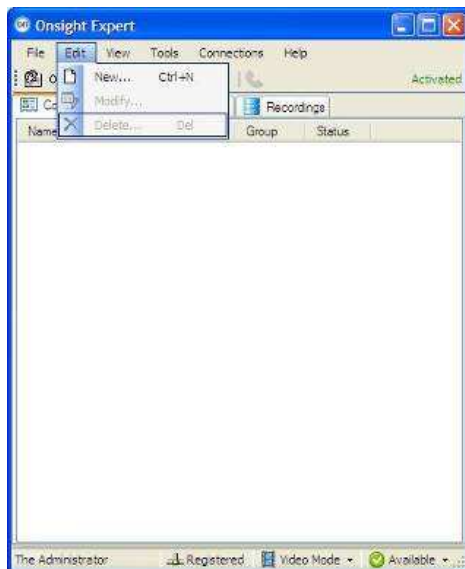


5.2.3 Setting up a New Contact

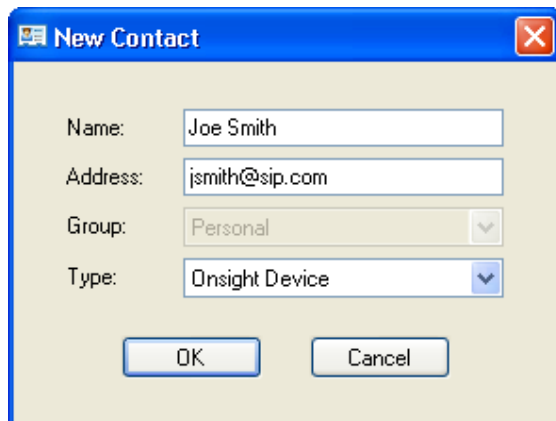
Once logged in, the Main Screen for Onsite Expert will appear as below.



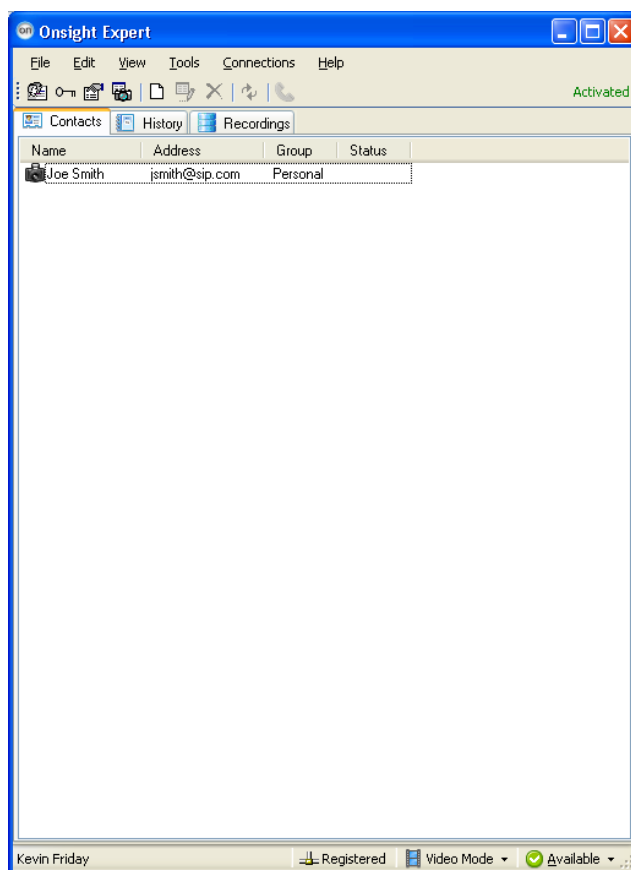
To create a contact, click **Edit** and select **New**.



A New Contact window will appear. Enter the appropriate info for **Name** and **Address**. The Name can be any name associated with a given Onsite Device or Onsite Expert user. The Address is the SIP Address of the endpoint you are calling. E.g. **Onsite1@sip.com** Once the Name and Address have been entered, click **OK**.



You will then see the contact shown under the Contact tab from Onsite Expert.



5.2.4 Making a Call from Onsite Expert

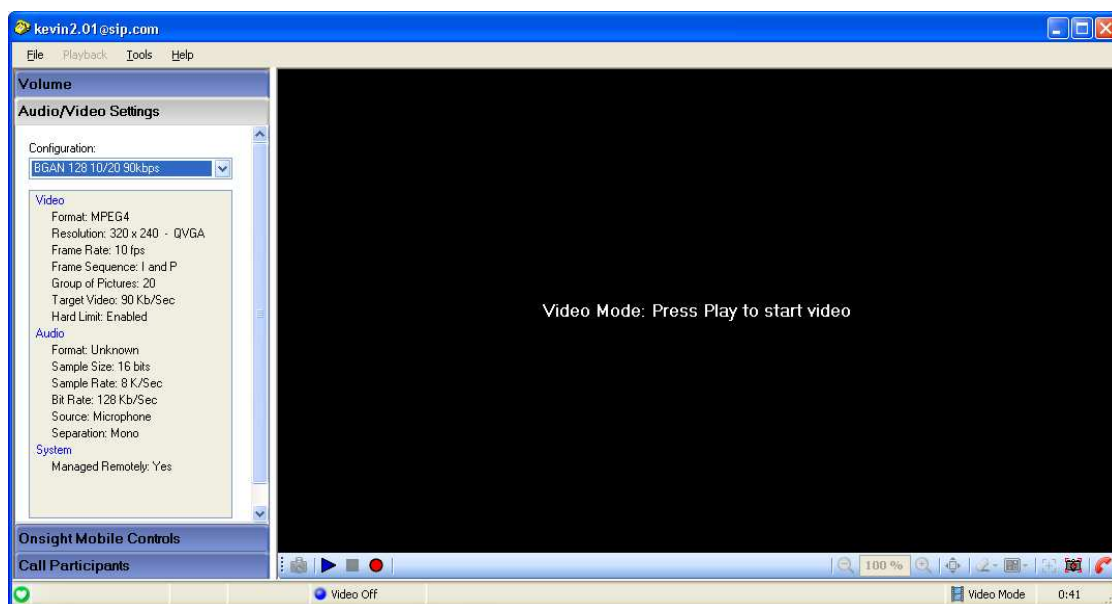
To make a call from Onsite Expert, **double-click** the Contact entry you wish to call. When the Call begins, you will see the calling and ringing message.



When the call is accepted by the camera user, the **Call Accepted** message box will appear. Click **OK**.



Once the call is accepted, the following window will appear.



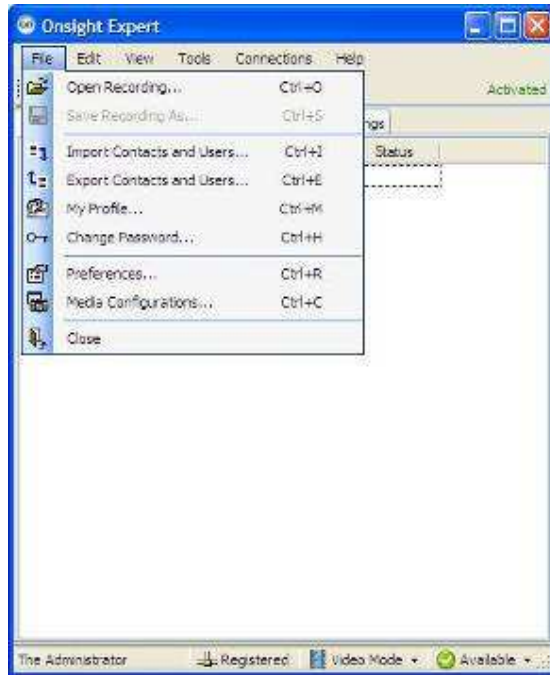
You will immediately have a two-way audio connection between Onsight Expert and the Onsight Device. To start the video stream from Onsight Expert, press the **Play button** on the bottom left side of the screen.

On the Audio/Video Settings tab select the appropriate Media configuration from the configuration drop down list. See the next section for instructions on creating Custom Media Configurations.

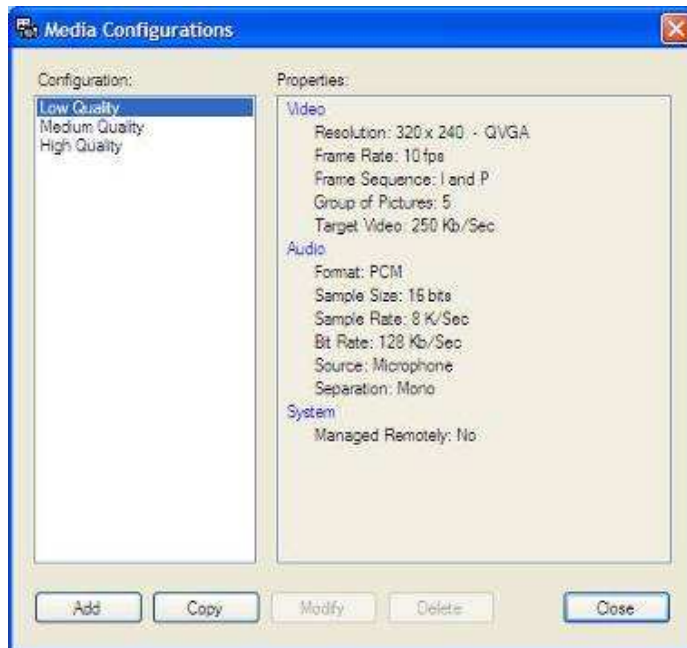
5.2.5 Setting up Custom Media Configurations

Media configurations contain the resolution, bit rate, and frame rate settings for optimizing the video stream. The Onsight system comes with three preconfigured media configurations – Low, Medium, and High. You can also create your own custom media configurations so that you can operate effectively and efficiently within the bandwidth limits of your network.

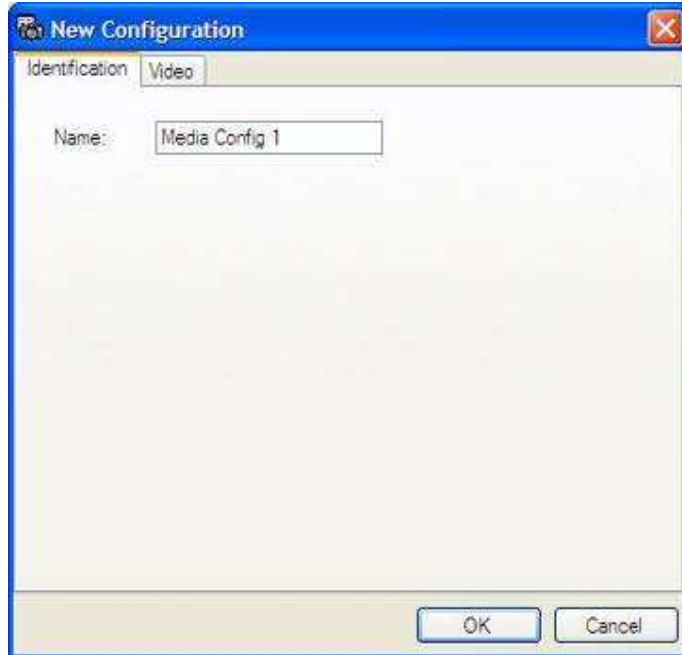
To create a custom media configuration, click **File** and select **Media Configurations**.



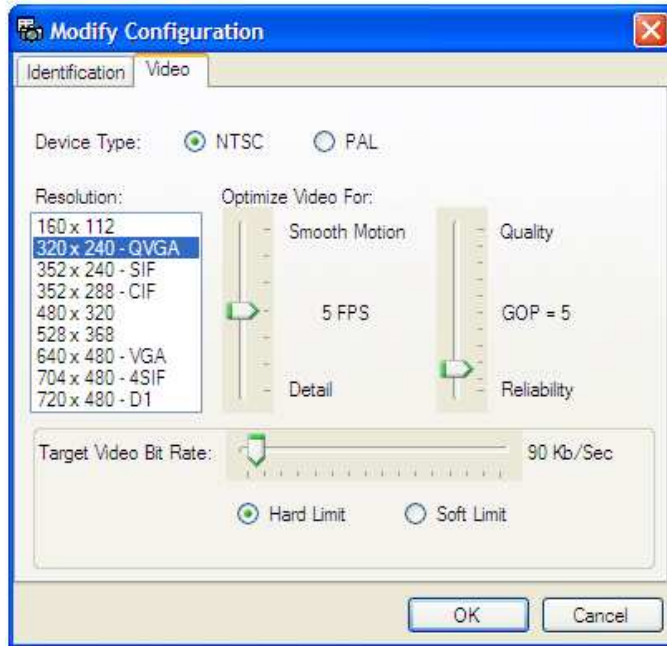
The Media Configurations window will appear as below. Click **Add**.



Enter the Name for this new configuration, and then click the **Video** tab on the top-left, as below. The name of the configuration should reflect the settings and its use. E.g. BGAN_176K_10fps, would indicate this media configuration if for the 176K BGAN service.



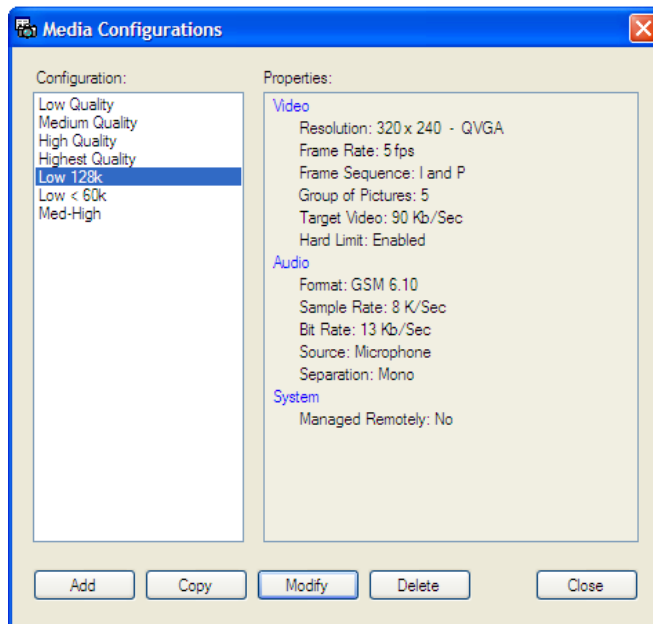
In the Video tab, you select the appropriate settings for each parameter shown below. As a rule of thumb, set the **GOP** between 5 and 10. Choose "**Hard Limit**" to keep the video stream within the chosen **Target Video Bit Rate** setting. The Onsite Device will not exceed the set **Target Video Bit Rate** when this is enabled. Choosing "**Soft Limit**" allows the video stream to exceed the chosen **Target Video Bit Rate** setting *when required* to maintain the current video frame rate. However, **Soft Limit** is not recommended for use with Satellite terminals.



Once all the settings have been chosen, click **OK**.

You will now see the newly created media configuration listed with the preconfigured media configurations, as seen below. Click **Close**.

celui du bureau



The following table provides suggested Media Configurations for you to use as a starting point to test at the different BGAN Streaming plan levels. To minimize the amount of bandwidth allocated

for audio, the low bandwidth GSM 6.10 audio codec is recommended for VoIP, and the secondary Subject Audio channel is disabled.

Table 1: Recommended Streaming Service Media Configurations

Streaming Service (Kbps)	Resolution	Frame rate (fps)	Group of Pictures (GOP)	Video Target Bit Rate (Kbps -Hard Limit)
128	320 x 240	10	5	90
176	320 x 240	10	5	135
256	320 x 240	10	5	200
Note¹ : Disable Subject Audio and use the GSM Audio Codec for Voice.				
Note² : Under extremely low bandwidth conditions, the Viewfinder resolution (160x112) can also be used, this would allow video to be sent and then collaborate using a 720x480 shared still image.				

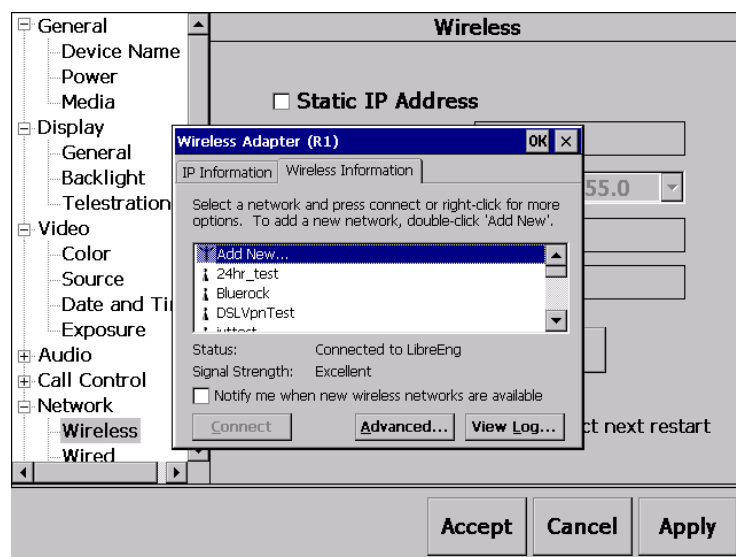
5.3 Setting up BGAN with Onsight

Refer to the technical document or user guide for the specific BGAN terminal you are using. Configure all wireless network settings such as IP Address, Subnet Mask, etc. **on the BGAN terminal.**

Note¹: the user can choose a streaming connection of 128, 176, or 256 Kbps. Higher bit rates will support higher resolution video; however for some applications 128 kbps may be satisfactory.

Note²: Still Image Sharing allows the user to stream lower resolution video and send higher resolution 720x480 still images for collaboration.

Make sure the Onsight Device's Wireless settings are configured for the same wireless network as the BGAN terminal. **See Section 5.12-Network Set-up** for more information on how to configure the wireless settings on the Onsight camera. After the wireless network is configured on the Onsight Device, choose the appropriate wireless network from the list displayed on the Onsight Device and click the **Connect** button, as below.



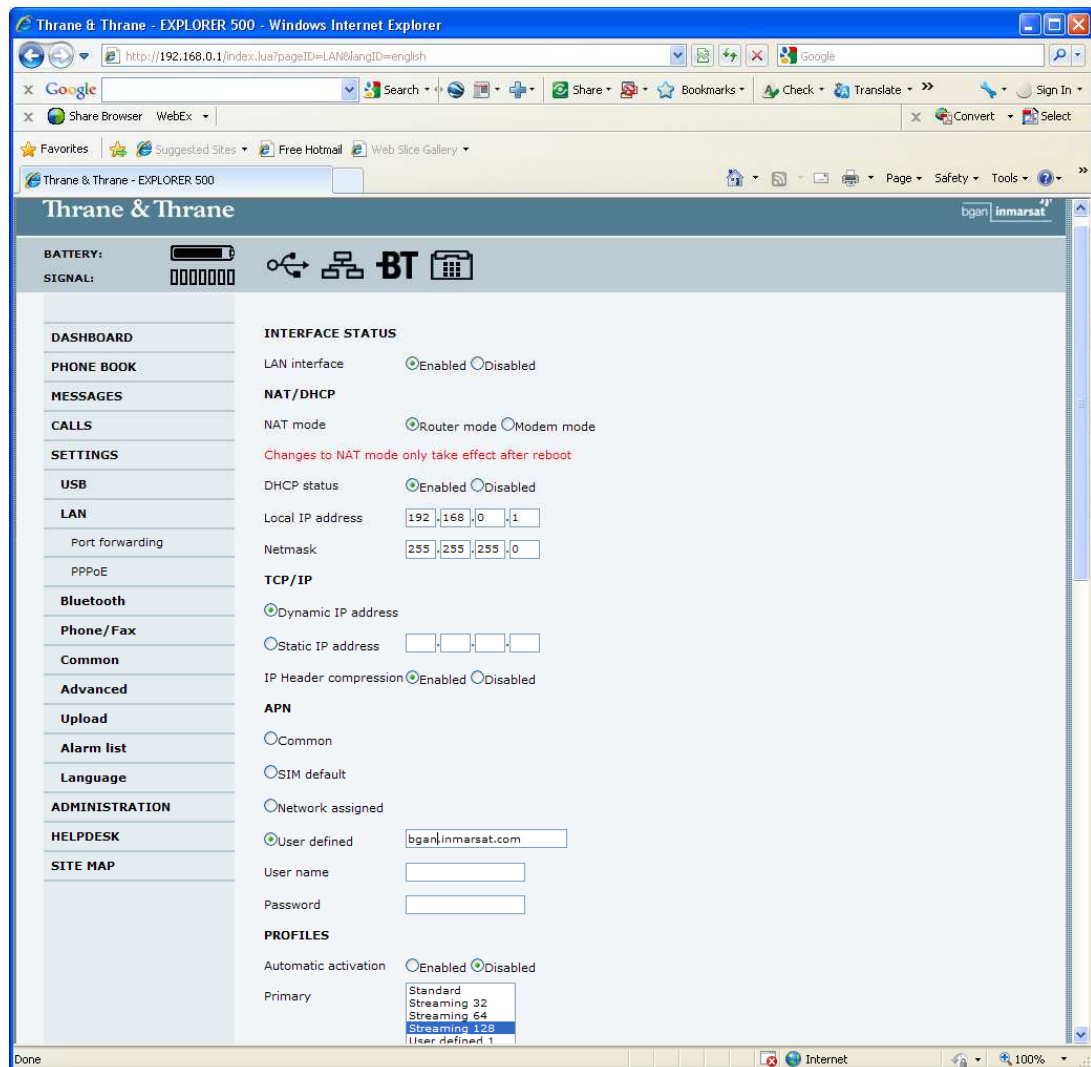
5.4 Setting up BGAN – Thrane & Thrane Explorer 700

Streaming IP service should be initiated from the BGAN terminal and can be configured from either the EXPLORER™'s built-in web server (via a laptop's web browser) or using the LCD MMI.

1. Open your internet web browser and type the following IP address in the address bar:
192.168.0.1



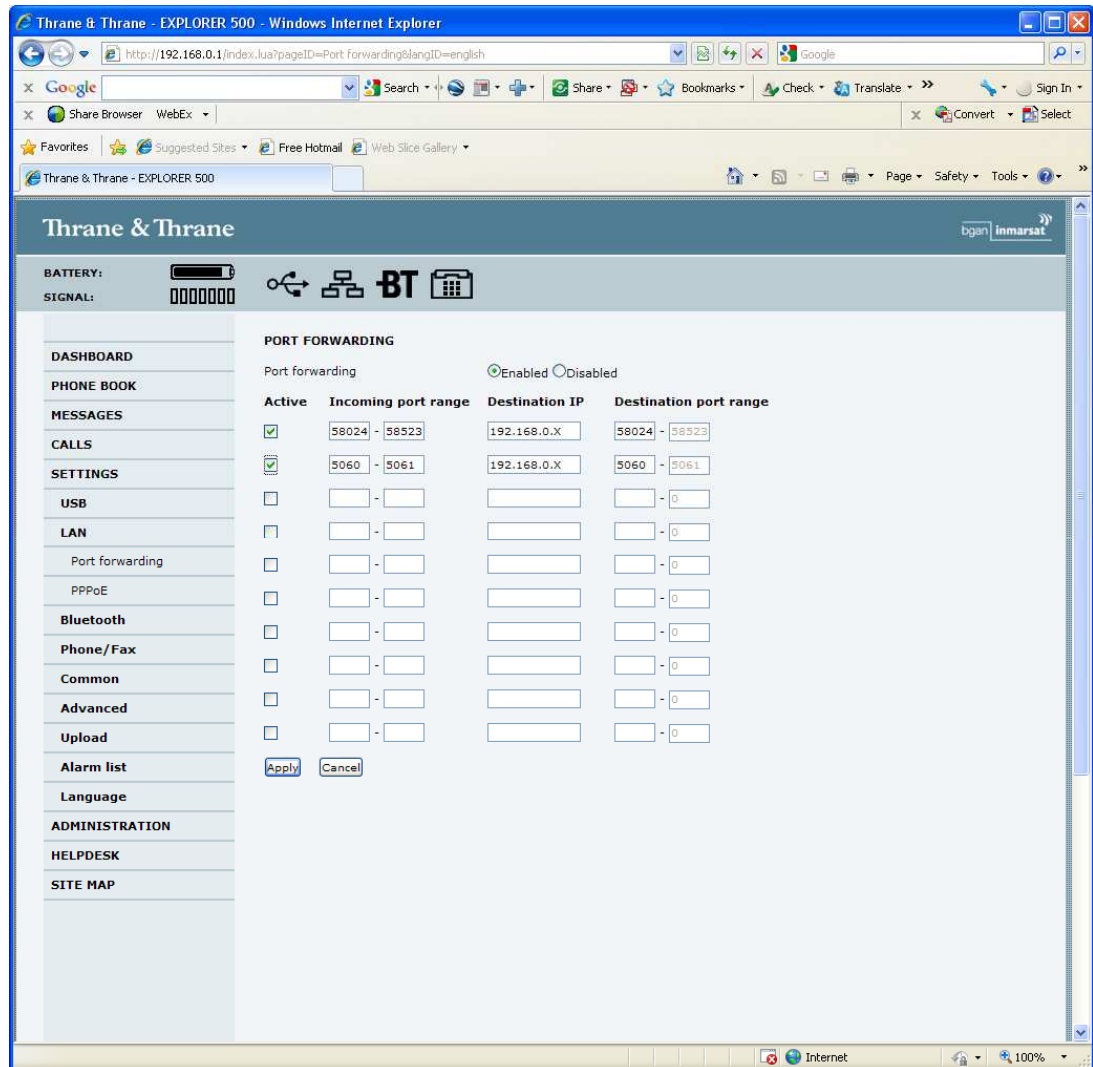
2. Click on Settings and then LAN
4. Now you should see the web server interface. The screenshot below shows the settings required as configured via the EXPLORER™'s web server interface, ensure to click apply before you leave the web page. Please consult your EXPLORER™ manual for more detailed information.
5. NAT Mode: Select **Router**
6. APN: Select **User Defined**; enter the APN, user name and password provided by your SP in order to get a Static IP address. NOTE: If no static IP address is used your IP address will change every time you connect to the BGAN network. On the dashboard screen you can see the IP address of your connection.
7. Automatic Activation: select **Disable**.
8. Primary: Choose the desired Streaming Bit Rate
9. Click **Apply**



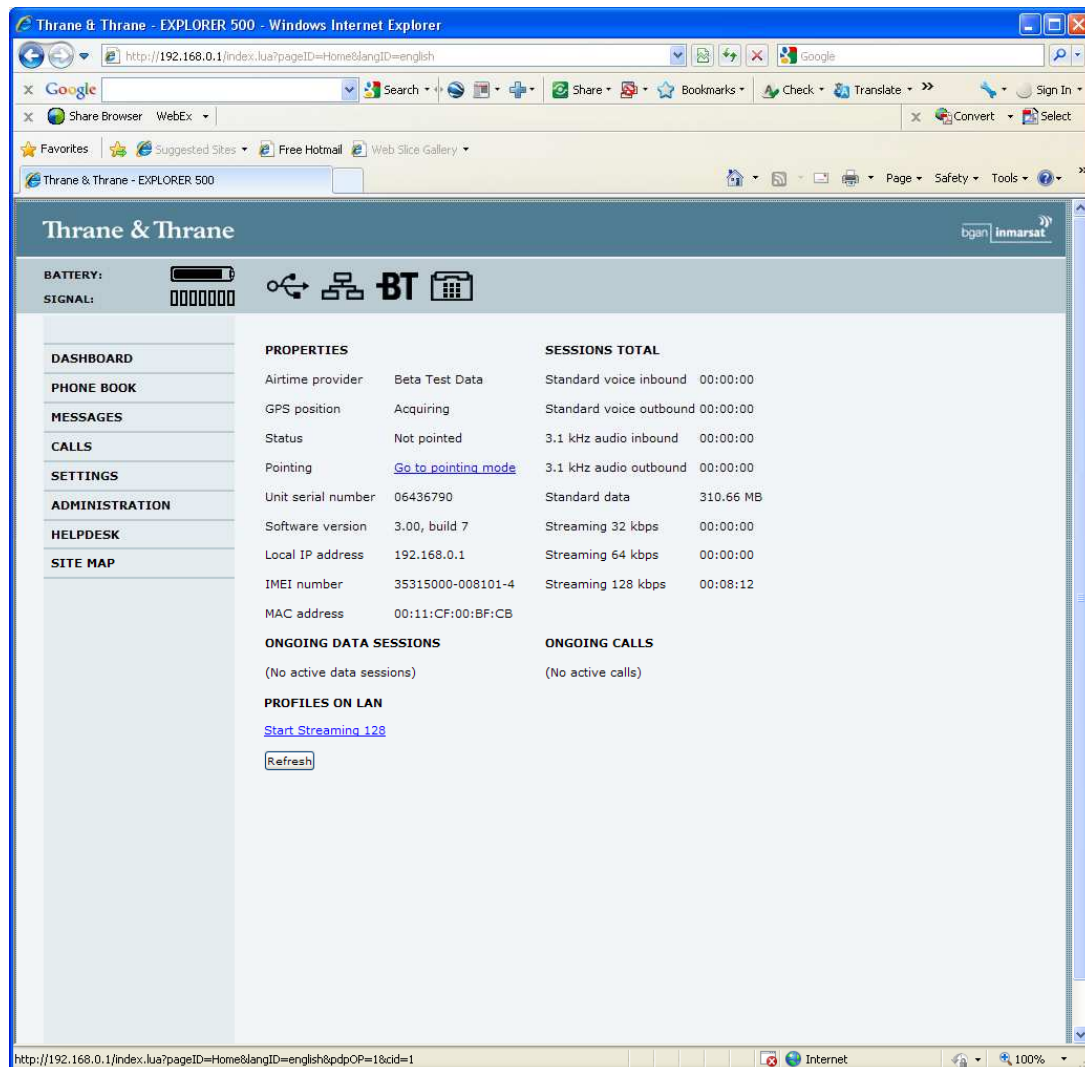
10. Now your terminal is configured to start a Streaming connection manually after you register on the network using the web interface (DASHBOARD Page) or LCD MMI (Please see next section).
11. Click on **Port Forwarding** on the left Menu.
12. On **Port Forwarding** select **ENABLE**.
13. Check the Active box and enter **58024 – 58523** for the Incoming port Range and the IP address you configured in the PNSC ex. 192.168.0.X then for the destination port **58024 – 58523**
14. Check the Active box and enter **5060 to 5061** for the Incoming port Range and the IP address you configured in the PNSC ex. 192.168.0.X then for the destination port **5060 to 5061**

NOTE: The Static IP Address 192.168.0.X needs to be manually configured on the Onsite Device for either the wired or wireless interface.

1. Your configuration should look like this:



2. Click APPLY before leaving the page.
3. Restart your terminal and click OK after properly pointing the terminal. Once the Explorer is registered on the BGAN network you need to go to the DASHBOARD and click Start Streaming. Please see image below for reference.



5.5 Connecting to Explorer 700 BGAN via LCD MMI

The screenshots below show the steps to configure via the EXPLORER™ LCD MMI.

To initiate a connection from the LCD MMI, go to the main view of the LCD.



Press Arrow Down button until CONNECT menu is selected



Press OK
Select the Streaming rate desired and press OK button



Select START and press OK button



Press OK button to confirm Standard connection and wait a minute or two to allow the EXPLORER™ to register the Packet Switched connection with the BGAN system. After registration the LCD main screen will show STREAMING ACTIVE. See LCD below.



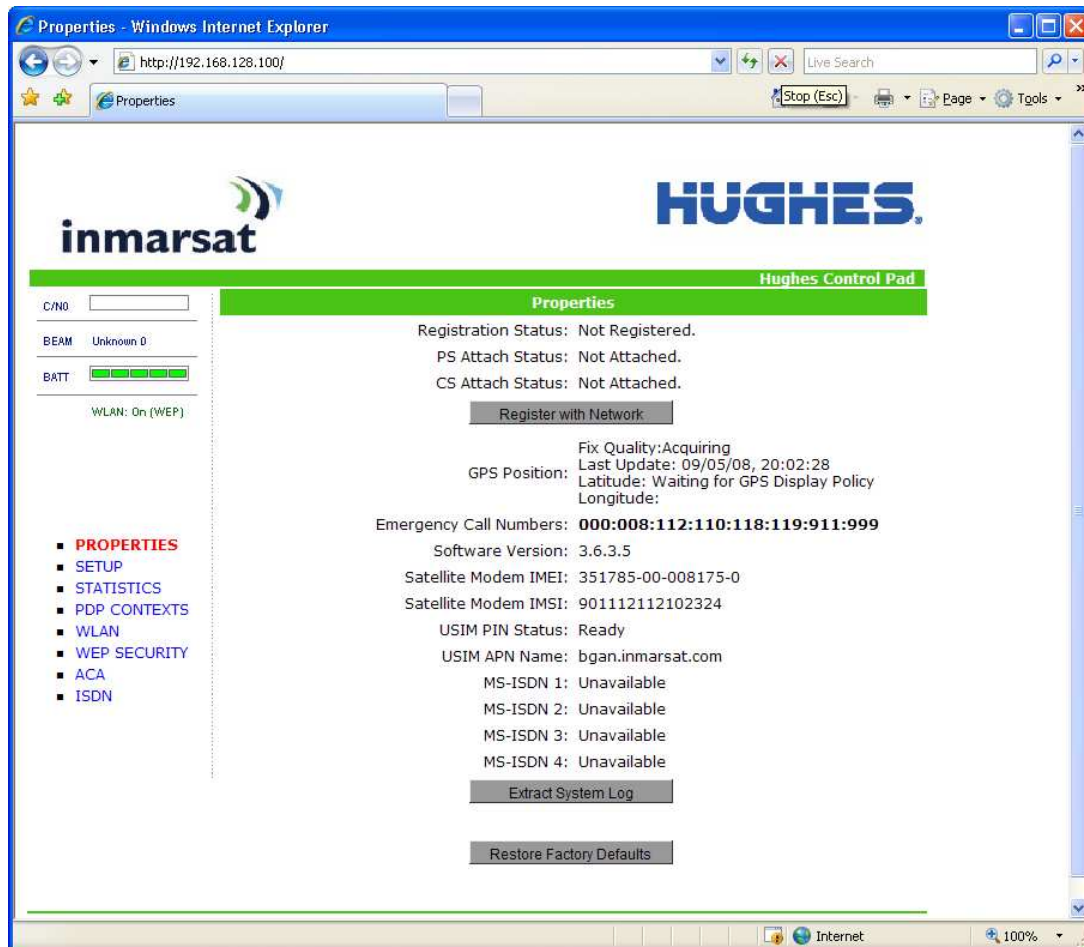
To stop the Streaming Session select CONNECT, Select the streaming session you are using and press STOP.

Stopping the streaming session when you are done using the Onsite Device is required in order to stop the charges for using the satellite streaming services.

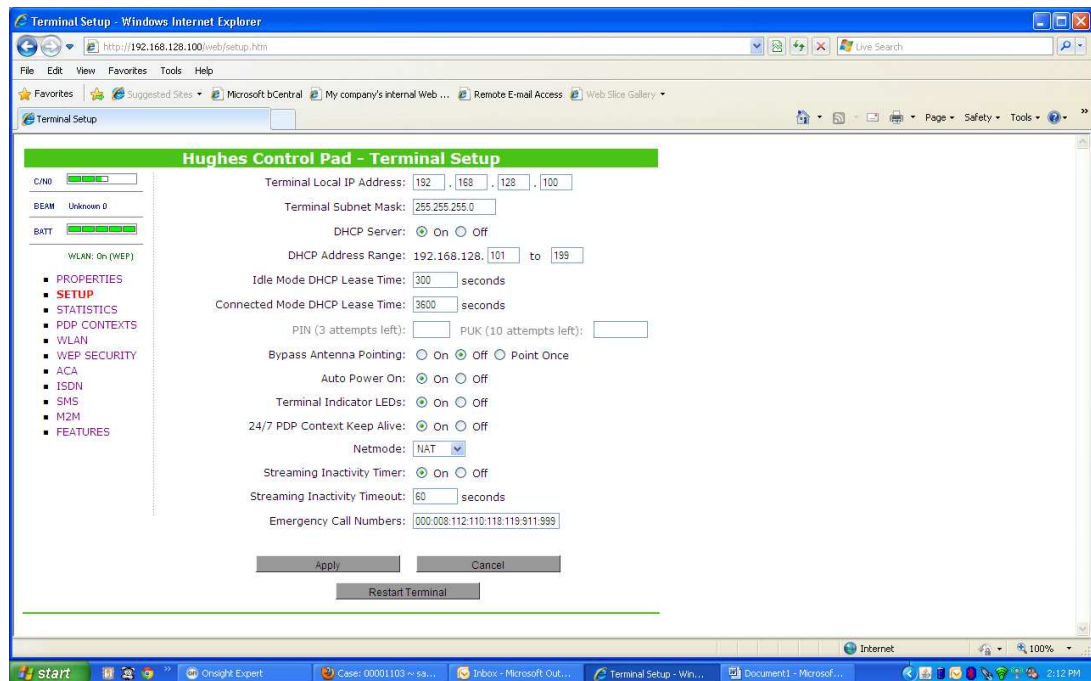
5.6 Setting up BGAN – Hughes HNS9201

Standard service should be initiated from the BGAN terminal and needs to be configured from the Hughes™ HNS9201's built-in web server (via the Internet Explorer web browser, do not use other web browsers).

1. Open your internet web browser and type the following IP address in the address bar:
192.168.128.100

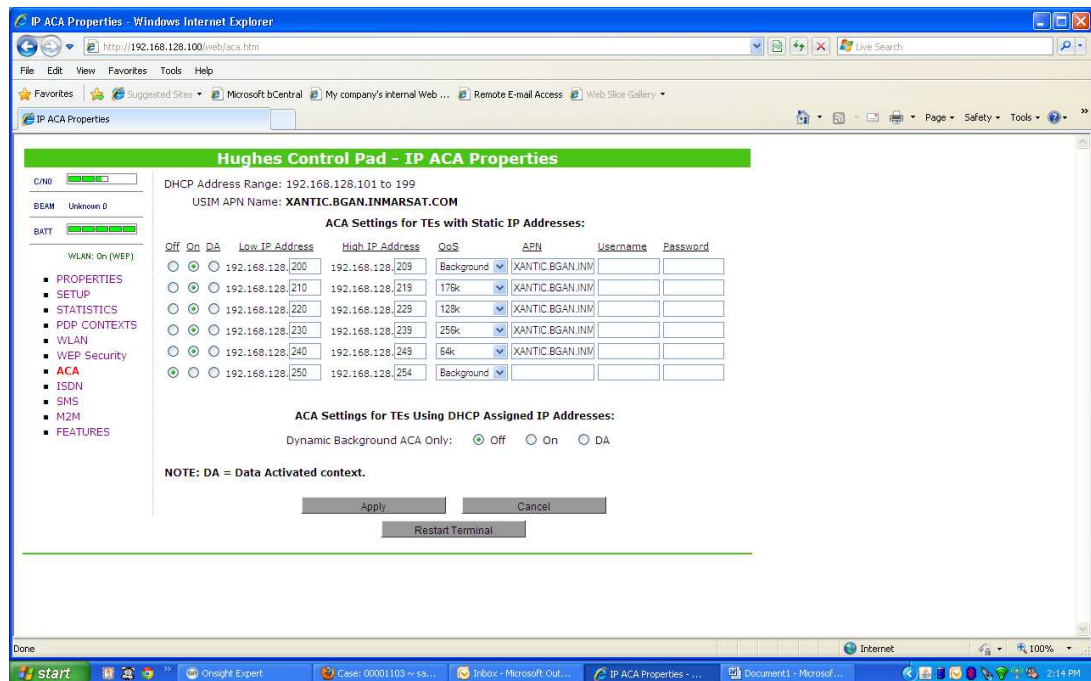


2. Click on Setup in the menu on the left.
3. Set the 'Streaming Inactivity Timer' to On.
4. Set the 'Streaming Inactivity Timeout' to 60 seconds. This is the minimum setting that is compatible with the Onsite System.

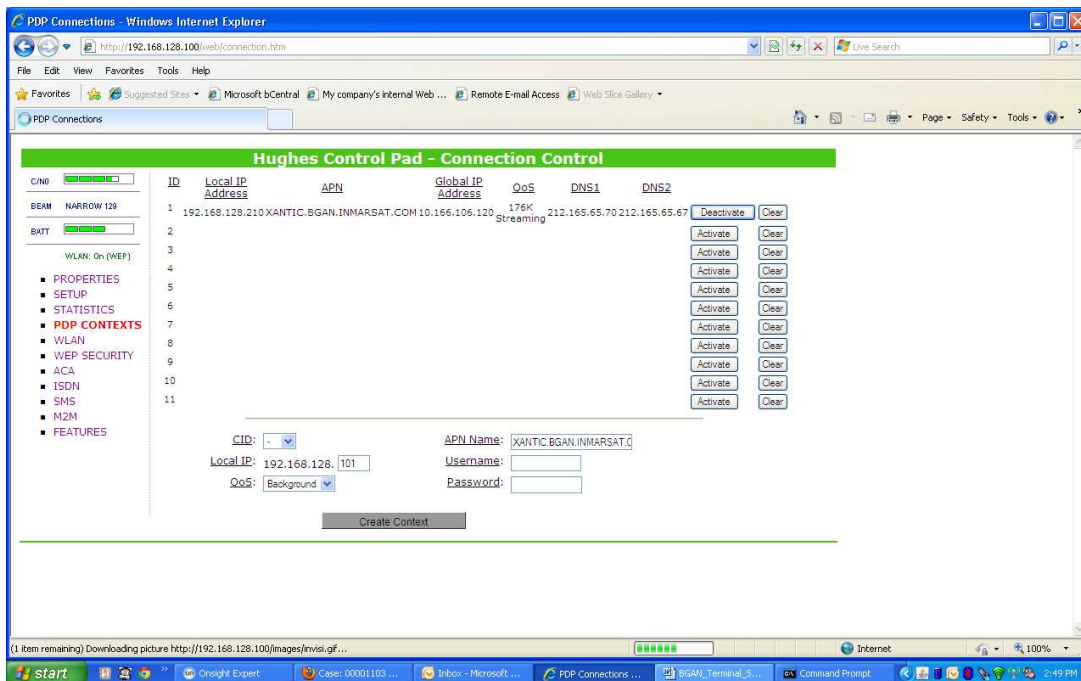


5. Press the "Apply" button to save the changes.
6. Click on ACA on the menu on the left.
7. Select **ACA settings for TEs with Static IP address 'ON'** for the range of the Streaming Data rate you desire. QoS select from 128Kbps up to 256Kbps -Stream. Enter the APN, user name and password provided by your SP in order to get a Static IP address. NOTE: If no static IP address is used your IP address will change every time you connect to the BGAN network. On the PDP Contexts screen you can see the IP address of your connection.
8. Click Apply
9. Then click Restart Terminal

Your configuration should look like this



10. Select a Static IP address from within the range that has the desired Streaming Data Rate. E.g. To use the 176K Streaming service you must select a Static IP address from the 192.168.128.210 to 192.168.128.219 range. This needs to be manually configured on the Onsite camera to either the wired or wireless interface.
11. Now register the terminal by pressing the Audio button until the signal strength lights go off or by clicking the Register with the Network button on the Properties page of the web interface.
12. The terminal will automatically recognize the IP address assigned to the Onsite Device and start the PDP connection automatically.
13. The Onsite Device will now register to the SIP Server and you are able to make calls to the Onsite Expert. The Charges for the Streaming service begin as soon as the Onsite Device registers to the SIP Server. Turn off the Onsite Device when you are not making any calls.
14. The active PDP connection is displayed and the QoS being used is indicated on the PDP Context page. In the example below the QoS is the 176K Streaming service.



5.3 Managing the Onsite Device's Streaming Service Usage

The Streaming Service will begin charging against the Onsite Device's usage once the first network packets are sent over the satellite connection. This happens as soon as the Onsite Device registers to the SIP Server. Even though you are not in a video call you will be charged for the streaming service. ***It is important that you only connect the Onsite Device to the terminal when you are ready to place a call to the Onsite Expert.***

When you have completed your call you must turn off the Onsite Device (OD) in order to deactivate the streaming charges. After 60 seconds the streaming charges will stop since the 'Streaming Inactivity Timeout' has occurred on the Hughes terminal. The timeout is triggered 60 seconds after the last network packet has been sent by the Onsite Device. If you want to place another call with the Onsite Device, the stream must be manually activated on the PDP Contexts page before the OD can send data again. Press the 'Activate' button beside the QoS service you wish to start.

5.3.1 Call Management Scenario:

You have finished a call and you have turned off the Onsite Device so that you are not charged for time on the Streaming Service. The Hughes terminal's 'Streaming Inactivity Timeout' will trigger after 60 seconds and the PDP context for the Onsite Device will be deactivated. If you wish to place another call you will need to power up the Onsite Device (OD) and manually Activate the PDP context associated with the OD on the PDP Contexts page. You can then place another call once the OD has registered to the SIP server.

6. Librestream Contact Information

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