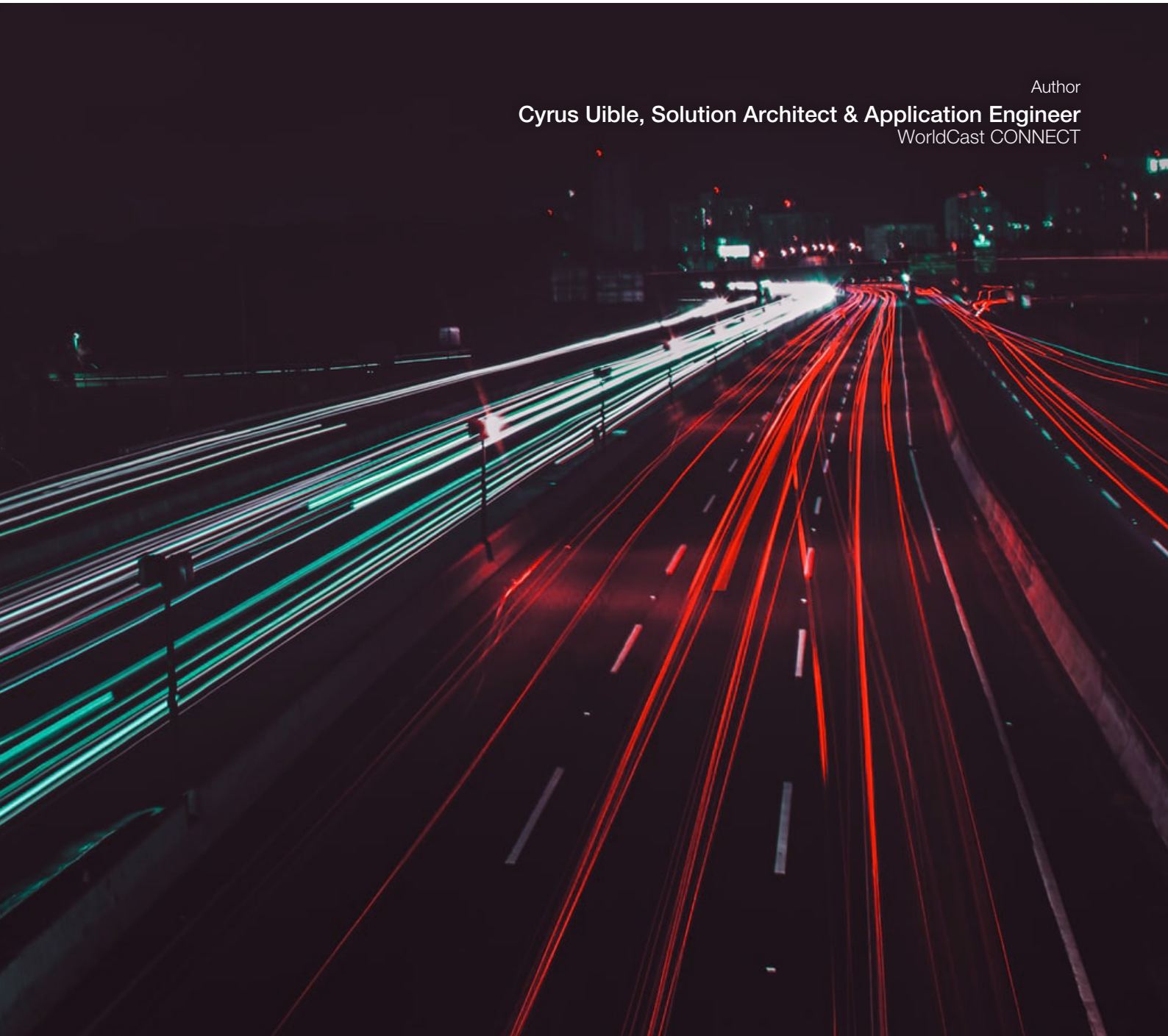
CONNECT
WORLDCAST GROUP

SOLUTION BRIEF

Why “Open” Network Management Systems are Essential for Media Organizations

Author
Cyrus Uible, Solution Architect & Application Engineer
WorldCast CONNECT



In today's media landscape, the management and distribution of content is an integral part of any organization's success. However, with the increasing complexity of media networks and the constant demand for content, traditional network management systems may no longer suffice. This is where open network management systems come into play.

When it comes to choosing a network management system (NMS) for your organization, one of the biggest fears or risks that customers face is that the system they buy today will become obsolete or technologically irrelevant in a short period of time; especially considering that an enterprise or small commercial grade platform might cost 10 - 15% of an overall project. These customers know that in the long run these types of management systems will save their organization enough time and/or revenue to make such a purchase an absolute requirement, but they still want those investments to last the entire technological cycle and ideally even grow into the next. Having an NMS that keeps up with the changing landscape for ten or more years is the goal, and the “openness” of Kybio is how you can get there.

In this article, openness in network management systems refers to the use of “open” standards that allow for greater flexibility, interoperability, customization, and scalability. It provides media organizations with a powerful toolset that can help them optimize their networks, and integrate with existing systems and technologies, and avoid vendor lock-in.

CONNECT
WORLDCAST GROUP

01

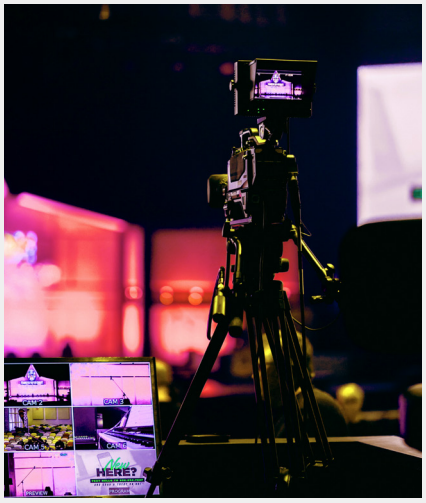
Support for "Open" Protocols

You could also call this being protocol agnostic. The NMS needs to support ANY legal type of IP communication, SNMP, REST API's, telnet, ssh, etc. Even in cases where there might be legacy non-IP-capable equipment, there must be a way that a gateway device can be used in between to support the IP to serial or IP to GPIO communication. This openness will allow customers to be able to monitor any device using any communication protocol long into the future.

The question then shifts from "What protocols does my NMS support" to "Does this equipment / virtual device / software service support ANY kind of remote communication?"

What about custom or propriety protocols? Not a problem as long as there is documentation and or case examples to study and test with.

What about security concerns? From our perspective, we recommend that all communication be as secure as the end devices or systems will allow. We always have and will continue to support the most up-to-date security protocols in all of our drivers.



02

Support for "Open" On-Premise Hardware

This means Kybio can run on almost anything. Underneath the hood so to speak, Kybio runs as a containerized docker application. This not only has significant security advantages but it also lends itself to making its underlying deployment hardware (the server it runs on) a commodity decision. Any commercial server will do. And because Kybio runs inside docker it means that in effect it can run on any OS, though we always recommend an LTS (Long Term Support) version of Ubuntu/Debian; this takes the risk of buying the wrong kind of server out of the equation. Kybio doesn't require any particular manufacturer. In fact, what we have seen in the field is that Kybio typically outlasts the hardware it is running on. Moving it to an affordable server is then an easy, straightforward process with little to no interruption to a customer's operation.

Another key benefit is the ability to integrate with existing systems and technologies. By using an open NMS, media organizations can avoid vendor lock-in and ensure that their networks can adapt to changing business requirements over time. This allows them to leverage the latest technologies and features without having to completely overhaul their entire infrastructure.

Kybio is pure software. Run it on any hardware you want as long as it has enough horsepower to provide the performance and experience you want. Of course, we have documentation for those specifications available upon request.

CONNECT
WORLDCAST GROUP

03

Support for "Open" On-Premise Virtual Machines

Kybio can run inside a Virtual Machine (VM) on any commercially available virtualization platform. Hyper-V or VMware for example. If customers are currently using a particular virtualization platform, it's fine, Kybio will run on it. If they change to another vendor in the future, it will be fine, Kybio will support it. There is no risk here again because Kybio does not tie its customer down to any one virtualization platform.

04

Support for "Open" Cloud Providers

Just like the on-premise virtual machines, Kybio can run inside a cloud-based VM on any modern cloud provider. AWS, Google Cloud and Azure to name a few. The fact that Kybio is already running as a docker container makes deployment in the cloud a near automated process. In fact, using Kubernetes, we have demonstrated how a new Kybio instance can be completely deployed automatically in a number of minutes.

There is no risk here for the long-term choices of the customer. Install Kybio now in a private cloud? No problem. Move it later to AWS? No issue. Move it again to Azure? Done.

Kybio can adapt to both your organization's technical requirements and the industry's advancements seamlessly. This is why we can continue installations with inline upgrades for literally decades.

05

Support for "Open" Network Design

Running Kybio in your on-premise data center? Supported
Running Kybio in the cloud? Supported
Running Kybio as a hybrid? Supported
Running Kybio without any internet? Supported
Running Kybio for a single NOC? Supported
Running multiple regional NOCs with a super NOC overseeing everything? Supported

We have built Kybio in such a way that we have yet to encounter a network design in which it cannot operate effectively and easily without having to jump through a lot of technical hurdles. Using Kybio's included EdgeBot technology allows this kind of modular and flexible design.

Customers don't need to ever worry about a network redesign. Kybio can adapt as required.

06

Support for "Open" Cyber Security

Our mindset here is that security must always be at the forefront of our installations. Supporting HTTPS and multi-factor authentication is standard out of the box. All communication between any Kybio server and client is secure and all communication between Kybio and the devices it monitors can be as secure as the device permits.

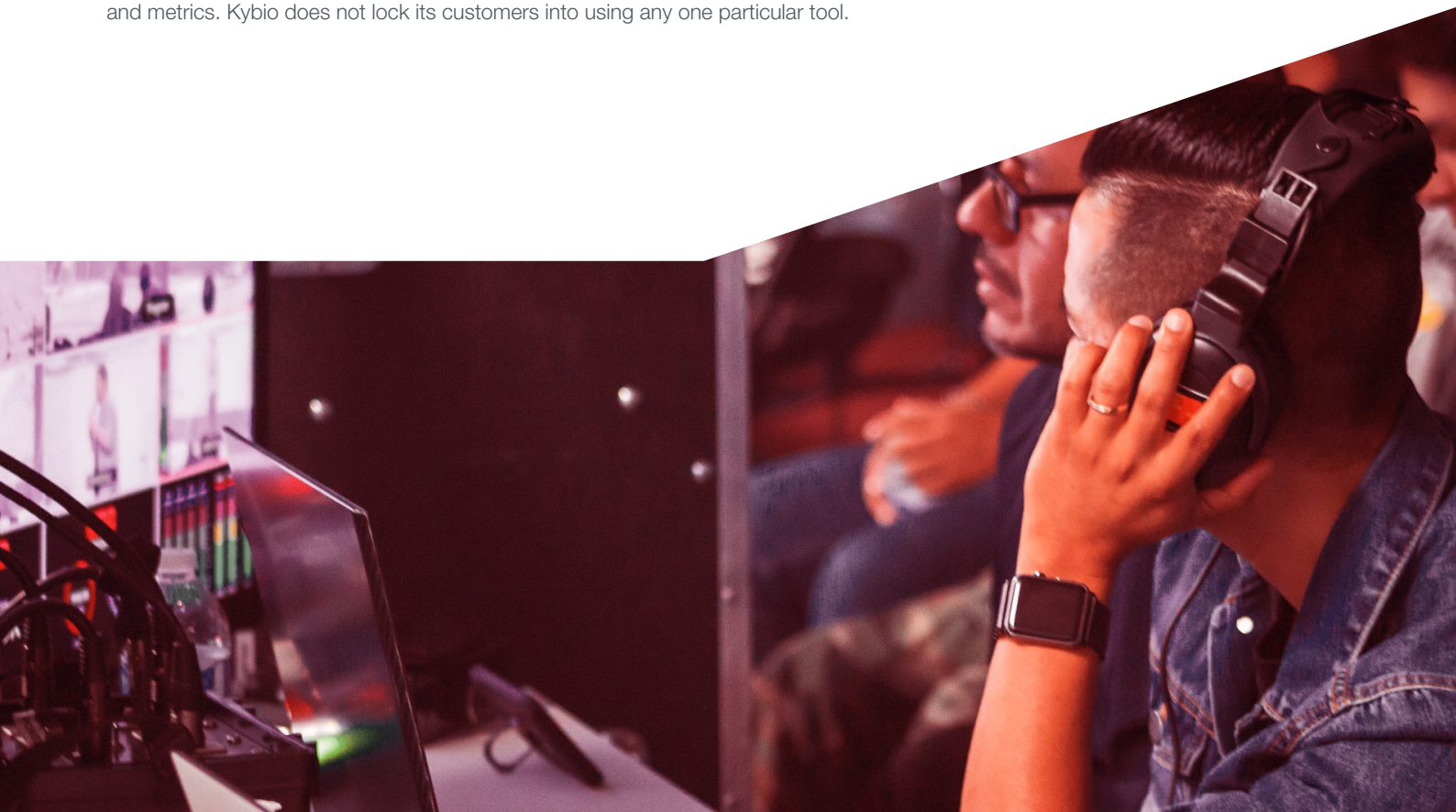
07

Support for "Open" Visual Design

Anyone who has ever seen a Kybio demo or promotional video has probably noticed one of Kybio's most well liked features: the GUI. It's not only pleasing to look at, but simple and intuitive to learn and use. An integral part of this experience is the ability to use SVG (Scalable Vector Graphics) files for the visual diagrams.

SVG's can be created in most major diagramming products such as Visio, Draw.io, and LucidChart. They all support SVG exports. But even these may become soon less important as Kybio will support creating and designing visual diagrams directly in the client interface, starting in Kybio version 5.

The point is that customers can design any visual using any tool, and display that diagram inside Kybio, enhanced with Kybio statuses and metrics. Kybio does not lock its customers into using any one particular tool.



CONNECT
WORLDCAST GROUP

Summary

In conclusion, open network management systems are essential for media organizations looking to optimize their networks in an increasingly complex, demanding, and ever-changing landscape. By leveraging "openness" they can achieve greater flexibility, interoperability, customization, and cost savings. As the media landscape continues to evolve, open network management systems will become increasingly important for organizations looking to stay competitive and deliver the best possible experiences to their audiences.

Kybio's purpose, therefore, is to bring value to its customers for the long term and to remove the anxiety and risk of a changing technology landscape. At the end of the day the reason why Kybio will typically outlast the hardware it runs on is based on our commitment to being open to change.

It is said the only thing we can count on is change. Kybio's customers are always ready.

Ready to improve your media monitoring? Getting set up with Kybio is easy, takes only a few minutes, and your first 30-days are FREE.

Request a free trial

HEADQUARTERS
20, Avenue Neil Armstrong
33700 Mérignac Bordeaux-Métropole FRANCE
+33 533 890 500

U.S. REGIONAL OFFICE
19595 NE 10th Avenue Suite A
Miami, FL 33179
USA
+1 305 249 3110

VISIT OUR WEBSITE:
www.worldcastconnect.com