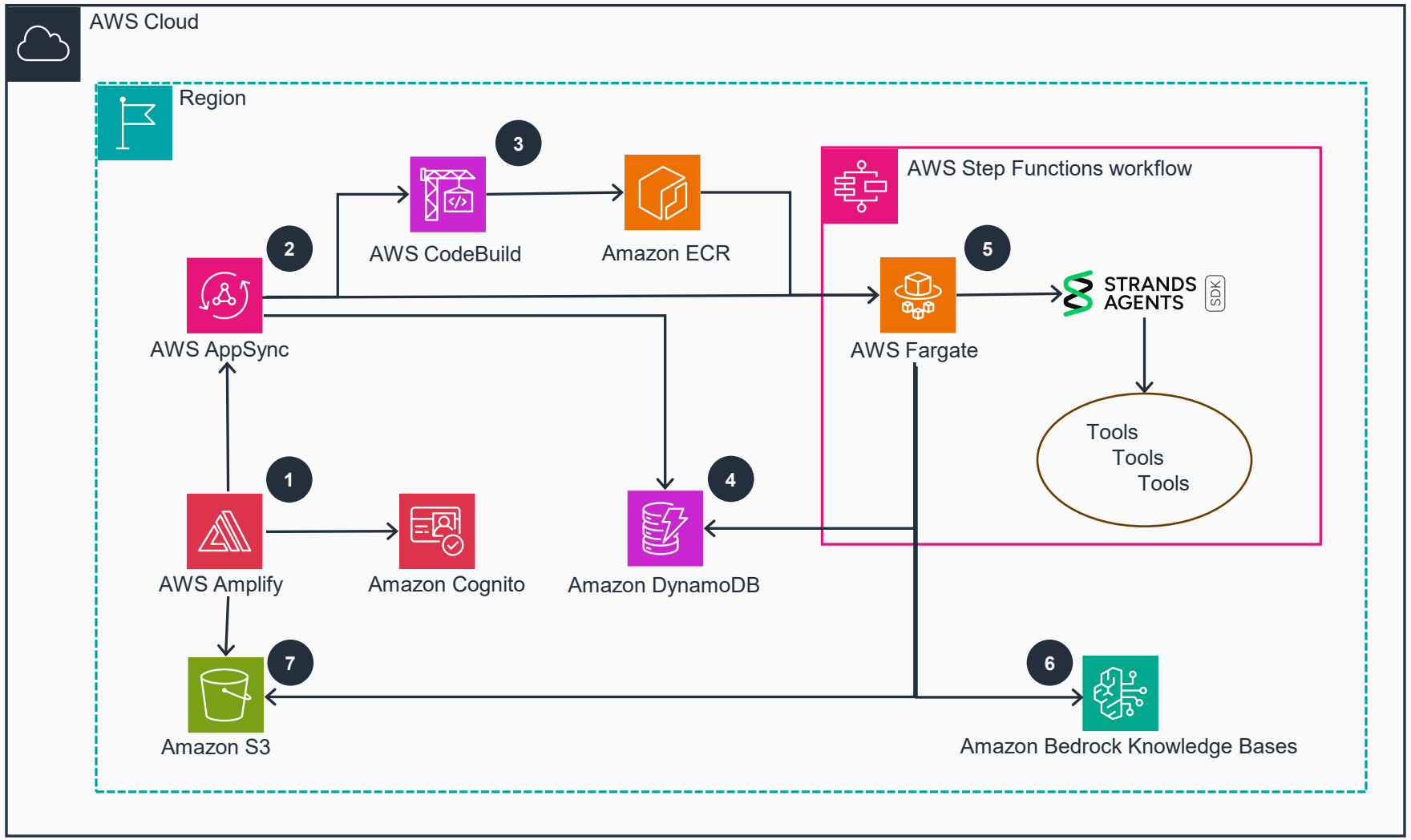
Guidance for Intelligent Legacy to SaaS Application Migration

The guidance aims to help customers create or use AI-powered tools to accelerate their migration assessment processes while providing transparency and justification for the decisions made.



1. Users access a user interface hosted on **AWS Amplify**, authenticate via **Amazon Cognito**, and configure the S3 URI path for the migration assessment target location.
2. Using **AWS AppSync**, users inspect the workflow code through the Workflow Builder interface, reviewing the logic that will be executed by Strands Agents in an **AWS Fargate** container. Once validated, users initiate a Docker build process.
3. **AWS CodeBuild** executes the Docker container build job and, upon successful completion, pushes the image to **Amazon ECR**.
4. Throughout the process, configuration details, build image locations, and related metadata are stored in a **DynamoDB** table. Downstream systems, including the Strands Agents, reference this data during assessments.
5. With all assets in place, users trigger an assessment job from the UI, which launches an **AWS Fargate** task to run the Strands Agents.
6. The Strands Agents execute the code built from the Workflow Builder, querying **Amazon Bedrock Knowledge Bases** to retrieve relevant documentation and contextual information as needed.
7. The assessment completes when **AWS Fargate** writes reports and results to JSON files, saving them to the **Amazon Simple Storage Service (Amazon S3)** bucket accessible to the frontend. Users can then review the assessment results through the UI.

Reviewed for technical accuracy October 28, 2025

AWS Reference Architecture