



# Case Study

## Ideal Systems integrate Bluefish444 supported workflows



Ideal Systems provides media and audio visual related integration services for the broadcast, telecommunication, government, education and enterprise industries, using the latest and greatest technologies including cloud services, software development, consulting services and live event production and operation.

Established in 1989, Ideal Systems has been operating for 29 years, mostly in Asia, and has completed over 300 projects and operates in 13 regional offices throughout Asia. One of their inherent strengths is being local in every almost every country in Asia, while offering international expertise due to their large number of diverse personnel from all over the world.

	<b>1989</b> Year Established	<b>300+</b> Projects Completed	<b>13</b> Regional Offices	<b>26</b> Awards Won
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Ideal focus on projects that utilize audio, video and data as a medium for a mix of industries ranging from broadcasters, newsroom and studios, media & production facilities, uplink and downlink facilities, and many more. They are able to provide complete end-to-end solutions, from initial consultation and systems requirement analysis, followed by gap analysis, system design, and procurement management, right up to system build, commissioning, handover and support.

## Meet just a few of Ideal Systems' Clients



## mediaproxy

### Media Logging

Ideal first came across Bluefish444 as a result of deploying MediaProxy systems in various projects across Asia. Ideal have installed MediaProxy primarily for logging off-air video and audio signal monitoring for regulators requiring advertisement verification.



MediaProxy has since evolved to incorporate extra toolsets, including IP and data monitoring, analysis and multi-viewer supporting multiple third-party integrations.

Bluefish444 have a direct OEM agreement with MediaProxy to supply Epoch video cards as high-quality baseband SDI inputs to MediaProxy servers. Ideal have deployed more than 250 logging channels based on MediaProxy with Bluefish444 hardware throughout Asia.

Updesh Singh, Director of Technology at Ideal Systems, says, “We have had an excellent experience with MediaProxy including Bluefish444 multi-channel SDI ingest. In MediaProxy we have found value in their ever expanding and evolving feature set and product roadmap. This, in turn, allows us to continually engage our clients with new features and workflows.”

Singh continues, “Bluefish444 offers a solid foundation for MediaProxy servers as the highest quality SDI video ingest, providing proven reliability and offering a good range of cards to fit various customer needs.”



Adobe® Creative Cloud



### Non-Linear Editing

When Apple announced the end of support for Final Cut Pro 7, Ideal decided to move their clients to a more robust and flexible cross-platform NLE environment, such as Adobe Premiere Pro.

Ideal found that Bluefish444 Adobe support is cross-platform supporting either Apple Macs or Windows workstations for SDI/HDMI NLE workflows. This flexibility enabled Ideal to repurpose many of their customer’s existing Apple Mac Pros, switching them from Final Cut Pro 7 to Adobe Premiere Pro.

The move to creating HD content brought about the need for uncompressed external monitoring from within the NLE. Ideal introduced Dell workstations running Windows OS to the market, integrated with NVIDIA Graphics cards, Adobe Premiere Pro and Bluefish444 Epoch | Neutron video cards for simultaneous SDI & HDMI monitoring outputs.

Ideal considered two other SDI video card manufacturers and did some head-to-head testing. The final decision was to go with Bluefish444 due to its stability, better quality and direct and quick access to Bluefish444 support when needed.

Updesh Singh comments, "Our first deployment was done around 2014/2015. The Epoch | Neutron cards provided a higher quality over the other card options and allowed the use of any bit-depth and resolution for source content. They were easy to install and setup. The entire turnkey solution provided a very stable editor that has worked seamlessly and without much fuss since, almost never requiring any support after deployment. The only support calls to Bluefish444 were for some Windows patching or software updates."



SYNAPSE  
CONVERTER



## Signal Conversion

Standard in most professional video workflows throughout Southeast Asia is the need to convert between video and audio formats. Ideal Systems, having had positive experiences with Bluefish444 Epoch video cards, decided to evaluate the Bluefish444 Synapse mini converter range. Synapse mini converters are designed for live broadcast environments, offering dual redundant input/output for SDI and HDMI in case of a failure of the primary source or outputs.

Ideal evaluated the Synapse HDMI120 for off-air signal monitoring, with HDMI being fed from set top boxes (decoders). Ideal confirmed that all audio channels from the decoder were passed through the SDI as embedded audio. The HDMI120 dual SDI outputs allowed Ideal to reduce the number of devices in the workflow, and in turn save on cost and complexity.

The first SDI output from the HDMI120 was fed directly to a multi-viewer to display the video, and the second SDI output was fed to an audio embedder that embedded different audio tracks and languages from a second or third decoder depending on the number of audio language tracks that were available for that specific channel. Ideal specified up to 3 x HDMI120 per set top box, allowing the operations team to monitor hundreds of channels in 3 different audio languages without having to view or navigate the decoder menu directly.



HDMI120  
HDMI → SDI



RANGE

Ideal specified the Synapse SDI110, converting from SDI to HDMI, to feed multiple large screen monitors for NOC, Master Control and Production Control rooms. The SDI110 offers dual redundant inputs, critical

for 24/7 monitoring in case of primary source failure, and an SDI loop preview used to feed an engineering maintenance room for secondary monitoring.

“We have deployed mostly the HDMI120 and the SDI110. Synapse mini converters offer the same quality and stability as the Bluefish444 video cards with some unique functionality that otherwise would require the use of multiple converters or other gear,” says Updesh Singh. “Synapse has helped to provide a much-needed reduction in complexity for ease of operations. A large SEA broadcaster has utilised hundreds of Bluefish444 converters due to some of its unique professional features as well as its reliability for 24/7 critical operation.”



## Live Production including Edit-While-Record

Bluefish444 offer IngeStore software as a free download, compatible with all Epoch video cards. IngeStore is used to capture up to 4 SDI video sources simultaneously and is commonly used in multi-cam and ISO recording, archive from tape and near live production via edit-while-record.



ingeStore



Ideal identified clients who want to ingest multiple feeds for edit while record that do not require the extra functionality or cost of more complex and expensive server solutions. Specifically, Ideal wanted a workflow solution to ingest multiple feeds directly to a storage subsystem such as NAS or SAN to make available the growing files for edit within a few seconds of ingest.

Ideal tested a few other brands and solutions for the same workflow. Some of these were cost prohibitive while others did not fit the complete requirements, had limitations on codec support or required some form of platform integration.

Singh comments, “We have not used IngeStore extensively except for test and demonstration purposes, but so far it has proven to provide a very reliable Ingest platform. We intend to connect a NAS system to IngeStore and some dedicated edit machines running Adobe Premiere Pro to access and edit the content within a few seconds of ingest. The IngeStore user interface is quite intuitive with features that are easy to find and use. IngeStore offers real time ingest and encode of all the broadcast grade codecs which is another plus. It provides the flexibility to create fast phased news, sports and entertainment”. He continues, “We believe IngeStore will eventually grow to support IP ingest allowing for the flexibility of remote editing on a network from SDI and IP sources. “



# Case Study



Adobe Creative Cloud



NewTek™



BRAINSTORM



drastic.tv

streamstar

## Mutual Partnerships between Ideal Systems and Bluefish444

Bluefish444 have forged extensive industry partnerships with many different software manufacturers throughout the breadth of the professional video industry. For an integration services business like Ideal, it is a great advantage to know that after having already qualified and successfully installed Bluefish444's quality, reliability and flexibility, the same video cards can be further deployed by Ideal, in other workflows and use cases.

"We already work with some of Bluefish444 software partners such as Brainstorm, Adobe, Avid, Newtek, and Vizrt among others. We are intending to evaluate Bluefish444 with Drastic Technologies for its VideoQC and 4K Scope applications, and to deploy Bluefish444 with Streamstar systems, as we own and use this software production tool for the Ideal Live production division," states Singh. He continues, "Over the years we have found Bluefish444 to be a very attentive manufacturer, and we have forged a great partnership with them. They have always listened to our comments and opinions, and this has allowed both companies to grow and develop coherently."



## Video Over IP, UHD and HDR

Over the past few years Ideal have been very focused on building both knowledge and integration technologies for the future broadcast studio and media industry. This includes Ultra High Definition (UHD), High Dynamic Range (HDR), Video Over IP, and Augmented and Virtual Reality (AR/VR). Bluefish444 KRONOS, the next generation Bluefish444 PCIe video, audio and data capture and playout card, covers all the aforementioned technologies and more.

Ideal systems are eagerly waiting demonstration and official availability of KRONOS video cards in order to assess the new technologies and markets that will be reached with this ground-breaking technology.

One of the unique benefits Ideal can see with the Bluefish444 KRONOS card is the ability for one solution to meet so many varied workflows, with SDI, HDMI and Video Over IP standards such as SMPTE 2022 and 2110.

Singh comments, “We are evaluating Video Over IP technologies, particularly with the incorporation of graphics in IP transports. The KRONOS range will fit well to transport IP standards such as SMPTE 2022 and 2110, and support for high frame-rates of 60fps and above with HDR. For some clients who want to use existing infrastructure with 4K/UHD, we could use this either with quad link 3G SDI or 12G SDI interfaces.”



**Updesh Singh, Director of Technology at Ideal Systems**