

Top 4 Challenges When Viewing Documents in the Cloud



Implementing a solution that views documents stored in a cloud-based system, such as a content management system, engineering drawing repository or a technical publication library, can present some challenges. Each requires consideration to promote a good experience for the end user. There are four common challenges that you could face when implementing a cloud-based document viewing system: working with multiple file formats, variations in document size, browser-compatibility with HTML5, and viewing documents on mobile devices.

Multiple File Formats

First, the documents that you want to view may be in many different formats. They may be PDF, TIFF, Word, Excel, PowerPoint, CAD, or many others. The device that is being used to display the content often may not have the right software needed to display the document or image. This issue is further compounded by the varying number of devices that the content will be viewed on. A common solution is to convert the files on the server to a generic format that can be viewed by many devices, but this presents other issues. For example, most browsers and devices today can display JPEG or PNG formats, but both of these are raster image formats. If a text-based document such as a Word file is converted to an image, the display quality deteriorates when a page is zoomed and you lose interactivity with the content.

Document Size

The second challenge is regarding the size of the document, either the number of pages or the physical size of the file. Downloading the entire document can take a long time depending on available bandwidth. This is especially an issue on mobile devices with slow or crowded data connections. A system that provides a quick initial view of the first pages of the document allows a user to begin reading the content while the rest of the document downloads. This increases worker productivity and can even reduce traffic if the user quickly determines that they do not wish to continue with the document.

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Browser-Compatibility

The third challenge faced is that there are various browsers used to access the Internet and they do not all work the same. The four major browsers are Chrome, Internet Explorer, Firefox and Safari. Each browser has differences in how they operate and how the code works under the covers. Document viewing technology is dependent on some level of support within the browser. For example some browsers support Flash and some do not. HTML5 is only supported on recently updated versions of some browsers, so older browsers can create challenges. Even where HTML5 is supported, different browsers have different levels of support. Sometimes the differences are subtle and only cosmetic, while others, like complex formatting, can cause significant display issues.

Mobile Viewing

The fourth challenge relates to viewing documents on mobile devices. With today's on demand business world it is imperative to be able to support viewing documents on mobile devices. Not all the devices behave the same way and different operating systems are used on the devices. Without a consistent mobile viewing platform, separate viewing apps may need to be installed on each device and results will vary. Using a single technology that supports many documents types is very important in a mobile environment.

Is HTML5 The Answer?

HTML5-based viewers can help resolve some of the challenges associated with browsers and mobile devices. However, there is a misconception that the adoption of HTML5 is the answer to all problems and it is not. The four major browsers have been implementing HTML5 over time and how much of the standard that is supported varies greatly with the version of the browser. Older

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versions of the browsers that are used in many governments, educational institutions and well-established businesses do not support HTML5.

Summary

More and more organizations are moving to solutions where documents are stored in cloud-based systems. The four common challenges identified in this article, working with multiple file formats, variations in document size, browser-compatibility with HTML5, and viewing documents on mobile devices, are examples of what you might face when deploying to your customers. Understanding that these common challenges are a possibility and preparing for them before you encounter them is important. Providing a single server platform with multiple viewing technologies, including HTML5, Flash, and image-based presentation, can help ensure that all users can view documents, regardless of their specific device, browser or operating system. With that knowledge you can successfully promote a good experience for your users and overcome the major pitfalls faced by so many organizations today.

About the Authors

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About Accusoft

Accusoft provides a full spectrum of document, content and imaging solutions. With its broad range of solutions, Accusoft is committed to deliver best-in-class, enterprise grade and fully-supported applications and a globally recognized suite of software development kits (SDKs). Accusoft products work reliably behind the scenes for capturing, processing, storing and viewing images, documents and more. Add barcode, compression, DICOM, image processing, OCR/ICR, forms processing, PDF, scanning, video, and image viewing to your applications. Products are delivered as applications and toolkits for multiple 32-bit/64-bit platforms and development environments, including iOS, Android, .NET, Silverlight, ASP.NET, ActiveX, Java, Linux, Solaris, Mac OSX, and IBM AIX. For more information, please visit www.accusoft.com.