

AI Agent Studio demo.

Agent Team of type “Workflow”.

Scan-read PDF from SaaS invoice and generate JSON with LLM.

Introduction/Goal.

We will provide the steps to read a PDF file stored in Oracle ERP.

We will create a demo from scratch.

Flow.

1. Read invoice in parameter, assign to variable
2. Search invoice attachment using Business Object node.
3. Use LLM node to transform the PDF into JSON format and show.
4. Use a second LLM to convert Unit of Measure Name in JSON to UOM code.

Preparatory steps.

- Investigate the payables REST API before further steps.

First search invoice id with invoice number using this REST or a BI-Publisher query.

<https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com/fscmRestApi/resources/11.13.18.05/invoices/?q=InvoiceNumber='D3-300000296208759'&fields=InvoiceId&onlyData=true>

GET https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com/fscmRestApi/resources/11.13.18.05/invoices/?q=InvoiceNumber='D3-300000296208759'&fields=InvoiceId&onlyData=true

Params • Authorization • Headers (10) Body • Scripts Tests Settings

Key	Value	Description
q	InvoiceNumber='D3-300000296208759'	
fields	InvoiceId	
onlyData	true	

Body Cookies Headers (28) Test Results 200 OK • 739 ms • 1.0 kB

{ } JSON ▾ Preview Visualize ▾

```
1 [ "items": [ 2 | { 3 | "InvoiceId": "300000317626637" 4 | } 5 ] 6 | "count": 1, 7 | "hasMore": false,
```

Then search for attachments.

<https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com/fscmRestApi/resources/11.13.18.05/invoices/300000296208759/child/attachments>

Here we show how to get the “string” to use as second parameter to query the attachment content.

The screenshot shows a REST client interface with the following details:

- Method:** GET
- URL:** https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/invoices/300000317626637/child/attachments/0002000000EACED00057708000110D9445D78CC000000EACED00057708000110D9445D78CB
- Headers:** (10)
- Body:** ItemNumber
- Response Status:** 200 OK
- Response Time:** 720 ms
- Response Size:** 2.66 KB

The response body is a JSON object containing attachment metadata, with the "name" and "kind" fields highlighted in yellow.

```

{
  "Type": "file",
  "links": [
    {
      "rel": "self",
      "href": "https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/invoices/300000317626637/child/attachments/0002000000EACED00057708000110D9445D78CC000000EACED00057708000110D9445D78CB",
      "name": "attachments",
      "kind": "item"
    },
    {
      "rel": "canonical",
      "href": "https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/invoices/300000317626637/child/attachments/0002000000EACED00057708000110D9445D78CC000000EACED00057708000110D9445D78CB",
      "name": "attachments",
      "kind": "item"
    }
  ]
}

```

Now the content of the attachment in base64.

<https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/invoices/300000317626637/child/attachments/0002000000EACED00057708000110D9445D78CC000000EACED00057708000110D9445D78CB/enclosure/FileContents>

The screenshot shows a REST client interface with the following details:

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- URL:** https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/invoices/300000317626637/child/attachments/0002000000EACED00057708000110D9445D78CC000000EACED00057708000110D9445D78CB/enclosure/FileContents
- Headers:** (28)
- Body:** Base64
- Response Status:** 200 OK
- Response Time:** 812 ms
- Response Size:** 85.02 KB

The response body is a large base64 string representing the file content.

- **Prepare the Payables Invoice with PDF attachment.**

We will play with invoice: “D3-300000296208759”.

Notice the attachment we have added manually (provided for demo purposes).

Manage Invoices

Invoice Details

Search Results D3-300000296208759

Invoice Date	1/6/25	Invoice Amount	1,113.62 USD	Business Unit	US1 Business Unit
Invoice Type	Standard	Applied Prepayments	0.00 USD	Payment Business Unit	US1 Business Unit
Supplier or Party	Lee Supplies	Unpaid Amount	1,113.62 USD	Payment Terms	Immediate
Supplier Site	Lee US1	Holds	1	Payment Currency	USD
Address	5000 CARTER DR., LOS ANGELES, CA-90032	Notes		Attachments	PO_US165029_0.pdf

Approval and Notification History

Holds

Samples from PDF.

Purchase Order US165029

Purchase Order US165029

Supplier Details:

Company Lee Supplies
 Contact Ryan Lee
 Address 5000 CARTER DR.
 LOS ANGELES, CA 90032 LOS ANGELES

Submit your response to:

Company US1 Legal Entity
 Contact Calvin Roth
 Address 500 ORACLE PKWY
 REDWOOD CITY, CA 94065 SAN MATEO
 Phone 1-773-675-5336
 Fax
 E-mail CALVIN.ROTH_daadb@oraclepdemos.com

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Bill To **US1 Business Unit**
411 University Street
SEATTLE, WA 98101 King
UNITED STATES

Ship To

Notes USD = US Dollar

Customer Account Number	Supplier Number	Payment Terms	Freight Terms	FOB	Shipping Method
	1252	Net 30	Buyer pays freight		
Confirm To	Deliver To Contact				
Calvin Roth	Calvin Roth				

Line	Item	Price	Quantity	UOM	Ordered	Taxable
1	Black Laser Printer Toner Cartridge	79.00		Ea		
Supplier Item CMC04413						
This line references Document (Blanket Purchase Agreement) 52236.						
	Promised		1	Ea	79.00	<input checked="" type="checkbox"/>

- **Business Object 1.**

Name: AP Get Invoice Attachment

Description: Retrieve the invoice attachment for a single invoice

The screenshot shows the Oracle Business Object creation interface. In the 'Create a new business object' section, fields include:

- Family: FIN
- Product: Other
- Name: AP Get Invoice Attachment
- Code: ORA_FIN_OTHER_APGETINVOICEATT
- Resource Type: Monolith resource
- Resource Path: /fscmRestApi/resources/11.13.18.05/invoices
- Description: Retrieve the invoice attachment for a single invoice

In the 'Business Object Functions' section, there is a table with columns: Name, Description, Resource Path, and Actions. One row is visible:

Name	Description	Resource Path	Actions
Get a single invoice Based on an Invoice Number	Get a single invoice Based on an Invoice Number	/fscmRestApi/resources/11.13.18.05/invoices/	

URL from Oracle reference doc.

```
/fscmRestApi/resources/11.13.18.05/invoices/{invoicesUniqID}/child/attachments/{attachmentsUniqID}
```

Sample URL to get the attachment content.

```
https://fa-etit-saasfademo1.ds-
fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/invoices/300000317626637/child
/attachments/0002000000EACED00057708000110D9445D78CC0000000EACED00057708000110D9445D78C
B/enclosure/FileContents
```

The screenshot shows the 'Edit scenario - AP Get Invoice Attachment' dialog. Configuration fields include:

- Name: GetAttachmentFromInvoice
- Description: Get a single Invoice Based on an Invoice Number
- Operation Type: HTTP GET
- Resource Path: /fscmRestApi/resources/11.13.18.05/invoices/{pInvoiceId}/child/attachments/{pAttachmentsUniqID}/enclosure/FileContents

Headers

Resource Path:

```
/fscmRestApi/resources/11.13.18.05/invoices/{pInvoiceId}/child/attachments/{pAttachments
UniqID}/enclosure/FileContents
```

In this demo, the second parameter will be provided by the user.

Example usage.

Example Usages

+ Add

Description	Sample Payload	Actions
Retrieve Invoice attachment for invoice id "999" and Attachment Unique Id "ABCDE"	{"pInvoiceId":"0001","pAttachmentsUniqID":"ABCD"}	

Retrieve Invoice attachment for invoice id "999" and Attachment Unique Id "ABCDE"	{ "pInvoiceId": "0001" , "pAttachmentsUniqID" : "ABCD" }
---	--

- **Business Object 2.**

Name: Get UOM2.

Edit businessobject - Get UOM2

Family SCM	Product SCM Foundation
Name Get UOM2	Code ORA_SCM_SCMFOUNDAT_GETUOM2
Resource Type Monolith resource	Resource Path /fscmRestApi/resources/11.13.18.05/unitsOfMeasure
Description Returns a list of units of measure.	

Resource path:

/fscmRestApi/resources/11.13.18.05/unitsOfMeasure?limit={pLimit}&onlyData=true&fields=UOM,UOMCode

Edit scenario - Get UOM2

Name GetActiveUOM	Description Returns the set of UOM
Operation Type HTTP GET	Resource Path /fscmRestApi/resources/11.13.18.05/unitsOfMeasure?limit={pLimit}&onlyData=true&fields=UOM,UOMCode

Parameters and Example Usage.

Parameters and Business Object Fields

Add Parameter	Add Field	Add Field from Specification		
Name	Data Type	Description	Is Parameter	Actions
pLimit	number	Number of records to retrieve	true	
UOMCode	string	UOM Code	false	
UOM	string	UOM Name	false	

Example Usages

+ Add		
Description	Sample Payload	Actions
number of records	{"pLimit": "10"}	

Agent Team steps.

Name: AA_READ_PDF_AND_SHOW.

Description: Read PDF in payables invoice attachment and show data in JSON format.

AA_READ_PDF_AND_SHOW

Details **LLM** **Security** **Triggers** **Variables** **Error Handling**

Agent Team Name AA_READ_PDF_AND_SHOW	Agent Team Code AAREADPDFANDSHOW
Family FIN	Product Other
Type Workflow	Maximum Interactions
Description Read PDF and show content in JSON format	

LLM tab.

AA_READ_PDF_AND_SHOW

Details **LLM** **Security** **Triggers** **Variables** **Error Handling**

Provider GPT-5 mini

Triggers tab.

AA_READ_PDF_AND_SHOW

Details **LLM** **Security** **Triggers** **Variables** **Error Handling**

Webhook

pAttachmentsUniqID
string

plInvoiceld
string

Variables tab.

AA_READ_PDF_AND_SHOW

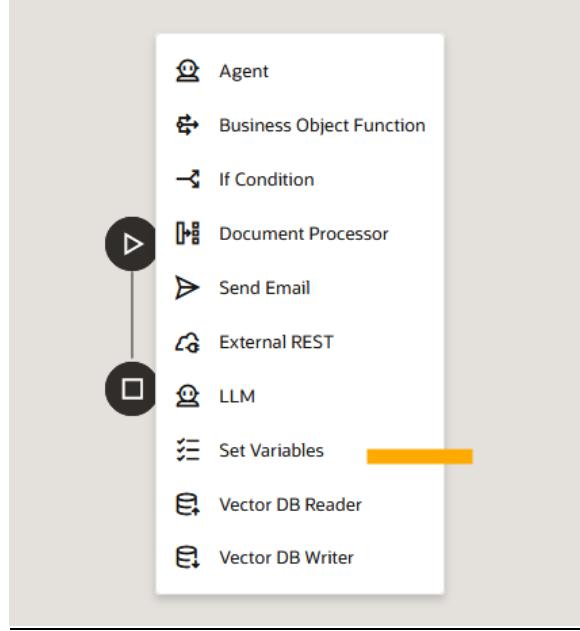
Details LLM Security Triggers Variables Error Handling

Variables

+ Add

varAttachmentsUniqID		
string		
varInvoiceld		
string		

Add the node to “Set Variables”.



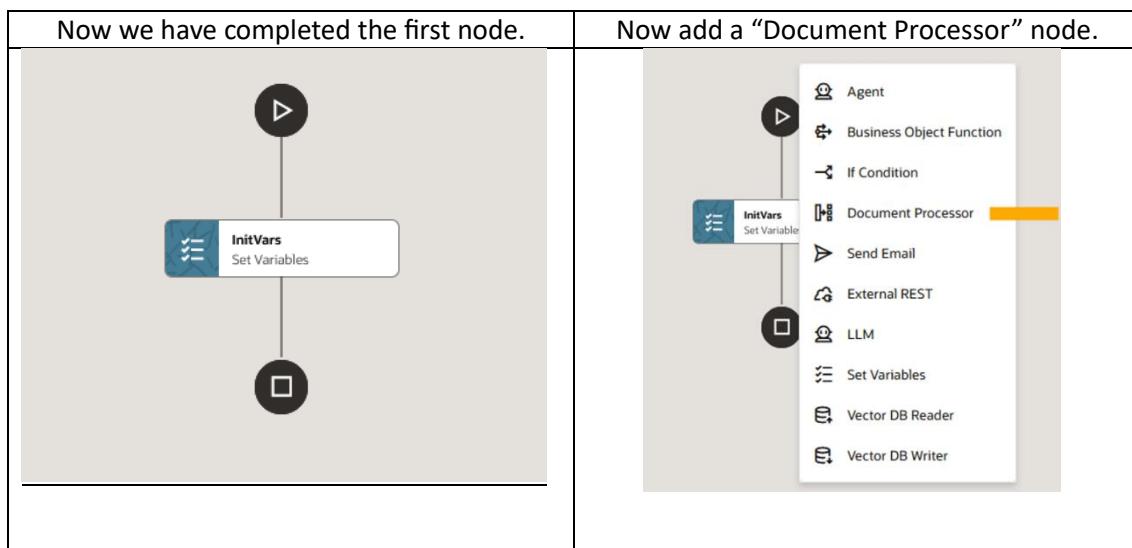
Now assign variables values from triggers.

InitVars
Set Variables

Name InitVars	Code INITVARS
------------------	------------------

Variables

varAttachmentsUniqID	string
varInvoiceld	string



Name: ReadPDF.

Select business object: AP Get Invoice Attachment.

ReadPDF
Document Processor

Name: ReadPDF Code: READPDF Type: Document Processor

Family: FIN Product: Other Business object: AP Get Invoice Attachment

Parameters

- plvoiceld: string
- pAttachmentsUniqID: string

Output

```

{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
    "text": {
      "type": "string"
    }
  },
  "required": [
    "text"
  ]
}

```

Assign parameters.

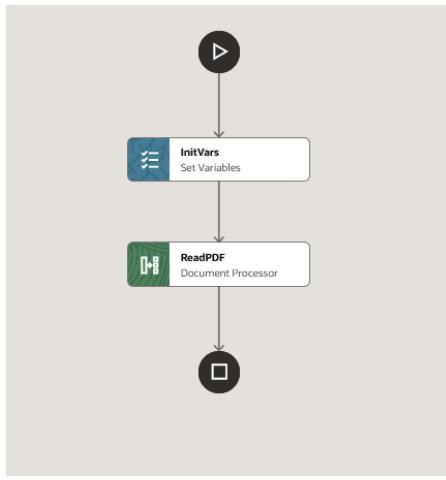
Parameters

Name plInvoiceld	Type String
Value {{ \$context.\$variables.varInvoiceld }}	
Type {{ to start seeing context-sensitive expressions. }} ⊕ ▾	
Cancel Apply	
Cancel Update	

Parameters

plInvoiceld	✎
string	
<hr/>	
Name pAttachmentsUniqID	Type String
Value {{ \$context.\$variables.varAttachmentsUniqID }}	
Type {{ to start seeing context-sensitive expressions. }} ⊕ ▾	
Cancel Apply	

Now our canvas looks like this.



Initial test.

```
{
  "pAttachmentsUniqID":
  "00020000000EACED00057708000110D9445D78CC0000000EACED00057708000110D9445D78CB",
  "pInvoiceld": "300000317626637"
}
```

{"text":"Purchase Order US165029 \nPurchase Order US165029\nSupplier Details:\nCompany Lee Supplies\\nContact Ryan Lee\\nAddress 5000 CARTER DR,\\nLOS ANGELES, CA 90032 LOS ANGELES\\nSubmit your response to:\\nCompany US1 Legal Entity\\nContact Calvin Roth\\nAddress 500 ORACLE PKWY\\nREDWOOD CITY, CA 94065 SAN MATEO\\nPhone 1-773-675-5336\\nFax\\nE-mail CALVIN.ROTH_daadb@oraclepdemos.com\\nThis document has important legal consequences. The information contained in this document is proprietary of US1 Legal Entity. It \\shall not be used, reproduced, or disclosed to others without his express and written consent of US1 Legal Entity.\\nThis agreement between US1 Legal Entity and Lee Supplies is authorized for binding commitment. The parties hereto have read \\nand executed this agreement as of the ____ day of _____, _____.\\nProprietary and Confidential 1\\nPurchaser Order US165029 \\nOrder US165029\\nOrder Date 06-JAN-2025\\nChange Order 0\\nChange Order Date 06-JAN-2025\\n \\nRevision 0\\nOrdered 1,017.00 USD\\nSold To US1 Legal Entity Supplier Lee Supplies\\n500 ORACLE PKWY 5000 CARTER DR,\\nREDWOOD CITY, CA 94065 SAN MATEO LOS ANGELES, CA 90032 LOS ANGELES\\n \\nBill To US1 Business Unit Ship To\\n411 University Street\\nSEATTLE, WA 98101 King\\nUNITED STATES\\n \\nNotes USD = US Dollar\\nCustomer Account Number Supplier Number Payment Terms Freight Terms FOB Shipping Method\\n1252 Net 30 Buyer pays Origin\\nfreight\\nConfirm To Deliver To Contact\\nCalvin Roth\\nLine Item Price Quantity UOM Ordered Taxable\\n1 Black Laser Printer Toner 79.00 Ea\\nCartridge\\nSupplier Item CMC04413\\nThis line references Document (Blanket Purchase Agreement) 52236.\\nPromised 1 Ea 79.00\\n1/17/25\\nRequested\\n1/17/25\\nRequested and Promised Dates correspond to the date of arrival at the Ship-to Location.\\nLine Total 79.00\\n2 Inkjet Cyan Cartridge 39.00 Ea\\nSupplier Item CMC04409\\nThis line references Document (Blanket Purchase Agreement) 52236.\\nProprietary and Confidential 2\\nPurchaser Order US165029 \\nLine Item Price Quantity UOM Ordered Taxable\\nPromised 1 Ea 39.00\\n1/17/25\\nRequested\\n1/17/25\\nRequested and Promised Dates correspond to the date of arrival at the Ship-to Location.\\nLine Total 39.00\\n3 LaserJet Pro 400 M401n Laser 899.00 Ea\\nPrinter\\nSupplier Item HPP9985847\\nSupplier Configuration ID S1209\\nThis line references Document (Blanket Purchase Agreement) 52236.\\nPromised 1 Ea 899.00\\n1/15/25\\nRequested\\n1/15/25\\nRequested and Promised Dates correspond to the date of arrival at the Ship-to Location.\\nLine Total 899.00\\nTotal 1,017.00\\n \\nProprietary and Confidential 3\\n"}'

Notice the JSON output provides a long string in the field text, which is good for an initial testing but not very useful.

Changes Part 1. First LLM.

This will be our “Prompt”.

DEMO_LLM_1
LLM

Name DEMO_LLM_1	Code DEMOLLM1	Type LLM
---------------------------	-------------------------	--------------------

Prompt
EXTRATION CHALLENGE:
You're analyzing the following document with varied formats. **{\${context.\$nodes.READPDF.\$output.text}}**

The document consists of header information and line information.
a. Header information can appear anywhere in the document and in any format.
b. Line information can appear in different structures:

COMPREHENSIVE EXTRATION STRATEGY:
1. Scan the ENTIRE document, not just the top portion
2. Look for supplier information in all possible locations
4. Pay attention to indentation and formatting that indicates hierarchical relationships
5. Look for totals and subtotals to verify your extraction accuracy
6. Do not add any items that are not mentioned in the quotation document

➊ Type {{ to start seeing context-sensitive expressions.

Temperature DEMO

➋ Type {{ to start seeing context-sensitive expressions.

EXTRATION CHALLENGE:
You're analyzing the following document with varied formats.
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The document consists of header information and line information.
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6. Do not add any items that are not mentioned in the quotation document

And the Output.

Note: we have used the one from “Quote to PR” example for learning purposes and save time.

DEMO_LLM_1
LLM

Name DEMO_LLM_1	Code DEMOLLM1	Type LLM
--------------------	------------------	-------------

Prompt
EXTRACTION CHALLENGE:
Type {{ to start seeing context-sensitive expressions.

Temperature
DEMO
Type {{ to start seeing context-sensitive expressions.

Output

Output Builder Mode Specification Mode Simple Mode

```

Properties
{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "type": "object",
  "properties": {
    "header": {
      "type": "object",
      "properties": {
        "PreparerId": {"type": "string"},
        "RequisitionDescription": {"type": "string"},
        "SupplierNameFromDocument": {"type": "string"},
        "NormalizedSupplierName": {"type": "string"},
        "SupplierContactEmail": {"type": "string", "format": "email"},
        "SupplierContact": {"type": "string"},
        "SupplierContactPhone": {"type": "string"},
        "SupplierContactFax": {"type": "string"},
        "SupplierSite": {"type": "string"},
        "SupplierContactEmailDomain": {"type": "string"},
        "CurrencyCode": {"type": "string"},
        "QuotationNumber": {"type": "string"},
        "Date": {"type": "string"},
        "AttachmentFileName": {"type": "string"},
        "AttachmentCategoryName": {"type": "string"},
        "AttachmentAsyncTrackerId": {"type": "string"}
      }
    },
    "required": [
      "PreparerId",
      "RequisitionDescription",
      "SupplierNameFromDocument",
      "NormalizedSupplierName",
      "SupplierContactEmail",
      "SupplierContact",
      "SupplierContactPhone",
      "SupplierContactFax",
      "SupplierSite",
      "SupplierContactEmailDomain",
      "CurrencyCode",
      "AttachmentFileName",
      "AttachmentAsyncTrackerId"
    ],
    "lines": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          ...
        }
      }
    }
}

```

```

    "LineNumber": { "type": "string" },
    "ItemDescription": { "type": "string" },
    "SupplierItemNumber": { "type": "string" },
    "Quantity": { "type": "number" },
    "UOM": { "type": "string" },
    "Price": { "type": "number" },
    "LineType": { "type": "string" },
    "ManufacturerName": { "type": "string" },
    "ManufacturerPartNumber": { "type": "string" }
},
"required": [
    "LineNumber",
    "ItemDescription",
    "Price",
    "LineType"
]
}
},
"required": ["header", "lines"]
}

```

Testing.

This is the result of our test	These are samples from PDF.																																																																																																
<pre> AA_READ_PDF_AND_SHOW { "SupplierSite": "5000 CARTER DR., LOS ANGELES, CA 90032", "SupplierContactEmailDomain": "", "CurrencyCode": "USD", "QuotationNumber": "US165029", "Date": "06-JAN-2025", "AttachmentFileName": "", "AttachmentCategoryName": "", "AttachmentAsyncTrackerId": "" }, "lines": [{ "LineNumber": "1", "ItemDescription": "Black Laser Printer Toner Cartridge", "SupplierItemNumber": "CMC04413", "Quantity": 1, "UOM": "Ea", "Price": 79.0, "LineType": "Standard", "ManufacturerName": "", "ManufacturerPartNumber": "" }, { "LineNumber": "2", "ItemDescription": "Inkjet Cyan Cartridge", "SupplierItemNumber": "CMCO4409", "Quantity": 1, "UOM": "Ea", "Price": 39.0, "LineType": "Standard", "ManufacturerName": "", "ManufacturerPartNumber": "" }, { "LineNumber": "3", "ItemDescription": "LaserJet Pro 400 M401n Laser Printer", "SupplierItemNumber": "HPP9985847", "Quantity": 1, "UOM": "Ea", "Price": 899.0, "LineType": "Standard", "ManufacturerName": "", "ManufacturerPartNumber": "S1209" }] } </pre>	<p>Purchase Order US165029</p> <table border="1"> <tr> <td>Order</td> <td>US165029</td> </tr> <tr> <td>Order Date</td> <td>06-JAN-2025</td> </tr> <tr> <td>Change Order</td> <td>0</td> </tr> <tr> <td>Change Order Date</td> <td>06-JAN-2025</td> </tr> <tr> <td>Revision</td> <td>0</td> </tr> <tr> <td>Ordered</td> <td>1,017.00 USD</td> </tr> </table> <p>Sold To: US1 Legal Entity 500 ORACLE PKWY REDWOOD CITY, CA 94065 SAN MATEO</p> <p>Supplier: Lee Supplies 5000 CARTER DR. LOS ANGELES, CA 90032 LOS ANGELES</p> <p>Bill To: US1 Business Unit 411 University Street SEATTLE, WA 98101 King UNITED STATES</p> <p>Ship To:</p> <table border="1"> <thead> <tr> <th>Line</th> <th>Item</th> <th>Price</th> <th>Quantity</th> <th>UOM</th> <th>Ordered</th> <th>Taxable</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Black Laser Printer Toner Cartridge Supplier Item: CMC04413</td> <td>79.00</td> <td>1</td> <td>Ea</td> <td>79.00</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td></td> <td>Requested 1/17/25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Promised 1/17/25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Line Total</td> <td>79.00</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Inkjet Cyan Cartridge Supplier Item: CMCO4409</td> <td>39.00</td> <td>1</td> <td>Ea</td> <td>39.00</td> <td></td> </tr> <tr> <td></td> <td>This line references Document (Blanket Purchase Agreement) 52236.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Line Total</td> <td>39.00</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>LaserJet Pro 400 M401n Laser Printer Supplier Item: HPP9985847 Supplier Configuration ID: S1209</td> <td>899.00</td> <td>1</td> <td>Ea</td> <td>899.00</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td></td> <td>Requested and Promised Dates correspond to the date of arrival at the Ship-to Location.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Line Total</td> <td>899.00</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Total</td> <td>1,017.00</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>This line references Document (Blanket Purchase Agreement) 52236.</p> <p>Requested and Promised Dates correspond to the date of arrival at the Ship-to Location.</p>	Order	US165029	Order Date	06-JAN-2025	Change Order	0	Change Order Date	06-JAN-2025	Revision	0	Ordered	1,017.00 USD	Line	Item	Price	Quantity	UOM	Ordered	Taxable	1	Black Laser Printer Toner Cartridge Supplier Item: CMC04413	79.00	1	Ea	79.00	<input checked="" type="checkbox"/>		Requested 1/17/25							Promised 1/17/25							Line Total	79.00					2	Inkjet Cyan Cartridge Supplier Item: CMCO4409	39.00	1	Ea	39.00			This line references Document (Blanket Purchase Agreement) 52236.							Line Total	39.00					3	LaserJet Pro 400 M401n Laser Printer Supplier Item: HPP9985847 Supplier Configuration ID: S1209	899.00	1	Ea	899.00	<input checked="" type="checkbox"/>		Requested and Promised Dates correspond to the date of arrival at the Ship-to Location.							Line Total	899.00						Total	1,017.00				
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	Promised 1/17/25																																																																																																
	Line Total	79.00																																																																																															
2	Inkjet Cyan Cartridge Supplier Item: CMCO4409	39.00	1	Ea	39.00																																																																																												
	This line references Document (Blanket Purchase Agreement) 52236.																																																																																																
	Line Total	39.00																																																																																															
3	LaserJet Pro 400 M401n Laser Printer Supplier Item: HPP9985847 Supplier Configuration ID: S1209	899.00	1	Ea	899.00	<input checked="" type="checkbox"/>																																																																																											
	Requested and Promised Dates correspond to the date of arrival at the Ship-to Location.																																																																																																
	Line Total	899.00																																																																																															
	Total	1,017.00																																																																																															

It doesn't look perfect, but LLM seems able to get a lot of information.
 Feel free to refine the “Prompt” and apply conditions in the for your learning.

Changes Part 2. Second LLM.

We will change the resulting payload from previous step; we will update the UOM name with UOM code in the resulting JSON payload.

- In Agent Team, we will add new Business Object Function using “Get UOM2”.

Name: BOF_UOM .

BOF_UOM
Business Object Function

Name BOF_UOM	Code BOFUOM	Type Business Object Function
Family SCM	Product SCM Foundation	Business object Get UOM2
Function GetActiveUOM		

Parameters

pLimit	string		
--------	--------	--	--

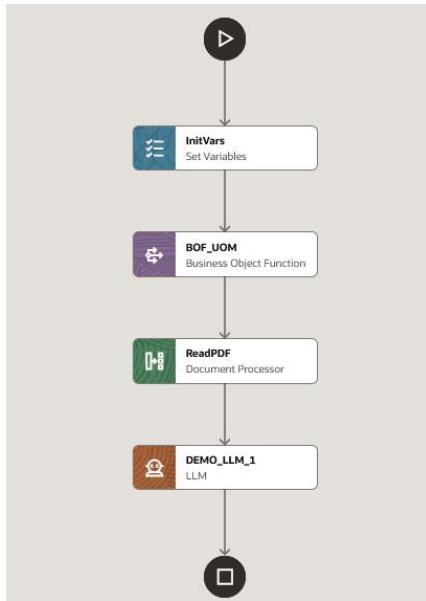
Parameter

Limit=250

Output

```
{  
  "$schema": "http://json-schema.org/draft-07/schema#",  
  "title": "InternalUOMList",  
  "type": "object",  
  "properties": {  
    "internal_uom_list": {  
      "type": "array",  
      "items": {  
        "type": "object",  
        "properties": {  
          "UOMCode": {  
            "type": "string"  
          },  
          "UOM": {  
            "type": "string"  
          },  
          "Description": {  
            "type": "string"  
          },  
          "UOMClassName": {  
            "type": "string"  
          }  
        },  
        "required": ["UOMCode", "UOM", "Description", "UOMClassName"]  
      }  
    },  
    "required": ["internal_uom_list"]  
  }  
}
```

Overview.



- We will add a new LLM node in Agent Team.

Name: DEMO_LLM_2.

DEMO_LLM_2
LLM

Name DEMO_LLM_2	Code DEMOLLM2	Type LLM
--------------------	------------------	-------------

Prompt
You are a buyer creating a purchase requisition.

Each Unit of Measure must be mapped to a valid UOMCode from the internal system's list.

TASK:
For each line in {{\$context.\$nodes.DEMOLLM1.\$output}}, update the UOM field so that it matches the UOMCode of one of the entries in the internal UOM list: {{\$context.\$nodes.BOF_UOM.\$output.internal_uom_list}}.

STRICT RULES:
- You MUST ONLY assign a UOMCode from the internal UOM list.
- DO NOT invent new UOM codes or use any UOMs not explicitly present in the list—even if the UOM is missing from the list.
- If the UOM is unavailable in the internal list, select the most semantically appropriate or closest available UOMCode. NEVER output a UOM value that does not exist in the internal list.
- Reference the item description to determine the closest match if an exact match does not exist.
- Output ONLY the JSON array of updated line items, with each UOM field containing a value from the internal UOM list. Do not include any additional text or explanation.

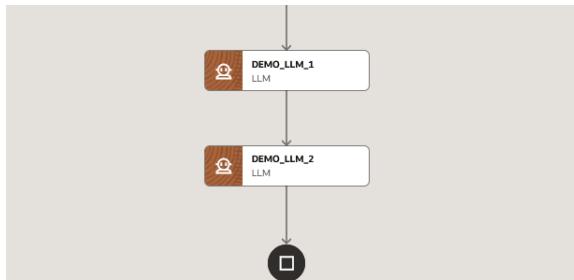
Type {{ to start seeing context-sensitive expressions. }}
Temperature
0.0

Output

Output Builder Mode
 Specification Mode Simple Mode

Properties
{}

Cancel Update



Prompt.

You are a buyer creating a purchase requisition.

Each Unit of Measure must be mapped to a valid UOMCode from the internal system's list.

TASK:

For each line in `{{$context.$nodes.DEMOLLM1.$output}}`, update the UOM field so that it matches the UOMCode of one of the entries in the internal UOM list: `{{$context.$nodes.BOF_UOM.$output.internal_uom_list}}`.

STRICT RULES:

- You MUST ONLY assign a UOMCode from the internal UOM list.
- DO NOT invent new UOM codes or use any UOMs not explicitly present in the list—even if the UOM is missing from the list.
- If the UOM is unavailable in the internal list, select the most semantically appropriate or closest available UOMCode. NEVER output a UOM value that does not exist in the internal list.
- Reference the item description to determine the closest match if an exact match does not exist.
- Output ONLY the JSON array of updated line items, with each UOM field containing a value from the internal UOM list. Do not include any additional text or explanation.

Temperature.

0.0

Output.

Notice UOMcode.

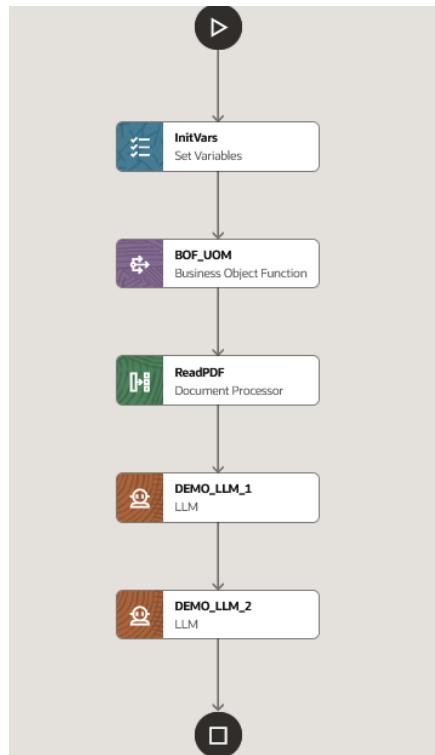
```
{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "type": "object",
  "properties": {
    "header": {
      "type": "object",
      "properties": {
        "PreparerId": { "type": "string" },
        "RequisitionDescription": { "type": "string" },
        "SupplierNameFromDocument": { "type": "string" },
        "NormalizedSupplierName": { "type": "string" },
        "SupplierContactEmail": { "type": "string", "format": "email" },
        "SupplierContact": { "type": "string" },
        "SupplierContactPhone": { "type": "string" },
        "SupplierContactFax": { "type": "string" },
        "SupplierSite": { "type": "string" },
        "SupplierContactEmailDomain": { "type": "string" },
        "CurrencyCode": { "type": "string" },
        "QuotationNumber": { "type": "string" },
        "Date": { "type": "string" },
        "AttachmentFileName": { "type": "string" },
        "AttachmentCategoryName": { "type": "string" },
        "AttachmentAsyncTrackerId": { "type": "string" }
      }
    },
    "required": [
      "PreparerId",
      "RequisitionDescription"
    ]
  }
}
```

```

        "SupplierNameFromDocument",
        "NormalizedSupplierName",
        "SupplierContactEmail",
        "SupplierContact",
        "SupplierContactPhone",
        "SupplierContactFax",
        "SupplierSite",
        "SupplierContactEmailDomain",
        "CurrencyCode",
        "AttachmentFileName",
        "AttachmentAsyncTrackerId"
    ],
},
"lines": {
    "type": "array",
    "items": {
        "type": "object",
        "properties": {
            "LineNumber": { "type": "string" },
            "ItemDescription": { "type": "string" },
            "SupplierItemNumber": { "type": "string" },
            "Quantity": { "type": "number" },
            "UOMCode": { "type": "string" },
            "Price": { "type": "number" },
            "LineType": { "type": "string" },
            "ManufacturerName": { "type": "string" },
            "ManufacturerPartNumber": { "type": "string" }
        },
        "required": [
            "LineNumber",
            "ItemDescription",
            "Price",
            "LineType"
        ]
    }
},
"required": ["header", "lines"]
}
}

```

General overview.



Testing.

Payload.

```
{
  "pAttachmentsUniqID": "0002000000EACED00057708000110D9445D78CC0000000EACED00057708000110D9445D78CB",
  "pInvoiceId": "300000317626637"
}
```

Notice the change from previous version.

We now have the “calculated” code for UOM instead of UOM name.

Before	After
<pre>AA_READ_PDF_AND_SHOW { "SupplierSite": "5000 CARTER DR., LOS ANGELES, CA 90032", "SupplierContactEmailDomain": "", "CurrencyCode": "USD", "QuotationNumber": "US165029", "Date": "06-JAN-2025", "AttachmentFileName": "", "AttachmentCategoryName": "", "AttachmentAsyncTrackerId": "" }, "lines": [{ "LineNumber": "1", "ItemDescription": "Black Laser Printer Toner Cartridge", "SupplierItemNumber": "CMC04413", "Quantity": 1, "UOM": "EA", "Price": 79.0, "LineType": "Standard", "ManufacturerName": "", "ManufacturerPartNumber": "" }, { "LineNumber": "2", "ItemDescription": "Inkjet Cyan Cartridge", "SupplierItemNumber": "CMC04409", "Quantity": 1, "UOM": "EA", "Price": 39.0, "LineType": "Standard", "ManufacturerName": "", "ManufacturerPartNumber": "" }, { "LineNumber": "3", "ItemDescription": "LaserJet Pro 400 M401n Laser Printer", "SupplierItemNumber": "HPP9985847", "Quantity": 1, "UOM": "EA", "Price": 899.0, "LineType": "Standard", "ManufacturerName": "", "ManufacturerPartNumber": "S1209" }]</pre>	<pre>AA_READ_PDF_AND_SHOW { "SupplierContactEmail": "", "SupplierContact": "Ryan Lee", "SupplierContactPhone": "", "SupplierContactFax": "", "SupplierSite": "5000 CARTER DR., LOS ANGELES, CA 90032 LOS ANGELES", "SupplierContactEmailDomain": "", "CurrencyCode": "USD", "QuotationNumber": "US165029", "Date": "2025-01-06", "AttachmentFileName": "", "AttachmentCategoryName": "", "AttachmentAsyncTrackerId": "" }, "lines": [{ "LineNumber": "1", "ItemDescription": "Black Laser Printer Toner Cartridge", "SupplierItemNumber": "CMC04413", "Quantity": 1, "UOMCode": "EA", █ "Price": 79, "LineType": "Goods", "ManufacturerName": "", "ManufacturerPartNumber": "" }, { "LineNumber": "2", "ItemDescription": "Inkjet Cyan Cartridge", "SupplierItemNumber": "CMC04409", "Quantity": 1, "UOMCode": "EA", █ "Price": 39, "LineType": "Goods", "ManufacturerName": "", "ManufacturerPartNumber": "" }, { "LineNumber": "3", "ItemDescription": "LaserJet Pro 400 M401n Laser Printer", "SupplierItemNumber": "HPP9985847", "Quantity": 1, "UOMCode": "EA", █ "Price": 899, "LineType": "Goods", "ManufacturerName": "", "ManufacturerPartNumber": "S1209" }]</pre>

Conclusion.

We are able to read a PDF file and transform into JSON.

With proper adaptations the resulting JSON payload could be used to create, update business objects, etc.

Note regarding the “Ids” used in this demo.

Of course, users don't know “invoice id” and the second parameter to retrieve the file content of the attachment.

The purpose of this demo is to show how to retrieve and extract information from PDF, to make it simpler we work with “ids”.

To find the invoice id you could follow our previous chapter “AI_Fusion_Agent 25D_Workflow.pdf” in which we tell how to find the “purchase orderd id” from the “purchase order number”.

For second parameter a OIC integration of type REST API could be an option as to get the long string is not very straightforward.

Technical

Code example	Comments
PO_US165029_0.pdf	PDF sample to read-scan. Feel free to use yours for testing.