

White Paper

The Publisher's Dilemma: How to Reach Your Customers in a Multi-Device World

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www.signalvp.com

How to Reach Customers in a Multi-Device World

I: Introduction

The ever-changing content landscape

The world's digital content landscape is quickly expanding. Rich media supplements work, connects people to our social networks and provides entertainment. The more content fills viewers' lives, the more they expect bigger, better, and faster access to it. From PCs and tablets to smartphones, today's individual is hyper-connected to more than one device. At their desks or on the go, viewers not only desire rapid access, but they expect a dynamic and reliable viewing experience with ever-evolving content.

The publisher's dilemma

In this content-heavy world, every organization is in the publishing business. Whether you are a university, a media supplier, a corporate office or one of the many businesses in between, you need to get content quickly to your employees, sales team, clients and beyond. Your content must not only be delivered and viewed on today's ever-changing roster of devices, but it must be secured so it doesn't go beyond your intended recipients. So which distribution methods do you use? Do you rely on third-parties (like online channels) to manage and distribute your content, or do you rely on in-house technology (such as FTP file sharing) to take on the publishing and distribution workload? How do you adapt to the expanding media landscape to stay ahead of content demand? How do you efficiently handle security across many content types, devices and platforms? This is the 'publisher's dilemma'.

In this paper, we address the most common problems surrounding how content is published today and uncover a solution to the publisher's dilemma—an innovative online content publishing platform that provides complete ownership of secure, dynamic content, enabling subscribers to easily access content, regardless of device and bandwidth capabilities without putting the business at risk.

As a publisher, you need a universal online publishing platform that allows you to:

- Get content to viewers the way they want it, where they want it
- Give viewers a rich viewing experience anywhere, anytime
- Publish and secure, dynamic content the way you want to
- Be assured your content security and policies remain in effect after content is published
- Know your subscribers

According to the Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2010-2015, two-thirds of the world's mobile data traffic will be video by 2015. Mobile video will double every year between 2010 and 2015.

II. What's Wrong with the Way Publishers Distribute Content Today?

Today's platforms curb the viewer experience

In today's content delivery paradigm, most platforms rely on a pull model—publishers and subscribers of content are required to take manual steps to distribute, view and download content from an internet-based location. For example, publishers upload content to consumer-oriented sites (YouTube, Dropbox, YouSendIt, or even Facebook) or to existing enterprise content management tools (ECM, DAM, WCM, SharePoint or FTP sites). With these platforms, viewers must download or stream content to their device of choice. Due to a reliance on manual interactions and a robust Internet connection, the pull model can significantly hinder the subscriber's experience.

First, the subscriber must be online, which forces dependency upon bandwidth. Second, they have to remember and enter their login credentials. Next, in order to view the content, the subscriber may need the appropriate native content viewer installed on their device, or if a unique viewer is not required, wait for content to download. Downloads can take a long time, and when the content arrives, it does not always display in the right format for the viewer's chosen device.

Finally, once content is successfully accessed, the subscriber does not always know whether they have the most recent version, often forcing them to search out updates and obtain new files. Any one of these interaction points can be disrupted by technical and subscriber errors, negatively impacting the viewer's experience with a publisher's content and creating an unreliable, one-dimensional, stagnant interaction.

Today's publisher lacks total content control

Publishers are rarely able to maintain full control of their content. The challenge is to maintain control not only during viewing, but also in-transit and at rest. Most of the content delivery methods available today only tackle part of this task. For example, asset management systems are great for securing content while it is stored in the system, however once a viewer has downloaded the content to their device, a publisher has no control over the viewer's ability to intentionally or unintentionally distribute that content. Current methods also do not support device fragmentation. While some publishing tools are good for delivering content in a single file format, that capability does not always span across other content applications—each file format relies on the security rules that are built into its native application.

The content publishing lifecycle:

Ingestion

Protection

Publication

Consumption

According to the U.S. Commerce Department, intellectual property theft is estimated at more than \$250 billion and costs over 750,000 jobs annually. The International Chamber of Commerce estimates the global fiscal loss to intellectual property theft is more than \$600 billion per year—and rising. For example, Microsoft's Active Directory Rights Management Services do not provide protection for non-Microsoft applications or file types.

Source: Smallwood, R. (May 28, 2011). Securing documents in the WikiLeaks era. Retrieved from <http://www.kmworld.com>.

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The worldwide smartphone market is forecast to grow 55% year over year in 2011 as a growing number of users turn in their feature phones for more advanced devices. According to the International Data Corporation (IDC), vendors will ship a total of 472 million smartphones in 2011 compared to roughly 305 million units shipped in 2010. “End-users are becoming more sophisticated about what kinds of experiences are offered by the different operating systems.” - Ramon Llamas, senior research analyst with IDC’s Mobile Phone Technology and Trends team

Source: IDC Press Release. (June 9, 2011). Worldwide Smartphone Market Expected to Grow 55% in 2011 and Approach Shipments of One Billion in 2015, According to IDC. Retrieved from <http://www.idc.com>.

Consumer-based online content sharing and delivery models create even more challenges. Not only is the enterprise publisher limited to a few popular sites for effective content distribution, but more importantly, they do not own the delivery channel for their high-value content. Their ability to tailor policies to meet varying business objectives is significantly limited. If publishers want to secure or even monetize their content they must either trust that those with access to the content won’t misuse it or rely on a third-party channel’s rules and regulations to not only apply those policies, but to maintain viewer relationships and provide usage analytics. Similarly, when viewers interact with the monetized content, they are essentially interacting with the third party platform, not the publisher directly.

Device and platform proliferation strains publisher resources

While the variety of devices available today provides unparalleled convenience for viewers, they present logistical and technological issues for publishers. Today’s publisher must not only focus on publishing to the desktop environment, but to portable devices like smart phones and tablets. These portable devices not only differ in terms of the technology that they are built on, but also on their operating systems. To further compound the issue, various device manufacturers impose even more nuances to differentiate one device from another. This means that a publisher must determine how to reliably and securely deliver rich content to all device types operating on all technologies and all platforms—a constantly changing list of devices, each of which can require significant time and resource expenditure to support.

Supporting these new device platform has changed from an option to a requirement, since they are being used by a large and growing share of publishers’ end users. IDC forecasts that in 2012, it expects worldwide tablet shipments will reach 106 million units¹.

In order to ensure successful content delivery across the wide variety of devices and platforms, transcoding must occur. Transcoding is the process of converting a media file or object from one format to another, or tailoring media to the unique constraints of mobile devices and other products that have smaller screen sizes, lower memory and slower bandwidth rates². With today’s traditional publishing approaches, transcoding content often occurs manually, which can be a redundant, time consuming and highly-technical process.

For example, if content needs to be delivered across Windows PCs, Mac PCs, Android tablets, and iPads, the publisher has to understand

¹ IDC Press Release. (March 13, 2012). Media Tablet Shipments Outpace Fourth Quarter Targets. Retrieved from <http://www.idc.com/getdoc.jsp?containerId=prUS23371312>.

² <http://www.webopedia.com/TERM/T/transcoding>, Retrieved June 22, 2001.

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the acceptable minimum screen sizes, resolutions, bitrates and so on for these four different target devices. In addition to knowing the appropriate specifications, publishers have to manually initiate the transcoding of their content into the right formats. For the above four devices, the transcoding process would have to be done four different times. Additionally, if these processes are not done well, viewers will have a low-quality experience with a publisher's content and brand.

Signal Online Publishing—Benefits for Publishers

- Streamlined solution—a push model that is capable of leveraging existing technology investments and complements existing workflows
- Security capabilities support a variety of existing business models
- Capitalizes on efficiencies of online content publishing and delivery
- Flexible deployment options: SaaS and on-premise
- Can be tailored for a variety of industries and applications
- Analytics and administration management maximize direct relationship with viewer and content effectiveness

III. A solution to the Publisher's Dilemma

Publishers need a flexible solution that is designed to answer the specific challenges at each stage in the content lifecycle. An online content publishing and distribution model that enables publishers to consistently deliver a secure, dynamic and superior viewing experience—regardless of viewers' Internet connectivity, device type or platform—will give businesses what they need to stay abreast of the content explosion.

Rimage Signal Online Publishing™

Rimage Signal Online Publishing addresses the inefficiencies facing publishers, picking up where current delivery methods leave off. It is an end-to-end online content publishing platform that automatically transcodes, secures and delivers rich content to a variety of devices and platforms without online dependency for accessing or viewing content. With the Signal platform, publishers have a secure, smart and simple way to maintain control of premium content and ensure a reliable, secure, and measurable viewing experience for the subscriber—all while maintaining existing workflow and supporting business objectives.

The screenshot displays the Signal Publisher Portal interface. At the top, there's a navigation bar with tabs for Channels, Content, Subscribers, Policies, Categories, Dashboard, Admin, and Support. The main area is divided into several sections:

- Channels:** A table listing various channels like 'About Signal', 'Executive Communicat...', 'Filters - Lesson 1', etc., with columns for publication date, files, and subscribers.
- Channel Details:** A form on the right for editing channel information, including name, description, thumbnail URL, and store URL.
- Content:** A list of content items with their respective file names and formats (e.g., Apple Macintosh, Windows).
- Subscriber:** A list of subscribers with their email addresses and device information.
- Policies:** A section indicating that there are no policies for this channel.

Figure 1: The Signal Publisher Portal enables publishers to automate the direct delivery of content to subscribers.

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An automatic and secure content delivery model

Signal Online Publishing is based on an automatic ‘push-based’ content delivery model. While it utilizes the most efficient qualities of online content publishing, it does not rely solely on internet connectivity for content viewing. Content is published through the Signal platform and automatically pushed to the subscriber’s device(s), where it is directly stored.

The Signal platform’s unique Digital Rights Management (DRM) technology enables publishers to secure content at all stages of delivery and access—in transit, at rest, and during access or playback—without draining resources or requiring publishers to double as IT experts. Because Signal publishing can automatically convert content to a secure, universal file format (.s2g), it is viewable on any device that has the Signal Subscriber Application, and the DRM is persistent across many different content types, file formats, platforms and devices.

After securing the content with Signal DRM technology, publishers can set security access and usage policies that persist with the content throughout its entire lifecycle, no matter where content is consumed. Publishers have total control over content, even after publishing. For example, content access can be granted or extended if a subscriber’s rights have expired, without having to resend the content. Content access can be revoked if the subscriber’s status or rights have changed or if the publisher feels the content is no longer accurate or valid. On the subscriber side, Signal technology maintains awareness of a subscriber’s status and rights, simplifying access to current and updated content for the subscriber without compromising security.

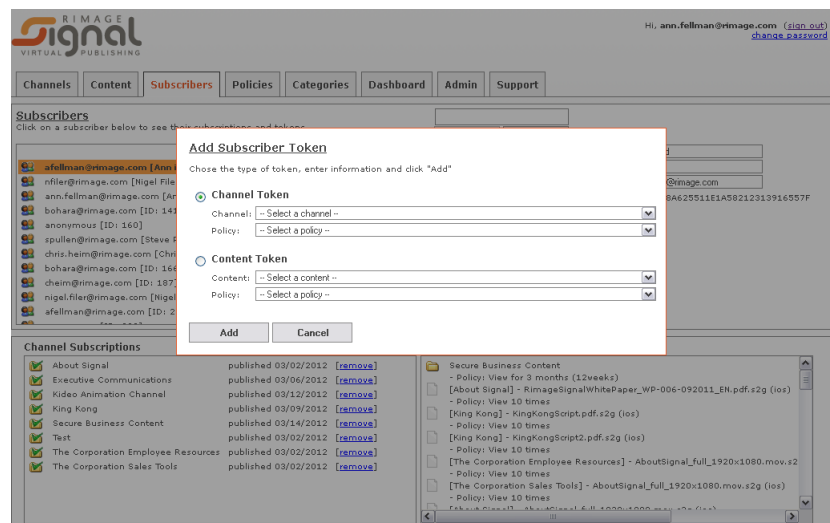


Figure 2: From the Publisher Portal, publishers can grant or extend access to content through the subscriber management tab.

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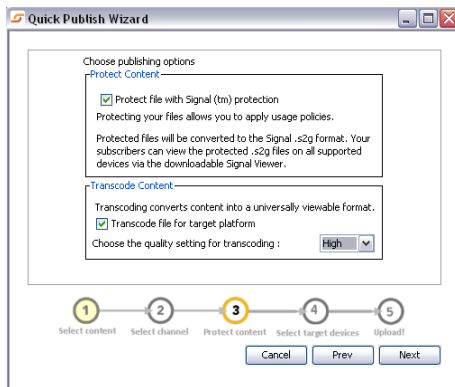


Figure 3: Signal Publisher Wizard streamlines security and transcoding.

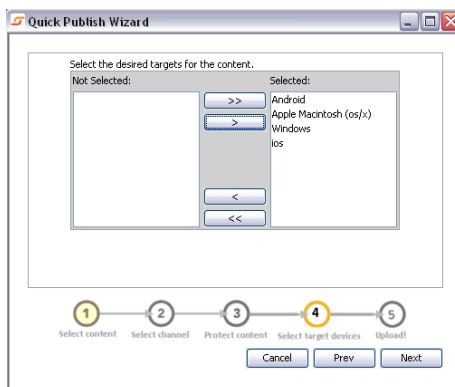


Figure 4: Signal Publisher Wizard assists in device output type selection.

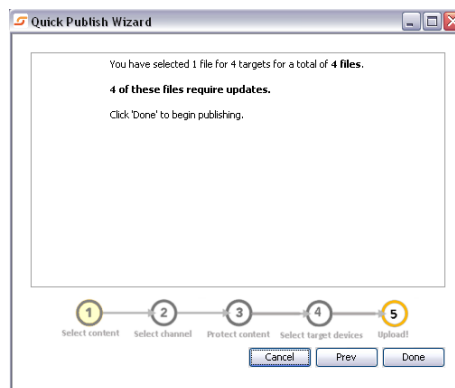


Figure 5: Signal Publisher Wizard automatically secures and transcodes content for multiple formats in a single step.

Streamlined transcoding and publishing

When publishing content for access on a variety of platforms and devices, proper transcoding is essential for delivering a high quality experience. However, today's transcoding workflows can be a drain on publishers' limited resources. Signal Online Publishing addresses this issue by automatically transcoding content for a variety of devices and platforms in a single step, minimizing redundant resource-intensive and complex processes and supporting subscribers' multifarious viewing habits.

Remember the four different transcoding steps for four different devices? Signal technology automates and combines these high-tech, time-consuming processes into one step for all devices. Through a single application in the Signal platform, publishers invoke the ingestion and staging of content once for delivery to multiple devices, platforms, and output formats, streamlining the most essential processes associated with delivering secure, rich content. Plus, publishers do not have to be transcoding experts to get the job done. The Signal platform transfers content into exactly the right formats for the intended devices and platforms, ensuring a reliable and enhanced viewer experience everywhere, every time. Signal technology also gives publishers the flexibility to keep their content in native formats and still benefit from the automatic transcoding engine.

An 'ownable' platform

Signal Online Publishing empowers publishers to remain in control of content throughout the distribution chain as long as necessary. In addition to robust, flexible and automatic security and transcoding capabilities, the Signal platform is standards-based, supporting integrations with other applications and infrastructures and leveraging existing systems and workflows to publish content in a way that supports an organization's unique objectives. For example, the Signal platform can integrate with an e-commerce engine, fully supporting monetization of content. Publishers can own their Signal publishing platform, minimizing reliance on third parties for premium content and maximizing revenue-generating opportunities.

The Signal system's adaptable policy engine allows a range of objectives to be implemented, enabling publishers to set specific policies and usage parameters. For example, policies can be based on duration, number of views (how many times a subscriber can access content), viewing sequence (view

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Signal Online Publishing—Benefits for Subscribers:

- Push-based content delivery means no manual interaction, no website login or password and no buffering/streaming issues—a dynamic viewing experience every time
- Portability—view content online or off, as well as access content via a variety of devices
- Flexible content migration and recovery—if a subscriber’s device is lost, stolen or upgraded, subscriptions or content can be transferred

content item A before content item B), or date ranges (start date and end date), and can be applied to individual pieces of content or entire channels that contain a collection of content. In addition, these policies and usage parameters can be changed or updated at different times, even after the content has been delivered to the subscriber. The smart Signal system makes sure that subscribers have the most recent content versions and gives total control of the content back to publishers.

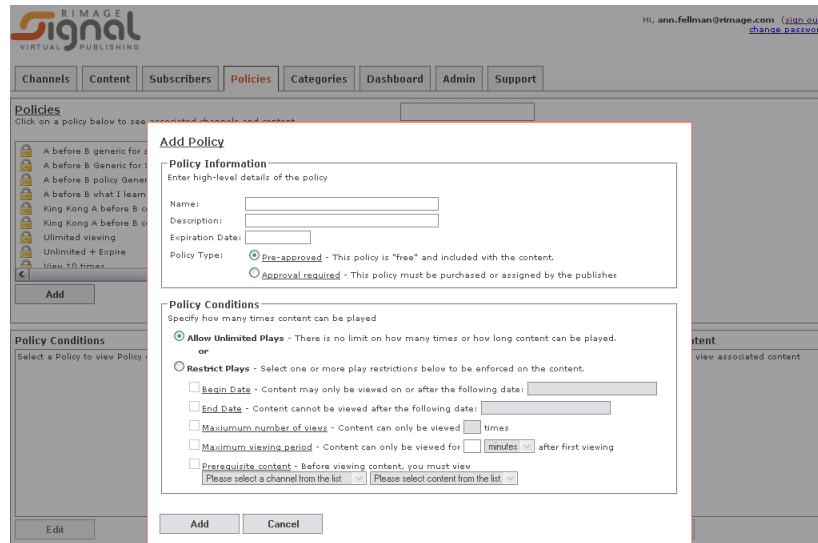


Figure 6: Signal Publisher Portal policy management simplifies the usage and access parameters of your content.

Visibility to usage and subscriber environments

In addition to allowing ownership of the content publishing platform and maintaining a direct relationship with its subscribers, the Signal platform’s database-driven metrics allow publishers to gain valuable insight into their subscribers’ content access and usage habits without having to use a third party paradigm. With the ability to set unique policies comes enhanced traceability—publishers can quickly view baseline analytics surrounding content access and usage, subscriber devices and platforms, and supporting standards. Subscriber metrics can be integrated into a publisher’s preferred analytics reporting tools for a deeper view into content usage habits. Signal publishing not only puts publishers in control of where their content is going and how it gets there, but it gives publishers the power to improve their content based directly on subscriber preferences.

Ease of use

The Signal platform’s wizards, simple user interfaces, and minimized manual interactions guarantee ease-of-use for both publishers and subscribers. For publishers, the Signal Publishing Wizard automatically

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secures and transcodes content. The web-based administration console simplifies the management of content, channels and subscribers, as well as enables the quick creation, application and update of policies with a few simple steps.

Subscribers can begin receiving content with just a few simple clicks. Notifications are sent only when new content is 100% available locally on the subscriber's device(s); this means that subscribers can access content without dependencies on internet connectivity. The Signal

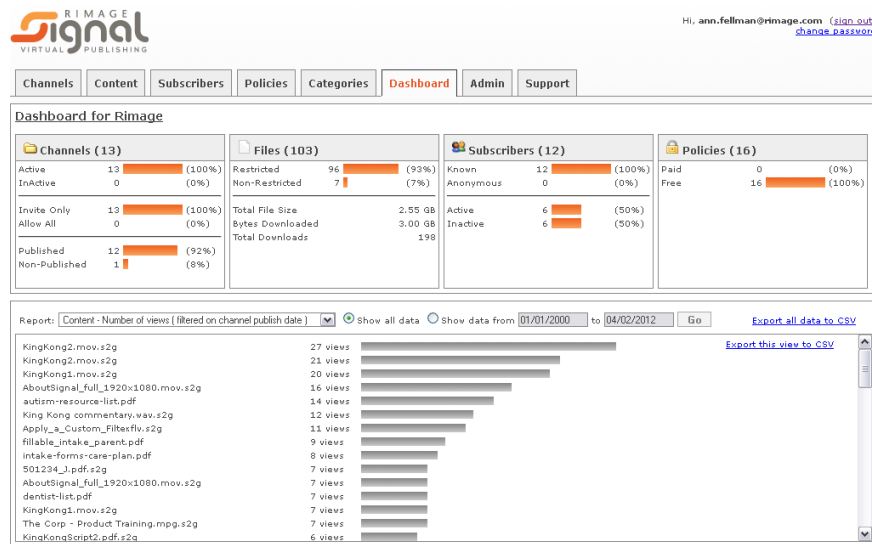


Figure 7: Signal Publisher Portal gives valuable insight into content access and usage through the dashboard tab.

system's ability to locally cache and access rich content eliminates the frustrating starting and stopping associated with traditional online streaming, ensuring that subscribers have a dependable and positive viewing experience no matter where they are or how they access content. Content is published once and successfully viewed anywhere.

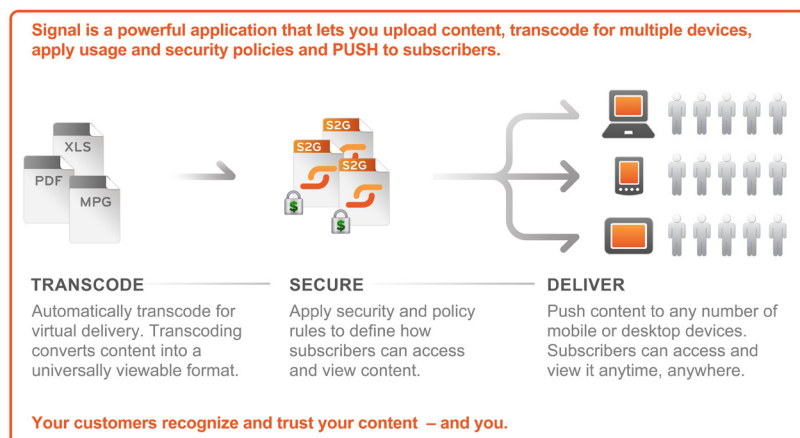


Figure 8: Signal Online Publishing workflow.

How to Reach Customers in a Multi-Device World

1. Secure and upload your content using the Signal platform—videos, text, images, audio
2. Select the devices and platforms you want to deliver to—Mac, Windows, iOS, Android
3. Apply usage policies—the ‘who’ and ‘how’ of content delivery and access
4. Signal technology handles the rest—your content gets where it needs to go, safely and securely

IV. Conclusion

Traditional and physical methods of content delivery—the bookstore, the newsstand and even the CD player—are taking a back seat to digital and mobile content consumption. Today’s content and its destination are no longer static. Content delivery methods need to keep the pace so that information gets where it needs to go faster than ever before, without any sacrifices in quality or security.

In today’s environment, publishers need to choose the right delivery model, maintain control of content, stay connected with customers and, most importantly, get content to the devices their subscribers prefer while maintaining security and organizational policies. While standard content distribution technologies and trends, such as online channels and traditional asset management or file sharing tools, are effective in some ways, they don’t get the whole publishing job done efficiently and effectively.

Rimage Signal Online Publishing is an end-to-end online content publishing platform that solves the publisher’s dilemma by directly addressing the inefficiencies that have surfaced in the wake of the digital content explosion. While publishers have struggled to secure and control their content through the whole content lifecycle, Signal technology makes it practical and profitable. Now publishers can deliver secure, dynamic content in exactly the way subscribers want to receive it without losing control.

In one complete and easy-to-use package, the Signal Online Publishing supports unique business objectives and automatically pushes premium content to viewers. Publishers benefit from total content control, robust security, direct subscriber relationships and the automation of complex, time draining tasks. Subscribers get an intuitive, premium viewing experience—no matter where or how they view their content.

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