

AWS State, Local, and Education Learning Days

Sacramento, CA

1:30pm – 3:00pm

300
level

**Workshop:
Building Agentic
Workflows**

Advanced AWS
workshop on
building autonomous
AI workflows with
Amazon Bedrock for
developers

aws Learning Days
State, Local, and Education



Building Agentic Workflows on AWS

Mike Glover (he/him)

Sr. Solutions Architect

AWS

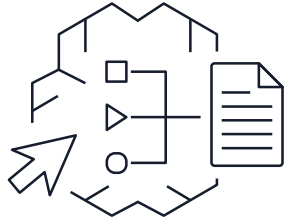
mrglover@amazon.com

Nick Kniveton (he/him)

Sr. Solutions Architect

AWS

kniveto@amazon.com



Agents for Amazon Bedrock

Enable generative AI applications to execute multi-step business tasks using natural language

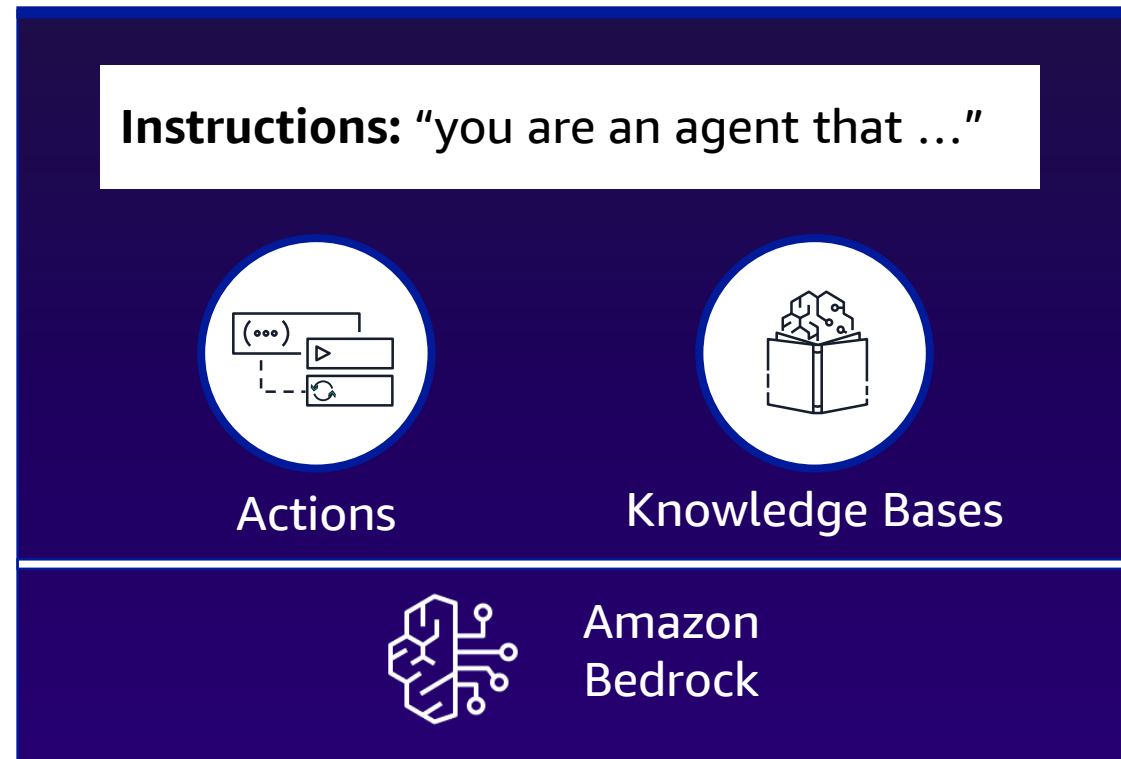
Features

- Uses power of LLM's to prompt and respond using natural language
- Breaks down and orchestrates tasks
- Completes tasks by dynamically invoking APIs
- Securely and privately accesses company data
- Surfaces chain-of-thought trace and underlying agent prompts

Agent basics



Agent



Simplest agent has only a set of instructions



why did the AI
go to school?

to improve its
learning Rate

write an email
message

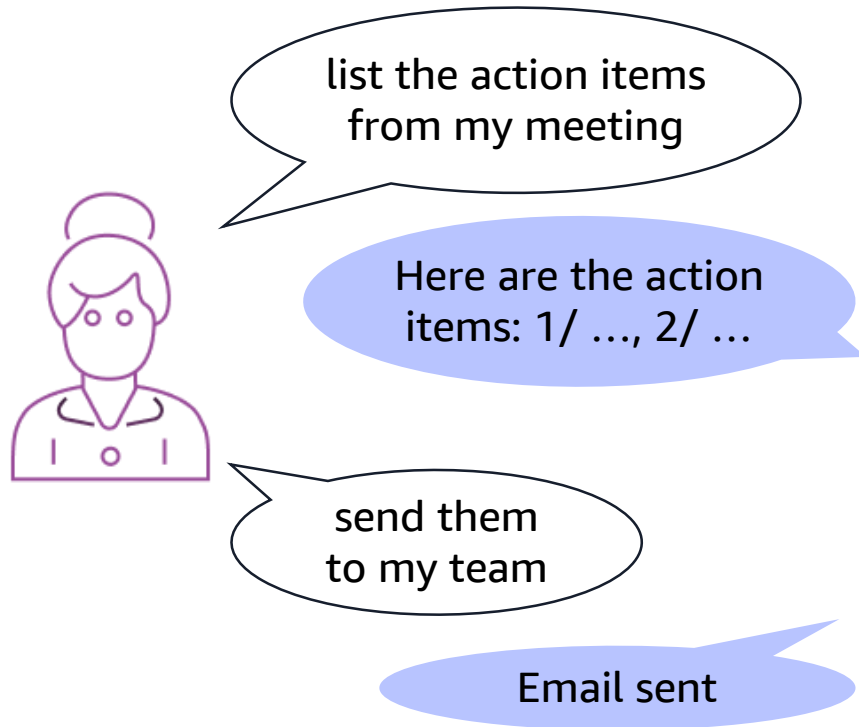
I'm sorry, I'm just a
funny bot who tells jokes

Joke bot

Instructions: "you are a funny agent that can **only** tell jokes. **you refuse to do anything else.** you always keep the jokes clean and not offensive. you can tell jokes about any topic."

Agents use **actions** to get work done

Meeting assistant



Instructions: "you summarize meetings and send results"

Meeting Actions

List Meetings

In: date range

Out: [date, subject, meeting ID]

Get Action Items

In: meeting ID

Out: [action items]

Utility Actions

Send Email

In: subject, recipients, body

Out: status

Get Team

Out: list of team member email addresses

Agents use Knowledge Bases to find information

HR Policy Assistant



If I switch to part-time, will I still get vacation days?

Sorry, part-time staff aren't eligible for vacation days.

Instructions: "you are an HR agent, helping employees understand HR policies"

HR Knowledge Base

Vacation Policy
Contains the entire vacation policy for the company

Agents can combine **Actions** and **Knowledge Bases**

HR Policy Assistant v2



how much vacation do I get per year?

as a full-timer with 3 years tenure, you get 15 days

cool. I'd like to take off December 8 to 15

approved, enjoy. you have 8 more days available

Instructions: "you are an HR agent, helping employees understand HR policies and manage vacation time"

HR Knowledge Base

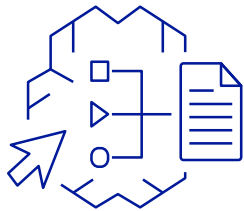
Vacation Policy
Contains the entire vacation policy for the company

HR Actions

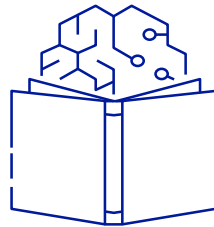
Request Vacation
In: start date, end date
Out: approval status, remaining balance

Agents are secure

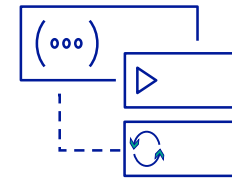
Agent



Knowledge Base

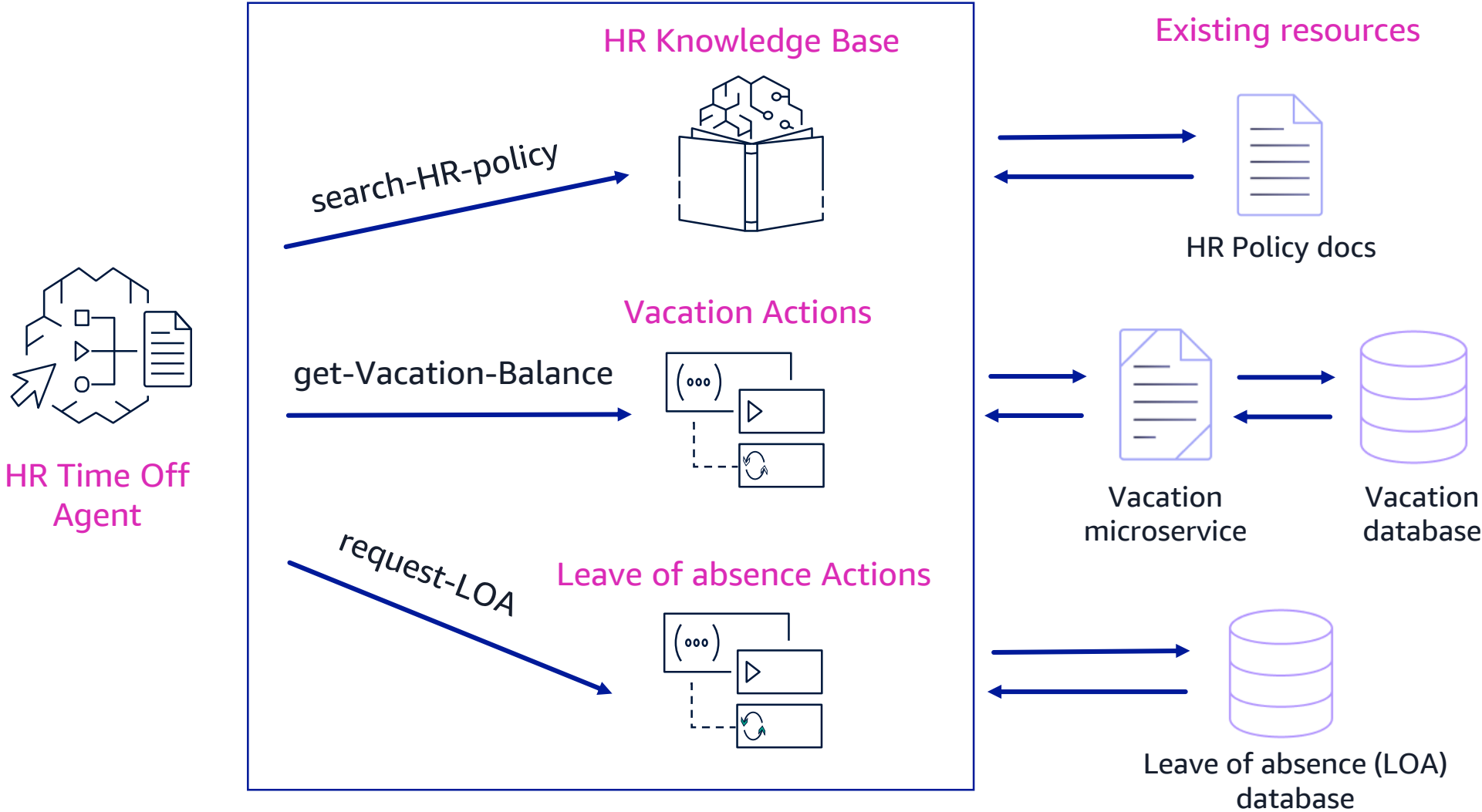


Action group



- Each resource has its own IAM role
- Principals can be granted or denied access independently
- Builds on Amazon Bedrock model invocation security

Agents build on existing enterprise resources



Workshop

<https://s12d.com/sacld-workshop>



<https://s12d.com/sacld-workshop>



Workshop: Building Agentic Workflows on AWS


Workshop Access

- [Click here to join the Workshop Event](#)
- **Event access code:** TBD (if needed. Use the link above for one-click access)





Sign in via your preferred method

aws workshop studio 

Workshop Studio > Sign in

Sign in

Choose a preferred sign-in method

Email one-time password (OTP)

Enter your personal or corporate email to receive a one-time password

Login with Amazon

Login with your Amazon.com retail account

Amazon employee

Login with your Amazon Corporate account. Only for Amazon Employees.

© 2008 - 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved. [Privacy policy](#) [Terms of use](#)



Review the terms and join the event

aws workshop studio

Workshop Studio > Join event

Step 1
Enter event access code

Step 2
Review and join

Review and join

Event details

Name	Start time	Duration	Level
AWS General Immersion Day	9/23/2022 01:13 AM	12 hours	-

Description
AWS General Immersion Day

Terms and Conditions

Read and accept before joining the event

1. By using AWS Workshop Studio for the relevant event, you agree to the AWS Event Terms and Conditions and the AWS Acceptable Use Policy. You acknowledge and agree that are using an AWS-owned account that you can only access for the duration of the relevant event. If you find residual resources or materials in the AWS-owned account, you will make us aware and cease use of the account. AWS reserves the right to terminate the account and delete the contents at any time.
2. You will not: (a) process or run any operation on any data other than test data sets or lab-approved materials by AWS, and (b) copy, import, export or otherwise create derivate works of materials provided by AWS, including but not limited to, data sets.
3. AWS is under no obligation to enable the transmission of your materials through Event Engine and may, in its discretion, edit, block, refuse to post, or remove your materials at any time.
4. Your use of AWS Workshop Studio will comply with these terms and all applicable laws, and your access to AWS Workshop Studio will be automatically terminate if you do not comply with any of these terms or conditions.

I agree with the Terms and Conditions

Cancel Previous **Join event**

© 2008 - 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved. [Privacy policy](#) [Terms of use](#)



DC LD - Agentic AI Test <

Agentic Architecture using Amazon Bedrock

Introduction

Architecture Diagram and Flow

▶ Setup and configuration

▶ Creating the Knowledge Base

▶ Creating the agents

Update Lambda Configuration

Invoking the Agents

Running the GUI

Summary

▼ AWS account access

[Open AWS console \(us-west-2\)](#)

[Get AWS CLI credentials](#)

[Get EC2 SSH key](#)

Exit event

Event ends in 9 hours 45 minutes.

[Event dashboard](#) > [Agentic Architecture using Amazon Bedrock](#)

DC LD - Agentic AI Test

Event information

Start time

3/27/2025 12:02 PM

Duration

10 hours

Accessible regions

us-west-2, us-east-1

Description

DC LD - Agentic AI Test

Workshop

Title

Harnessing the power of Agentic AI Architecture

Complexity level

300

AWS services

Amazon Bedrock, Amazon RDS for PostgreSQL, AWS Lambda

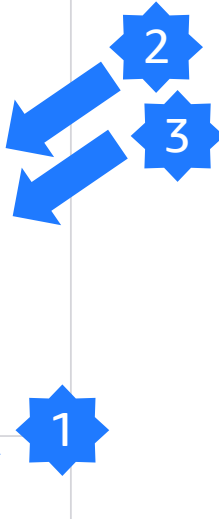
Topics

Machine Learning (ML/AI), Modernization, Serverless, Generative AI

[Get started >](#)

Description

By participating in this workshop, you will gain hands-on experience in building an AI-powered application with multiple agents that can: Comprehend and execute natural language commands. Reason through tasks and utilize appropriate tools. Interact with databases, external APIs, and knowledge repositories to perform the requested actions.





Thank you!

Mike Glover (he/him)

Sr. Solutions Architect
AWS
mrglover@amazon.com

Nick Kniveton (he/him)

Sr. Solutions Architect
AWS
kniveto@amazon.com

Please complete the survey
for this session



Track: AI / ML

Session: Building Agentic
Workflows on AWS

Coming up NEXT

3:15pm – 4:15pm

200
level

**Intelligent contact
centers**

Learn how AI can
modernize customer
service operations
and improve
satisfaction