

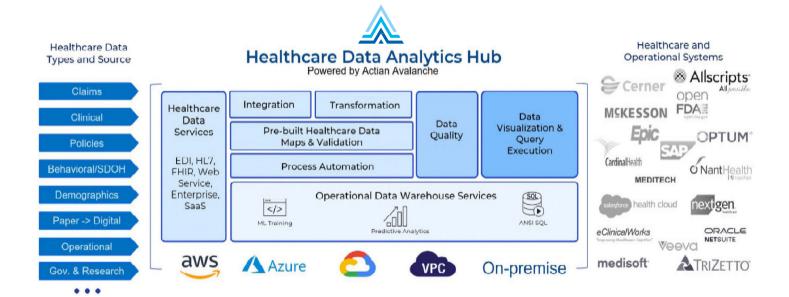
Actian Healthcare Data Analytics Hub

Data-Driven Analytics for Superior Value-Based Care and Payments

· Optimize Healthcare Data Value · Improve and Accelerate Insights · Reduce Costs and Streamline Ops

Actian's Healthcare Data Analytics Hub is an integrated, modular platform for accessing source data, integrating and automating data flows, running cloud data analytics, and using third-party visualization and reporting. Powered by the Avalanche Data Platform, the Healthcare Data Analytics Hub delivers:

- Self-Service data aggregation and analytics for non-IT super users (analysts, ops managers, data scientists, etc.)
- Visualization with seamless third-party BI integrations: Looker, Tableau, PowerBI, and more
- Support for new CMS interoperability mandates, combined clinical, operational, claims and SDOH data
- Insights from and optimization of claims processing and Revenue Cycle Management data
- The ability to proactively identify and address errors, abuse, and fraud
- Patient and partner experience platforms that embrace the consumerization of healthcare



Tailored for Use By

Data Engineers, Modelers and Scientists

Payer, Provider, and other Healthcare Industry Analysts

Healthcare Data Integration Support

Healthcare Standards

- FHIR, CDA, HL7v3, HL7v2
- EDI-X12 (834, 835, 837)
- REST, SOAP

Healthcare Data Coding, Models and Payloads

- HL7 CDA, CDM, OMOP, QRDA
- ICD-9, 10, HCPCS,
- SNOMED, LOINC, RxNorm
- JSON/XML

Industry Standard Data Integration Support

- RESTful APIs
- SOAP
- JDBC/ODBC
- Spark
- .NET
- JSON
- XMI
- Parquet, Avro, RCFile, ORCFile
- Drag-and drop data loading from
- delimited files e.g. .CSV, RDF

Visualization and BI Tools Support

- Looker
- Qlik
- PowerBlTableau
- ThoughtSpot
- MicroStrategy
- Cognos
- R Library
- Google Kubeflow
- Sisense

Security and Compliance

Fully HIPAA compliant, comprehensive security

- SOC 2 Type 2 compliance
- Column-level data masking and encryption
- Customer managed keys

Managed features

- Cloud Security Alliance member
- CIDR-based IP allow list
- Intrusion detection
- SIEM logging
- AES 256-bit data encryption
- SHA-1, -2, MD5
- Authentication integration with Google, AWS, and Azure
- Security patching

Compute Platform

Public Cloud

- Google Cloud
- Amazon Web Services
- Microsoft Azure

Private Cloud/On-Premises

- Microsoft Windows
- Linux (Major Distributions)
- VMware vSphere
- Docker Containers with Kubernetes Orchestration



Built-in Data Management Support

Data Processing

- Vectorized, MPP processing built for operational analytics workloads and scalability
- CPU caching
- Full ANSI SQL with UDF capabilities
- Query Results Caching
- Positional Delta Trees
- Smart compression
- Storage indexing

Data Repository Sources

- SQL stores (JDBC/ODBC, PostgreSQL, MySQL, DynamoDB)
- NoSQL stores (Cassandra, HBase, MongoDB)
- Columnar stores (Redshift, Vertica)
- Document-oriented stores (MongoDB)
- Hadoop and Hive
- File stores (Google Cloud Storage, Azure Blob Storage, Amazon S3, Amazon Elastic File System)
- File formats (CSV, JSON, Parquet, SequenceFile, Avro, RCFile, ORCFile)

Data Lake Sources

- Amazon S3
- Google Cloud Storage
- Azure Data Lake Storage
- Hadoop



