

**Construction
Imaging®**

MANAGE | AUTOMATE | INTEGRATE

Viewpoint Integration

Providing content management technologies to fully manage, automate, and integrate construction business processes with construction business applications, document archiving, and information availability. Automated workflows, integrated applications, and structured information management provide our clients with the necessary tools and professional resources to implement and maintain a successful Enterprise Content Management strategy.

Construction Imaging fully integrates with Viewpoint Construction Software providing a “best in class” pairing between ECM and ERP. Construction Imaging technologies augment the business process, providing electronic workflows to streamline the data collection into the Viewpoint ERP system. Additionally, the ECM integration provides a central storage and management solution for all electronic documentation. Additionally, centralized storage provides a principal administration portal for security, access, archiving, backup, and retention. Construction Imaging solutions equip Viewpoint users and administrators with an array of tools to develop and maintain a comprehensive Enterprise Content Management strategy.

Data Validation

Data validation is a critical component of the Viewpoint integration. Data validation ensures that the document management system is operated on correct, clean and up-to-date Viewpoint data. Often this process is carried out for the purpose of making Viewpoint data available to end-users without giving them access to the Viewpoint software. It also ensures data consistency between the two programs and eliminates manual entry. Popular data validation includes Data Lookup and Commitment Pull.

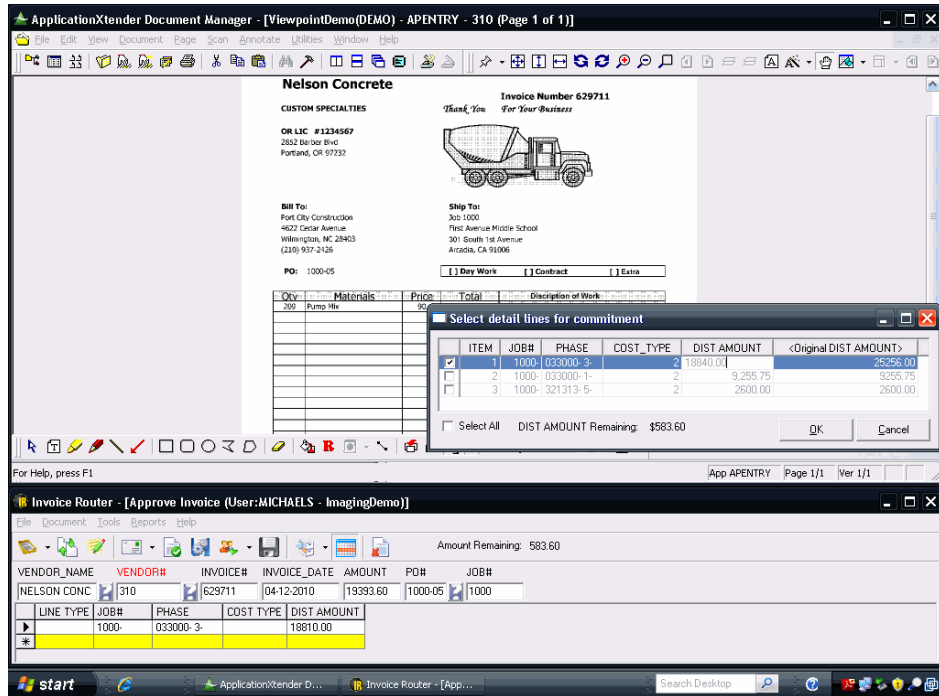
Data Lookup

Lookups, like in Viewpoint, provide an easy way to ensure users input valid information into the appropriate fields. Lookups can be as simple as showing a list of vendors, or as complicated as providing the user with a list of valid cost types for the company, job and phase that they have entered for a particular invoice detail line. Lookup fields are typically configured to mirror Viewpoint, but may be customized to customer requirements if necessary.



Commitment Pull

Invoice Router's standard detail grid provides a great way to code invoices; however, for those invoices that have the coding lines already setup in Viewpoint, implementing the Commitment Pull feature is a great advantage.



The Commitment Pull provides real-time access to Viewpoint's PO/SL line item data from Invoice Router. Users are presented with a grid showing all lines in Viewpoint for that particular PO/SL. Users then select lines that apply to that invoice and enter the current amount for the line item being approved.

Advanced Validation

Viewpoint clients that have advanced validation needs, a solution feature provided allows for customer-created Stored Procedures to be executed when a user attempts to approve a document. The Stored Procedure will have access to any field value from the document and when completed will return a warning or

The Commitment Pull allows users to view the commitment amount remaining in Viewpoint on a purchase order or subcontract prior to routing or approving the invoice in the document management system.

error message stating the reason the document failed validation. If the information validated successfully, the user sees nothing and the document is approved. Stored procedures can include verifying that the subcontract has been signed, insurance is up to date and a lien release is present.

Data Export

Exporting data from Construction Imaging into Viewpoint can be performed in a variety of methods, depending on the document type and/or the client's internal policies and procedures. Data Exports eliminate duplicate keying, which is a goal of any Enterprise Content Management implementation.

Type Once Export

Type Once Technology allows data from Invoice Router to be pushed directly into the AP Transaction Entry screen in Viewpoint. Users don't need to learn any new processes; the Type Once Export enters the data exactly as if a user had typed in the invoice manually, but much faster. Validation is performed interactively by Viewpoint as it always has. If an error occurs, the process is paused and the user is prompted to resolve the problem. If the AP user cannot resolve the problem immediately, the export can be canceled and the document routed to the appropriate user for correction.

Batch Export

This method eliminates the need for AP to see every document, while still ensuring that Viewpoint validates every invoice. An Import Template is provided to import batches of invoices directly into the system. Invoices appear as a new batch in Viewpoint and must still be processed by an AP user. To ensure compliance and data integrity, Viewpoint tables are never directly edited or modified.

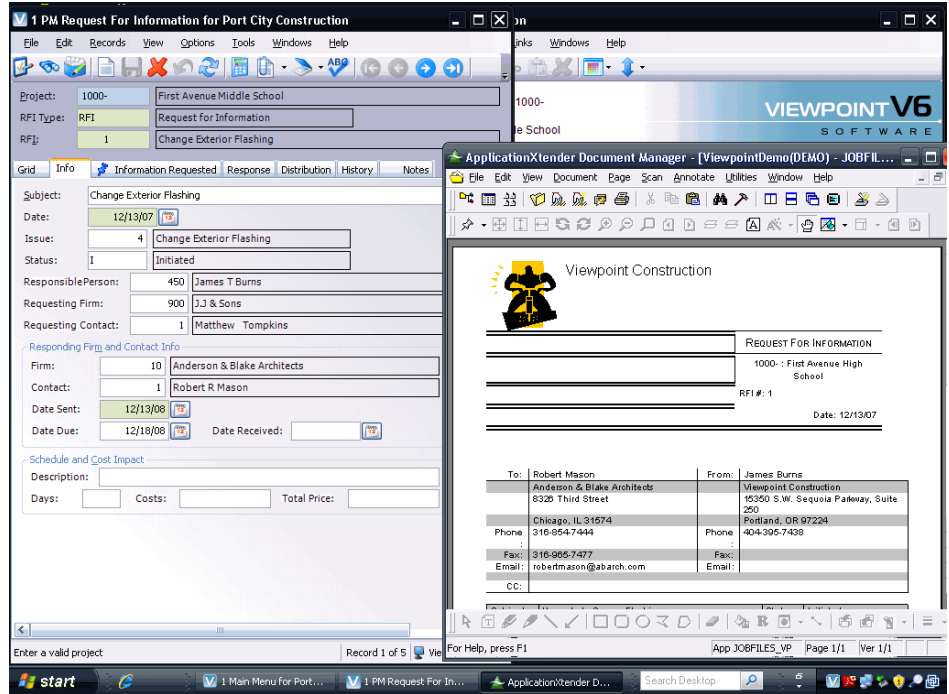
Document Linking

Construction Imaging allows two-way linking of documents between the document management repository and Viewpoint. Two-way linking allows for those proficient with the Viewpoint DM interface to continue to use the same method before the integration and allows those users whom may have not had access to Viewpoint an efficient way to manage documents through Construction Imaging's interface for adding and retrieving documents from the repository.

Viewpoint DM Interface

The Document Manage System can be configured to attach to any form or transaction type in Viewpoint's system. When a Viewpoint form is connected, any documents uploaded to that form will automatically be placed in Construction Imaging's repository. For example a user may want to attach a document to an employee record in HR Resource Master. That document is pushed into the Construction Imaging HR repository and a shortcut is left in Viewpoint. When a user retrieves that document, it is opened automatically in Construction Imaging's viewer. Attachments may be added by drag-and-drop or using the Add Attachment form.

Attachments from Construction Imaging act as native Viewpoint attachments and thus all the features of Viewpoint DM are available. For example, attachments still exist in drilldown reports and users can launch the document by clicking the appropriate attachment line item. If a user chooses to email an attachment, such as an RFI, from Viewpoint, the document is seamlessly exported from Construction Imaging and attached to the email. The same applies for Job Billing CD creation; any associated attachments are automatically exported and put on the CD. Thumbnails, a popular feature with many users, are fully supported



Construction Imaging's document management system supports 200+ native document views from within the system, providing complete document control without downloading files to the desktop.

Benefits: Line speed requirements, no need for document viewing applications in order to review or markup documents, annotations, etc

Index Search

Index searching can be done in both Construction Imaging and the Viewpoint Attachment Index Search. The document linking process updates Viewpoint Attachment Indexes. Casual users already familiar with the Attachment Index Search may continue to use this feature to find the documents they need while power users may use the Construction Imaging interface.

Push Attachments

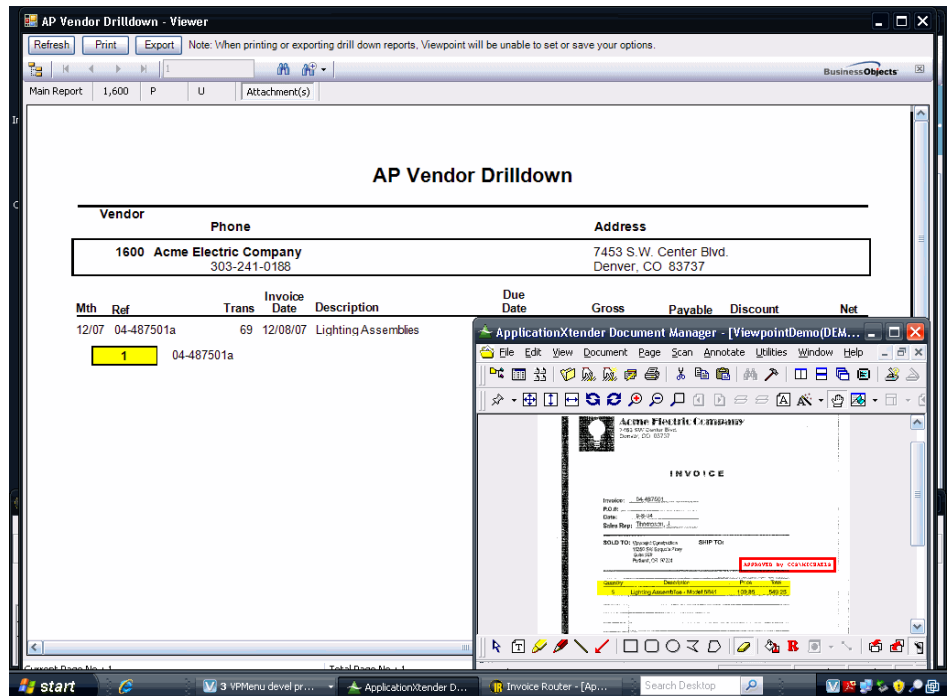
While Viewpoint's DM interface works great for one or two documents attached to a record; batch entry of volumes of documents is much more efficient in the Construction Imaging CDM or IR interface. Any documents added via the IR/CDM interface can be automatically pushed to the appropriate Viewpoint form as shortcuts. For example, invoices added in Invoice Router are pushed to the associated AP Transaction in Viewpoint.

Powerful Viewer

Viewpoint's DM system requires that users have an application installed to view the document they are downloading. Construction Imaging provides a powerful viewer with support for more than 200 document types. Some popular types include: Word, Excel, PDF, CAD, JPEG, TIFF and many more. Users no longer need expensive third party software to simply view a stored document.

Credentials and Security

Credentials and security are controlled within Viewpoint and the document management system. Initially when a user accesses the plug in from Viewpoint, they are prompted for their document management username and password. The user's Viewpoint username, document management username and encrypted document management password is stored in a table in the document management database. Subsequently, each time the user accesses the document management system, a query for their DM credentials based on their Viewpoint username is conducted and automatically logs them in. If the user's DM password ever changes, we prompt them for their new password. Therefore the only time the user gets prompted for credentials is when they first use the integration or their password changes.



Highlighted entries can be double clicked to access the associated image.

Viewpoint 'Attachment Types' are secured thru user credentials and are validated every time an attachment is accessed, whether adding, viewing or deleting, the document management system makes a call to Viewpoint to determine if the current user has access to that Attachment Type. If they do not have the appropriate security level, they are prompted with a message stating the security restriction. Regardless of Viewpoint's Attachment Type security, the document management system's document level security is still enforced.

Conversion

Many customers may already be using Viewpoint DM and have documents attached throughout the system. Once mapped to the Construction Imaging repository, an administrator may choose to run the conversion utility to take all existing Viewpoint attachments and push them into the Construction Imaging repository. However, this is not required. A day-forward method can be used as well where all new attachments are stored in the Construction Imaging repository, and any existing attachments are left in Viewpoint.

Construction Imaging is dedicated to creating a seamless user experience for Viewpoint customers. We are working closely with Viewpoint to ensure our solution continues to provide a comprehensive integration between two best-of-breed applications.