

ANALYTICS

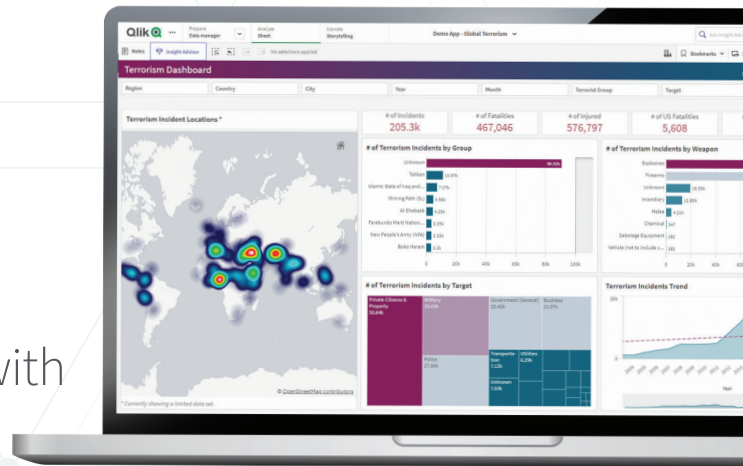
Action-oriented Analytics in a FedRAMP Moderate Cloud

Qlik Cloud[®] Government



INTRODUCTION

Qlik provides our U.S. Public Sector customers a secure, sustainable approach towards cloud adoption with a first-class analytics platform in a FedRAMP Moderate cloud environment.



Qlik supports our public sector customers with an analytics platform that empowers organizations and meets the security standards of the FedRAMP Marketplace. Qlik Cloud Government, our SaaS platform designed specifically for U.S. Public Sector, is authorized at the FedRAMP Moderate Impact Level (IL) and Department of Defense (DOD) IL2. Qlik is committed and heavily invested in the success of our U.S. Public Sector customers with plans to continue expanding our certifications.

Qlik Sense® powers the analytics services within Qlik Cloud Government and was built to deliver broad value for everyone in your organization. Qlik Sense and its purpose-built analytics engine delivers unmatched analytical power, driving world-class visualization and discovery, augmented analytics, and action-oriented capabilities beyond the dashboard. Insight Advisor is your intelligent assistant that delivers AI-powered insight generation, natural language interaction, and advanced analytics that broaden insight and access for all types of users. Move from passive to active analytics with intelligent alerting, fully interactive mobility, embedded analytics, and collaboration capabilities that promote timely action. And for the enterprise, you get a high-performance SaaS solution with open and standard APIs, powerful data integration and connectivity, and best-in-class management and governance.

With Qlik Sense, people can truly unleash their intuition. Our one-of-a-kind associative engine provides unmatched capabilities for combining data, exploring information, and delivering speed-of-thought calculation. It indexes all the associations in your data, and exposes both related and unrelated values as you click, revealing hidden insights that would be missed by query-based tools. It keeps all analytics in context together based on your selections, and performs calculations as fast as you can think, scaling to high numbers of users and large, complex data sets.

Qlik Sense empowers everyone on your team to fully realize the power of their data and make the best decisions that help you capture the business moments that transform your organization.

Purpose-Built for Analytics

Qlik Sense delivers a unique and powerful analytics experience for everyone, in all areas of your business. It is designed to promote human intuition and data literacy for users of all skill levels, allowing people to easily explore information and quickly gain trusted insights to take action and solve problems – from the simple ones to the most complex.

Associative Exploration

User exploration in Qlik Sense is unmatched. Users can freely ask questions using simple interactive selections and search. Our engine instantly responds with answers after each click, recalculating all analytics to the new context and highlighting both associated and unrelated data through easy-to-understand color cues. No boundaries. No restrictions. Your people are empowered to follow their own paths to discovery, uncovering blind spots that would be overlooked with query-based tools.

In addition, Smart Search provides an intelligent navigation experience unlike any other analytics solution. Search across your entire application and data set to refine context and make discoveries. Qlik Sense not only reveals individual matches, but also the possible combinations in your data, allowing you to apply multiple selections directly through search.

THE ASSOCIATIVE DIFFERENCE®

Relational databases and SQL are rigid structures designed in the 1980s for transactional systems, not modern analytics. Analytics tools that rely on query-based approaches struggle to combine data sources, support interactive user exploration, and retain performance and flexibility at scale.

With unique associative technology, our purpose-built analytics engine enables users of all skill levels to explore their data freely without limitations. It brings together unlimited combinations of data, achieving a “many-to-many full outer join” without leaving any data behind. It offers unprecedented freedom of exploration through interactive selections and search, instantly recalculating all analytics and revealing data relationships as you click. By keeping all visualizations in context together and retaining both associated and unrelated data values, our engine helps you discover hidden insights that query-based tools would simply miss.

Our engine calculates analytics as fast as you can think, using a full set of record-level data, scaling to massive data volumes and large numbers of users. This unique engine technology is our primary advantage, with more than 20 years of innovation and investment.

Data Discovery

Best-in-class visualization and discovery is always at your fingertips. The creation and exploration process is simplified for users with the assistance of Insight Advisor. Data sources can be easily connected together with data profiling and combination suggestions. Charts are created through natural language or simple drag-and-drop, with chart assistance that suggests the right types of visualizations based on the data being used. Over 30 smart, fully responsive visualizations provide a beautiful experience and feature innovative techniques to summarize data shape, highlight patterns and hotspots, and pinpoint outliers. Geospatial analysis and mapping, based on Qlik GeoAnalytics® technology provides advanced

geographic visualization and calculation. And with our unique analytics engine, Qlik offers the most flexible and interactive dashboards on the market, supporting free-form exploration and search not possible with query-based tools.

Qlik Sense provides a complete set of data preparation and integration capabilities, including graphical data preparation and robust ETL scripting, allowing users to work with nearly limitless combinations of data. We offer an enterprise data catalog for easy access to governed data sources, a broad set of connectors to on-premises and cloud-based sources, and direct query capabilities to compliment in-memory analysis.

Content Delivery

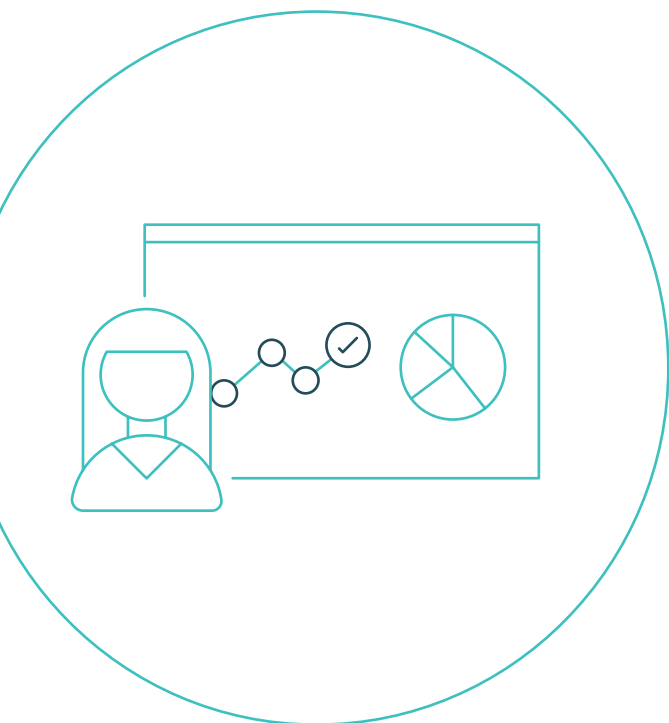
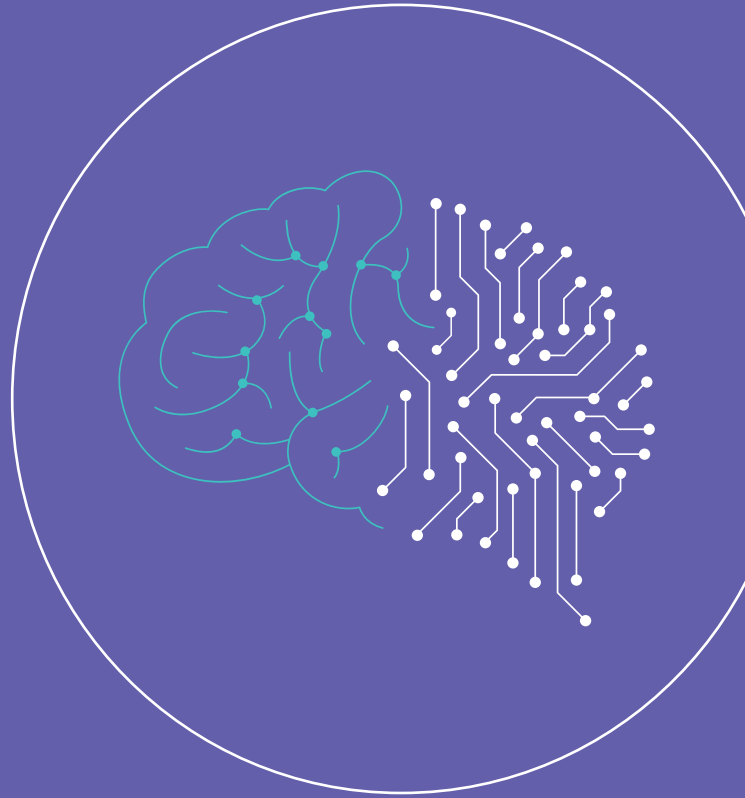
With Qlik Sense, you can support all your information delivery needs, allowing users to subscribe to or monitor the analytics that matter most. Qlik Sense allows users to subscribe to their favorite individual analytics for schedule .PDF delivery on a routine basis. Users can make selections, and that context will be applied when the subscription is created. They will receive emails with PDF attachment and links back to Qlik Sense, taking them back to live analytics with selections applied. Selections are saved from the users so context is never forgotten. Chart monitoring is also in the hub, where users can customize their own analytics experience for fast updates on key analytics. And users can manually print and export data, analytics, and stories to PDF and Excel for easy sharing.



AUGMENTED ANALYTICS

At Qlik, we believe that AI should work in combination with human intuition, not replace it. Our approach is different from “one-size-fits-all” tools or bolt-on AI — we combine our unique associative technology with AI and cognitive capabilities built into our platform at a foundational level. The result is true Augmented Analytics that enhance the ability of people to interact with data, generate insights, and make the best possible decisions.

Drawing from this core technology, Insight Advisor is your intelligent, AI assistant in Qlik Sense – providing auto-generated analyses and insights delivered in multiple forms through a variety of user experiences. Insight Advisor helps all types of users reach their full potential with data, minimizing cognitive bias, amplifying discovery, and driving enhanced data literacy.



Data Literacy Through AI

AI helps your people understand and use data in more effective ways to find every possible edge. With combined AI and associative technology, Qlik Sense empowers users of all skill levels to do more with data.

Insight Advisor

Insight Advisor in Qlik Sense delivers a full range of augmented analytics capabilities, driven by combined associative and cognitive technology. It offers AI-generated analyses and insights, automates the creation and data preparation process, supports natural language interaction, and delivers advanced analytics for users to explore.

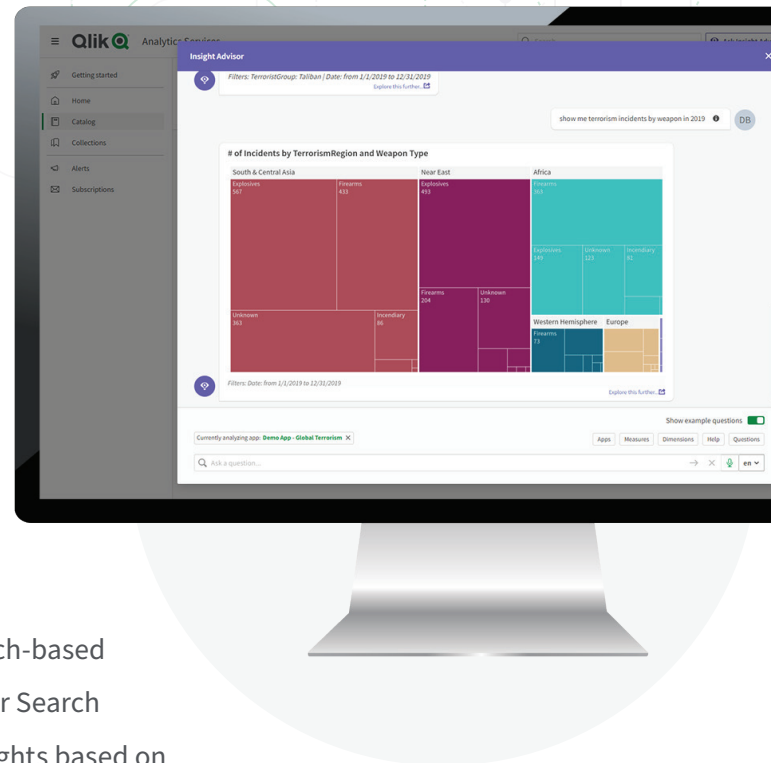
Auto-generated analytics include visualizations, narrative interpretations, and even entire sheets and dashboards. Insight Advisor features a robust business logic layer for customization of insight generation and natural language processing, and machine learning to make insight suggestions more relevant and impactful over time. With unique context awareness, Insight Advisor offers insights that closely align with user perspective and intuition.

Associative Insights take AI to the next level, directly combining the power of our associative and cognitive technologies to suggest the most significant excluded values for users to explore. Our engine identifies data values unrelated to user selections (gray values), and Insight Advisor analyzes these values to assess potential impact and offer suggestions about the most significant areas to explore.

Natural Language Analytics

Insight Advisor supports natural language in Qlik Sense across multiple user experiences including search-based discovery and fully conversational analytics. Insight Advisor Search allows users to more easily generate new analyses and insights based on natural language search, extending the power of insight creation to more people. It provides auto-generated analyses and insights based on NLP (Natural Language Processing). Users can make edits and adjustments to visualizations and directly add them to dashboards for further exploration. And users get natural language interpretations (NLG) for further context and data literacy.

Conversational Analytics enables users to ask questions and get answers in a natural, conversational manner, without having to be data experts, enhancing their data literacy. And organizations can drive adoption, spreading the power of analytics and data driven decisions to far more people than ever before. Insight Advisor Chat provides a fully conversational, natural language interface across multiple apps. Natural Language Processing (NLP) understands user intent, and Natural Language Generation (NLG) delivers added insight and perspective for a deeper understanding of your question. Insights include auto-generated charts, narrative insights, key observations and more. Users can easily interact to get answers to their follow-up questions, and link directly to visual discovery, in context, for deeper analysis and insight.



From Passive to Active Analytics

Qlik's vision is a state of continuous intelligence where technology and processes support the triggering of immediate action from real-time, up-to-date data – what we call Active Intelligence. For BI and analytics, this means taking people beyond the dashboard, with action-oriented capabilities that deliver the right insight at the time and place of decision. Active analytics capabilities include intelligent alerting, search and conversational analytics, collaboration, mobility, embedded analytics and more. And of course, it needs to be supported by an intelligent analytics data pipeline that can deliver a continuous flow of up-to-date data, from all your data sources.

Inform the Decision

When making decisions, it's critical to capture and share the context you need to accurately inform decisions, from your data, people, and other systems. Collaborative notes in Qlik Sense allow users to capture and harness the critical human context needed for the best business outcomes, both individually and in teams. People can add narrative to analytics, and drive discussions to interact with others around data. Collaborative notes in Qlik Sense are independent artifacts that can include multiple analytics and serve as an independent record for decisions.

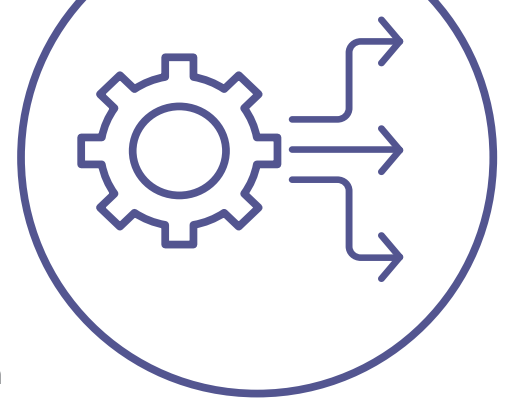
In addition, interactive data storytelling facilitates live meetings and presentations. Users can create slides with analytics and insights, in a linear story, with graphical content and text commentary. With direct, in-context linking to analytics apps, users can dive directly into live analytics for immediate answers to follow-up questions as they arise in discussion.

And, organizations can build, integrate, and extend analytics to leverage functionality and deliver insight and context from third-party tools and technologies. Qlik Sense provides a complete set of open APIs allowing creation of custom analytics and extensions, either custom developed or leveraging third-party tools and technologies, using industry standard development skills.

Beyond the Dashboard

To deliver analytics at the time and place of decision, you must go beyond the dashboard to where and how people work. Qlik Sense delivers unmatched analytical power on mobile devices. It is inherently mobile, delivering a complete set of analytics capabilities within an optimized cloud user experience on any





device. Unlike other products, users can explore, create, and collaborate on mobile devices, without boundaries or limitations. Our touch-based web client provides intuitive operation, and responsive design intelligently adapts visualizations, data, and functionality to create the best possible experience for the device. Users can seamlessly transition across devices, with sessions retained so they can pick up where they left off. They can access natural language features to generate new analytics and ask questions conversationally. And with no additional effort to mobilize analytics, organizations benefit from a build anywhere consume anywhere approach.



In addition to mobile, embedded analytics allow organizations to extend the reach of analytics to more internal employees and the broader ecosystem of customers and partners, where and how they work. Qlik Sense provides a complete set of open APIs, allowing analytics to be rapidly embedded in workflows and operational apps, using industry standard development skills. A complete set of APIs offer access to the full set of capabilities in the Qlik Sense platform, for a complete and powerful embedding experience. And, the power of the Qlik Associative Engine is fully available in embedded analytics, delivering a fully interactive set of in-app analytics that respond to selections at the speed of thought and work together to reflect a unified context

Trigger the Action

Qlik Sense is built to drive action based on changing data, helping you capture the moment by triggering action when it is needed. This includes both human action and automated events, all driven by a real-time data pipeline.

To prompt human action, Qlik Sense delivers powerful, data-driven alerts with sophisticated alert criteria, notifying users of potential issues and allowing them to immediately take action. Intelligent data alerting notifies users of changes, trends, and outliers in data, through statistical evaluation of new data against thresholds, comparisons between measures, condition and/or logic, and the ability to trigger alerts based on individual dimension values. Qlik Sense supports both self-service and centralized alerting, and alerts can be delivered through customizable emails and our web interface. With alerting, more people can proactively monitor their business, spot trends and outliers, and take timely action based on changing data.

High Performance SaaS

Qlik Sense is available on Qlik Cloud Government, a cloud platform designed for the U.S. Public Sector and Federal organizations of all sizes. Qlik Cloud Government is built for unmatched performance and flexibility. It features full enterprise SaaS deployment, built on a modern, containerized architecture. Organizations can take advantage of Qlik Cloud Government to lower infrastructure costs, the operational benefits from offsetting hardware and maintenance, and continuous releases that ensure users always have the newest analytics at their fingertips.

Your organization can deploy modern analytics, including self-service, without having to make trade-offs when it comes to governance and trust. Qlik Cloud Government features a modern hub with governed content areas that allow people to easily find and share analytics. Our modern management capabilities provide a single point of control for all areas of the system. Flexible security and dynamic data reduction ensure that information is accurate and secure. And our unique analytics engine delivers unmatched flexibility and calculation speed when scaled to high numbers of users and large, complex data sets. Your organization gets the performance and governance it needs to maximize adoption and value.

Qlik Cloud Government Platform Certifications

Qlik Cloud Government has achieved authorization for the FedRAMP Moderate Impact Level (IL) and the Department of Defense (DOD) IL2. FedRAMP is the Federal Risk and Authorization Management Program which administers cloud products and services for the U.S. Public Sector. FedRAMP has established a set of Impact Levels categorized by the sensitivity of data that can be contained in a Cloud Service Provider (CSP).

Qlik is known globally for our high standards with regards to security and compliance. We hold a number of internationally recognized security certifications including SOC 2 - Type 2 and ISO27001. We anticipate expanding our certifications as we continue to advance capabilities to support our customers.

For more information, please contact a [Qlik Representative](#).



About Qlik

Qlik's vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Qlik offers real-time data integration and analytics solutions, powered by Qlik Cloud, to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik serves more than 38,000 active customers in over 100 countries.

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