



What Is an HTML5 Document Viewer?



Document viewing remains surprisingly difficult for organizations. [Recent survey data](#) found that despite the prevalence and priority of document management tools in the workplace, just 12 percent of respondents said these solutions were “working well”. The result? Users often need to track down applications capable of viewing and editing specific file types, leading to enterprise environments where staff are [using more than 125 apps](#) just to get the job done.

HTML5 document viewers offer a way to bridge the gap between potential and performance by empowering staff to easily view, search, annotate, redact, convert, and edit documents in a single place – their browser window. But what exactly is an HTML5 viewer? How does it work? And where can it help streamline business operations?



Current Document Management Challenges



Existing document management offerings aren't living up to staff and C-suite expectations. And while every business faces their own unique frustrations, four common concerns include:

Managing Multiple File Types — Document repositories are rapidly growing as enterprises deal with an influx of file formats and types. From handwritten and scanned PDFs to spreadsheets, text files, and images, increasing document diversity means staff are often forced to juggle multiple, native applications simultaneously. These extra app layers lead to lost time and potential security risks as employees switch programs or view sensitive information outside of a secure platform. This creates new costs for businesses as they purchase multiple application sets and app “seats” to ensure there's enough room for all users.

Ensuring Secure Collaboration — Security also presents a persistent document challenge as companies continue to leverage legacy frameworks that rely on manual or email-based collaboration. Not only are these processes cumbersome and inefficient, but they introduce the issue of version control and progress tracking.

Maintaining File Integrity — Existing document viewing and editing processes lack version control, forcing teams to find the most recent email or track down the most current, manually-edited version of a document. As a result, both file integrity and ownership are compromised, which introduces increased regulatory and compliance risks.

Juggling On-Demand Expectations — Users now expect seamless document viewing and collaboration that mirrors their experience with personal mobile devices and applications. Regardless of file type or storage location, staff want the ability to access documents anytime, anywhere, and on any device. Development and IT teams, meanwhile, want the peace of mind that comes with portable, dynamic viewing solutions that don't sacrifice security for speed.





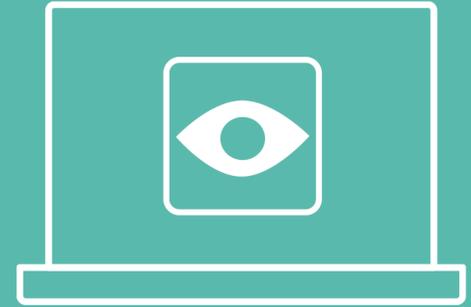
The HTML5 Document Viewer Solution

An HTML5 document viewer is a document viewing solution that allows users to easily view and collaborate on multiple document types from any desktop or mobile device within a browser. HTML5 document viewers make this possible by converting files from native formats into desired outputs, then presenting the resulting content in a browser using standard HTML5 markup.

The biggest draw of HTML5 viewers? Single-interface interaction. Everything happens in-browser, making them ideal for integration at scale. As a result, they're often deployed by value-added resellers and software manufacturers to develop specific solutions for client needs. They're also leveraged by enterprises looking to add functionality to existing document management solutions (DMS) or content management solutions (CMS) that both reduce total costs and improve overall efficiency.

This allows developers to easily embed [HTML5 document viewing functions](#) into existing websites or applications without the need to create new apps from the ground up and without compromising document security. End-users, meanwhile, get the responsive, dynamic viewing experience they want without the need to download plugins or open other applications.





Along with simple deployment and development, HTML5 document viewers offer other benefits such as:

- Support for multiple software platforms and browsers to ensure consistent viewing across enterprise environments — users can view documents how, where, and when they want without compromising form or function.
- Ability to view a wide variety of file format types used by healthcare, legal, manufacturing, government, and financial firms.
- Reduced need for other viewing applications and software licences.
- Seamless web and mobile-friendly viewing experience that relies on HTML5 markup rather than device-specific constraints.

Accusoft's [PrizmDoc Viewer](#) offers industry-leading HTML5 functionality, making it the viewer of choice for developers, integrators, and system administrators looking to enhance document viewing, collaboration, and security without increasing complexity.

PrizmDoc Viewer makes this possible by using a collection of REST APIs that support more than 100 file types. It also includes built-in support for conversion, OCR, annotation, redaction, advanced search, and large document server-side search. It's now incorporated into thousands of enterprise document workflows worldwide.



Some of the most common PrizmDoc Viewer use cases include:



Enterprise Content Management (ECM) Platforms — PrizmDoc Viewer helps extend system capabilities by streamlining document and image access, retrieval, and viewing in addition to expediting document distribution throughout the organization.



Legaltech Solutions — PrizmDoc Viewer's on-demand document conversion functionality makes it ideal for eDiscovery initiatives that require on-demand data retrieval, annotation, and redaction.



Fintech Solutions — FinTech companies can embrace the future of finance with the ability to easily transform application, portfolio, and investment information into actionable data for efficient processing.



Learning Management Systems (LMS) — HTML5 viewer integration with LMS empowers teachers and administrators to easily view, annotate, and comment on key components of student assignments.

With so many different possibilities, PrizmDoc Viewer is well suited to meet even the most specific business needs.



What Can PrizmDoc Viewer Do For You?

As demands for powerful, process-driven document viewing evolves, what sets PrizmDoc Viewer apart?

Zero-Footprint — With no client-side installations or downloads, PrizmDoc Viewer empowers the viewing of documents and images within native web browsers. By harnessing existing browser functionality and plug-ins, enterprises gain powerful document viewing, editing, and collaboration functions that don't impact current processes or performance.

Popular File Format Support — PrizmDoc Viewer handles more than one hundred [proprietary and open file formats](#) including common types such as Microsoft Office documents, PDFs, and email along with case-specific formats such as DICOM.

Multi-Level Data Protection — 256-AES content encryption plus configurable user permissions helps ensure that documents remain secure during transport and processing and that only authorized users have the capability to annotate, redact, or edit documents.

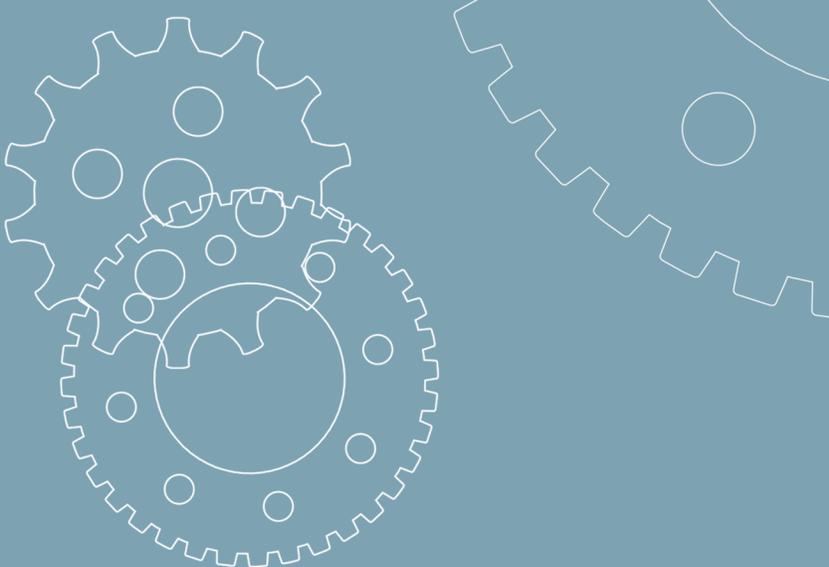
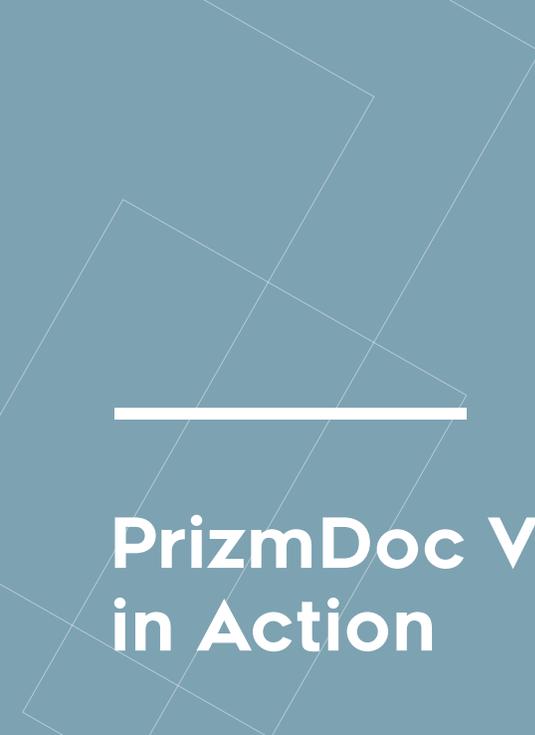
Customizable Interface — With all open-source UI code, development teams can customize menus, tabs, and layouts to suit the style and format of in-house applications.

Powerful REST APIs — [Server-side APIs](#) deliver automated, backend document processing that occurs outside the viewing client. From content conversion and eSignature to redaction, OCR, and advanced search, PrizmDoc Viewer has you covered.

Flexible Hosting Models — Prefer the power of public or private cloud? Connect to the PrizmDoc Server via Accusoft's fully managed backend. Need to keep documents closer to home? Host PrizmDoc Server on your existing infrastructure for complete control.

SVG Support — PrizmDoc Viewer [includes support for SVG conversion](#). This vector-based graphic standard offers scalability, responsiveness, accessibility and interoperability — but isn't standard with most HTML5 viewers.





PrizmDoc Viewer in Action

Process performance is one thing, but what can PrizmDoc Viewer do in practice? How does it directly impact enterprise workflows?

Display All Document Types Quickly and Accurately — By eliminating the need for multiple, file-specific applications, PrizmDoc Viewer allows staff to review and provide feedback on any file using a single, common interface, both improving overall performance and reducing your total licensing costs.

Provide High-Fidelity Renderings of Microsoft Office Formats — Not all conversions of Microsoft files are created equal — but accurate, high-fidelity, in-browser renderings of Word, Excel, and PowerPoint documents are often required to ensure regulatory compliance. PrizmDoc Viewer offers true native viewing of these popular file types on-demand.

Increase the Performance of Large Document Viewing and Search Functions — Speed matters. End-users don't have time to waste waiting for documents to load or convert. PrizmDoc Viewer utilizes both document pre-loading and customizable, server-side search parameters to help your business [improve document access](#) and offload the heavy lifting of text-based search to ensure browsers aren't overloaded.

Deliver Secure Collaboration — By integrating PrizmDoc Viewer into existing applications, companies can ensure trust and compliance of critical documentation with key security controls. For example, expandable and scalable annotation features allow users to easily collaborate on files by proofreading, reviewing, and adding comments while maintaining the integrity of the original file with robust version control. File owners can ultimately decide to approve, reject, or incorporate specific suggestions. PrizmDoc Viewer also includes powerful [search and redaction](#) features to both find and protect any personally identifiable information (PII) or Protected Health Information (PHI). Redactions can be added manually using text selection, rectangle, or full page functions, or automatically burned in using specific search terms and regex patterns.



Understanding the Mechanics of PrizmDoc Viewer

PrizmDoc Viewer makes it easy to present Office, PDF, TIFF, email, and a host of other document types as part of your existing web application. To achieve this high-speed, high-fidelity document viewing, editing, and conversion, [PrizmDoc Viewer](#) leverages server-side processing that includes three key components:

- 1** The HTML5 viewer itself, which runs in-browser to display content.
- 2** The backend, comprised of PrizmDoc Application Services (PAS) and PrizmDoc Server, which handles document processing.
- 3** Your web application, also called the “reverse proxy.” It sits between the HTML5 viewer and the backend to manage content requests.

Think of the PrizmDoc Viewer backend as the engine that drives document conversion. It takes on the task of converting document pages to SVG using a compute-intensive process that has no permanent storage.

The PrizmDoc Server handles the heavy lifting but doesn't hang on to any document pages, while PAS acts much like your own web application. It has privileged access to your document storage solution — such as a file system or database — to deliver key functionality including the long-term caching of pre-converted content and the loading and saving of document annotations. As a result, there's no need to add additional code to your existing app; PrizmDoc Viewer takes care of both conversion and delivery.





By keeping documents in-browser, your app is only tasked with requesting specific assets while the backend starts working on document page conversion immediately — even as the rest of the document is being processed. From the user perspective, this means the first pages of a converted document arrive almost instantly, allowing staff to start editing, annotating, or redacting while the remainder of the document is processed.

When users start a new viewing session, the request for document conversion travels from your application and through PAS to the PrizmDoc Server cluster. Once there, a single machine is responsible for answering the conversion request. This isn't something users or developers need to worry about, since the specific IP address of the correct machine is encrypted into the viewing session ID itself. Since PrizmDoc Server instances only use a local cache, no data is shared or stored on the server itself.

This routing structure also improves load balancing, since every PrizmDoc Server instance is capable of piping the conversion request to the correct machine if required. In fact, even if enterprises removed the load balancer in front of their PrizmDoc cluster and sent all requests to a single-server machine, all requests would still be properly routed.





Doing More with Docker

Just as HTML5 solutions represent a step up from existing document viewer options, container-based Docker images offer a better way to customize and deliver software. By leveraging PrizmDoc Viewer in a [Docker container](#), enterprises gain critical benefits for evaluation, development, and production, including:

Seamless Installation — Container-based deployment and installation means you don't need to worry about OS requirements, software conflicts, or operational differences between your development and deployment environments.

Fast Startup — Starting up PrizmDoc Viewer containers takes only seconds with Docker images, since there's no need to create or keep an image with pre-installed PrizmDoc settings.

Scaling and Recycling — Demand for PrizmDoc Viewer functions naturally fluctuate during the workday — at night, fewer users require conversion and annotation tools, but some still need on-demand access. Leveraging Docker images allows enterprises to quickly scale up PrizmDoc Viewer instances as required and recycle them when they're not in use, in turn reducing total resource consumption.

Easy Recovery — If a PrizmDoc instance reports itself as unhealthy, Docker makes it easy to start over. Since the production version of PrizmDoc Server keeps its cache on the host file system, you can simply create a fresh container without losing key cache data.

Image Previews — Using Docker, it's easy to pull and run the newest preview versions of PrizmDoc Viewer to try out upcoming features and bug fixes.

Ready to jump start your PrizmDoc Viewer development with Docker?
Get started with our evaluation image [here](#).



Existing enterprise document viewing solutions can't keep pace with evolving user expectations, regulatory requirements, and file format complexity. PrizmDoc Viewer offers the ability to streamline key functions and enhance security with HTML5-native support to deliver document viewing, collaboration, annotation, redaction, and conversion on-demand.

Learn more about PrizmDoc Viewer and all of its [unique features and functions](#) on our website.



About Accusoft

Accusoft is a software development company specializing in content processing, conversion, and automation solutions. From out-of-the-box and configurable applications to APIs built for developers, we help organizations solve their most complex content workflow challenges. Our patented solutions enable users to gain insight from content in any format, on any device with greater efficiency, flexibility, and security.