



Autodesk Inventor 2024 iLogic-Vault Sample Rules

Readme



Agenda

Sample Rules

- Downloads
 - Inventor sample files
 - iLogic-Vault sample rules
- Setup
 - Inventor iLogic | sample rules
 - Adding Inventor sample files to Vault Professional
- Review and run iLogic-Vault sample rules

Downloads

Inventor Sample Files

- Fishing Rod Model
 - Fishing_Rod.zip
- iLogic-Vault Sample Rules
 - iLogic-Vault_SampleRules.zip



Inventor Sample Files

Autodesk Support

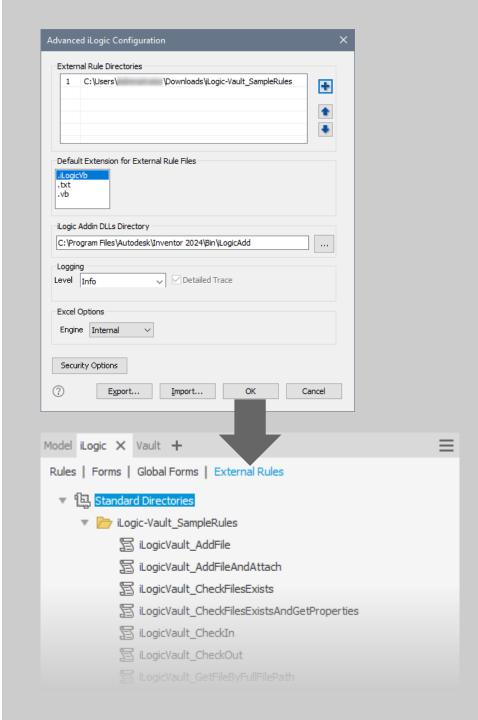
Feb 18, 2022

Download these sample files to explore Autodesk® Inventor® software functionality.

Setup iLogic

Sample rules

- Download and extract the sample rules to a folder of your choice
- Add this folder to Inventor iLogic Advanced Configuration

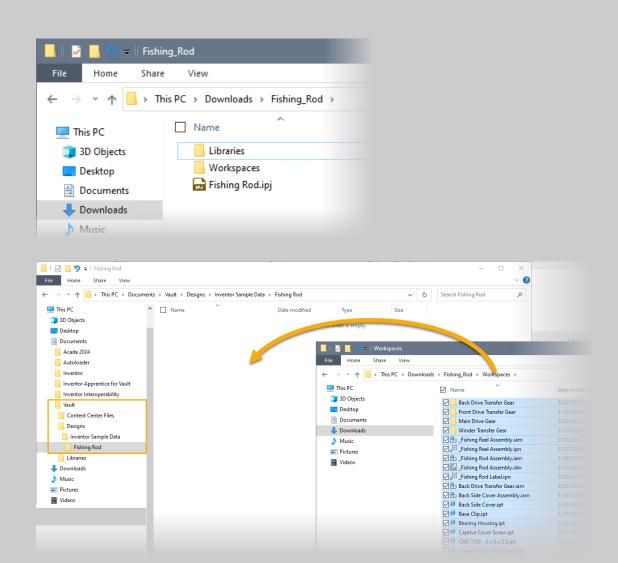


Setup Vault

Import sample model

- Download and extract the Fishing_Rod model to a folder of your choice
- 2. Move the files into your Vault working folder structure
 - Content Center Files
 - Designs\Inventor Sample Data\Fishing Rod

Creating the path as shown is highly recommended, as it is referenced within several iLogic rules!

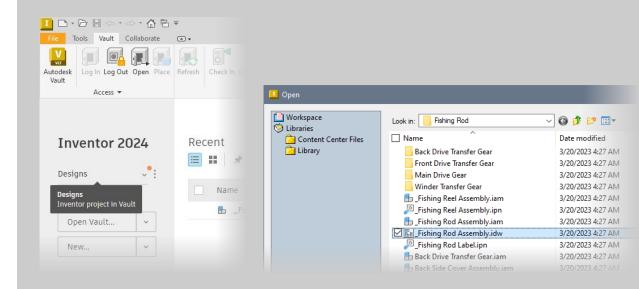


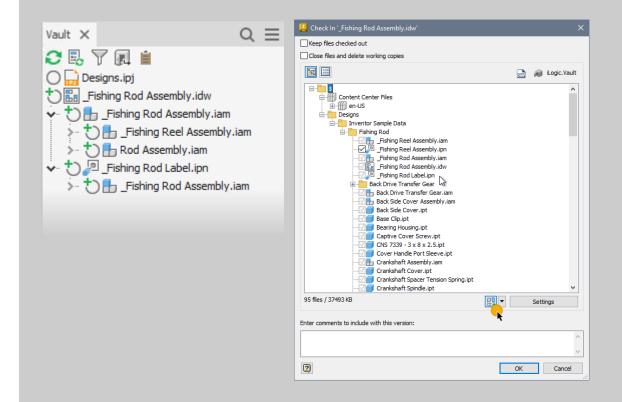
Setup Vault

Import sample model

- 3. Open the file "Fishing Rod Assembly.idw"
 - Consume your default Inventor-Vault project

- 4. Check-in
 - o Optionally, include related files 🗣

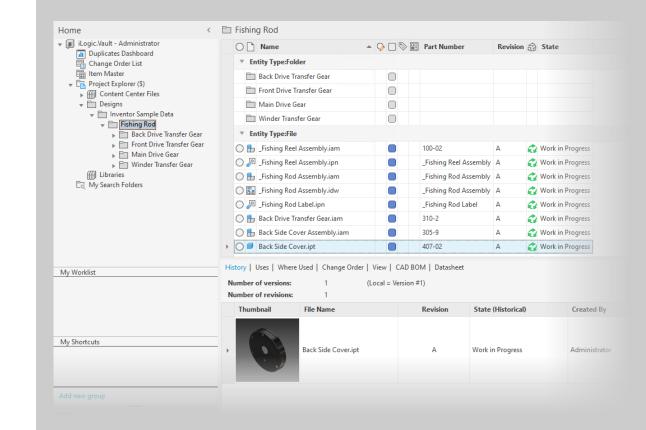


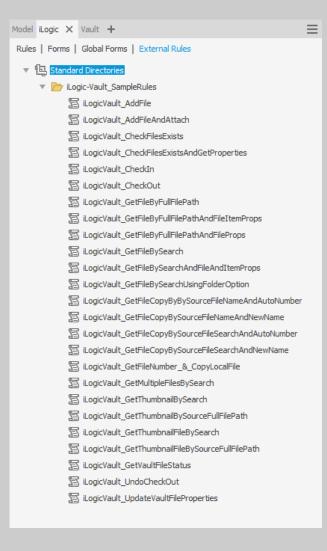


Setup Vault | Result

Import sample model

Expected Result





Review & Run

What can you get from each rule

- Each rule's detail slide in this section shares
 - Description (Subtitle)
 - Requirements
 - iLogicVault method consumed | Applied option(s)
 - Additional iLogicVault methods consumed/relevant for the context
 - Expected result
 - Tips
- You can walk through the sample in any order. However, some rules make sense to have a predecessor, e.g., Check-in runs best after Check-out or GetFileNumber_&_CopyLocalFile

iLogicVault_AddFile

Create 3D camera view, export as *png and upload to Vault

Requirement

Open any part or assembly

Method

iLogicVault.AddFile()

Additional methods

iLogicVault.ConvertLocalPathToVaultPath()

Tips

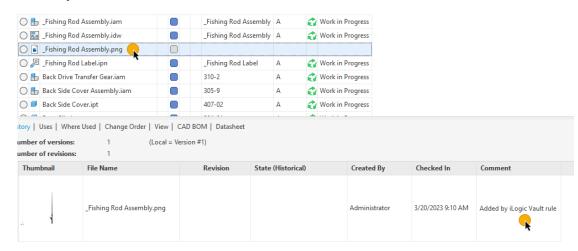
- This rule demonstrates how to export bitmap files without an active graphics window by creating a camera object on the fly.
- The rule uses ThisServer instead of ThisApplication and is compatible with Vault Job execution.

Options

Update existing file in Vault = True

Expected result

- iLogic Log success info
- Uploaded file in Vault



iLogicVault_AddFileAndAttach

Evaluate Vault Status, create 3D camera view, export as *png, upload to Vault, and attach

Requirement

Open any part or assembly

Method

iLogicVault.AddFile()

Additional methods

- iLogicVault.GetVaultFileStatus()
- iLogicVault.ConvertLocalPathToVaultPath()

Tips

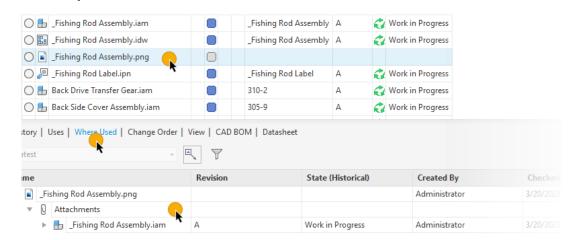
- This rule demonstrates how to export bitmap files without an active graphics window by creating a camera object on the fly.
- The rule uses ThisServer instead of ThisApplication and is compatible with Vault Job execution.

Options

Update existing file in Vault = True

Expected result

- iLogic Log success info
- Uploaded file in Vault



iLogicVault_CheckFilesExists

Search for a list of files by submitting multiple search criteria

Requirement

Open any part or assembly

Method

iLogicVault.CheckFilesExistBySearchCriteria()

Additional methods

- iLogicVault.GetVaultFileStatus()
- iLogicVault.ConvertLocalPathToVaultPath()

Tips

 Apply search option "AND" by enforcing MatchAllCriteria = True

Options

- Query multiple Vault properties
- Apply search option "OR"

Expected result

iLogic Log success info

iLogicVault_CheckFilesExistsAndGetProperties

Search for a unique file by submitting multiple search criteria and get all file properties

Requirement

Open any part or assembly

Method

iLogicVault.CheckFilesExistBySearchCriteria()

Additional methods

- iLogicVault.GetVaultFileStatus()
- iLogicVault.ConvertLocalPathToVaultPath()

Tips

 Apply search option "OR" by enforcing MatchAllCriteria = False

Options

- Query multiple Vault properties
- Apply search option "AND"

Expected result

iLogic Log success info

```
iLogic Log X +
[Go to beginning] | [Show earlier messages]
INFO|iLogic-Vault file search found: Back Side Cover.ipt
INFO|Back Side Cover.ipt Property DisplayName=Value: Has Markup=False
INFO|Back Side Cover.ipt Property DisplayName=Value: Date Version Created=3/20/2023 8:15:46 AM
INFO|Back Side Cover.ipt Property DisplayName=Value: Obsolete=False
INFO|Back Side Cover.ipt Property DisplayName=Value: Has Markup (Historical)=False
INFO|Back Side Cover.ipt Property DisplayName=Value: Created By=Administrator
INFO Back Side Cover.ipt Property DisplayName=Value: File Replicated=True
INFO Back Side Cover.ipt Property DisplayName=Value: File Name=Back Side Cover.ipt
INFO|Back Side Cover.ipt Property DisplayName=Value: Name=Back Side Cover.ipt
INFO|Back Side Cover.ipt Property DisplayName=Value: Checked In=3/20/2023 8:15:46 AM
INFO|Back Side Cover.ipt Property DisplayName=Value: File Name (Historical)=Back Side Cover.ipt
INFO Back Side Cover.ipt Property DisplayName=Value: Date Modified=3/20/2023 4:27:37 AM
INFO|Back Side Cover.ipt Property DisplayName=Value: Version=1
INFO|Back Side Cover.ipt Property DisplayName=Value: Comment=
INFO|Back Side Cover.ipt Property DisplayName=Value: File Size=260096
INFO Back Side Cover.ipt Property DisplayName=Value: File Extension=ipt
INFO|Back Side Cover.ipt Property DisplayName=Value: Visualization Attachment=User
INFO|Back Side Cover.ipt Property DisplayName=Value: Number of Attachments=0
INFO|Back Side Cover.ipt Property DisplayName=Value: Linked to Item=False
```

iLogicVault_CheckIn

Call the Inventor user command Vault Check-in on the active document

- Requirement
 - Active Inventor file, either checked out or not added to Vault yet
- Method
- Additional methods
- Tip
 - Suppress Vault dialogs for iLogicVault automation

Check In dialog

Check Out dialog

Check In dialog on file close

Check Out dialog on file open

Undo Check Out dialog

Settings...

Settings...

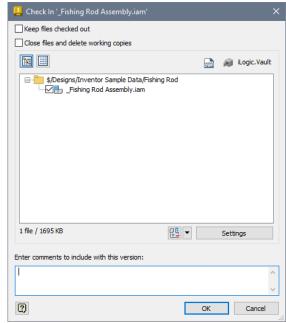
Settings...

Settings...

Settings...

Options

- **Expected result**
 - Active file (top node) checked-in

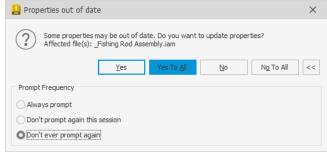


iLogicVault_CheckOut

Call the Inventor user command Vault Check-out on the active document

- Requirement
 - Active Inventor file, checked-in to Vault
- Method
 - O --
- Additional methods
- Tips
 - Suppress Vault dialogs for iLogicVault

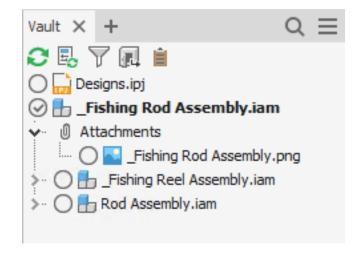
automation



Options

O --

- Expected result
 - Check-out status of active file (top node only)



iLogicVault_GetFileByFullFilePath

Download a file from Vault submitting the full path and file name

Requirement

- Active document = new file
- Empty working folder

Method

iLogicVault.GetFileByFullFilePath()

Additional methods

O --

Tips

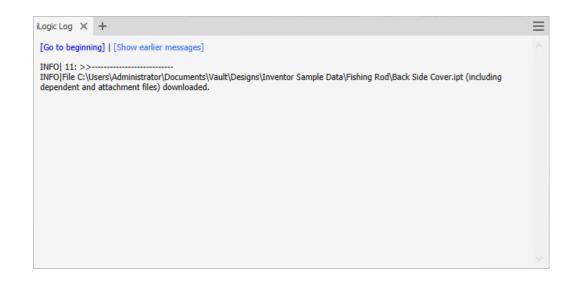
Try the optional Checkout=True

Options

Checkout = False

Expected result

iLogic Log success info and local file



iLogicVault_GetFileByFullFilePathAndFileItemProps

Download a file, found by full path and file name, and get a list of property names/values

Requirement

- Active document = new file
- Empty working folder

Method

iLogicVault.GetFileByFullFilePath()

Additional methods

O --

Tips

 Run the Assign/Update Item command on the given file first to get the item properties

Options

- Checkout = False
- Include file and item properties

Expected result

 iLogic Log success info, properties (name/values), and local file

```
iLogic Log X +
[Go to beginning] | [Show earlier messages]
INFO|File C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Back Side Cover.ipt (including
 dependent and attachment files) downloaded.
 INFO|Vault File Property Name/Value: Has Markup = False
INFO|Vault File Property Name/Value: Date Version Created = 3/20/2023 8:15:46 AM
INFO|Vault File Property Name/Value: Obsolete = False
INFO|Vault File Property Name/Value: Has Markup (Historical) = False
INFO|Vault File Property Name/Value: Created By = Administrator
INFO|Vault File Property Name/Value: File Replicated = True
INFO|Vault File Property Name/Value: File Name = Back Side Cover.ipt
INFO|Vault File Property Name/Value: Name = Back Side Cover.ipt
INFO|Vault File Property Name/Value: Checked In = 3/20/2023 8:15:46 AM
 INFO|Vault File Property Name/Value: File Name (Historical) = Back Side Cover.ipt
 INFO|Vault File Property Name/Value: Date Modified = 3/20/2023 4:27:37 AM
 INFO|Vault File Property Name/Value: Version = 1
 INFO|Vault File Property Name/Value: Comment =
 INFO|Vault File Property Name/Value: File Size = 260096
INFO|Vault File Property Name/Value: File Extension = ipt
INFO|Vault File Property Name/Value: Visualization Attachment = User
INFO|Vault File Property Name/Value: Number of Attachments = 0
```

iLogicVault_GetFileByFullFilePathAndFileProps

Download a file, found by full path and file name, and get a list of property names/values

Requirement

- Active document = new file
- Empty working folder

Method

iLogicVault.GetFileByFullFilePath()

Additional methods

O --

Tips

Options

- Checkout = False
- Include file properties

Expected result

 iLogic Log success info, properties (name/values), and local file

```
iLogic Log X +
 [Go to beginning] | [Show earlier messages]
 INFO|File C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Back Side Cover.ipt (including
 dependent and attachment files) downloaded.
 INFO|Vault File Property Name/Value: Has Markup = False
 INFO|Vault File Property Name/Value: Date Version Created = 3/20/2023 8:15:46 AM
 INFO|Vault File Property Name/Value: Obsolete = False
 INFO|Vault File Property Name/Value: Has Markup (Historical) = False
 INFO|Vault File Property Name/Value: Created By = Administrator
 INFO|Vault File Property Name/Value: File Replicated = True
 INFO|Vault File Property Name/Value: File Name = Back Side Cover.ipt
 INFO|Vault File Property Name/Value: Name = Back Side Cover.ipt
 INFO|Vault File Property Name/Value: Checked In = 3/20/2023 8:15:46 AM
 INFO|Vault File Property Name/Value: File Name (Historical) = Back Side Cover.ipt
 INFO Vault File Property Name/Value: Date Modified = 3/20/2023 4:27:37 AM
 INFO|Vault File Property Name/Value: Version = 1
 INFO Vault File Property Name/Value: Comment =
 INFO|Vault File Property Name/Value: File Size = 260096
 INFO|Vault File Property Name/Value: File Extension = ipt
 INFO|Vault File Property Name/Value: Visualization Attachment = User
 INFO|Vault File Property Name/Value: Number of Attachments = 0
```

iLogicVault_GetFileBySearch

Download a file from Vault by searching a unique file

Requirement

- Active document = new file
- Empty working folder

Method

iLogicVault.GetFileBySearchCriteria()

Additional methods

O --

Tips

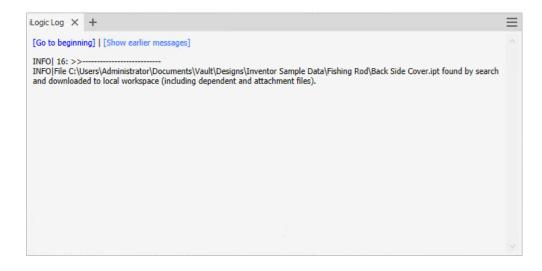
Try the optional Checkout=True

Options

- MatchAllCriteria = True
- Checkout = False

Expected result

iLogic Log success info and local file



iLogicVault_GetFileBySearchAndFileItemProps

Download a file, found by search, and get a list of property names/values

Requirement

- Active document = new file
- Empty working folder

Method

iLogicVault.GetFileBySearchCriteria()

Additional methods

O --

Tips

 Run the Assign/Update Item command on the given file first to get the item properties

Options

- Checkout = False
- Include file and item properties

Expected result

 iLogic Log success info, properties (name/values), and local file

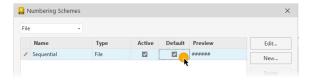
```
iLogic Log X +
 [Go to beginning] | [Show earlier messages]
INFO|File C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Back Side Cover.ipt (including
 dependent and attachment files) downloaded.
 INFO|Vault File Property Name/Value: Has Markup = False
 INFO|Vault File Property Name/Value: Date Version Created = 3/20/2023 8:15:46 AM
 INFO|Vault File Property Name/Value: Obsolete = False
 INFO|Vault File Property Name/Value: Has Markup (Historical) = False
 INFO|Vault File Property Name/Value: Created By = Administrator
 INFO|Vault File Property Name/Value: File Replicated = True
 INFO|Vault File Property Name/Value: File Name = Back Side Cover.ipt
 INFO|Vault File Property Name/Value: Name = Back Side Cover.ipt
 INFO Vault File Property Name/Value: Checked In = 3/20/2023 8:15:46 AM
 INFO|Vault File Property Name/Value: File Name (Historical) = Back Side Cover.ipt
 INFO|Vault File Property Name/Value: Date Modified = 3/20/2023 4:27:37 AM
 INFO|Vault File Property Name/Value: Version = 1
 INFO|Vault File Property Name/Value: Comment =
 INFO|Vault File Property Name/Value: File Size = 260096
 INFO|Vault File Property Name/Value: File Extension = ipt
 INFO|Vault File Property Name/Value: Visualization Attachment = User
INFO|Vault File Property Name/Value: Number of Attachments = 0
```

iLogicVault_GetFileCopyBySourceFileNameAndAutoNumber

Copy a vaulted file by submitting the file name/path and name of a numbering scheme

Requirement

Active/default numbering scheme



Method

iLogicVault.GetFileCopyBySourceFileNameAndAutoNumber()

Additional methods

O --

Tips

 Try numbering scheme input values according to your configured schemes

Options

- Name of numbering scheme
- Numbering scheme with user input values

Expected result

 copied file in Vault, downloaded, updated Part Number

	umber of versions: umber of revisions:	2	(Loc	al = Version #2)				
	Thumbnail	File Name	Revision	State (Historical)	Created By	Checked In	Comment	Part Number
Þ	0	100001.ipt	А	Work in Progress	Administrator	3/20/2023 10:56 AM	Property Edit	100001
	0	100001.ipt	А	Work in Progress	Administrator	3/20/2023 10:56 AM	iLogic File Copy from Back Side Cover.ipt	407-02

iLogicVault_GetFileCopyBySourceFileNameAndNewName

Copy a vaulted file by submitting the file name/path and a new file name

Requirement

O --

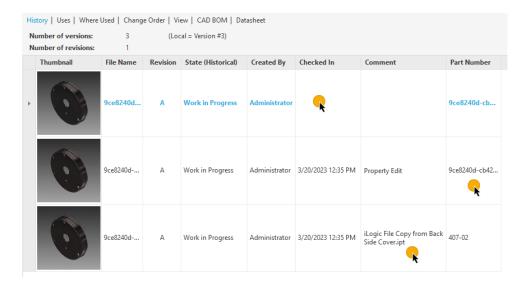
- Method
 - iLogicVault.GetFileCopyBySourceFileNameAndNewName()
- Additional methods

O --

Tips

O --

- Options
 - Check-out = True
- Expected result
 - copied file in Vault, downloaded, updated Part Number, checked out

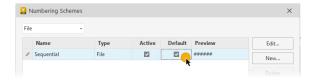


iLogicVault_GetFileCopyBySourceFileSearchAndAutoNumber

Copy a vaulted file found by searching, consuming a new number, and downloading it

Requirement

Active/default numbering scheme



Method

o iLogicVault.GetFileCopyBySourceFileSearchAndAutoNumber()

Additional methods

O --

Tips

 Try numbering scheme input values according to your configured schemes

Options

- Name of numbering scheme
- Numbering scheme with user input values

Expected result

 copied file in Vault, downloaded, updated Part Number

His	story Uses Where	Used Chang	je Order Vi	ew CAD BOM Dat	asheet			
	lumber of versions:	2	(Loc	al = Version #2)				
N	lumber of revisions: Thumbnail	File Name	Revision	State (Historical)	Created By	Checked In	Comment	Part Number
•	0	100001.ipt	А	Work in Progress	Administrator	3/20/2023 10:56 AM	Property Edit	100001
	0	100001.ipt	А	Work in Progress	Administrator	3/20/2023 10:56 AM	iLogic File Copy from Back Side Cover.ipt	407-02

iLogicVault_GetFileCopyBySourceFileSearchAndNewName

Copy a vaulted file by submitting the file name/path and a new file name

Requirement

O --

- Method
 - iLogicVault.GetFileCopyBySourceFileSearchAndNewName()
- Additional methods

O --

Tips

O --

- Options
 - Check-out = False
- Expected result
 - copied file in Vault, downloaded, updated Part Number, checked out

	Number of versions: 2 (Local = Version #2) Number of revisions: 1									
	Thumbnail	File Name	Revision	State (Historical)	Created By	Checked In	Comment	Part Number		
Þ		100002.ipt	А	Work in Progress	Administrator	3/20/2023 12:48 PM	Property Edit	100002		
		100002.ipt	А	Work in Progress	Administrator	3/20/2023 12:48 PM	iLogic File Copy from Back Side Cover.ipt	407-02		

iLogicVault_GetFileNumber_&_CopyLocalFile

Copy a local file by submitting consuming a new Vault file number

Requirement

Active Inventor file, saved locally.

Method

iLogicVault.GetNewNumber()

Additional methods

iLogicVault.CopyLocalFile()

Tips

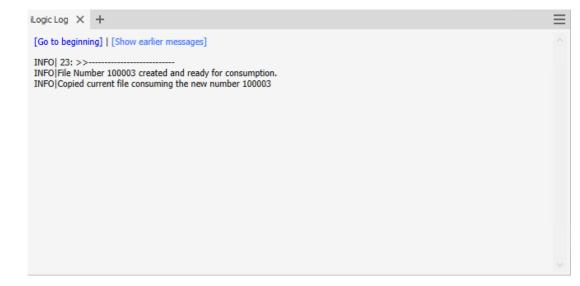
Combine with rule sample to check-in file

Options

O --

Expected result

- Active file, copied locally, not checked in
- iLogic log success info



iLogicVault_GetMultipleFilesBySearch

Search a list of files and download all of them

Requirement

- Active document = new file
- Empty working folder

Method

iLogicVault.GetFilesBySearchCriteria()

Additional methods

O --

Tips

Try the optional Checkout=True

Options

- MatchAllCriteria = False
- Checkout = False

Expected result

iLogic Log success info and local files

```
[Go to beginning] | [Show earlier messages]

INFO| 24: >>-------
INFO|iLogic-Vault file search found and downloaded (note: dependent and attachment files are included in the download, but not listed):

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Crankshaft Spindle.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Drag Lock Guide.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Drag Lock Pivot Pin.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Swing Arm - Left.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Swing Arm - Right.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Swing Arm Pivot Pin.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Swing Arm Pivot Pin.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Winding Assembly Base Ring.ipt

C:\Users\Administrator\Documents\Vault\Designs\Inventor Sample Data\Fishing Rod\Winding Assembly Plate.ipt

INFO|Multiple file search and download finished.
```

iLogicVault_GetThumbnailBySearch

Search for a file and download its thumbnail as an image object

Requirement

Active document = new file

Method

iLogicVault.GetThumbnailImageBySearchCriteria()

Additional methods

O --

Tips

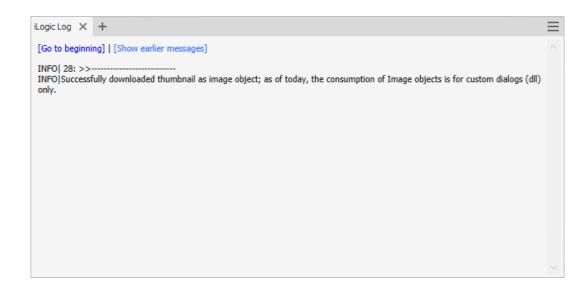
 Thumbnail image objects target custom iLogic Forms extension development (*.dll)

Options

MatchAllCriteria = True

Expected result

iLogic Log success info and image object



iLogicVault_GetThumbnailBySourceFullFilePath

Get a vaulted file and download its thumbnail as an image object

Requirement

Active document = new file

Method

iLogicVault.GetThumbnailImageByFullSourceFilePath()

Additional methods

O --

Tips

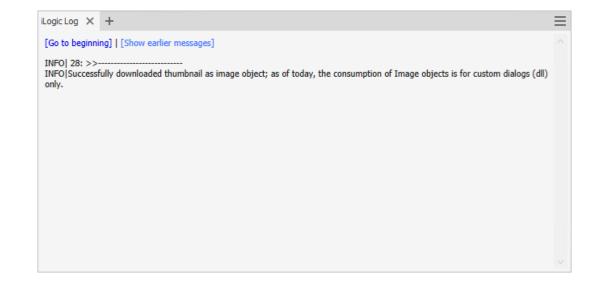
 Thumbnail image objects target custom iLogic Forms extension development (*.dll)

Options

O --

Expected result

iLogic Log success info and image file downloaded locally

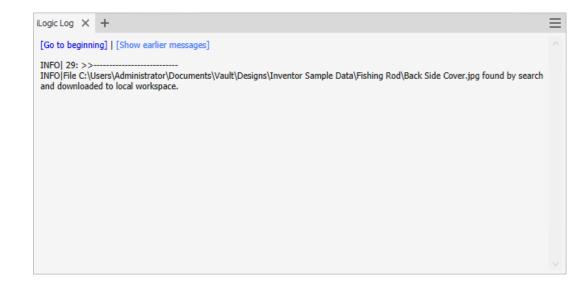


iLogicVault_GetThumbnailFileBySearch

Search for a file and download its thumbnail as an image file

- Requirement
 - Active document = new file
- Method
 - iLogicVault.GetThumbnailFileBySearchCriteria()
- Additional methods
 - O --
- Tips
 - O --

- Options
 - MatchAllCriteria = True
- Expected result
 - iLogic Log success info and image file downloaded to local folder

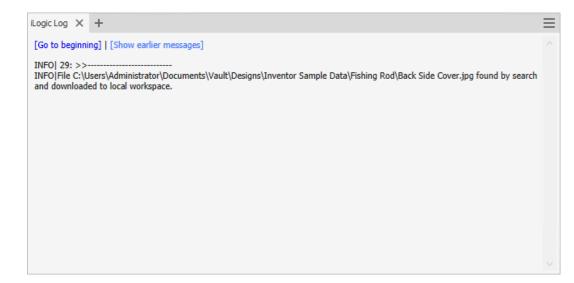


iLogicVault_GetThumbnailFileBySourceFullFilePath

Get a vaulted file by name/path, and download its thumbnail as an image file

- Requirement
 - Active document = new file
- Method
 - iLogicVault.GetThumbnailFileByFullSourceFilePath()
- Additional methods
 - O --
- Tips
 - O --

- Options
 - O --
- Expected result
 - iLogic Log success info and image file downloaded locally



iLogicVault_GetVaultFileStatus

Get a vaulted file by name/path, and download its thumbnail as an image file

Requirement

Open a vaulted file in Inventor

Method

iLogicVault.GetVaultFileStatus()

Additional methods

O --

Tips

 Run the rule on files checked-out, checkedout by other users or locked files

Options

O --

Expected result

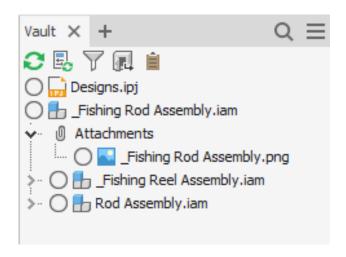
iLogic Log success info list of Vault file status information

iLogicVault_UndoCheckOut

Call the Inventor user command Vault Undo Check-out on the active document

- Requirement
 - Active Inventor file vaulted, checked-out
- Method
 - O --
- Additional methods
 - O --
- Tips
 - O --

- Options
 - O --
- Expected result
 - Checked-in status of the active file (top node only)



iLogicVault_UpdateVaultFileProperties

Validate active file's Vault status and update file properties

Requirement

Open a vaulted file in Inventor

Method

iLogicVault.UpdateVaultFileProperties()

Additional methods

- iLogicVault.GetVaultFileStatus()
- iLogicVault.ConvertLocalPathToVaultPath

Tips

 Run the rule on files checked-out, checkedout by other users, or locked files

Options

O --

Expected result

iLogic Log success info



 On non-consumable files: iLogic Log error message and Vault File Status detail information



