ORACLE Help Center

Creating the Attachment Steps

Before You Begin

This 30-minute tutorial shows you how to build an orchestration that uses many of the new operations available in the Attachments step in the Orchestrator Studio.

In this tutorial, you will:

1. Create an orchestration to get, add, and update text attachments.

2. Create an orchestration that receives file input and uploads the received file input as a file-type attachment.

3. Create an orchestration that retrieves a file attachment from JD Edwards EnterpriseOne and returns it as file output in the orchestration response.

Background

Starting with Tools Release 9.2.6.0, a new step type called Attachments is available in the Orchestrator Studio. Using this step, you can call the attachment (media object) REST APIs that were previously available as REST calls. These seven actions are available in the Attachments page of the Orchestrator Studio to manage attachments:

- **List**: Applies to file, text, and URL attachments types
- **Get Text**: Applies to text attachments type
- **Add**: Applies to text and URL attachments types
- **Update Text**: Applies to text attachments type
- **Upload File**: Applies to file attachments type
- **Download File**: Applies to file attachments type.

- **Delete**: Applies to file, text, and URL attachments types.

❶ Creating an Orchestration to Manage Text Attachments

In this task, you will learn how to use the new Attachment step within an orchestration to manage text type attachments.

Note: This task relies on EnterpriseOne demo data. You can use other data available in your system to enter a sales order to perform this task.

Getting a List of Existing Attachments

1. Sign in to the EnterpriseOne web client.

2. Access the Manage Existing Order (P42101) application using the Fast Path or open the application from the Navigator menu.

    1. Click **Find** and search for the record that has the paper clip icon. For example, search for Order Number 411.

    2. Select the record, click the **Row** menu, select **Order** , and then select **Header Attachments**.
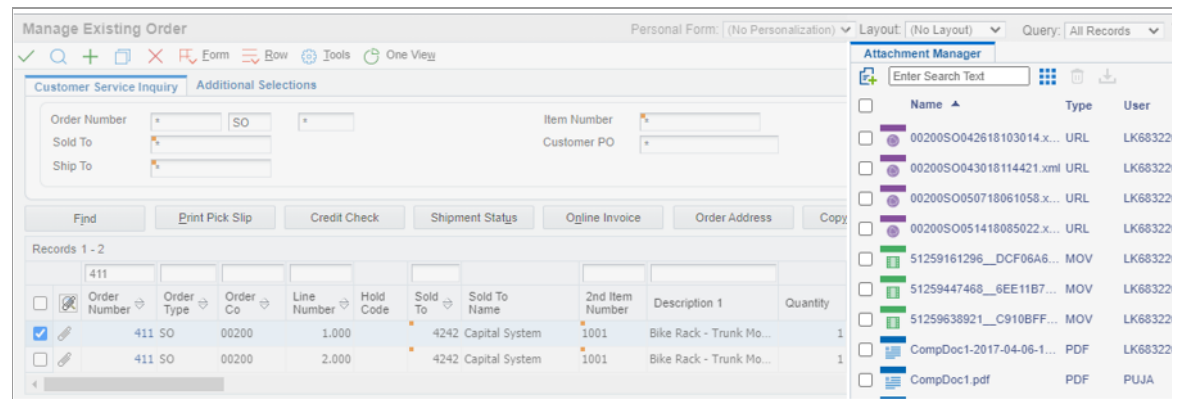
Attachment Manager Window

    3. Click the **About Attachments** icon (i) in the Attachment Manager window and note the structure name. In this example, the structure name is **GT4201A**.

Attachment Information

3. Sign in to the JD Edwards Orchestrator Studio.

4. Click **Orchestrations** and click **New**.

5. In the Name field, enter `Order Text Attachments.`

6. To add a step, click the **Add** icon (**+**) icon and select **Attachments**.

7. Click **New**.

8. In the Name field, enter `ListAllOrderAttachments.`

9. In the Structure Name field, enter `GT4201A`, and press the **Tab** key. The values in the Keys table are automatically populated.

Structure Name Field

10. In the Action section, select the **List** option.

11. Click **Save** and click the **Close** icon.

12. Click **Save** to save the orchestration.

13. Click the **ListAllOrderAttachments** step and select **Transformations**.

14. Click the **Add Inputs** to Orchestration button and then click the **Auto Map** button.

15. Click **Save**.

16. Click the **End** icon and click **Outputs and Assertions**.

17. Enable the **Select All** option and click outside the window to close the Outputs and Assertions window.

18. Click **Save** to save the orchestration.

19. Click the **Start** icon and select **Inputs and Values**.

20. Enter these values in the Default Values field for the inputs and save the orchestration:

Input	Default Value
mnDocumentorderinvoicee	411
szOrdertype	SO
szCompanykeyorderno	00200

21. Click the **Start** icon and click **Run Orchestration**.

22. Click **Run**.

23. Examine the response, notice that all the types of attachments and their individual details are included.

Run Orchestrations Window

Getting a List of Existing Text Attachments

1. Sign in to the EnterpriseOne web client.

2. Access the Manage Existing Order (P42101) application using the Fast Path or open the application from the Navigator menu.

3. Click **Find** and search for the record that has the paper clip icon. For example, search for Order Number 411.

4. Select the record, click the **Row** menu, click **Order** , and then select **Header Attachments.**

5. Ensure that the Attachment Manager window contains at least one text attachment. If a text attachment is not available, click the **Add** icon (+) and add a text attachment.
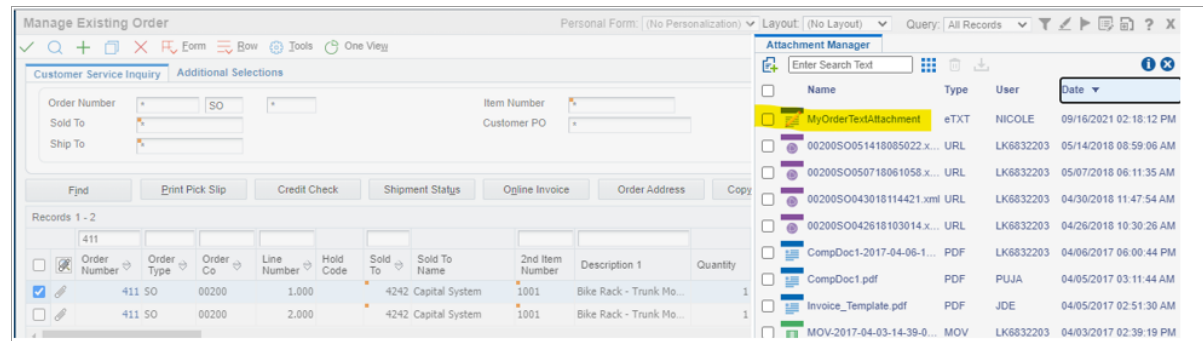
Attachment Manager Window

6. Access the JD Edwards Orchestrator Studio.

7. Click the **Orchestrations** icon .

8. Click the **Order Text Attachments** orchestration created in the "*Getting a List of Existing Attachments*" section.

9. Click **Design Mode.**

10. Click the **Add** icon (+)after the ListAllOrderAttachments step.

11. Select Attachments and click **New**.

12. Enter the name as `GetTextAttachments.`

13. Enter the structure name as `GT4201A`, and press the **Tab** key. The values in the Keys table are automatically populated.

14. In the Action section, select the **Get Text** option

15. In the Input section, enable the **Get All** option and then click **Save** to save the attachment step.

16. Click **Close** to return to the orchestration.

17. Click the new **GetTextAttachments** step and click **Transformations**.

18. Click **Auto Map** and click **Save**.

19. Click the **End** icon and click **Outputs and Assertions.**

20. Enable the **Select All** option and then click **Save** to save the orchestration .

21. Click the **Start** icon and select **Inputs and Values**.

22. Enter these values in the Default Value field for the inputs and save the orchestration.

Input	Default Value
mnDocumentorderinvoicee	411
szOrdertype	SO
szCompanykeyorderno	00200

Inputs and Values Window

23. Click the **Start** step and then click **Run Orchestration.**

24. Click **Run.**

25. Scroll to the end of the output to see the details of the text attachments returned in the response. Make a

note of the sequence number returned for the text attachments. In the following example, the sequence number is **16**.
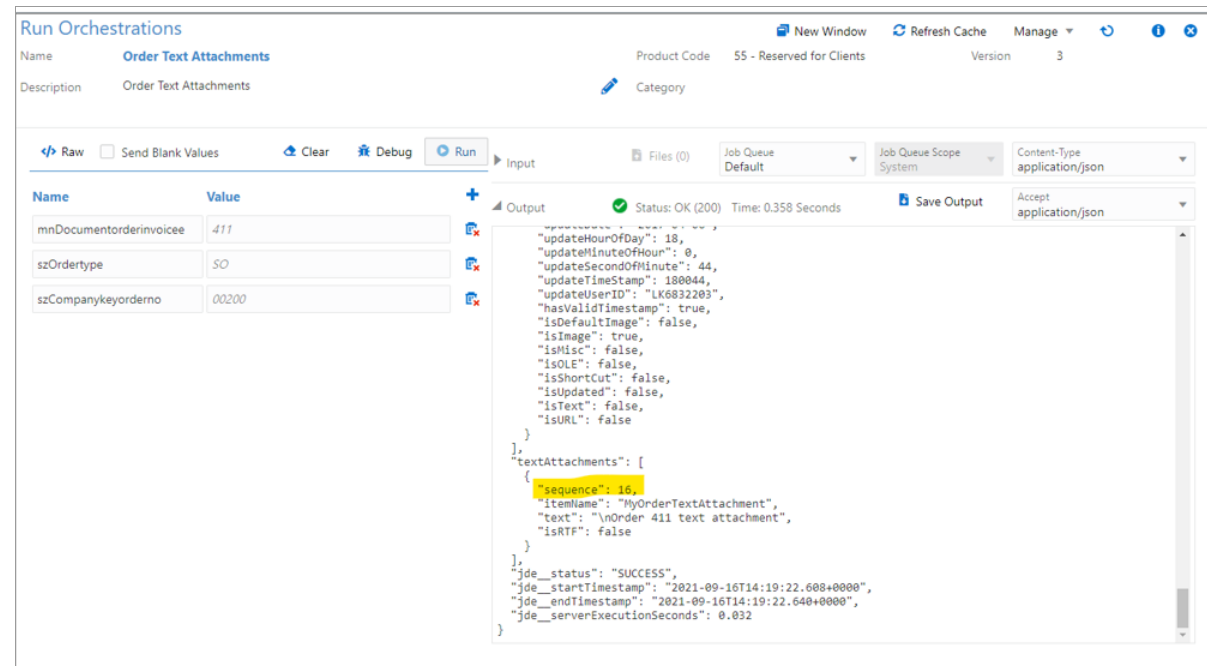
Run Orchestrations Window

Getting a Single Text Attachment

1. Access the JD Edwards Orchestrator Studio.

2. Click the **Orchestrations** icon.

3. Click the **Order Text Attachments** orchestration.

4. Click **Design Mode**.

5. Click the **Add** icon (+) icon after the GetTextAttachments step.

6. Select **Attachments** and click **New**.

7. Enter the name as `GetSingleTextAttachment`.

8. In the Structure Name field, enter **GT4201A**, and press the **Tab** key. The values in the Keys table are automatically populated.

9. In the Action section, click the **Get Text** option.

10. Enter the sequence number as a variable: `${sequenceNo}`.

11. Save the attachment step and return to the orchestration.

12. Click the **GetSingleTextAttachment** step and click **Transformations**.

13. Click **Auto Map**. The system automatically populates the Keys table.

14. Enter your sequence number in the Default Value field of the sequenceNo input field. For example, enter `16`.

Transformations Window

15. Click **Save.**

16. Click the **End** icon and select **Outputs and Assertions.**

17. For the attachment GetSingleTextAttachment, enable the **Return All Grids** option. In the Output field, replace the default name with this new name : `textAttachmentsSingle`.

18. Enable the **Select** option for the fields sequence, itemName, and text.

Select Option in Outputs and Assertions Window

19. Save the orchestration.

20. Click the **Start** icon and click **Run Orchestration.**

21. Click **Run**.

22. Scroll to the end of the output and examine the response. Notice that the details of the text attachments for that key are provided, and the new section contains just the text attachment for the specified sequence number, which is 16.
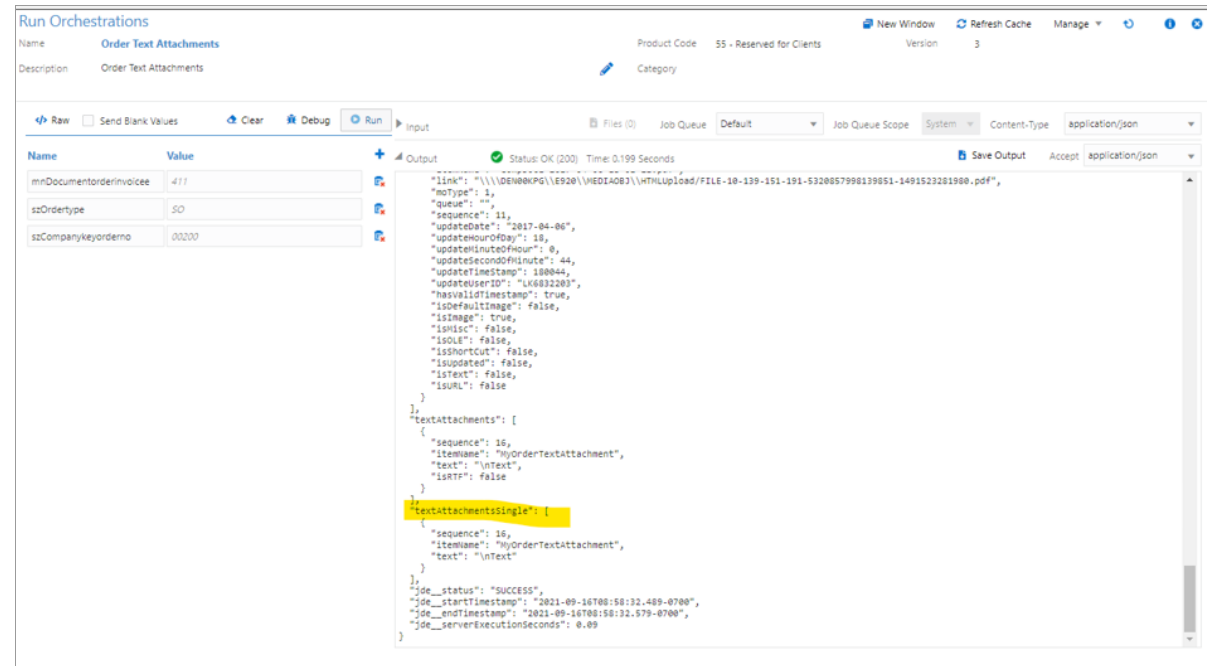
Run Orchestrations Window

Adding a Text Attachment

1. Access the JD Edwards Orchestrator Studio.

2. Click the **Orchestrations** icon.

3. Click the **Order Text Attachments** orchestration.

4. Click **Design Mode.**

5. Click the **Add** icon (+)after the GetSingleTextAttachment step.

6. Select **Attachments** and click **New**.

7. Enter the name as `AddTextAttachment`.

8. In the Structure Name field, enter `GT4201A`, and press the **Tab** key. The values in the Keys table are automatically populated.

9. In the Action section, click the **Add** option.

10. In the Input field, select the **Text** option for the Attachment Type field.

11. In the Item Name field, enter `OrchestrationAddText`.

12. Enter this variable for the Text field: `${newOrchText}`.

13. In the Output section, in the Sequence Variable field, enter `addSeqNo`.

> **Note:** Notice the difference between the input variables and the output variables. For the input variables, the variable notation is used (because inputs can be literal values or variables). For the output variables, the variable notation is not used, as each of these variables are just a name given to a known output value.

Input

Attachment Type	● Text ○ URL
Item Name	OrchestrationAddText
* Text	${newOrchText}

Output

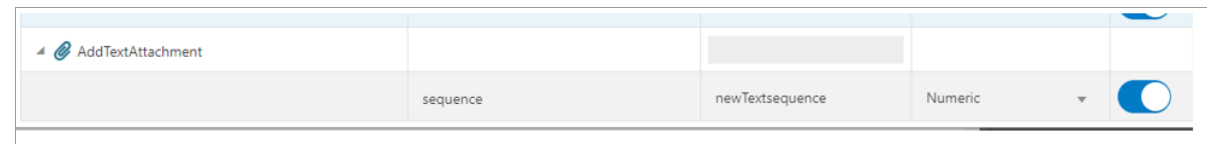| Sequence Variable	addSeqNo

Input and Output Sections

14. Save the step and return to the orchestration.

15. Click the **AddTextAttachment** step and select **Transformations**.

16. Click **Auto Map** to populate the Keys table, and in the Default Value field for the newOrchText input field, enter `New Text from Orchestration.`

17. Click **Save**.

Transformations Window

18. Click the **End** icon and select **Outputs and Assertions**.

19. Scroll to the bottom of the output and find AddTextAttachment. Enable the **Select** option for the sequence field. Change the value in the Output field to `newTextSequence`.

20. Click **Save**.

Select Option

21. Click the **Start** icon and select **Run Orchestration.**

22. Click **Run**.

23. Scroll to the end of the output and notice that a new sequence number is provided for the added text attachment.
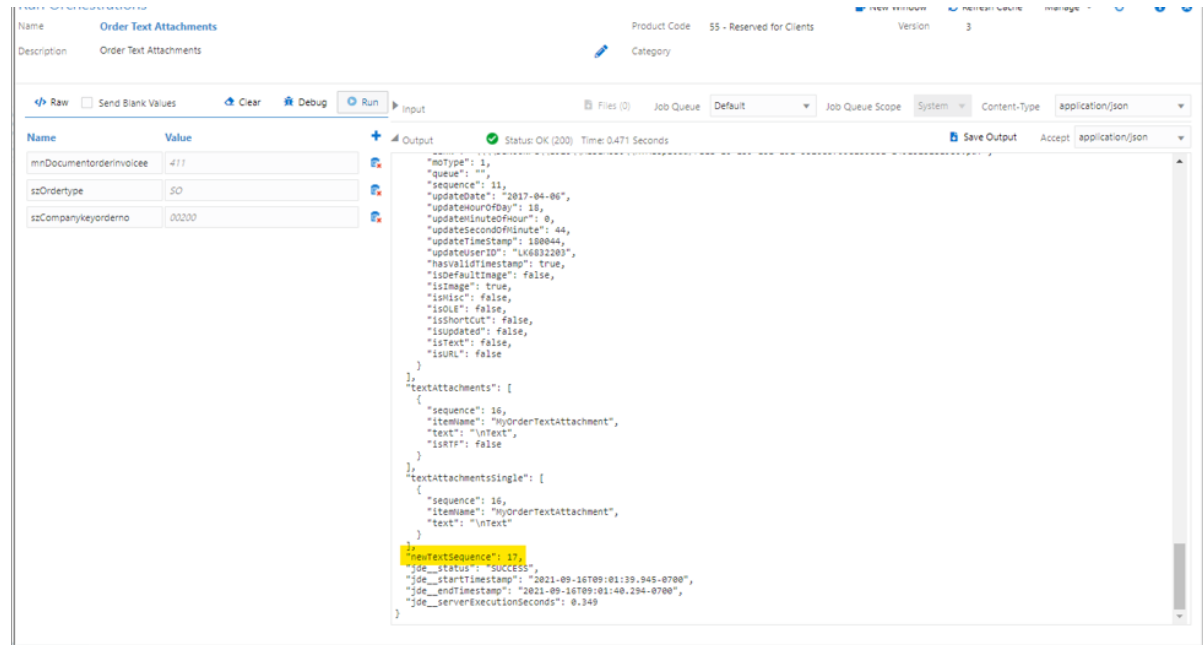
Run Orchestrations Window

Updating a Text Attachment

1. Access the JD Edwards Orchestrator Studio.

2. Click the **Orchestrations** icon.

3. Click the **Order Text Attachments** orchestration.

4. Click **Design Mode.**

5. Click the **Add** icon (+) icon after the AddTextAttachment step.

6. Select **Attachments** and click **New**.

7. Enter the name as `UpdateTextAttachment`.

8. Enter `GT4201A` in the Structure Name field, and press the **Tab** key. The values in the Keys table are automatically populated.

9. In the Action section, select the **Update Text** option

10. In the Sequence field, enter `${updateTextSeq}`.

11. Select the **Append** option.

12. In the Text field, enter `${appendText}`.

Input Section

13. Save the step and return to the orchestration.

14. Click the **UpdateTextAttachment** step and click **Transformations**.

15. Click **Auto Map** to populate the Keys table.

16. For the UpdateTextSeq input, select **addSeqNo** from the Available Values drop-down menu.

Transformations Window

17. For the appendText input, in the Default Value field, enter `More text from orchestration.`

18. Click **Save**.

19. Click the **End** icon and select **Outputs and Assertions.**

20. Scroll to the bottom of the output and for the UpdateTextAttachment attachment, enable the **Select** option.
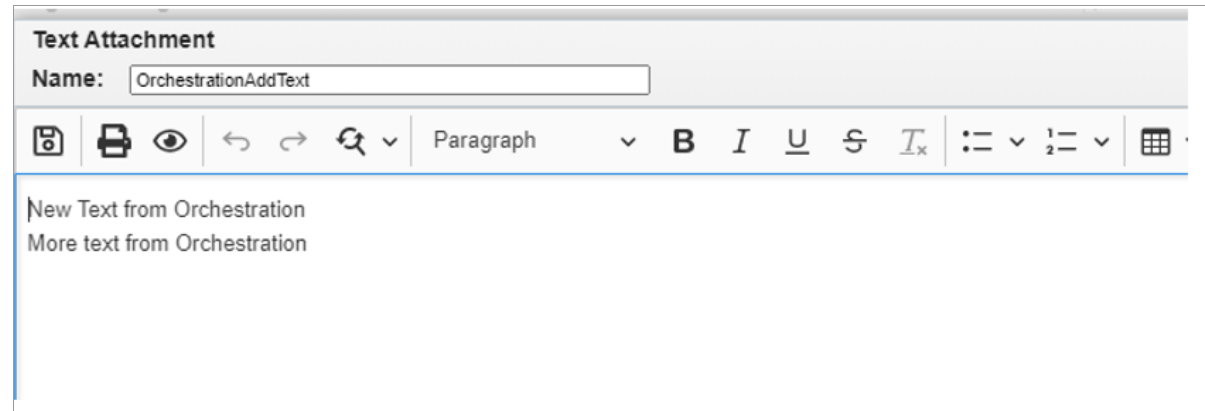
Enable Option for UpdateTextAttachment

21. Save the orchestration.

22. Click the **Start** icon and select **Run** Orchestration.

23. Click **Run**.

24. Scroll to the end of the output and notice the update status.
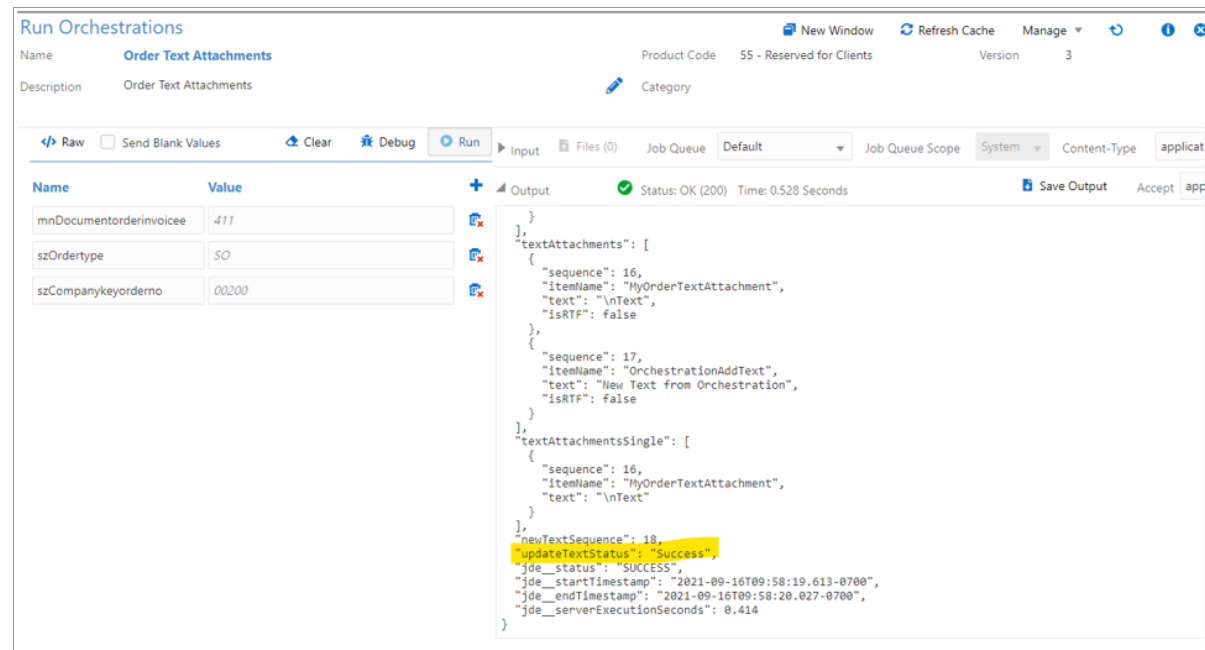
Run Orchestrations Window

25. From the Tools menu, click JD Edwards EnterpriseOne, and navigate to P42101. Search for and find your order.

26. Select the order, from the Row menu, select Order, and then click **Header Attachments.**

27. Notice that the new attachment is updated with the name from the add step and it is also updated with the append text from the update step.

Text Attachment

② Creating an Orchestration that Accepts and Uploads Files as EnterpriseOne Attachments

In this exercise, you will define an orchestration that receives any number of files containing the key information for an order, and upload those files as attachments to that order key.

Creating an Orchestration to Receive Files

1. From the Orchestrator Studio home page, select **Attachments**.

2. Click **New**.

3. In the Name field, enter `UploadOrderAttachmentFile`.

4. Enter **GT4201A** as the structure name , and press the **Tab** key. The values in the Keys table are automatically populated.

5. In the Action section, select the **Upload File** option.

6. Leave the Item Name field blank (it will be populated with the file name by default).

7. In the File Name field, enter the variable input value as `${fileName}`.

   This file is always stored in a temporary directory. First, the system looks for the file in the user session temporary directory, and then in the root temporary directory.

8. Save the attachment step.

Attachment Step

9. From the Manage menu, click **Create Orchestration.**

10. Save the new orchestration (retain the default name).

11. Click the **Start** icon and click **Inputs and Values.**

12. Click the **Delete** icon (**X**) to delete the **fileName** input. In this tutorial, you will create an array of files to

use as input.

13. Enter these values in the Default Value field for the inputs.

Input	Default Value
mnDocumentorderinvoicee	411
szOrdertype	SO
szCompanykeyorderno	00200

Inputs and Values Window

14. Click the File Inputs tab and perform these steps:

    1. Select the **Process Files As An Array** option.

    2. Enable the **Overwrite Existing Files** option to keep the original file names.

    3. In the File Array Name field, enter `FileArray`.

File Inputs Tab

15. Save the orchestration.

16. Click the **UploadOrderAttachmentFile** step and click **Transformations**.

17. From the Iterate Over drop-down menu, select **FileArray**.

18. Disable the **Return Raw Output** option.

19. From the Available Values drop-down list in the fileName row, select **FileArray.fileName.**

Transformations Window

20. Save the orchestration.

21. Click the **Start** icon and click **Run Orchestration**.

22. Click the **Files(0)** button and select a few files from your local machine.
    They must be valid files that can be uploaded as attachments in EnterpriseOne. A configuration controls
    which extensions are allowed. For this example, a .txt file, a .jpg file, and a .pdf file are used.
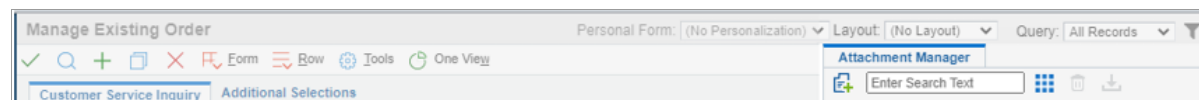
Files Window

23. Click **Run**.
    The response shows that the upload step runs for each file in the request.
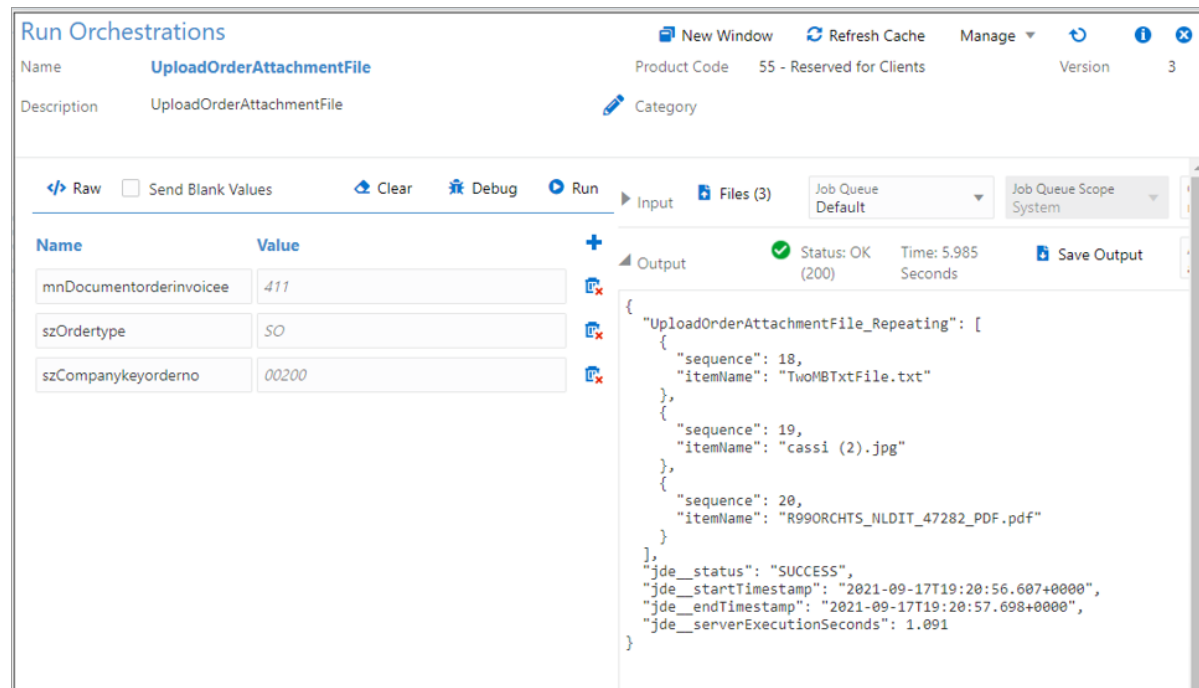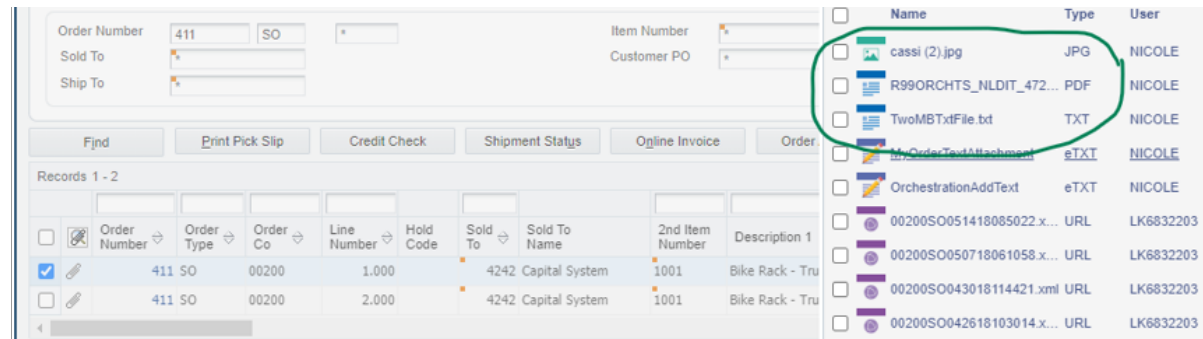

Run Orchestrations Window

24. From the Tools menu, click **JD Edwards EnterpriseOne**, and navigate to P42101. Search for and find your order.

25. Select the order, from the Row menu, select **Order** and then select **Header Attachments.**
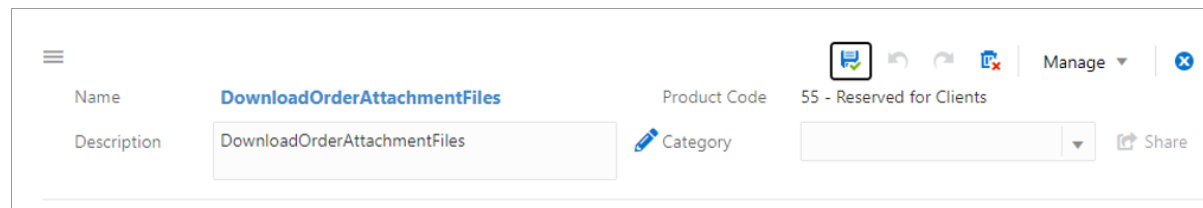   You should see the files that were just uploaded through the orchestration.

Attachment Manager Window

③ Creating an Orchestration to Download File Type Attachments

In this task, you will create an orchestration that fetches files from the order attachments and returns those files in the orchestration response.

1. From the Orchestrator Studio home page, select **Attachments**.

2. Click **New**.

3. In the Name field, enter `DownloadOrderAttachmentFiles`.

4. Enter the structure name as **GT4201A**, and press the **Tab** key. The values in the Keys table are automatically populated.

5. In the Action section, select the **Download File** option.

6. Enable the **Download All** option.

7. In the Output section, in the Data Set Variable Name field, enter `downloadedFiles`.

8. Save the attachment step.

Attachment Step

9. From the Manage menu, select **Create Orchestration.**

10. Save the resulting orchestration.

11. Click the **End** icon and choose **Outputs and Assertions.**

12. Click the **Files** tab.

13. Select the **Response is a .zip file** option.

14. In the first row, enable the **Array** option .

15. From the Array Variable drop-down menu, select the **dowloadedFiles** option and from the Output File Variable drop-down menu, select **fileName**.
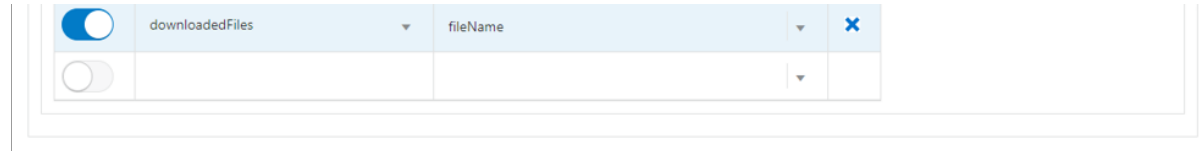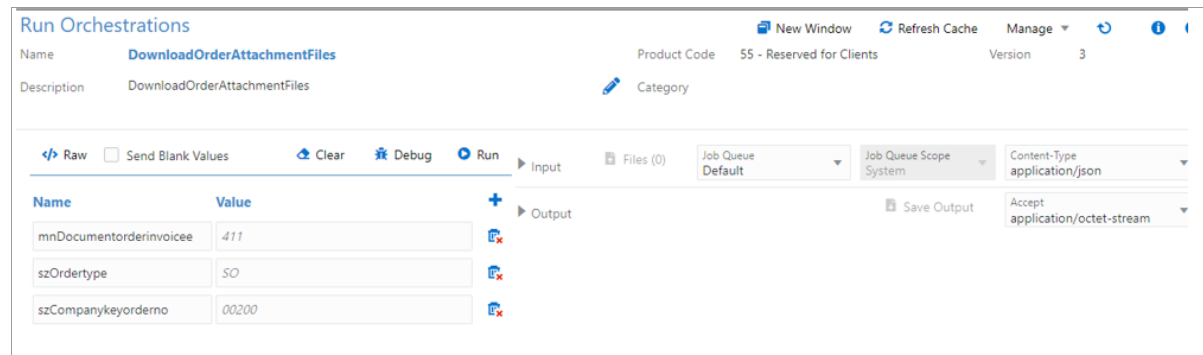
Outputs and Assertions Window

16. Save the orchestration.

17. Click the **Start** icon and click **Inputs and Values.**

18. Enter these values for in the Default Value field for the inputs and save the orchestration.

Input	Default Value
mnDocumentorderinvoicee	411
szOrdertype	SO
szCompanykeyorderno	00200

19. Click the **Start** icon and click **Run Orchestration**.
    Note: To download file inputs, change the value selected in the Accept drop-down menu to **application/octet-stream.**
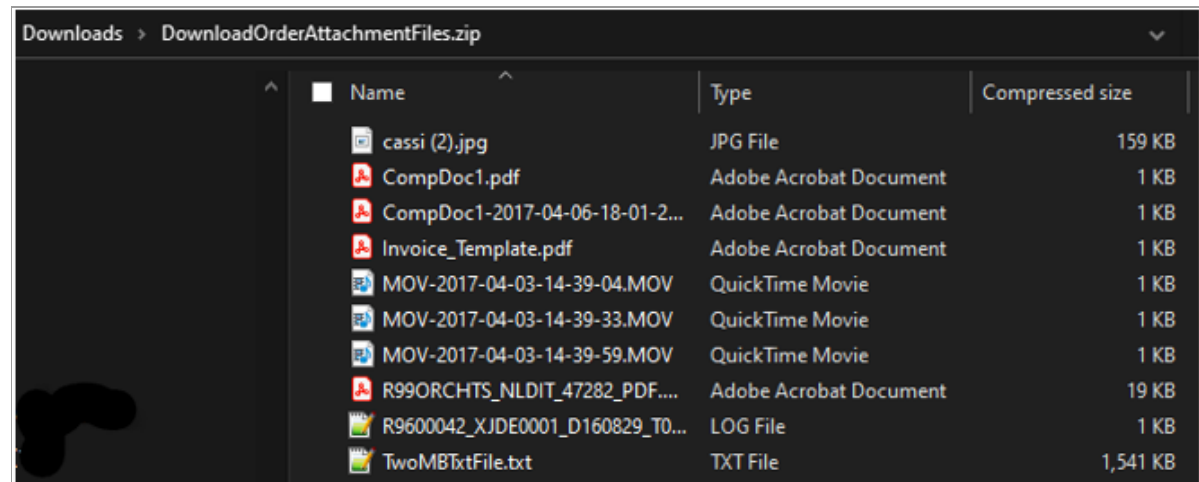

Run Orchestrations Window

20. Click **Run**.

21. Verify that the resulting .zip file is downloaded by your browser.
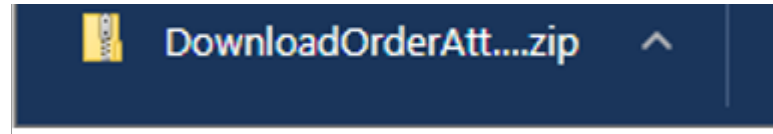
Downloaded ZIP File

22. Open the .zip file to view the attached files. The .zip file contains all the file-type attachments for that media object key.

Downloaded Files

⮞ Want to Learn More?

■ Orchestrator Guide

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