

Cohesive Information Solutions



Maximo and FileNet Integration using CONNtext



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Armedia



Presenting today

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Electronic Document Management System (EDMS)



- May contain millions of Documents, many with multiple versions and revisions
- May contain many documents that are not relevant to Asset Management and Maximo
- May contain n-tiers of document hierarchies for sorting and management

Asset Management



- Can have attached documents to support asset management
- Historical attachments
- Some such as engineering drawings may be controlled with multiple revisions
- Some such as pictures may not be controlled and for information only
- Relatively simple folder structure

Typical Users



- Asset Management users are typically novice EDMS users



- Electronic Document Management users are typically novice AM users

Product Goals

- Utilize built in tools to integrate Maximo and FileNet while preserving the Maximo library structure and the ability to utilize cheaper network storage for non-controlled attachments as well as integrate with multiple EDMS systems if needed
- Make only relevant FileNet documents available in Maximo and easy to find and link
- Have users only work in the system they are comfortable
- Accurately reflect the version used on a work document for history purposes

Maximo & FileNet Integration

- *CONNtext* and the Maximo Integration Framework (MIF) provide a seamless bi-directional solution between Maximo and FileNet.



Real-time access to appropriate FileNet content and ability to link to specific document version

Real-time access to Maximo information from the FileNet user interface

Jointly offered by:



Maximo & FileNet Integration



- CONNtext contains the user defined rules to determine which types of documents are relevant to Maximo and only sends those
- CONNtext translates the n-tiered document hierarchy to a simplified Maximo folder structure
- CONNtext maintains the Maximo library with the most current approved revision for each of the relevant documents
- CONNtext also allows the viewing and maintaining of linked Maximo objects from a FileNet document
- CONNtext is also certified by FileNet

Jointly offered by:



Maximo & FileNet Integration



- Maximo uses the MIF to communicate with FileNet for the maintenance of the library and the links to Maximo objects
- Maximo uses a DMS class file for structuring the URL's to FileNet documents allowing continued support of mapped network drives as well as other DMS class files for multiple EDMS integrations if needed
- Maximo leverages escalations to lock in specific document revisions when manually requested or automatically at specific points in the work order lifecycle

Jointly offered by:



Maximo & FileNet Integration

•Use Case Scenario 1 – Add a new Pump drawing to FileNet and link to Maximo Asset

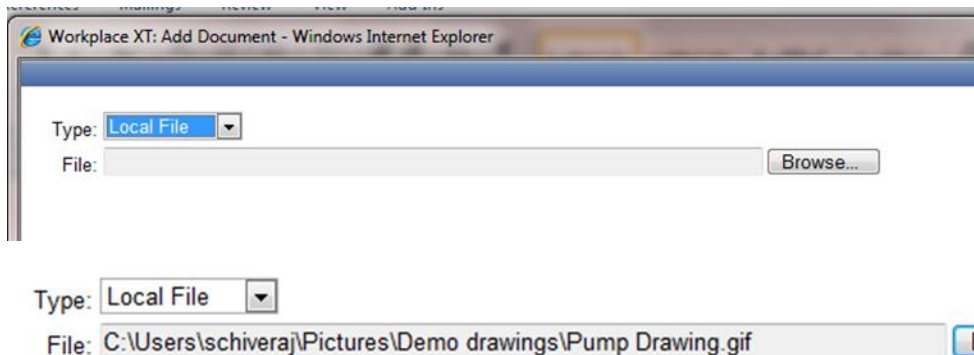
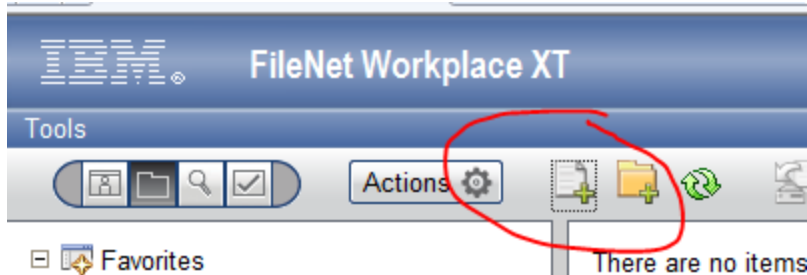
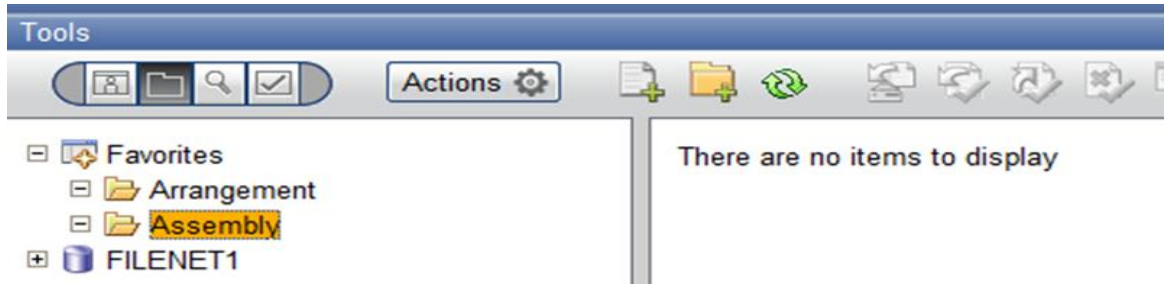
- We will add a new Pump Drawing to FileNet
- It is of a Class and Document Type that Maximo subscribes
- A Maximo Library Link is created
- From FileNet, create an attached document link to an Asset in Maximo
- View the Attached Document link in FileNet
- View the Attached Document link in Maximo
- View the Document from the Maximo hyperlink

Jointly offered by:




CONNtext In FileNet Client

- Add a Document to FileNet



CONNtext In FileNet Client

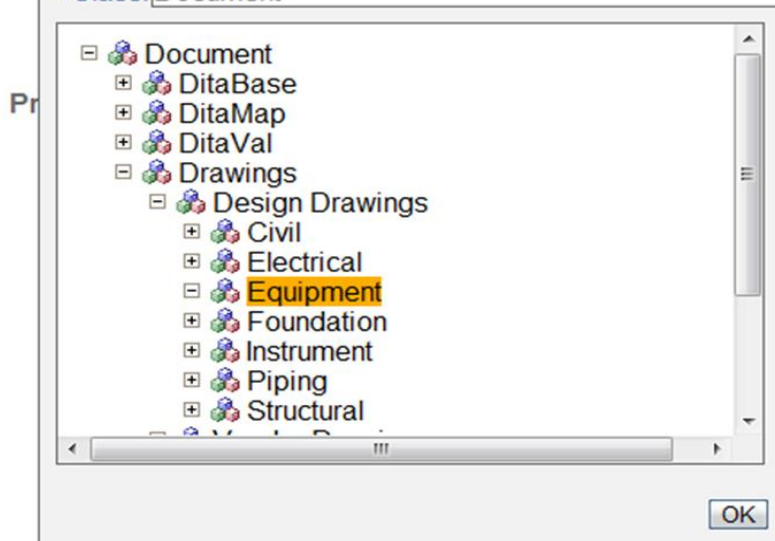
- Add a Document to FileNet cont.

 Filename: Pump Drawing.gif
☒ Location: FILENET1 :: Assembly
✓ Class: Document
☒ Major version


Properties

Document Title: Pump Drawing.gif

 Filename: Pump Drawing.gif
☒ Location: FILENET1 :: Assembly
✓ Class: Document



- Add a Document to FileNet cont.



 Filename: Pump Drawing.gif
☒ Location: FILENET1 :: Assembly
 Class: Equipment
☒ Major version

Properties

* Document Title: Pump Drawing.gif

* Drawing Number: 5467


* Revision Number: 00

 * Revision Date: 2/8/11 

 Sheet Number:

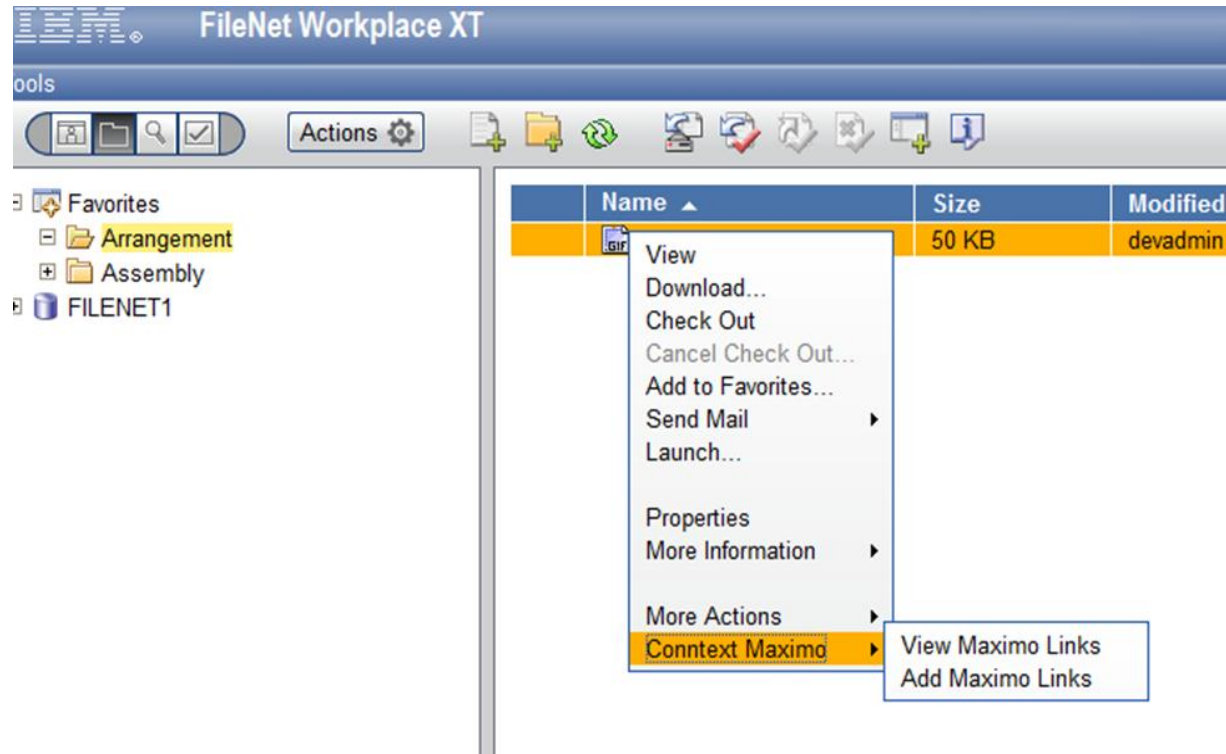
 Site:

Resp Organization:

* Drawing Type: Assembly 

- CONNtext business rule was established such that Equipment Class documents of Drawing Type Assembly should go to Maximo
- In addition, CONNtext rule also maps these types of documents to the “EQP DWGS” folder in the Maximo Library

- CONNtext menu items added to the document menu to view Maximo linked objects or add links to Maximo objects



- Choosing the Add Maximo Links opens a dialog. Selecting the type of object to link provides a list of query criteria for that object.

Adding links to Pump Drawing.gif of type Equipment

Asset	ASSETUID:	Like	
Job Plan	Asset:	Like	11430
Work Order Tracking	Description:	Like	
	Status:	Like	
	Asset Type:	Like	
	Location:	Like	
	Manufacturer:	Like	
	Vendor:	Like	
		Query	

View

- Note that the function also queries Maximo to determine which applications are enabled for Maximo Folder EQP DWGS and only displays those.

- If Query criteria displays multiple records, multiple links can be created at once (several of the same type of assets)

Asset

Job Plan

Work Order Tracking

View

ASSETUID:

Asset: 11430

Description:

Status:

Asset Type:

Location:

Manufacturer:

Vendor:

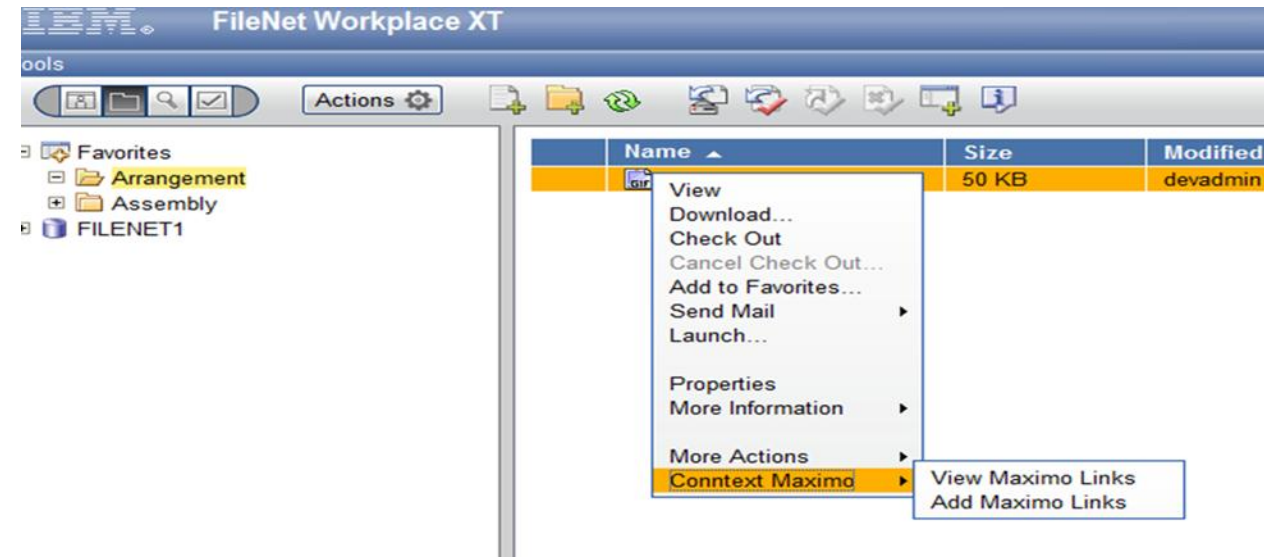
Query

Maximo records for Asset

ASSETUID	Asset	Description	Status	Asset Type	Location	Manufacturer	Vendor
<input type="checkbox"/>	1559	CS11430 BEDFORD CS Centrifugal Pump 100 GPM, 60 FT-HD	NOT READY	null	null	null	null
<input type="checkbox"/>	1561	CS11430 DENVER CS Centrifugal Pump 100 GPM, 60 FT-HD	NOT READY	null	null	null	null
<input type="checkbox"/>	146	T-B11430 150 AMW410 MITSUBISHI MOLDING	NOT READY	null	MOLD	MITSUBIS	SLW SALE
<input type="checkbox"/>	139	L11430 PNEUMATIC PRESS	NOT READY	null	L430	B&C	COSCO
<input checked="" type="checkbox"/>	121	11430 Centrifugal Pump 100GPM/60FT HD	OPERATING	null	BR430	IR	IR

Maximo responded with:
Adding link to ASSET
ASSET121231EQP DWGS

- By using the View Maximo Links option, you can view a list of all Maximo records that are linked to the document



Viewing links for Pump Drawing.gif of type Equipment

Asset
Job Plan
Work Order Tracking

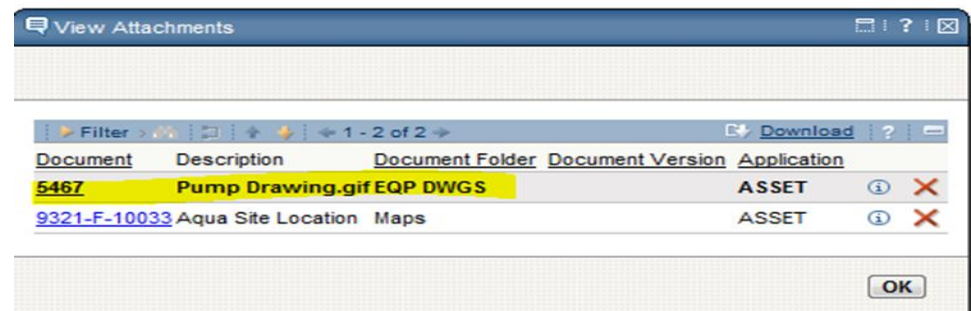
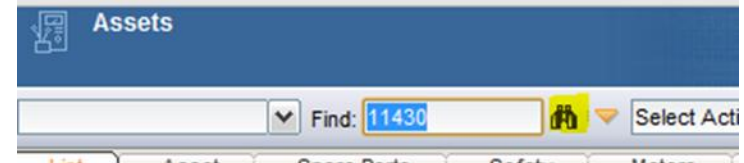
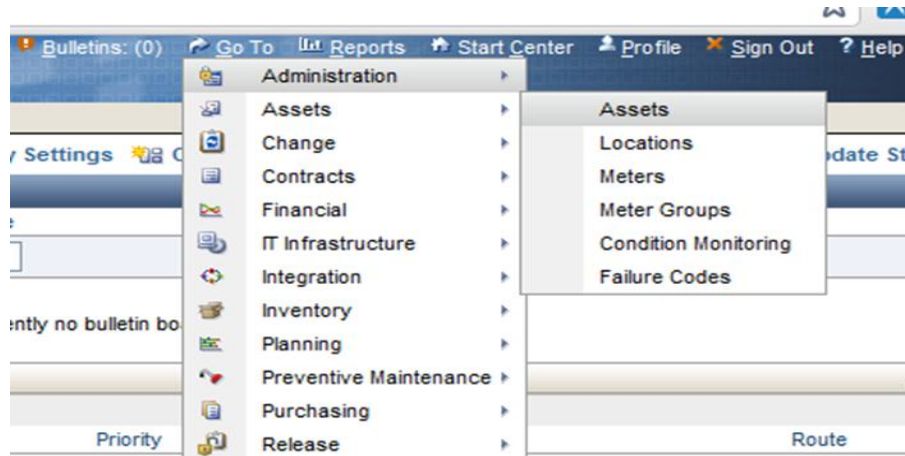
View

Maximo links for Asset

ASSETUID	Asset	Description	Status	Asset Type	Location	Manufacturer	Vendor
121	11430	Centrifugal Pump 100GPM/60FT HD	OPERATING	null	BR430	IR	IR

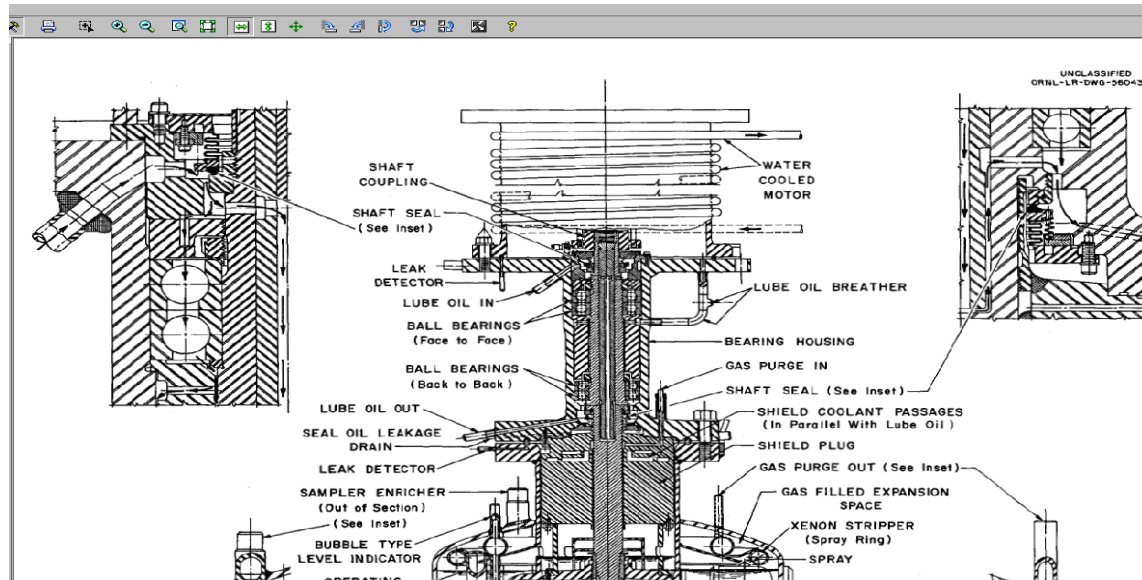
Maximo Assets / Attached Documents

- The document link added in FileNet now shows natively in Maximo



Maximo Accessing FileNet

- Clicking the link in Maximo uses the DMS class file to formulate the URL to retrieve the document from FileNet (latest version). Login requirements would depend on your authentication configuration.



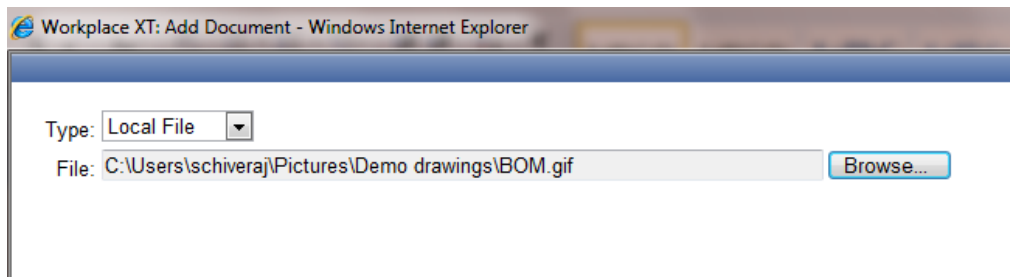
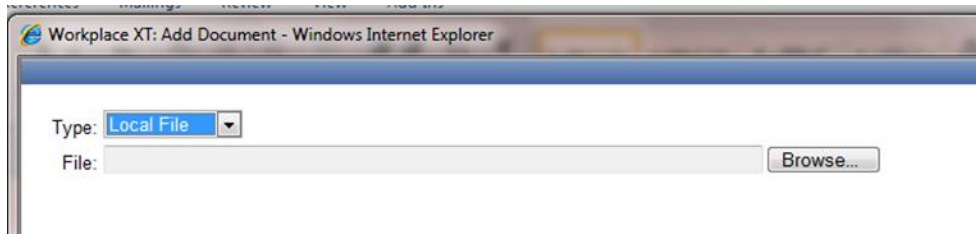
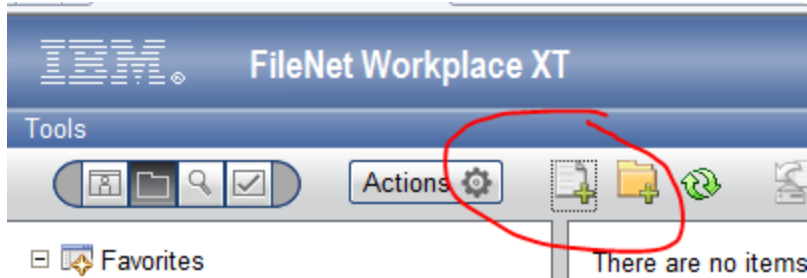
Maximo & FileNet Integration

•Use Case Scenario 2 – Add a new BOM drawing to FileNet and link to Maximo Work Order, Revise Document after WO completed

- We will add a new BOM Drawing to FileNet
- It is of a Class and Document Type that Maximo subscribes
- A Maximo Library Link is created
- From FileNet, create an attached document link to a Work Order in Maximo
- Complete the Work Order in Maximo
- Create a new revision of the BOM drawing in FileNet
- View the Attached Document link from the Work Order (Rev 1)
- View the Attached Document link from the Maximo Library (Rev 2)

CONNtext In FileNet Client

- Add a Document to FileNet



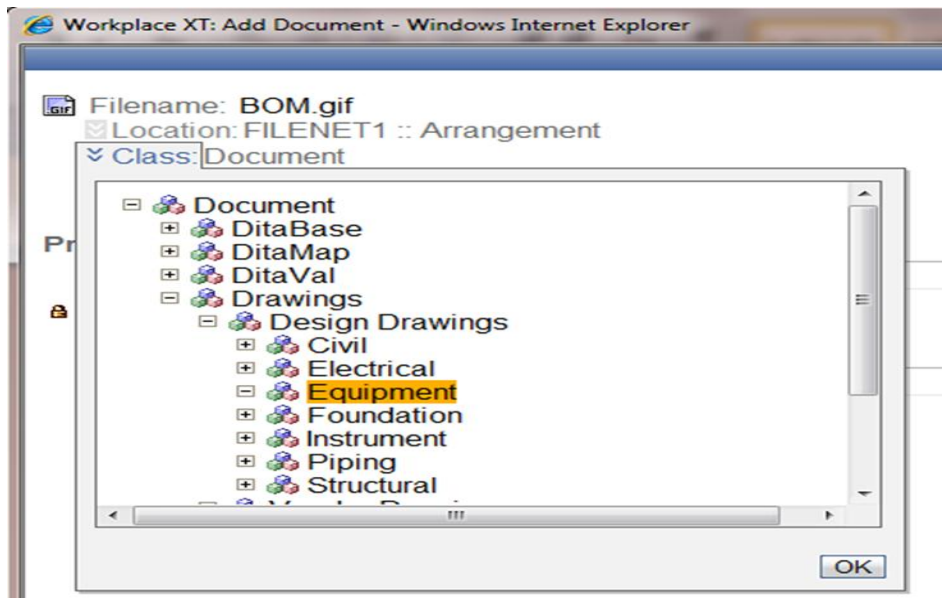
CONNtext In FileNet Client

- Add a Document to FileNet cont.


 Filename: BOM.gif
☒ Location: FILENET1 :: Arrangement
✓ Class: Document
☒ Major version

Properties

Document Title: BOM.gif



Document Versioning



 Filename: BOM.gif
☒ Location: FILENET1 :: Arrangement
☒ Class: Equipment
☒ Major version

Properties

* Document Title:

* Drawing Number:

* Revision Number:

 * Revision Date: 

Sheet Number:

Site:

Resp Organization:

* Drawing Type:

- Note that this time we used the Drawing Type Arrangement. CONNtext also maps this to Maximo and to the same EQP DWGS folder.

- Choosing the Add Maximo Links opens a dialog. Selecting the type of object to link provides a list of query criteria for that object.

Adding links to BOM.gif of type Equipment

Asset

Job Plan

Work Order Tracking

View

WORKORDERID: Like

Work Order Number: Like 1164

Description: Like

Work Type: Like

Location: Like

Status: Like

Problem Code: Like

Query

Maximo records for Work Order Tracking

WORKORDERID	Work Order Number	Description	Work Type	Location	Status	Problem Code
<input type="checkbox"/> 1854	1164	null	11430	BR430	WAPPR	null

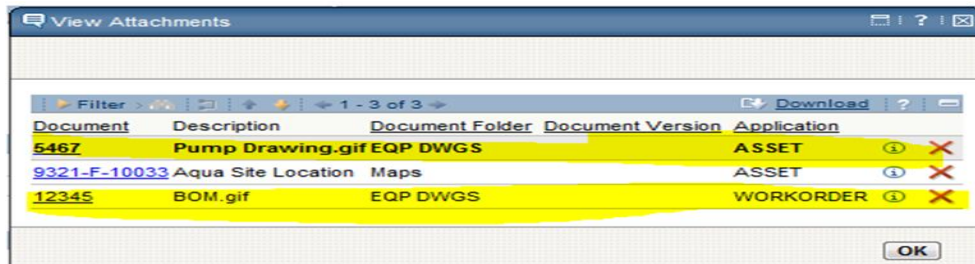
Create

Maximo responded with:
Adding link to WOTRACK
WORKORDER1854230EQP DWGS

- Work Order 1164 is found and linked to the new BOM document in FileNet

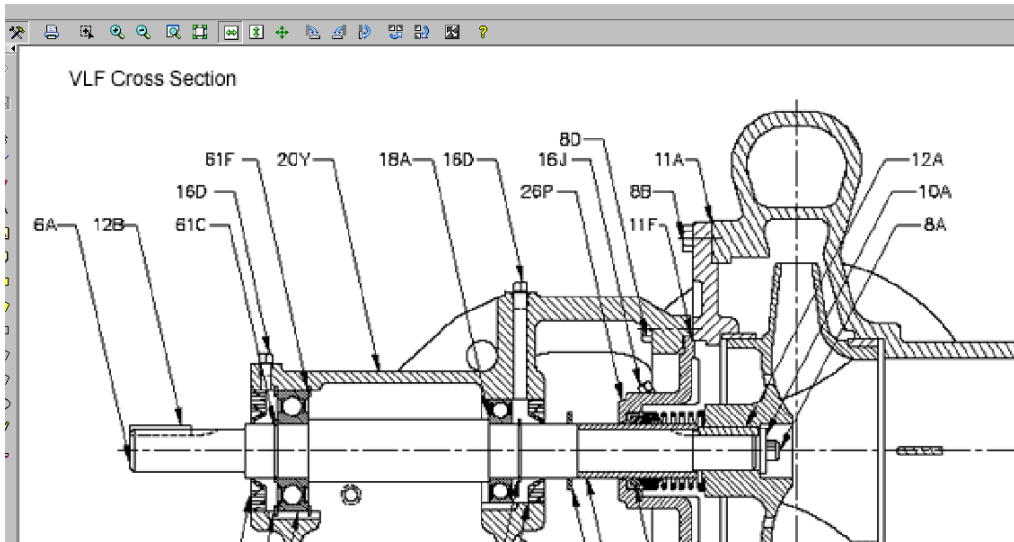
Document Versioning

- Clicking the link from the WO attachments listing displays the current drawing version from FileNet.



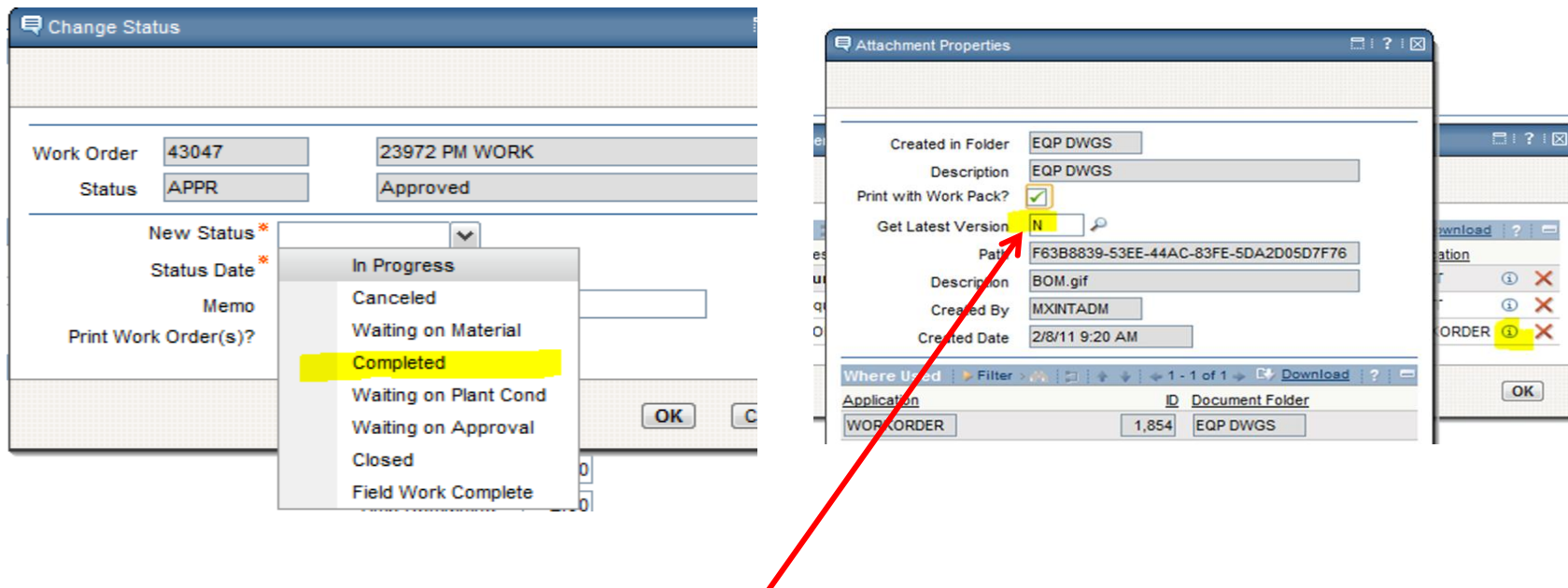
The screenshot shows a 'View Attachments' window with a table listing document versions. The table has columns for Document, Description, Document Folder, Document Version, and Application. Three rows are visible, each with a yellow highlight and a red 'X' icon in the Application column.

Document	Description	Document Folder	Document Version	Application
5467	Pump Drawing.gif	EQP DWGS	ASSET	ASSET
9321-F-10033	Aqua Site Location	Maps	ASSET	ASSET
12345	BOM.gif	EQP DWGS	WORKORDER	WORKORDER



Document Versioning

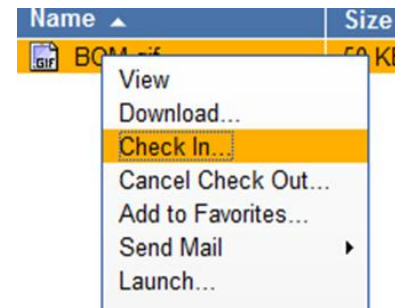
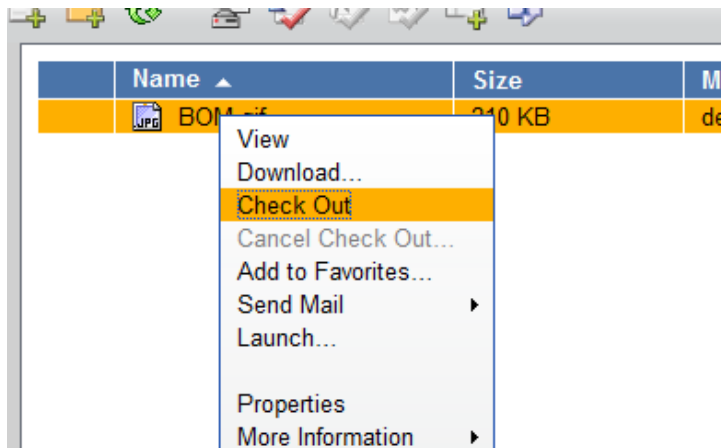
- Next, the WO status is changed to Complete. An escalation picks up that event and locks the document link to this current version.



- Escalation changes get latest version to N and locks URL to current version

Document Versioning

- Next, we add a new color version of the BOM drawing and make it the current revision.



Type: Local File

File: C:\Users\schiveraj\Pictures\Demo drawings\BOM new.jpg

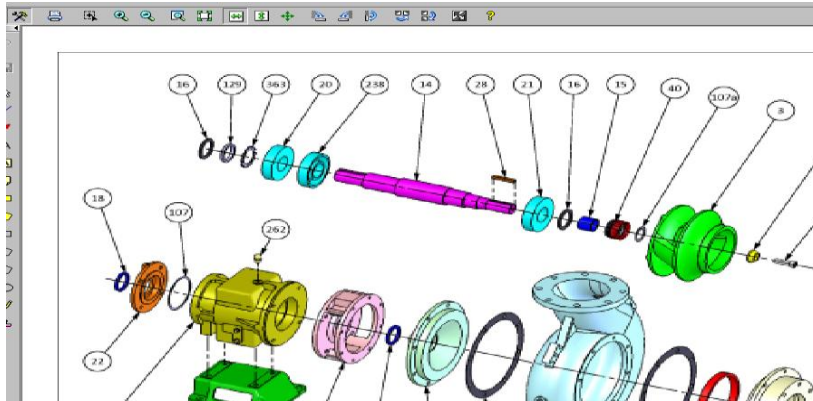
Browse...

Document Versioning

- Viewing the document from FileNet or the Maximo library now brings up version 2, the new color image.

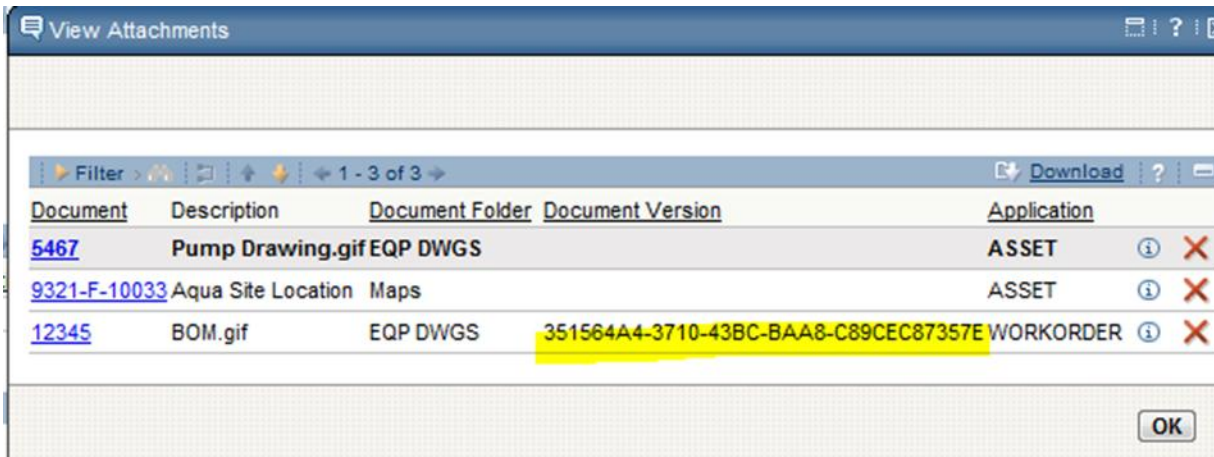
 Filename: BOM new.jpg
Location: FILENET1
Class: Equipment
Version: 2.0

Checkin succeeded for: BOM.gif



Document Versioning

- When we view the attachment list in Maximo for Work Order 1164, the document version is now populated to the version the work order was performed with.



Document	Description	Document Folder	Document Version	Application
5467	Pump Drawing.gif	EQP DWGS		ASSET
9321-F-10033	Aqua Site Location	Maps		ASSET
12345	BOM.gif	EQP DWGS	351564A4-3710-43BC-BAA8-C89CEC87357E	WORKORDER

Document Versioning

- Clicking the hyperlink from this screen retrieves version 1 of the BOM drawing.

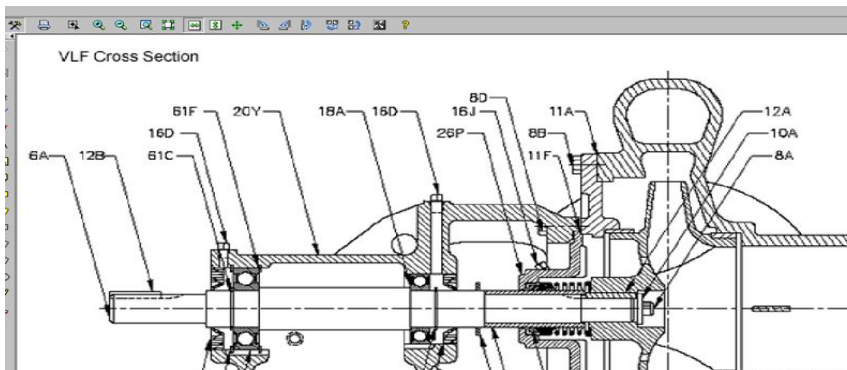
View Attachments

Filter > 1 - 3 of 3

Download

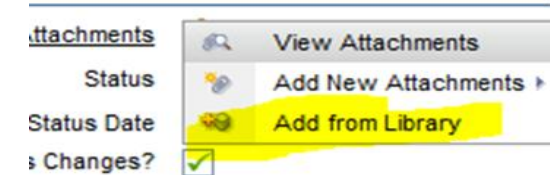
Document	Description	Document Folder	Document Version	Application
5467	Pump Drawing.gif	EQP DWGS		ASSET
9321-F-10033	Aqua Site Location	Maps		ASSET
12345	BOM.gif	EQP DWGS	351564A4-3710-43BC-BAA8-C89CEC87357E	WORKORDER

OK



Document Versioning

- We can also view the document from Maximo's Library. Filter the list by type DMS to see a listing of FileNet documents.



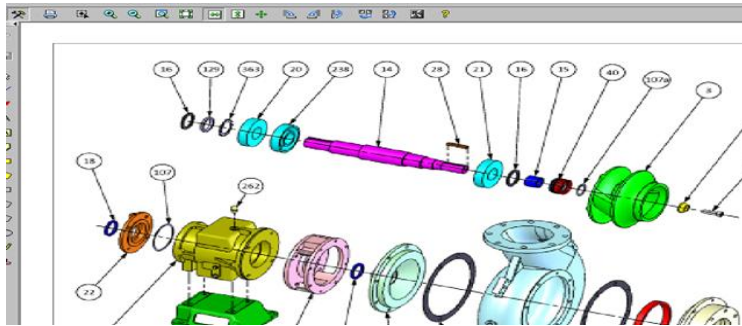
Create Attachments from Documents in the Library

Choose documents to attach to the current record and then select the folder to which they will be assigned.

Document Name	Description	Doc Folder	Type	Link Folder	Path	Print
<input type="checkbox"/> 12345	BOM.gif	EQP DWGS	DMS	EQP DWGS	F63B8839-53EE-44AC-83FE-5DA2D05D7F76	<input checked="" type="checkbox"/>
<input type="checkbox"/> 23456789	Updated Test 2/DESCRIPTION>	Maps	DMS	Maps	8F0CFB86-E19A-4699-A257-49B20CB3FFAA	<input type="checkbox"/>
<input type="checkbox"/> 5467	Pump Drawing.gif	EQP DWGS	DMS	EQP DWGS	02A98027-061C-447B-B327-FECFC772A822	<input checked="" type="checkbox"/>
<input type="checkbox"/> 9321-A-10023	rev 0.txt	Maps	DMS	Maps	CA7F1589-EF60-4167-BB46-BB197FD2A616	<input checked="" type="checkbox"/>
<input type="checkbox"/> 9321-C-10033	Site Map	Maps	DMS	Maps	C96502E5-2C7C-415E-8831-2743BBEAD750	<input type="checkbox"/>
<input type="checkbox"/> 9321-C-20313	1basic-dyes-500x500.jpg	Diagrams	DMS	Diagrams	95A94506-42DC-4D02-B62F-96F03BF500EF	<input checked="" type="checkbox"/>
<input type="checkbox"/> 9321-F-10033	Axis Site Location	Maps	DMS	Maps	33186561-B062-4672-9F89-C2565F334C4B	<input type="checkbox"/>

Document Versioning

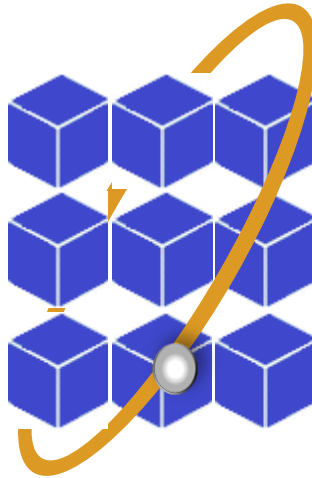
- When we click this hyperlink, it displays the current version 2 in color.



Challenges

- Maximo's Get Latest Version
- Maximo's Folder Limitations – Add from Library
- Maximo's Attachment Folder
- No native FileNet users, only Maximo users
- Authentication

Cohesive Information Solutions, Inc.



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