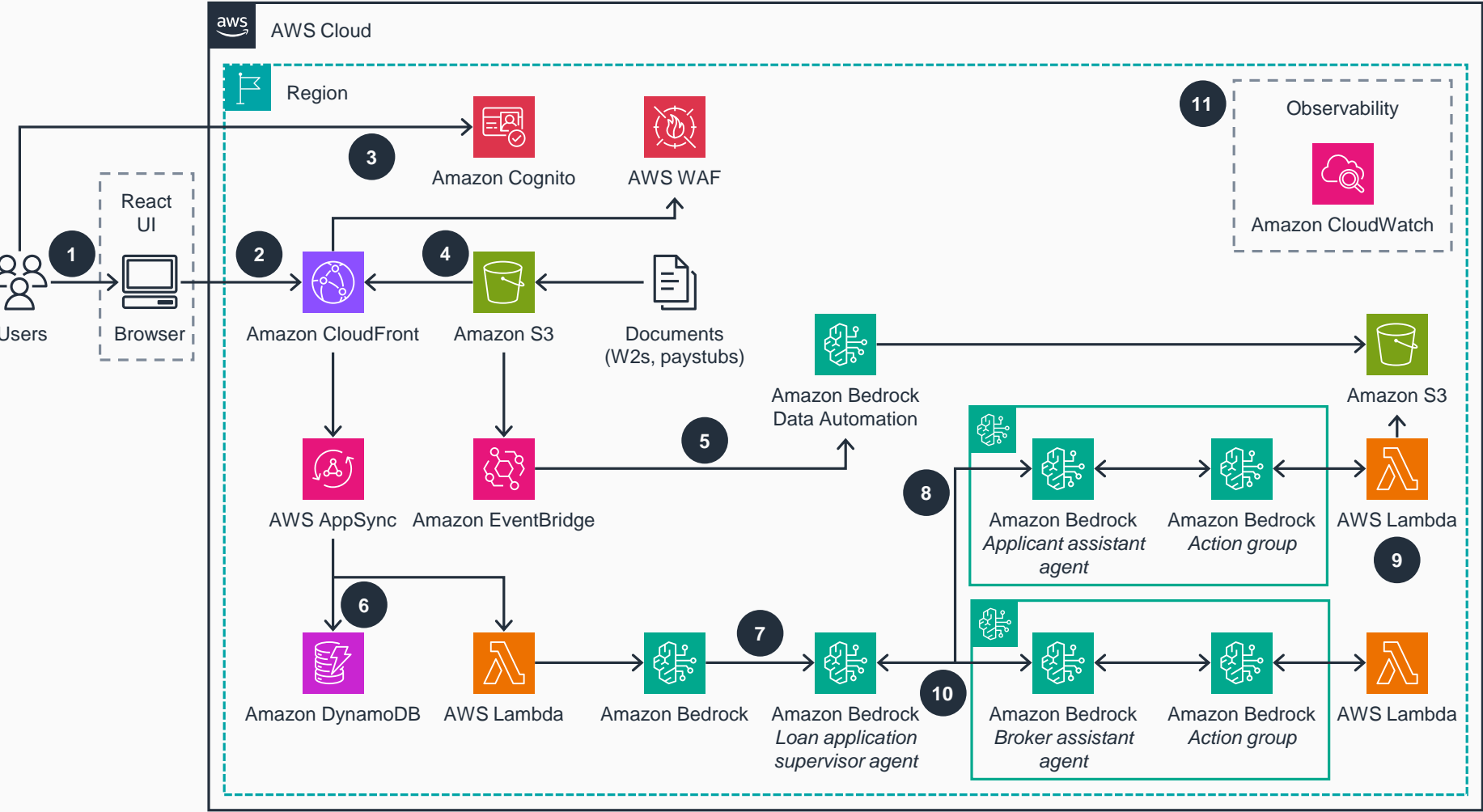


# Guidance for Intelligent Document Processing Agents on AWS

This architecture diagram shows a secure way to automate loan application workflows for both applicants and brokers by using generative AI with Amazon Bedrock.



- 1 The user initiates their journey by accessing the web UI through their web browser.
- 2 **Amazon CloudFront** handles the content delivery, ensuring optimal performance across different geographical locations.
- 3 The user authenticates through **Amazon Cognito** to the web app while **AWS WAF** protects against malicious activities.
- 4 The user can interact using a static web app hosted on **Amazon Simple Storage Service (Amazon S3)**, where they can upload required documentation to **Amazon S3**.
- 5 **Amazon Bedrock Data Automation**, invoked by **Amazon EventBridge**, begins processing and analyzing the submitted documents for relevant information extraction.
- 6 **AWS AppSync** manages the user's interactions with **AWS Lambda** resolver and **Amazon DynamoDB**.
- 7 **Amazon Bedrock** multiagent collaboration orchestrates the agentic workflow. The supervisor agent oversees the entire process, monitoring both applicant assistant agent and broker assistant agent, routing requests correctly through each stage.
- 8 The supervisor agent routes the user's requests to the applicant assistant agent to verify documents and manage the data collection.
- 9 The applicant assistant uses action groups with tools to calculate the debt-to-income ratio and generate the application summary, then saves the application result to **Amazon S3**.
- 10 The broker assistant agent processes the application based on the collected information and predefined criteria, then generates a preapproval letter for the loan application.
- 11 **Amazon CloudWatch** provides comprehensive monitoring and logging across the entire system, as well as tracking of all components.