Clinical Analytics Solution (CAS) on AWS

End-to-end clinical trial data management, from integration to visualization

Market trends and challenges

Data is the trusted currency of business for our customers and clients. Today’s businesses are at a tipping point where a variety of significant trends are leading to massive changes—called Data 3.0. Data is now a part of boardroom-level conversations, and the future of businesses depend on how effectively they can leverage their data assets. With an explosion in data volume, new users, new data types, and new cloud capabilities, gaining reliable, consistent, high-quality insight from clinical and trial data can be challenging to implement.

Deloitte’s solution

Deloitte’s Clinical Analytics Solution (CAS) is a collaborative effort between Informatica, Deloitte, and AWS to provide life sciences companies with a way to gather and clean the mountains of data that come from clinical trials using AI. Once cleaned, the data is run through a proven process to turn it into a usable format and stored in a proprietary model to allow for predictive reporting. A comprehensive dashboard is provided to allow immediate insight into results based on Deloitte’s extensive industry expertise.

Clinical SDTM data is ingested into an Amazon S3 bucket. Informatica Intelligent Cloud Services (IICS) transforms the clinical data into a usable format, and migrates it to an AWS Redshift Data Warehouse, paired with the Deloitte Research Trust data model. Users access data using pre-configured Tableau dashboards.

Solution benefits

Deloitte’s ready-to-use solution for cloud data management allows you to find insights from clinical and trial data.

- **Easily configurable**
  Reduce your time-to-market for enhancing features and capabilities

- **Self-service capabilities**
  Allow users to drive their own omnichannel, AI-enabled experience

- **Secure**
  Leverage an architecture that is based on industry best practices with patterns to protect sensitive data

- **Predictable pricing**
  Pay only for what you use with the per-consumption-based, predictable pricing model
Solution space

Discover scalable and secure solutions that will help empower you to achieve your business needs with Amazon Web Services (AWS) and AWS Partner Network (APN) Partners that have attained AWS Competency designations. Customer-ready solutions are based on architectures validated by AWS, include a combination of AWS services and APN Partner technologies, can be deployed quickly with solution accelerators like AWS Quick Starts, and feature optional consulting offerings provided by APN Partners to accelerate your cloud transformation.

Solution overview

Key features

**Ingest:** Convert files from a SAS Export (XPT) format into a standard CSV file, conduct header and column checks, and send automated notifications of any ingestion errors

**Integrate:** Apply out-of-the-box analytics and industry-specific data modeling using the Deloitte Research Trust Data Model on Amazon Redshift for downstream consumers and applications

**Catalog:** Leverage the Informatica Enterprise Data Catalog (EDC) to create comprehensive data lineages and explore an ever-increasing volume of data from a variety of sources

**Visualize:** Allow Deloitte to manage and maintain components of your contact center so you can spend more time improving the customer experience

Solution architecture

Deloitte’s Clinical Analytics Solution is pre-built, scalable, and resilient - leveraging AWS services such as Amazon S3 and Amazon Redshift. The solution is designed to use S3 as a Data Lake, integrate data using Informatica Intelligent Cloud Services (IICS) Cloud Data Integration and Apache Spark, migrate it into an Amazon Redshift Data Warehouse using Cloud Mass Ingestion, and visualize the data on pre-configured Tableau dashboards.

Get in touch

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