

## How To Deploy Zoomdata Big Data Analytics And Visualization On AWS Data Lake

# Deriving insights from Data with Zoomdata and a Data Lake on AWS

Data and the insights that can be gleaned from it have become the lifeblood of today's data-driven businesses. Organizations rapidly gather, store, and analyze huge volumes of structured, semi-structured, and unstructured data from a variety of sources. It's imperative to rapidly analyze this data for timely insights. With the advent of data lakes and modern BI, businesses can now achieve this.

To meet the needs of a data-driven business, the data lake - a modern and flexible data storage solution - has emerged. The data lake, defined as a central repository for data regardless of its structure, is increasingly recognized as the best way to accomplish these tasks, and Amazon Web Services (AWS) is quickly distinguishing itself as the leader in data lake infrastructure. But infrastructure is just part of the equation when it comes to unlocking the valuable insights held in a company's data. Just as infrastructures have grown and adapted to modern business demands, so must the analytics tools and business intelligence platforms used to tap into the secrets held within the data lake. Zoomdata Modern BI solution for data lakes on AWS delivers blazing-fast visual analytics for structured, unstructured, and streaming data by connecting directly to AWS and other third-party data sources.



Strong security and data governance

#### Why build data lake on AWS

- Store data of any size in Amazon Simple Storage Service (Amazon S3)
- Ingest data of any kind with Amazon Kinesis, Snowball, Direct Connect, and more.
- Easily encrypt all the data
- Leverage AWS security and compliance

## Why visualize with Zoomdata Modern BI tool?

- Fast visual analytics for structured, unstructured, and streaming data
- Analyze data in place with Smart Connectors for AWS data sources
- Unmatched speed delivers analytics for 10B+ rows of data in seconds
- Simple procumbent model through AWS Marketplace

#### Zoomdata is Modern BI for AWS Data Lakes

## AWS Data Lake Solutions

AWS provides many of the building blocks required to implement a secure, flexible, and cost-effective data lake. It offers a prepackaged <u>Data Lake Solution</u> based on AWS Cloud Formation Templates that automatically configure the needed core services. Within minutes, you can deploy a completely serverless data lake architecture with all data stored in managed AWS services and processed via Lambda-based microservices.

You can use a series of templates to configure your data lake's core AWS services such as AWS Lambda services and Amazon Cognito for user authentication. The AWS Data Lake Solution leverages the security, durability, and scalability of Amazon S3 to manage a persistent catalogue of organizational data sets. Amazon DynamoDB manages the corresponding metadata. Once a data set is catalogued, you can search and browse available data sets from the data lake console and select them for analysis. Then you can securely check out the data set and expose it to your analytics tool. Because a variety of data structures can be housed in the AWS data lake, it's important to use an analytics tool that can work with them quickly and easily.



How various components form a complete data lake solution.

## Zoomdata is Modern BI for AWS Data Lakes

Creating a data lake on AWS results in a fantastic data repository, but the business value of its data can best be realized with the addition of a modern BI solution. Zoomdata is that modern BI solution because it is extremely fast, secure, and built to handle any type and size of data. Zoomdata natively connects to all AWS data services while Zoomdata Fusion transparently incorporates most third-party data sources. Zoomdata is an ideal choice for AWS-based data lake customers seeking to leverage the insights provided by modern BI, either as a standalone solution or embedded in their offerings.

Zoomdata is the quintessential modern BI tool because it:

- Accesses data with extreme speed using micro-queries and data sharpening.
- Blends on-the-fly data from multiple data sources via Zoomdata Fusion.
- Seamlessly connects with a wide range of modern and traditional data sources using the Zoomdata Smart Connector Framework.

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- Offers business users a self-service, mobile-friendly user experience.
- Lets users quickly and easily interact with data and visualizations at the speed of thought.
- Provides a Data DVR to visualize and control data streaming in real time.

## What makes Zoomdata unique for AWS Data Lake

Zoomdata's innovative and forward-thinking architecture helps businesses analyze data in place to facilitate data discovery and exploration while preserving security and data governance.

#### **Extreme speed**

Zoomdata overcomes the challenges of analyzing massive data sets with streaming micro-queries and high-definition data sharpening: instead of sending one big SQL statement, Zoomdata executes smaller micro-queries and sharpens visualizations as the results of each stream from the source, showing instant results so users can act immediately.

#### Analyze data in place

Analyzing data in place enables Zoomdata to draw from multiple sources without the need to make a separate copy. Business users have a browser-based, self-service environment in which to analyze and visualize combinations of data streams and AWS data without waiting for periodic batch updates. Real-time analysis is a major benefit of working with data in place.

#### Strong security and data governance

Zoomdata can discover, explore, analyze, and visualize different types of data in place, without the need to make a copy. Moving and copying data has the potential to break security. It's best to keep data in a AWS data lake, where it is already secure.

#### Self-service

Zoomdata enables self-service data discovery, exploration, analytics, and visualization on AWS data lakes. Analyzing data in-place eliminates the need for IT involvement and provides business users with a simple, intuitive, and collaborative way to visually interact with data to make data-driven decisions. Zoomdata extends self-service BI and analytics to a wide range of mobile, touch, and legacy devices anywhere, at any time.

#### **Real-time interaction**

Business users interact intuitively with Zoomdata to quickly and easily visualize real-time, historic, and unstructured data. Business users get seamless visualization of real-time and historical data using Zoomdata's patented Data DVR technology. Zoomdata Data DVR allows business users to pause, rewind, and replay visualizations of streaming data and compare streaming data captured at different times.

### Get started today.

New to big data analytics or just want to try Zoomdata on AWS? No worries. We created a free and easy way to get started. Visit the Amazon and Zoomdata Cloud Trial Page to get started: <a href="https://www.zoomdata.com/awstrial">www.zoomdata.com/awstrial</a>

### **Contact Us**

If you have any questions about this paper or the trials, please contact us aws@zoomdata.com

