**Mendix Cloud (aPaaS): Cold Chain Logistics Powered by Mendix and AWS**

Build low-code applications that are seamlessly integrated with AWS using Mendix connectors to connect with AWS services such as AWS IoT Core to monitor and control IoT devices and many other services to process exceptions and notify users. Use the Mendix purpose-built Amazon Rekognition connector to automate quality inspections.

Mendix Cloud is a cloud-native application platform as a service (aPaaS) optimized for Mendix applications. Mendix Cloud runs in its own AWS account. Mendix abstracts complexity of managing underlying hosted AWS resources (Amazon S3, Amazon Relational Database Service (Amazon RDS), and so on). Mendix is available in different AWS Regions. Customers can launch services on their own AWS accounts. Telemetry messages from IoT sensors are published to AWS IoT Core, where they processed according to custom rules, and forwarded into the backend service structure. The information from the external systems is then fed into the Amazon S3 data lake. Mendix connectors for IoT enable publishing and subscription to IoT devices using the MQTT protocol. The Mendix application can include condition-based logic to control actuators by updating a device shadow.

Amazon Timestream stores time series data from IoT sensors and optimizes it for fast analytical queries. The Mendix app can use a database connector (JDBC) to query records. AWS Glue data lake is used as a backend database engine for systems which requires large amount of data processing with high performance. The information from the external systems is then fed into the Amazon S3 data lake. Amazon Athena acts as the front door for applications to access data, business logic, or functionality from your backend services. Any Amazon service that supports REST API can be called inside Mendix and authenticated using Signature V4. Use Amazon Athena to retrieve and analyze data inside a customer data lake using standard SQL. Amazon DynamoDB is used as a backend database engine for systems which requires large amount of data processing with high performance.
Mendix for Private Cloud: Cold Chain Logistics Powered by Mendix and AWS

Build low-code applications that are seamlessly integrated with AWS, by using Mendix connectors to connect with AWS services such as AWS IoT Core to monitor and control IoT devices and many other services to process exceptions and notify users. Use Mendix's purpose-built Amazon Rekognition connector to automate quality inspections.

AWS Cloud – customer account

Mendix for Private Cloud is the only low-code platform that supports the full application lifecycle on Kubernetes. Simplify application and data lifecycle management with the Mendix Operator. Securely connect to the Mendix rich low-code development toolset with the Mendix Gateway. To deploy apps to your private Amazon EKS cluster, the cluster must be registered in the Mendix private cloud portal.

Telemetry messages from IoT sensors are published to AWS IoT Core, where they are processed according to custom rules and forwarded into the backend service structure.

The information from the external systems then feed into the Amazon S3 data lake.

Mendix connectors for IoT enable you to publish or subscribe to IoT devices using the MQTT protocol. The Mendix application can include condition-based logic to control actuators by updating a device shadow.

Amazon Timestream stores time series data from IoT sensors and optimizes it for fast analytical queries. The Mendix app can use a database connector (JDBC) to query records.

Mendix AWS and S3 connector allows you to upload, modify, and delete any unstructured data and files inside the app, and back up any data for long-term storage or reporting purposes.

The Mendix database connector allows you to easily incorporate your external databases directly in your Mendix app using a JDBC driver.

The Amazon Rekognition connector provides the microflows for using Amazon Rekognition to analyze images.

Mendix AWS and SNS connector provide the ability to explore topics through the UI, and publish messages to topics, including message attributes.

Amazon API Gateway acts as the front door for applications to access data, business logic, or functionality from your backend services. Any Amazon service that supports REST API can be called inside a Mendix application. API requests signed using AWS Signature V4.

Use Amazon Athena to retrieve and analyze data inside a customer data lake using standard SQL.

Amazon DynamoDB is used as a backend database engine for systems which requires large amount of data processing with high performance.