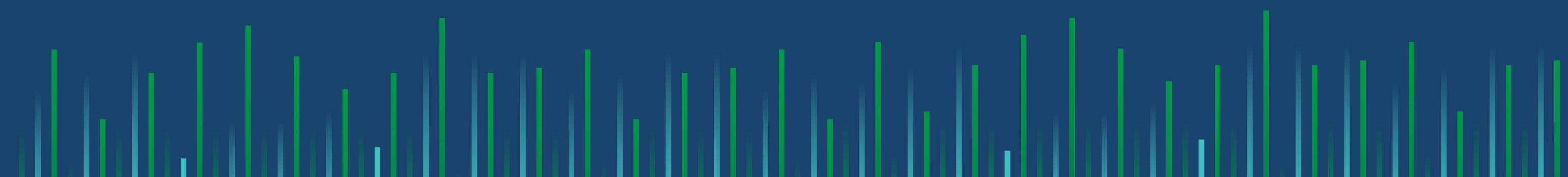




COOKING UP CLEAN DATA

Seamless Data Preparation for Everyone



Welcome to your data prep kitchen!

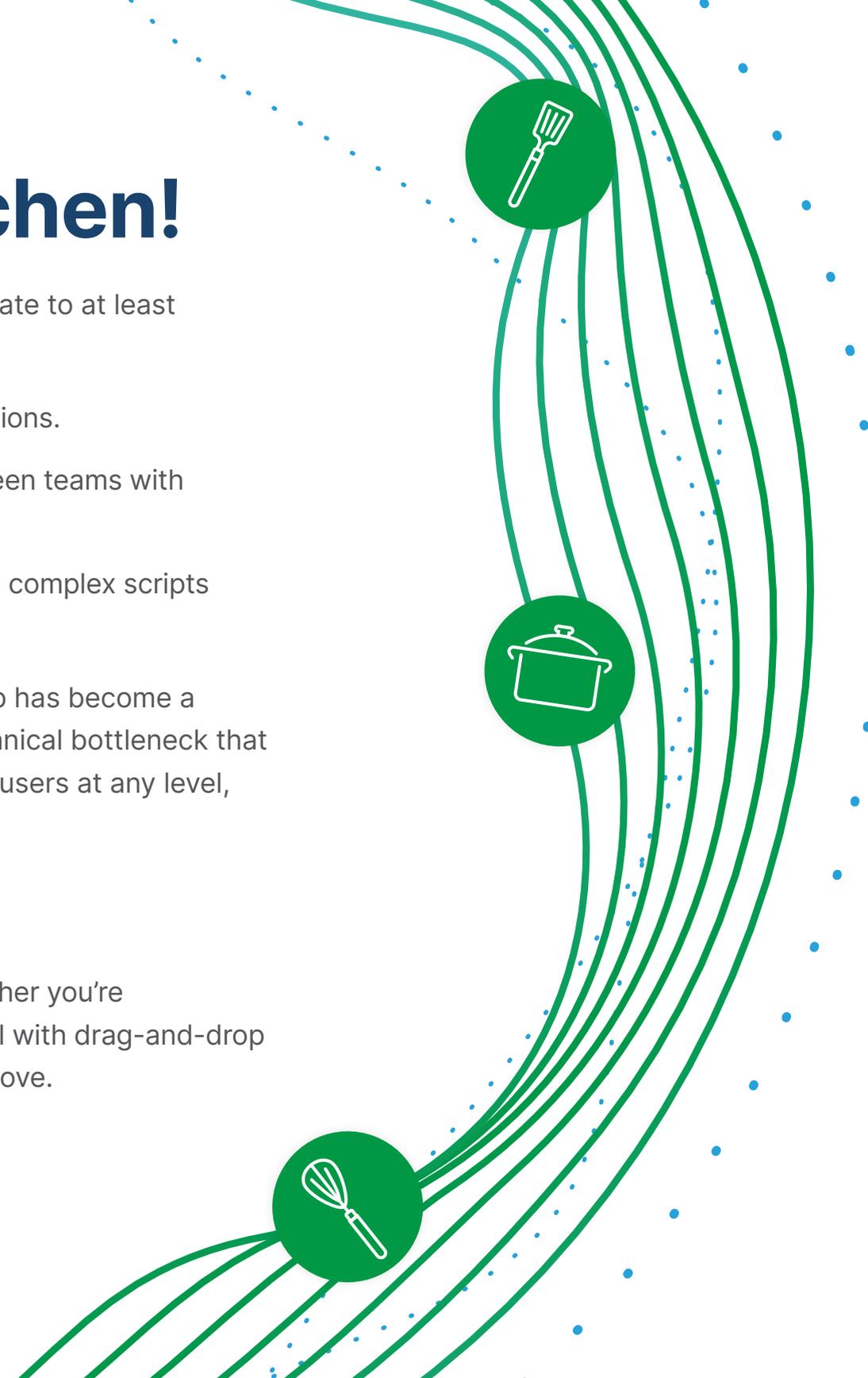
When it comes to preparing data, how smooth are your workflows? Chances are, you can relate to at least one of the following scenarios:

- Your Excel-based data prep worked fine with 10,000 rows, but now you're dealing with millions.
- Your organization uses five different data prep tools, and datasets can't easily move between teams with different skill levels.
- Your data team has a three-week backlog because only two people know how to write the complex scripts needed for data prep.

Situations like these play out thousands of times a day across organizations where data prep has become a complex juggling act. But here's what's changed: Data preparation no longer has to be a technical bottleneck that slows down your analytics projects. With a spectrum of Qlik tools that support data prep for users at any level, you can build resilient workflows that adapt to change while empowering your entire team.

HOW TO GET COOKING

This guide provides an introduction to the Qlik tools for professional-grade data prep — whether you're provisioning seasoned “Master Chefs” who write scripts from scratch, “Line Cooks” who excel with drag-and-drop interfaces, “Recipe Followers” just learning their way around data, or (most likely) all of the above.



Three types of data chefs. A solution for each — and all.

People who work with data come from all skill levels and backgrounds. Understanding their work styles is key to choosing the right tools — and with Qlik, you don't have to settle for fragmented workflows. Instead, you can break down barriers with a unified platform that scales from structured, tabular experiences to simple drag-and-drop operations and complex data prep workflows.

RECIPE FOLLOWERS

Need step-by-step guidelines



QLIK SOLUTION: TABLE RECIPE

Who they are:

These data-literate users know how to ask questions of data, communicate insights, and make decisions based on them.

Where they sit:

Anyone in the business who uses data.

How they work best:

They do best with structured experiences, such as streamlined flows with built-in governance, guidance, and guardrails.

LINE COOKS

Use drag-and-drop flows



QLIK SOLUTION: DATA FLOW

Who they are:

These data-savvy users operate without a formal background in advanced analytics, statistics, or a related field.

Where they sit:

Business analysts, business users, and data analysts.

How they work best:

They prefer visual interfaces that automatically generate code while producing professional-grade results.

MASTER CHEFS

Write scripts from scratch



QLIK SOLUTION: SCRIPTING

Who they are:

These highly technical power users thrive on precision and control over their data preparation processes.

Where they sit:

Data architects, experienced analytics developers, and technical analysts.

How they work best:

They understand that manual scripting provides maximum flexibility and performance optimization.



Table Recipe: for people who love tabular simplicity.

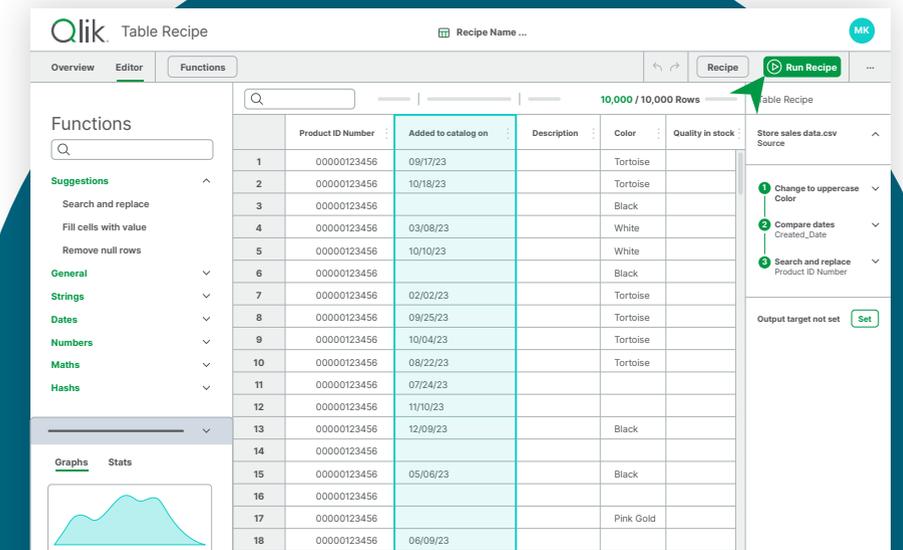
The Table Recipe approach provides a familiar, spreadsheet-like interface that makes data preparation accessible to users who prefer working with tabular data — while still delivering enterprise-grade capabilities.

Table Recipe enables users to:

- Prepare data with 60+ column-level preparation functions.** Table Recipe focuses on single-table sources with column-level operations, providing essential functions for data cleansing, standardizing, converting, splitting, basic masking, and formatting. Apply functions across multiple categories, including general operations, column actions, string manipulations, date transformations, number processing, mathematical calculations, and hash functions for data protection. Easily hide, reorder, remove, rename, and duplicate columns as needed, and filter rows with conditional logic in steps.
- Preview data and view column distributions.** Work with a live data sample in the spreadsheet-like interface and view data distribution statistics for individual columns. In the data distribution panel, simple visualizations show frequency distributions for text data — and statistical curves or bar charts for numerical values — to help users understand data structure and identify potential quality issues in the final output.
- Get instant feedback with intuitive interactions.** See immediate results in the data preview grid when applying functions, with instant visual feedback for every transformation. Right-click on any cell for quick shortcut actions like filtering on specific values, while the recipe panel on the right provides a clear, step-by-step view of all applied changes — making it easy to track, modify, or reorder columns in your data preparation workflow.

SECRET INGREDIENT Table Recipe functions

Table Recipe intelligently suggests relevant functions based on your data patterns and column types, making it easier for Recipe Followers to discover the right transformations without guessing.





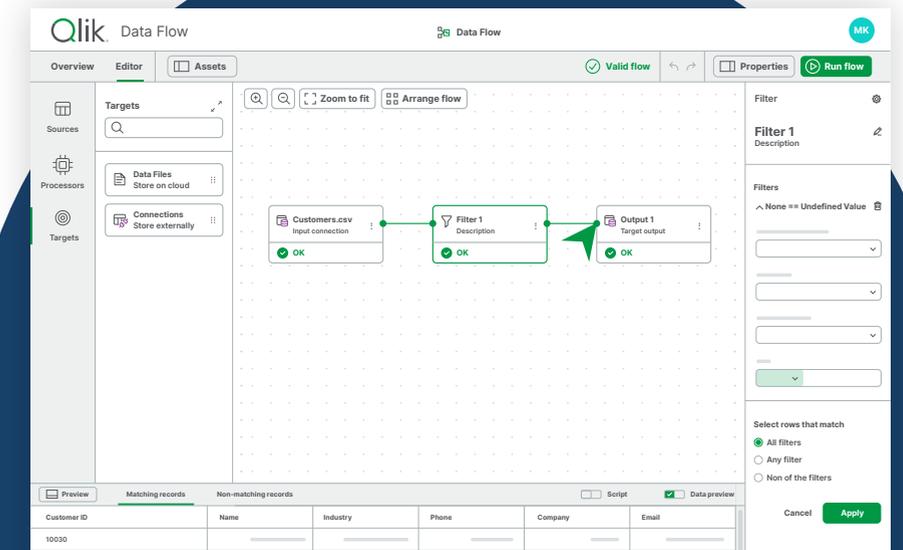
Data Flow: for visual thinkers and efficiency seekers.

An intuitive, no-code experience in which users create visual flows to prepare data, Data Flow makes sophisticated data cleaning accessible to data-savvy users — while allowing them to maintain power and flexibility. Qlik Data Flow enables users to:

- **Combine multiple data sources with processors.** Visually combine multiple data sources using drag-and-drop tools like the Join processor to merge datasets based on common keys. Connect to platform datasets and connections as sources and then output to multiple target formats, including QVD, Apache Parquet, CSV, and TXT files in data files or external file storages.
- **Split, filter, and convert fields easily — and monitor status in real time.** Easily filter data with advanced conditions; split datasets into matching and nonmatching flows; and manipulate fields through splitting, concatenating, and string transformations — all with real-time data preview at each step. The Data Flow view shows each component's status and validation, providing real-time configuration feedback to ensure flows are complete and valid before execution.
- **Add branching workflows with the Fork processor.** Duplicate input data into up to 10 identical output flows to enable branching logic — for example, routing the same dataset to different transformation workflows or storage destinations.
- **Enable sophisticated, code-free data preparation with built-in processors.** Use the Aggregate and Window processors to group, summarize, and calculate across datasets — from creating totals and averages by segment to generating running totals, moving averages, and rankings for time-series and machine learning (ML) feature engineering.

SECRET INGREDIENT Expression editor enhancements

The enhanced expression editor provides Line Cooks with intelligent assistance through contextual tooltips that guide function entry; built-in search and replace tools; and guided expression building with field selection. Users can easily search and select a function grouped by category (e.g., conditional, time and date, string).





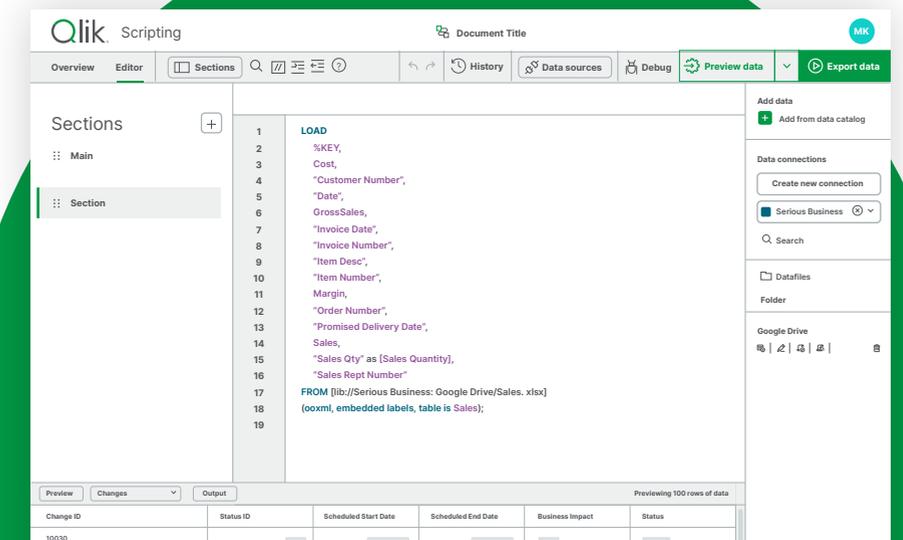
Scripting: for experts who want precision and full control.

For Master Chef data preparers, Qlik's scripting capabilities join granular control with enterprise-grade power. Chefs can whip up data prep workflows exactly as they envision them, without compromise or constraint, to tackle the complex data challenges that would overwhelm visual tools. Qlik Scripting enables users to:

- **Manipulate data with full scripting flexibility.** Calculate new values, translate coded values, aggregate data, and join or concatenate tables. Use advanced techniques like complex calculations, string manipulations, and multi-step data transformations.
- **Gain precise control through variables, loops, and conditional logic.** Build sophisticated data workflows using variables to store dynamic values, FOR loops to iterate through datasets or file collections, and conditional IF statements to implement complex business rules. Advanced control structures enable iterative processing that adapts to your data's unique requirements.
- **Optimize performance with incremental loading capabilities.** Maximize efficiency with strategies that process only new or changed data since the last execution. Operate in optimized mode for faster performance than standard mode and much faster performance than full database reloads.
- **Use a professional development environment with built-in debugging.** Take advantage of data preview capabilities, comprehensive debugging features, and the ability to test partial loads without processing entire datasets. Maintain and troubleshoot complex workflows with built-in versioning.

SECRET INGREDIENT Embeddable plug-and-play scripts

Create a library of prebuilt, tested script modules that developers can quickly drop into any project to promote consistency, reduce development time, and ensure best practices across multiple applications and teams.



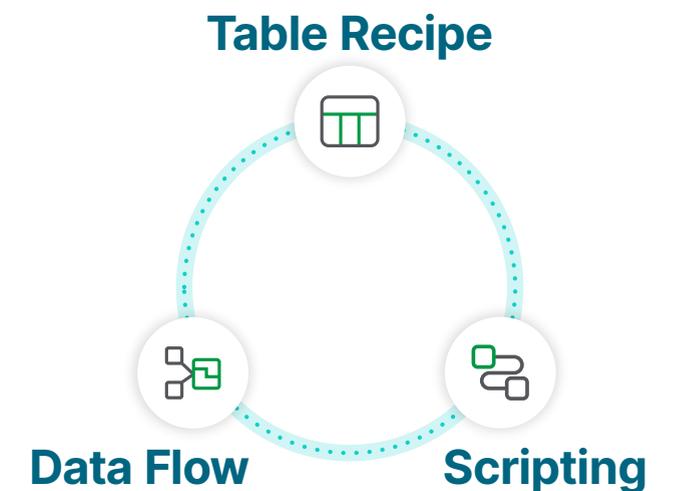
Bring it all together for advanced collaboration and flexibility.

Making Qlik's data preparation tools even more powerful is their seamless integration across the entire data-to-insights lifecycle. Users can prepare data using any combination of visual flows, scripting, or tabular interfaces; collaborate through governed workspaces with role-based access controls; and immediately channel that clean, trusted data into machine learning models or interactive dashboards without traditional handoffs or data movement bottlenecks.

- **Use no-code tools that generate scripts.** Both Table Recipe and Data Flow automatically generate scripts from visual transformations that can be converted and edited. Users can start with intuitive drag-and-drop interfaces and progressively advance to custom scripting as their skills develop. With the Qlik script processor, users can include custom script within a visual data flow, providing flexibility to combine visual and scripted approaches within the same workflow.
- **Collaborate with governed spaces and unified access.** All data preparation assets — Table Recipes, Data Flows, and Scripts — leverage Qlik's space framework (personal, shared, managed) for governance and collaboration, enabling teams to work together with appropriate role-based permissions. You can access all three data preparation experiences through the dedicated "Prepare data" activity center, while built-in lineage and impact analysis provide transparency and tracking across your data prep workflows, making it easy to understand data dependencies and assess the impact of changes.
- **Pass clean data directly to ML or dashboards.** Qlik's data preparation tools create seamless workflows that deliver clean, analytics-ready data directly to dashboard applications and machine learning platforms like Qlik Predict™ without leaving Qlik Cloud Analytics™. That eliminates the traditional barriers between data prep and advanced analytics and enables users to transform data once and reuse it across multiple ML models and visualization apps.

SECRET INGREDIENT

Embed Table Recipe as a processor within Data Flow workflows, where Data Flow serves as the parent framework managing sources, targets, scheduling, and execution while incorporating one or multiple Table Recipe transformations alongside other Data Flow processors.



WORKFLOW TIPS

Prep like a pro: Orchestrate your workflow.

Successful data prep isn't just about having the right tools. It's about orchestrating those tools strategically to create sustainable, scalable, and secure data workflows. These tips will help get you started:



Match tool to use case.

Strategic tool selection should be driven by your use case requirements — with load script transformations generally providing flexibility and control for complex scenarios or large datasets — while considering factors like data complexity, team skills, and system compatibility. Plan your data model structure first, and then match the appropriate tool to your team's capabilities and project requirements.



Schedule and automate workflows.

Schedule data preparation tasks directly from the catalog based on chronology (time, day, etc.) or event (task-based outcomes). For more advanced workflows requiring third-party notifications, complex dependencies, or integration with external systems, use Qlik Automate™ with the “Do Reload” automation block to create sophisticated workflows and task chaining that include notifications from Slack, Teams, or email while maintaining full control over your data integration projects.



Start visually and transition to scripting.

Qlik's visual tools automatically generate load scripts that can be viewed and converted for manual editing when needed. For more advanced and custom logic, users can either convert the full data flow into a script for editing or include custom scripting using the Qlik script processor within the visual workflow. This allows Line Cooks to use visual preparation tools while Master Chefs contribute scripting expertise within the same data flow, enabling progressive skill development and collaborative development throughout.



Govern data prep with roles and permissions.

Keep data governed throughout. Qlik's multi-tier space management framework allows developers to work with mock data in shared spaces while production data remains secured in managed spaces with higher governance requirements. Granular permission management is integrated with enterprise identity providers, enabling you to maintain security while allowing appropriate data access.

THE FULL DATA JOURNEY

Build the complete data pipeline from source to insight.

Data preparation focuses on the last mile for analytics, providing the final seasoning for creating analytics-ready data. Large organizations also need the steps that come earlier in the process — that is, the heavy lifting of sourcing and preparing raw ingredients at enterprise scale. For that, we have Qlik Talend Cloud® data integration.

PRO TIP: Start with trusted data products.

Data products are the keystone bridge between data integration and analytics, providing analytics users with trusted, packaged datasets from Qlik Talend Cloud pipelines that can be used as sources for last-mile data preparation refinements. Like ready-made ingredients from a professional kitchen, these data products enable fast, reliable analytics preparation without starting from scratch.

[Learn more about Data Products](#) →

ADVANCED OPTIONS: Work with a proven solution.

For data engineers requiring more sophisticated data integration capabilities — like SQL-pushdown transformations in data warehouses like Snowflake or Databricks — Qlik Talend Cloud pipelines and transformation flows provide comprehensive enterprise data integration.

[Explore Qlik Talend Cloud Transformation Flows](#) →



Turn raw data into rich insights with Qlik Cloud.

After your data is properly prepared, the real value creation begins. When your Master Chefs, Line Cooks, and Recipe Followers finish their prep work, the results immediately become fuel for deeper insights without additional handoffs or reformatting. Whether you're already using Qlik or exploring what's possible, Qlik Cloud provides the advanced capabilities that enable you to maximize the value of every dataset your team has carefully crafted:

- The Qlik analytics engine reveals hidden relationships and enables interactive exploration across all your data without predefined queries or rigid data models
- AI-powered insights and augmented analytics automatically surface key findings, generate natural language explanations, and suggest next-best actions
- Enterprise-grade governance and security keep data protected with role-based access controls, data lineage tracking, and compliance features that scale
- Embedded analytics and custom applications bring insights directly into your business processes and workflows, eliminating the need to switch between systems
- Real-time streaming analytics process and analyze data as it arrives, enabling immediate response to changing conditions and emerging opportunities

With a combination of sophisticated data preparation and advanced analytics capabilities, you're not just cleaning data — you're building the foundation for transformative business insights.

**Ready to
get cooking?**

Start your free trial
of Qlik Cloud® today.

[Try It Now](#)



About Qlik

Qlik converts complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio leverages advanced, enterprise-grade AI/ML and pervasive data quality. We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our AI/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

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