

DOCUSIGN PLUGIN -ESIGNATURE API

Introduction:

The DocuSign Sample plug-in demonstrates how you can send documents from an IBM Enterprise Content Management (ECM) repository DocuSign. Users can then use DocuSign to sign and approve the documents digitally from anywhere and on any device. The JWT Auth grant flow is implemented in the sample.

The plug-in provides an IBM Content Navigator menu action to get the document signature status from DocuSign systems. In addition, the plug-in uses IBM Content Navigator task manager to create asynchronous tasks that periodically update signature status automatically updates or automatically check-in signed documents and update signature status.

DocuSign prerequisites:

To use the DocuSign Sample plug-in, you must have a DocuSign developer account. If you don't have a developer account already, you can create it at <https://secure.docusign.com/signup/develop>. Please follow the instructions to setup up a docusign App. Store the following in a safe location, as it will be required in later steps:

- IntegrationKey
- UserID of user/admin to be impersonated
- Account ID: Can be gotten from the Admin Icon expanded view (#xxxxxxx)
- Generate RSA Key pairs, Store them in a file, namely; privateKey.txt, publicKey.txt

From the sandbox, you can find the integrator key or application key that is used to connect to your DocuSign account from any application. For information about your integrator key, log in to <https://admindemo.docusign.com/api-integrator-key>

For JWT Authorization Grant prerequisites:

Granting consent individually

Before one's client ID or **integration key** (IK) can be used to obtain an access token for a user, the user must grant the client ID consent to do so. Consent can be granted to a client ID to obtain one or more permission **scopes** for a particular user.

There are 3 main types: Administrative, Individual and ISV application grant. In this demo, we will be using Individual grant consent. To obtain consent, ask the users who will be impersonated by the JWT grant application to open a particular URL in their browser. You will supply them with the URL to be used during this one-time task.

When the user opens the URL, they will be asked to authenticate with DocuSign. After authenticating, they'll then be asked to grant consent to your application via a form:



JWT Example Application is requesting permission to:

- Create and send envelopes. Obtain links for starting signing sessions.
- This application will be permitted to request access to your account without you being present.

The application you are connecting to is not provided by DocuSign, Inc. By clicking Accept, you are allowing the application to use your information in accordance with their respective terms of service and privacy policies.

ACCEPT

CANCEL

The individual consent URL

This Individual consent URL code is a one time grant that requires the user in question to give consent. Use the following URL format to grant consent.

Its format is:

SERVER/oauth/auth?response_type=code &scope=signature%20impersonation&client_id=CLIENT_ID
&redirect_uri=REDIRECT_URI

Where

Server: <https://account-d.docusign.com>

Client ID: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx

Redirect URL: localhost or any URL. One can customize the URL to make UX seamless.

An example of such URL would be: [https://account-d.docusign.com/oauth/auth?response_type=code
&scope=signature%20impersonation&client_id=xxxxxxx-xxxx-xxxx-xxxxxxxxxxxx&redirect_uri=http://localhost:9080/navigator/](https://account-d.docusign.com/oauth/auth?response_type=code&scope=signature%20impersonation&client_id=xxxxxxx-xxxx-xxxx-xxxxxxxxxxxx&redirect_uri=http://localhost:9080/navigator/)

For more information on the other method of giving consent follow the link:

<https://www.docusign.com/blog/developers/oauth-jwt-granting-consent>

IBM Content Navigator prerequisites:

1. Make sure Maven is installed.
2. Copy all the dependencies into a lib directory.
 - a. navigatorAPI.jar
 - b. com.ibm.ws.prereq.commonj-twm.jar
 - c. ICNTask.jar
 - d. Jace.jar
 - e. taskManagerAPI.jar
3. Run the following maven command to add the jar to your local maven repo:
mvn org.apache.maven.plugins:maven-install-plugin:3.0.0-M1:install-file -Dfile=path-to-your-artifact-jar -DgroupId=your.groupId -DartifactId=your-artifactId -Dversion=version -Dpackaging=jar -DgeneratePom=true

- a. Please reference the pom.xml for respective groupID and artifactID. e.g mvn org.apache.maven.plugins:maven-install-plugin:3.0.0-M1:install-file -Dfile=\${project.basedir}/lib/ICNTasks.jar -DgroupId=com.ibm.ecm -DartifactId=icntasks -Dversion=3.0.11 -Dpackaging=jar -DgeneratePom=true

FileNet P8 prerequisites:

Before you deploy and use the plug-in, make the following changes to the document metadata in FileNet P8 using Administrative Console for Content Engine (ACCE):

- a. Create an integer choice list with following settings:
 - i. Symbolic Name: DSSignatureStatusChoiceList ii. Type : Integer iii. Options :
 - a. None: 0
 - b. Draft: 1
 - c. Sent: 2
 - d. Completed: 3
 - e. Checkedin: 4
 - f. Voided: 5
- b. Create a property definition called DSSignatureStatus with the following settings:

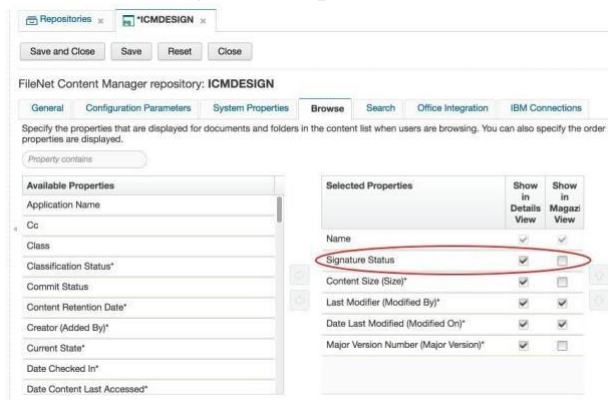
Display Name : Signature Status
 Symbolic Name : DSSignatureStatus
 Type : Integer

Associate the DSSignatureStatus property definition with the DSSignatureStatusChoiceList choice list and set the default value to 0.
- c. Create a property definition called DSEnvelopeID with the following settings:

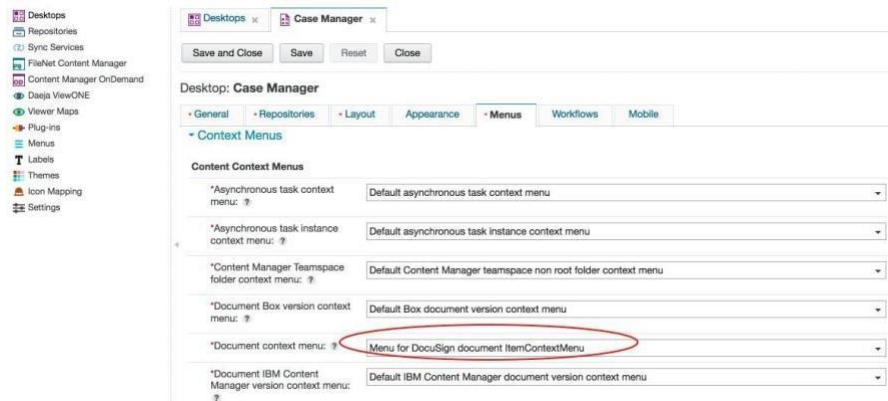
Display Name : Envelope ID
 Symbolic Name : DSEnvelopeID
 Type : String
- d. Add the DSSignatureStatus property definition to the Document class.
- e. Add the DSEnvelopeID property definition to the Document class as a hidden property. g. Copy DocuSignPlugin.jar to /opt/IBM/ECMClient/configure/explodedformat/taskManager/taskManagerWeb/WEB-INF/dropins The above mentioned path will be different for Windows.
- h. Restart WebSphere.

Building the JAR & Setting up the DocuSign Sample plug-in IBM Content Navigator

1. Download the DocuSign Plugin repository
2. In the directory containing the pom.xml, run "mvn clean package"
3. Upon successful build, you can find the docuSignPlugin.jar
4. In the IBM Content Navigator, open the administration tool.
5. Configure your repository to show the Signature Status property in the Details View as shown in the following screen capture:



2. Log in to your DocuSign developer account (<https://secure.docusign.com/signup/develop>).
3. Create a DocuSign template as described in [Creating a DocuSign template](#).
4. In the IBM Content Navigator administration tool, register and configure DocuSign Sample plug-in. You must provide the DocuSign Integration Key, UserID, AccountID and location of the private key file as part of the configuration.
5. Configure the IBM Content Navigator menu actions:
 - a. In the IBM Content Navigator administration tool, open the desktop that you want to configure.
 - b. On the Menus tab, change the value for the Document Context Menu field to “Menu for DocuSign document itemContextMenu” as in the following screen capture:



6. Click ‘Open Asynchronous Tasks View’ on Navigator features pane and create a new task ‘DocuSign signature status updates configuration’ from ‘Schedule Task’ drop down list. You can schedule this task by providing the following details. If you want auto check-in of signed documents, select ‘Enable auto check-in’ checkbox. If you want only the signature status to be updated, then do not ‘Enable auto checkin’ checkbox.

DocuSign signature status updates configuration

* Target Repository:

* DocuSign User Name:

* DocuSign Password:

* DocuSign Integration Key:

* Enable auto check-in: ☒

Schedule Information

* Name:

Description:

☒ Run on a schedule

* Repeats:

* Start date:

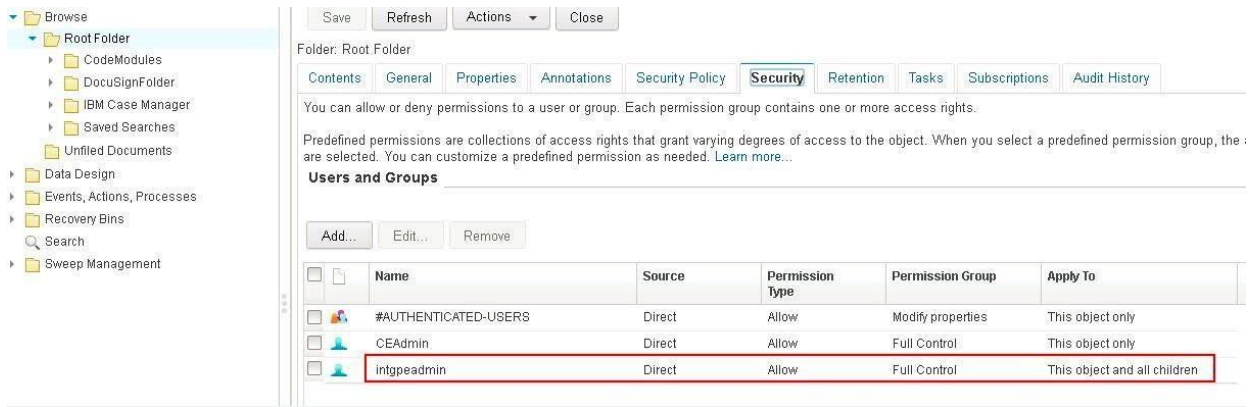
End date:

Notification

Email address:



7. Provide appropriate security access to the hidden “DocuSignFolder” folder that the plugin creates for staging the documents. Provide Full Control (or File-in/Un-file) security access permissions on root folder level using ACCE for all the users who would be sending the signature requests to DocuSign. Below snapshot shows the security configuration to add "intgpeadmin" user.



Creating a DocuSign template:

1. On the TEMPLATES tab, select the New option to create a new template.
2. Provide a template name and upload the sample document IBM Docket Number 123344 Assignment Declaration.pdf from the Box share folder for the sample plug-in.
3. Provide a placeholder Signer1 and Signer2 as shown in the following screen capture and click Next:



Add Recipients

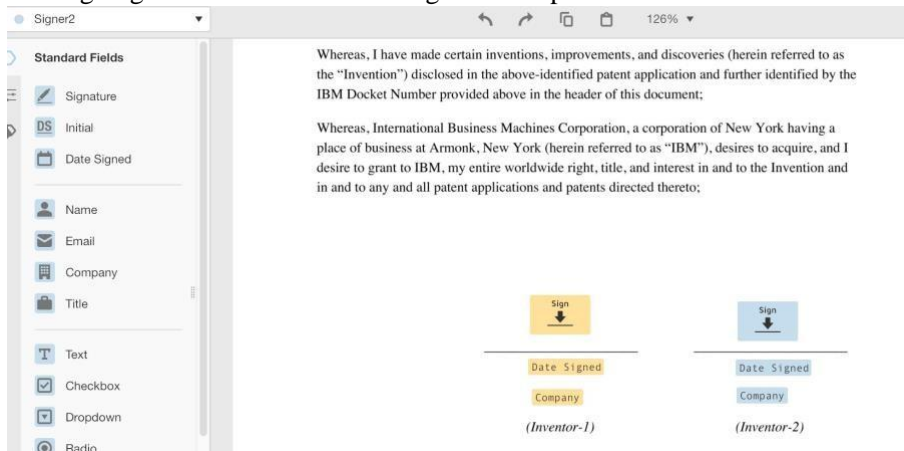
As the sender, you automatically receive a copy of the completed documents.

IMPORT BULK LIST ADD FROM CONTACTS SIGNING ORDER

☐ Set signing order

Signer1	Name	Email	Needs to Sign	
Signer2	Name	Email	Needs to Sign	

4. Drag and drop the required Sign tabs from the palette onto the document where the signatures are to be placed at signing as shown in the following screen capture:



5. Click Save and Close the template
6. Restart Navigator.9