

Engineering Workflow & Document Management Systems for Facilities Management

There are many corporate, manufacturing, and/or universities, undergoing changes in their facilities that demand a robust engineering workflow and document management system (EDMS). Expansion and renovation projects require facilities management teams to adopt specialized software to manage their growing facilities and communicate with contractors responsible for their construction projects. The utilization of a document management system to control their facility maintenance and construction documents can ultimately help improve communication with the contractors responsible for these projects.

In addition, facilities management departments have a myriad of financial documents used to keep their facilities up and running. A document management system can help organizations better store and organize these documents by helping these organizations manage document versioning, workflows, and document security.

Facilities Management for Engineering-based Projects

An engineering workflow and document control system can help organizations better manage their construction projects and maintain tight control over their facility documents. Specifically, universities can use building floor plans, equipment information, and other infrastructure documents in the ongoing maintenance of their facilities, including space planning utilization and renovations. In addition, universities and school districts often outsource their design and construction projects to external AEC vendors. As such, these agencies can use a document control system to review and approve work performed by external contractors.

Document Versioning

An engineering workflow and document management system provides a single source of truth for managing reviews and approvals. Document versioning is facilitated by the system, ensuring the correct version of a document is being used or reviewed at all times. The system also includes the option to include redundancies, such as time stamps and seals of approval, so that there is no question as to whether a document has been reviewed and is the current version.

Facilities management departments can base version numbers on their preferred versioning schemes, which can be numerical, alphabetical, or alphanumeric, and can even change between vendors and projects. This allows them to use their traditional versioning schemes, making it easy to train new users.

Digital CAD Drawing Markups

With ImageSite and Engine-Box, workers can markup (redline) drawings from any location, making it easy to communicate changes upstream. Workers can indicate changes using images, text, audio, and even video, making it easy to communicate changes. Comments and Notes can be assigned with markups to show a string of changes and requirements. Additionally, markups allow organizations to create their own library of symbols with variable text for engineering stamps or seals for approval and more.



Efficient Storage and Continuity

The facilities management department can use this technology to preserve knowledge, as all system users are required to follow the same set of document management procedures. This ensures organizations don't lose files as workers move between companies or retire. For universities, this is a critical element of an engineering workflow and document management system as institutions with high turnover, or a large staff often face these issues.

Faster Project Turnaround

Employees often spend a large portion of their time searching for and handling documents, creating inefficiencies in workflows that can lead to project delays. ImageSite and Engine-Box provide sophisticated and quick search capabilities using both metadata attributes and full text search indexing. The systems also provide internal and external notifications to ensure the timeliness of projects, and accuracy of information. Users can also automate document actions, eliminating the time needed for manual handling of documents. Project managers can review workflow audit trails and analytically identify bottlenecks, inefficiencies, unneeded tasks, and general workflow velocity.

Transparency for Vendors and Contractors

With ImageSite and Engine-Box, companies can ensure their vendors have access to the files they need, when they need them, without granting them access to your network or unnecessary files. Additionally, the RFI/Submittal and Transmittal modules, ensure speedy communications between third parties, and complete control over project deadlines. It is the perfect solution, as it helps improve their collaboration and increase overall efficiency of workflows.

Engineering Workflow and Document Management System vs. Local Devices

The use of PCs and laptops to execute and manage workflows has become the norm, with the majority of these workflows being document-centric. The digital files have been maintained and employed on user local machines for years, using decentralized software applications (e.g., Excel, Acrobat, and Windows File Manager). Centralized document management systems now provided a better way to maintain, distribute and manage these files.

The major differences are:

Engineering Workflow and Document Management System

- Automatic versioning of files based on preferred versioning schemes
- Full-text search and advanced search filters using conditional operators
- Automated document actions based on workflow configuration
- Secure communications with vendors and contractors
- Collaboration tools such as markups, (redlining), internal/external notifications, RFIs, and more.

Local Systems

- Basic version control
- Organizations are subject to data loss by misplacing files or overwriting
- No automation
- Simplistic searching
- Little to no file sharing
- Unsecured communications via email
- No collaboration tools.

eQuorum

eQuorum is an engineering document management software provider offering Cloud, on-premise, and hybrid solutions for companies with a large number of files, file types, or locations. Companies have been utilizing this software for more than 25 years by some of the country's leading utilities and power generating, manufacturing, and engineering services companies, as well as major universities and government agencies.