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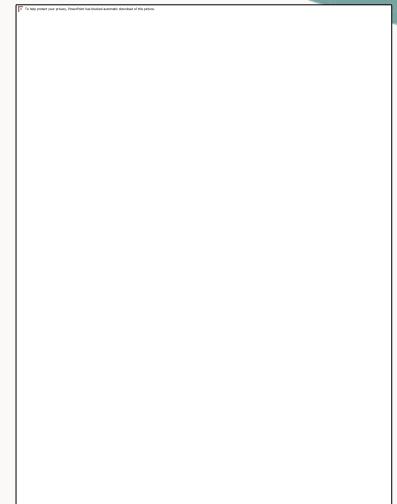
This is a unique program designed to boost employees' learning and skills by connecting with Oracle's in-house experts. Engage in tailored, interactive sessions where our specialists share their deep knowledge and expertise.

Name

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Oracle GSC

Oct 17, 2025



Speakers-virtual profile



Santhi Kondabolu

Functional Lead, Oracle



Experience

21 years



Expertise

Oracle Certified Consultant with over 21 years of expertise



Location

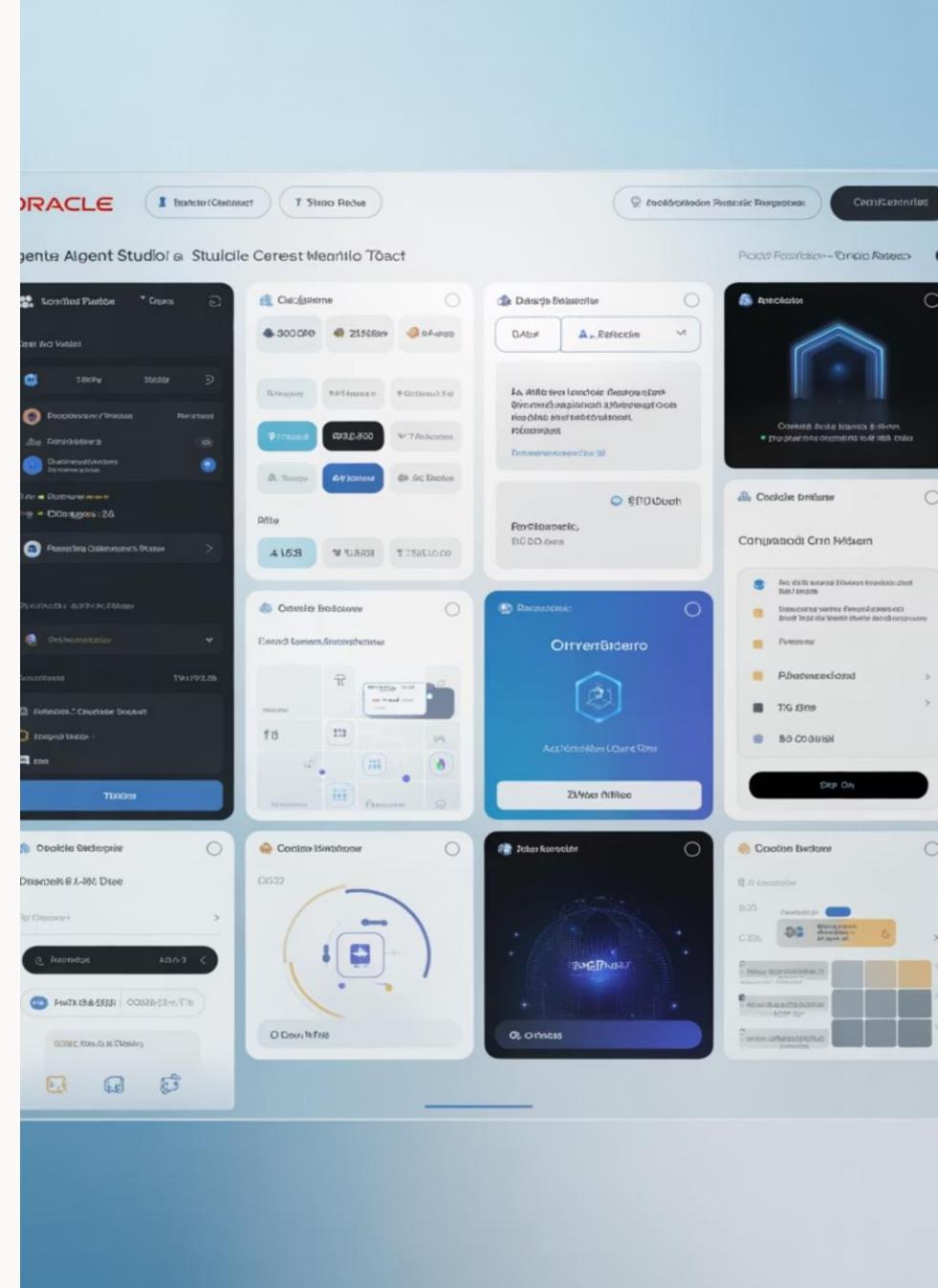
Hyderabad,
India

Building Generative AI Agents Using Prompt Engineering (Day 2)

Overview of AI Agent Studio

AI Agent Studio is a design-time environment that empowers you to create, configure, validate, and deploy AI agents to meet your organization's needs. With AI Agent Studio, you can easily extend preconfigured agent templates and even build new agents and multiagent flows from scratch.

AI Agent Studio is fully integrated into Oracle Fusion Cloud Applications, providing secure and seamless access to the knowledge stores, tools, and APIs of Fusion Applications. This integration enables agents to be deployed directly into the flow, ensuring an efficient process.



AI Agent Studio vs. similar competitor offerings

Business Advantage	Oracle	SAP	Workday	Microsoft Dynamics 365	ServiceNow	Salesforce	Notes
Optimized LLMs included at no additional cost	●	extra costs	extra costs	likely extra costs	extra costs	likely extra costs	a
Agentic AI at no additional cost	●	extra costs	extra costs	○	extra costs	likely extra costs	b
Single security model for AI and applications	●	○	○	○	○	○	c
Built-in credential store for external data	●	○	○	○	○	○	d
Agentic AI administrative testing and validation	●	○	○	○	●	○	e
Built-in agentic AI development tools	●	○	○	○	●	●	f
Agentic AI embedded knowledge store	●	○	○	○	○	○	g
Embedded GenAI	●	●	○	●	○	●	h
Requires separate data cloud	no	yes	yes	yes	yes	yes	i
AI agent data write-back integration *	●	○	○	○	○	●	j

● = full support | ● = strong support | ○ = moderate support | ○ = limited support | ○ = no support

A Framework for Positioning AI in Fusion Apps

AI in Oracle Fusion Applications evolves through **four progressive layers of intelligence** — from generating content to assembling fully autonomous multi-agent systems.

Each stage represents a step toward **intelligent enterprise automation**.

Author

Purpose: Use GenAI to generate or summarize text within workflows.

Example Capabilities: Write emails, summarize transactions, or generate job descriptions.

Answer

Purpose: Provide intelligent, cited responses using Retrieval-Augmented Generation (RAG).

Example Capabilities: Answer HR or order management queries using uploaded knowledge sources.

Action

Purpose: Execute multi-step processes using AI agents that interact with tools and APIs.

Example Capabilities: Process returns, update orders, dispatch maintenance requests.

Assemble

Purpose: Build, deploy, and customize multi-agent systems natively in Fusion using AI Agent Studio.

Example Capabilities: Create AI-driven business assistants and orchestrate end-to-end workflows.

-  **Key Message:** Start small — use embedded AI features today, build expertise, and evolve toward assembling complex AI-driven processes.





The Four Layers of AI in Fusion Apps – Deep Dive

✍ AUTHOR – GenAI Text Creation

- Automates writing and summarization directly in the flow of work.
 - Personalized using application and user context.
 - 100+ embedded capabilities across Fusion (e.g., HCM, Order Management).
- ⚠ Requires Redwood UI for many features.

ANSWER – Intelligent Q&A (RAG-Based)

- Delivers fact-based, cited responses.
- Uses customer-uploaded manuals, guides, or repositories.
- 50+ AI agents embedded across modules like Order & Asset Management.

ACTION – Agentic Workflows

- Performs multi-step tasks via orchestrated tools (calculators, APIs, calendars).
- Agents transact autonomously — update sales orders, process returns, generate quotes.

ASSEMBLE – AI Agent Studio

- Enables rapid creation, customization, and deployment of agents.
- Accesses Fusion business objects, APIs, and rules securely.
- Uses optimized LLMs (Llama, Cohere) or customer-provided models.
- Includes a testing/validation environment and 3rd-party integrations.

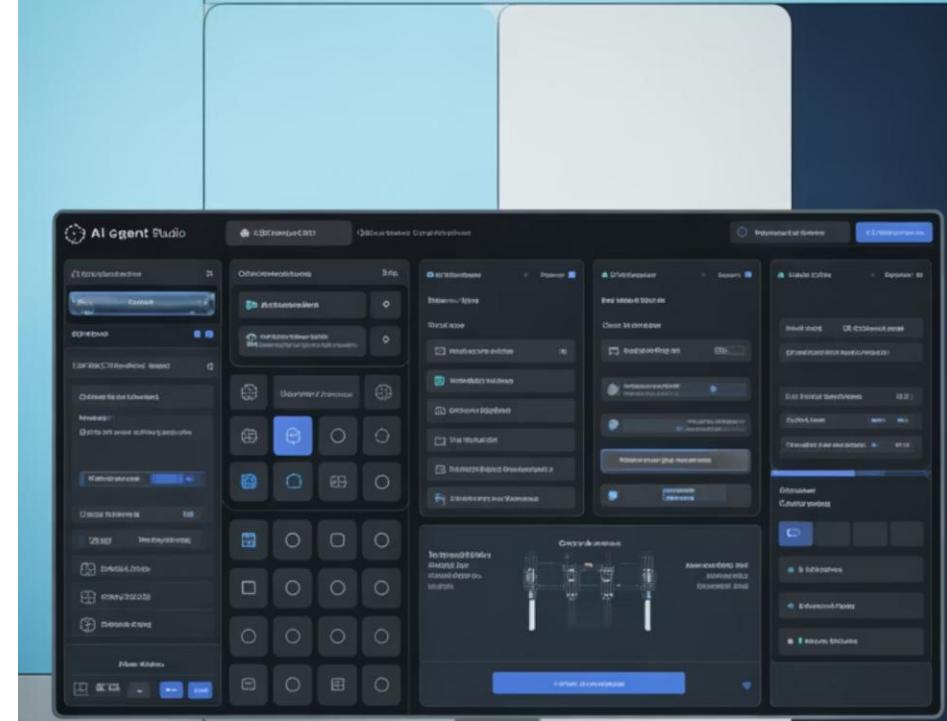


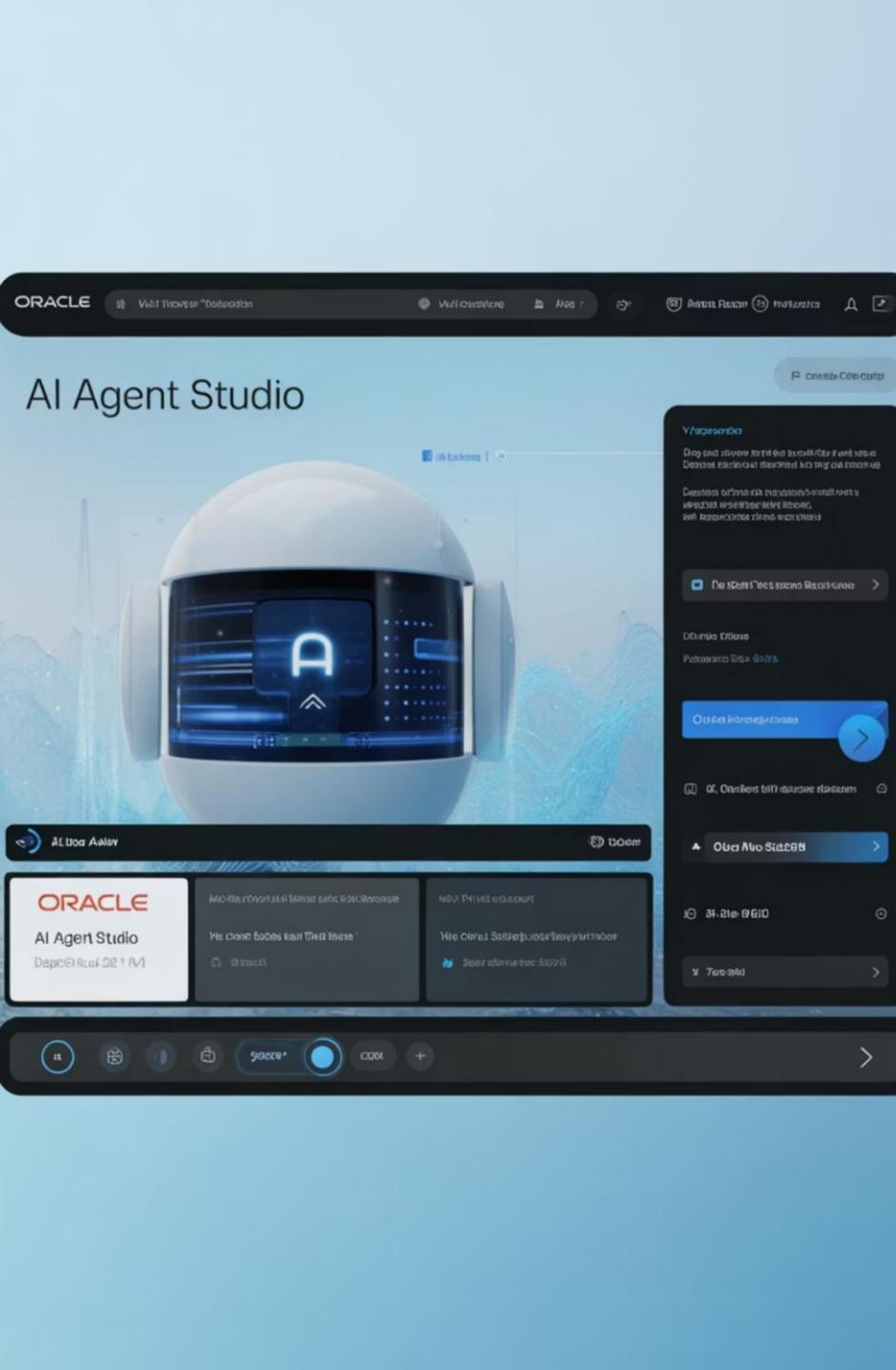
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See AI Agent Studio in Action

Watch the AI Agent Studio in action: AI Agent Hype Reel – oTube

[Watch AI Agent Studio Hype Reel](#)

Key Capabilities of AI Agent Studio

Feature	Description
Agent template libraries	Use templates and natural language prompts to create or fine-tune agents for common business scenarios, such as opportunity-to-quote processing and shift scheduling.
Agent team orchestration	Configure multiple agents to collaborate on multistep processes, integrating user approvals where necessary.
Agent extensibility	Change and extend existing agents in Oracle Fusion Cloud Applications by incorporating new data sources, prompts, and APIs to fit specific business needs or industry requirements.
Native integration with Fusion Applications	Directly access APIs and tools in Fusion Applications, ensuring seamless deployment of agents without complex modifications.
Third-party system integration	Connect with external systems and collaborate with third-party agents for end-to-end automation with secure API support.
Trust and security framework	Automatically applies the security configurations, policies, and access controls of Fusion Applications, ensuring compliance with enterprise security standards.
Validation and testing tools	Use built-in tools to make your agents reliable, repeatable, easy to explain, and secure by verifying AI-driven flows before deployment.



Access Requirements for AI Agent Studio

Prerequisites

To enable and use AI Agent Studio, ensure the following configurations are completed:

Enable Security Console for Permission Groups

01

Navigate to Setup

Go to Setup and Maintenance → Manage Administrator Profile Values

02

Search Profile

Search for profile:
ORA_ASE_SAS_INTEGRATION_ENABLED

03

Set Value

Set Site Level Value = Yes

This allows the Security Console to integrate with permission groups and external applications.



Run Scheduled Processes to Import Security Data

Run these two jobs sequentially to sync users and roles from LDAP into Fusion security tables:

1 Import Resource Application Security Data

2 Import User and Role Application Security Data

Navigation: Navigator → Tools → Scheduled Processes → Schedule New Process → Submit each job

(Optional) Assign Privilege for External REST API

Tools

To create or test REST API-based tools in AI Studio:

- **Privilege required:** Create and Edit Backends for Visual Builder Studio (ORA_FND_TRAP_PRIV)
- **Add this privilege under:** Security Console → Function Security Policies (Assign it to your custom role)

Assign Predefined Duty Roles to Job Roles

Provide AI Agent configuration access across all product areas:

Navigation: Navigator → Tools → Security Console → Create New Custom Job Role

In Role Hierarchy → Roles and Permission Groups Tab, add these:

- ORA_DR_FAI_GENERATIVE_AI_AGENT_CX_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_FIN_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_GRC_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_HCM_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_PRC_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_PRJ_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_PSC_ADMINISTRATOR_DUTY
- ORA_DR_FAI_GENERATIVE_AI_AGENT_SCM_ADMINISTRATOR_DUTY

 If Application Implementation Consultant role is not assigned, add this privilege manually: Manage All Intelligent Agents (ORA_FAI_MANAGE_ALL_AI_AGENTS)

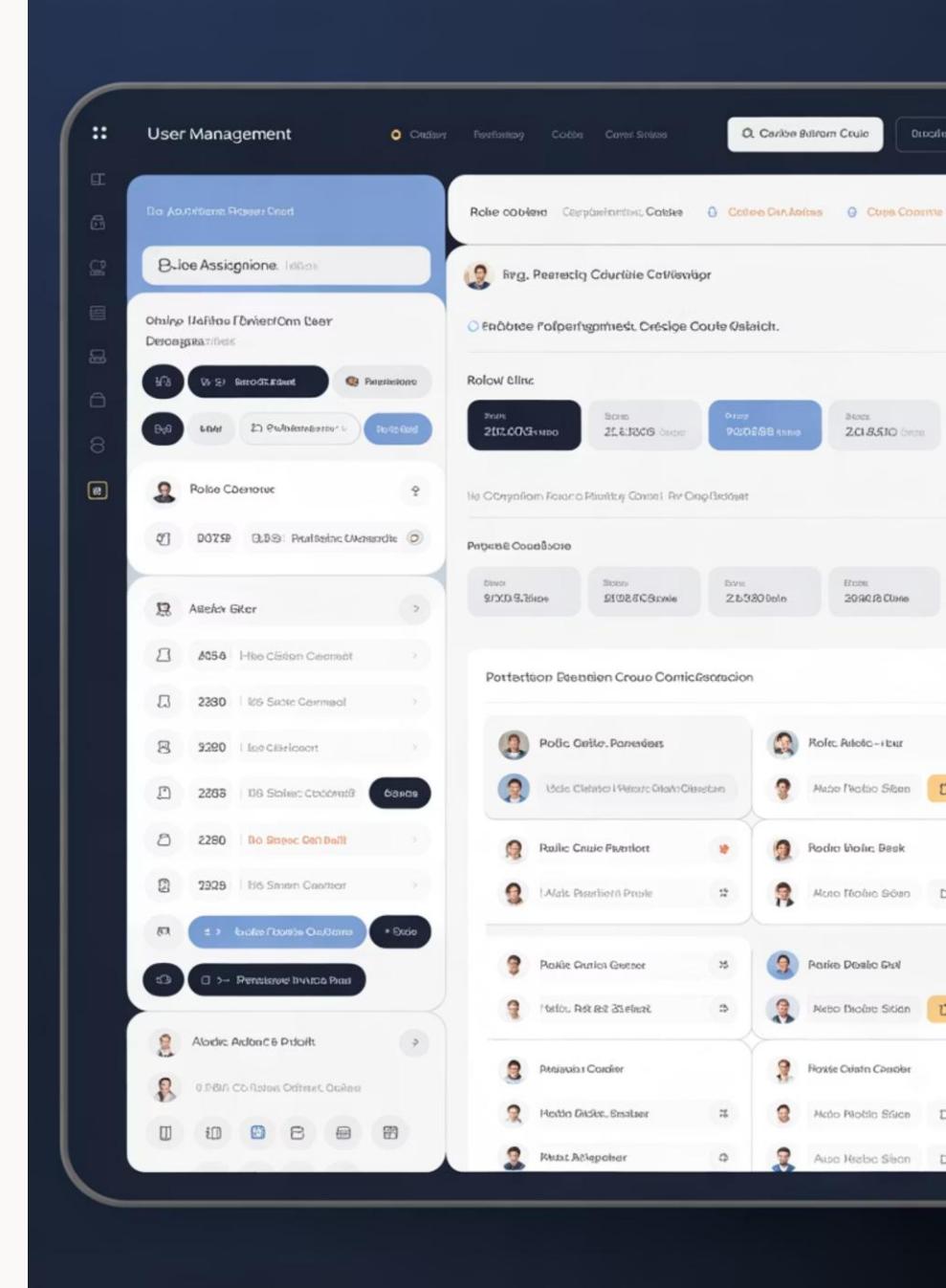
Assign Roles to Users

Save Custom Role

Save the custom role and assign it to users who need access to AI Agent Studio.

Enable Permission Groups

Ensure Permission Groups are enabled before saving.



Get Started with AI Agent Studio

 Get Started with AI Agent Studio You can start with a preconfigured agent template or create your own agent team. Here's a broad outline of the key tasks involved in creating an agent team. (These same components can be edited later while using a preconfigured template.)



Define Tools

To effectively define the tools required by an agent, first identify the types of questions users might ask, and decide which tools the agent needs to answer accurately.

Available Tools:

Oracle Fusion Cloud Business Object

Access Fusion data fields, APIs, and rules—like cost of an item or last updated date—directly and securely. Agents follow native Fusion access controls for data protection and privacy.

Document Upload

Upload documents to help the agent find answers from text or files and provide precise, contextual responses.

User Profile

Retrieve user information such as region, tenure, or department for personalized responses.

Calculator

Perform numeric computations, e.g., calculating time-off balances or totals.

Email

Access email client to send summaries or interactions pulled from a knowledge store.

Deep Link

Route users directly to Fusion pages for quick actions like updating records or transactions.



Demo



Define Topics

Topics define the focus area or expertise of the agent. They streamline how the agent selects tools and interprets user intent.

Best Practices:

- Specify clear instructions guiding the agent on tool usage.
- Help the agent understand user intent and identify the right topic automatically.
- Give each topic a clear, specific name and natural language instruction for accurate use.
- Topics can be reused across multiple agents.



Demo





Build New Agents

Define the capabilities and scope of your agent, including:

Agent Name

Choose a clear, descriptive name for your agent

Product Area

Define where the agent will operate

Natural Language Instructions

Define agent logic and collaboration with other agents

Demo



Build, Test, and Deploy AI Agent Teams

Add a User (Human) in the Loop

- Include approval or review steps for specific AI actions.
- Add this step anywhere in the process to maintain oversight—e.g., before sending an email or updating a record.
- Ensures human validation for sensitive or business-critical actions.





Build the Agent Team

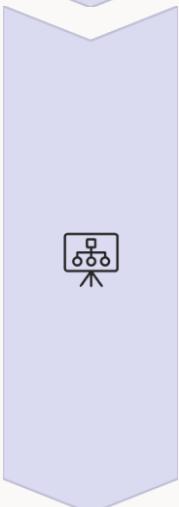
Create an agent team and add agents or artifacts to it.

Types of Agent Teams:



Supervisor Agent

Manages other agents and the overall agentic flow.



Workflow Agent

Executes tasks in a defined sequence; each node performs a specific function like:

- Extracting data
- Calling a business object
- Running an LLM
- Sending an email

Demo



Test the Agents

Always test before deployment to production.

Testing Process:

- Run test queries and review responses for accuracy and relevance.

Observe:

- The logic and steps followed by the agent.
- The actions taken to generate results.

Demo





Deploy the Agent Team

Once tested and finalized, deploy directly from AI Agent Studio.

Deployment Options:



Embed Conversations

Integrate agent chat into websites or apps.



Trigger via External Resources

Use webhooks or embed chat in HTML/React web pages.

Demo





Create AI Agents Using Preconfigured Agent Team Templates

Steps

01

Go to Navigator ▶ Tools ▶ AI Agent Studio

02

Select Use Template from the required agent team and provide details for the new agent team.



Tip

- ☐ To automatically add a suffix to all artifacts in your agent team, choose **Copy Template** instead of **Use Template**.

Use Template

→ step-by-step guided configuration of each artifact.

Copy Template

→ opens the canvas directly to edit agent settings, tools, and topics.

Details Tab

Field	Description
Family	Select the family to which this agent team belongs.
Product	Select the product within the family for the agent team.
Maximum Interactions	Define how many times an agent can interact with its assigned topics and tools.

Employment Lifecycle Policy Advisor Test EMP LC Policy Advisor

Details LLM Questions Security

Agent Team Name Employment Lifecycle Policy Advisor Test EMP LC Policy /	Agent Team Code EMPLOYMENT_LIFECYCLE_POLICY_ADVISOR_TEST_EMI
Family HCM	Product Global Human Resources
Maximum Interactions 10	
Description The Employment Lifecycle Policy Advisor equips managers with clear, step-by-step guidance on company policies for hiring, onboarding, development, and offboarding.	



LLM Tab

Field	Description
Provider	Choose the Large Language Model (LLM) for your agent.

Employment Lifecycle Policy Advisor Test EMP LC Policy Advisor []

Details **LLM** Questions Security

Provider
Default



Security Tab

Field	Description
Add	Select the roles that will have access to this agent team.

Employment Lifecycle Policy Advisor Test EMP LC Policy Advisor

Details LLM Questions **Security**

+ Add

After you add roles, you can see them here.

Employment Lifecycle Policy Advisor Test EMP LC Policy Advisor

Details LLM **Questions** Security

Starter Questions

Question 1

Question 2

Question 3

Follow-up Questions

Enable Follow-up Questions



Enable if you want the AI to generate follow-up questions based on user conversation history.

Questions Tab

Field	Description
Starter Questions	Define initial questions for the agent team.
Follow-up Questions	Allow the agent to ask follow-up questions based on the conversation history.

Output Configuration and Publishing Agent Teams

Prompt & Expression Setup

Define the prompts used for generating follow-up questions or other dynamic outputs.

Field	Description
Prompt	Enter the instruction or query pattern used for follow-up questions.



Output Tab

Define the overall structure of the agent's output using a JSON schema to specify the exact output format.

Field	Description
Specification Mode	Enables direct editing of the JSON schema for precise output control.
Simple Mode	Allows defining output values and data types — automatically generates the corresponding JSON schema.

Configuration Notes

Continue to edit and add artifacts such as tools, business objects, and topics within the agent team.

Avoid altering core artifacts from the preconfigured template, as they're optimized for best performance.

Test and Fine-Tune

- Use  Run to test the agent team.
- For adjustments, edit using  Edit Agent within AI Agent Studio.



Publish and Access

01

After testing, publish the agent team.

02

View published flows on the AI Agents page.

03

To access directly, append this path to the AI Studio URL: /agent-explore

(e.g.,

<https://example.com/myApp/redwood/human-resources/ai-studio/agent-explore>)

Demo

Create Custom AI Agents of Type Supervisor (From Scratch)

Step 1 – Navigate

Go to Navigator ▶ Tools ▶ AI Agent Studio.

Add Required Tools

For example, to create an HR Benefits Administrator Agent that answers questions on medical, vision, or retirement plans:

Document Tools

→ upload HR and financial benefit documents

- ◊ Before using document tools:
 - Set status = Ready to Publish
 - Run Process Agent Documents scheduled process
 - After completion, set status = Published

Business Object Tools

→ fetch employee enrollment data

Calculator Tool

→ compute balances or percentages



Output Configuration and Publishing Agent Teams

-  Prompt & Expression Setup Define the prompts used for generating follow-up questions or other dynamic outputs.



Output Tab

Define the overall structure of the agent's output using a JSON schema to specify the exact output format.

Specification Mode

Enables direct editing of the JSON schema for precise output control.

Simple Mode

Allows defining output values and data types — automatically generates the corresponding JSON schema.





Configuration Notes

- Continue to edit and add artifacts such as tools, business objects, and topics within the agent team.
- Avoid altering core artifacts from the preconfigured template, as they're optimized for best performance.

Define Topics

Specify for each topic:



Topic purpose and scope



Tools to use



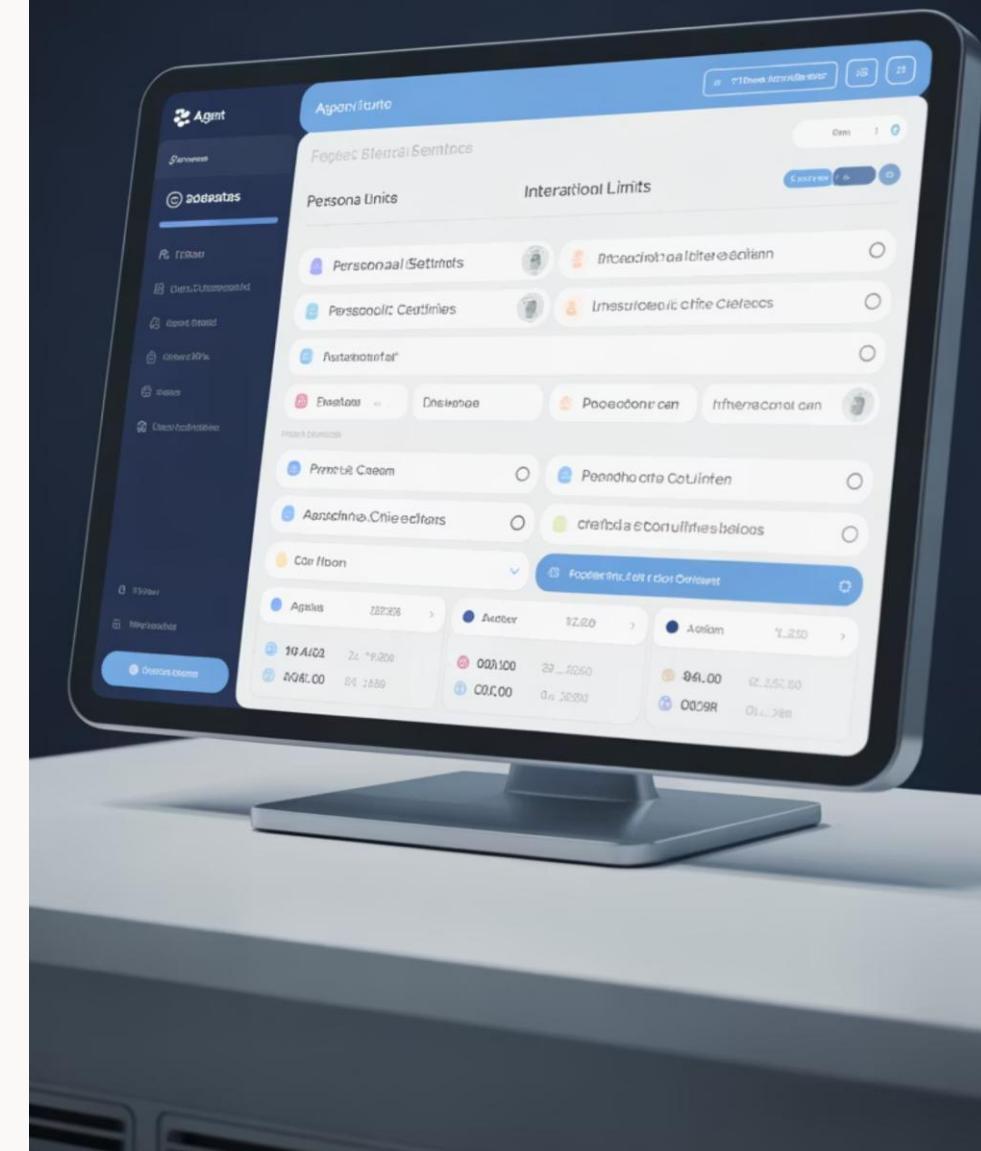
Example questions



Guidelines or guardrails

Add an Agent

- In **Maximum Interactions**, define how often the agent can interact with topics and tools
- Describe agent persona and tone of responses
- Add prompt logic and variables using Insert Expression



Build Agent Team

Add details in tabs below:

Details Tab

Field	Description
Family	Select family for this agent team
Product	Select associated product
Type	Choose Supervisor to manage other agents
Maximum Interactions	Set interaction limit

LLM Tab

Field	Description
Provider	Select the LLM for your agent

Security Tab

Field	Description
Add	Select roles that will have access



Questions Tab

Field	Description
Starter Questions	Define initial queries
Follow-up Questions	Allow follow-up based on chat history
Prompt and Expression	
Field	Description
Prompt	Use {chatHistory} to generate follow-up questions in JSON schema format — remove markdown. Example: \[{"question":"Q1"}, {"question":"Q2"}\]
Insert Expression	Add dynamic variables (e.g., Current Date Time)
Output Tab	
Field	Description
Specification Mode	Manually edit JSON schema
Simple Mode	Auto-generate JSON schema based on defined fields



Test and Fine-Tune

01

Use  Run to test the agent team

02

For adjustments, edit using  Edit Agent within AI Agent Studio



Publish and Access

- After testing, publish the agent team.
- View published flows on the AI Agents page.
- To access directly, append this path to the AI Studio URL: /agent-explore (e.g., <https://example.com/myApp/redwood/human-resources/ai-studio/agent-explore>)

Create and Configure

01

Click Create

02

Click  New Supervisor Agent

03

Enter details and save

Add Worker Agents

Add existing or create new worker agents within the same team. Each worker agent is unique to its team and not reusable elsewhere.



Add Artifacts and Topics

Include additional tools or business objects needed for your scenario.



Test and Publish

- Use  Run to test the agent team
- Fine-tune with  Edit Agent
- Finally, Publish the agent team

Access the published agents at: <https://redwood/human-resources/ai-studio/agent-explore>



⌚ Monitor and Evaluate AI Agents

🔍 Purpose

Monitor your AI agents' performance, understand usage patterns, identify errors, and evaluate accuracy before production deployment.



Key Concepts

Monitoring

Tracks how agents behave in production, ensuring quality:

- Response time 
- Token count 
- Error detection 

Evaluation

Tests agents before deployment for:

- Correctness
- Response time
- Token usage efficiency

Helps maintain consistent, high-quality user experiences across sessions.



Core Metrics

Metric	Description	Evaluate	Monitor
Error Rate	% of user sessions that ended in error	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Error Count	Total number of recorded errors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Session Count	Number of conversations initiated	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P99 Latency	Wait time for 99% of users (find worst delays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P50 Latency	Wait time for 50% of users (detect common lag)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Total Tokens	Cumulative tokens used	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Input Token Count	Tokens sent to LLM (prompts, context)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Output Token Count	Tokens generated by LLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Median Correctness	Accuracy score (0–1) vs reference answers	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Prerequisites

To display metrics in AI Agent Studio → Monitoring and Evaluation tab:

- 01 Go to Navigator ▶ Tools ▶ Scheduled Processes
- 02 Click Schedule New Process
- 03 Keep Type = Job
- 04 Search for Aggregate AI Agent Usage and Metrics
- 05 Run the process (can be scheduled daily)

Monitor and Evaluate AI Agents

Monitor Agents

Purpose: Track agent performance in production and identify inefficiencies or errors.

Steps to Monitor:

1. Navigate to Navigator ▶ Tools ▶ AI Agent Studio
2. Open Monitoring and Evaluation → Monitoring tab
 - Shows aggregated metrics across all agent runs
 - Includes draft and active agents
3. Select an agent to view detailed session data:
 - Number of interactions (turns)
 - Completion status (success or error)
 - Tokens used
4. Click any session to open Detailed Trace View, showing:
 - Step-by-step timeline of conversation
 - Tools invoked and duration of each step
 - Metrics per step

Evaluate Agents

Purpose: Assess your agents' performance against test questions and expected answers. Each evaluation set tests one or more questions to verify response correctness and latency.

Steps to Create and Run Evaluation:

1. Navigate to Navigator ▶ Tools ▶ AI Agent Studio → Monitoring and Evaluation → Evaluation tab
2. Click Manage Evaluations →  Create New
3. Enter name, code, description, and choose Agent Team
4. Select Run Mode:
 - Sequential: Runs in defined order (context-dependent)
 - Random: Runs in random order
5. In Questions tab, add:
 - Likely user questions and expected answers
 - Optionally upload CSV (column 1: questions, column 2: expected answers)
6. In Metrics tab, set pass/fail thresholds (e.g., < 0.7 = fail)
7. Click Create
8. On the Manage Evaluations page → select Initiate Evaluation Run
9. Choose the agent version and execute the run



 Analyze Evaluation Results Tab Information Displayed Response Performance Compares expected vs actual agent answers, includes per-question metrics and detailed timeline (trace view). Correctness Displays correctness score (0-1) and feedback from LLM and human reviewers via Correctness Score by Human.

Outcome

These evaluation and monitoring insights help you:



Detect latency issues and optimize prompts



Verify accuracy and stability before production



Continuously improve agent reliability



Compare Evaluation Runs



Helps you compare two different evaluation runs of same AI agent to identify:

Performance regressions or improvements

Changes in latency, correctness, and token usage

Impact of recent modifications or prompt updates

Steps

01

Go to Navigator ▶ Tools ▶ AI Agent Studio

03

Select the desired evaluation set

02

Open the Monitoring and Evaluation → Evaluation tab

04

Choose any two runs and click Compare



Tabs in Comparison View

Tab	Description
Summary	Provides a high-level overview of performance differences (overall accuracy, latency, token usage).
Details	Offers a granular, question-by-question comparison between Run 1 and Run 2. Shows: <ul style="list-style-type: none">• Actual responses for both runs• Latency and tokens used per question• Trace links to pinpoint reasons for performance or accuracy changes

Outcome

This comparison allows you to:

Track the evolution of agent quality over time

Verify improvements after tuning prompts or workflows

Identify bottlenecks or regressions before publishing updates

Quiz

Q & A

Poll - Time



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