OPERATIONAL ANALYTICS

Analytics in 15

Event Detection with Amazon MSK and Kinesis Data Analytics

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What are we covering today?

- ❑ Why? / What challenge are we solving
- ❑ Architecture
- ❑ Overview of Solution Components
- ❑ Demo

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Challenge Statement

Gaming establishments like to offer incentives to their frequent customers to stay in their casino and catch cheaters

- How can we perform analysis on near real-time data to find who the casino wants to offer an incentive; i.e. free meal?
- Given the flurry of activity, how can we identify cheaters?
- And so on… streaming analytics -- to keep the lucrative games running smoothly, how do we know when a table needs additional chips?

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How?

- Streaming analytics in Kinesis Data Analytics Studio using events in Apache Kafka (MSK)
- Mainly SQL *and a little Python too*
- There's much more – Kinesis Data Analytics, Lambda, SNS, S3, Athena if you are interested

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Amazon MSK

- A fully managed, highly available, and secure service for Apache Kafka (Provisioned and Serverless)
- Multiple authentication options including SASL/SCRAM, Mutual TLS, and IAM
- See also MSK Connect service (managed Kafka Connect) to support easy integrations with other data sources and destinations

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Amazon Kinesis Data Analytics Studio

- A fully managed, serverless service powered by Apache Zeppelin and Apache Flink
- Allows for analytics and visualization of streaming data in a notebook-based experience + promote to Kinesis Data Analytics app
- Can perform filtering, transformations, aggregations all from a SQL-based interface
- Can use Apache Kafka/MSK and Amazon Kinesis Data Streams natively as sources and sinks

aws

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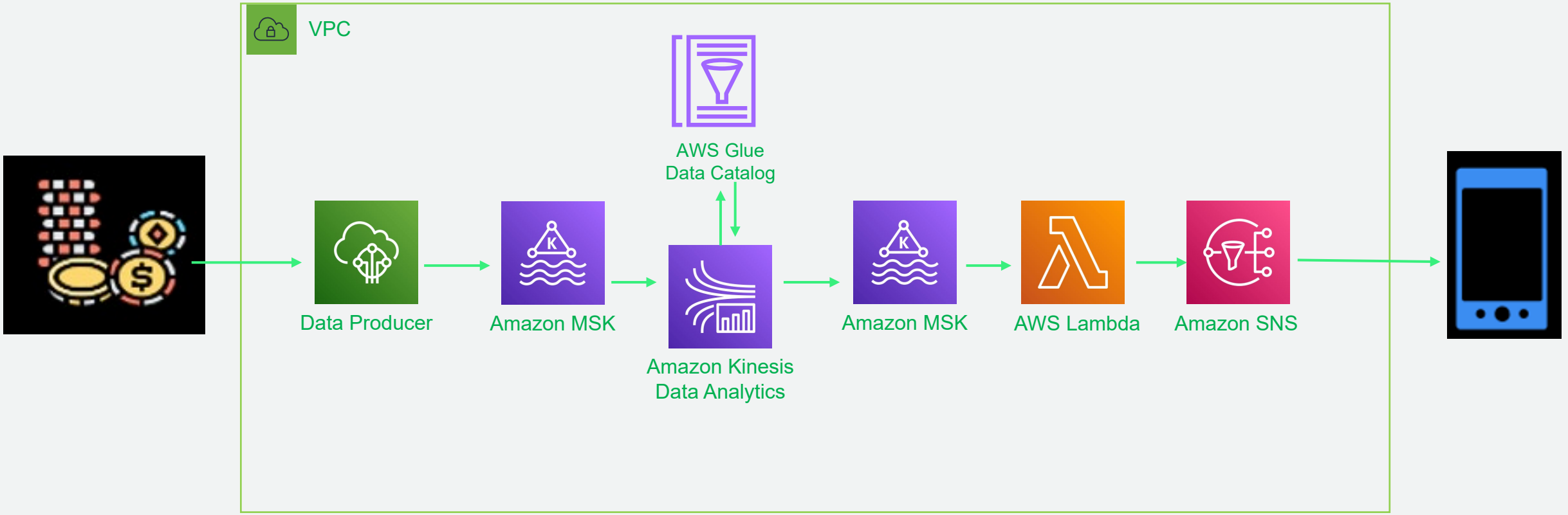
Architecture



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Demo

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Try it today!

s12d.com/msk-with-kda

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Thank you!

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