Al Agent Studio demo. "Prompts" Part 2 &

<u>Sequential orchestration with Business Objects.</u>

Payables Invoice->Supplier->Bank Accounts of Supplier

Introduction/Goal.

This is our second chapter focused on "Prompts" and sequential Agents.

We will chain 3 steps using tools based on REST API's:

- Search payables invoice using "Invoice Number" to get "Supplier name".
- Search suppliers using "Supplier Name" to get "SupplierId".
- Search bank accounts of supplier using "SupplierId".
 - We will show the user the list of bank accounts of supplier.

The goals are:

- a) Creating Agents for Business Object "Agent Team" and show the effect of the "Prompts" and also
- b) Show the sequential use of Agents.

AI Sequential Systems

Definition: In sequential systems, tasks must be completed in a strict order. Each step depends on the completion of the previous one.

Supervisor Role: No supervisor is needed in sequential systems because there is no need for delegation or coordination between agents. The process flows linearly, with each worker executing one task after the other without branching or deviation.

Key Feature: Simple, fixed order of execution. Tasks follow a defined sequence and must be done in a specific way.

Overlap: Sequential systems are less dynamic and do not require agent-to-agent communication, which is different from multi-agent systems that need coordination.

Preparatory steps.

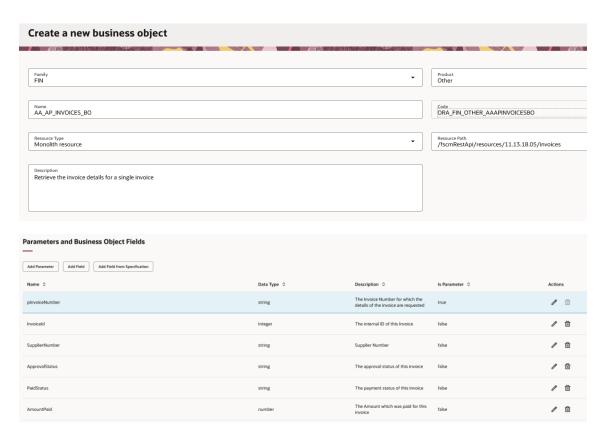
1. BO for Payables Invoice. First level.

Name: AA_AP_INVOICES_BO.

Note: you could duplicate from "AP Get Invoice Details BO" existing in demo instances or follow steps shown here.

Sample for REST API.

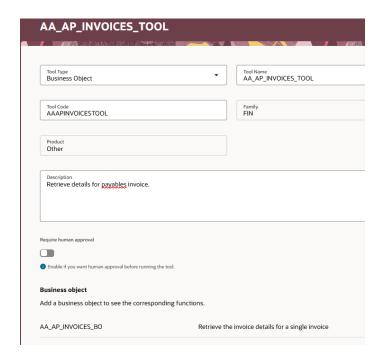
https://fa-xxxx-saasfademol.ds-fa.oraclepdemos.com/fscmRestApi/resources/11.13.18.05/invoices?onlyData=true&q=SupplierNumber='1252'



Description for parameter: The Invoice Number for which the details of the invoice are requested

2. <u>Tool.</u>

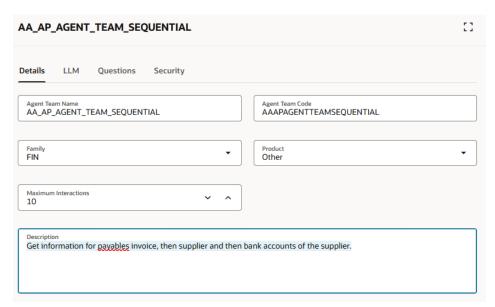
Name: AA_AP_INVOICES_TOOL



3. Agent Team.

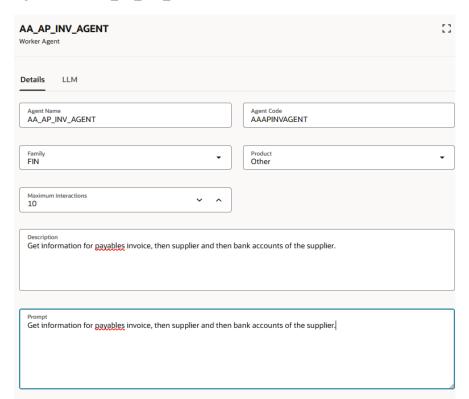
Description: Get information for payables invoice, then supplier and then bank accounts of the supplier.

Name: AA_AP_AGENT_TEAM_SEQUENTIAL.



After creating "Agent Team" we will create the "Agent".

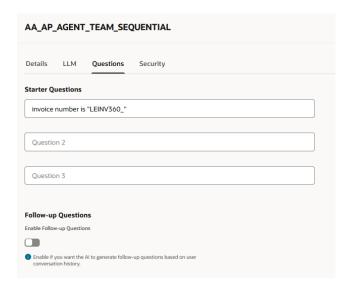
Agent name: AA_AP_INV_AGENT.



Now we will add first Tool.

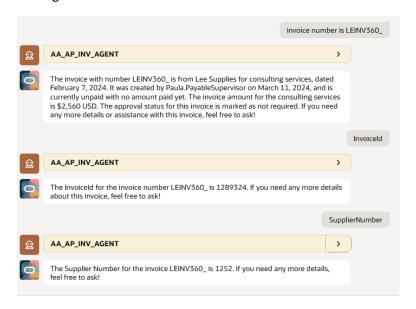


We will add a first question for easy testing.



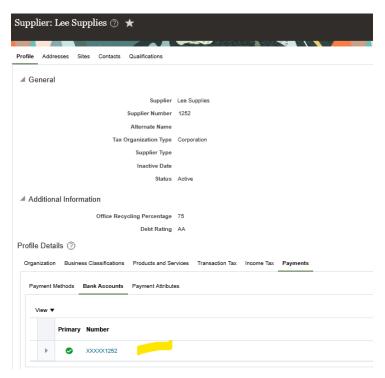
invoice number is "LEINV360_"

Testing.



4. BO for Suppliers. Second level.

Let us find a supplier in the system with bank account.



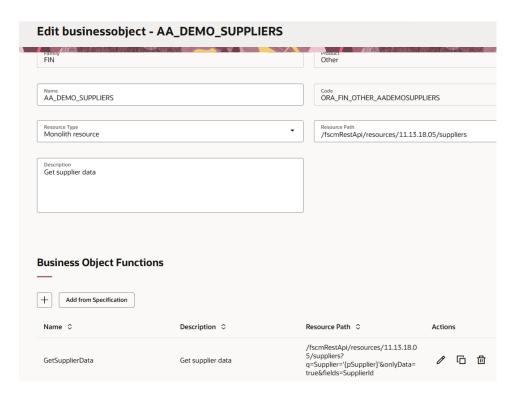
Sample for REST API.

https://fa-xxxx-saasfademol.ds-fa.oraclepdemos.com//fscmRestApi/resources/11.13.18.05/suppliers?expand=DFF&q=Supplier='Lee Supplies'&onlyData=true

Partial response.

```
"SupplierId": 300000047414503,
"SupplierPartyId": 300000047414501,
"Supplier": "Lee Supplies",
"SupplierNumber": "1252",
```

Name BO: AA_DEMO_SUPPLIERS.

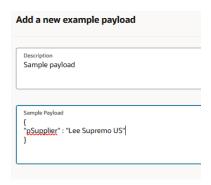


Resource path:

/fscmRestApi/resources/11.13.18.05/suppliers?expand=DFF&q=Supplier='{pSupplier}
}'&onlyData=true&fields=SupplierId

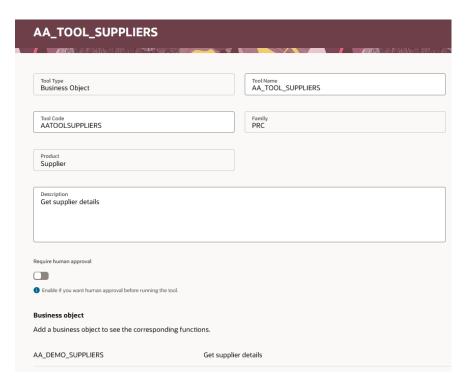


Description for parameter: The Supplier Name for which the details of the supplier are requested.



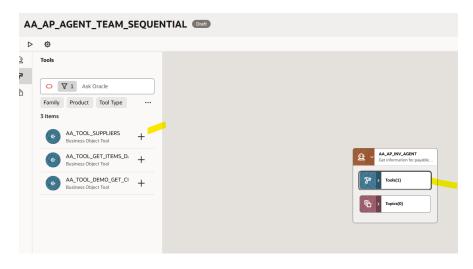
5. Tool.

Name: AA_TOOL_SUPPLIERS.

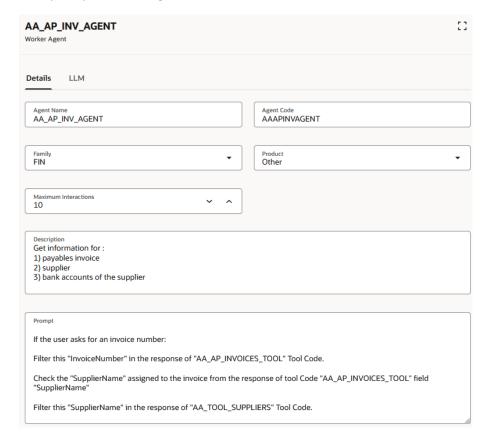


6. Agent Team.

Include the previous tool.



New prompt and testing.



Description.

Get information for:

- 1) payables invoice
- 2) supplier
- 3) bank accounts of the supplier

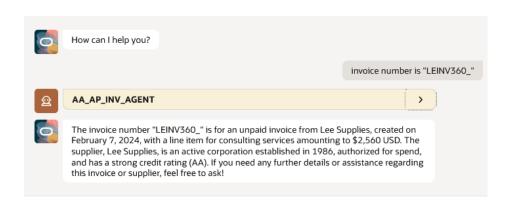
Prompt.

If the user asks for an invoice number:

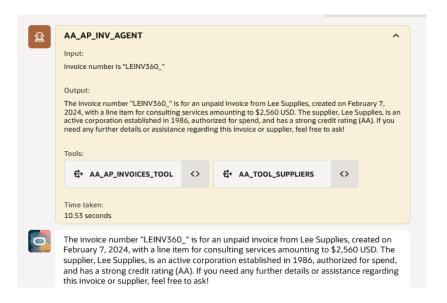
Filter this "InvoiceNumber" in the response of "AA_AP_INVOICES_TOOL" Tool Code.

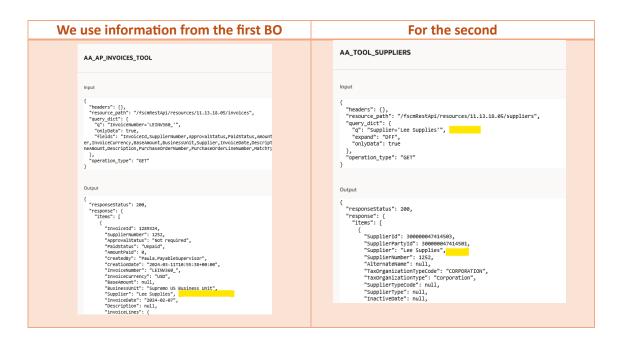
Check the "SupplierName" assigned to the invoice from the response of tool Code "AA_AP_INVOICES_TOOL" field "SupplierName"

Filter this "SupplierName" in the response of "AA_TOOL_SUPPLIERS" Tool Code.



Notice both BO tools are run.







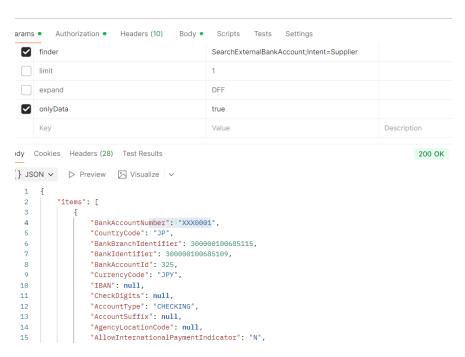
To get sequential steps, and passing parameters to next sequence, the magic seems to be in the "Prompt".

7. Bank accounts or Purchase orders. Third level.

Sample for REST API.

https://fa-xxxx-saasfademol.ds-

 $fa.oraclepdemos.com//fscmRestApi/resources/11.13.18.05/externalBankAccounts?q=VendorId=3\\00000047414503&finder=SearchExternalBankAccount;Intent=Supplier&onlyData=true$



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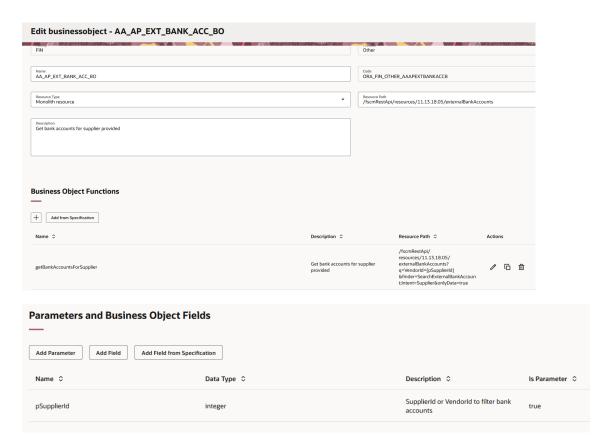
 $\frac{\texttt{fa.oraclepdemos.com//fscmRestApi/resources/11.13.18.05/purchaseOrders?q=SupplierId=30000}{0047414503}$

Name: AA_AP_EXT_BANK_ACC_BO

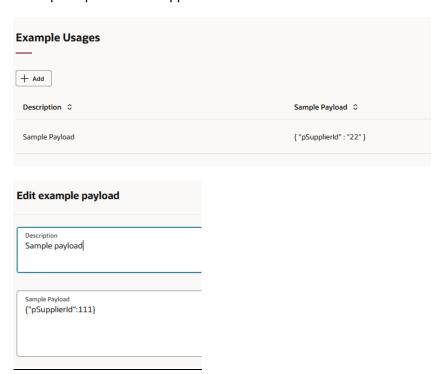
Description: Get bank accounts for supplier provided

Resource path.

 $/fscmRestApi/resources/11.13.18.05/externalBankAccounts?q=VendorId=\{pSupplierId\}&finder=SearchExternalBankAccount;Intent=Supplier&onlyData=true$

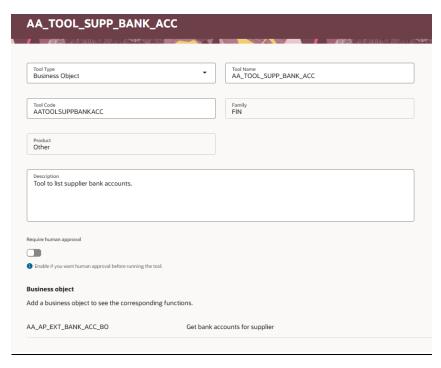


Description parameter: SupplierId or VendorId to filter bank accounts



8. <u>Tool.</u>

Name: AA_TOOL_SUPP_BANK_ACC



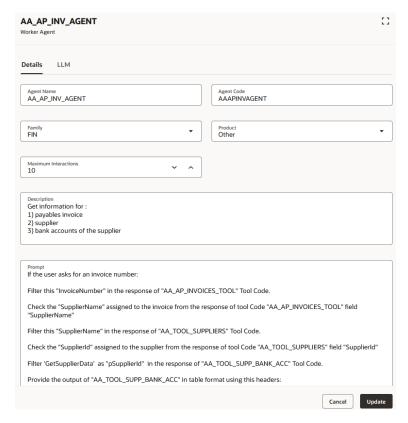
9. Agent Team.

Include third tool in Agent team.





Prompt 1.



If the user asks for an invoice number:

Filter this "InvoiceNumber" in the response of "AA AP INVOICES TOOL" Tool Code.

Check the "SupplierName" assigned to the invoice from the response of tool Code "AA_AP_INVOICES_TOOL" field "SupplierName"

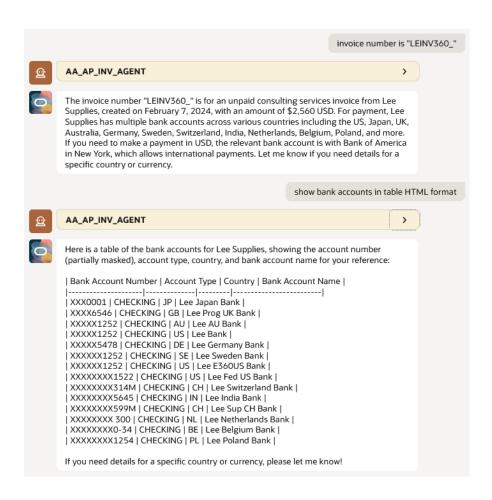
Filter this "SupplierName" in the response of "AA TOOL SUPPLIERS" Tool Code.

Check the "SupplierId" assigned to the supplier from the response of tool Code "AA_TOOL_SUPPLIERS" field "SupplierId"

Filter 'GetSupplierData' as "pSupplierId" in the response of "AA_TOOL_SUPP_BANK_ACC" Tool Code.

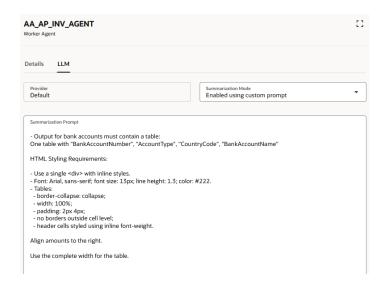
Provide the output of "AA_TOOL_SUPP_BANK_ACC" in table format using this headers:

 ${\tt BankAccountNumber|AccountType|CountryCode|BankAccountName}$



Prompt 2.

We will keep prompt 1, but we will add LLM "Summarization Prompt".



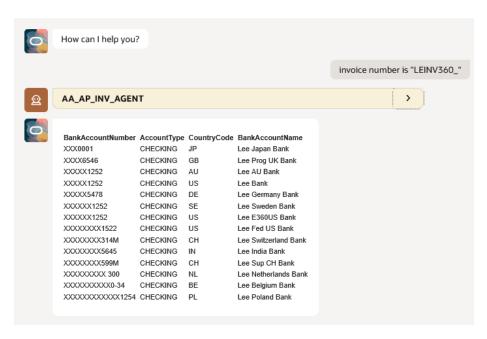
- Output for bank accounts must contain a table:
One table with "BankAccountNumber", "AccountType", "CountryCode", "BankAccountName"

HTML Styling Requirements:

- Use a single <div> with inline styles.
- Font: Arial, sans-serif; font size: 13px; line height: 1.3; color: #222.
- Tables:
 - border-collapse: collapse;
 - width: 100%;
 - padding: 2px 4px;
 - no borders outside cell level;
 - header cells styled using inline font-weight.

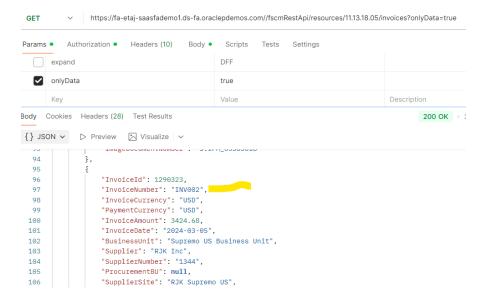
Align amounts to the right.

Use the complete width for the table.

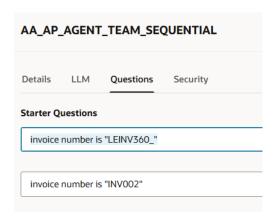


Final Test.

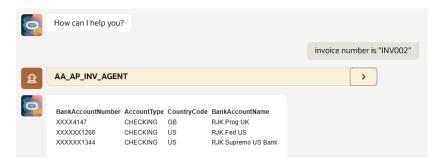
Let us find another invoice.



Added this "Question" for ease of use.



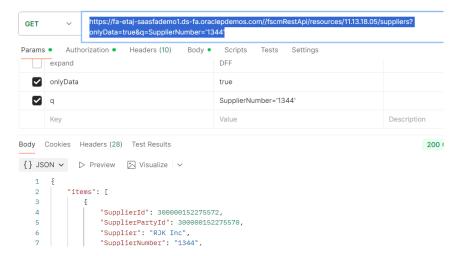
Test.



Now let us review if this information is correct.

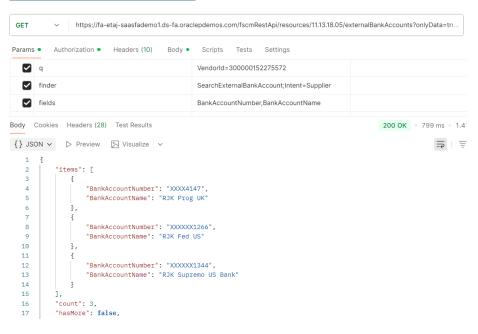
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<u>fa.oraclepdemos.com//fscmRestApi/resources/11.13.18.05/suppliers?onlyData=true&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&q=Suppliers&</u>



https://fa-xxxx-saasfademol.ds-

 $\label{lem:condition} $$fa.oraclepdemos.com/fscmRestApi/resources/11.13.18.05/externalBankAccounts?onlyData=true &q=VendorId=300000152275572&finder=SearchExternalBankAccount;Intent=Supplier&fields=BankAccountNumber,BankAccountName$



Prompt 3.

With this LLM "Summarization Prompt".

Based on the information through the chat history and/or tool call responses, construct a clear, professional, and user-friendly answer to address the user's original query. construct an answer that addresses the user's original query.

Your answer should be directed towards the user and should be friendly, professional, and concise. If you are not able to answer the user's question based on the tool calls or through the chat history,

you should let them know that you do not have access to that information.

--ANSWER REQUIREMENTS--

Your answer should be based only on the information available to you in the tool calling chat

history. You should never invent or make up answers. If the question requires you to synthesize

answers across several tool responses, you should do that. Note that some information may need

to be summarized from across multiple places in a given object. Use your inference and semantic

knowledge to derive the answer from the data without inventing anything.

Answer the question in HTML format.

Use tables for showing homogeneous list of results.

For columns with numeric values right align the cells including the headers.

For all other columns left align the cells including the headers

Add simple solid border to tables.

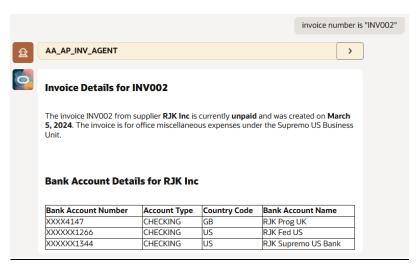
Use H6 when rendering headings or titles.

Do not use markdown syntax for highlighting.

--ADDITIONAL REQUIREMENTS--

- * Do not mention tool calls, chat history, underlying operations, or system processes.
- * Keep the response natural and conversational without unnecessary preambles.
- * Provide a direct and engaging response without phrases like "Based on tool calls" or similar references.
- * Do not append any characters or trailing Periods (.) at the end of valid URLs.
- * If link is generated by DeepLink tool do not remove from response.

We get this much better "look and feel".



Conclusion.

We have built our first sequential orchestration with single Agent using "Prompts".

We have worked on a three-level Agent using three business objects.