



# VIDEO APIs

## The Power to Do It Your Way

Since the dawn of the decade, Software as a Service (SaaS) and its infrastructure-focused cousin of cloud computing have become increasingly essential for business. These paradigms allow companies to limit internal IT costs, leverage specialists' domain-specific expertise, and eliminate the hassles of traffic spikes, backups, and 24x7x365 uptime. Yet tightly integrating any technology into a corporation's existing infrastructure and business processes requires flexible customization options.

This white paper describes how the Twistage video application programming interfaces (APIs) have enabled customers to lower their internal costs and design their own custom video experience.



# Video APIs: The Power to Do It Your Way

Though all web-based services offer a central site to manage data and to set preferences, only those committed to true flexibility offer a robust API, which allows enterprise customers to incorporate the functionality they need into the systems they already have in place. True integration cannot rely solely on employees manually visiting a web-based console. Even Salesforce, the poster child of the SaaS era and bearer of the “no software” logo, produces documentation for its API that approaches close to 1000 pages.

## THE API APPROACH

Of course, complexity is not the goal; flexibility is. Each company using hosted solutions prioritizes what it deems important. A short, up-front internal integration lowers the total cost of ownership of SaaS solutions. Already have a homegrown content management solution in place? Or a commercial CMS implementation that content editors have spent time mastering? Maintaining efficient workflows for editorial staffs that are managing online content every day is critical. But if your entire video solution is managed inside pre-baked Flash video widgets, chances are your content management system won't be able to manipulate it dynamically. While the online property looking to stream five static videos through a generic interface may have less ambitious requirements of its video provider, anyone seeking a slightly more sophisticated solution will want flexibility.

Twistage technology was built with exactly this approach in mind, and that's what makes Twistage a true platform. Our management console and our suite of player options, for example, were built on top of these same APIs. The pre-built options provide point-and-click simplicity, but often customers need to go deeper. Other companies in the video space have recently come to understand the power of APIs, retrofitting their solutions into pre-existing technology. Twistage, meanwhile, has been built from the ground up with APIs at its core. The result is a flexible video solution that easily integrates into any content management system, fitting seamlessly into sites written in any language with any backend.

## Why Video APIs Are Essential:

- ✓ Optimize your users' experience
- ✓ Liberate your designers
- ✓ Express your brand your way
- ✓ Define your own workflow
- ✓ Integrate with existing systems
- ✓ Eliminate manual tasks
- ✓ Lower maintenance costs
- ✓ Test and swap different ad systems
- ✓ Allow flexibility for future needs

And much more...



To give you a more concrete understanding of how APIs can be applied creatively to enterprise needs, this white paper walks through several scenarios where companies have implemented Twistage technology to build their own customized video experience.

## SOLUTIONS: DESIGNING THE LOOK AND FEEL

Working with a video partner offloads plenty of “pain” when maintaining a media-rich site, but it should not require you to compromise control of your design principles. Yet some video platforms are so confident that your site should use their look and feel that they only provide an array of templates rather than really allowing you to customize the player how you'd like or to build your own playlists, carousels, and other important video elements.

Twistage provides a wide menu of pre-built, automatic players, playlists and carousels that plug right into your site for an instant video experience. These elements can be themed, skinned, and branded with the click of a button. But when you want it your way, programmatic access to each video element, via an API, is essential.

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For example, the site of über-blogger Perez Hilton wanted to promote its playlist in a dominant part of its site, with the bright pink color scheme associated with its celebrity figurehead. Fast Company, meanwhile, had a completely different look and feel to match. In these cases and in many more, the metadata for specific content, including the thumbnail preview, title, tags, and publish date, are immediately available with a single API call. Perez Hilton strategically promotes its “most popular” video clips, accessing Twistage’s reporting API programmatically. With complete access and control, the options are limited only by your imagination.

## SOLUTIONS: FURTHER CUSTOMIZATION OF THE USER EXPERIENCE

Adjusting the visual design for a video experience is just the tip of the iceberg of user experience customization. Twistage customer Drama Fever, for example, was aware that many of its end users do not make it all the way through its full-feature 60-minute videos on the first visit. But users do return and resume watching when they have time. To improve the user experience, Drama Fever now records at what point each registered user leaves each video clip. Upon returning to each video, playback automatically resumes from the precise spot where they left off. This is possible because of the flexibility provided by the Twistage player API.

Other implementations have included full engagement experiences, where the entire web page acts in concert with

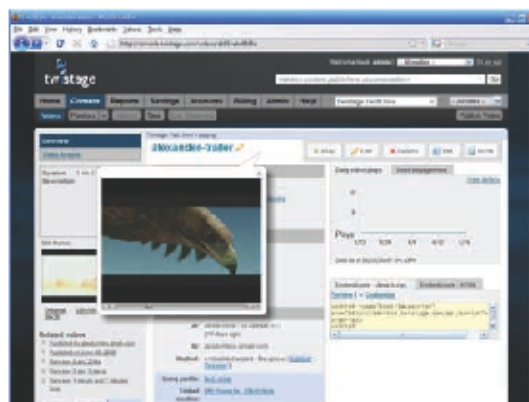
the video during playback. Pull quotes have appeared alongside videos, swapping out at the right moment to emphasize the right message; dynamically generated table of contents that seek to specific points in a video can easily be inserted into a webpage. Again, with complete access and control, the options are limited only by your imagination.

## SOLUTIONS: INTEGRATED WORKFLOW

Playback, of course, is only one component of the video lifecycle; publishing and content management are critical parts as well. And here too, customers have taken advantage of Twistage’s API to tailor the video platform to what works best for their internal processes.

Children’s site KidzBop, for example, collects UGC videos from its users, which then need to be manually approved videos by moderators. Kidzbop has a team of content moderators who review each user-supplied video. For the monitors to be efficient, a smooth workflow is critical. Moreover, managing and administering the monitoring team requires tools. Though the approval process could easily take place in the Twistage console area, KidzBop has lowered its internal costs with an approval interface that sits within its own website. Content moderators log directly into the KidzBop system – no specific Twistage credentials are necessary – to review all new videos. The internal application logs their usage and sends their actions directly to Twistage, which in turn pings the KidzBop website, automatically making new content available to end users.

Twistage offers a simple and intuitive out-of-the-box video managing and publishing experience...



... and a robust API library to allow customers to take their customization one step further.

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## SOLUTIONS: CONTROLLING ACCESS TO SECURE CONTENT

The ease with which digital media can be transferred from one endpoint to another introduces the challenge of securing the content so that users can only view content where and when they are allowed. Using APIs, the Twistage platform provides businesses with the flexibility they need to restrict access to their valuable or proprietary content.

Twistage customer Jive Software must manage strict privacy and authentication requirements for the enterprise social business software it provides to its Fortune 100 clients and their employees. Instead of working with awkward and unfriendly Digital Rights Management options for its content, Jive instead authenticates each user through its own access control system.

Through Jive's software, Twistage provides a piggyback authentication system, granting access for specific content to individual end users based on the Jive customer's business rules and pre-defined user privileges. Twistage then communicates with Jive behind the scenes to enable or reject video streams dynamically. In this way, even if users share the HTML behind a video's webpage, the content remains secure to approved users only. The entire process remains efficient, safe, and consistent as Jive manages user privileges centrally, communicating with Twistage through its streaming authentication APIs.

The Twistage API also provides customers with the capabilities to control access rights based on geographical location. Content can be segmented so that some videos can only be viewed in specific countries, while other videos are globally available. Several Twistage customers limit their premium content to users in the US and Canada using this functionality.

## SOLUTIONS: BACK-END CONTENT MANAGEMENT

Since Twistage acts as a video content management system, it maintains a database of the customer videos it stores. But clients often want a local copy of the same video data to promote videos on their site. While there are many technical ways to synchronize these databases, Twistage's APIs simplify

this process significantly. When newly available videos are published to Twistage, either through the backend console or remotely through the publishing APIs (used all the time with UGC sites, for example), Twistage completes the transcode on its cloud but doesn't stop there. It then automatically pings the customer web server, telling it that newly available content is ready. A simple function on the customer's backend can then automatically update its site, making new content available seamlessly.

Other customers, meanwhile, prefer not to maintain a database of content at all, considering it unnecessarily redundant. Instead they use the Twistage APIs to get tagged, organized RSS feeds of available video every few minutes, automatically updating their site content based on the Twistage data.

As a developer the Twistage APIs are fun and as a business user the possibilities are unrivaled.

- Akshobhya Mann  
Lead Sr. Solution Architect, Clickability

## SOLUTIONS: APIS AND CODE LIBRARIES

As we have seen here, using video APIs to integrate custom content, workflows, and technical measures into your own backend is certainly powerful. Far more functionality can be automated through publishing APIs, syndication APIs, streaming APIs, format APIs, reporting APIs, and much more. But in addition to providing extensive functionality, the APIs are also simple to use. Complicated pieces of functionality can be included in just a line or two of code. Twistage provides "wrapper libraries" in a series of popular programming languages such as PHP and Java, encapsulating broad concepts around simple dynamic input variables you provide. And in addition to providing you with the right building blocks, we support our customers, step-by-step, with very thorough documentation and excellent customer service.



## Summary

There's a reason why tech teams and site producers love us. Twistage reduces a site's video complexity, and the APIs allow tight control. The end result: a video experience that works for you and your users.

Twistage's technology extends beyond the video player. Twistage was designed to provide customers the tools to create their ideal video experience:

- Designing the look & feel
- Further customization of the user experience
- An integrated workflow
- Controlling access to secure content
- Back-End Content Management
- APIs and Code Libraries

You're producing and selecting your video content. Shouldn't you also be designing the video experience?