



Smart Farm on AWS Architecture

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5. Derive real-time insights with **Amazon Managed Service for Apache Flink** and notify users via **Amazon Simple Notification Service**.
6. Enable analytics with **OpenSearch** and use **Amazon Simple Storage Service** for a data lake strategy.
7. Transfer owned data, like planting records or farm finances, securely into your data lake with **AWS Direct Connect**.
8. Securely consume data from a sensor ecosystem hosted on AWS with **AWS PrivateLink**.
9. Empower users with insights delivered via **Amazon API Gateway** or visualizations with **QuickSight**.
- 10 Build and deploy machine learning (ML) models for edge inference with **Amazon SageMaker AI**. Use **Amazon SageMaker Ground Truth** to manage data labeling workflow.
- 11 Each time a new file is written into **Amazon S3**, **AWS Glue crawler** crawls the data to infer the schema and make it available into the **AWS Glue Data Catalog**. **Amazon Athena** does on-demand querying.
- 12 Use a **Lambda** function that imports the **AWS IoT Device Defender** reports into **AWS Security Hub** to centralize incident response.

## Download editable diagram

To customize this reference architecture diagram based on your business needs, [download the ZIP file](#) which contains an editable PowerPoint.

## Create a free AWS account

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Sign up for an AWS account. New accounts include 12 months of [AWS Free Tier](#) access, including the use of Amazon EC2, Amazon S3, and Amazon DynamoDB.

## Further reading

For additional information, refer to

- [AWS Architecture Icons](#)
- [AWS Architecture Center](#)
- [AWS Well-Architected](#)

## Diagram history

To be notified about updates to this reference architecture diagram, subscribe to the RSS feed.

Change	Description	Date
<a href="#">Initial publication</a>	Reference architecture diagram first published.	October 24, 2022

### Note

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