

Workflow 101

A BEGINNERS GUIDE
TO WORKFLOW DESIGNER

| Tina Pham

SALES ENGINEER/TRAINER
DOCUNAV SOLUTIONS

| Tanner Kos

BUSINESS DEV REP
DOCUNAV SOLUTIONS

Presenter



Tina Pham
Sales Engineer/Trainer
DocuNav Solutions

Moderator



Tanner Kos
Business Dev Rep
DocuNav Solutions



BEGINNER'S GUIDE TO Workflow Designer

Topics for today's presentation:

What is Workflow

A brief overview of what Workflow is, and what purpose it serves

How to use Workflow

Activities frequently used in Workflow

When to use Workflow

A walkthrough of examples and how you can utilize Workflow in your organization

What is Workflow?



A POWERFUL TOOL

Whatever you envision,
Workflow brings it to life.



PROCESS AUTOMATION

Simplify document handling
across your environment



THIRD PARTY INTEGRATION

Retrieve information from other
systems



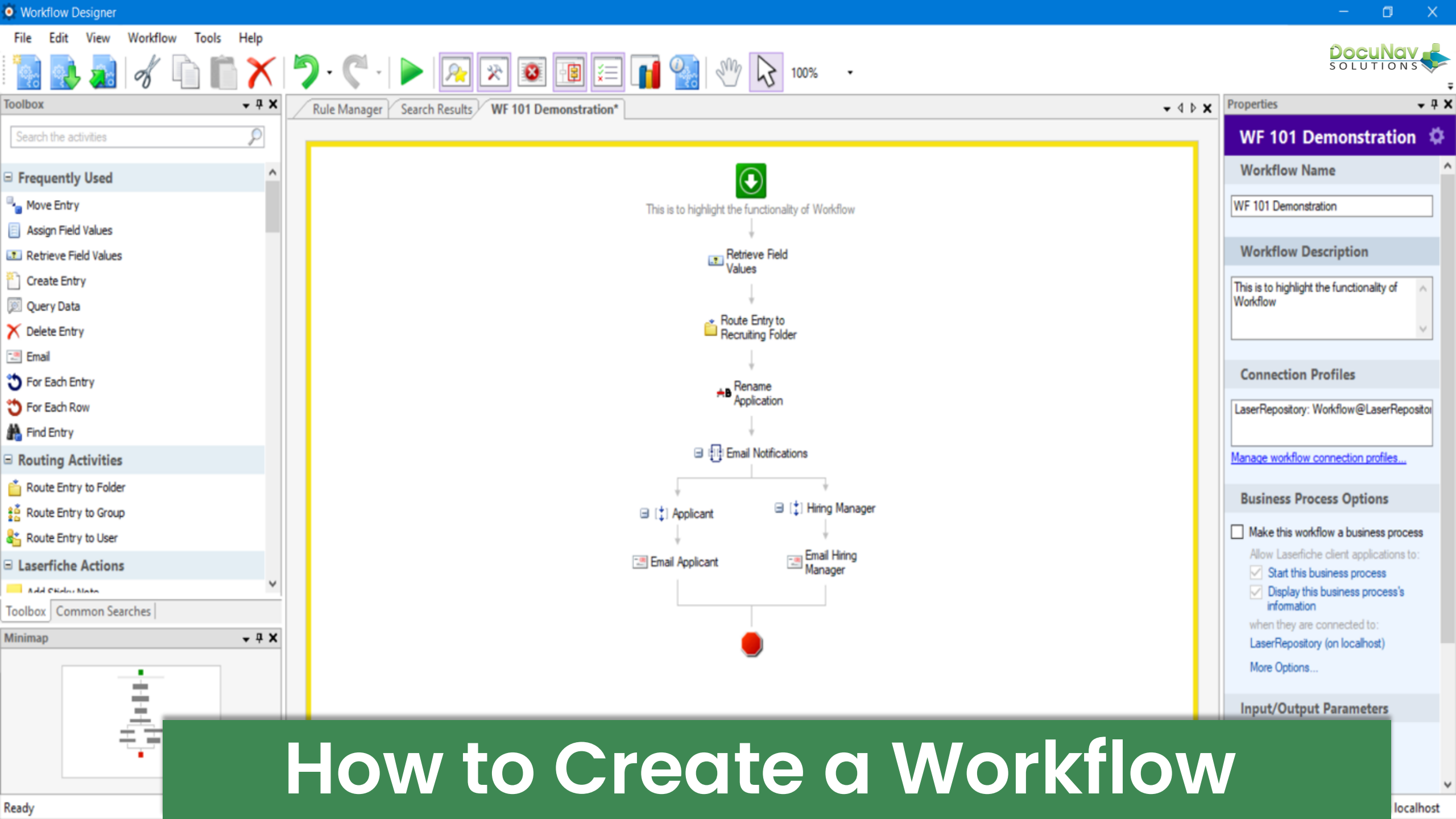
...AND MORE!

Send Notifications, Assign
retention, Move documents

Plan, Plan, Plan!

Before you start building your workflow, it is very important to diagram your process to make sure it's logical and consistent.

- Make sure the proper people are involved,
- Gathering information by interviewing,
- Finding pain points,
- Are there unnecessary steps?



How to Create a Workflow

Properties

WF - IIMC

Workflow Name

WF - IIMC

Workflow Description

Connection Profiles

Inhouse: wdagent@Inhouse

[Manage workflow connection profiles...](#)

Business Process Options

☐ Make this workflow a business process

Allow Laserfiche client applications to:

☒ Start this business process

☒ Display this business process's information

when they are connected to:

Inhouse (on v-fs)

[More Options...](#)

Input/Output Parameters

Input Parameters:
(None)

Output Parameters:
(None)

[Configure input/output parameters...](#)

Properties

[View workflow properties](#)

[Configure termination notifications](#)

Workflow Profile Manager

Choose the connection profiles that are available for this workflow:

Inhouse: wdagent@Inhouse

New Profile

Add

Remove

Copy from:

[Manage Connections...](#)

Profile Details:

Name: New Profile

Server:

Repository:

User name:

Password:

Validate

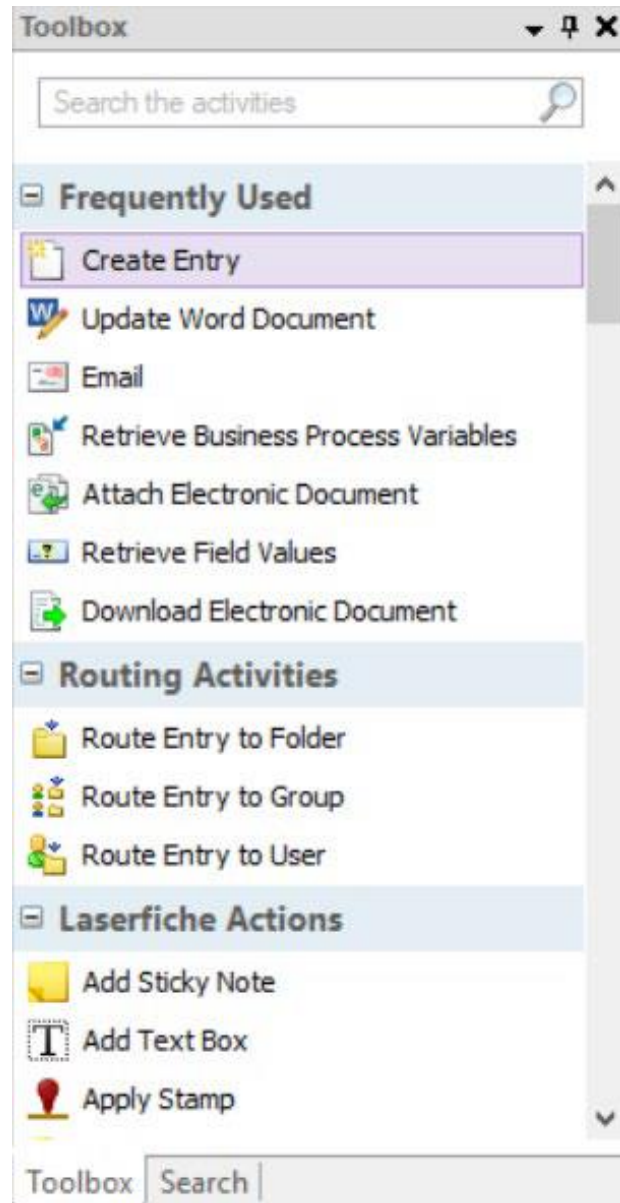
Help

OK

Cancel

Connection Profile

This allows you to interact with the repository.



Activities

 Move Entry

Move_Entry ?

Activity Name

Move_Entry

Activity Description

Moves or copies a Laserfiche entry to a specified folder. Can also create a shortcut.

Action

☒ Move
☐ Copy
☐ Create Shortcut

Destination

Student Records\LAST_NAME, FIRST_NAME - ID# > ...

If the path does not exist:
☒ Create it
☐ Create it and report a warning
☐ Terminate the workflow

Entry to Move

☒ Starting Entry
☐ Other Entry [Select...](#)
Activity: For Each Entry
Entry: Current Entry

Move Entry & Rename Entry

 Rename Entry

Rename ?

Activity Name

Rename

Activity Description

Renames a Laserfiche entry.

New Entry Name

%(tkRename)| >

Entry to Rename

☒ Starting Entry
☐ Other Entry [Select...](#)
Activity: For Each Entry
Entry: Current Entry

Retrieve Field Values

Activity Name

Retrieve Field Values

Activity Description

Retrieves template name and field values from a Laserfiche entry and creates custom tokens to be used by other activities in your workflow definition.

Fields

Check (All Values)
Check Date (All Values)
Document Category
Document Date
Document Description
Document Type
Due Date
Entity
Invoice Amount

Field Value Source

☒ Starting Entry
☐ Other Entry [Select...](#)
Activity: Find Entry 7
Entry: Output Entry

Choose Fields

Search Fields

Name:

Template: [Search by template](#)

☐ Only show selected fields

Field Name	Type	If multi-value, retrieve
☒ AP Remark	Text	
☐ Approval Decision	Text	
☐ Attach Entry ID	Text	
☐ Business Process ID	Text	
☒ Check	Text	All values
☒ Check Date	Date	All values
☐ Co Code	List	
☐ Company	Text	
☐ Confidential AD Users	Text	No values
☐ Confidential Status	Text	
☐ Date of Birth	Date	
☐ Department ID	Text	

☐ Select / Clear all

Help OK Cancel

Retrieve Field Values

 Retrieve Field Values

Assign Field Values

 Assign Field Values

1-Choose
template
option

2-Pick Your
Metadata
fields

3-Apply it to
your entry

Template

☐ Keep the current template
☐ Unassign the current template
☒ Assign the following template:
 Human Resources >
[Refresh](#)
☐ Remove fields from unassigned templates

Field Values

Click field

Field Values

Employee ID: %(CustomQuery_EmployeeID)
First Name: %(CustomQuery_FirstName)
Last Name: %(CustomQuery_LastName)

☒ Starting Entry
☐ Other Entry [Select...](#)
 Activity: (No activity selected)
 Entry: (No entry selected)

Data Activities



Query Data



Insert Data



Update Data



Custom Query

Data Source

Custom Query Activity Data Source

Database Type: Sql (ODBC)
Database: Sample@Workflow
Authentication: Windows Authentication

Workflow Data Source Administrator

Workflow Server data source:

Name	Description
Sample Database	

Add
Remove
Configure

Test


A Workflow Data Source specifies how to connect to a data provider.

Help
Close

Connecting your Data Source

Query Data

 Query Data

1

Data Source

Custom Query Activity Data Source 

Database Type: Sql (ODBC)

Database: Sample@Workflow

Authentication: Windows Authentication

2

Query Criteria

Select the table and columns to use:

Employees2 

Column	Value
LastName	Smith

Add... Edit... Remove

[Test Query...](#)

3

Add Query Criteria 

Select a column and specify the value that a row must have in order to be included in the query results.

Column: EmployeeID

Value: %(FindUser_Id|) 

OK Cancel Help

4

Rows To Return

☐ First row only

☐ First  > rows

☒ All rows

5

Query Options

☐ Specify a custom timeout

 > second(s)

Insert Data

 Insert Data

Data Source 1

Custom Query Activity Data Source 

Database Type: Sql (ODBC)

Database: Sample@Workflow

Authentication: Windows Authentication

Data to Insert 2

Select the table and then configure the values to insert in it.

Employees2 

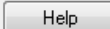
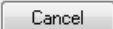
Column	Value
LastName	%{FindUser_Display Name}
Address	%{QueryData_Address}



☒ Create Identity Token

Data to Insert 3

Include	Column	Value
☐	EmployeeID	
☒	LastName	%{FindUser_Display Name}
☐	FirstName	
☐	Title	
☐	TitleOfCourtesy	
☐	BirthDate	
☐	HireDate	
☒	Address	%{QueryData_Address}
☐	City	
☐	Region	

Update Data

 Update Data

1

Data Source

Custom Query Activity Data Source 

Database Type: Sql (ODBC)

Database: Sample@Workflow

Authentication: Windows Authentication

2

Rows to Update

Find the rows to be updated.

Employees2 

Column	Value
ReportsTo	%(FindUser_Display Name)

Add... Edit... Remove

3

Add Update Criteria 

Select a column to query and specify the value that the row must have in order to be updated.

Column: EmployeeID

Value: %(RetrieveFieldValues_Employee Number) 

OK Cancel Help

*4

New Values

Update the rows found with these new values:

Column	Value
EmployeeID	%(FindUser_ID)

Add... Edit... Remove

Custom Query

 Custom Query

Data Source

Custom Query Activity Data Source 

Database Type: Sql (ODBC)
Database: Sample@Workflow
Authentication: Windows Authentication

Custom Query

Query:
<Not specified>

Parameters:

Name	Value
------	-------

[Edit...](#) [Test...](#)

Custom Query Editor

 Create a custom SQL query

Custom Query:
SELECT *
FROM employees INNER JOIN addresses
ON employees.id = addresses.id
WHERE employees.title = ?

Parameter Names:	Type:	Parameter Values:
?	String	%(RetrieveFieldValues_Title)
	Default	

Rows To Return

☐ First row only

☐ First rows

☒ All rows

Query Options

☐ Specify a custom timeout

second(s)

Search Repository

Search Repository

Search Symbols

=	equal to	<>	not equal to
<=	less than or equal to	>=	greater than or equal to
<	less than	>	greater than
&	and		or
-	not	^N	within N number of words

Search Repository

Activity Name

Activity Description
Searches a Laserfiche repository using the provided search syntax. Retrieved entries can be accessed using the For Each Entry activity.

Search Query
Enter the Laserfiche advanced search syntax:

```
{[Employee Records]:[Last Name]="Horton",  
[First Name]="Matt", [Employee ID]="3417"} &  
{LF:Name="*", Type="D"}
```

[Test Search Query...](#)
☐ Use fuzzy search (full-text search only)
☐ Percentage of word:
☒ Number of letters:
☐ If an entry is a shortcut, use the document or folder that it references
☐ Include variations of root word in full-text searches
Case/Accent Sensitivity:

☐ Exclude path column

Results to Return

☐ First result

☐ First results

☒ All results

Additional Properties

In Laserfiche Client

Search Syntax

Enter the phrase to search for:

```
{[Employee Records]:[Last Name]  
="Horton", [First Name]="Matt",  
[Employee ID]="3417"} & {LF:Name="*",  
Type="D"}
```

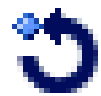
☐ Include search syntax in query

Define Token Values

Token	Value
%[Date]	
%[FindUser_Display Name]	
%[RetrieveFieldValues_Author]	

Help OK Cancel

Repeating Activities



For Each
Entry



For Each
Row

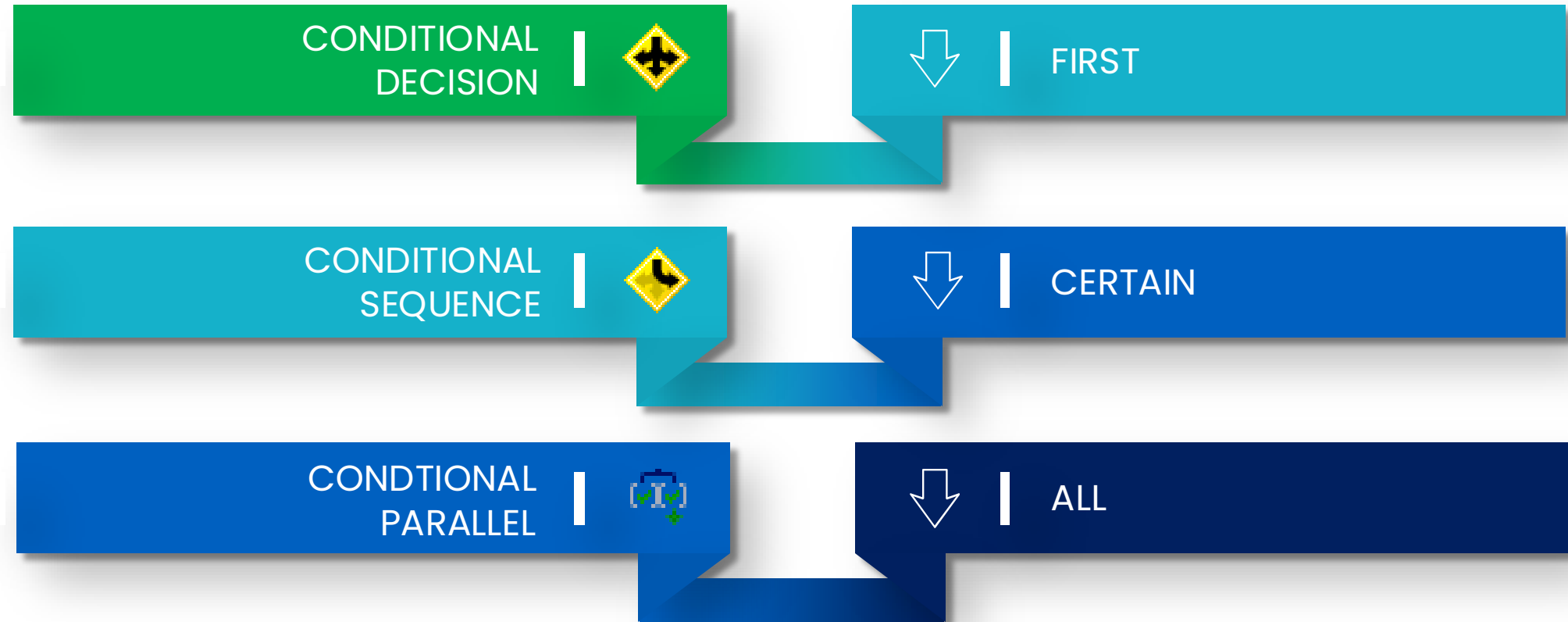


For Each
Value



Repeat

Flow Control Activities



CONDITIONAL
DECISION

FIRST



Specify the conditions that must be satisfied for the workflow to continue.

If all of these conditions are true

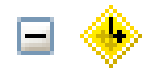
- 1 ► Document : Page Count is between 3 and 5
- 2 User : User's Groups include Human Resources

Add condition

Add group



Routing Decision



Branch



Branch 2

Drop
Activities
HereDrop
Activities
Here

CONDITIONAL
SEQUENCE

CERTAIN

Conditional
SequenceDrop
Activities
Here

Specify the conditions that must be satisfied for the workflow to continue.

If all of these conditions are true

- 1  Document : Page Count is between 3 and 5
- 2 User : User's Groups include Human Resources

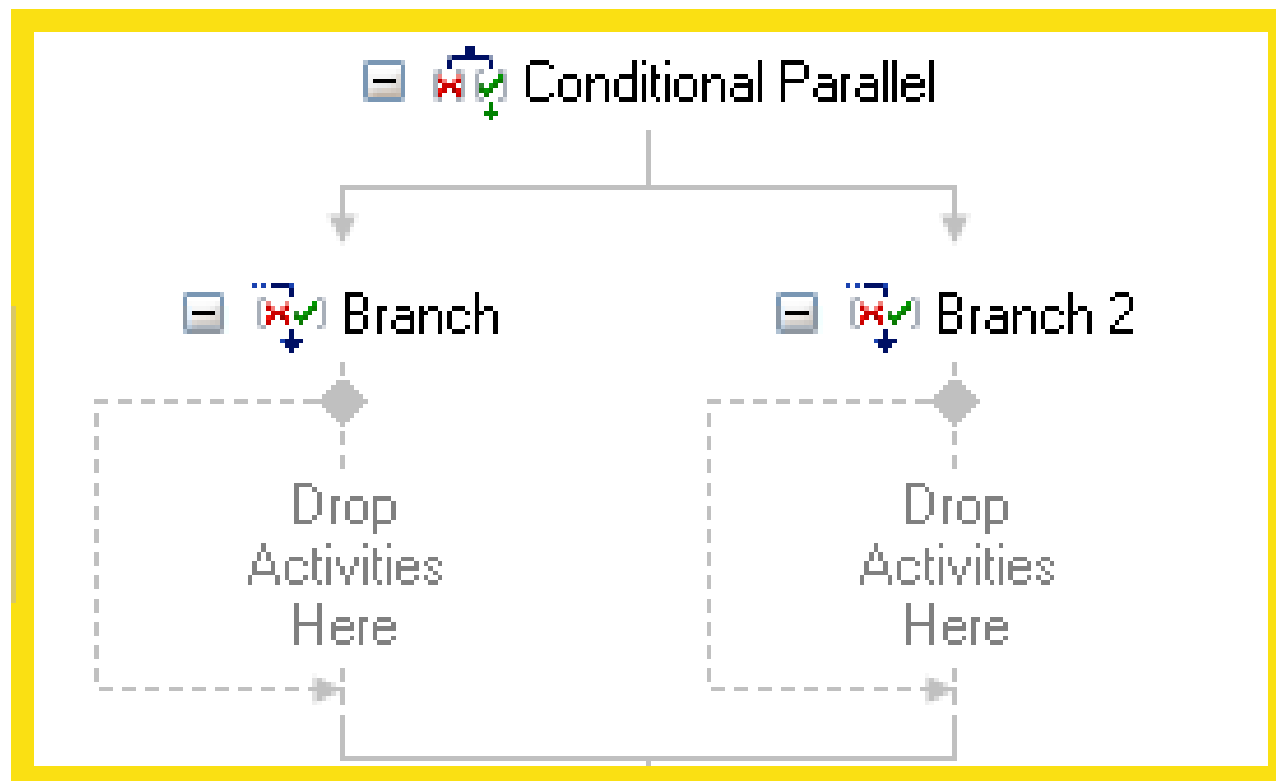
Add condition

Add group

CONDITIONAL
PARALLEL



ALL



Edit...	
	Undo
	Redo
	Cut
	Copy
	Paste
	Delete
	Disable
	Collapse
	Add Branch
	Description Options ▶
	View Options ▶
	Zoom ▶
	View Properties...
	Options...
	Help

Edit...	
	Undo
	Redo
	Cut
	Copy
	Paste
	Delete
	Disable
	Collapse
	Add Branch
	Description Options ▶
	View Options ▶
	Zoom ▶
	View Properties...
	Options...
	Help

Setting Conditions

Condition

Specify the conditions that must be satisfied for this branch's contained activities to run.

If all of these conditions are true

1 ▶ Entry : Field (Document Description) (EMP-EMP-Process::Starting Entry) is not empty

2 If any of these conditions are true

3 Token : Create Workflow Tokens (tkRetentionSchedule) is empty

4 Token : Create Workflow Tokens (tkCutoffInstruction) is empty

5 Token : Create Workflow Tokens (tkSecurity) is empty

Add condition Add group

Help OK Cancel

Retrieve Business Process Variables

Server

Forms Server

Host: http://v-dev-w7x64-22
Authentication: Default Authentication

Fields

Employee Requests

Click here to select which fields to retrieve

Choose Fields

Search Fields

Search by fields

Search by form

☐ Only show selected fields

Field	Type	Form	Token Name
☐ Address - Zip Code	Address	Request	Address_Postal
☐ Address - Country	Address	Request	Address_Country
☐ E-mail	E-mail	Request	E-mail
☐ Reason for Request	Text	Request	Reason_for_Request
☐ Department	Radio Button	Request	Department
☐ Details	Table*	Request	Details
☐ Details (Item)	Text	Request	Item
☐ Details (Amount)	Currency	Request	Amount
☐ Request for	Checkbox	Request	Request_for
☐ Requested by	Date	Request	Requested_by
☐ List of Recipients	Collection*	Request	List_of_Recipients
☐ Total Amount	Currency	Request	Total_Amount

☐ Select / Clear all

Note: Collection and table fields (marked with an asterisk above) can only be accessed by using a For Each Row activity

Help
OK
Cancel

Set Business Process Variables

Server

Forms Server 

Host: http://v-dev-w7x64-22

Authentication: Default Authentication

Fields

Employee Requests 

Click here to select which fields to retrieve

Choose Fields

Search Fields

Search by fields 

Search by form

☐ Only show selected fields

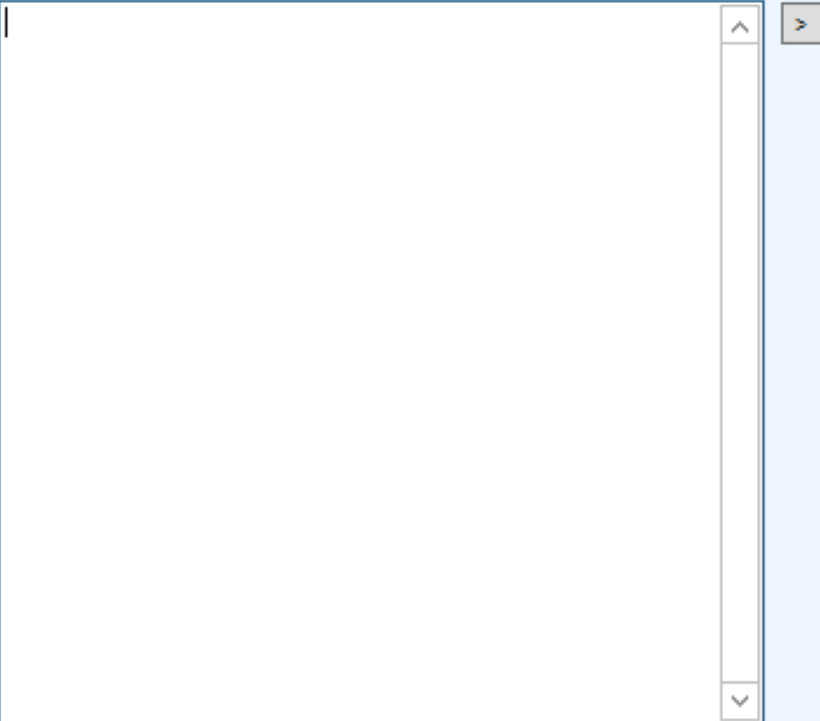
Field	Type	Form	Token Name
☐ Address - Zip Code	Address	Request	Address_Postal
☐ Address - Country	Address	Request	Address_Country
☐ E-mail	E-mail	Request	E-mail
☐ Reason for Request	Text	Request	Reason_for_Request
☐ Department	Radio Button	Request	Department
☐ Details	Table*	Request	Details
☐ Details (Item)	Text	Request	Item
☐ Details (Amount)	Currency	Request	Amount
☐ Request for	Checkbox	Request	Request_for
☐ Requested by	Date	Request	Requested_by
☐ List of Recipients	Collection*	Request	List_of_Recipients
☐ Total Amount	Currency	Request	Total_Amount

☐ Select / Clear all

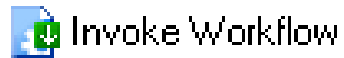
Note: Collection and table fields (marked with an asterisk above) can only be accessed by using a For Each Row activity

Help OK Cancel

Starting Variable Values



Invoke Workflow



01 Pick the workflow to invoke

02 If applicable, a list of input parameters will appear under Input Name.

03 Optional: Wait for the invoked workflow to finish running before continuing to run the current workflow

The interface is titled "Invoke Workflow" and contains several sections:

- Activity Name:** A text field containing "Invoke Workflow".
- Activity Description:** A text area containing "Runs a specified workflow."
- Workflow:** A dropdown menu showing "Employee Information". Below it is a link "View workflow...".
- Input Parameters:** A section titled "Configure values for the selected workflow's input parameters:" containing a table.

Input Name	Value
EmployeeID	%tkEmployeeID
- Refresh parameters:** A link below the input parameters table.
- Wait for Invoked Workflow:** A section with a checkbox labeled "Wait for the invoked workflow to finish running before continuing to run the current workflow".
- Starting Entry:** A section with two radio buttons: "Current workflow's starting entry" (selected) and "Other Entry" (with a "Select..." link). Below these are labels for "Activity: Find Entry" and "Entry: Output Entry".

Workflow Parameters

Input/Output Parameters

Input Parameters:
(None)

Output Parameters:
(None)

[Configure input/output parameters...](#)

Workflow Parameters

Input Parameters:

Input Name	Multi-value	Default Value	Token Tags
Click 'Add Input' to create an input parameter.			

☐ Show alternative token names for input parameters

Output Parameters:

Output Name	Multi-value	Output Value	Suggested Token Tags
Click 'Add Output' to create an output parameter.			

Help OK Cancel

Starting Rules – Condition

The screenshot shows the 'Rule Wizard' dialog box in the 'WF - IIMC' application. The dialog has a title bar with 'Rule Wizard' and a close button. It features a dark blue sidebar on the left with a folder icon and a large green arrow pointing upwards. The main area is white and contains the following text:

Welcome to the Workflow Rule Wizard

This wizard creates a starting rule: a condition or schedule assigned to a published workflow that defines when it will run.

Give your rule a descriptive name so that you can easily find and monitor it later.
Click Next to get started.

Rule name:

Description:

Rule type: ☒ Condition ☐ Schedule

Rule status: ☒ Enabled

At the bottom are buttons for 'Help', '< Back', 'Next >', and 'Cancel'.

Rule Wizard

Starting Condition Properties

The conditions below will be evaluated when the Event Type occurs. Specify which repository's metadata will be available to the conditions with the "Get metadata from" drop-down menu.

This section shows the configuration for the starting condition. It includes two drop-down menus at the top: 'Event Type' set to 'Entry Changed' and 'Get metadata from' set to 'Inhouse (Inhouse; wdagent)'. Below these is a list of conditions numbered 1 through 7:

- 1 **If all of these conditions are true**
- 2 **▶ Entry : Type equals Folder**
- 3 **Repository equals Inhouse**
- 4 **User does not contain workflow**
- 5 **Entry : Path starts with Marketing\ARCHIVE\Run Smarter Awards\2013\Pending Summary**
- 6 **If any of these conditions are true**
- 7 **Entry : Field (Entry Status) equals Summarized**
- 8 **Entry : Field (Entry Status) equals Invalid**

Below the list are two buttons: 'Add condition' and 'Add group'.

At the bottom is a checkbox labeled 'Run workflow on the entry's folder (instead of the entry itself)' which is currently unchecked.

At the very bottom are buttons for 'Help', '< Back', 'Publish', and 'Cancel'.

Starting Rules - Schedule

Rule Wizard

Schedule Properties
The workflow will be run at the specified time(s).

Configure when to run the workflow:

Start on: 4/29/2011 at 10:40 AM

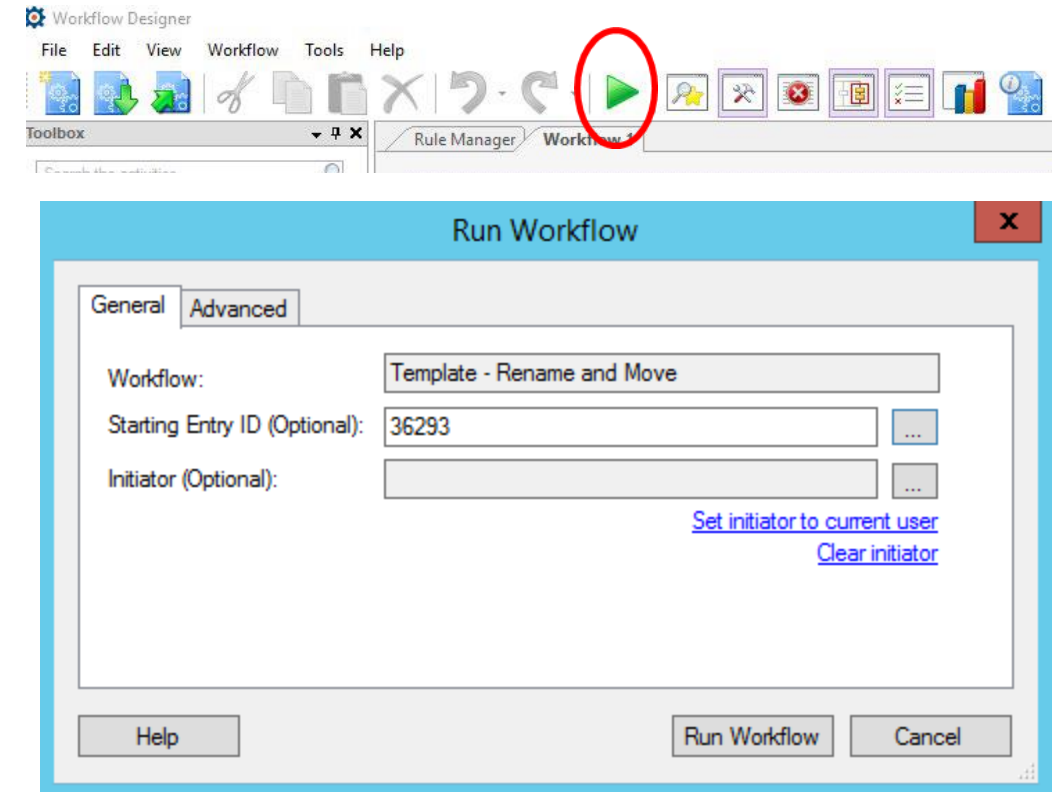
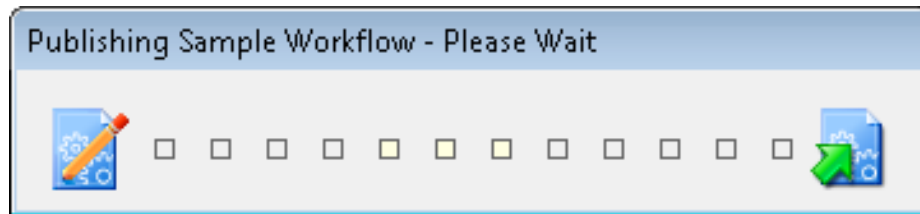
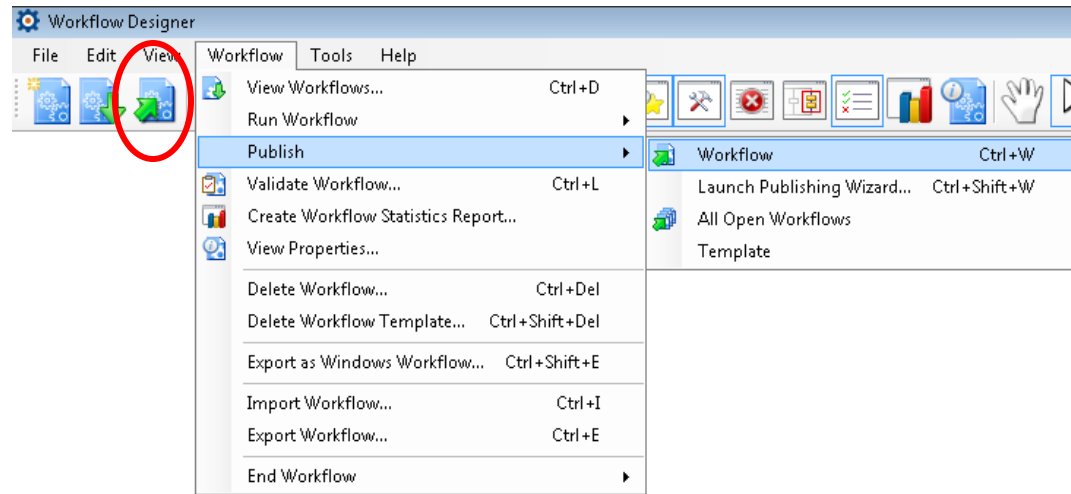
Repeats: Daily Configure...
Runs every day.

After the schedule has started:

☒ Re-run the workflow every: 15 Minutes for 1.00 hours

☒ Stop schedule on: 4/29/2011

Help < Back Publish Cancel



Publishing and Testing

Search Workflow Instances

Search

New Search

State

☒ **Workflow Status**

☐ Active

☐ Completed

☐ Terminated

☒ **Errors, Warnings, or Messages**

☐ Errors

☐ Warnings

☐ Messages

☐ Time of Last Action

Start Information

☐ Workflow Name

☐ Start Date

☐ Starting Rule

☐ Started By

Entry

☐ Entry Name

☐ Entry Path

☐ Entry ID

Advanced

☐ Laserfiche Server

☐ Laserfiche Repository

☐ Activity Name

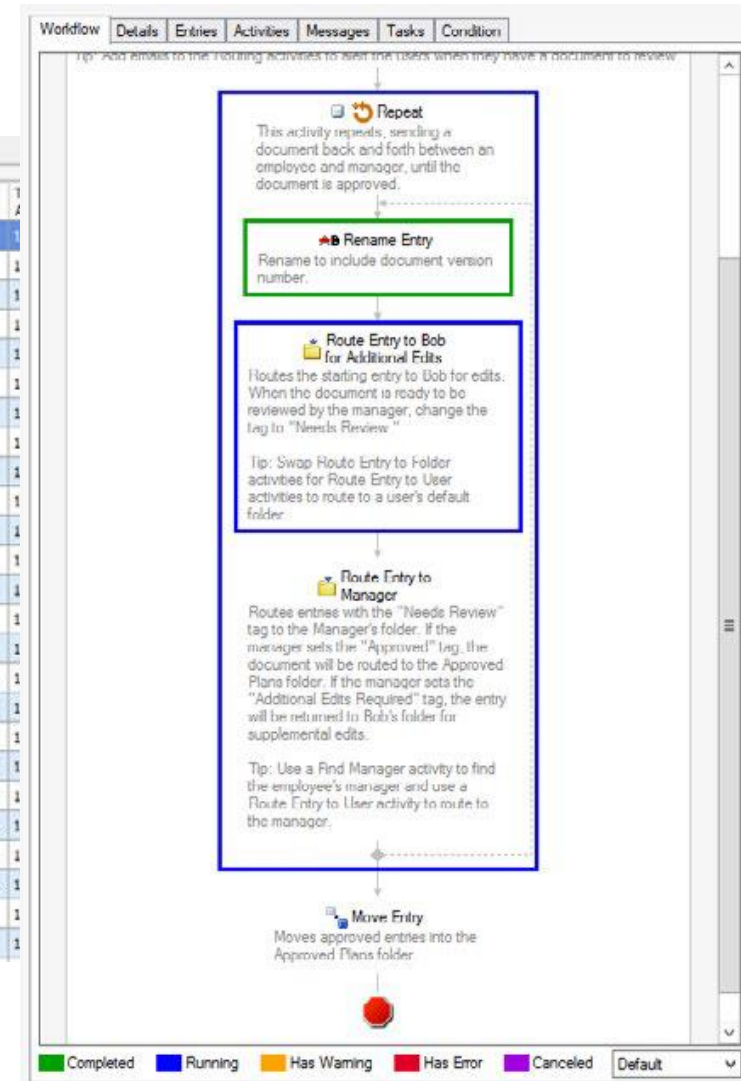
Business Process

☐ Static

[Reset](#) [Save](#) [Search](#)

Toolbox Search Common Searches

Instance Name	Instance Status	Starting Name	Entry ID	Original Path	Workflow Status	Messages	Start Time
			(None)		Completed		11/5/2015 4:03:33 PM
			(None)		Completed		11/5/2015 4:04:07 PM
			(None)		Completed		11/5/2015 4:07:41 PM
			(None)		Completed		11/5/2015 4:08:27 PM
			(None)		Completed		11/5/2015 4:09:20 PM
			(None)		Completed		11/5/2015 4:15:51 PM
			(None)		Completed		11/5/2015 4:16:15 PM
		medical	168	\\Case Files\...	Completed		11/5/2015 4:18:21 PM
		legal	170	\\Case Files\...	Completed		11/5/2015 4:18:35 PM
		education	171	\\Case Files\...	Completed		11/5/2015 4:18:46 PM
			(None)		Completed		11/5/2015 4:19:37 PM
		medical	168	\\Case Files\...	Completed		11/5/2015 4:21:42 PM
		education	171	\\Case Files\...	Completed		11/5/2015 4:21:49 PM
			(None)		Completed		11/5/2015 4:21:52 PM
		education	171	\\Case Files\...	Completed		11/5/2015 4:22:23 PM
			(None)		Completed		11/6/2015 4:25:00 AM
			(None)		Completed		11/6/2015 7:51:30 AM
			(None)		Completed		11/6/2015 7:53:43 AM
			(None)		Completed		11/6/2015 7:54:53 AM
			(None)		Completed		11/6/2015 9:38:58 AM
			(None)		Completed		11/6/2015 11:16:37 ...
			(None)		Completed		11/6/2015 11:34:54 ...
			(None)		Completed		11/6/2015 11:35:13 ...
			(None)		Completed		11/6/2015 1:50:41 PM
			(None)		Completed		11/6/2015 1:52:52 PM



When to use Workflow

Examples of Workflow

You wish to create a workflow that will move and rename a document to a student's cumulative folder based on metadata values.

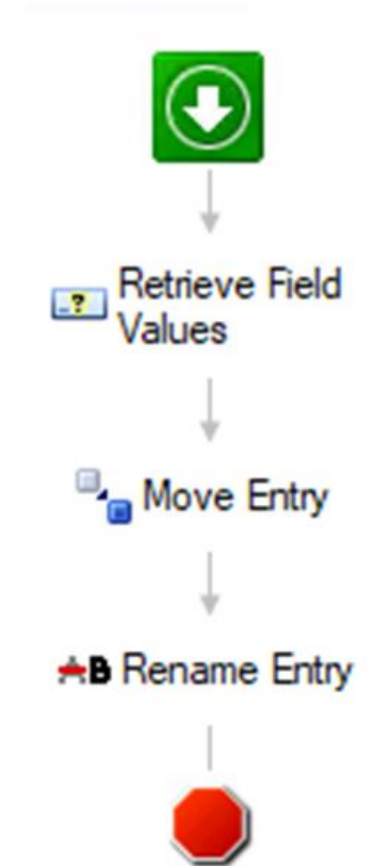
Example #1

Activities Needed:

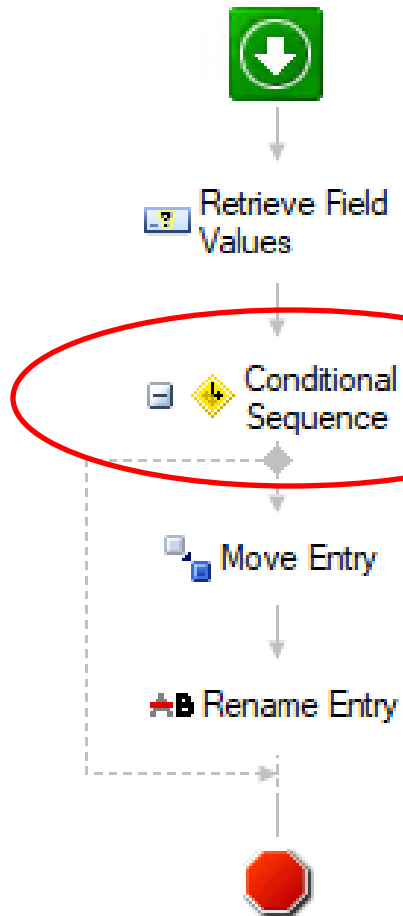
01 Retrieve Field Values

02 Move Entry

03 Rename Entry



Answer:



Condition

Specify the conditions that must be satisfied for the contained activities to run.

If all of these conditions are true

- 1 Token : Retrieve Field Values (First Name) is not empty
- 2 Token : Retrieve Field Values (Last Name) is not empty

Add condition Add group

Help OK Cancel

You wish to create a workflow that will find all documents of a given document type and insert the list of results, along with some metadata, into a SQL table for later use.

If the document is already listed in the table, you want to update the existing row instead.

You also want an email when the task is complete.

Example #2

Activities Needed:

01

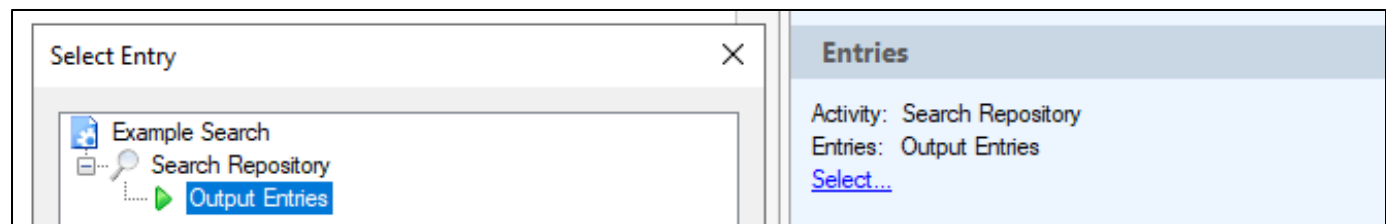
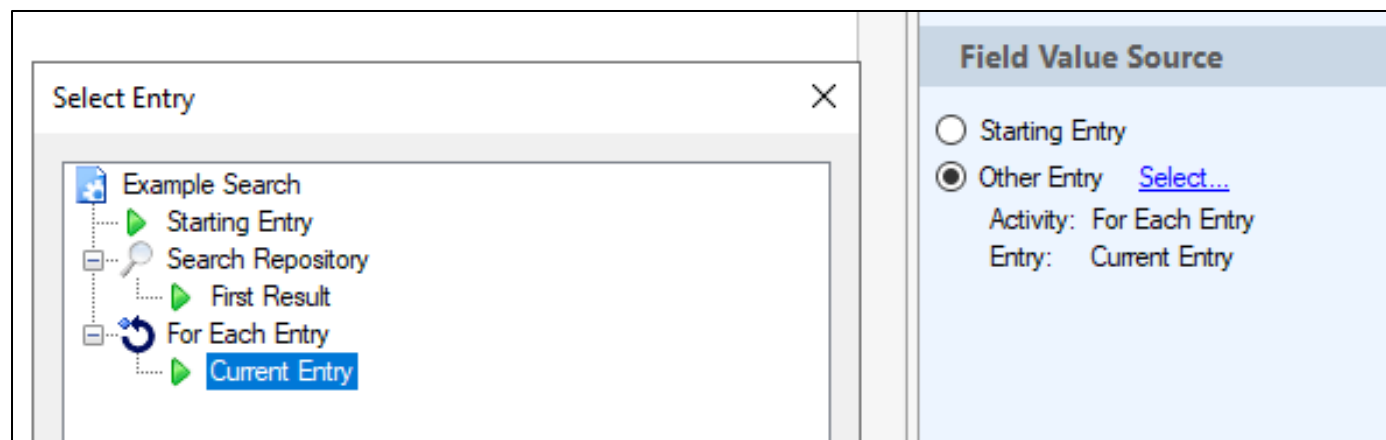
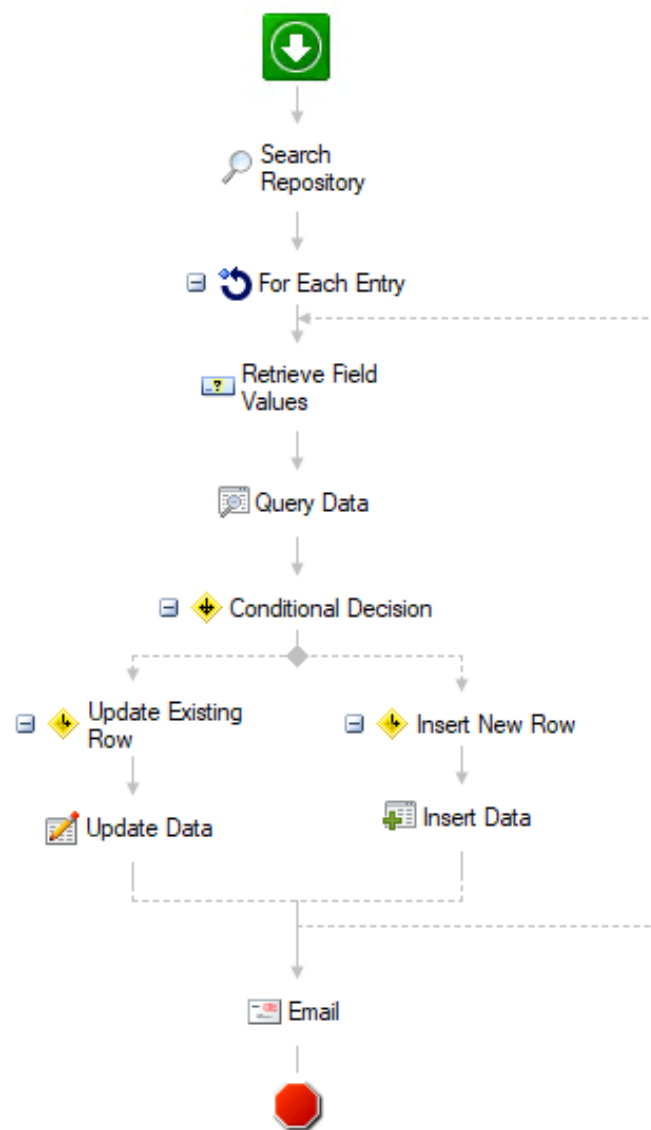
Search the Repository

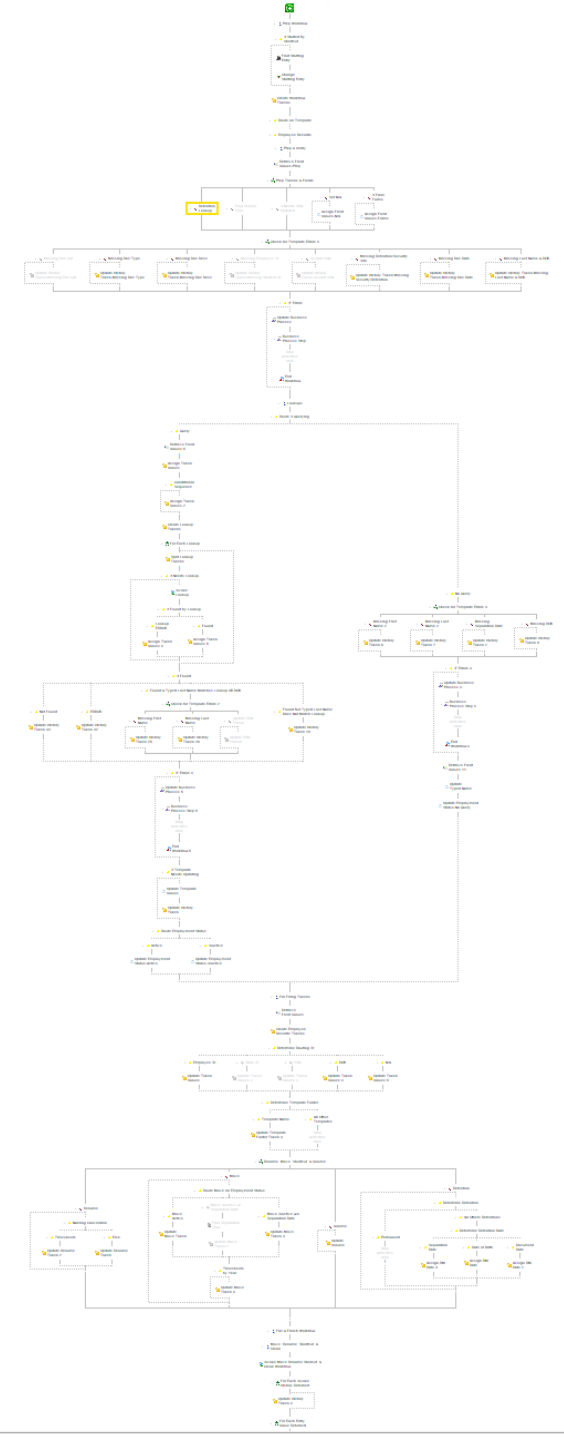
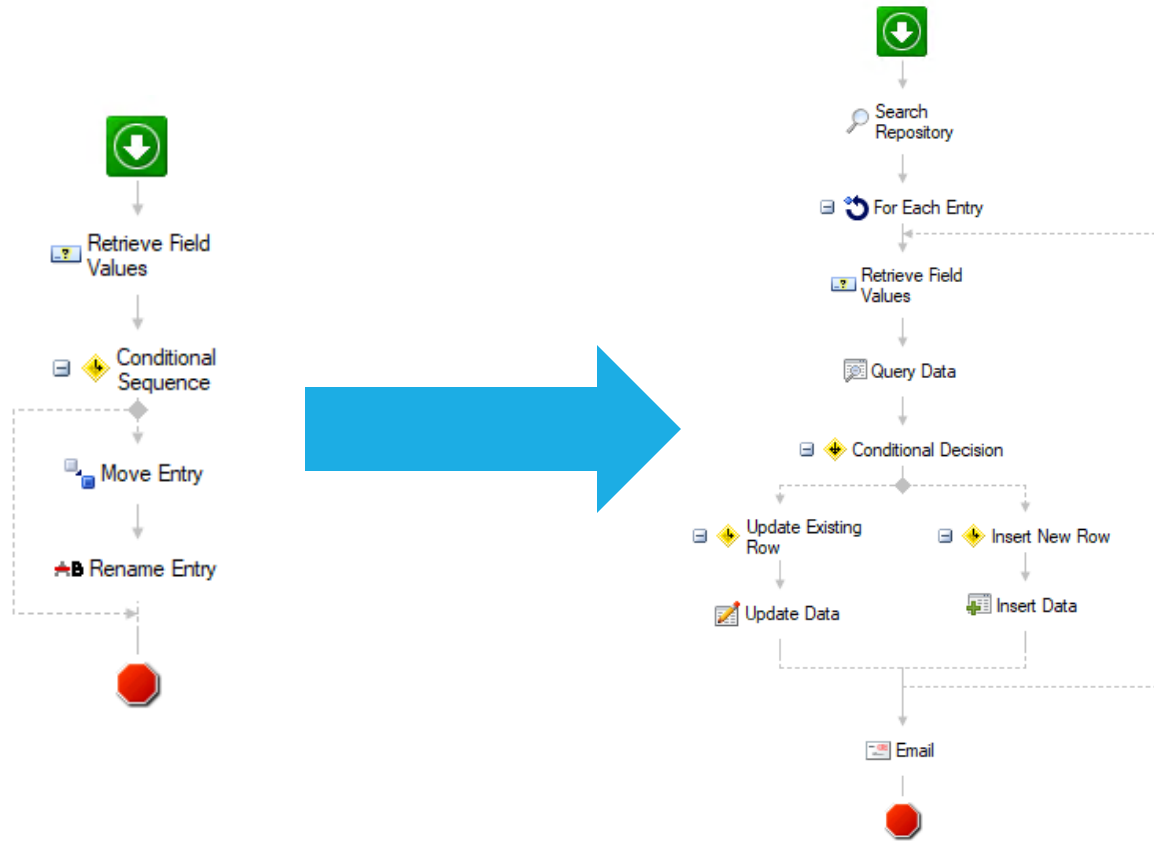
02

For Each Entry > Retrieve Field Values
and Query Data to determine Update
Data or Insert Data

03

Email





Expansion and Growth

Questions?

THANK YOU!

WORKFLOW 101