



## AmberFin Application Note

# Integrating baseband video devices into file workflows

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### EXECUTIVE SUMMARY

Post and Broadcast organizations are seeing a rapid increase in file based acquisition and delivery. So, there's a need for cost effective and efficient file based working.

Software products using generic IT hardware (rather than traditional video and audio products) are growing rapidly in popularity, as their price/performance now offer practical and cost effective file based working.

However, not everyone can move from traditional hardware products to modern file based software products quickly. There are many reasons why organizations may want to extend the life of baseband products. This application note gives some basic example of how iCR can be used as an interface between file based systems and traditional hardware products.

## Background

There is a huge installed base of traditional hardware baseband video & audio products and traditional SDI infrastructure. Organizations who want to go file based may need to transition 'step by step'.



*Traditional Broadcast products are giving way to generic IT but the process will be gradual*

Some examples of traditional hardware users still want to fit into file based workflows include:

- Hardware video legalizers
- Hardware digital video noise reduction systems
- Hardware digital video restoration systems
- Hardware real time audio encoding systems

The user wants to process files 'on the fly' in a traditional hardware device as baseband video or audio, then turn the baseband signals back into files for delivery.

This requirement typically breaks down into four parts:

1. Incoming files need converting to video and/or audio
2. The video and/or audio need to pass through a baseband device for processing
3. The result needs to be converted back to files with a suitable wrapper.
4. The whole task needs to be controlled by a human or computer coordinator

## Partial solutions

There are many possible ways of playing files as video and then re recording them as files. In a Broadcast setting, in theory baseband server ports can be used. These may have a basic range of supported file formats. For very simple applications this can be made to work but this approach is inflexible and ties up server resources. In a Post setting, one common method involves using two non linear editing systems – one as a player and one as a record device.



*Using NLEs to integrate traditional hardware into file based workflow is possible but inefficient and unreliable.*

However in practice, using NLEs can be very labour intensive, slow and prone to operator error. Manually loading files onto a timeline, then playing out through baseband hardware, the recording the result on another NLE, then exporting files (possibly with an additional transcoding or rewrapping pass) is time consuming and clumsy.

With thousands of combinations of file formats and wrappers and no standards police, a more fully developed solution is needed. AmberFin iCR can fulfill this role.

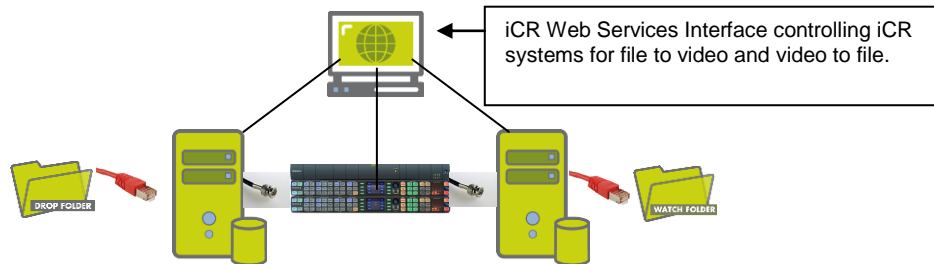


## The AmberFin Approach

The AmberFin iCR range includes a range of different products that provide 'file to video' and 'video to file' conversion. iCR products can be combined and configured to deliver:

- File to baseband video/audio input conversion software
- Baseband video/audio to file output conversion software
- User definable web services control application software

The user (or systems integrator) simply needs to source two Matrox I/O cards and two existing or new PCs to complete the package:



Workflow is very simple and easy to automate, if required. Incoming files are placed in a drop folder. The original files are played as baseband via the inline hardware device and captured in a watch folder as new files.

Some, most or all of the process can be automated, depending on the kind of tasks and the hardware involved. Some examples include:

- Off shift or overnight operations can be programmed as batch tasks.
- Automatic 'top and tailing' of content can be carried out, for example adding countdown clocks, black or test signals to content.
- Depending on the interface capabilities of the hardware device, settings can be changed on a per job basis, using the web services tool.
- End clients can be notified that their job is ready (or the job can be automatically delivered).

Optionally, more sophisticated workflows can be created. Some examples include:

- Multiple file based deliverables can be made from the original file with only one pass via the hardware device.
- Logos and text can be automatically added
- Content watermarking can be automatically added
- Audio track layout can be modified

In summary the iCR can offer great ROI by extending the life of traditional hardware, automating repetitive labor intensive processes and offering up to 24/7/365 machine utilization.

There are many other possibilities that your AmberFin representative will be happy to discuss. To find out more, contact

[info@amberfin.com](mailto:info@amberfin.com)