# Druid and Hospital Care



# **Executive Summary**

Hospital Care is a health plan GROUP with several hospitals spreaded throughout Brazil, where each unit has its own hospital ERP, besides several other medical area systems that need to be integrated with the corporate SAP.

The project consists of an integration bus between the several hospital systems, including hospital ERPs and SAP, including the creation of a data lake with all information transported between the hospitals and the headquarters.

## **Customer Challenge**

The client had the need to have detailed information of all events trafficked through the bus (purchases, expenses with clients, health plans, admissions, transfers, expenses with pharmacies, exams, laboratories, personnel: employees, third parties, security) in order to monitor and process mining these events, finding bottlenecks, redundancies and non-optimized flows.

As each hospital has its own proprietary systems and its own specific and unique data schemes, the main challenge was to transform them into standardized information that could be used centrally in the corporate ERP (SAP).

#### **Partner Solution**

Druid implemented an integration bus totally based on AWS Serverless solutions, using services such as EventBridge, Lambda, SQS, DynamoDB, API Gateway and others. For the Data Analytics solution, a Data Lake was implemented based on AWS S3, which contains all the events transacted between the several hospital management systems and SAP. With the information stored in S3 in a totally safe way because it contains, among other sensitive patient data, the AWS Glue service was used to catalog and transform the data in a standardized way to be consumed by the AWS Athena service.

Several dashboards were created using AWS QuickSight based on the views created by AWS Athena. In addition to the dashboards, several operational reports were created using AWS QuickSight and AWS Athena as a data source.

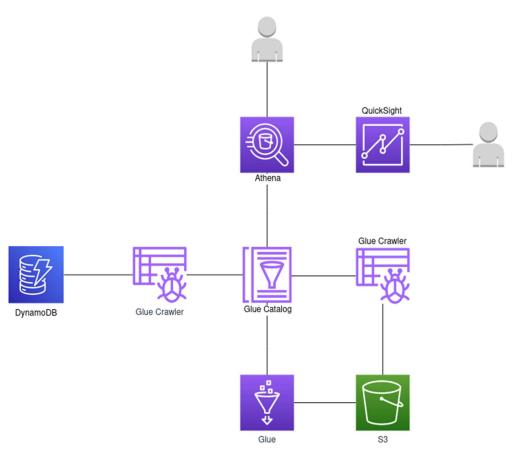
## **About Druid**

Druid is a technology company established in 1998 focusing on the development and integration of complex, high performance, and scalable systems.

We have delivered successful projects to dozens of customers. Our high skilled team already delivered more than 500 projects.

Since 2019, we are focusing on the AWS Cloud, enabling our clients to overcome the limitations of traditional on-premises business applications and unlock the power and flexibility of Cloud.





## **Results and Benefits**

One of the greatest results achieved was the consolidation of controls and reports, both technical and managerial, helping with decision making and discovering problems in internal processes. Maintenance costs were reduced by 70% by replacing the old systems with AWS services. In addition, Druid implemented the new middleware in record time.

## Conclusion

The cloud-based software tools that Druid and Hospital Care have created together are already helping to provide visibility and important insights into hospital management. Creating tools such these is not easy: it required a team of highly skilled and experienced engineers. However, by working together, the product was done. With this it was possible to create a complete healthcare system at your disposal, from examination labs, health plans and medical centers, and highly complex hospitals. We seek, through this union, to make the system fair for all involved, offering patients treatments focused on their well-being, to the health operators' fair values and no waste, to the collaborators dignified recognition and to the investors sustainable returns, favoring the whole chain through optimized and efficient management.