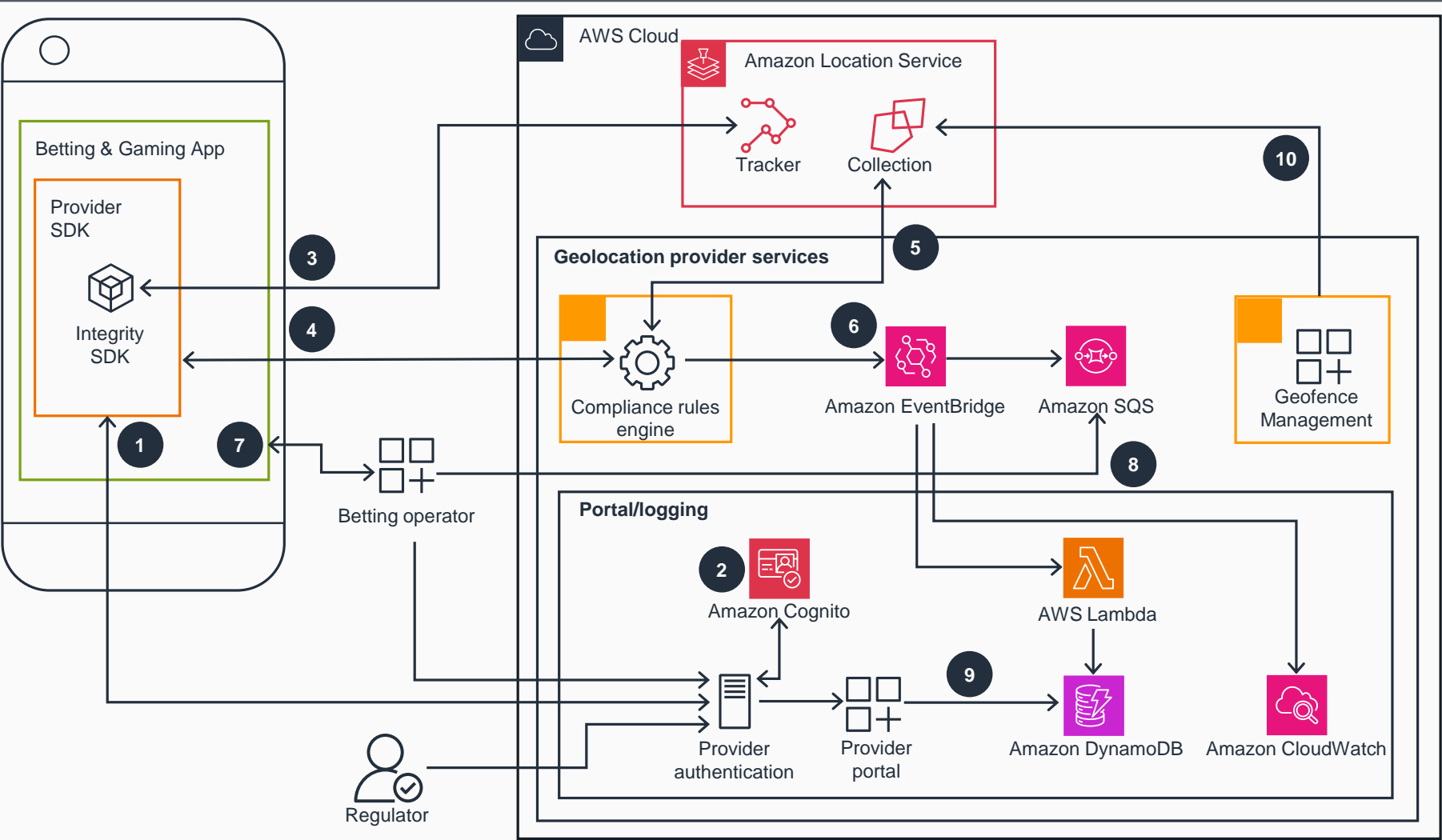


Guidance for Building Geolocation Systems for the Betting & Gaming Industry on AWS

This architecture diagram shows how gaming service providers can use AWS to build a geolocation verification system tailored for betting and gaming operators.



- 1 The provider's software development kit (SDK) calls the provider's authentication service to authenticate and/or register users.
- 2 The provider's authentication service calls **Amazon Cognito** to retrieve temporary credentials, granting users the ability to update their location.
- 3 The Integrity SDK, within Provider's betting and gaming app, performs device integrity checks and sends device location to the **Amazon Location Service** to determine device position.
- 4 The provider's SDK sends location data to the compliance rules engine (CRE) built by the provider. The provider uses the CRE to determine if bets are allowed based upon location data and other evaluations.
- 5 The CRE sends location data to **Amazon Location**, retrieves a list of geofences previously uploaded by the provider, and receives geospatial evaluation. If the CRE determines bets are allowed, it sends an expiring token back to the device.
- 6 The CRE forwards device wager eligibility and location data to **Amazon EventBridge**. **EventBridge** forwards data to **Amazon Simple Queue Service (Amazon SQS)** for distribution to the betting operators. Data is sent through **AWS Lambda** to **Amazon DynamoDB** to support the provider portal and to **Amazon CloudWatch** for logging and monitoring.
- 7 Upon a wager attempt, the provider's app checks for a valid token. If confirmed, it forwards the wager to the betting operator.
- 8 The betting operator receives messages from the provider's **Amazon SQS** endpoint to determine compliance posture prior to allowing wagering.
- 9 A secure provider portal using the provider's **DynamoDB** provides auditing information to the betting operator and regulator.
- 10 The geofence boundary management is maintained by the Provider, who updates their **Amazon Location** geofence collection.