



Using Quicklink over BGAN

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1 Overview

Quicklink offers a network efficient and cost effective way to capture, transmit, repurpose and deliver high quality media for both Live and Store and Forward broadcasts.

The unique design of the Quicklink system when combined with BGAN enables you to choose the functionality and features that meet your precise media encoding and transmission needs.

Quicklink is the preferred choice in the industry for our quality, flexibility and customer care.

2 Product Range

Store & Forward LNG Solution – Video can be captured directly from a camera or imported as an edited file and compressed using the Quicklink advanced video compression, which is ideal for transmission over the BGAN network.

Live LNG Solution– Video is captured and compressed using Quicklink advanced video compression ideal for transmission over the BGAN network. Quicklink offer both software and a range of hardware live encoders. The studio then receives the stream which is decoded in the Quicklink Payout server and ready for output for Live ON AIR broadcast.

Integration Solutions – Quicklink automatic integration modules are based on a standard universal MXF “wrapper” which is compatible with most commonly used editing and production suites, and other high profile media products. Quicklink’s advanced management software enables automatic ingestion and repurposing of content from many other sources and into all industry standard formats for example MP2, MP4, Windows Media, Real Player, 3G

Quicklink News Warehouse Solutions – The technology enables production companies to showcase their video on a website from where broadcasters can download the broadcast-quality version in a secure username/password environment.

3 Typical Users

- First responders.
- Broadcasters.
- Government Agencies
- NGO's.
- Military.
- News Agencies.
- Multimedia corporations.

4 Key Features

The Quicklink solutions offer the following main features over the BGAN network:

- Fast and cost effective live broadcast and Store and Forward transmission.
- Ease of set up and operation.
- Network Resilience.
- Outstanding video quality.

5 Benefits to BGAN users

Quicklink's superior compression techniques offer you fast, cost effective transmission of video content from bureaus and on location over BGAN, whilst maintaining outstanding broadcast quality for both Live and Store and Forward transmission.

Default profiles can be used which are rigorously tested with Inmarsat BGAN or profile choices can be individually customised.

Advanced features within the Live LNG such as Automatic bandwidth detection and adjustment allow the user to maximise available BGAN capacity at the time of transmission.

Advanced features within the Store & Forward LNG optimises BGAN bandwidth. The Inmarsat PEP accelerator needs to be installed in order to make use of this advanced feature.

6 Using Store & Forward LNG

This section describes how to set up BGAN for use with Quicklink and gives an example of a Quicklink configuration.

6.1 Equipment Needed

To set up this configuration, you must have the following equipment:

- DV Camera or Analogue camera with DV converter if you wish to capture video
- Quicklink Encoder (Windows PC or Apple Mac)
- Inmarsat PEP accelerator installed on the encoder
- BGAN terminal
- Quicklink Decoder/Play Out Server (Studio Room)

6.2 Setting up the Store & Forward LNG

- a. Install BGAN Launch Pad and BGAN PEP accelerator on the encoding computer.
- b. Start up Quicklink Store & Forward LNG
- c. If you have been given a settings file 'Quicklink.profile' from your administrator, the required settings can be automatically imported into the software via FILE->PROFILE->IMPORT PROFILE
- d. If you do not have access to your required settings, here are some standard settings that may be suitable for your environment.
- e. SETTINGS-> CONNECTIONS: The 'Server Name' must be the exact name of your destination server. The I.P address must be correct for your destination server.
- f. SETTINGS-> OPTIONS: uncheck/deselect all the boxes and confirm
- g. SETTINGS-> TRANSMISSION PREFERENCES: check /tick the Own Company Server box, default port 80. Default settings are Passive File Transfer and no Proxy/Firewall Method

6.3 Sending Store & Forward LNG via BGAN

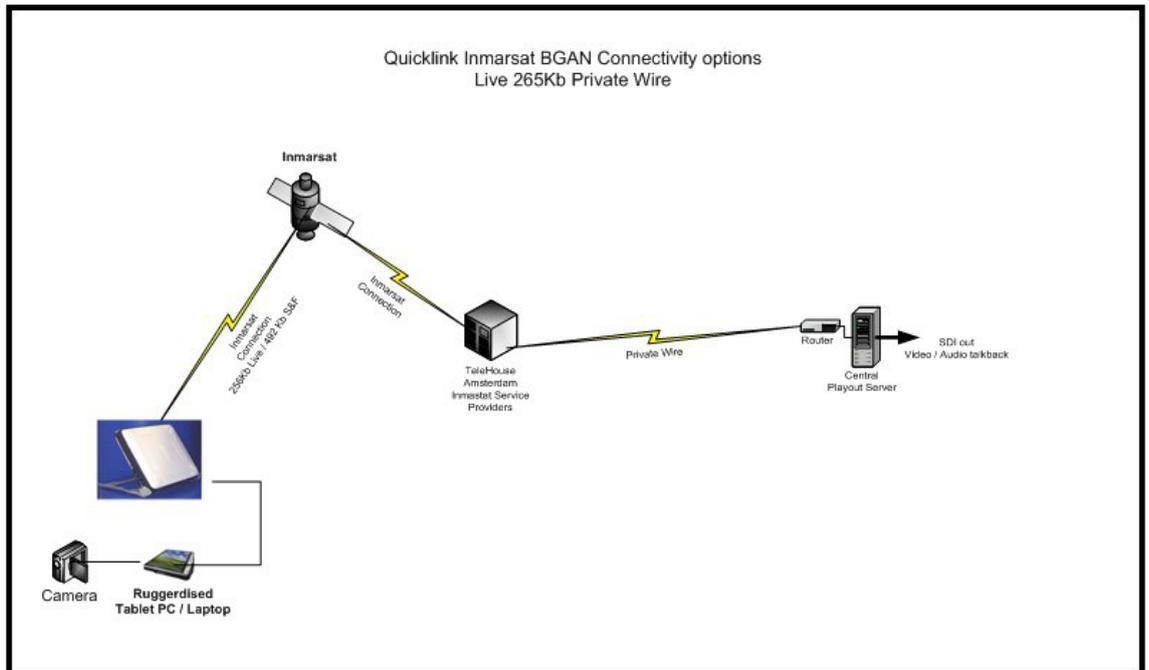
To store and forward a video to the server, you must first either capture video or import video. To import a video, simply select the **Import Video File** option.

To capture a video:

- a. Make sure your camera is connected to the computer.
- b. Select the **Capture Video** option to display the capture window.
- c. Once recording is complete, click on Stop, and exit the window
- d. Quicklink prompts you to select the encoding rate for compression. Inmarsat recommends **2 MB 2 Pass** for general broadcast quality, but you can select whichever is more appropriate for your purpose.
- e. You can choose to send your file now or later. When the file is transmitting a transmission progress window will appear until file transmission is complete.

7 Using Live LNG

This section describes how to set up BGAN for use with Quicklink and gives an example of a Quicklink configuration.



7.1 Equipment Needed

To set up this configuration, you must have the following equipment:

- DV Camera or Analogue camera with DV converter
- QuickLink Encoder (Windows PC or Apple Mac with Boot Camp)
- BGAN terminal
- QuickLink Decoder/'Play Out' Server (Studio Room)

7.2 Setting up the Live LNG

To set up the client for this configuration, do the following:

- a. Install BGAN Launch Pad on the encoding computer.
- b. Connect the Camera to the computer, and ensure that it is configured properly.
- c. Start up Quicklink on the Windows platform of the encoder
- d. Before sending any live broadcast, you must specify a server address.



Go to Settings> Add Remove Destinations on the main toolbar. The following window is displayed:
Add the name for the recipient Playout server (your Quicklink decoder), and its IP address.

7.3 Sending Live LNG via BGAN



Enter a friendly name into the Name textbox that will be displayed at the server or enter your own name. Select the destination of your company's server by selecting from the Destination drop down box.

Select the Profile that is to be used with the transmission. There are preconfigured 256k profile and 384k profiles (for BGAN X-stream) available in the dropdown menu. Alternatively, you may wish to use the automatic adjust feature which will maximise available bandwidth at the time of transmission.

Once you have entered all of the details, click the Transmit button.

8 Recommendations/Optimizations

Switch off error correction before you establish streaming IP data connection.

9 Technical Summary

Feature	Store & Forward LNG	Live LNG
BGAN support	Standard and Streaming Compatible	Streaming, X-Stream and Automatic Adjust
H264 Codec	Version 7.0.0.0	Yes
Automatic End Station Encoding	All Standard Formats MP2,MFX etc	N/A
Optimised Transfer	Yes. Also uses PEP accelerator	Yes, UDP
HTTP Transfer	Version 7.0.0.0	N/A
Software Solution	Downloadable and license key	Downloadable and license key
Hardware Solution	Ruggedised	1U Rack Mounted and portable options
Operating Systems	MAC, Windows XP, Windows Vista	Boot Camp on MAC, Windows XP, Windows Vista
NTSC and PAL format	Auto switching	Auto switching and conversion
Playout Server Output	SDI/Analogue	SDI/Analogue
Return video / audio feed using BGAN forward channel	N/A	Yes
BGAN ISDN support	Yes	Yes
BGAN IP Addressing requirement	Supports All	Supports All
Simultaneous Live and Store and Forward support, using BGAN TFT (secondary PDPcontext)	Yes	Yes

10 Further Support and Details

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