Report-IT Enterprise Unleashed

REPORT-IT
ENTERPRISE EDITION

EE

Tieline
The Codec Company

Integrating Report-IT Enterprise for affordable remote broadcast solutions

Tieline®
The Codec Company

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About Report-IT

Tieline was the first manufacturer to deliver a smartphone codec app in 2009 and today Report-IT it is the world's most popular app for live and recorded reports. In fact, tens of thousands of broadcasters around the world use Report-IT every single day for live broadcasts.

GROUND-BREAKING LIVE AUDIO STREAMING APPLICATIONS

Many broadcasters are aware that Tieline's Report-IT Enterprise application for iOS and Android has revolutionized live smartphone reporting. What is not as well known is that innovative broadcasters have discovered ground-breaking and inventive ways to use Report-IT for a range of reporting and commentary solutions, including:

1. Live high quality reports, recording of reports and FTP of recordings back to the studio.

2. Sideline reporting at live sporting events.

3. Integrating sideline commentary into commentary position audio at live events using Report-IT.

This document outlines a range of unique and pioneering ways to use Report-IT when broadcasting over cellular and Wi-Fi networks. It defines how radio and television networks can increase flexibility and save thousands of dollars in hardware for live remotes and sporting event commentary applications.
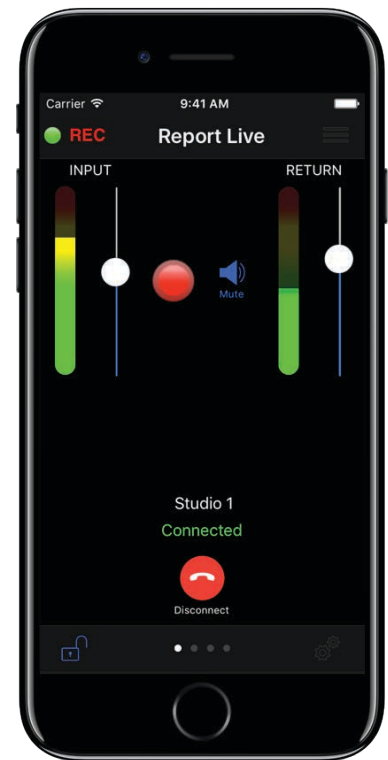

Figure 1: Report-IT Enterprise app

HOW IS REPORT-IT USED FOR LIVE REMOTES, RECORDED REPORTS AND FILE TRANSFERS?

The multi award winning Report-IT has revolutionised newsgathering and live remote broadcasts to ensure you can go live first!

Report-IT turns your iPhone or Android smartphone into a pocket-sized portable 15kHz live IP audio codec and ultra-slim high fidelity 20kHz audio recorder.

Combining Tieline's Merlin PLUS codec with Report-IT has delivered our stations greater remote flexibility. The workflow for all of our simple remotes has been streamlined and we have freed up significant resources for other purposes.

Mike Hutchens, Townsquare Media

At the touch of a button broadcast live IP audio over cellular or Wi-Fi from any remote location to a Tieline IP codec in the studio. Perfect for remote broadcasts, live reports or two-way interviews, simply connect earphones to your phone and hear studio communications and program audio in real-time while broadcasting.

- Broadcast 15kHz live two-way interviews with the studio at the touch of a single button.

- Use the high quality mic on your iPhone or Android smartphone to prerecord up to 20kHz quality high fidelity audio, then file reports via FTP automatically. Pair your smartphone with a push-to-talk (PTT) Smart Button using Bluetooth and you can remotely start and stop recording, which is ideal for press conferences and other remote control recording applications.

- Prerecord interviews, trim them offline, then build a playlist and insert them as "wraparounds" into live crosses with the studio.

- Attach a professional dynamic mic to your phone using a compatible third party microphone adapter cable.

Without hesitation, if it is smartphone or hardware codecs you are looking for, it is worth trying Tieline codecs and Report-IT for high quality mobile reporting.

Jerome Bellini, President of NIP Productions and Technical Director for Radio Monaco
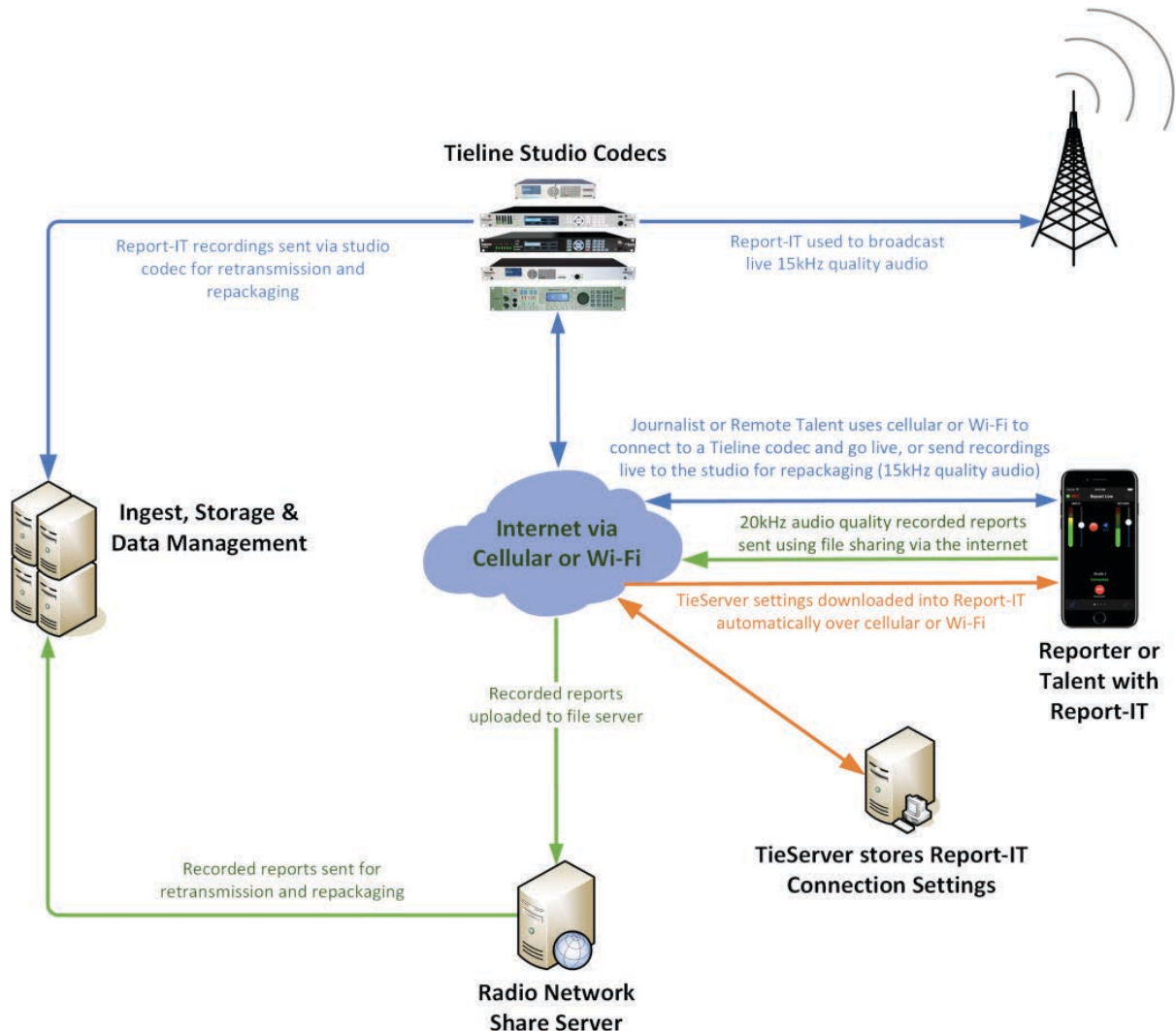
Figure 2: Typical Report-IT Configuration for Live Reporting with File Recording & File Transfers

UNIQUE FEATURES IN REPORT-IT

Report-IT has unique features to make it simple to use and reliable over wireless IP networks.

SMARTSTREAM PLUS DUAL REDUNDANT STREAMING

SmartStream PLUS delivers true network diversity for smartphone reporting. It allows users to stream using the phone's cellular connection and simultaneously stream over commonly available Wi-Fi access points, or over an affordable MiFi (mobile Wi-Fi) device. If one connection is lost, the other will continue to stream reliable IP audio to the studio to ensure continuity of remote audio.

SmartStream PLUS significantly enhances the reliability of smartphone broadcasting and can be employed when connecting to Tieline's Merlin and Genie families of IP codecs.
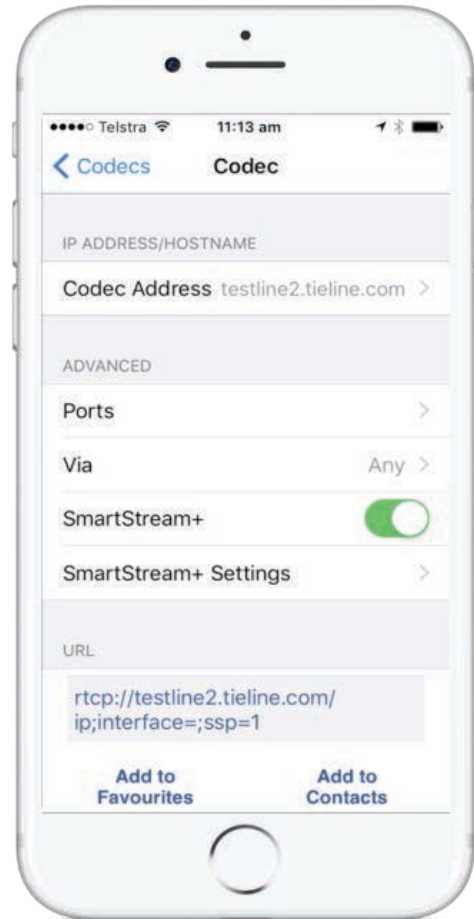

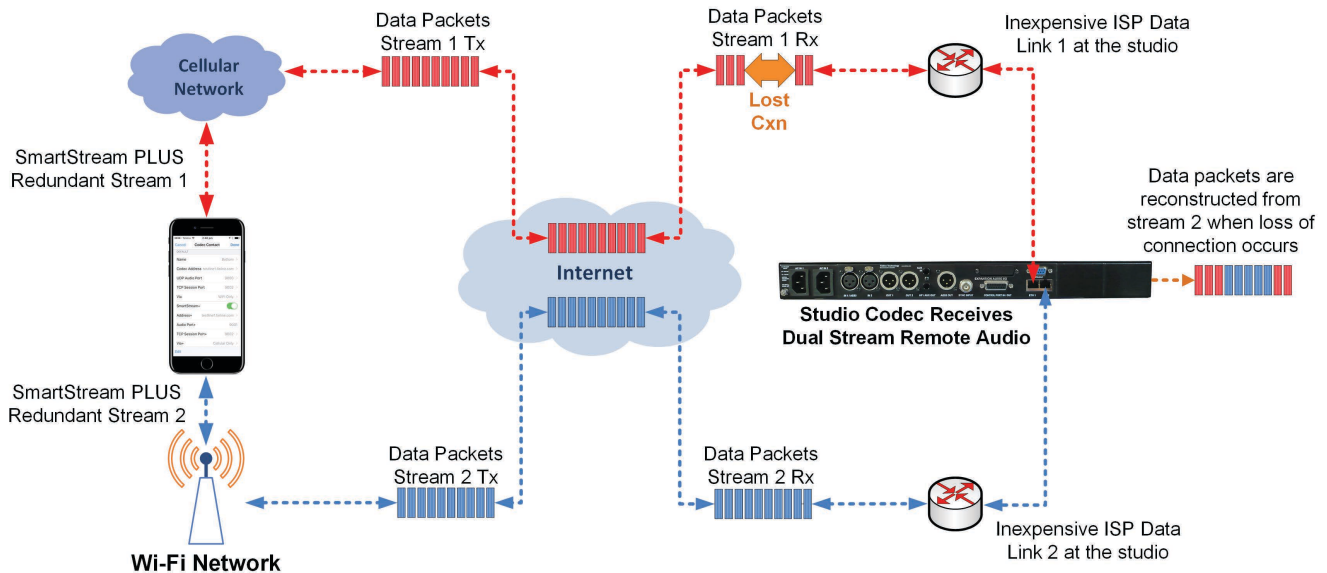

Figure 3: Configuring SmartStream PLUS

Figure 4: Example using SmartStream PLUS over Cellular and Wi-Fi Networks

VIP-CONNECT TO LAUNCH AND CONNECT REPORT-IT

VIP-Connect allows users to securely log in and launch the Report-IT Enterprise app with a single touch, without entering username and password credentials.

With VIP-Connect, a user simply installs the Report-IT Enterprise app on their smartphone via a free download, and then:

1. A Report-IT Enterprise administrator generates a unique VIP-Connect URL with the TieServer Management Console and sends it via an email, text or messaging app to the user.

2. The user taps the VIP-Connect URL to automatically launch Report-IT Enterprise and log in with fully secure credentials.

VIP-Connect logs the user into the app and configures the Report-IT Enterprise app to connect securely to a studio codec and stream crystal clear, high-fidelity audio at the touch of a button. VIP-Connect URLs can be created using the PC/Mac version of Tieline's TieServer Management Console. Security is paramount and administrators can configure unique URLs for each Report-IT Enterprise user account and individually control the effective life of every URL created.
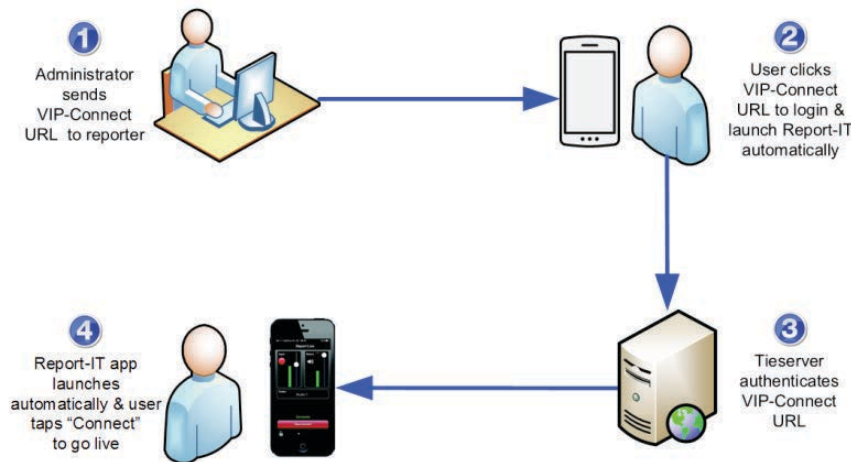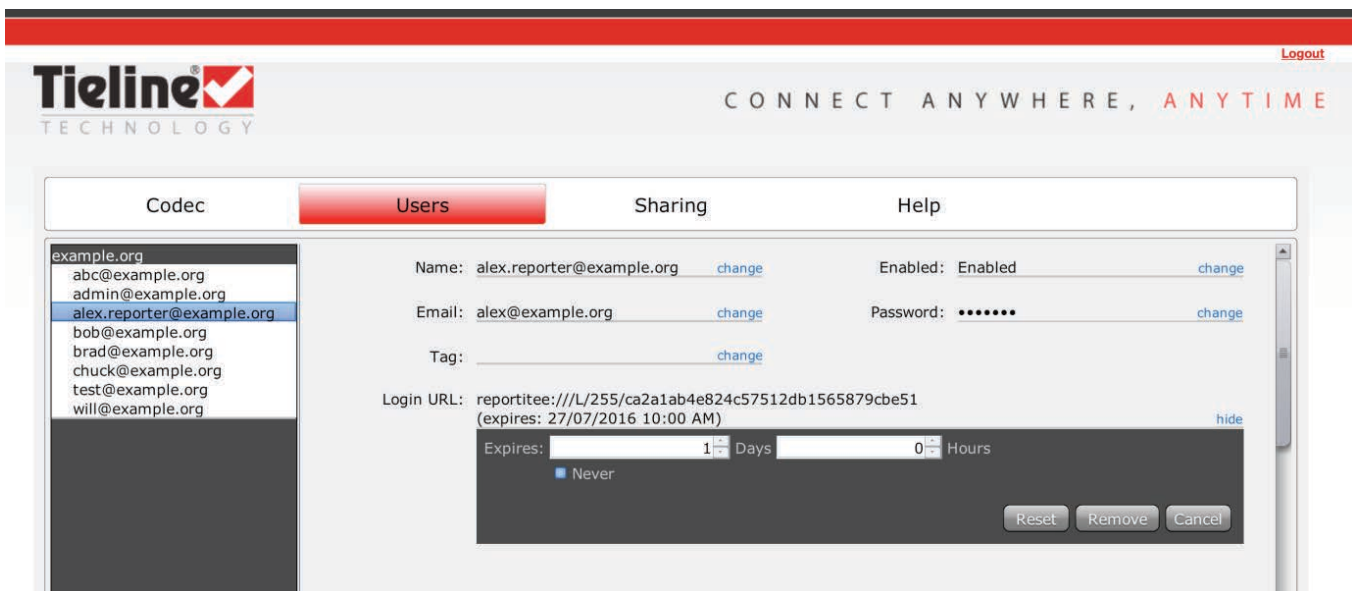

Figure 5: VIP-Connect Workflow

Figure 6: VIP-Connect Configuration Panel

REPORT-IT FOR SIDELINE REPORTING AT LIVE SPORTING EVENTS

Report-IT is ideal for sideline reporting at live sporting events. A commentator can use their smartphone and connect to either the studio or a remote van and receive a mix-minus feed of audio and simultaneously transmit low delay, high-fidelity audio as they call the game from close to the action.

For 'mix from home' sporting events, where audio and communications is routed from a home studio, commentator program audio and their mix-minus feed can be easily routed to and from any location with a reliable cellular or Wi-Fi network connection.
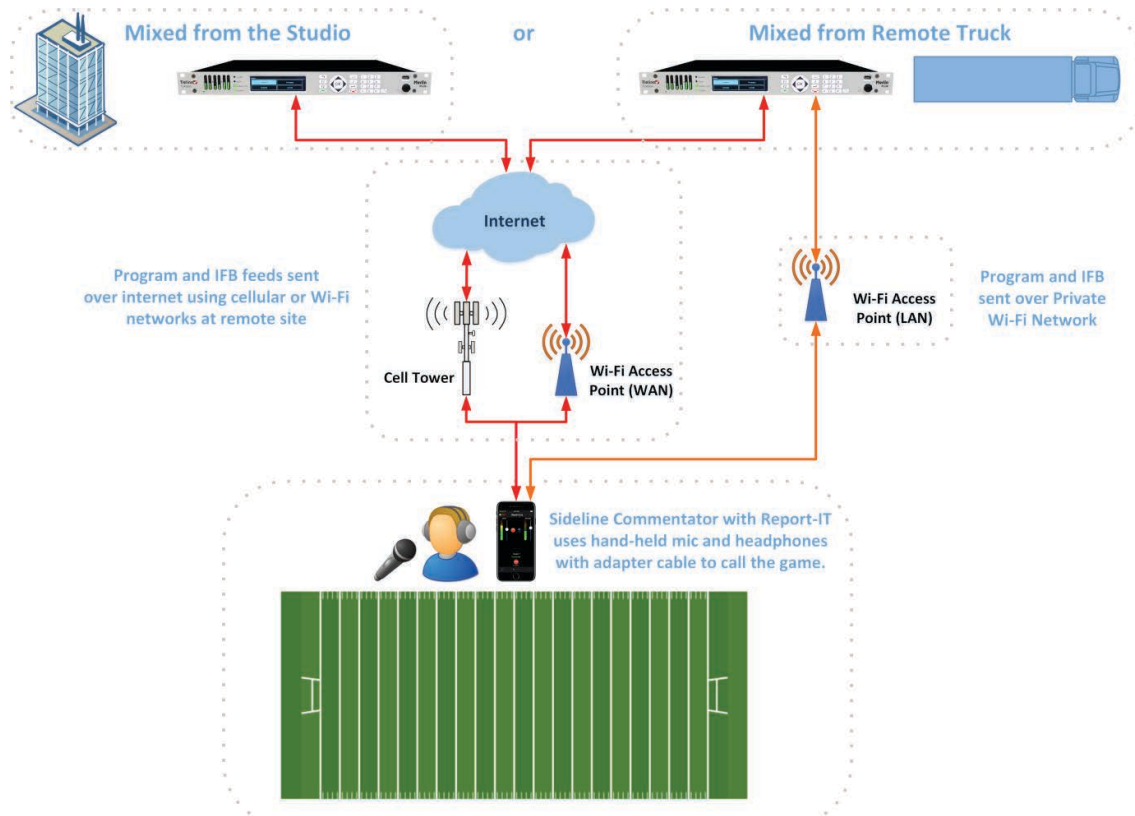

Figure 7: Sideline Commentary using Report-IT and Tieline Merlin or Merlin PLUS Codecs

Requirements:

- A Tieline codec at the studio or in the remote van. This feeds the commentator mix-minus and receives program audio transmitted from the sideline.
- Report-IT Enterprise app on the commentator's smartphone.
- Smartphone cable adapter, with an XLR mic connector for a dynamic mic, plus a headphone output e.g. Shure MOTIV MVi adapter, or iRig or similar.
- Optional headphone amp to increase gain in load environments.

Advantages:

- Portable and lightweight solution.
- Simple for non-technical announcers to use; launch the app and tap 'Connect' to stream crystal clear and high quality live audio. All settings are configured by an administrator at the studio, so no technical knowledge is required at the remote site.
- No need to purchase expensive radio microphones and IFB receivers for on-field sideline commentary talent at the venue.
- Connect using cellular or private/public Wi-Fi networks to broadcast live.
- Long battery life and external power banks can extend battery life.
- Use the Cloud Codec Controller to remotely connect and disconnect Report-IT, monitor and adjust audio levels, view connection link quality and adjust connection bit-rates.

# REPORT-IT FOR SIDELINE REPORTING WITH TIELINE VIA

Tieline's ViA remote codec has a touch screen digital matrix router which supports using Report-IT as a sideline commentary input source. In this mode, program audio from Report-IT can be mixed with outgoing commentary audio from ViA, to send a complete mix of commentary position audio and sideline commentary back to the studio.

To use Report-IT in this mode:

1. Connect ViA to a studio Merlin or Merlin PLUS codec to stream bidirectional mono or stereo audio. Note: the return path from the studio can be a mix-minus feed of studio program.

Figure 8: Report-IT used for Sideline Reporting using ViA
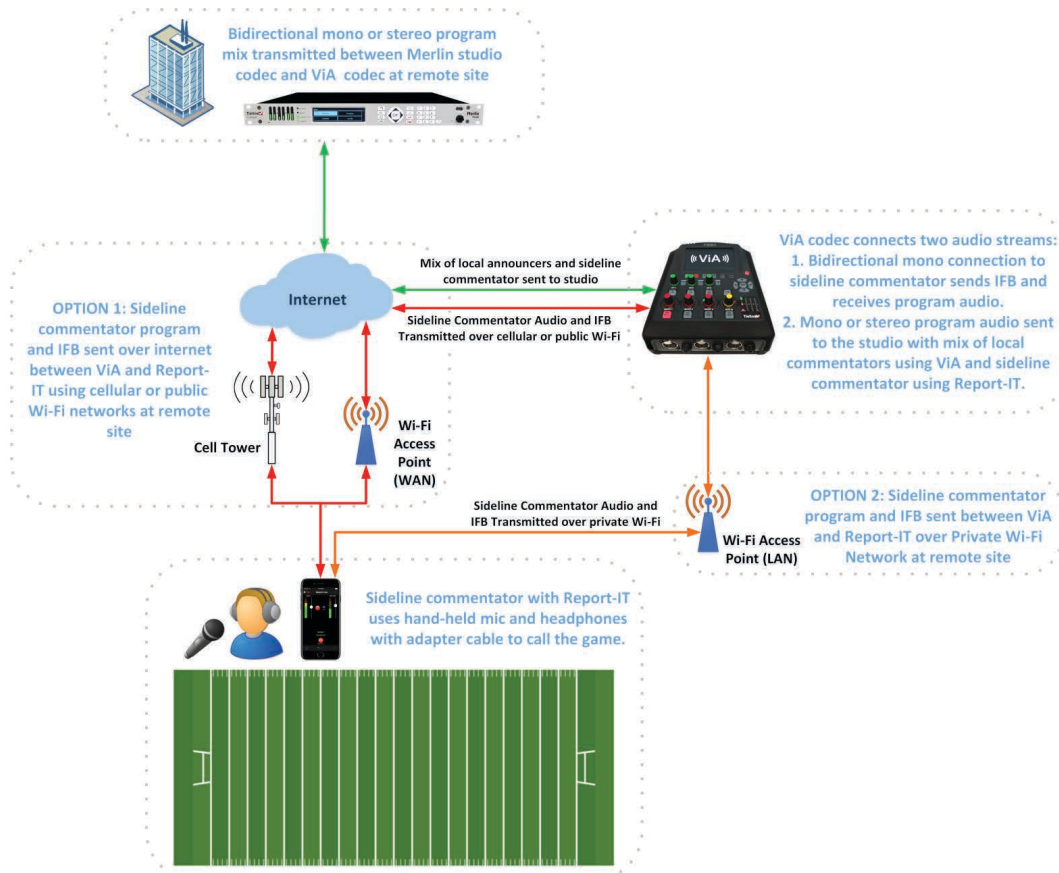
2. Create a mono audio stream connection between a sideline commentator using Report-IT to the ViA in a commentary position at a sporting event. Note: the ViA codec touch screen matrix editor can be used to create a unique mix-minus onsite. In the following example, encoder 3 in ViA is used to send mix-minus commentary audio to the sideline commentator using Report-IT. The sideline commentator's program audio is being routed to the commentator headphones and into encoders 1 and 2 using decoder 3.

3. Mix the sideline commentator audio with ViA commentary position audio and send a mono or stereo program mix back to the studio.
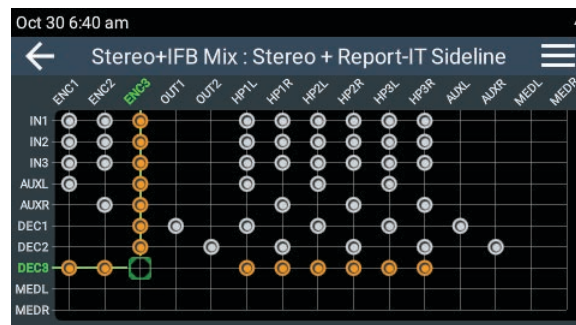
Figure 9: ViA Audio Routing screen

Requirements:

- A remote ViA codec and a Tieline codec at the studio which feeds commentator mix-minus and receives program audio transmitted from the remote ViA codec.
- Report-IT Enterprise app on the sideline commentator's smartphone.
- Smartphone cable adapter, with an XLR mic connector for a dynamic mic, plus a headphone output e.g. Shure MOTIV MVi adapter, or iRig or similar.
- Optional headphone amp to increase gain in loud environments.

Advantages:

- Portable and lightweight solution.
- ViA codec offers simple touch screen mix-minus and program routing at the remote event and interfaces with the codec at the studio.
- Report-IT is simple for non-technical announcers to use; launch the app and tap 'Connect' to stream crystal clear and high quality live audio. All settings are configured by an administrator at the studio, so no technical knowledge is required at the remote site.
- No need to purchase expensive radio microphones and IFB receivers for on-field sideline commentary talent.
- Connect using cellular or private/public Wi-Fi networks to broadcast live.
- Use the Cloud Codec Controller to remotely connect and disconnect Report-IT and ViA, remotely start and stop recordings, monitor and adjust input and record levels, lock and unlock controls and observe link quality.
- Long battery life and external power banks can extend battery life.

CASE STUDY: CROCMEDIA COVERS AUSTRALIAN OPEN GOLF WITH REPORT-IT

By George Biagioni, IT Director for Crocmedia in Australia

The 2014 Australian Open Golf Tournament was a watershed moment for Australian golf in bringing fans closer to the action. Crocmedia was contracted by Golf Australia to provide on-course and online radio coverage of the tournament… and so Australian Open Radio was born!

A special event license allowed Australian Open Radio to broadcast around the course using a local 5W transmitter.

Around five thousand VHF receivers were distributed to spectators by Golf Australia to follow all the golfing action live and it was also streamed online.

The commentary team of Andrew Maher, Mark Hayes, Mike Clayton, John Huggan, Martin Blake and Matt Cutler used iPhones with Tieline's Report-IT Enterprise codec application to report live throughout the event. Each commentator carried a small external battery charger power bank, so their phones would last a full day as they followed the various groups round the course.

Figure 10: George Biagioni, IT Director, Crocmedia

WheatNet-IP Integration

The iPhones with Report-IT connected to a Merlin PLUS codec with WheatNet-IP. This was connected to a VP-8IP audio processing blade and a Wheatstone IP12 WheatNet console. All audio stream routing was configured using Wheatstone's Navigator software and this was a breeze to configure.

Each announcer was sent an IFB mix minus and Mark Allen our studio host would call them in live. The producer could also directly notify each announcer when we were close to crossing to them. At any time there were up to three people reporting live as they followed each playing group. We even had live bidirectional conversations between two roving announcers from different sections of the course!

After the iPhones connected to the cellular network, Tieline's automatic jitter software measured prevailing network conditions and adjusted latency accordingly. At times total latency was as low as 80ms.

A Cellular Reporting First

We were definitely breaking new ground in Australia and perhaps this may be a world-first. I haven't heard of anyone using a similar configuration using smartphone apps and cellular technology to go live over 4 days.

Feedback was unanimously positive from everyone involved and the connections were very reliable throughout. Spectators and online listeners loved the coverage and from an engineering perspective we had very positive results. The host broadcast television crews had significant issues with their radio mikes around the course and I felt relieved to not have to search for clear RF frequencies, which can be a nightmare in some situations.

Figure 11: Mark Hayes reporting at the Australian Open Golf with Report-IT

Combining Report-IT with the Merlin PLUS WheatNet codec was a great way to cover all the action. It proved that an innovative application like Report-IT can successfully deliver high quality live broadcast audio.

Since the first year of AO Radio in 2014 we have continued to broadcast in the same way in each subsequent year.

Figure 12: Tieline's Merlin PLUS with Wheatnet-IP audio codec

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