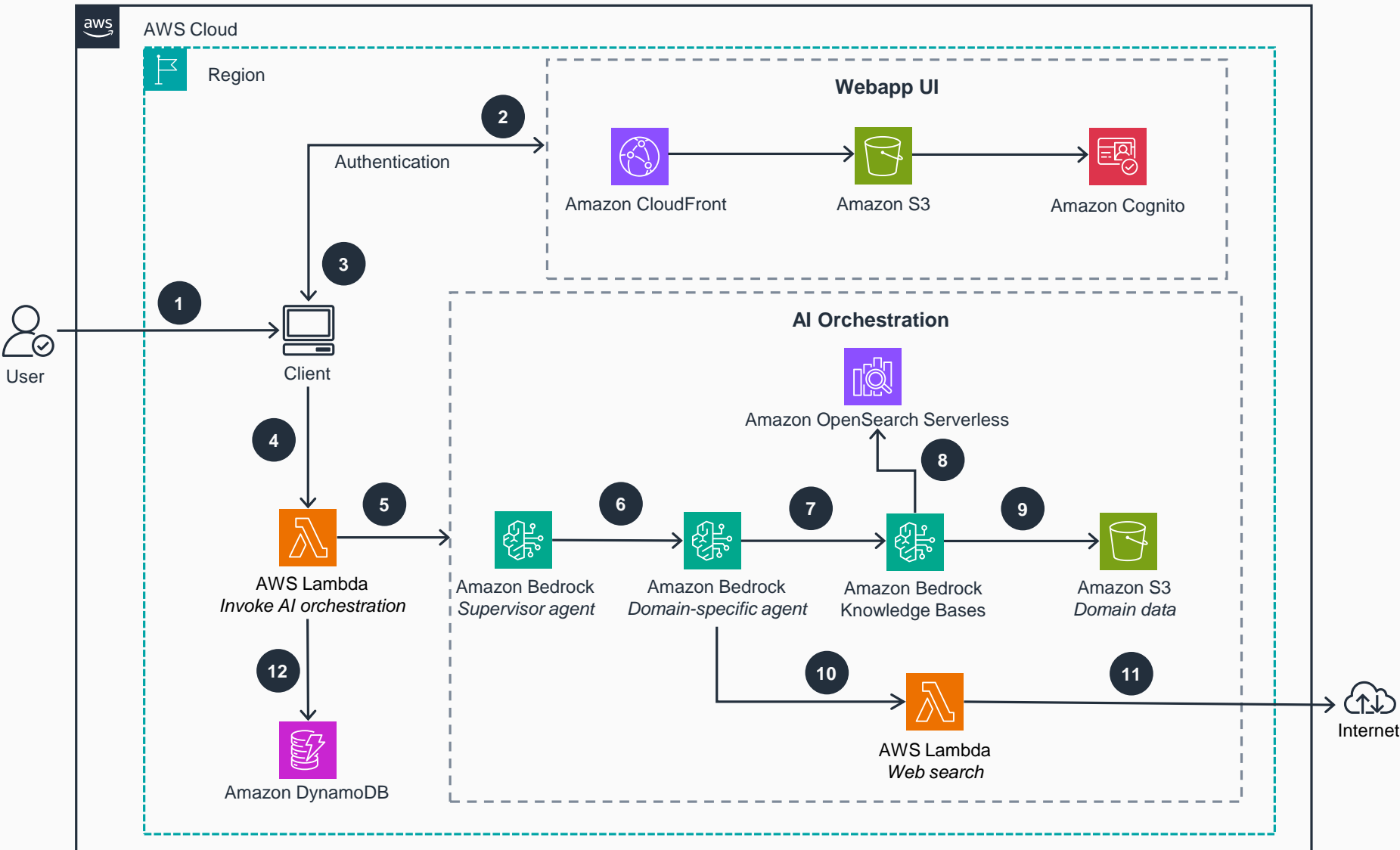


Guidance for Multi-Agent Employee Virtual Assistant on AWS

This architecture diagram shows how a virtual employee assistant can streamline internal communications, using AI to provide quick, cross-functional answers from various departments through a single chat interface.



- 1 The user accesses TeamLink AI, an **Amazon Bedrock**-powered virtual assistant, through their web browser to submit queries and receive instant cross-departmental information.
- 2 When the user accesses the application, **Amazon CloudFront** delivers the web interface content, helping ensure a smooth experience regardless of the user's location.
- 3 Behind the scenes, **Amazon Simple Storage Service (Amazon S3)** serves the static website content, while **Amazon Cognito** verifies the user's identity and permissions to access the system.
- 4 After the user submits their query, the client application triggers an **AWS Lambda** function that acts as the orchestrator for the AI processing workflow.
- 5 The **Lambda** function forwards the user's request to the **Amazon Bedrock** Supervisor Agent, which acts as the primary coordinator for processing the query.
- 6 The Supervisor Agent within **Amazon Bedrock** analyzes the query and directs it to the appropriate Domain-Specific Agent for specialized processing.
- 7 To locate relevant information, the Domain Agent queries **Amazon Bedrock Knowledge Bases**, the system's central information repository.
- 8 The system then uses **Amazon OpenSearch Serverless** to search through indexed documents for query-related matches.
- 9 During this process, **Amazon S3** provides access to domain-specific datasets that have been previously indexed in the OpenSearch system.
- 10 If the query requires external information, the system activates a **Lambda** Web Search function to expand the search beyond internal resources.
- 11 **Lambda** web search queries the internet for additional data if needed, using Tavily API.
- 12 Throughout the interaction, **Amazon DynamoDB** maintains a record of the entire conversation between the user and system.