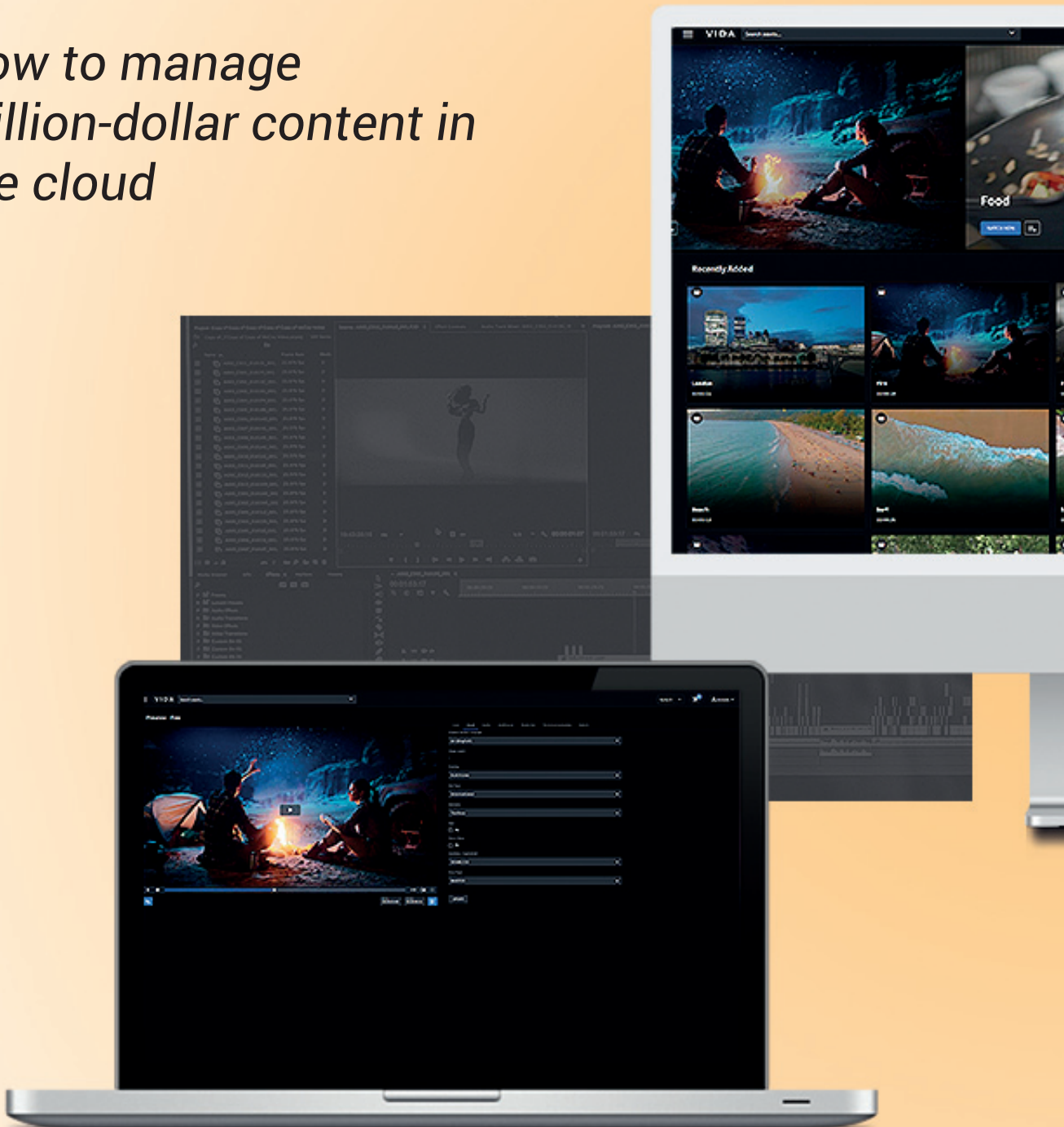




How to manage million-dollar content in the cloud





At TM Broadcast International we have been approaching the evolution of storage and content management systems in professional broadcast and VOD environments. As everything else in this industry, also content management systems are currently leaving behind the classic local infrastructures based on hardware to evolve towards technological models based on the cloud and software services.

To learn about this development first hand we have contacted VIDA, a company that offers content distribution and storage services on a cloud infrastructure. Its parent company is Visual Data, a company with many years of experience in professional media environments. Our contact was Symon Roue, Managing Director of VIDA. Here you will find all the details about this tool as well as the reasons why content management is evolving towards the cloud.

What is VIDA?

VIDA It is a cloud-native SaaS platform delivering efficiencies for managing, migrating, distributing and monetizing library content. It works as a content operating system. The solution runs in the cloud across multiple cloud providers and uses the latest tools and serverless multi-cloud infrastructure.

Serverless basically means that our application treats the cloud infrastructure as if it were a huge computer. It abstracts the requirements away from you.

Normally and as your system grows, you have to start up your server, put the operating system on it, load some compute, etc. You're always building servers or shrinking servers, starting up more storage and then shrinking it.

This system allows you to scale in depth in storage size, and compute on a totally dynamic basis as you're using it. It would be very easy for us to go from 1,000 users to 10,000



Symon Roue, Managing Director of VIDA.

or 100,000. The system would not be subject to any restrictions on the power of the service that needs to be commissioned.

VIDA streamlines media workflows and gives users control over their content in a secure, agile and central environment. The Software as a Service (SaaS) model flexes to fit business needs, offering a suite of features and capabilities including natural language-based clip searching and viewing, unlimited users,

as-is library migration, direct distribution to more than 500 partners and a "shopping cart" functionality to facilitate secure content purchases.

How was VIDA born?

We focus on media and entertainment because this is the industry we know inside-out. The VIDA team is entirely focused on developing this content operating system. However, we are part of a parent company called Visual Data.

This makes us more mature than a startup and gives us a more solid base to start from.

For more than 30 years, Visual Data has been managing content libraries, distributing TV shows and movies, and localizing them for broadcasters, in home entertainment, in movie theaters, and most recently in streamers. About two years ago, we decided to

create the VIDA content operating system. Mainly because we couldn't find any other software on the market that matched our vision of where the industry was going.

Technically speaking, VIDA has been in development for about eighteen months and officially at the NAB Show in April. In addition, we demonstrated it at The Media Production & Technology Show in

Olympia, London, during the month of May, and plan to showcase it at IBC this September. We already have some amazing clients onboarded including BBC Motion Gallery. VIDA is used to house their library of digitized television programs. If you make a documentary about Churchill, for instance, you can search the BBC library and find the clips, and place an order to receive those materials. That was our first launch customer.

Given the pendency, what options does your company bring to the paradigm shift in television workflows?

We had our busiest time. During the pandemic, the streamers — Disney, Netflix and Amazon— needed to get content onto their platform at an accelerated rate because more and more people were subscribing. At the same time, production itself was at a standstill. That caused a lot of customers to come to their catalogues looking for titles they had unreleased on their platforms. We had one of the busiest times in



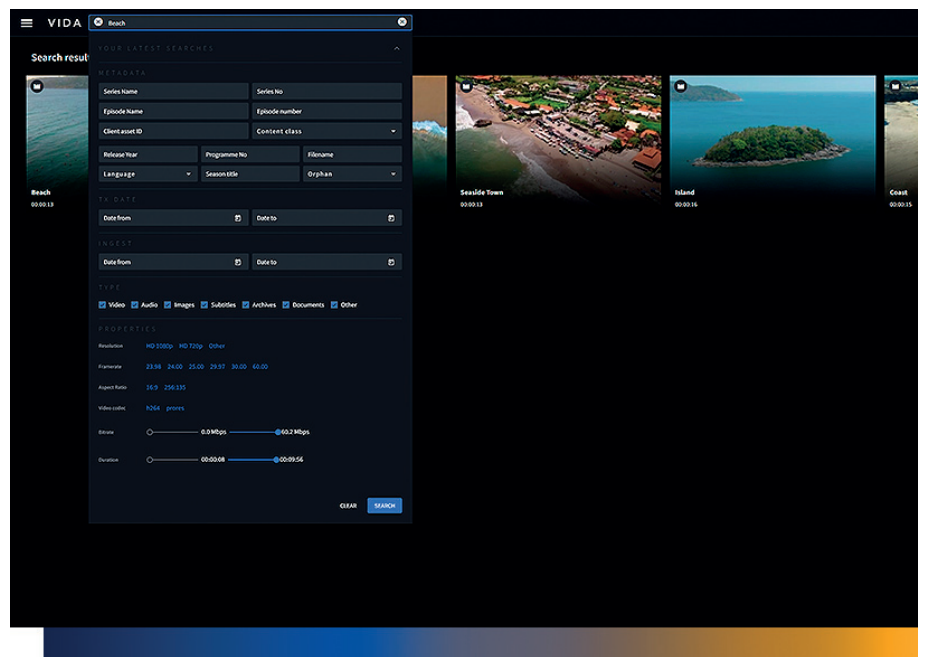
our company, working with catalogue, processing it, localizing it and delivering it.

VIDA can be deployed on Amazon, right? Can it be deployed on other clouds?

Computing is predominantly on Amazon, but we use storage from various cloud systems for VIDA. These are different customers. This is necessary because there are different economics with different cloud providers, and some customers already have a preferred relationship with certain cloud providers.

What are the main reasons for having a preferred cloud provider?

It depends on the type of library you have. If your library is large and very slow moving, you might use technology like Amazon Deep Glacier for your content storage because it's much more economical, but the restoration costs are higher and it takes longer. Other customers have libraries that are



Deep search across multiple libraries.

very transactional. They never really know what they are going to sell next. Speed of execution is really important, so they need to have their content in hot storage. The content is immediately available. It's always online. When we onboard a customer, we profile their preferred cloud storage, and then VIDA connects to those cloud providers.

How do you integrate with the different cloud providers?

If your library is stored in Azure Storage, for example, we would connect Azure

to the VIDA software with and index. We use Dolby Hybrik to parse the assets and technical metadata, perform automated QA and create the proxy files.

What services does VIDA offer?

The first thing it offers is the management of your content in the cloud. It offers unlimited user and it allows for a lot of collaboration between teams. Traditionally, for a content distributor, the marketing team might have a few systems to manage marketing collateral, package shots, movie

information, banners, and artwork. The production department manages, among other things, scripts, cue sheets and metadata about the program. Then there is the materials team, the actual master files, localized dubbing versions, subtitles, etc. VIDA allows all these teams to work together on one platform where they can collaborate, view each other's materials, share them and deliver them.

The interface is built in a familiar format, similar to Dropbox, but the system is a custom built platform for media and entertainment industry files. Capable of handling anything from 4K HDR files to Word documents, all assets are easily managed and shared between people.

We also have a library system that allows the content owner to manage their collaborators and suppliers. They can have one company do the dubbing, another do the subtitling, and so on. From the system, the VIDA user can invite a supplier to upload an asset to the

platform. All this also means it's easier to monitor your contributors.

When assets come into the system they go through a series of quality control processes that are automated, but we also complement it with the expertise of our team who supervise the work. Then when they have done their quality control process they can store it in the system.

The material delivery system is based on a "shopping cart" solution. If, for example, a user needs access to scripts, cue sheets or film images, they can select them in the interface as if they were shopping online. The user presses the "buy" button and the files are delivered to the recipients that have been added to the system.

We also offer the tools to work as a robotic e-commerce storage. For example, if the user wants to send an asset to a location, let's say a German broadcaster. VIDA knows that it needs a specific video format, that it needs particular dubbing tracks

and subtitles. VIDA has that capability because it is onboarded with the broadcaster. You don't have to search for the files individually, build a package and send it to the destination you need.

And let's not forget the principle, once the content is localized, the VIDA platform allows you to transcode, transcribe, translate, deliver, share, collaborate and all those other things that the cloud gives us.

What are the advantages of cloud versus on-premise installations?

I would say speed of execution. You can do huge jobs or small jobs in parallel at the same time, whereas on-premise, you have a certain bandwidth, and after that everything becomes sequential. I think that's a key aspect.

Human resources are also more optimized with a cloud infrastructure. In an on-premise installation, you always need to have extra staff to meet any need. However, cloud

infrastructures do not need to have multiplied human resources. Not to mention downtime. In local installations, you sometimes need to stop the system to update and correct certain things. They also have a certain risk of crashing. The cloud is operational 99.99999% of the time.

This operability also means that, in a traditional set-up, if a sales manager calls late on a Friday afternoon and says that they have to send content to a customer who has just closed the deal, this task will not be completed until the following Monday. By contrast, in the cloud this task could be accomplished instantly because that customer, with a system like VIDA, would be able to access the content themselves. It allows working 24 hours a day.

How does the business model work?

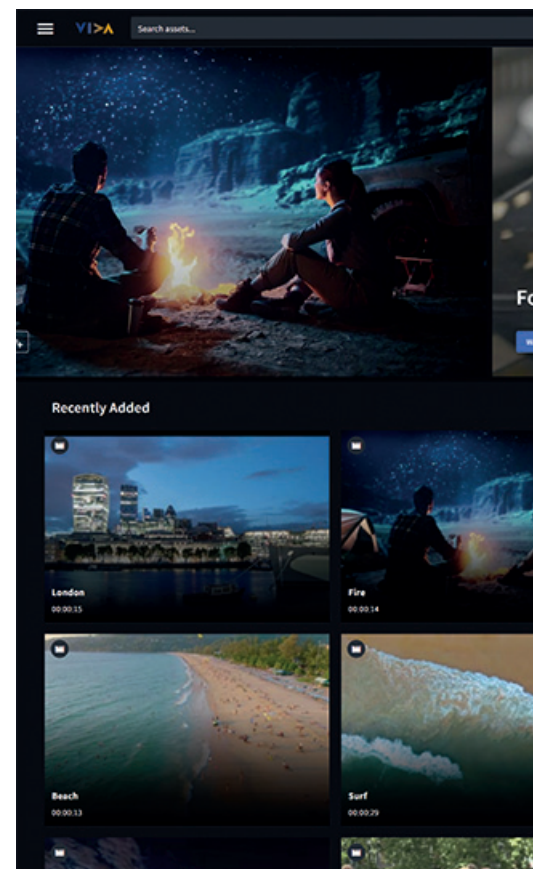
It is a subscription model. Using the cloud, of course, has its costs.

Many years ago we stored

very large video and film libraries in buildings. Then we had to pay rents and also acclimatization. Back then, it was associated with costs because you had to take care of it. Now it's the same thing, it also has costs associated with it. You simply shouldn't put your archive in an old garage with a leaky roof.

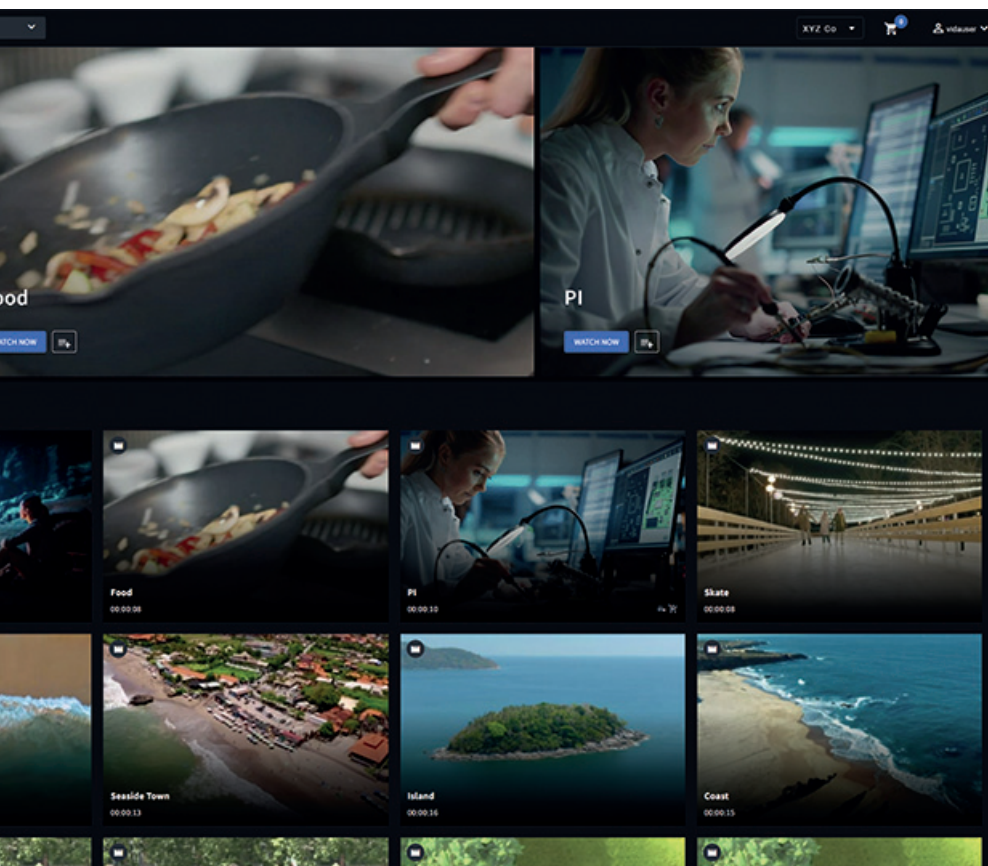
There is always the possibility of creating your own data center, though. You need a robust LTO system. It has to be dual-powered because you always have to be able to get the content at any time within a short period of time. You got to have a team of technicians. You got to have air conditioning. You've got to have resilience in your infrastructure, and you got to have a very powerful Internet connection. All this has a cost associated.

The same goes for the cloud. Microsoft, Google, AWS, they all have their own data centers. But there's another consideration to keep in mind. They run the data centers much more efficiently and more



environmentally friendly than we ever could.

I think there's always a cost associated with managing the value of intellectual property. It's worth billions, so the cost of storing it securely is a big part of it. You can do this in huge and very expensive on-premise facilities, or you can rely on technologies like the cloud that offshore and facilitate this task in a very secure way. For example, at VIDA, we always make three copies of every piece of content. This is an



production, we will be more into integrations with other systems, but for now we want to remain focused on our clients' core needs.

How do you secure your content and service?

We have several layers of security. Our multi-cloud storage means content has an added layer of backup and security. We also use Office 365 and Google single sign-on, which protects access to the platform. Users are invited into the platform and then required to identify through a two-factor authentication. Users can be given specific types of access within the system to limit content exposure. ◆

important thing to keep in mind.

Is there a possibility to integrate the VIDA system with a cloud editing program?

Yes. Although we have already done proofs of concept relating to this, we have not yet implemented it for any clients. We can integrate the Adobe Panel into VIDA for example.

Do you have plans to integrate more of these tools into the platform?

At the moment, we are mainly focused on TV and film distribution. When we get more into TV

Cart checkout and delivery.

