GoodData

GoodData Corporation

Empower your business users by bringing self-service analytics to their Amazon Redshift data

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What is Redshift?

Amazon Redshift is a fast, cost-effective data warehousing service that combines the best features of high-performance data warehouses with the unlimited flexibility and scalability of data lake storage. You can easily run analytic queries against data stored locally in Redshift or directly against data stored in Amazon S3. It is simple to set up, automates most of your administrative tasks, and delivers powerful performance at any scale.

Do you need to enable your business users, whether they're external or internal, with analytical and reporting features? Do you operate on Amazon infrastructure and prefer Amazon Redshift to collect your data? If your answer to both of these questions is yes, then stop exploring. You've just found the perfect solution. By combining Amazon Redshift-the most popular cloud data warehouse with powerful data integration options-and the GoodData platform, your users can get actionable insights out of the data they already have.

Your business users will immediately benefit from the reports and insights in your application, and they'll also be able to easily customize those reports to their needs and create their own. Yes, your users will be able to—not just those with advanced analytics skills and access to BI tools.

Instead, you'll be able to deliver these robust capabilities to your users' desktops, mobile phones, tablets-wherever they're using your product. After that, you'll find that your new analytical capabilities will spread like wildfire among your users. They'll engage with your product every day and help you to create a modern and truly data-driven product or portal.

Last but not least, the overall cost you'll pay for this state-of-the-art analytics is far less than what you pay today or were planning to pay.

Ready to get started? You can have the first reports in your product or portal in less than a month. Sound too good to be true? Read on and find out how we do it with our guided demos, tutorials, and trials, or get started with free version.

Powerful analytics

With GoodData, advanced analytics is readily available in an elegant, concise form. Moreover, the GoodData platform provides unmatched analytics reusability, so you can reuse existing reports and metrics to build new ones.

The shared semantics provided by the logical data model (LDM) ensures that all your users use the same shared data with common semantics. Basically, two users building the same report will always get the same numbers.

What is GoodData?

GoodData is a data analytics platform-as-a-service that enables organizations to deliver, evolve, and manage analytics for their customers, employees, partners, franchises, and other members of their business network. It is designed to deliver dashboards, self-service data exploration, and insights at the point of work—in products, business applications, and workflows. The highly scalable nature of this cloud-based platform ensures you won't outgrow your analytics investments.

The GoodData platform supports any data size-from a few megabytes to hundreds of terabytes-without compromising performance or inflating costs by leveraging multiple back ends to achieve the optimal price-performance ratio for your analytics. For example, 80% of your customers can use the cost-optimized back end, while the top 20% of your largest customers can use the performance-optimized (clustered, columnar) back end. Upgrading customers from the cost-optimized to performance-optimized back end does not require any changes in the solution implementation, a "build once, deploy everywhere" approach that eliminates the expense of hybrid implementations.

For common business users

GoodData's easy-to-use drag-and-drop functionality makes it simple for anyone to create reports, insights, and dashboards and customize their look and feel, interactions, and analytical properties.

GoodData tooling provides intelligent context-aware guidance for business users. It automatically hides the elements that can't be used in the current insight, suggests the next analytical step, and shortens the complex analytical setups-like period-over-period analysis or trending-to a single mouse click. Your users can instantly and securely share anything they create with their colleagues or your support or analytics teams.

This combination of analytics power and ease of use improves the business user's ability to perform self-service analytics. Your users can instantly create exactly what they need without waiting for your teams to deliver it, saving your product, development, and customer success teams from the tedious, repetitive tasks of customizing insights and dashboards for a specific customer.

At the point of work

GoodData platform can deliver dashboards, reports, and insights to all devices that your users regularly access. The GoodData UI is 100% browser based and dynamically adjusts to accommodate the screen size that your user has, whether that's desktop, tablet, or mobile. You simply develop a dashboard or insight once, and the GoodData UI takes care of rendering it in a way that fits the user's screen.

The GoodData.UI SDK allows your developers to granularly embed and control any dashboard, report, or insight in your web application with just a few lines of code. All of this is packaged in a nice, modern interface that you can completely customize and whitelabel to match the brand of your product or portal.

Zero setup and maintenance

GoodData platform is the only analytical service that guarantees availability SLAs. Like your product or portal, it is always on, day, night, business day, or weekend. This means that you don't need anyone to manage operations; GoodData takes care of running your solutions at a fraction of your overall operational costs.

The GoodData platform is a cloud service, so you can instantly provision the required capacity and bandwidth. All components of your solution are constantly elastically adjusted to fit your needs.

In addition, every aspect of the GoodData platform complies with the latest security standards. This commitment to security means that GoodData has never experienced any breach of customer data or personal information.

Enterprise Shield

Strong protection of your PII or otherwise sensitive data in GoodData platform. Fully controlled environment with tools that enhance trust, transparency, compliance, and governance.

HIPAA COMPLIANCE

AICPA SOC — AICPA Service Organization Control Reports — aicpa.org/soc — Formerly SAS 70 Reports ®

ISO 27001

EU GDPR

Seamless integration with Amazon Redshift

The GoodData platform can inspect your Amazon Redshift tables and generate the business analytical model (LDM) that your users are going to share to maintain consistency in their analytics.

The GoodData platform works in the opposite direction too. You can make a diff of the business analytical model with existing Redshift tables and safely create or modify the tables that will be automatically synchronized with GoodData.

GoodData's Automated Data Distribution (ADD) service handles the high-performance data synchronization between Redshift and GoodData. The ADD service supports full loads, incremental loads, advanced deletions, and many more actions that are required to keep data up-to-date for all customers.
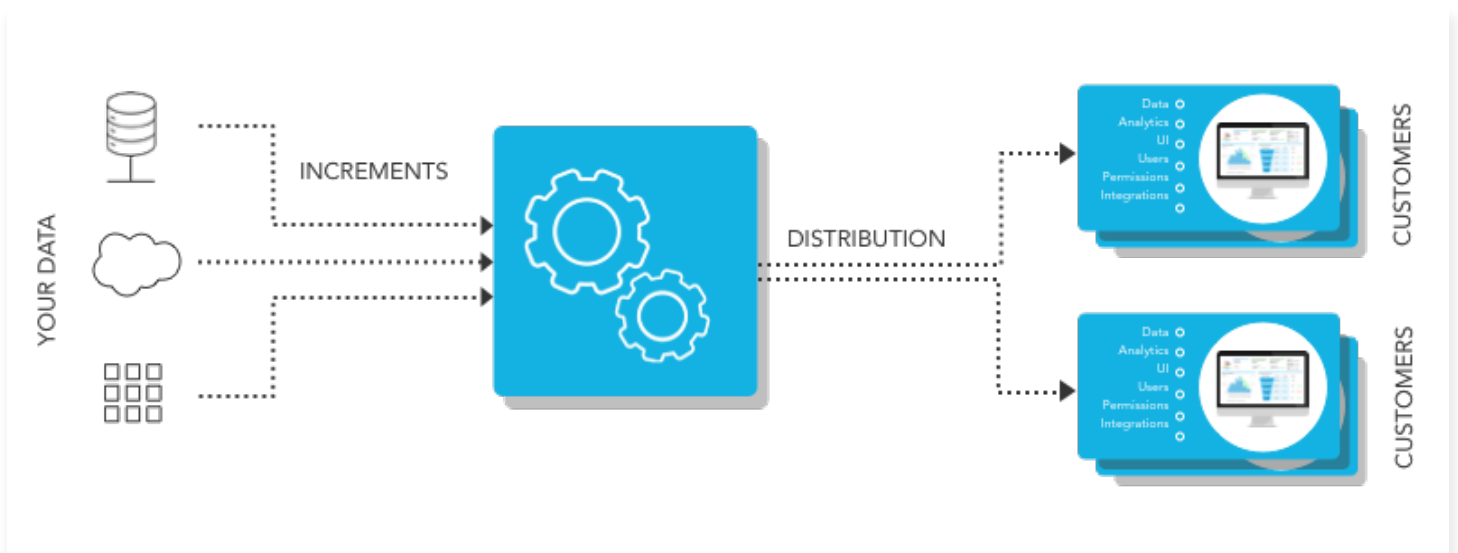
Seamless integration with Amazon Redshift

GoodData's support, business, and professional services teams are always available to help you deliver your state-of-the-art analytical solution. With extensive experience from implementing hundreds of analytical solutions, our support and service personnel can help you with best practices, reviews, and suggestions, or even fully take over the entire implementation for you.

How integration works

The figure below illustrates the key elements of how the GoodData platform and Amazon Redshift work together.
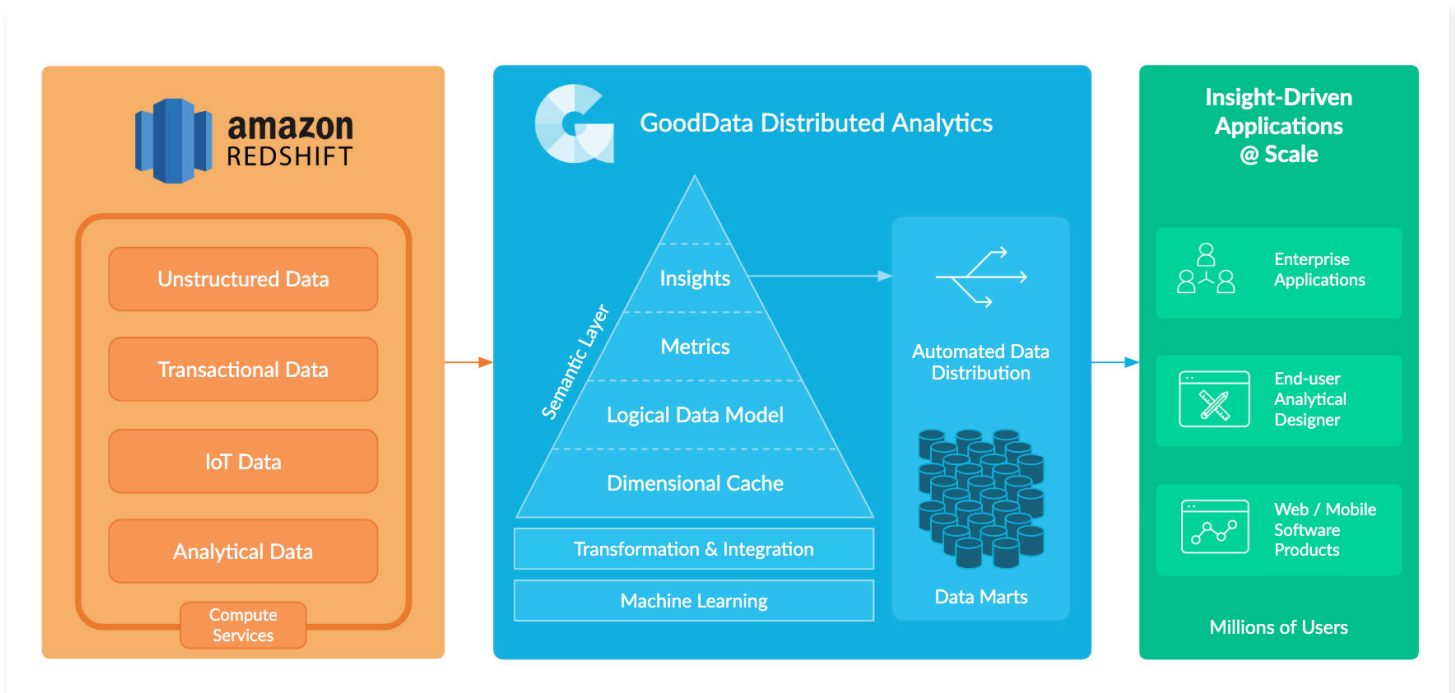
Extract, transform, and load data to Amazon Redshift

You most likely already have some data extraction, loading, and transformation processes already in place, like using Amazon Glue, SQL, or third-party tools like FiveTran, Segment, Stitch, or Informatica to extract data from your data sources, consolidate them in Amazon Redshift, and transform them into a meaningful business model.

Business data model

The data that you ingest into Redshift must be often connected, consolidated, and transformed into forms and shapes that are understandable for your end users. We call the result of such data transformation the "business model," and you'll often want to have multiple business models for different groups of business users (e.g., marketing, sales, support, etc.). Having multiple business models for different users avoids the problem of confusing your users by giving them access to too many datasets that they don't need.

The GoodData platform can quickly integrate with any of your business models' data tables and map them to the LDMs and their entities that reside in GoodData workspaces.

Workspaces

The GoodData workspace is a universal container for all analytics needs of a specific tenant, whether that tenant is your customer, business partner, business unit, or any group of people that wants to share data and reports.

The workspace contains data, reports, metrics, dashboards, users, roles, permissions, and all configurations that a specific tenant needs. You'll most likely use one workspace for each tenant, but you're also free to use multiple workspaces for each tenant. Providing multiple workspaces for a single tenant addresses multiple use cases. Perhaps you want to provide tailored analytics to sales, marketing, and support audiences for each of your customers. You'll then need three workspaces for each tenant. Please note that there are plenty of instances where you'd use just a single workspace too.

Logical data model

The LDM defines the data structure of each workspaces, each workspace always contains one LDM. The LDM contains entities and their relationships, both of which are subject to your analytics. Every report query is described with and leverages LDMs.

The LDM is usually shared across many workspaces to ensure consistency, which means that all your customer workspaces can use the same LDM. They just contain a different subset of the data related to the customer that owns the workspace. And, of course, you can customize each workspace's LDM for specific customer needs, such as by adding extra data elements or datasets.

Output stage tables

Your Redshift business model usually contains multiple relational tables with the data you need to analyze, which are referred to as "output tables." The output tables contain data that are transferred into GoodData workspaces. The workspace's LDM structure must be compatible with the output tables' structure.

The GoodData and Redshift integration supports bidirectional synchronization between the output stage tables and the GoodData LDM. The changes to the output stage tables can be propagated to the LDM and vice versa.

ADD service

The bulk of the data synchronization heavy lifting is performed by the ADD service, which transfers the data between the Amazon Redshift output stage and all the GoodData workspaces you have. The ADD service can support many different synchronization modes. For example, it can perform frequent micro-batch synchronization of data.

The service is optimized for maximum throughput and low latency. It can be scheduled, monitored, and programmed to send you alerts when any issue occurs.

Analytics and reporting

Once a workspace's LDM is populated with the data and users are defined, building and using analytics begins. A workspace's users use the drag-and-drop Analytical Designer tool to create all the insights they need.

The insights can be used to create interactive dashboards that combine multiple insights to analyze specific business areas, processes, or workflows. Multiple users can collaborate on insights, share them, improve them, or reuse them to build their own insights.

Embedding analytics into your application

Everything in the GoodData workspace has its own URL, which can be used to interact with the object using REST API. The URL fully references the object; for example, it might include a unique workspace ID.

The URL can be used for seamless embedding of visual objects-any insight, any dashboard-into your web applications. Moreover, you can embed all GoodData tools like Analytical Designer or KPI Dashboards to enable the creation of insights and dashboards right in your application.

You can use the powerful JavaScript SDKs with a broad set of functions and events to implement interactions of the embedded analytics with the rest of your applications. You can fully customize the look and feel of the embedded objects, localize them, and a lot more.

And lots more that we don't have the time to dive into now

GoodData offers tons of other useful features for managing thousands-or even tens of thousands-of workspaces with shared LDMs and analytics objects, user provisioning, single sign-on integrations, and many others. To learn more about these, please refer to the resources on our website and documentation, or simply give us a shout and we can answer your specific questions in a short call.

After reading this paper, you now know enough to jump to our interactive demo and Amazon Redshift Tutorial. Sign up for our trial and choose the track that is right for you. You can also sign up with our free platform tier to start from scratch with zero risk.

Additional resources

If you'd like to discover more about embedded analytics and the GoodData platform, we have a number of additional resources available.

Watch this.

Start for free
Do you want to prototype and validate the business case of analytics on a small set of your customers? With GoodData, you can bring embedded analytics for free to your product or business application for up to 5 customers.

GoodData pricing plan allows you to start for free and grow as you need while having the costs under your control.

See more at www.gooddata.com/free.

Technical paper

For technical professionals, this paper is designed to give you an overview of exactly how GoodData is able to deliver powerful analytics to massive audiences while still being the most cost-effective platform on the market. It explores how our modular platform provides the tools, runtimes, and storage for data ingestion, preparation, transformation, analytic queries, data visualization, and application integration.

GoodData.UI and Live Examples

For UI developers looking to explore more in-depth information on how the GoodData platform can be customized, take a look at GoodData.UI. By referencing our JavaScript library, you can take a look at how you can easily customize visualizations and build applications with our ready-made and custom React components.

GoodData experience

Explore our Library or Documentation for more.

Get more information

Have a question or want more information that we didn't cover here? Our team is happy to schedule a call.