Guide to Qlik Cloud Reporting

includes Playbook for Qlik NPrinting to Qlik Cloud Reporting

Qlik Q

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Roadmap information should not be relied on in making a purchasing or migration decision, as the development, release, and timing of any features or functionality described for Qlik's products remains at our sole discretion.

Version History

Version	Date	Description
1.0	May 2023	Initial Version

INTRODUCTION

Qlik Cloud supports a wide range of reporting and distribution use cases for business users and centralized report developers. Whether you are coming from Qlik NPrinting or other Mode 1 BI platforms, this guide is designed to assist you in identifying how you can adopt Qlik Cloud for your analytics modernization goals while still supporting your report distribution use cases:

- From the business user to the report developer

- For producing a range of report styles from Tabular to Presentation to Pixel Perfect documents

- Including different report delivery modes from interactive to burst reporting

Reporting and Distribution on Qlik Cloud have been reimagined from Qlik's Client Managed product offerings of Qlik Sense on Windows, QlikView, Qlik NPrinting and Qlik Alerting.

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Elements of Qlik Cloud Reporting

The reporting and distribution capabilities on Qlik Cloud are evaluated from two perspectives.

1. Report composition and consumption – which relates to the report schema (template), output format and the purpose of the report detailing how report recipients consume/use its content e.g. the appearance and file format of the report.

2. Report process requirements – which relates to the various business conditions that influence the report creation and distribution. e.g. *how* do report task creators define report delivery details.

   Let's take a deeper look.

Report Compositions

Dashboard & Presentation Report

Qlik Sense Sheets, a/k/a dashboards, are a curation point of analytics. There are many report distribution use cases where common dashboard layouts are suitable, if not desirable, for the file format version. In Qlik NPrinting today, many generated PDF, Pixel Perfect, DOC, and email authored reports are essentially reproductions of dashboards.

Primary document formats: PDF & PPT

Tabular Reports

The most traditional report is a row and column data presentation, sometimes with accompanying visual analytics. Often it includes crosstab / pivot table presentation of data from a single source. Data sets are often large and need dimensional sheets and/or formatted page layout for table output.

Primary document formats: XLS(x), CSV

Secondary document formats: PDF

High-fidelity document reports

These reports require pixel perfect placement of all visual/text/analytic content. Typically, they are used for the highest level of professional document creation.

Primary document formats: PDF

Secondary document formats: DOC

Report Process requirements

Once report formats are identified, there are a multitude of factors that determine *how* reports are prepared and delivered.

Burst Reporting & Report Factory	Burst reports involve recipient or destination specific report creation and delivery as well as advanced task trigger capabilities. • Recipient Management – managing sizeable lists of recipients including user level filters, group associations, and related email addresses (CC, BCC). • Burst Report delivery – user filtering, data reduction to deliver recipient specific documents and data. • Channel Management - Email, File Store, cloud store, etc. • Report delivery – scheduled delivery vs triggered vs reload based. • Cycled report creation – producing report documents for a set of dimensions and making all variants available together. Report factory takes burst reporting to a higher scale, batch writing large volumes of documents to hard drive folders or web storage devices. Burst reporting is normally configured by report developers or centralized analytics administrators.
Interactive Reporting: Subscriptions & OnDemand Reporting	Also referred to as self-service reporting – this is where the business user is involved in the composition and task definition for the reports being produced from a dashboard. • Business users may want to generate pre-defined report templates that have been made available to them in an ad-hoc manner.

- Business users may want to define their own composition dashboard view of analytics with data selections and then schedule delivery to their inbox.
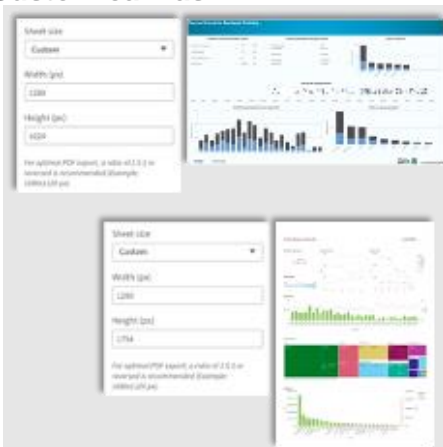
Report Compositions on Qlik Cloud

Dashboard and Presentation reports

Qlik Cloud has the ability to leverage sheets within a Qlik Sense application as a composition point for reporting. These sheet-based reports are Dashboard or PowerPoint Report types. Reports can be configured by business users (interactive mode), Subscriptions or through advanced compositions via the Qlik Reporting Service API or Qlik Application Automation configuration (Batch mode). Possible output formats are PDF or Microsoft PowerPoint PPT.

When outputting to Microsoft PowerPoint, each visualization on the source sheet is rendered as an image allowing it to be re-sized or manipulated within the PPT file. In addition, the images have a transparent background allowing a Microsoft PowerPoint theme to be added to the file after creation if specific branding elements are needed as part of report final preparation activities.

Application developers can tailor a Qlik Sense application for use in reporting by using a number of specific sheet configurations and other strategies. These authoring elements can allow for branded, and in some cases, near pixel perfect report authoring.

Custom canvas

Application developers can control the canvas orientation using the sheet style panel.

Extended sheets: It is important to note that if extended sheets are used, the reporting service will optimize the orientation and may flip longer sheets to portrait mode vs compress the sheet into landscape.
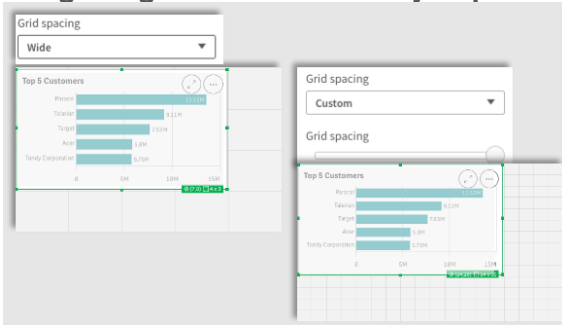
Test trick: when developing the sheet you can use the manual download of a sheet to verify how the sheet will look in the report composition – they are the same output.
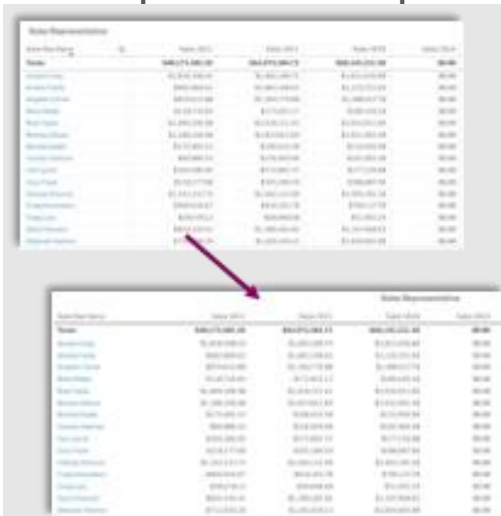
Background images

Application developers can insert a sheet background image for using the sheet style panel.

Fine grain grid for accurate object placement

Application developers can set the grid spacing for more accurate object sizing and placement within a sheet.

Theme for professional table presentation

Application developers can use a theme to make tables more professional in appearance when in file format version.
The theme is available on Qlik Community.

Tabular Reports

The Qlik Reporting planned roadmap includes a Tabular Reporting capability that will allow highly formatted, tabular reports. Report authors will be able to connect to a Qlik Sense application and use data and visualizations to compose near pixel perfect, report templates.   Report tasks will be governed and managed within the Qlik Sense application experience. Check out Qlik Community in the second half of 2023 for updates on availability.

Pixel Perfect Reports

Currently, the sheet base authoring using Qlik Cloud offers near pixel perfect report capabilities -- see Dashboard and Presentation reports above. Further, the custom canvas and fine grain grid control within the Qlik Sense Client may be used to support this type of reporting.

With the Tabular Reporting roadmap capability, a second Pixel Perfect report option will become available. Thereafter, Qlik intends to evaluate a traditional Pixel Perfect editor based on customer input/feedback – feel free to add your voice to Ideation on Qlik Community.
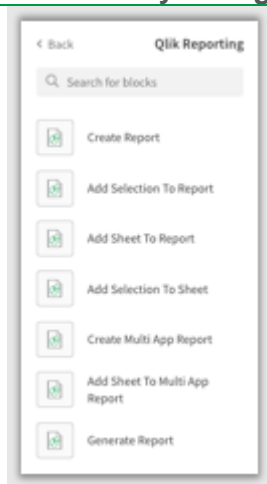
Report Capabilities on Qlik Cloud

Batch Reporting and Dashboard | Presentation Reports or Pixel Perfect

What are they?

Dashboard Reports are created from Qlik Sense application(s) sheet compositions. The visible portion of content within the Qlik Sense apps are the report composition; there is no pagination of extended sheets or sheets that have objects that scroll. Multi-page reports are achieved via composition of sheets that contain the visible content. Reports can include looped content and content from different applications. Report Tasks can use external Recipient Lists, can cycle reports, and provide delivery to a variety of channels.

How are they configured?

Sheet based reports are produced through a call to the Qlik Reporting Service using the Composition method – see https://qlik.dev/apis/rest/reports .

For most, the API would be too complex to adopt (check out Qlik.Dev for a tutorial). Qlik Application Automation and the report blocks offer a highly efficient means to define the report composition within an automation. There are a set of connectors called Qlik Reporting that allow developers to dynamically form reports. Through the use of a Qlik Connector object the developer can define session-based data reductions to achieve the desired report output.

A report definition starts with a Create Report block and then ends with a Generate Report block. Reports can be as simple as sending all sheets from the app or as complex of specific sheets repeated based on dimensional loops and/or sheets from various applications.

Selections can be applied at the report level (single app reference) or on a sheet-by-sheet basis.

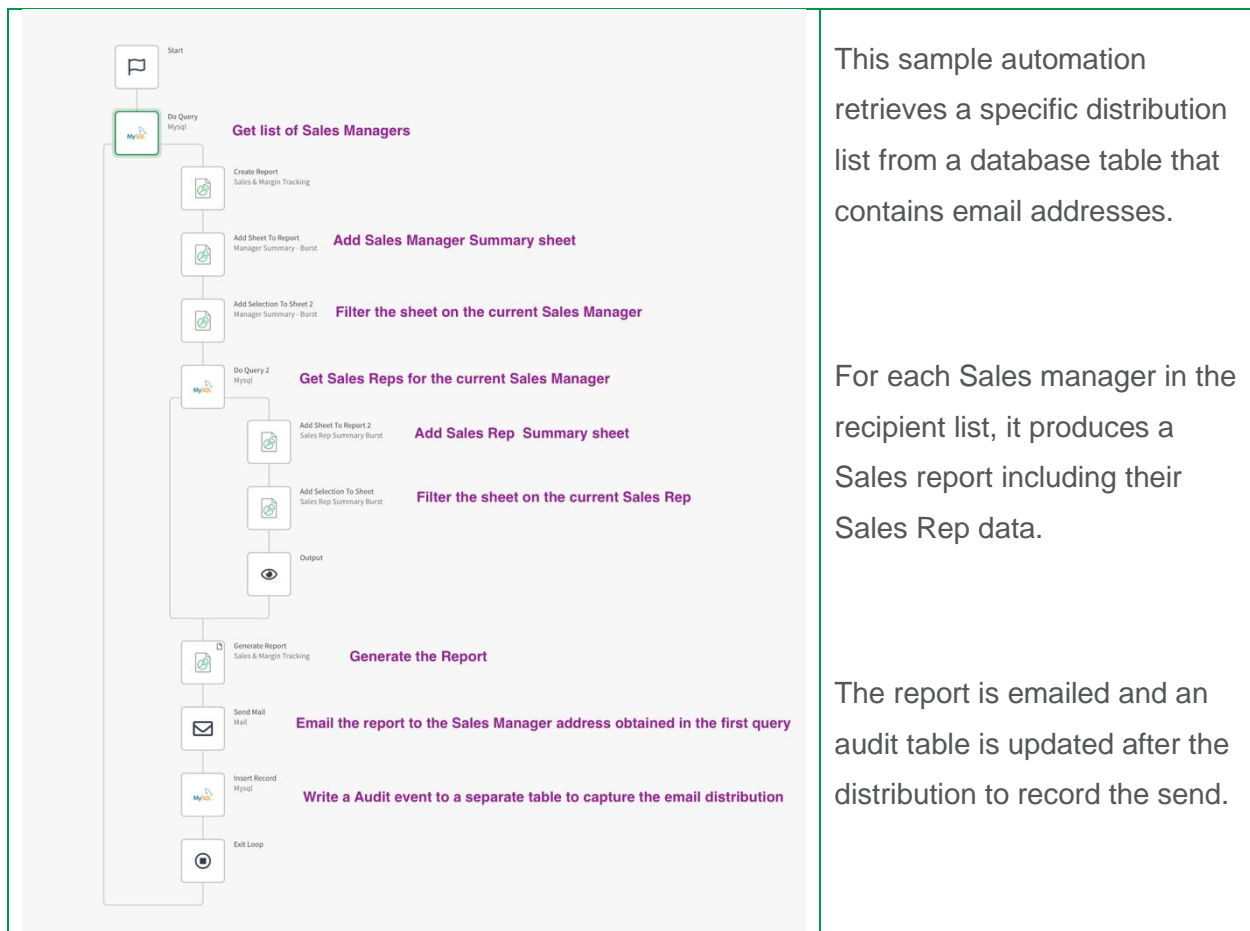**Tutorial: Reporting from Qlik Cloud Analytics**

Recipient Management & filtering

Recipient lists, containing all of your analytics users (regardless of whether they are Qlik users or not) can be read from a variety of connected cloud stores including:

1. Inline table within a Qlik Sense table

2. Spreadsheet cloud connected XLS or Google Sheet

3. Databases

To leverage these recipient lists you will use a Loop block construct to iterate through each user. If there are user level selections that need to be applied to the composition for each recipient, then each report will need to apply a Selection corresponding to the filter field in the recipient list being read in. Two template samples are available when creating a new automation that will pre-populate the automation workspace with the required block: (1) reading from a Straight Table and (2) reading from an Excel file.

Example: Using a database to obtain a recipient list and distribute recipient specific reports.

This sample automation retrieves a specific distribution list from a database table that contains email addresses.

For each Sales manager in the recipient list, it produces a Sales report including their Sales Rep data.

The report is emailed and an audit table is updated after the distribution to record the send.

Distribution Channels

Through Qlik Application Automation, the report task logic can be configured to deliver reports to a variety of channels including Email, Microsoft SharePoint, and cloud storage locations (Dropbox, S3, and more). After each Report Generation Block, a Copy File block is used to move the report output to the connected channel.
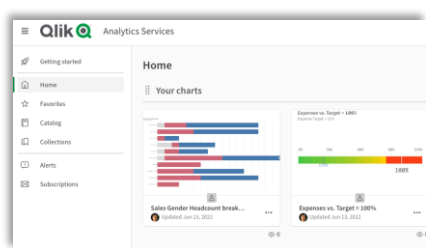
References
- Tutorial **Creating a Qlik Reporting Service report**
- **See the Reporting section of the Templates help document for the latest list of automation templates that will accelerate report task creation**

Interactive Reporting - "Like" reporting use cases for the business user

For many BI leaders, the quest to maintain user activity within the chosen analytics platform is met with user behavior patterns that call for a distributed report. Qlik's Active Intelligence vision of making decisions with the most accurate view of data has contributed to a number of "like" use cases that can be positioned with business users as alternatives to receiving reports. These use cases do require the user to have access to the source Qlik Sense application and offer the user the ability to flexibly integrate analytics into their daily workflow versus traditional static, point in time, reports. Any distribution use cases can be distributed to other Qlik users who have access to the referenced Qlik Sense application.
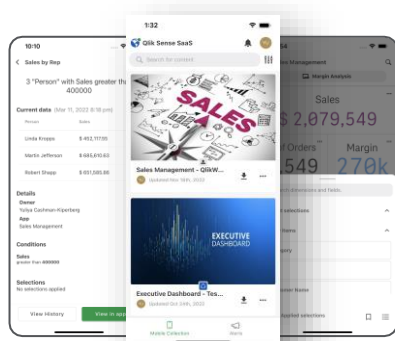
Monitored Charts

	Monitored charts are an acceptable alternative for distributed reports for some users. Business users can create a self-curated view, within the cloud hub or the Qlik Sense Mobile app, of the current data of their preferred visualizations across all apps they can access. See: **Monitoring visualizations**

Qlik Sense Mobile

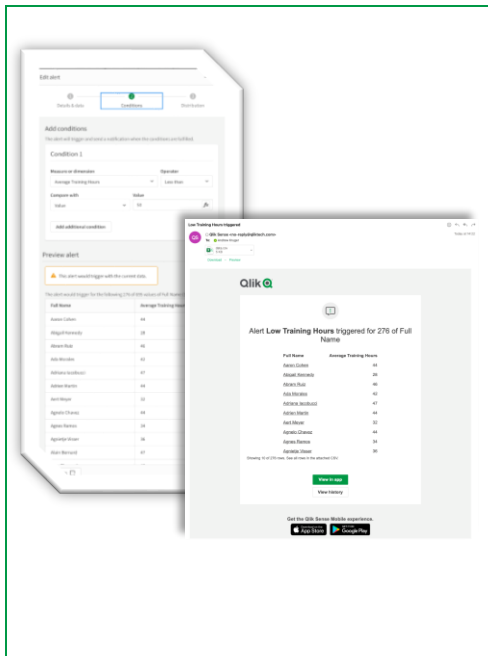|	
	Qlik Sense can be viewed in a Mobile browser on tablet or phone and there is a Qlik Sense Mobile app in the IOS App Store and the Google Play Store. This offers users full analysis and view of the latest data instead of deferring to point in time static reports. See: **Qlik Sense Mobile SaaS**

Data Alerts

Many reporting use cases in Qlik NPrinting are actually solving the business problem of notification via email of data conditions versus sending a report document. Any business user can create conditions to be evaluated on a scheduled or reload basis. When the condition occurs, the user can be notified via email, hub notification or Mobile push to the Qlik Sense Mobile app. Data Alerts supports a burst use case when Section Access is applied in the application. One condition can be used for many users, delivering the notifications only relevant for each user.

See: **Monitoring data with alerts**

Interactive Report - Subscriptions

For many situations, the Qlik Sense apps that are viewed interactively can form the report view of the analytics they need for downstream use. In Qlik Cloud, application developers build applications which enable business users to evaluate the state of a business. By leveraging this natural curation of analytics and associated selections, these Qlik Sense objects and sheets become the easiest form of content composition for a report.

What are Interactive Reports?

A scheduled report containing user selected sheets and data filters, delivered in PDF or PPT format.

How are Interactive Reports configured?

Within an application, the user can select the menu item title Subscribe to Sheet and follow the modal dialogue. See: Schedule Reporting with Subscriptions for detailed instruction and a sample video.

Recipient distribution and burst scenario

During the subscription creation modal flow there is a Share option. If the developer of the application has implemented section access, controlling the row level security of each user, the distributed report will contain recipient specific data. If there is no section access, then all users will receive the same report.

Qlik NPrinting Migration Playbook

Reporting with Qlik NPrinting (Client Managed) vs Qlik Cloud Reporting

Below is a summary of the differences between Qlik NPrinting and Qlik Cloud Reporting.

Qlik NPrinting	Qlik Cloud (Reporting)
Stand-alone value-add product A separate product on separate server(s) that requires distinct user directory, authentication, and authorization.	*Qlik Cloud integrated reporting capabilities* An integrated SaaS offering with one set of architectural services offering deeper support with the Qlik engine including alternate states and 'always one selected value'
Customer's technology team manages deployment for optimization and scale Customers manage Qlik NPrinting servers (fixed or limited number of pre-paid servers) to achieve optimal throughput and scale	*Qlik Cloud offers a scaled report delivery service* Elastic report generation that auto-scales
Single pattern for report authoring / composition via NPrinting Designer Qlik NPrinting Designer requires specific expertise and is required for all use case support, simple to more complex	*Range of options for report composition* Simple sheet selection via Native subscriptions Advanced composition and report process definition (Qlik Application Automation) Roadmap: Advanced authoring options
Fixed data sets Limited support for large data sets or data that frequently updates	*Fixed and Dynamic Data Sets* Support for on demand data sets using Qlik Application Automation

Migration Steps

When planning a migration to Qlik Cloud from Qlik NPrinting, you will first need to evaluate your Qlik NPrinting report estate. There are two ways to do this:

Self-driven – Either through your own manual analysis of your Qlik NPrinting instance (e.g. you may have a relatively small reporting estate), or you can use the Qlik Community posted Audit Trail application which can be used to read in your Qlik NPrinting Audit logs and offer visual analysis.

Supported by Qlik and/or Qlik Partner – If your Qlik NPrinting reporting estate is very large or complex, or you deliver a shared system service to your business community, you may wish to seek the professional support of Qlik and / or a Qlik Partner. Your Qlik representative or Qlik Partner can perform a deep dive analysis of your Qlik NPrinting estate and identify migration opportunities.

Step 1: Prepare for NPrinting Assessment

Unless you are doing a totally manual assessment, you will want to enable your Qlik NPrinting Audit Trail log on each NPrinting environment you assess. See https://help.qlik.com/en-US/nprinting/May2022/Content/NPrinting/AdministeringQVNprinting/Audit-trail.htm. If you have a development and a production environment, it is advised to get logs from both so you can understand at an aggregate layer how many reports you are running per month.

Step 2: Run your chosen tool for findings

If working with a Qlik representative or Qlik Partner, they will work with you to perform the assessment.

If running the Audit Trail App you will be able to load your NPrinting Audit Trial Logs and see results that inform (see the appendix for more) regarding:

- Estimates # Reports Produced Monthly

- Estimates # Automation Executions Monthly

- A breakdown of your Report Tasks, report formats produced, channels of delivery and more.

With the findings from these tools, you will be able to identify prioritized tasks, frequencies and form an understanding of your operational distribution reports that may need migration to Qlik Cloud.

Step 3: Complete business use cases mapping

Upon completion of the prior migration steps, you should have an understanding of your operational reports. Now you can begin mapping your operational reports to similar user cases in Qlik Cloud.

The tables below offer possible migration options for your Qlik NPrinting use cases. Review the report templates in the left column and the corresponding format. The right column offers a suggested capability on Qlik Cloud.

Important: the foregoing is a proposed framework for evaluation of moving from Qlik NPrinting to Qlik Cloud Reporting. Organizations must consider their business user requirements and evaluate Qlik Cloud capabilities in their entirety to determine the best solution for their reporting and distribution requirements.

BATCH USE CASE MIGRATION PATH

NPrinting Templates	Format	Qlik Cloud Capability
QlikView & Qlik Sense Entity *Qlik Sense Sheet* *Microsoft PowerPoint* *Microsoft Word* *Microsoft Excel* *HTML*	*PDF | PPT*	• *Sheet based reports with Qlik Application Automation (Email, SharePoint, Cloud Storage)*
Microsoft Excel *QlikView & Qlik Sense Entity* *CSV | SKV | TAB*	*XLS | CSV | PDF*	• ***Roadmap****: Tabular report Authoring and native tasks (Email, SharePoint)*
Pixel Perfect *Microsoft Word* *Microsoft Excel*	*PDF*	• *Sheet based reports with Qlik Application Automation (Email, SharePoint, Cloud Storage)* • ***Roadmap****: Tabular report Authoring and native tasks (Email, SharePoint)*

INTERACTIVE USE CASE MIGRATION PATH

NPrinting Templates	Format	Qlik Cloud Solution
QlikView & Qlik Sense Entity *Qlik Sense Sheet* *Microsoft PowerPoint* *Microsoft Word* *Microsoft Excel* *HTML*	*PDF | PPT*	• *Alert – data conditions* • *Subscription* • *Monitored Chart* • *Qlik Sense SaaS Mobile* • ***Roadmap****: On-Demand (Qlik Application Automation)*
Microsoft Excel *QlikView & Qlik Sense Entity* *CSV | SKV | TAB*	*XLS | CSV | PDF*	• ***Roadmap****: Subscription (Highly formatted tabular Reporting)*
Pixel Perfect *Microsoft Word* *Microsoft Excel*	*PDF*	• *Subscription* • ***Roadmap****: Subscription (Highly formatted tabular Reporting)* • ***Roadmap:*** *On-Demand (Sheet based reports with Qlik Application Automation)*

Appendix: Qlik NPrinting Audit Trail Analysis App for Qlik Cloud Migrating Customers

This Qlik Sense application has been developed to support Qlik NPrinting customers for the following:

- Understanding their Qlik NPrinting deployment for the type of report tasks and outputs currently in use. This will promote a deeper understanding of reporting requirements and identifications of "like" use case support in Qlik Cloud.

- Forecasting "value add" service requirements as part of the move to Qlik Cloud e.g. Qlik Reporting Service and Qlik Application Automation How does it work?

- Providing approximate answers for these questions:

    - How many reports are being distributed from Qlik NPrinting today?

    - What Report Tasks are producing files from Qlik NPrinting?

    - What types of files are being produced from Qlik NPrinting?

    - What channels of report delivery are in use for report tasks?

    - How many Qlik Application Automation runs might be needed on Qlik Cloud for Reporting?

    - How many Qlik Reporting Service reports might be required on Qlik Cloud?

Prerequisites

- Qlik NPrinting Log file that has been produced from Qlik NPrinting. For configuration see https://help.qlik.com/en-US/nprinting/May2022/Content/NPrinting/AdministeringQVNprinting/Audit-trail.htm

- An understanding of Qlik Cloud's value add services Qlik Application Automation and Qlik Reporting Service.

Steps to use the app:

- Enable your Qlik NPrinting Audit Trial feature (in any supported Qlik NPrinting version) and run it for 30 days – or a period that covers a representative sample of your operational reports.

- Download the Audit Trail Log file.

- Download the Audit Trial application and install on your Qlik Sense [Qlik Sense August 2022+ or Qlik Cloud + Qlik Data Gateway-Direct Access].

- Load your Audit Trail Logs (you can load audit trials logs from various Qlik NPrinting instances).

- Start your analysis!

Limitations

- Zip file use in Qlik NPrinting represents a compressed set of N files. There is no means from Qlik NPrinting Audit Trial data to incorporate an approximation of distinct report creations within Zip files into the provided forecasts.

Appendix: Other Reference Links

Qlik Cloud – Qlik Reporting Service

- [Generate a report using Qlik Application Automation](#)

- [Qlik Reporting Service - Brief Overview with Detailed Demonstrations - Part 1 and Part 2](#)

- [Qlik Reporting PowerPoint Format](#)

Qlik Cloud - Self-service for business users

- [Qlik Sense in 60 - Chart Monitoring](#)

- [Scheduling reports with subscriptions - Qlik Sense Cloud](#)

- [SaaS in 60 - Webhook filters, multi-sheet subscriptions and more!](#)

- [Collaborative Notes](#)

- [Everybody Make Some Noise!! Data Alerts are now in Qlik Sense SaaS!!!!](#)

- [Creating an alert with multi step conditions - Qlik Cloud](#)

Understanding your NPrinting Deployment

- Governance Dashboard https://community.qlik.com/t5/Official-Support-Articles/Qlik-NPrinting-Governance-Dashboard-Version-3-Now-Available/ta-p/1744538

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. Our cloud-based Qlik Active Intelligence Platform® delivers end-to-end, real-time data integration and analytics cloud solutions 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 38,000 active customers around the world.

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