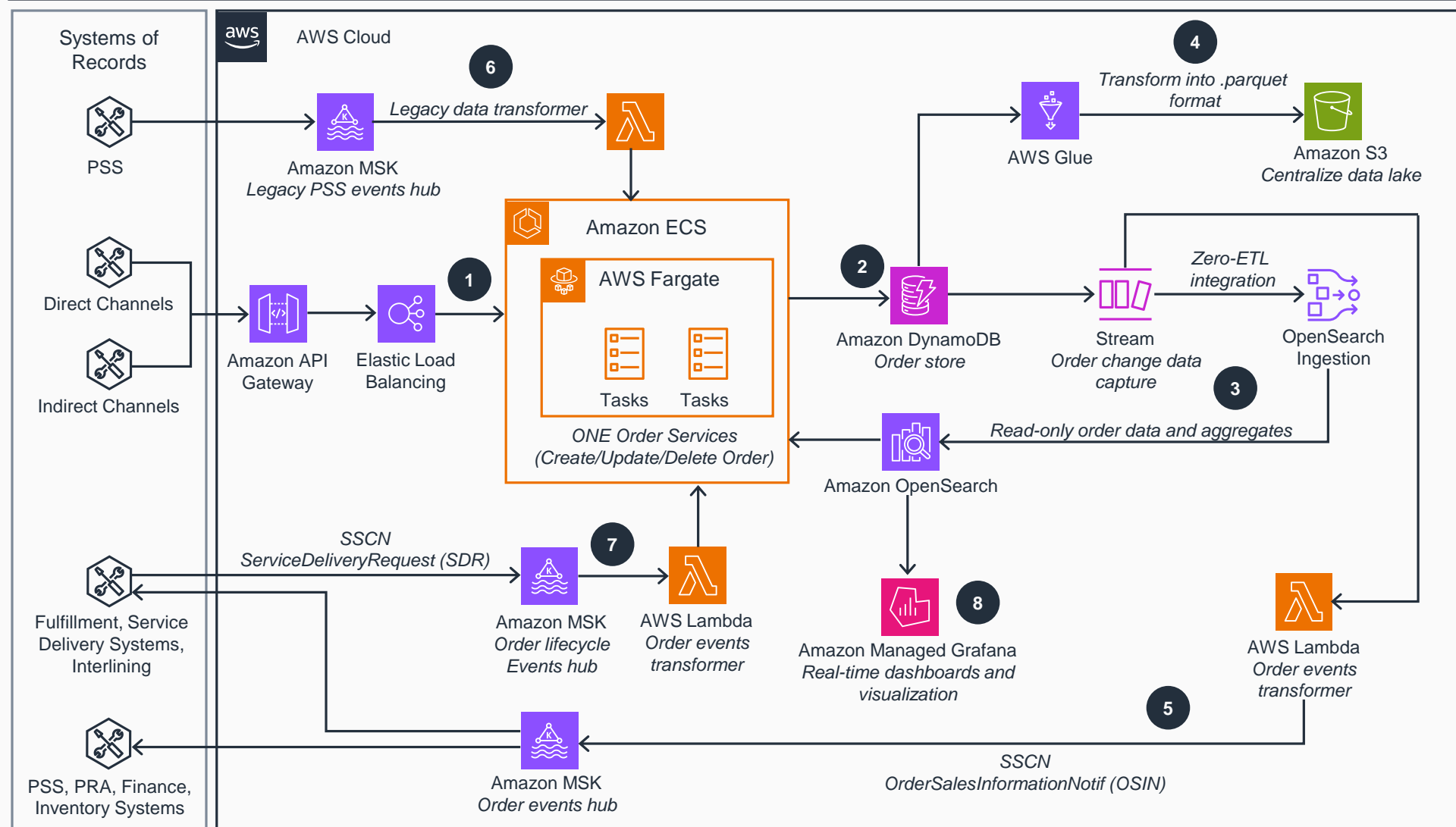


Guidance for Building Airline Order Management Systems on AWS

IATA ONE Order-compliant

This architecture diagram shows how airlines can implement an IATA ONE Order-compliant solution on AWS, leveraging cloud-native services to unify customer data, streamline order management, and enhance operational efficiency.



- 1 Deploy the order services as containers on **Amazon Elastic Container Service (Amazon ECS)** using **AWS Fargate**, and expose the endpoints using **Amazon API Gateway** with traffic routed through **Elastic Load Balancing (ELB)**.
- 2 Emit order lifecycle events (create/update) to **Amazon DynamoDB** for persistent storage.
- 3 Capture order changes in real time using **DynamoDB Streams** and ingest them into **Amazon OpenSearch Service** using zero-extract, transform, load (ETL) integration for search and aggregation.
- 4 Export order data from **DynamoDB** to **Amazon Simple Storage Service (Amazon S3)** using **AWS Glue** for reporting and historical analysis.
- 5 Transform order events with **AWS Lambda** and stream them to passenger service system (PSS), passenger revenue accounting (PRA), finance, fulfillment, and delivery using **Amazon Managed Streaming for Apache Kafka (Amazon MSK)**.
- 6 Process and transform the PSS messages, such as passenger name record (PNR), electronic ticket (ETKT), electronic miscellaneous document (EMD), or departure control system (DCS) changes, with **Lambda**. Update the **DynamoDB** order store.
- 7 Ingest *ServiceStatusChangeNotif* (SSCN) and *ServiceDeliveryNotif* (SDN) messages from fulfillment and delivery companies using **Amazon MSK**. Process them with **Lambda**, and update the order store.
- 8 Visualize real-time order data with dashboards and metrics using **Amazon Managed Grafana**.

