BUILDING
APPLICATIONS WITH
FORCE.COM - PART 2
(AUTOMATING
BUSINESS PROCESSES
USING VISUAL
WORKFLOW)

Exercise Guide





Automating Business Processes Using Visual Workflow

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14-1: Create a Flow

Scenario:

Universal Containers is seeing a number of candidate records missing information. They want a candidate wizard created that includes all the needed information to complete the record.

Goal:

Create a flow using Visual Workflow.

Tasks:

- 1. Create a flow.
- 2. Add a screen element to prompt for the candidate's name.
- 3. Set the start element for the flow.
- 4. Add a screen element to prompt for the candidate's contact information.
- 5. Add a screen element to prompt for the candidate's experience and education.
- 6. Add a record create element to create a new candidate record.
- 7. Add a screen element to finish the wizard.
- 8. Save and run the flow.

Time:

40 minutes

Instructions:

- 1. Create a flow.
 - A. Click Setup | Create | Workflow & Approvals | Flows.
 - B. Click **New Flow**. The Welcome to Cloud Flow Designer screen opens displaying an overview video. Click **Close** to close the screen.
- 2. Add a screen element to prompt for the candidate's name.
 - A. Drag and drop **Screen** from the palette onto the flow window.
 - B. In the **Name** field, enter Candidate Name. (The **Unique Name** field autopopulates.)
 - C. Click the Add a Field tab.
 - D. Double-click the **Textbox** input type twice to add two textbox fields to the screen.
 - E. Click the top textbox field and enter First Name as the label. (The **Unique Name** field auto-populates.)
 - F. Click the other textbox field and enter Last Name as the label. (The **Unique Name** field auto-populates.)
 - G. Click **OK** to complete the screen element.



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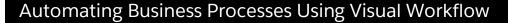
- 3. Set the start element for the flow.
 - A. Hover over the **Candidate Name** element.
 - B. Click the **Set as Start Element** icon.
 - C. Click **Save** and save the flow with the name Candidate Wizard. Click **OK** on the General Warning screen.
- 4. Add a screen element to prompt for the candidate's contact information.
 - A. Drag and drop **Screen** from the palette.
 - B. Name the element: Candidate's Contact Information
 - C. Add three textbox input fields.
 - D. Configure the fields:

Field Type	Label	Unique Name	
Textbox	Phone	Phone	
Textbox	Mobile Phone	Mobile_Phone	
Textbox	Email Address	Email_Address	

- E. Click **OK** to complete the screen element.
- F. Connect the Candidate Name element to the Candidate Contact Information element.
- G. Click Save.
- 5. Add a screen element to prompt for the candidate's experience and education.
 - A. Drag and drop **Screen** from the palette.
 - B. Name the element: Experience and Education
 - C. Add the following fields.

Field Type	Label	Unique Name
Number	Years of Experience	Years_of_Experience
Checkbox	Currently Employed	Currently_Employed
Textbox	Current Employer	Current_Employer

- D. Add a multi-select picklist field.
 - Add a multi-select picklist field.
 - ii. In the Label field, enter Education. (The Unique Name field auto-populates.)
 - iii. Select Create New | Choice from Choice Settings.
 - iv. Enter GED/HS Diploma as the Label. (The Unique Name field auto-populates.)
 - v. Make sure Text is selected as the Value Data Type.
 - vi. Enter GED/HS Diploma as the Stored Value and click OK.
 - vii. Click Add Choice 6 times to add 6 other choices.
 - viii. Repeat steps iii-v for each of the choices with the following name and stored





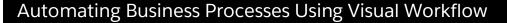
values:

Choice Name	Stored Value
BA/BS	BA/BS
MA/MS/MBA	MA/MS/MBA
MD	MD
JD	JD
PhD	PhD
Post Doc	Post Doc

- E. Click and drag the **Education** field so that it is below the **Years of Experience** field and above the **Currently Employed** field.
- F. Click **OK** to complete the screen element.
- G. Connect the Candidate's Contact Information element to the Experience and Education element.
- H. Click Save.
- 6. Add a record create element to create a new candidate record.
 - A. Drag and drop **Record Create** from the palette onto the flow window.
 - B. Name the element Create Candidate. (The Unique Name field auto-populates.)
 - C. Select the Candidate object from the Custom section of the Create picklist.
 - D. Configure the fields and associated values:

Field	Values
First_Namec	Screen Input Fields First_Name
Last_Namec	Screen Input Fields Last_Name
Phonec	Screen Input Fields Phone
Mobilec	Screen Input Fields Mobile_Phone
Emailc	Screen Input Fields Email_Address
Educationc	Screen Multi-Select Fields Education
Currently_Employedc	Screen Input Fields Currently_Employed
Current_Employerc	Screen Input Fields Current_Employer
Years_of_Experiencec	Screen Input Fields Years_of_Experience

- E. Click **OK**.
- F. Click and drag an arrow connector from the Experience and Education element to the Record Create element to connect the elements together.





- G. Click Save.
- 7. Add a screen element to finish the wizard.
 - A. Drag and drop **Screen** from the palette onto the flow window.
 - B. In the Name field, enter Candidate Created. (The Unique Name field autopopulates.)
 - C. Add a display text field.
 - D. Name the display text field: CandidateCreated
 - E. Enter this message in the field:

```
The candidate you entered, {!First_Name} {!Last_Name}, has been created.
```

Use the **Select Resource** picklist to enter the {!First_Name} {!Last_Name} screen input fields.

- F. Click **OK**.
- G. Connect the Create Candidate element to the Candidate Created element.
- H. Click **Save**.
- 8. Run the flow.
 - A. Click Run.
 - B. Enter the candidate information into the corresponding fields:

i. First Name: Johnii. Last Name: Smithiii. Phone: 4155551234

iv. Mobile Phone: (leave blank)

v. Email: (leave blank)
vi. Years of Experience: 3
vii. Education: BA/BS

viii. Currently Employed: (selected) ix. Current Employer: XYZ labs

- C. Click **Finish** and close the flow browser tab.
- D. Click Close to exit the Flow Designer.
- E. Navigate to the existing candidates and verify that John Smith is listed as a candidate.

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14-2: Create a New Version of a Flow

Scenario:

Universal Containers is also seeing a number of duplicate candidate records being created. They want to add a record lookup to the candidate wizard to check if the candidate is already in the system based on their name.

Goal:

Create a flow using Visual Workflow.

Tasks:

- 1. Open an existing flow.
- 2. Add a record lookup element to check if the candidate exists.
- 3. Save a new version of the flow.
- 4. Add a decision element based on the lookup element.
- 5. Add a screen element to display faults for data elements.
- 6. Save and run the flow.

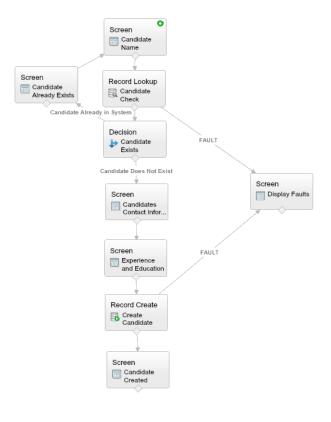
Time:

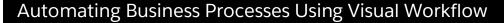
40 minutes

Instructions:

- 1. Open an existing flow.
 - A. Click Setup | Create | Workflow & Approvals | Flows.
 - B. Select All Flows from the View picklist.
 - C. Click the Candidate Wizard link.
 - D. Click **Open** next to version 1 of the flow.
- 2. Add a record lookup element to check if the candidate exists.
 - A. Drag and drop **Record Lookup** from the palette onto the flow window.
 - B. In the Name field, enter Candidate Check. (The Unique Name field autopopulates.)
 - C. Select the Candidate object from the Custom section of the Lookup picklist.
 - D. Enter two lookup filters:

Field	Operator	Value
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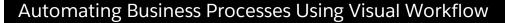


First_Namec	Equals	Screen Input Fields First_Name
Last_Namec	Equals	Screen Input Fields Last_Name

- E. Create a new variable:
 - i. Select **Standard | Id** as the field in the **Field** picklist.
 - ii. Select Create New | Variable from the Variable picklist.
 - iii. Enter ExistCandidateID as the UniqueName.
 - iv. Click **OK** to complete the variable.
- F. Click **OK** to complete the lookup element.
- G. Delete the connector between the Candidate Name element and the Candidate's Contact Information element by selecting the connector and pressing the **Delete** key.
- H. Click and drag an arrow connector from the Candidate Name element to the Candidate Check element to connect the elements together.
- 3. Save a new version of the flow.
 - A. Click Save As.
 - B. Select New Version from the Save As picklist.
 - C. Click **OK**.
- 4. Add a decision element based on the lookup element.
 - A. Drag and drop **Decision** from the palette onto the flow window.
 - B. Enter Candidate Exists as the name. (The Unique Name field auto-populates.)
 - C. Configure the **Editable Outcome**:
 - i. Enter Candidate Already in System as the Editable Outcome name. (The Unique Name field auto-populates.)
 - ii. Configure the resource row:

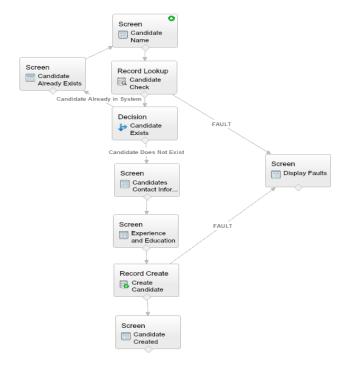
Resource	Operator	Value
Record Lookup Candidate Check	Equals	Global Constant \$GlobalConstant.True

- D. Configure the Default Outcome:
 - i. Click Default Outcome.
 - ii. Enter Candidate Does Not Exist as the name.
- E. Click **OK**.
- F. Connect the Record Lookup element to the Candidate Exists element.
- G. Add a screen to tell the user the candidate already exists:
 - i. Drag and drop **Screen** from the palette onto the flow window.
 - ii. In the Name field, enter Candidate Already Exists. (The Unique Name field auto-populates.)





- iii. Click the **Add a Field** tab.
- iv. Double-click Display Text.
- v. Double-click on the **Display Text** field and enter ExistsMessage at the name.
- vi. Add the message A Candidate with that name already exists. Please enter a different name. in the text field and click OK.
- H. Connect the Decision element to the Candidate Already Exists element.
- I. Select the Candidate Already in System outcome.
- J. Connect the Candidate Already Exists element to the Candidate Name element to request that the user enter a different name.
- K. Connect the Decision element to the Candidate's Contact Information element.
- L. Click Save.
- 5. Add a screen element to display faults for data elements.
 - A. Drag and drop **Screen** from the palette onto the flow window.
 - B. Name the element: Display Faults
 - C. Add a display text field.
 - D. Name the display text field: Display Fault Message
 - E. From the Select Resource picklist, select SYSTEM AND GLOBAL VARIABLES | \$Flow.FaultMessage.
 - F. Click OK.
 - G. Connect the Candidate Check and Create Candidate element to the Display Faults element.
 - H. Click Save. Your flow should match the flow below.





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6. Run the flow.

Α.	Click	Run.
∽.	CIICK	IVUII.

- B. Enter an existing candidate first and last name. (For example, John Smith was added in a previous exercise.)
- C. Does a message that the candidate already exists display?
- D. Close the flow browser tab.
- E. Click Close to exit the Flow Designer.

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14-3: Deploy a Flow

Scenario:

Universal Containers would like to be able to launch the candidate wizard from the candidate list view.

Goal:

Create a custom button on the candidate list view to run the candidate flow.

Tasks:

- 1. Activate the flow version.
- 2. Deploy the flow using a custom button.
- 3. Modify the Recruiting and HR profile to give them the Run Flows permission.
- 4. Run the flow.

Time:

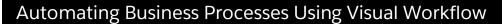
10 minutes

Instructions:

- 1. Activate the flow version.
 - A. Click Setup | Create | Workflow & Approvals | Flows.
 - B. Select All Flows from the View picklist.
 - C. Click on the Candidate Wizard flow.
 - D. Click **Activate** next to version 2 of the Candidate Wizard flow.
- 2. Deploy the flow using a custom button.
 - A. Click Create | Objects | Candidate.
 - B. Scroll down to the Buttons, Links, and Actions section, and click **New Button or Link**.
 - C. In the Label field, enter Candidate Wizard. (The Name field auto-populates.)
 - D. Select the List Button radio button.
 - E. From the Behavior picklist, select Display in existing window without sidebar or header.
 - F. From the Content Source picklist, select URL.
 - G. Scroll down to the text area below the field selection controls box and enter the following URL without any spaces:

/flow/Candidate Wizard?retURL=/home/home.jsp

- H. Click Check Syntax.
- I. Click Save.
- J. Click OK.
- K. Click Create | Objects | Candidate.





- L. Click **Edit** next to Candidate List View Search Layout.
- M. Move the **Candidate Wizard** button from the Available buttons column to the Selected Buttons column.
- N. Click Save.
- 3. Modify the Recruiting and HR profile to grant the Run Flows permission.
 - A. Navigate to **Setup | Manage Users | Profiles | Custom Recruiter**.
 - B. Select System Permissions and click Edit.
 - C. Select Run Flows and click Save.
 - D. Repeat these steps for the Custom HR profile.
- 4. Run the flow.
 - A. Click the Candidates tab.
 - B. Click GO!
 - C. Click Candidate Wizard.
 - D. Enter sample data in the wizard.
 - E. Verify that the new candidate record was created.