

Qlik Application Automation

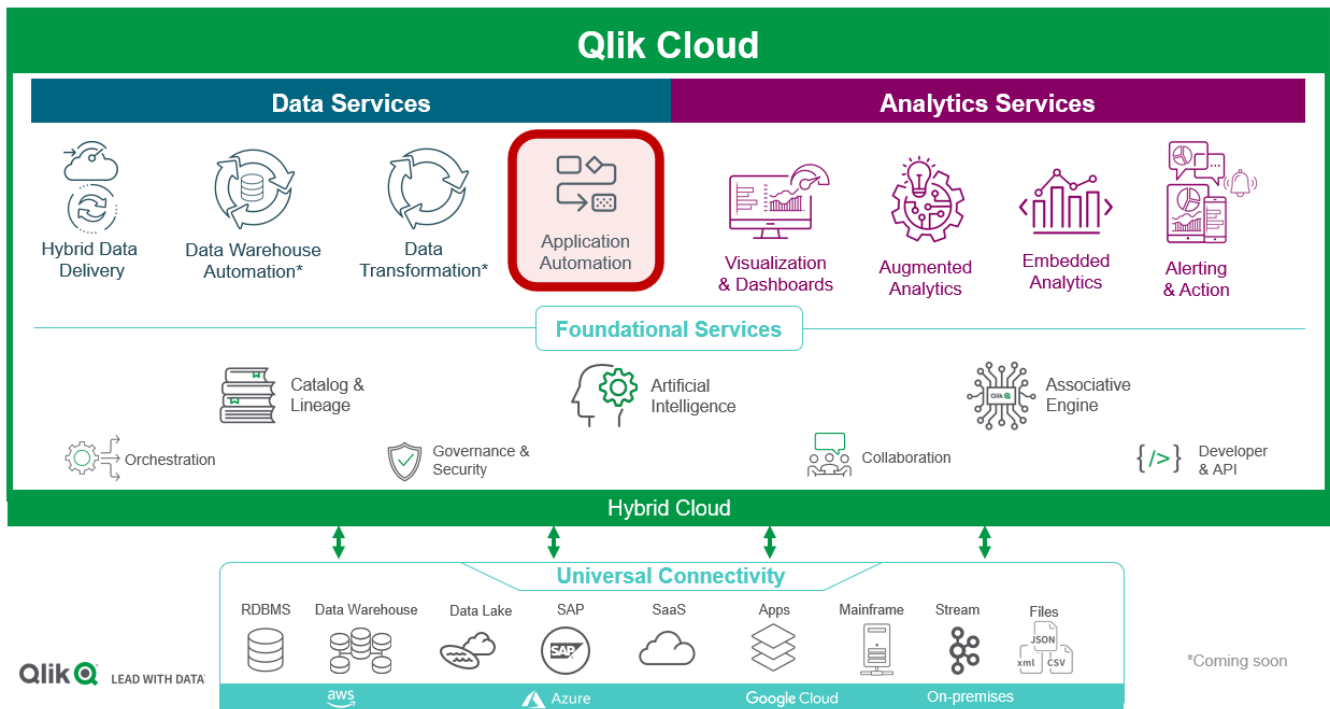
Content

Sommario

QLIK CLOUD OVERVIEW	2
QLIK APPLICATION AUTOMATION OVERVIEW	3
ARCHITECTURE	3
RELIABILITY	4
AUTOMATIONS	4
Blocks	4
Run modes of Automations	5
SECURITY MODEL	6
Connectors Authorization and Authentication	6
GOVERNANCE	6
STANDARDS & COMPLIANCE	7
Privacy compliance – access to personal data	7
USE CASES	7
SUMMARY	8

Qlik Cloud Overview

Qlik is a leader in data and analytics with a core mission to provide software that ensures organizations can work smarter and use data as a competitive edge. Qlik Cloud is a powerful end-to-end solution for data and analytics services. Our platform empowers curiosity-driven exploration offering everyone – at any skill level- the ability to use data to make transformative changes for their organization. Through several data focused services, the Qlik Cloud platform supports a full range of users and use-cases across the life cycle from data integration to insight generation including Change Data Capture & Data Cataloging, Application Automation, self-service analytics & dashboards, conversational analytics, custom and embedded analytics, and alerting.



This document focuses on the Qlik Application Automation component of Qlik Cloud including its architecture, security, governance, and reliability, and is intended to complement other technical documents for the Qlik Cloud platform.

Qlik Application Automation Overview

Qlik Application Automation is a no-code visual design tool for automating manual work. Instead of writing code, users combine configurable blocks that they drag and drop onto a canvas, forming a sequence of action steps from a variety of SaaS applications, including Qlik Cloud. These steps run like a program to automate business processes, using analytics to direct the flow of data through a multitude of applications.

Automations can be executed manually, run on a schedule, listen to webhook events and be triggered using an API endpoint. Automations are compiled into native code that runs in Kubernetes pods on Qlik Cloud to automatically provide the scalability you need to scale and automate your business processes.

Qlik Application Automation provides blocks to implement conditions, work with loops, use variables and a wide range of other building blocks to implement automation flows.

Architecture

Qlik Application Automation is an integral part of Qlik Cloud and is available in a Qlik Cloud tenant alongside other capabilities such as analytics Applications, connectivity to your data sources, and Notes.

The elastic nature of the underlying technology allows Qlik Application Automation as well as the other Qlik Cloud services to scale horizontally as needed.

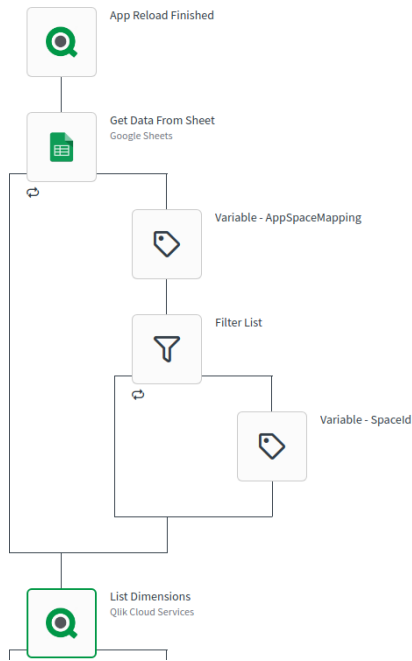
Qlik Application Automation shares access to common services such as authentication services and file storage to ensure an integrated experience with the other Data Analytics and Data Services capabilities within Qlik Cloud.

For more insight into the Qlik Cloud architecture please refer to the Qlik Cloud Platform technical paper.

Reliability

Qlik Application Automation is subject to the same uptime commitment policy reported in the Service Level Agreement (section 7, point 7.2).

Automations



Blocks

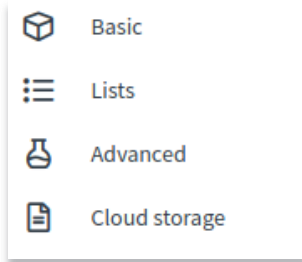
Every automation is made of different building blocks chained together to build a flow. There are 3 types of building blocks:

- Start Block
- Standard Blocks
- Connector blocks

See diagram of an automation on the left.

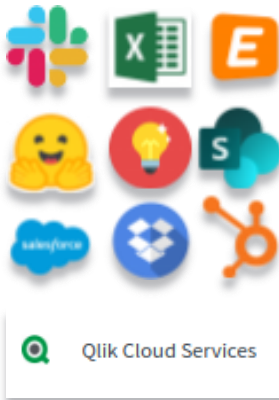


The Start block is your starting point and mandatory in each automation. It is already present in the canvas and defines the start of the automation process; any other block in the automation must be connected to the start Block chain.



Standard blocks fall into 4 categories. (Basic, List, Advanced and Cloud Storage). Some example uses are:

- Loop over data and Conditional block
- Working with Variable and user input block
- Merge, filter, Lookup or transform lists block



Qlik Application Automation offers a range of connectors. Connectors are the bridge between third-party applications and the automation. They can be used to get data from or write data to a third-party application.

One connector of note is the Qlik Cloud Service Connector, it allows the connection to the user's current tenant. It does not require authentication and comes with the same logged-in user's authorization.

Run modes of Automations

In addition to running an Automation manually, Automations can be automatically executed in 3 different ways:

- On a scheduled basis
- Triggered from an external webhook
- Exposed as an API Call

Security Model

Connectors Authorization and Authentication

In general, connectors allow two types of authentications, and this is dependent on the third-party provider service:

- Access token authentication
- OAuth Authentication

The Access token authentication method requires users to provide an access token (e.g., API key or secret) to the third-party application and provide it in the connector settings.

With OAuth authorization, users are forwarded to the application login page which requires user permission access to grant access to Qlik Application Automation, on behalf of Qlik Cloud. If the user agrees, Qlik Application Automation will store and refresh the access token for accessing data in the automations.

Qlik Application Automation will request both read and write permissions in OAuth flows, due to the nature of the features.

Automation owners can export automation in a JSON file format and subsequently import them in a different tenant or share with other users on the same tenant. Authentication tokens are not part of the export; thus, the import will require to re-authenticate all the connectors involved in the automation.

Governance

The Qlik Cloud platform's management console allows any administrator to manage and govern all the automations. An administrator is entitled to list all the tenant's automations, sort and filter them based on their name, status, last run, run mode, owner or completed time. Each automation can further show the list of executions and their states.

A Qlik Cloud administrator may Enable or Disable automations, change owner or delete them.

Standards & Compliance

As a component of the Qlik Cloud platform, the following apply to Qlik Application Automation:

- Soc 2 - Type 2
- Soc 3

ISO27001 For more details, please refer to the **Qlik Cloud Platform** technical paper, Standard and Compliance chapter.

Privacy compliance – access to personal data

Automations are built by combining blocks that represent API endpoints of connected applications. Automations can be executed manually, using webhooks, triggers or API calls. Each Automation execution is called a "job" or "run". Each job will have a history log that shows the API calls made by each block (the log is limited to a certain number of API calls).

The automations make API calls to connected SaaS Applications (e.g., Salesforce) which means that users can process the content within these Automations. For example, a user could build an Automation that fetches contacts/leads from their CRM and send it to another SaaS Application.

In case personal data is processed, part of the personal data will also be present in the history log of the Automations. History logs can be viewed in the UI for each Automation. History logs have a retention of 30 days and are deleted afterwards.

Use Cases

Given the flexibility and connectability of Qlik Application Automation, several common types of use cases as possible:

- **Operational automations in service of Qlik Cloud:** Qlik Application Automation provides a direct visual access to various Qlik Cloud APIs to facilitate operations such as:
 - Task chaining (e.g., Qlik Cloud Service app reloads)
 - App versioning
 - Assign licenses, roles, spaces, rights to users
- **Alerting and Messaging:** send messages using Email, Slack, and MS Teams triggered by events
- **Active intelligence:** triggered updates in business applications (such as CRM, SCM, ERP etc.) based on analytical insights

These use cases can be combined to create complex automations to support business processes, implemented in the same automation or by chaining different automations together.

Summary

Qlik Application Automation is a no-code visual design tool for automating manual work. Automations can be executed in several ways and provide a wide range of connectors and building blocks to implement automation flows. Qlik Application Automation is an integral part of Qlik Cloud with which it shares the elastic and scalable architecture, common services, standard and compliances.



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 provides an end-to-end, real-time data integration and analytics cloud platform 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 does business in more than 100 countries and serves over 50,000 customers around the world.

[qlik.com](https://www.qlik.com)

© 2021 QlikTech International AB. All rights reserved. All company and/or product names may be trade names, trademarks and/or registered trademarks of the respective owners with which they are associated.