

ORACLE

AI World

Building a Custom Agent with External REST APIs

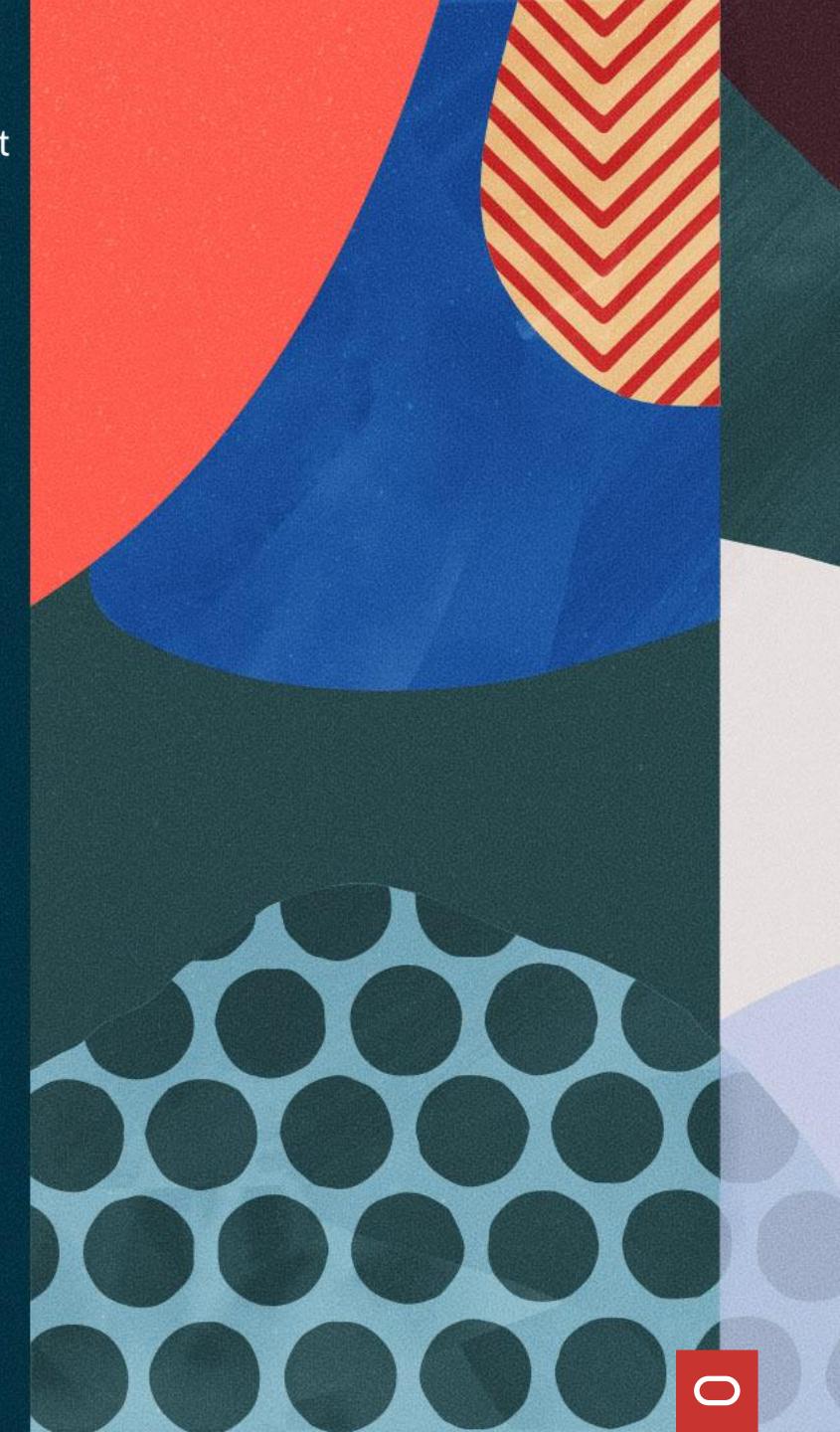
AI Agent Studio Advanced Lab

Oracle Cloud Center of Excellence

Oct 2025



ORACLE
Fusion Development
Center of Excellence



Safe harbor statement

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Speakers

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Senior Director, Product Management

Agenda

- 1 Introduction to AI Agent Studio
- 2 Overview of Tools in AI Agent Studio
- 3 Hands-on Lab – Build an Agent with External REST Tool
- 4 Best Practices
- 5 Q&A/Resources

Job Posting

Time Assistant

Career Planning Agent

Internal Mobility Assistant

Personal and Employment Details Assistant

Employee recognition message

Benefits Certification

Goal description

Court Orders Assistant

Incentive Compensation Plan Advisor

Performance feedback

Purchase Order to Sales Order Convertor

Compensation Advisor

New Hire Onboarding Assistant

Benefits Analyst

Service Request Triage Agent

Quote to Purchase Requisition Assistant

Knowledgebase articles

Job Seeker Analyst

Email, landing page authoring

Leave and Absence Analyst

Account Engagement Guide

Growth opportunities

Collective Agreements Analyst

Shift Change Request Assistant

Self-service Chat

Initiation synopsis

Candidate Selection

Work Order Assistant

Agent Chat Assistant

Opportunity-to-quote Guide

Repair suggestions

Supply Chain Collaboration Advisor

Item Shortages Analyst

Employee Hiring Advisor

Claims Policy Advisor

Compensation Guidelines Analyst

Claims Policy

Workflow Policy Advisor

Supply Chain Planning Process Advisor

Tax Withholding Guide

Customer Service Representative

Expense Policy Agent

Costing Period Close Assistant

Pricing promotions

Pay Policy Advisor

Talent Review Assistant

B2B Message Processor

Talent Advisor

Sustainability Policy Advisor

Campaign Optimization Agent

Service Request Resolution Agent Team

Retirement and Pensions Analyst

Goods Delivery Advisor

Campaign Planning Agent

Org Chart Analyst

Pay Analyst

Purchase Requisition Status Advisor

Sales Intelligence and Account Advisor

Insight Narratives and Summary

New Hire Onboarding Assistant

Self-service Chat Agent

Quality Inspection Standards Advisor

Packaging and Sustainability Assistant

Probability and Cost Manager

Compensation Statement Analyst

Contracts Researcher Agent

Knowledge Insights Agent

Employment Lifecycle Policy Advisor

Procurement Policy Advisor

Leave and Absence Policy Advisor

AI assistants and agents

Oracle AI Agent Studio

Create AI Agents with the same tools that Oracle uses.



Oracle AI Agent Studio for Fusion Applications



Design workflows and agents to fit your needs



Deploy and extend with prebuilt templates

AI Agent Studio

Ask Oracle

Type Family Product

Templates

Agent SCM - Procurement
Procurement Policy Advisor
Provides seamless access to procurement policies enabling employees to ask questions wh...

Use Template Learn More

Team CX - Sales
Sales Quote Generation
Orchestrates the recommendation of two to three different options for a given...

Use Template Learn More

Team HCM - Career Development
Career Planning Guide
Helps employees create actionable career progression plans. For example, the agent c...

Use Template Learn More

Agent ERP - Accounts Payable
Insights Advisor
Monitors for user specified business criteria and conditions and generates payment insight...

Use Template Learn More

Agent ERP - Accounts Payable
Payment Opportunity Execution
Assists the Payment Program Analyst end user with adjusting payment runs, modifying...

Use Template Learn More

Agent HCM - Benefits
Benefits Advisor
Helps employees understand and maximize their benefits packages, offering personalize...

Use Template Learn More

Team HCM - Global HR
HR Agent
Manages inquiries that come to HR related to Payroll, Benefits and Leave and Absences.

Use Template Learn More

Agent HCM - Global HR
Personal and Employment Details Assistant
Helps employees keep their profiles up-to-date and access information on employment...

Use Template Learn More

Team HCM - Compensation
Compensation Advisor
Advises managers on how to assess, develop, and compensate their Teammembers. It uses...

Use Template Learn More

Recommendations

Create AI Agents
AI Agents can use a variety of tools, topics and 3rd party integrations to work on the use cases you define.

Create Agent Learn More

Recently created

Multi Agent
HR Agent Team
A multi-agent team managing inquiries that come to HR related to Payroll, Benefits and Leave and Absences.

Single Agent
Absence Advisor Agent
An agent that can answer questions about employees' absence balances.

Single Agent
Suggest SR Resolution Agent
Create an agent that can suggest SR resolutions for specific situations.



Create custom agents and multi-agent teams



AI Agent Studio Tools

Providing Agents with a wide range of capabilities for Fusion and beyond



Document Tool

Upload or reference unstructured documents for semantic search and retrieval upon which to ground an answer or response

Business Object Tool

Retrieve data from the Fusion database and perform transactions on Fusion business objects as defined in the Fusion OpenAPI spec

Email Tool

Enable an Agent to write and send an email to a human recipient

Deep Link Tool

Send an end user to Fusion form interface to perform specific actions along with the required context

External REST Tool

Connect to any service to integrate any data and functionality with a public REST interface

User Session Tool

Makes context of the end user within Fusion to the Agents

Calculator Tool

Perform calculations for the most accurate answers involving math

Tool Type
External REST

Business Object

Deep Link

Document

Email

External REST

Create connections to Fusion data with a Business Object Tool

Retrieve Fusion data with ease



Access Fusion business object

Reference any Fusion Business Object via its OpenAPI spec by providing the BO endpoint and configuring the request/response

Setup parameters and headers using the Business Object documentation

Use the Business Object documentation to add required header and query parameters for the LLM to slot the contextual values

Prune the response fields list

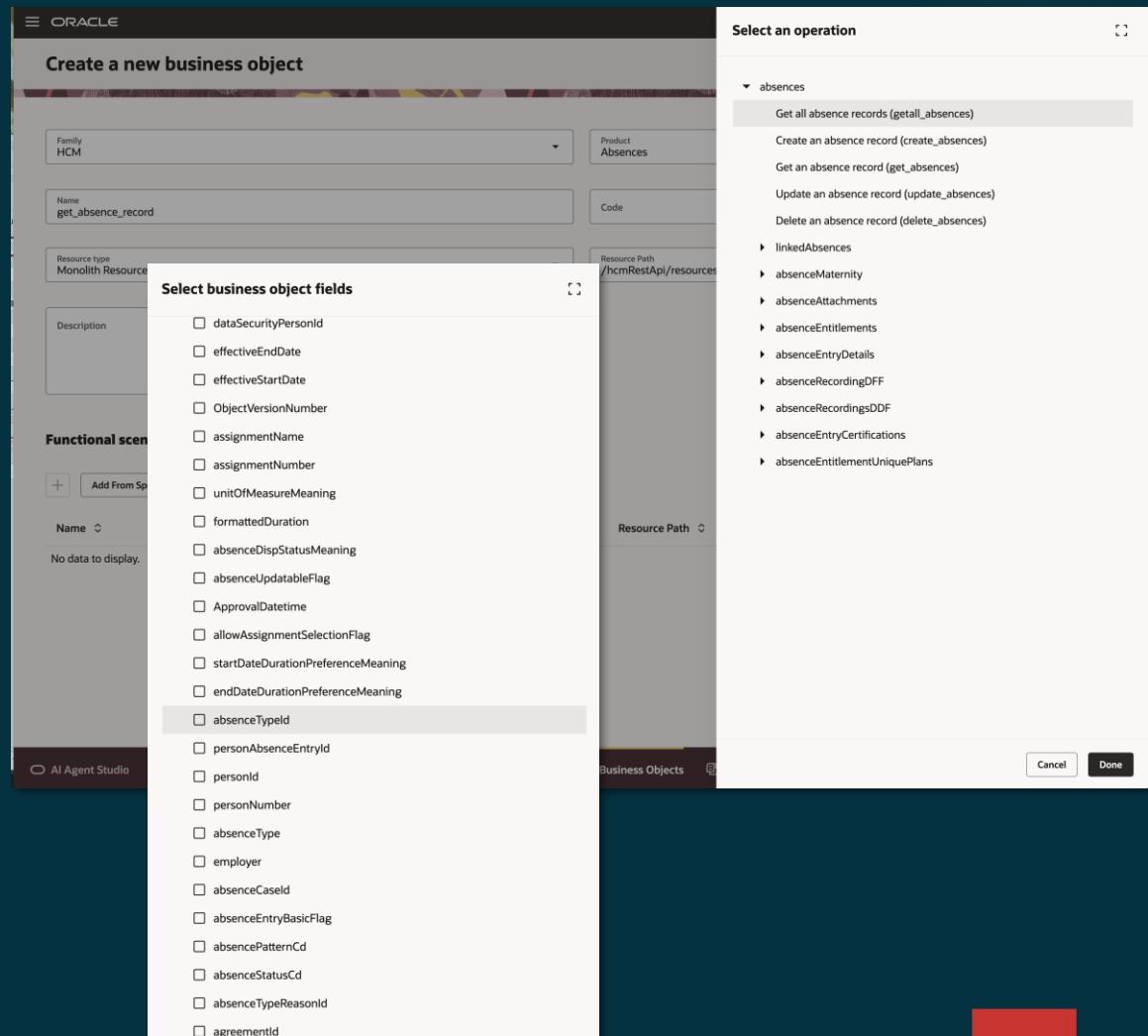
Select which fields will be returned from the GET request to focus the response for the use case

Supports Custom Objects and Custom Fields

Publish a new custom object and/or custom fields and the OpenAPI spec is updated so you can create a Business Object tool with those custom attributes

Data security stays intact

All Business Object tool requests use the Fusion user token of the logged in user, ensuring data integrity



External REST Tool

Define a REST Connection using an endpoint

Provide a specific REST endpoint to create a connection

Setup the Resource Path, HTTP/S operation, and parameters for each Function exposed within the tool

Setup parameters

Define slottable parameters for headers, query parameters and body for each Function

Show sample queries to the LLM

Give examples of the query so the LLM can properly slot parameters for that call

Test the Functions from within AI Agent Studio

Test each Function, by creating example parameters at design time, to ensure it is properly defined and works from within the Oracle environment

Create the External REST Tool and provide to an Agent to execute the REST call

Describe the capabilities of the tool along with the Functions definitions to enable the Agents to execute those calls as needed

The screenshot shows the 'Get Local Weather' configuration screen in the AI Agent Studio. The top bar has 'Get Local Weather' and 'Tool Type: External REST'. The main area includes fields for 'Code' (GET_LOCAL_WEATHER), 'Family' (SCM), 'Product' (Order Management), and a 'Description' box stating 'This tool can check the local weather by a latitude/longitude point.' A 'Require Human Approval' toggle is off. Below this are tabs for 'Functions' and 'Authorization'. Under 'Functions', there's a '+ Add' button, a 'Name' field, and a 'Resource Path' field containing 'https://api.weather.gov/points/'. To the right, 'Operation' is set to 'GET' and 'Description' is 'Provide a latitude, longitude point to get the weather at that location'. The bottom section shows a 'Sample Queries' tab with a 'Query' field containing 'https://api.weather.gov/points/39.7456,-97.0892' and a 'Description' field stating 'Sample query that needs a latitude, longitude pair to provide weather for that locations'.



External REST Tool Authentication

Connect to a wide variety of External REST Services

Access several authentication methods

From Basic Auth to OAuth2.0 and Fusion User Assertion, all your connectivity needs are available

Utilizes the same technology used by Visual Builder for Redwood customer extensions

Oracle's TRAP (Token Relay And Proxy) technology that powers this capability is the same used when extending Redwood Apps

Basic

Fixed username and password

OAuth2.0 User Assertion

Logged in user identity represented by OAuth token for custom scope

OAuth2.0 Resource Owner Password Credentials

OAuth token obtained with fixed client id, secret, username and password

OAuth2.0 Client Credentials

OAuth token obtained with fixed client id and secret

Oracle Cloud Infrastructure API Signature 1.0

Authentication

None

Hands-on Lab

Building a Custom Agent with External REST APIs

1

Create a Salary Benchmark Advisor Agent using External Rest API

2

Review Business Object and External REST API Tools, System Prompt and Usage of Summarization Prompt



Environment and Login Credentials

Application URL

<https://tinyurl.com/demo-dev49>

Or

<https://etar-dev49.ds-fa.oraclepdemos.com/fscmUI/faces/FuseWelcome>

User Credentials

Password - HOL@AIWorld2025

Usernames –

JESSICA.MULLEN

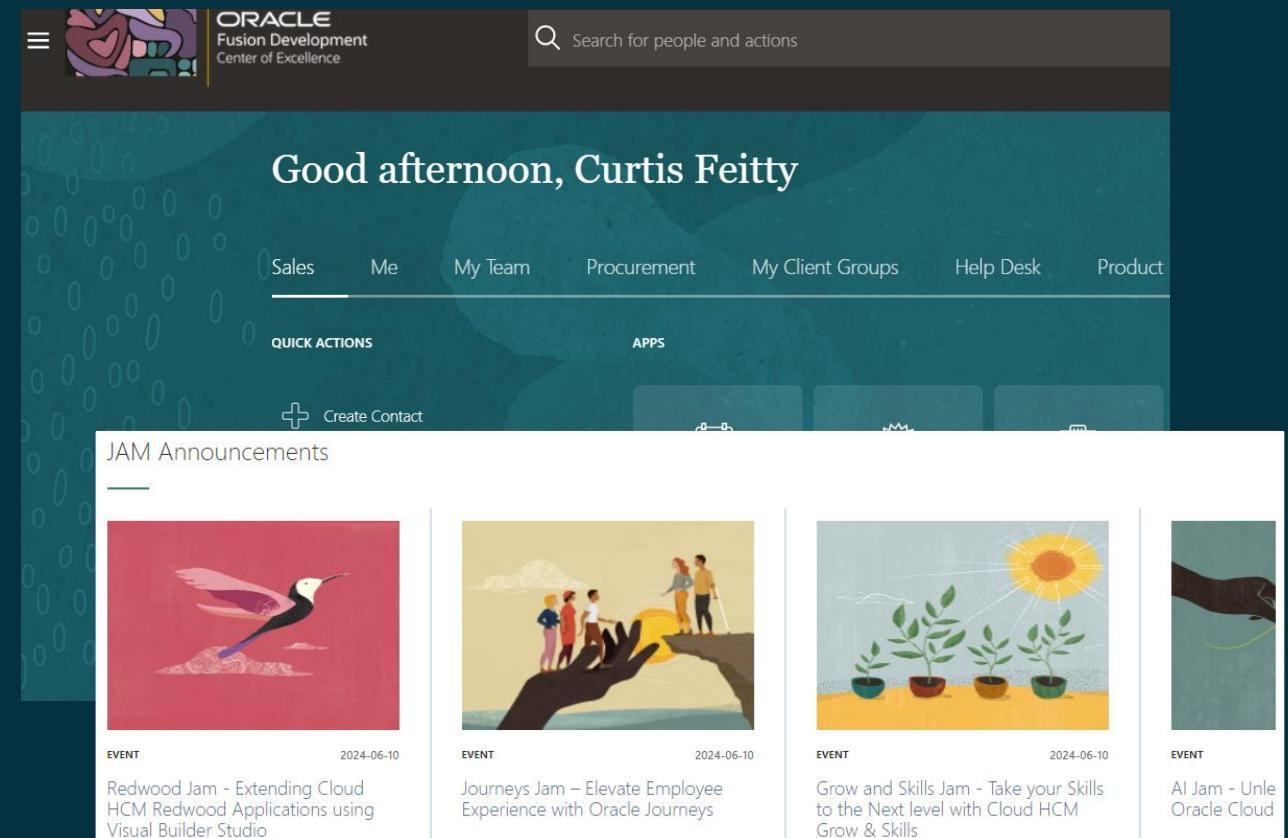
FRANK.PUKTA

JACK.FISHER

ADAMO.CARDELLINI

KEVIN.KINNEY

Scroll down on Home Page to the News and Announcement section to download the Labs



Tool Configuration & Usage

Best Practices

Write Clear, Precise Tool Descriptions

Descriptions are injected into prompts—ensure they explain the tool’s purpose, required inputs, expected output, and any dependencies or limitations.

Use Human-in-the-Loop (HITL) Thoughtfully

For tasks involving judgment, compliance, or ambiguity, integrate HITL steps with clear labels and fallback behavior if the user does not respond.

Limit Exposed Fields in Business Object Tools

Only select the fields needed for the agent to complete its task. This reduces response size, improves performance, and avoids unnecessary token usage.

Validate Inputs and Handle Errors Gracefully

Ensure the agent knows which inputs are required and how to proceed when they’re missing or incorrect. Tools should return helpful error messages or null-safe outputs.

Use Contextual Awareness

Don’t repeat `getUserSession` more than once per session unless necessary

Design for Performance and Responsiveness

Keep payloads light and avoid redundant API calls. Efficient tools lead to faster, more reliable agent responses.



Resources

Documentation

- [AI Resource page](#) in Cloud Customer Connect
- [What's New for 25D \(filter by AI column\)](#)
- [Oracle AI for Fusion Applications - Get Started](#)
- [How do I use AI Agent Studio?](#)
- Building an AI Innovation + Governance office [MOS KM](#) and Fusion AI Security principles [white paper](#)
- [AI Agent Collaboration Center](#)

Training

- CCC: [Introducing AI Agent Studio](#)
- CCC: [Let's Talk Tech: Getting Started with AI Agent Studio](#)
- OU : [Oracle Fusion AI Agent Studio Foundations Associate](#)
- OU: [Oracle AI Agent Studio for Fusion Applications Developers: Training and Certification](#)
- [AI Agent Studio 25D preview](#)
- Customer Connect Oracle AI for Fusion Apps [forum](#)
- CCC events: special topics on AI Agent Studio (coming soon!)
- CCC events: AI Agent Studio Office Hours (coming soon!)

Your feedback is important.

**Scan this QR Code or use the
Mobile App to share your
thoughts on this session.**





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Thank you

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Choice of LLMs

Fusion AI models

OpenAI	Meta	Anthropic	Google	XAI	Cohere
GPT-oss 120b *	Llama 3.3 70b	Claude-sonnet-4	Gemini 2.5 Flash	Grok 3	Command R
GPT-5 mini	Llama 3.1 8b <i>Fine Tuned</i>	Claude-haiku-3.5	Gemini 2.5 Pro		Embed 4 <i>Multimodal</i>
GPT-5					
GPT-4.1					
GPT-4o					

* Evaluating OpenAI Open Weights for completion,
RAG, and reasoning

Comes with
Fusion

Bring your own



Oracle AI Agent Studio



A PLATFORM TO BUILD, TEST, AND DEPLOY AI AGENTS

Integration & Extensibility	Observability and Evaluation	LLMs	AI Agents	Multimodal, RAG	Workflow Nodes
<ul style="list-style-type: none">MCP supportA2A agent cardsCredential storeMS TeamsSlackDynamic custom headersCommon integrations and connectors	<ul style="list-style-type: none">MonitoringEvaluationTest dataset mgmt.Agent tracingA/B comparisonsPerformance metricsToken usageRAG metrics (answer & context relevance, groundedness)Improved debugEnhanced guardrailsAuditing	<p>OpenAI, Meta, Cohere, Google, xAI, Anthropic</p> <p>Agent Marketplace</p> <p>Partner-built agent templates</p> <p>Prompt Management</p> <p>Prompt libraries and lifecycle management</p> <p>Topics management</p>	<ul style="list-style-type: none">New agent templatesSeeded runnable agent teamCustom agentsAgent builder assistantAI Agent Studio FAQ agentGet/put/post/patch/delete Fusion business objectsEnvironment promotion	<p>Image/document upload in chat</p> <p>Multimodal RAG</p> <p>SharePoint integration – RAG on external docs</p> <p>Workflow Agents</p> <p>Deterministic execution</p> <p>Chaining workflows</p> <p>Workflow as a chat agent</p>	<ul style="list-style-type: none">Agent nodeDoc processor, LLM, vector read/writeFor loop iterationRun in parallelSwitch – branching logicHuman-in-the-loopCode, tool nodesEmail trigger, time trigger, event trigger



AI Agent Studio: Prebuilt Templates 25C

Solve problems with AI agents that can plan and orchestrate tool usage



Human Resources

Benefit Analyst (Employee)
Leave and Absence Analyst
Leave and Absence Analyst (My Team)
Compensation Advisor (Employee)
Compensation Advisor (My Team)
Employment Details Assistant (My Team)
Employment Life Cycle Policy Advisor
Talent Advisor (My Team)
Pay Analyst
Leave and Absence Policy Advisor
Benefits Policy Advisor
Perks and Awards Analyst
Employment Contract Analyst
Employment Lifecycle Policy Advisor
Pay Policy Advisor

Service, Sales, and Marketing

Service Request Triage Agent
Service Request Resolution Agent
Account Advisor Agent
Sales Analyzer

Supply Chain, Finance, and Procurement

Sales Return Order Assistant
Maintenance Advisor
Operational Procedure Advisor
Work Instruction Authoring Advisor
Procurement Policy Advisor
Costing setup assistant
Costing period close assistant
Workflow Policy Advisor
Manufacturer Onboarding and Risk Advisor
Master Data Governance Standards Advisor
Product Regulations and Compliance Agent
Quality Inspection Advisor
Material Handling Agent
Outbound Compliance Agent
Goods Delivery Agent
Sales Promotions Advisor
Supply Chain Collaboration Policy Agent
Supply Chain Planning Advisor
Claims Policy Advisor

Public Sector

Agency Permit Assistant
Code Enforcement Case Assistant
Permit Inspection Assistant
Planning Activity Assistant
Reference APO Assistant

The screenshot displays the AI Agent Studio interface with a header bar containing 'Ask Oracle' and buttons for 'Type' (selected), 'Family', and 'Product'. Below this is a section titled 'Templates' featuring a 4x3 grid of cards. Each card includes a small icon, a title, a brief description, and two buttons: 'Use Template' and 'Learn More'. The cards are organized into categories:

- HR Agent Workflow**: A multi-agent workflow managing inquiries from HR related to Payroll, Benefits, and Leave and Absence.
- Mass Bulk Component Replacement Workflow**: A multi-agent workflow for replacing components in a mass bulk.
- Order Policy Lookup**: An agent for looking up order policies.
- Work Order Generation Template**: An agent for generating work orders.
- Suggest SR Resolution Agent**: An agent for suggesting resolution for Service Requests.
- Feedback Assistant**: An agent for gathering feedback.
- Performance and Goals Assistant**: An agent for setting and tracking performance goals.
- Account Advisor Template**: An agent for managing accounts.
- CX - Service**: Categories for Customer Experience (CX) and Service.
- HCM - Global HR**, **HCM - Benefits**, **HCM - Product**: Human Capital Management (HCM) categories for Global HR, Benefits, and Product.
- SCM**: Supply Chain Management (SCM) category.
- CX - Sales**: Customer Experience (CX) category for Sales.

At the bottom of the interface are navigation links: AI Agent Studio, Workflows, Agents, Tools, Topics, Prompts, Accounts, and Monitoring.



AI Agent Studio: Prebuilt Templates 25D

Human Resources

Benefits Court Orders Agent
Benefits Plan Advisor Agent
Onboard New Hires with AI Assistance
Internal Mobility Job Discovery Advisor
Internal Mobility Job Fit Advisor
Team Sync Agent
Job Offer Creation Advisor
AI Agent Studio for Job Requisition
Creation Flow
Job Applicant Screening Agent Template
Team Goals Assistant Agent
Transaction Console Assistant
Manager Concierge
Worker Concierge
RAC Helper
Employee Replacement Workflow Assistant
Scheduling Advisor
Learning Creation Assistant
External Career Site Job Fit Agent
External Career Site Job
Recommendation Agent
Payroll Run Analyst

Supply Chain and Manufacturing

ASN Creation Assistant
B2B Message Converter
B2B Message Processor
B2B Message Converter (Workflow)
Component Replacement Assistant
Contractor License Assistant
Data Access Advisor for Sales Orders
Data Extraction Query Transformer
Disposition Assistant for Rejects
FDA Recall Curation Assistant
Fulfillment Processing Assistant
Item Shortages Analysis Advisor
Maintenance Work Order Builder
Order Exception Assistant
Planning Activity Assistant
Planning Advisor for Exceptions and Notes
Post maintenance Work Recorder
Preapplication Agent Team
Product 360 Advisor
Product Comparison Advisor
Product Configuration Agent
Promotion Recommendation Advisor
Reference APO Assistant
Sales Order Assistant
Service Parts Advisor
Supply Disruptions Mitigator
Supply Disruptions and Mitigation Agent

Procurement

Supplier Portal Advisor
Purchase Requisition Status Advisor
Sustainability Policy Advisor
Quote to Purchase Requisition Assistant

Service, Sales, and Marketing

CPQ Administrator Assistant
Quote Advisor
Service Request Creation Assistant
Ingest Similar Requests
Service Request Escalation Prediction Agent
Service Request Triage Agent (Multiagent)
Embedded Help
Notification Agent
Incentive Payee Advisor
Incentive Administration Assistant
Pro Active Support AI Agent
Service Work Order Create Agent
Express Reports
Lead Advisor Agent Team
Case Analyzer Agent
Contract Summarization Agent
Service Request Resolution Workflow
Service Request Resolution Assistant
Deal Advisor Agent Team

Enterprise Resource Planning and Industry

Access Request Assistant
Expense Policy*
Expense Distribution Assistance*
Project Change Generation*
Project Status Summary & Action Plan*
B2B Message Conversion for trading partner comms*
JPMC Bank Account Validation Service Integration*

* Not available as pre-configured template in AI Agent Studio

Public Sector

Contractor License Assistant
Preapplication Agent Team
Agency Business License Assistant
Agency Planning Assistant
Code Incident Analyzer

