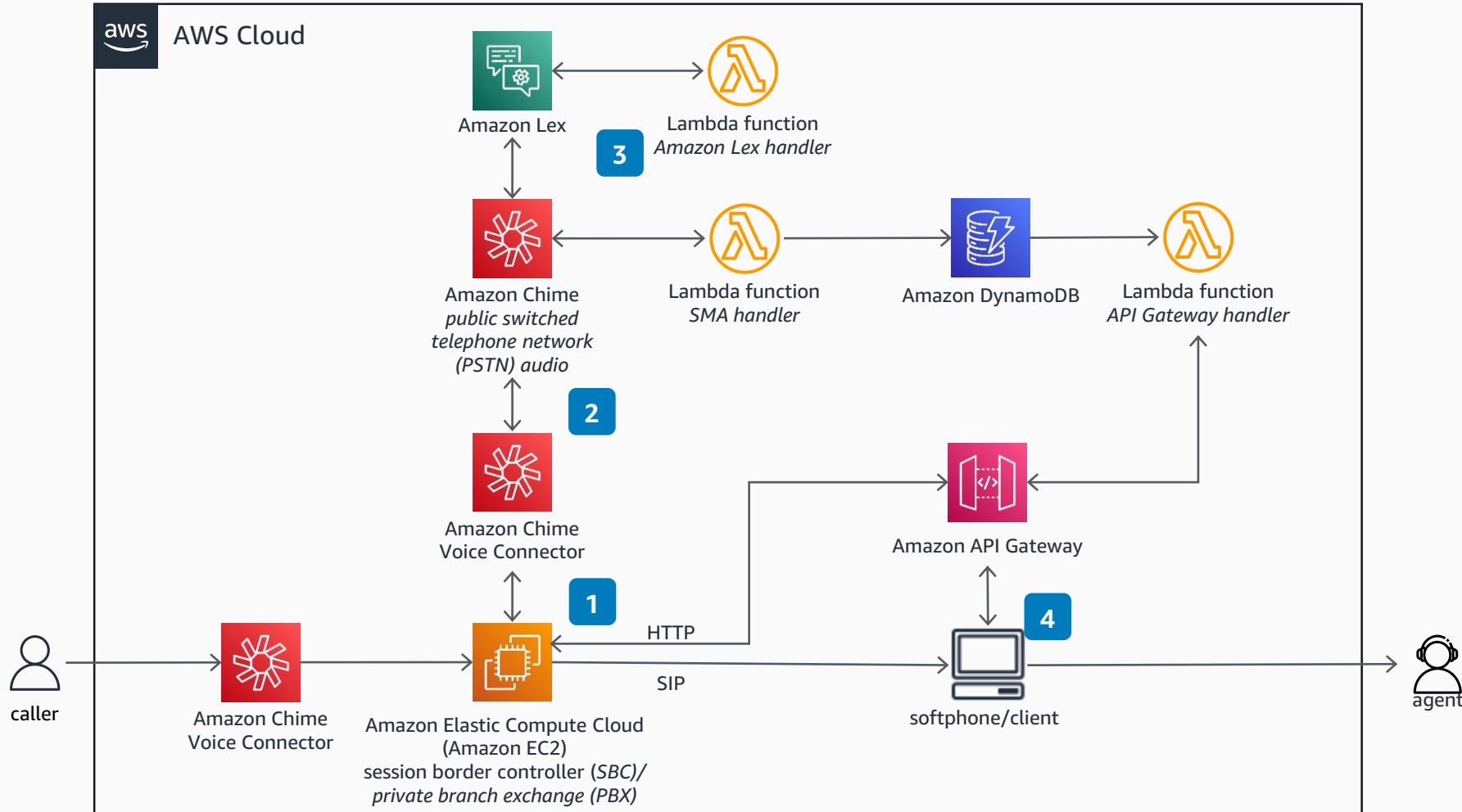


Guidance for Self Service with Virtual Assistants on AWS

Apply conversational artificial intelligence and machine learning (AI/ML) technology to power chatbots and enhance interactive voice response (IVR) to understand a customer's intent and allow them to self-serve easily, anytime, and without the need for live agent assistance.



- 1 A phone number is acquired through **Amazon Chime SDK**, which is associated with a contact center. Caller audio is routed through **Amazon Chime Voice Connector** by using Session Initiation Protocol (SIP), which initiates the **Amazon Chime SIP media application (SMA)**.
- 2 The **Amazon Chime SMA** notifies **AWS Lambda**, which stores call information in an **Amazon DynamoDB** table and starts the **Amazon Lex** chatbot/voice experience.
- 3 The conversation starts with the caller interacting with **Amazon Lex** to understand intent and capture caller information.
- 4 **Amazon Lex** returns call processing to the **Amazon Chime SMA** along with full results to the contact center for disposition or call routing to an agent if required.



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AWS Reference Architecture