



Engineering documents.  
Elevating productivity.

# Engineering Documents. Elevating Productivity.

This white paper describes how our engineering document management systems (EDMS) use an intuitive user interface, advanced workflow automation, and other robust tools to help companies manage digital file security, document-centric workflows, distribution, and improved collaboration.



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## Our Story

eQuorum is a privately-held corporation spun out of Byers Engineering Company in 1996. Byers Engineering Company was founded in 1971 and has since grown to become a large engineering firm with approximately 1,000 employees.

At eQuorum, we focus on solving complex workflow and document management problems for hundreds of organizations in various industries including manufacturing, utilities and energy providers, AEC (Architectural, Engineering, Construction), facilities management and government. Our customers seek to use digital documents to increase workflow productivity, enhance collaboration, and better secure and organize digital assets.

## Our Mission

Our mission serves a single purpose - build products for engineers as engineers, understanding that engineers require rock-solid tools that work and intuitively support the features they need every day.

We know that a single mistake or miscalculation in our industries can mean millions of dollars of rework and substantial loss of time. We don't want to be flashy, but want to provide stable solutions that help our customers achieve their goals with ease and the security of knowing their key assets are protected.





## Our Customer Promise

In 2005, eQuorum developed the first all-browser-based EDMS. The system, although for on-premise use, was still created to remove client software and JAVA from user computers and allow users to have a single viewer based on the simple navigation functionality of browsers. Today, eQuorum provides that same application in a private Cloud or a SaaS Cloud option. We can do this because we are, and have always been, browser-based, understanding the enhanced speed, security, and usability of this technology.

With the abundance of document management systems on the market today, there's no doubt that choosing the right Cloud document management software can be a difficult decision. eQuorum is here to provide a comprehensive, powerful, and most importantly – affordable Cloud document management solution. We believe in providing real value to our customers by eliminating unnecessary costs, providing industry-leading functionality, and equipping your team with the right tools using cutting-edge technology to bring your products to market faster.

# Our EDMS Solutions

## ImageSite® On-premise + Private Cloud

ImageSite is a comprehensive yet affordable, browser-based workflow and document management system that serves as a central distribution point to organize, store, and control the versioning of critical drawings, files, and documents.

ImageSite installs on a computer web server within your network, ensuring your corporate information remains in your possession. Users access all the features within ImageSite using nothing more than a browser or Windows client if they prefer. Since it's written in HTML5, there is no need for JAVA on local devices.

If the user prefers, the ImageSite Windows client (ImageSite Explorer) enables direct Windows access to dynamic content on the web server using Web 2.0 technology. ImageSite can be synced with other locations, or with our SaaS Cloud version – EngineBox™.

## EngineBox™

EngineBox is the cloud-based SaaS version of ImageSite. It resides outside the corporate network and is available through subscription, providing companies with immediate access to their documents and workflows from anywhere, using any device. Functionality is the same as licensed ImageSite.

SaaS subscribing means reduced time to benefit, improved scalability, and lower cost of implementation. It is a powerful solution fit for both small companies and large enterprises.

# Security and Access

## Access Control

Access Control methodologies and functionality are a way to ensure users are valid and authorized to access only the files and documents they need for their role. It prevents unauthorized users from accessing your company's IP (intellectual property) or confidential files. Access control comes in many forms; however, it consists primarily of two components: authorization and authentication.

## Authorization

Our EDMS solutions use a multilevel approach to Access Control. Both ImageSite and EngineBox are highly configurable, allowing system administrators to restrict access to files at the global, project, group, file, or file metadata level.

Both solutions ensure authorized users have access to only the files they need and do not provide unauthorized users with unnecessary capabilities (the concept of "least privilege").

These restrictions do not only pertain to the access of files but also the actions users can perform with a specific drawing or document. Depending on the needs of your organization, the system limits the capabilities of individual users such as uploading, downloading, editing, deleting, archiving, viewing, and more.

## Authentication

System administrators have full control over security and the ability to track failed login attempts and the IP addresses associated with them. If there is clear evidence of suspicious activity, the EDMS will automatically block the unauthorized user's IP address. With the IP Address Whitelist, you can ensure the system doesn't restrict access from your company's IP address or subnet.

## Single Sign-On (SSO)

ImageSite and EngineBox support various Identity Providers (IDPS) such as OneLogin, Microsoft Azure, AWS, Okta, and Google. It allows for the use of Single Sign-On (SSO), making it easy for users to access the system quickly and securely. Both provide users with the ability to implement Multi-Factor Authentication (MFA) to further secure authentication protocols.

## AES and SSL Encryption

Files located in ImageSite and EngineBox are encrypted using AES encryption protocols to ensure the secure storage of files. Files in transport are secured using SSL connections, guaranteeing privacy from the server to the user's device.

## Mobile Access and Security

ImageSite Mobile Access is an extension of our well-known document management software into the mobile world. It ensures an organization's drawings and documents are accessible to anyone with a mobile device, whether using an iPad, Android or Windows tablet, or other common devices.

Mobile users can access drawings and documents in the office, in the field, at home, or on the customer site. Our ScanNTap feature provides users with instant access to resource information by scanning a QR code with any mobile device.

Mobile is included with the purchase of ImageSite, allowing you to connect any corporate or personal mobile device to ImageSite.

And because ImageSite is HTML5-built there is no need to download or maintain a mobile app. This gives users instant portability of all their ImageSite documents and drawings, regardless of their location.

Electronic document management systems provide many benefits to organizations, but perhaps the most important in today's world of exploding data is the improvement in document security, especially with users employing mobile devices. IT departments are looking for better ways to safely keep their important files with increasing mobile access. The use of tablets and smartphones has exploded, and employees expect to be able to use these devices to connect and work with their daily applications and associated files, just as they would at their desks.

Employing a mobile-accessible content management system provides immediate access to legacy files and can ensure the security organizations desire. Web-based systems secure the files at the source, stopping inappropriate actions from taking place as opposed to older client-server applications requiring users to download files to their devices, leaving the files vulnerable to a variety of security breaches. Updates to the system only occur once on the content management system server, including viewing and printing, whereas other systems require users to download and maintain up-to-date software on all their devices.

# Capabilities

## Document Management

Our EDMS solutions provide complete control over digital file access. Users can check out documents (including CAD drawings) or download them to the system with ease while synchronizing local documents to the secure repository. System administrators and document controllers can configure document and folder attributes uniquely in multiple containers, including pre-defined pick lists and values. Our EDMS solutions help organize company information using Windows-like folders and subfolders for convenient user navigation most users are already familiar with. Users can save favorite documents, searches, sets, uploads, and downloads, and even define popular searches that are available to everyone. Administrators can configure ImageSite or EngineBox features that each user or group of users sees.

## Collaboration

Our EDMS solutions provide the ultimate “collaboration workspace” where users can go to find current projects, products, and customer-related information. Aside from their core document management features, both include a markup (redlining) tool where users can create an unlimited number of markup layers stored within the system. The extensive markup pallet can be used to add text, shapes, images, and even audio/video. The tool also includes variable text and a digital library where users can store and manage their library of symbols, including digital files such as engineering seals and stamps of approval.

Depending on your configuration, both EDMS solutions automate notifications, either through email, directly within the software, or both, to ensure project members are up-to-date with the latest requirements and information.

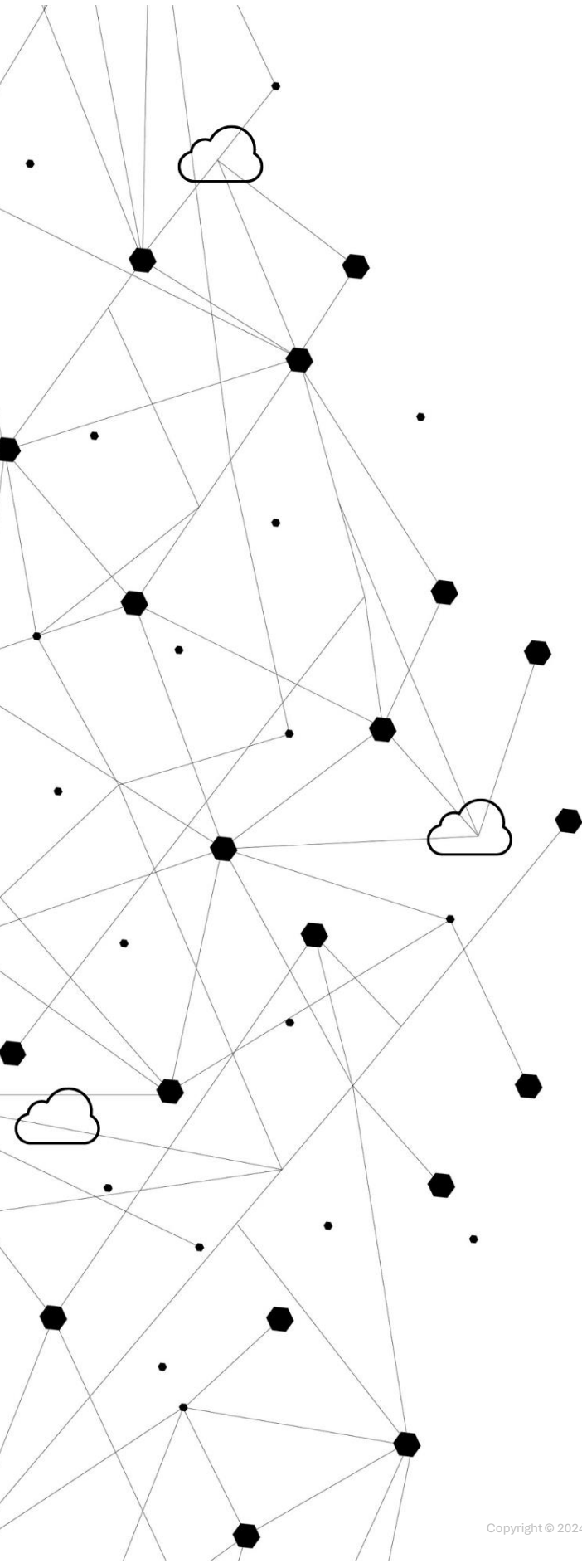
## Document Distribution

Both ImageSite and EngineBox offer advanced document distribution features, allowing you to work together more efficiently and securely. Use email and send compact messages with hot links to the documents you want others to work with. Send email hot links (URLs) for:

- Documents
- Document Sets
- Saved Searches
- Folders
- Markups.

Documents are always secure since they never leave the repository. Users must be authorized to access any document, even when using email distribution URL links. Clicking on the system links automatically prompts the user for login/password, if not using SSO. By only sending email links to stored documents, your important data is always protected, and users are always presented with the most recent version of the material. In addition to document security, sending links provides a complete audit of which users accessed which documents, when, and how.





## Guest Projects and Hybrid Configurations

When several, or many, files are to be distributed to non-system users, but the organization wants to restrict access to the specific files and track the actions by the recipients, a guest project can be created. Doing so does not require the recipient user to be set up in the system, as the email sent out includes a password for the user(s) to access the given files within the system. The link and password to the system and the files expire on a date established by the sender.

Recipients that enter the system are only shown the specified files and are restricted in their functionality, including downloading, printing, and marking up.

Using a hybrid configuration, by employing both ImageSite and EngineBox to automatically move files and workflows from On-premise to the Cloud and back again, allows documents or links to be provided to third parties without needing to give them access to the corporate network. A hybrid configuration also permits files to be synched between multiple locations, allowing users to see all files, even if they didn't originate on their ImageSite server. Synchronization is automated ensuring only the most current versions of files are available to users.

# Transmittals

## Creating Transmittals

Our Transmittal Management module automates the creation, tracking, and reporting of formal transmittal packages for vendors, contractors, and other third parties. Easily select and incorporate drawings, specifications, contracts, and other project-related files in a simple package that can be delivered by email or other means. Be assured that transmittals have current revisions when sent and revision levels are tracked against the originating transmittal document. Documents associated with transmittals resident in the system can never be deleted, maintaining the integrity of the audit trail.

Creating transmittals is straightforward and easily learned. Many of the transmittal fields have dropdown choices ensuring consistent tagging for searches. Using familiar corporate templates also makes the transition to automated transmittals quick and simple. Users with privileges can use a previous transmittal as the basis for a new transmittal, as often project transmittals are similar. Once started, a user can either enter a transmittal name or let the system automatically create one (guaranteeing the transmittal name is unique). Contacts for a transmittal are quickly added with an Outlook-like To, From, and BCC capability. Contacts can be system users or groups or non-system users.

Contacts that are sent the transmittal by email can be requested to confirm receipt of the email, which is recorded by the system and tracked.

Confirmations can also be sent directly to internal transmittal contacts notifying them of the receipt.

### The transmittal can include:

- Due dates (that are tracked and reported on)
- Reason codes
- Freeform remarks
- Delivery methods.

Along with standard information fields, transmittals can include custom fields that contain important status or project information (e.g., “not yet approved”).

These fields can be mandatory or optional and can contain multiple values (e.g., a custom status field can contain both “For Review” and “Critical Path” as values). Value validation rules can ensure transmittal actions can only be executed if specific conditions exist. For example, preventing a transmittal from being sent until all associated files have a status of “Approved” or better. You can add a transmittals Contents section that provides an overall description of all the items in the transmittal, with associated quantities. Then simply add files to the Associated Files list, either one by one, as a multi-file selection, a complete folder, or files in a pre-packaged set in Sets.

Files can be attached to the cover sheet, as is typically done, or the cover sheet can include URL links to the files so recipients can click file links and be directed back into the system, allowing for complete audit trails to be created including who and when files were viewed, downloaded, printed, or marked up.

A third method of delivering files in transmittals is to create a “cobbled-up” PDF document that includes the cover sheet. This permits the sending of a single PDF file without providing the native files.

### Transmittal Cover Sheets

Transmittal cover sheets are easily built using Microsoft’s Word and Add-in Open Document Processing Ecosystem application. Users can employ the Default template, and revise as desired, or templates can be made from scratch. Images and company logos can be included in the template, and almost any layout can be supported. Set up is done using standard XML tags and binding the tags to field names. Our Customer Support is there to help you create and implement almost any transmittal format.

Users have numerous options when it comes to creating and managing transmittals. This includes defaults for key fields, the addition of custom fields, and restrictions on when transmittals can be sent.



# Workflow Plus

## Workflow Management

Our Workflow+ module gives users improved control and visibility over workflows, making it easy to manage the stages of a project and the complex relationships required to complete related tasks. It includes a simple drag-and-drop interface for creating template workflows for managing steps and transitions.

Workflow+ automates important engineering and business processes, using a canvas-like tool to define projects as a series of interrelated workflow steps with assigned deadlines, each step associated with required documents and drawings.

Users with workflow capabilities can assign users to perform tasks at each step, providing them with detailed instructions and all the documents the user(s) needs, linked to the assignment. It automatically notifies workflow participants at each step, either through conventional emails, or internal notifications. Users can determine how often they receive these notifications and through which mechanism they prefer.

## Workflow Collaboration

Internally, workflows can be used to automate processes in small groups or across the organization. Assigned tasks are displayed in each user's My Workflow panel in the Dashboard, creating a "to-do" list. Tasks that have not yet been viewed or are overdue are highlighted in the panel. Externally, Workflow+ is a great way to improve process flow and connect with suppliers, contractors, and customers.

Simple workflows can be used to route information to external users for review and approval. Workflows can be shared with third parties to view, download, markup, and print documents and CAD drawings using a secured, self-expiring link without having to download, zip, email, FTP, or resort to external third-party tools. Use the document linking capability to give third parties direct access to view and markup files within the workflow. Enhance project collaboration and share files and drawings while protecting your IP and files that matter most.

## Attaching Files and Approvals, and Making Comments

A key benefit to using Workflow+ is all users are presented with the files they need to accomplish their task, whether CAD drawings, specifications, manuals, test results, invoices, etc. All attached files are carried through the workflow and can be marked up - and even versioned within the workflow.

Users with approval authority can simply approve or reject a workflow task with appropriate comments. Approvals can also include the application of seals or stamps or digital signatures. Various approval methods are offered, including a voting majority.

Comments get aggregated and recorded and are visible to all applicable users. They are helpful to users in adding workflow-specific information needed downstream and also as a means to historically document the execution of a workflow. Comments can be entered with appropriate entry types such as Remark, Question, or Answer and can be edited and sorted at any time.

## Integrating with Lifecycle

The Lifecycle functionality in the previous Workflow/Lifecycle module is now integrated directly within Workflow+ to automatically initiate the workflows and populate appropriate attribute data and needed files. Use this capability to establish retention/archiving protocols for files, to establish review and approval processes, and to kick off change workflows. Automatically update file attributes upon completion of workflows or tasks and send notifications to all interested parties.

## Visual Workflows

The desktop version of Workflow+ includes a visual, canvas-based tool for creating Workflow flow charts and managing steps and transitions. Simply drop a step in the workflow and drag it to the correct sequence. Attach manual or conditional criteria to advance between tasks and set off notifications.

## Common Applications

Utilize Workflow+ to increase productivity and control document-centric workflows, such as Engineering Change Requests. Automate engineering change packages throughout the organization, from review and approval to CAD users to QA, to production. Users check out linked documents, update and check in revised files, and release approved files; all with version control and notifications. Use Workflow+ to automate and track invoice processing from document inbounding through approval distribution to payment, all with automated audit trails.

## New Document Indexing and Search

Workflow+ automatically routes task-designated documents to assigned users for quality control review, transmittals, and release approval and can automatically relocate related documents to appropriate projects or folders, such as Pending Orders or Customer Requests. Documents can be searched by workflow and task as well as by custom workflow attributes, such as the vendor or customer data.

## Procedure Scheduling and Reporting

From simple routing workflows to complex, multi-step processes with scheduled deadlines, Workflow+ can be used to manage and monitor document-centric procedures. Use Workflow+ for approving and paying invoices, submitting and issuing building permits, identifying equipment maintenance tasks, and issuing needed work routers and related documents.

# RFIs & Submittals

## RFI & Submittal Management

The RFIs (Request for Information) and Submittals module provides companies with a structured way to manage requests and submissions. This module lets users associate RFIs or Submittals to particular projects, and improve the way the company manages and responds to the requests and submissions.

“RFI/Submittal Managers” establish user privileges, assign response tasks to specific users, and add due dates, ensuring the request/submission is responded to promptly and related files are available to the process participants.

Users with “create privileges” can generate new RFIs/Submittals. These creators can be in-house staff or third parties with access to ImageSite. Users with “review privileges” can view RFIs/Submittals and related replies but can’t make changes to the RFI/submittal, other than to comment.

RFIs/Submittals settings are fully configurable and can be adjusted to send custom automated email notifications to users when replies and changes are entered. All changes are recorded in the change log and can be referenced at any time when the need arises.

## Historical RFIs & Submittals

Historically, RFIs and submittals were tracked using spreadsheets, however, this has changed due to the availability of engineering document management platforms, such as ImageSite and EngineBox. ImageSite and EngineBox not only make it easy to manage requests and submittals but

can also help engineering and construction professionals save time and money while improving the overall timeliness and quality of their responses.

## RFI and Submittal Collaboration

Internally, the RFIs/Submittals module allows teams within the organization to easily collaborate by providing users with a quick and organized way to handle information requests and submissions. Externally, RFIs and submittals are used to efficiently communicate with contractors, vendors, and customers without needing to provide them access to information not relevant to their job functions. The RFIs/Submittals module is a great way to connect designers with third parties and customers and constructors with engineers. Using common documents and drawings and displaying entries (replies) from all parties permits all users to see and work with the same information and manage visible timelines.

## Attaching Files and Notes

Files related to RFIs or submittals are easily attached, eliminating the user’s need to search for documents. Notifications can be sent letting project managers, document controllers, supervisors, and others of a receipt of the RFI/submittal. Notes can be added to keep a running record of user questions, comments, and changes to an RFI/submittal and can also be used to clarify information, as well as provide instructions for process participants. The Notes threads are kept with the RFI/submittal for audit purposes.

## Deadline Management

With this advanced RFI/Submittal module, project managers can associate specific deadlines with all submissions, with past due responses notified to users and shown in the Dashboard and user reports to monitor and analyze the handling of the requests/submissions. Project managers can change the status of the RFI/submittal while adding information on schedule and cost impacts. Only users with management privileges can change deadlines.

## RFIs/Submittals from Anywhere

RFIs/Submittals can be entered on-site using any tablet device to immediately request additional information pertinent to project/construction implementation. Adding pictures, videos, and audio to RFIs/Submittals, from on-site, on the production floor, or at the customer office allows for a better-managed workflow for answering questions, and is much quicker than using paper redlining.

## Industry Applications

RFIs and submittals are common engineering processes used to collect requests and outside submissions for various production, construction, and facilities management projects. Submissions from vendors, contractors, and customers are typical. In several industries, such as AEC (Architecture, Engineering, and Construction) these submissions and their responses often form the basis for key audit trails of project steps taken or changes made.

## Applications for Construction

RFIs are the mechanism for vendors, subcontractors, and owners to communicate with AEC project participants for questions, changes, and project modifications. Maintaining a disciplined, rigorous workflow to manage, track, and report on requests ensures quicker responses, more accurate answers, and a reviewable audit trail should post-project questions arise. Allowing for RFIs directly from the field speeds up the information flow and gives on-site project managers the full history of changes and comments based on project requests.

## Manufacturing Submittals

Vendors and customers are constantly submitting drawings, documents, engineering change requests, material specifications, etc., and expect their submissions to be not only recognized but are being processed. Ensuring engineering changes, drawing updates, and technical document modifications are being worked on, as well as tracked, keeps customer submittals on time and budget. Also, using a distinct response tracking and management tool with notifications not only provides third parties with transparency but also the comfort of knowing their requests are being actioned.

# Digital Drawing Markup

## Advanced Drawing Markup

Our digital drawing markup module provides markup (redline) abilities and is displayed in real-time, allowing multiple users to collaborate over drawing files and documents simultaneously. Our markup tools allow users to markup drawings and calibrate scales to apply accurate measurements while easily communicating with other users for simple project collaboration. The markup palette can be easily moved around the screen, allowing users to position the palette in the place best for their device type and document type. Markup default settings and security settings can be customized to make it easier to indicate important changes to CAD drawings and other documents associated with project workflows.

## Images, Video, and Audio

This tool also enables users to add comments, videos, pictures, and audio to further detail revisions. By adding images, like engineering seals or A&P stamps, documents/drawings can be signed off or approved, and then the images can be “burned into” the PDF version of the file. Images can be JPG, PNG, GIF, or SVG and can be opaque or translucent, allowing the image to overlay any part of a drawing or document.

## Standard and Proprietary Shapes/Symbols

Use standard symbols and shapes provided on the palette or create or import your proprietary shapes and symbols and store them for future use, either as private or public figures. Customize text, colors, line forms, shapes, fonts, and fill patterns to signify different types of changes to documents. Use different colors per individual to identify changes by users. Standard ANSI and IEC electrical and P&ID symbols are provided with the system (with more being added every release cycle).



## Standard and Proprietary Shapes

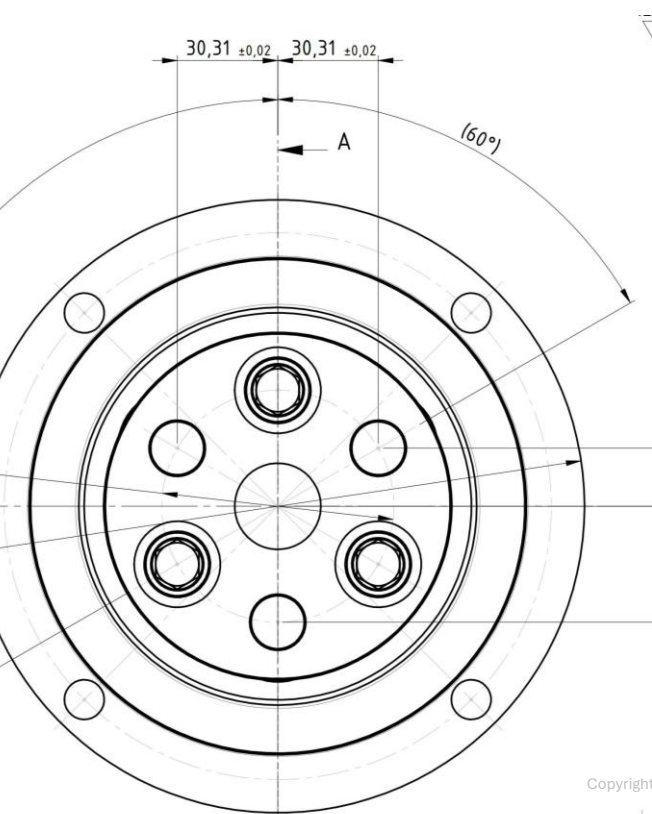
Customize text, colors, line forms, shapes, fonts, and fill patterns to signify different types of changes to documents. Use different colors per individual to identify changes by users. Text is available with different fonts, font sizes, and opacities. Line forms include solid and dashed lines of varying thickness.

Shapes include:

- Rectangles
- Circles
- Open and closed polygons
- Open and closed freehand shapes
- Lefthand and right-hand call-outs
- Clouds.

Make company symbols available on the palette, with the option for different symbols, by project type.

Quickly pick one of three pre-set highlight pens of varying widths and then pick a color.



## Manage Markups

All markups associated with a file can be shown in the view mode or users can select only the markups they would like to display, so it's easy to spot specific changes. Markups/redlines versions can be associated with just a single file version or can be brought forward to newer versions to create an audit trail of annotations and comments. Select which markups, by page, to include in a published or printed PDF version of the document. Scroll through your markups sequentially, forward or backward. Markups can be created and carried through in workflows like engineering change orders, invoice approvals, and design releases. Users can set notifications so that whenever a new markup is made or edited to a drawing or document, they, as well as other users, are alerted.

## Mobile Markups

Users can access the camera on their mobile devices to upload photos or videos to associate with change requests and drawings. Users can edit drawings online or offline and all drawings will be updated as soon as the internet is reconnected. While connected to the internet, users can view and send markups instantaneously with other users, enabling collaborative markup in real-time - even markup drawings or photos using smartphones, no software is required.

# eSync=Site

## Server Synchronization

eSync=Site allows the synchronization of folders and files across multiple servers and locations, with the security you currently have within ImageSite.

With eSync=Site you can:

- Allow multiple locations, departments, divisions, and even users to maintain files locally while having global access to remote ImageSite server documents, ensuring documents are up-to-date regardless of who last checked them out or where they last resided
- Provide users with mobile device access without allowing them into your network or needing to configure your systems for the multiple types of devices being used by employees
- Provide external users, such as vendors, contractors, and customers with secure access to important documents without them entering your network
- Configure a collaboration site, allowing secure access to documents by many different users and users types, in different locations
- Establish an archive or disaster recovery site that is automatically synched and maintained.

## How Does eSync=Site Work?

ImageSite document management software resides on a server that can be in your network (behind or in front of the firewall), in your wide area network, or in a hosted location (including cloud hosting).

The system administrator determines the configuration for the synching of projects, folders, and files across the various servers and who can synch what, then simply designates a project, folder, or file to be synched. Synching is a means of ensuring folders and files on separate servers (these can be anywhere) are the same, in terms of content, versioning, security, and metadata (the index information used for searching).

So, changes made to synched projects, folders, or files are reflected on their synched partners on the remote servers. Based on settings determined either by administrators or document owners, synched files on remote servers can be viewed, checked out, printed, or distributed.

To ensure users see no impact on accessing and downloading local files/documents, eSync=Site automatically scales the processing of synchronization activities based on the current user load. With many logged-in users, synchronization processing is dialed down, but when fewer users are logged in the synchronization processing is ramped up to take advantage of the opportunity to move data between servers.

## Configuration Options

eSync=Site provides administrators significant flexibility in configuring the software. The system can be defined to meet the exact needs of the organization, instead of the company having to change its work processes.

Configuration options include:

- The frequency at which folders/files are synched across servers
- The timing for when folders/files are moved between servers
- The number and location of remote ImageSite servers
- The directionality of synching
- Where folders/files are located on remote ImageSites
- Who can establish synching and how folders/files are synched
- Security modes to determine appropriate security governing protocols.

## System Synch Frequency

Depending on the necessity of having continuously current files/documents, network bandwidth, IT scheduling priorities, or quality checking requirements, the frequency in which documents and folders are synched across the network can be appropriately configured. Options Include:

### Continuous

Folders and files are immediately synched to remote ImageSite servers whenever material changes are made to the documents or folders. This ensures folders and files are always up-to-date.

### Scheduled

Synchronization can be set to automatically initiate all changed files using a schedule based on time of day, day of the week, or day of the month. This allows for efficient use of network bandwidth within IT scheduling priorities and for quality review before synching.

### On-demand

This is the most efficient means of folder/file movement across ImageSite servers, only synching folders/files when the owner wants to synch the folders and files.

## System Synch Timing

This is similar to on-demand synching but from the remote user perspective. Folders and files can be set for immediate file movement or delayed transfer. This allows remote users to see the files at other sites but not move a copy of the file until required by the remote user.

Use this feature to provide full versions of all network files without forcing high bandwidth movements during the day.

### ImageSite Servers to Synch

With eSync=Site, more than two ImageSite servers can be set up for synching. The administrator can configure which servers are to be synched and the direction of the synchronization. So, if Server A needs to synch to Server B but not Server C and Server B needs to Sync to Servers C and D but not A, not a problem. This works well where ImageSite servers are set up to specifically serve groups of users or groups of locations. Also great for maintaining specific file types on specific servers or locations.

### Synchronization Directionality

Most often there is a general directionality associated with ImageSite servers. For example, folders and files need to be sent one way from Server A to Server B where security is still controlled by the originating server. This works well for general document distribution to outside users like vendors, contractors, and customers. But sometimes a two-way synchronization is needed so Server B can communicate back to Server A. Providing two-way synchronization allows for better collaboration and more up-to-date documents.

### Synchronization Location

The synchronized folder or file on the remote server can either be placed in the same location as on the home server; in the same location, but named so it is clear the file is not native to the server; or in another directory. These three options allow the organization to:

- Set up duplicate file structures enabling more familiar directories for saving files

- Know which files reside on their local network and which reside on remote networks
- Provide tailored file structures for diverse location departments, or networks
- Synchronization rules can also be set to ensure all subfolders are synched whenever a high-level folder is synched to a remote server.

## Synching Authorities

Administrators can establish who can create or edit synching directives (i.e., the synching rules). The site and Project Administrators can configure broad synchronization rules for entire projects in top-level folders, or leave the configuration decision to the users to determine the synchronization rules for the content they control. These options help administrators and users identify the appropriate rules to be applied to folders, files, and projects and who will have access to these entities on remote servers.

## Security Modules

The system provides Syncing Authorities with several options for securing synced folders and files. These modes determine which server maintains and governs the security for particular folders and files. The Syncing Authority can transmit its list of permissions for users and groups to be attached to synced content or can allow the security rules that are already established on the destination server to appropriately restrict access. The Syncing Authority can also configure special overriding security restrictions to apply to all remote users as part of the syncing directive. This ensures users with broader access privileges on remote servers do not get incidental access to files not intended for them.

## Example Application

eSync=Site is a great way to establish a one-way syncing design where the primary ImageSite (the master) server automatically pushes up-to-date copies to a secondary ImageSite server.

The simple application of eSync=Site provides companies with the ability to enable:

- Vendor, contractor, and customer secure access to documents outside the corporate network
- A distribution site outside the corporate network, that allows secure access by mobile devices (including iPads and Android tablets)
- A Cloud-based site outside the corporate network for collaboration, sharing, and printing worldwide
- A disaster recovery site.

# Full-Text Search

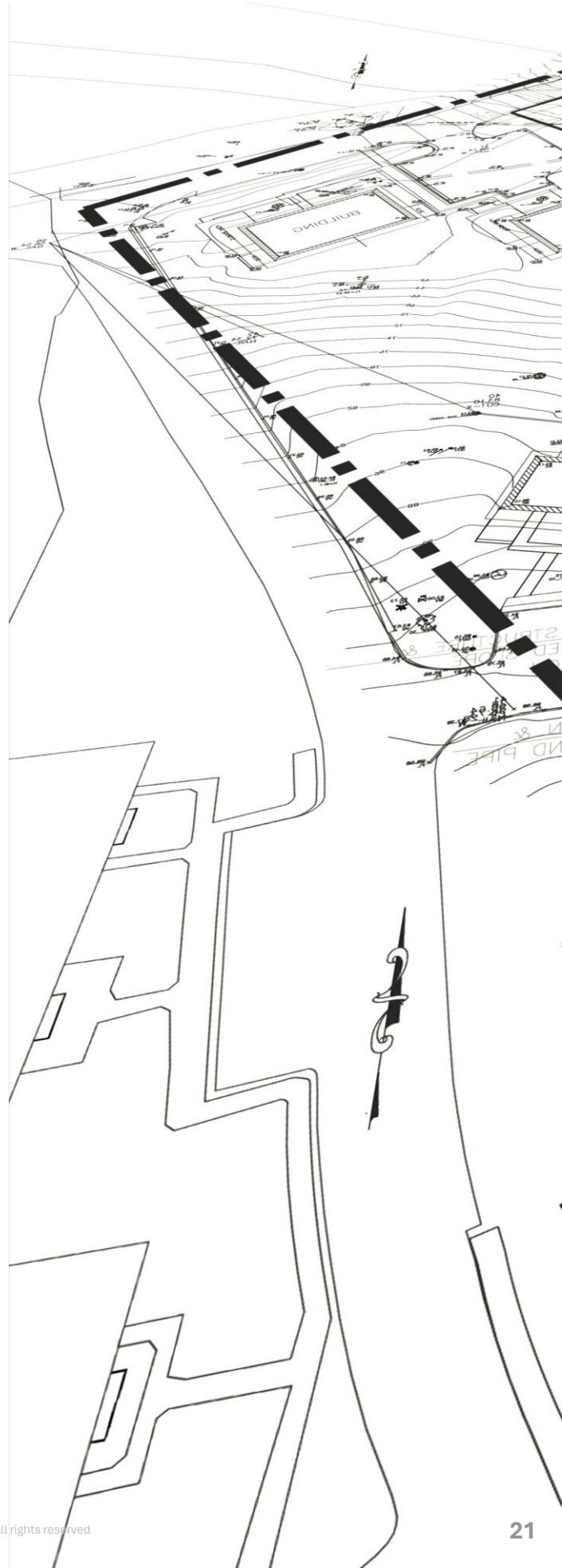
## What Is Full Text Search?

When combined with our standard features, the full text search functionality provides a powerful tool for quickly and easily locating documents.

The Full-Text Search (FTS) functionality allows document searches to be performed based on the content in the documents, including CAD, Word, PDF, Excel, PowerPoint, Email, published PDF, and ASCII files. In other words, search for words in a file, much like a web-search engine searches for websites by searching for words on the web pages. Text data is automatically submitted to the full-text search engine for indexing on document check-in.

The Full-Text Search functionality is an option displayed in the standard search template to search for words within a document. Wild card values, Boolean operators (e.g., and/or/not), and proximity values (words near other words) can be used to perform full-text searches.

Full-Text Search results are displayed just like any other search results, in the Search tab, and all results show a yellow highlighted field indicating where the text was found. For example, a government building permit department can define words related to building code violations. Construction firms can identify as-built numbers and names and route them to the design group for immediate response and resolution. Field service staff can identify part numbers with the installation of equipment.



# CAD Connectors

## AutoCAD® Connector

- Dynamic reference file detection during upload, and automatic creation of database links. Our EDMS automatically reads reference file connections, uploads reference files (Xrefs), and links them correctly in the repository.
- Title Block Integration automatically synchronizes AutoCAD Block/Tag and Field data with search attributes
- General text data within AutoCAD files are fully searchable using the Full-Text Search option. Users perform searches and find AutoCAD files based on general word or phrase searches.
- Web-based CAD vector viewing with layer and reference file display control
- Application ribbon add-in to permit viewing, check-out, and check-in without opening ImageSite
- Mobile device access to CAD files without the need for the native application
- Server-side comprehensive batch plotting with direct network access to any worldwide network printing or plotting device

## MicroStation® Connector

- Dynamic reference file detection, upload, and database linking, including nested reference file controls
- Web-based CAD vector viewing with layer and reference file display control
- Application ribbon add-in to permit viewing, check-out, and check-in without opening ImageSite
- Title Block Integration automatically synchronizes AutoCAD Block/Tag and Field data with search attributes
- Mobile device access to CAD files without the need for the native application
- Server-side comprehensive batch plotting with direct network access to any worldwide network printing or plotting device

## SolidWorks® Connector

- Dynamic assembly/component file detection, upload, and database linking
- 2D CAD vector image representation of the 3D model
- Title Block Integration automatically synchronizes AutoCAD Block/Tag and Field data with search attributes



- Application ribbon add-in to permit viewing, check-out, and check-in without opening ImageSite
- Server-side comprehensive batch plotting with direct network access to any worldwide network printing or plotting device
- Mobile device access to CAD files without the need for that native application (2D only)

### Inventor® Connector

- Assembly, Part, and Drawing check-out and check-in control from within Inventor with automated version management and appropriate drawing access
- Non-Inventor users can view and markup 2D drawings and reference files without additional CAD licenses
- Mobile device access to CAD files without the need for the native application (2D only)
- Dynamic Reference Files detection during upload which automatically creates database linking
- Title Block Integration automatically synchronizes Inventor Block/Tag and Field data with system attributes
- Application ribbon add-in to permit viewing, check-out, and check-in without opening ImageSite
- General text data within Inventor files are fully searchable using Full-Text Search capability
- Security-driven and context-sensitive commands based on user permissions.
- Server-side comprehensive batch plotting with direct network access to any worldwide network printing or plotting device



# Vault Integration

## Vault + ImageSite

Integrate Autodesk Vault and use the most efficient tools for the defined task. Engineers can allow Vault to manage the more complex part/assembly relationships, while our Vault Integration can automatically publish documents based on the state transition, enabling and ensuring the current and correct versions of documents are shared with the entire team. Metadata entered into Vault is transferred to our EDMS database, allowing easy searching. Documents are viewed, collected, downloaded, distributed, and printed by authorized users without the need for any client software or CAD viewing tools, using ImageSite or EngineBox as the portal for access to Vault documents. Additionally, our EDMS can allow or restrict document access based on its Vault state. For example, when a document is moved to an “In Revision” state in Vault, our EDMS can immediately flag the document and prevent operations such as printing and downloading until the revision is complete and the document is “Released.”

## Benefits

Deployment is fast since no software is required on the client’s PCs, aside from a standard web browser. Users are managed as a part of the Active Directory server; so as users are added to or deleted from the corporate network, their access to our EDMS is kept in sync. For example, DXF files are often utilized as Numerical Control (NC) files for milling machines.

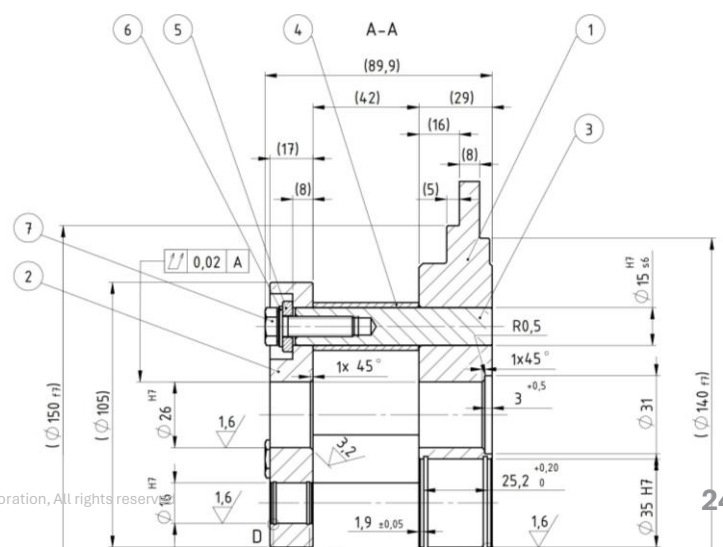
These files are not viewable when stored in Vault, but they are viewable in our EDMS, giving the machinist a quick visual confirmation before downloading and loading the file into the NC device.

File views are lightweight and quick, allowing salespeople to log in from remote locations and perform quick searches and views of the drawing files, without having to also download all the supporting parts and assemblies.

## Solutions

Using Application Programming Interfaces (APIs) from both Autodesk Vault and ImageSite or EngineBox, the desired behavior is implemented in such a way that no extra steps by the users are necessary. Configuration files define which file types are to be managed (DWG, IDW, DXF, DOC, XLS, PDF, etc.) and how metadata fields are mapped between the two products. Additionally, a routine that integrates with Vault monitors the various workflow states of a document. If a document is released, an entry is made in the Vault’s “Job Queue” to be processed by the eQuorum Vault Service.

The eQuorum Vault Services then publishes the file into the EDMS and copies the defined metadata fields. Similarly, if a file’s state is changed within Vault to “Revision Pending,” the corresponding file in the EDMS is flagged as being “In Revision” and protected from downloading and printing. If a file is deleted from Vault, the corresponding file is deleted from the EDMS.



# Domain Security

## Domain Security Module

Domain Security is an optional module that gives Administrators a single point of access to maintain security. This eliminates juggling multiple user databases on different systems throughout an organization — especially when hundreds or thousands of users are involved. The Domain Security module greatly reduces administrative overhead and makes access more convenient and secure for authorized users.

## How Domain Security Works

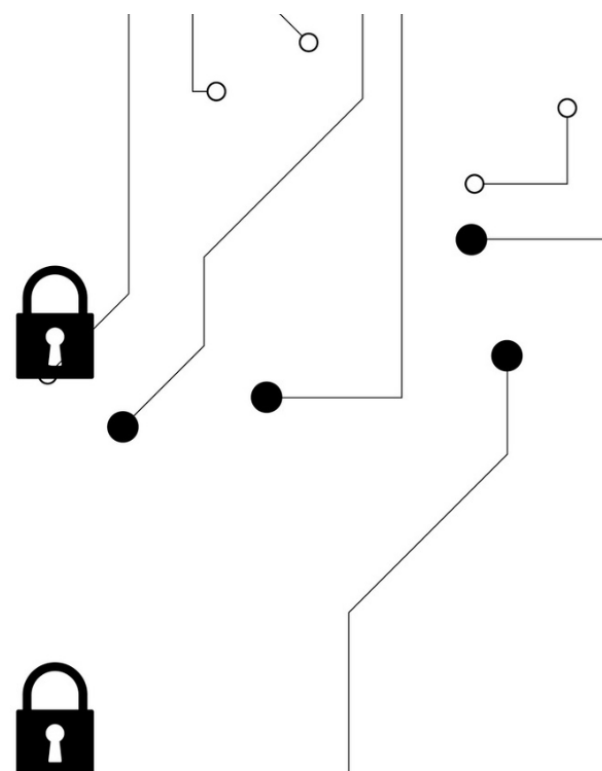
With the Domain Security module, security access for users and groups is automatically generated based on your Microsoft Windows User and Domain Group definitions in Active Directory. The EDMS Administrator simply points to a domain and clicks to select the user groups to create. This is a tremendous time-saver when hundreds or thousands of users need to access the EDMS. Once a user logs onto the company network, they are automatically logged into the EDMS creating a single sign-on. This eliminates the need for the users to reenter their name and password for access.

You still have the flexibility to maintain user accounts with a login and password. This is ideal for users who are not a part of your company's network, such as vendors or subcontractors. These users are prompted to provide security information before being allowed access. This ensures that only authorized users can access the EDMS within your company's firewall.

The EDMS is in frequent communication with the corporate domain server. If a company re-assigns or terminates employees and removes their access to the company network, they are similarly prohibited from the automated EDMS login. This is further assurance that no unauthorized user can access ImageSite or EngineBox.

## Single Cloud Sign-On

ImageSite supports Single Sign-On using Cloud ID Providers (IDPs), such as Okta, Azure, Google, OneLogin, and more, to create a unified access management platform for enterprise-level businesses. The system supports integration with IDPs where the system automatically populates users and groups from the Active Directory. Most IDPs also support Multi-factor Authentication (MFA) for access to the management system.



# Offline Mobile UI

## What is Mobile UI?

Our Mobile functionality may be used to access documents in the ImageSite and EngineBox systems. The Mobile functionality, due to its subset of the capabilities of the Desktop application, is lighter weight, and thereby suitable for mobile devices with smaller screens, such as smaller tablets and smartphones. The functionality is also a useful UI for desktop PCs and laptop PCs.

The functionality provides:

- Navigating projects and folders
- Viewing documents
- Viewing and editing markups (when Offline, editing when the user has checked out the document(s))
- Limited printing
- Simple searching.

## Offline Viewing and Markup

Since laptops and smaller format mobile devices, e.g., tablets, are often used away from the office, sometimes in limited or no Internet areas, the functionality includes an option to operate in an offline mode without an Internet connection to the ImageSite/EngineBox server. Using the functionality offline can provide faster response in some slow Internet areas, as the files are cached on the tablet, laptop, or PC, when “offline” has been enabled in the Settings view, and the documents of interest have been identified in the Favorites view.

To prepare for offline use, just before going offline and to ensure documents are the latest version users download the documents to be viewed while offline into the Favorites view. Once on the mobile device in Favorites the documents/drawings can be cached on the device using the Offline mode.

While offline (disconnected from the Internet) the system operates as it did while online except for searching. Documents and drawings can be marked up and video/photos added to the files. When the device can be connected to the Internet, the user changes back to the network setting, and the documents/drawings, with appropriate markups, are automatically uploaded back into the system.

# Implementation

## What Should You Expect?

eQuorum's implementation specialists have helped companies streamline EDMS implementations for more than 27 years, giving organizations immediate access to their files, documents, and data. You have three deployment options with our software, but because it is written in HTML5 all three options provide the same functionality.

## What Are Your Options?

- On-premise
- In a Private Cloud, managed by us
- In a SaaS Cloud, managed by us

Cloud implementations are exceptionally fast since we already have the infrastructure up and the software loaded and ready for configuration. On-premise implementations go as quickly as you want, as your organization is responsible for supplying the servers/VMs for the software.

Implementations can be accomplished in a matter of days to weeks. No longer do you need to wait months and years for a system to be available. And, leveraging our experience, we will guide you in making decisions to streamline your structure, files, permissions, and workflows in ways you may not have thought of.

ImageSite can also be integrated into legacy systems using our extensive API Toolkit, or by using the third-party software's API.

ImageSite seamlessly integrates with the leading CAD software (AutoCAD, MicroStation, Inventor, SolidWorks, and NX) and AutoDesk's Vault PDM, utilizing title block integration, automatic reference file detection, and integrated viewing and mark-ups.

We understand how stressful implementations can be, which is why our team is dedicated to getting your system up and running in just days, rather than months. Our implementation specialists will work with you every step of the way, ensuring your system is up, running, and ready to use by all employees who require access. Our Implementation Engineers provide you with the training and support you need to manage the system and train new system users quickly and effectively. Training is done on-site, through online webinars, and with online tutorials. You pick the way you want your employees to be trained, at no extra cost (travel expenses are charged for on-premise installs and training).

## On-premise Implementations

For on-premise implementations, you will need to supply a server or VM to run the webserver software (Apache Tomcat), a server or VM to run our software, and a server or VM to run database software (SQL Express, SQL Server, or Oracle). Depending on the number of files you have or the desired throughput, all three of these elements can run on the same server. The Implementation Engineers will help you set up these components and will if allowed by IT, load the ImageSite software directly on your machine for you.

## What Will You Need to Provide?

Once you choose ImageSite as your EDMS, you'll need to determine who will be administering the system. System Admins have full control over the software's configuration and should be the primary liaisons between your company and our specialists at eQuorum. They will create user profiles and set permissions on the user, group, project, file, or file metadata level to ensure the safety and security of your documents. System Administrators are the gatekeepers of the system and can change permissions and configurations on an as-needed basis.

### eQuorum will help you with:

- Consulting on how to best configure the system based on almost 30 years of experience
- System access and configuration
- Workflow automation
- Transmittal templates
- RFI/Submittal templated
- Bulk document migration upload
- CAD connector setup
- User access control and permissioning
- Administrator and user training.

# Industries We Serve

eQuorum serves a wide range of industries including aerospace, utilities and energy providers, national defense, Architecture, Engineering and Construction (AEC), manufacturing, facilities management and public sector. Our EDMS solutions, ImageSite and EngineBox, provide robust workflow automation and collaboration tools to help organizations execute projects more efficiently, and finish projects faster while delivering positive financial outcomes and meeting compliance requirements.



## Architecture, Engineering, and Construction (AEC)

AEC organizations create complex engineering concepts and designs. This includes CAD files, specifications, calculations, transmittals, RFIs, engineering change orders, and other construction documents. Storage, management, and audit of these documents are critical to ensure designs are properly interpreted, construction is done correctly and the resulting infrastructure is successfully recorded as operated.

## Manufacturing

Manufacturing organizations are highly collaborative environments where input from production, quality assurance, sales, and product support often create revisions to product documents. Workflows are critical to ensure changes to product designs are fully reviewed and approved by all parties to maintain high quality and avoid downstream production issues.



## Utilities and Energy Providers

Utility and energy-providing companies have a wide variety of documents related to building, managing, and maintaining their inside and outside infrastructure and assets. To that end, these organizations are often challenged to keep plant, substation, and transmission line information up-to-date and communicate important information across multiple departments, including during emergencies.

## Public Sector and Facilities Management

Government agencies and universities use building floor plans, equipment information, and other infrastructure documents in the ongoing maintenance of their facilities, including space planning utilization and renovations. Making these documents easily available to everyone who needs them is a big challenge for most facilities management departments. Because government agencies and universities often outsource their projects to external AEC vendors, they need an easy and traceable means to distribute and audit drawings and documents.



# Our Services

Our Consulting Group also provides Business Workflow Improvement consulting engagements including NIST Compliance Assessments. The Consulting Group works with organizations on their digital transformation by improving processes with digitization and improved document workflows.



## HTML5-Based Solutions

We developed a system where there are no software downloads required for any users. ImageSite, our on-premise solution, and EngineBox, our Cloud solution, are entirely HTML5-based.



## eQuorum Support

For occasions where you need customer support, though many organizations use the trite phrase that their customer service is the best in the industry, we believe ours is and even include it in our mission statement, "...and by providing a level of client support that is distinguishably superior." The eQuorum support team ensures customers receive the strategic counsel necessary to implement effective document management solutions. No phone menus, and no tickets; call and a Support Engineer will pick up the phone or respond to your email.



# About eQuorum

eQuorum is the developer of EngineBox, one of the first SaaS Cloud engineering document management systems (EDMS) in the U.S. Their product portfolio also includes ImageSite, an on-premise engineering document management system and workflow solution—also offered as a Private Cloud EDMS solution. ImageSite and EngineBox are built in HTML5 and do not require users to download software to their PCs, or download apps to their mobile devices, including laptops, tablets, and smartphones. eQuorum’s engineering document management products serve as a collaboration solution for affiliates, customers, and vendors in a wide variety of industries. eQuorum also provides NIST assessment consulting, training, and software implementation services.

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