

# Dynamic Video Collaboration in SharePoint

Leveraging the Power of SharePoint to Deliver Corporate Video Communications



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**QUMU**  
video that delivers

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## Executive Summary

Driven by the adoption of social collaboration tools and video applications for employees, today's SharePoint managers are under more pressure than ever before to deliver value. In many large companies, a SharePoint site is the central employee portal and businesses are clamoring around solutions capable of extending the SharePoint investment to bring greater value to the organisation.

In this paper, we analyse the deployment of scalable, controlled, and secure corporate video within Microsoft® SharePoint®. The paper focuses on specific ways in which corporate video technology can allow you to leverage video and rich media assets across your SharePoint sites. Learn how you can:

### *Provide A "YouTube-like" Experience Within SharePoint*

Give employees access to the centralised video library. Leverage search within SharePoint to allow users to find video content with ease. Provide social tools such as rate, review, clip, and share.

### *Deliver Live Video Streaming Within SharePoint*

Publish and distribute live and re-broadcast ("like-live") video webcasts to an easily accessible calendar of events and link to user's personal Outlook or other iCal calendar system.

### *Embed Video Excerpts On Any SharePoint Page*

By sprinkling short video clips and carousels throughout your SharePoint site, your messages are more targeted and your impact is greater.

### *Link Videos To Other Relevant SharePoint Content*

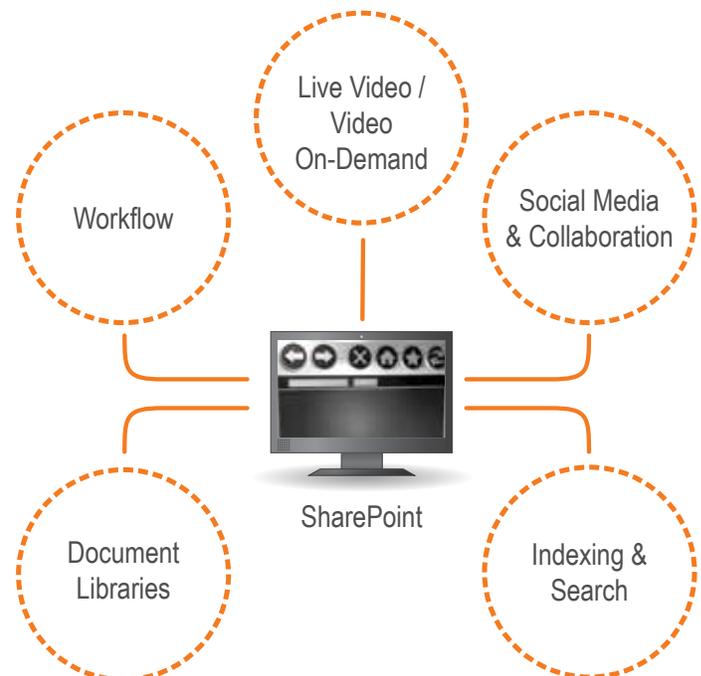
SharePoint sites contain a multitude of content that may relate to published videos. Providing linkage during the video publishing process to other documents, images, and pages makes it easier for the viewer to access further information on a given topic.

### *Add Video To Employee Social Video Communications*

Implement collaboration workspaces that include video demonstrations, quick-capture video creation, self-service video publishing, and social networking features.

### *Understand The Importance Of Dedicated Storage For Video*

Leverage a dedicated file system for video storage, rather than video stored as BLOBs in the default SharePoint content database. This prevents the SharePoint database from growing too large, and ensures a better performing SharePoint site.



Providing employees with a "YouTube-like" portal allows them to easily search, find, and interact with targeted video content.



## Business Goals Of Corporate Video

While corporate video solutions can contribute value in many areas, the highest value use cases are the ones where knowledge workers can discover and exchange information in better ways. The most common goals that can be grouped in these categories are:

1. Executive communications to employees
2. Subject matter expert identification and extension
3. Training and knowledge sharing
4. New hire on-boarding and retention
5. Improved team collaboration

To further explore these categories we can sight some specific use cases for corporate video.

*"Managing video demands unique processes and technologies because of its demands on storage, network bandwidth and content management."*

—Whit Andrews, Vice President,  
 distinguished Analyst, Gartner  
 (Organizational 'YouTubes' Demand a New  
 Video Responsibility, February 9, 2012)

## Use Cases For Video On-Demand

- Embed a video carousel of product demos at the top of the company product release page.
- Embed a video of the last employee all-hands meeting into every page within the Sales section of the site to encourage views.
- Provide easy EGC (Employee Generated Content) video upload utility on every page within SharePoint so employees can add relevant video content.

## Use Cases For Live Video Streaming and Employee Video Upload

- Ease of Administration - Setup rules once; Pathfinder takes care of the rest.
- Reduced Cost - Smart Pathfinder rules reduce traffic over public CDNs and 3G/4G data networks.
- Mobile Support - Pathfinder tames the unruly world of BYOD (bring your own device) - supporting iOS devices, Android and Windows phones

## Share Point Video Access Increases Collaboration

Microsoft SharePoint is at the forefront of a new generation of technologies designed to optimise collaboration at all levels of an organisation. SharePoint portals provide user-specific access to documents, workspaces, discussion boards, and other resources.

### *Companies Are Using SharePoint To Create:*

1. Information and training portals – secure portals for employees to easily share and search for information.
2. External websites and portals - increase collaboration with customers, partners and suppliers.
3. Document and file management - create internal workflows for document creation, editing and publishing.
4. Project coordination - increase productivity by quickly accessing project files in a central repository.

In all of the above scenarios, video has become an essential element of communications that organisations use to deploy video with SharePoint portals. A key function of a corporate video platform solution is to make video easily available, and to aid knowledge collection and sharing of information.



## SharePoint Video Benefits

*Communication Is Effective And Immediate* - With video, as opposed to text-based documents, blogs, and workspaces, communication is vivid, memorable, and approximates face-to-face interaction.

*Training, Messaging And Product Introductions Are Improved* - News can be relayed faster and training accomplished more efficiently than with text or in-person communication. Content is accessible in the same place employees go for many other things.

*Assets Are Secure* - Rich media assets distributed using SharePoint reside on a corporate network, or in a secure cloud-based storage, keeping essential information secure even if passwords are compromised.

*User Rights Are Retained* - By bringing video into SharePoint, an organisation's pre-existing user or department-level permissions automatically apply to rich media assets.

Improvements made in SharePoint 2010 included enhancements to discussions, wiki, blog and microblogging functionality, making SharePoint a much improved platform for social media collaboration. Some video enhancements were introduced as well. Specifically, enhanced support for posting, viewing, rating and editing video podcast content natively from within SharePoint. However, when it comes to live and on-demand corporate video communications, the native capabilities for video within SharePoint do not scale. Additionally, workarounds, such as faulty custom-built tools or half-hearted solutions like links to YouTube, present even more business challenges.

A corporate video platform solution quickly becomes necessary to extend SharePoint capabilities for live and on-demand video communications.

### Key Improvement Needs:

#### 1) Impact To SharePoint Services

Video communications have become mission critical and it is essential to preserve efficiency and scalability to protect other core SharePoint services, so they are not overly taxed by many users throughout an organisation accessing video programs at the same



time. Most organisations have put in place strict upload size limits for SharePoint, which often means video files simply cannot be uploaded. However, if allowed, using native SharePoint storage for video presents problems. When many users request video from the same web layer as other SharePoint services, overall SharePoint site performance is impacted. Pages take a long time to load and site navigation slows down tremendously, because the web servers are working too hard. An effective video platform solution should leverage a dedicated file system for video storage that is external to SharePoint, rather than video stored as BLOBs in the default SharePoint content database.

It is also important to use standard streaming services for viewing video programs, rather than specialised progressive download, which SharePoint provides natively. Because the video is a “traditional” file, it can be streamed to end users by deployed streaming servers that will not use the resources of the SharePoint servers.

## 2) Video Network Distribution

Network performance is critical as employees collaborate and access video from within SharePoint—the rich media files move back and forth over the network. Video files are large. They are stored centrally, but accessed remotely. Streaming and downloading them over the WAN uses a lot of bandwidth and will impact other services if not managed properly. In order to scale video distribution, it is important that your solution leverages corporate Content Distribution Networks (CDNs) and/or internet CDNs to ensure all viewers, regardless of physical location, a quality viewing experience. Often times, however, an organisation may have different divisions running different types of CDNs, and the CDNs cannot reach office locations. Distributing video content to multiple CDNs simultaneously and leveraging public CDNs for remote offices, can present a significant challenge for IT. Faced with flat or shrinking budgets, IT needs to find cost effective solutions to enable centralised SharePoint implementations, and provide distributed access to video communications.

Looking across all these business goals, the common characteristics are the capture and presentation of important information. Given those key characteristics and basic video access elements, what must a corporate video communications solution provide?

## The Qumu SharePoint Technology Integration Module

The Qumu SharePoint Technical Integration Module (TIM) brings video into SharePoint in an automated, secure, and scalable way, while leveraging core SharePoint services. SharePoint Discussions, Indexing, Search, Access Control and Document Libraries are all core SharePoint services that are leveraged by the Qumu solution. Qumu simply adds video to the experience.

**Easy Implementation:** You should not have to dramatically alter your existing SharePoint portal in order to enable video. It should integrate with your existing SharePoint strategy.

**Fully Automated:** The synchronization service pulls Programs from the Qumu Video Control Center (VCC) into SharePoint at regular, configurable intervals.

**Access Control:** Item and user-level permissions established in SharePoint should apply to video assets as well as documents and workspaces.

**End-User Simplicity:** Viewership can be measured, scheduled and encouraged with a straightforward user interface, searchable and accessible through SharePoint.

**Full Scalability:** Video should reach all SharePoint users, regardless of geographic location and time zone.

The Qumu SharePoint TIM provides a video management platform, called the Qumu Video Control Center (VCC), which is deployed alongside SharePoint. The VCC takes care of all aspects of video management. It provides the following key functions:

1. Flexible web parts
2. Video upload and storage management
3. Transcoding services with templates
4. Metadata extraction
5. Access to live webcasts
6. Employee generated content
7. Delivery and distribution

### *Flexible Web Parts And Links*

An effective solution should allow users to embed video content on any SharePoint site. This includes individual video files as well as scrollable video carousels containing multiple files that can be placed anywhere on a SharePoint page for easy access. You may want one central video portal for all videos, as well as embedded video presentations throughout your SharePoint site. The central portal makes it easy to search for content, similar to a YouTube experience, whereby the embedded video provides suggested viewing on specific pages throughout SharePoint.

*“Invest the effort to embed video directly in applications or documentation related to tasks that will benefit from the videos.*

*“In-context” help is always wise.”*

—Whit Andrews, Vice President, distinguished Analyst, Gartner (Serve Users Best and Use Video Most Effectively with In-Context Chunks, June 17, 2011)

Linking to other SharePoint content (pages, documents, presentations, images, etc.) is part of the standard publishing workflow when uploading a video. The result is easy access for viewers to find related information.

### *Video Upload And Storage Management*

The Qumu SharePoint TIM leverages a dedicated file system for video storage to ensure storage is managed outside of the SharePoint database. Qumu approaches storage in this way to ensure the SharePoint services are not impacted by video uploads and streaming activity. Additionally, video upload size limits can be much more flexible than with upload directly into SharePoint.

### *Transcoding Services With Templates*

When a user uploads a video into the Qumu Video Control Center, many rules are automatically applied. Templates defined during implementation set these rules so that each time a video is uploaded the system automatically applies a set of rules. Rules may be unique depending on the users' role, defined by SharePoint and Active Directory groups. The video is automatically transcoded into one or more files with specific size limits and bit rate ceilings and published through an approval workflow.

### *Metadata Extraction*

For each video, Qumu automatically extracts metadata about the video, including the filename, format, bitrate, date, etc. Additional metadata can be added by the user during the publishing workflow. This metadata is then used by SharePoint's native or FAST search for easily retrieving video programs.

### *Access To Live Webcasts*

SharePoint does not provide any native support for live streaming. However, with the Qumu SharePoint TIM, live webcasts are delivered seamlessly within SharePoint sites. The VCC's Live Event Calendar's integration with Microsoft Outlook and iCalendar lets employees know when to tune in to live broadcasts. Meanwhile, live polling, ratings, and reviews give quantitative and qualitative feedback to the creators of the content.

### *Employee Generated Content (EGC)*

Qumu takes advantage of social video collaboration. Employees can create videos, have them automatically transcoded to approved formats sent through an approval workflow, and published in a central and secure way. Viewers can easily rate and review, comment on, mash-up, and share video content with colleagues.



Embedded Single Video



Embedded Video Carousel

*“The proliferation of video cameras is dramatically reducing the cost of producing videos in organizations. Gartner surveys show that companies expect the proportion of their video produced by professional studios to fall during the next two years.”*

—Whit Andrews, Vice President, distinguished Analyst, Gartner (Video in Customer Service Grows in Significance, June 28, 2011)

### *Delivery And Distribution*

With the Qumu SharePoint TIM, the user accesses video through the SharePoint interface, but the “magic” happens behind the scenes – it is Video Control Center that decides which video format has to be used, which bitrate (if there are options), and where the stream will be coming from (i.e., closest CDN edge).

The Qumu Video Control Center platform solution integrates with both corporate content distribution networks (CDNs) and WAN optimisation technologies (i.e., Cisco, BlueCoat, Riverbed) and internet content distribution networks i.e., Akamai, AT&T) and can distribute both live and on-demand video programs simultaneously to both. Additionally, Qumu VideoNet technology appliances provide unique distribution capabilities, including a unique solution for offices that are not accessible from your corporate CDN. For these offices, VideoNet can access a single stream via a public CDN but then split it for any number of users locally. This dramatically saves money spent on public CDN fees.

### Why Qumu?

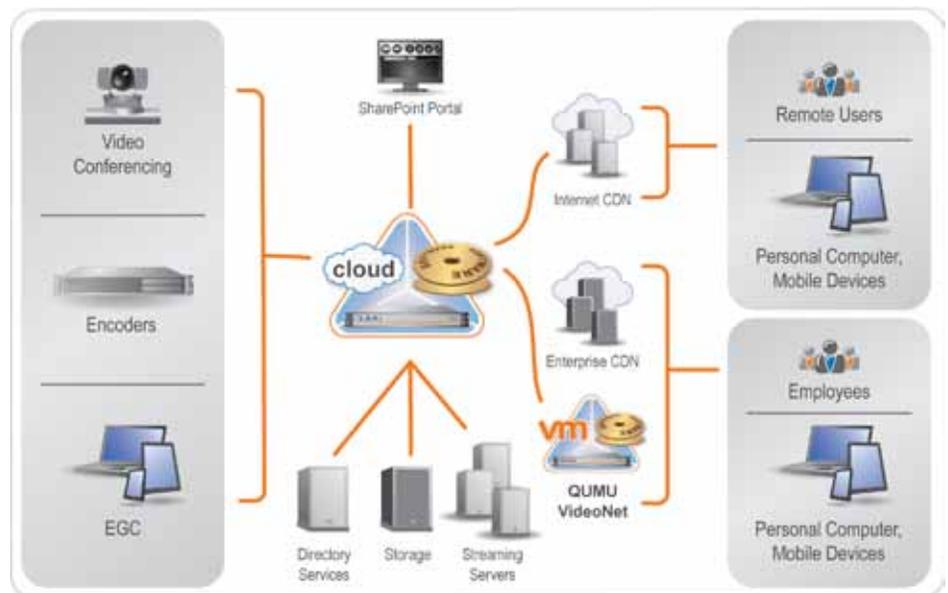
Qumu, a Rimage company, is the leading business video platform provider, empowering organisations to better engage and inspire employees, improve productivity, and reduce costs. The Video Control Center is Qumu’s flagship product, providing a powerful video platform for the enterprise. Qumu’s full product suite also includes the Qumu Capture Studio video creation appliance, Qumu VideoNet for intelligent video distribution, Qumu Mobility solutions for extending the reach of video, and Qumu Digital Signage. In all solutions, Qumu focuses on allowing organisations to:

### *Leverage What You Already Have*

The Qumu Video Control Center integrates with existing infrastructure, from content distribution networks to video conference endpoints to SharePoint, extending your return on investment on other systems. From the IT perspective, management costs are reduced because you only need to support one infrastructure and one set of technologies to provide comprehensive corporate video across the organisation.

### *Scale To Your Audience*

Our solutions are reliable and fully scalable; we can distribute rich media to as many people as your network accommodates without dropped broadcasts, decreased video quality, or other problems.



Qumu Solution Architecture Overview



### *Make Video Use Simple And Straightforward*

Qumu's corporate video technology delivers centralised control of all administration, configuration, and maintenance tasks. The administrative user interface is intuitive to use and is consistent across all capabilities.

### *Analyse Your Results*

Measure the power and success of your video assets and webcast events through Qumu's advanced reporting tools, validating your investment in corporate video communications.

### *Deploy Enterprise Video The Way You Want*

You can run the Video Control Center as software on-premise, an appliance, managed service, virtual machines or as a SaaS service – it is your choice. Qumu supports both on-prem and cloudbased deployments (SharePoint Online for Office 365 Dedicated).

## Conclusion

Employee video usage is here to stay and growing fast, and a corporate video communications platform can deliver significant business value. Leveraging the dynamic experience of video and network advances in content distribution, you can better engage and communicate with employees, abstract additional value from subject matter experts, improve training and recruitment, and increase team collaboration.

To truly reap the business value of video communications, corporate video solutions must create dynamic interactions for viewers, and also address the architectural network concepts for distributing video to a variety of network types successfully.

With the Qumu SharePoint Technology Integration Module, you can leverage the collaborative power of SharePoint to deliver scalable video quickly and securely. With a single collaborative video space for your business, employees are more connected and productive and your company achieves a new competitive advantage.

## About Qumu

Qumu provides collaborative multimedia content management solutions that work with any IT infrastructure. We organise and securely distribute to disc, desktop and mobile viewers while tracking and analysing the results. Qumu helps organisations leverage the latest in corporate video technology to produce Employee Generated Content (EGC) communication, information sharing, training, videoconference recording and streaming, webcasting, Town Hall meetings, with multi-CDN support. Qumu customers can seamlessly deploy enterprise video applications via: Appliance, Software, SaaS, or as a Managed Service.

Contact Qumu at +44 020 7748 9090 or via [www.qumu.com](http://www.qumu.com).