Watson Care Manager

Bring your own tool (BYOT) reporting

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 9

Edition

This edition applies to Watson™ Care Manager.

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Chapter 1. Watson Care Manager Bring your own tool (BYOT) reporting

Bring your own tool (BYOT) reporting enables you to choose a business intelligence (BI) tool. Use your chosen Business Intelligence (BI) tool to analyze IBM Watson® Care Manager data and create custom reports and dashboards.

Note: From July 1 2022, for BYOT documentation updates, see the WH Support Docs site.

Using BYOT reports makes it easier to access your data and also gives you the flexibility to use the reporting tools that best suit the needs of your organization. In addition, by using BYOT, there is no need to up skill to use external reporting tools and you can choose the frequency of report generation.

You can use the IBM Watson Care Manager database to facilitate the generating of reports by using many different reporting tools. The IBM Watson Care Manager data is hosted in the IBM Watson Care Manager reporting data warehouse and can be accessed by using reporting tools such as Power BI, Jasper Soft, or BIRT.

You have a choice of three BYOT integration methods. Use one of these connection methods to connect your BI Tool to the IBM Watson Care Manager reporting data warehouse and generate reports. To help you choose the correct integration method for your organization, use the evaluation criteria that are outlined in Choosing an integration method. The following are the BYOT integration methods.

Direct BI tool connection
The client BI tool reads directly from the IBM Watson Care Manager reporting data warehouse.

Federated
Customer BI tool reads from their own federated database to the IBM Watson Care Manager reporting data warehouse.

Data download
Create a program to extract the report data from the IBM Watson Care Manager reporting data warehouse.

Chapter 2. Choosing an integration method

You can choose from three BYOT integration methods to connect your business intelligence (BI) tool of choice to the IBM Watson Care Manager reporting data warehouse, and generate reports in your BI tool.

To help you decide which BYOT method is most appropriate for your organization, see the following table.

Table 1. Evaluation criteria				
Integration method	Data volumes	Latency	Report execution time	Resources
1. Direct integration	Lower	Based on client-geographical region	Medium	Low
2. Federated data	Lower	Medium	Medium	Medium
3. Data download	Higher	Fast	Quickest	High

Review the following descriptions to give you a better understanding of the evaluation criteria:

Latency
> To understand the latency of your data, you must first understand your geographical location in relation to the location of the data center in which the reporting warehouse is deployed. Encrypted data is sent from the IBM Watson Care Manager reporting data warehouse to the BI tool by the public internet. Latency is the time that it takes for data to transfer from the IBM Watson Care Manager reporting data warehouse to the BI tool, for example, from the IBM Dallas data center to a client who is located in California. Contact your client representative who can provide an example of latency test results. For US customers, the IBM Watson Care Manager application and IBM Watson Care Manager reporting data warehouse are both deployed in the IBM Watson Care Manager Dallas data center.

Data volumes
> Data volumes refer to the number of first-class business records that you report against, for example, the number of patients, the number of notes or touchpoint records, or the number of assessment records. Reports or dashboards that display aggregated data only result in a few records that are sent to the client's BI tool. However, if you have many reports that list raw transaction data, it is an important consideration. Smaller clients might have less than 2,000 lives under care, medium-sized clients 2,000 - 5,000 lives under care and larger clients over 5,000 lives under care.

Reporting execution time
> Reporting execution time refers to the time it takes to run a report. Some reports are run interactively where the data is rendered directly on your client work station and in some cases your BI tool might support running reports in batch mode. Organizations have different requirements on report execution time. Some organizations mainly run reports nightly, or daily, and in these cases reports taking over 30 + seconds are acceptable. Other organizations who embed reports into applications might require some reports to run within a 5-second window. You must understand your report requirements in terms of report execution time.

Skills and staff availability (resources)
> Skills and staff availability refers to your organization's availability of skill resources for your BI tools. What rational database management system (RDBMS) administrator skills are available to review the federation option? Do you have skills in data integration in the form of ETL skills and skills to create a client download program? The availability of skills and resources influences the choices of your initial integration method.

Examples to help choose the best integration method for your organization

Direct integration
Direct integration is appropriate for the smaller client, for example, who has one staff member who allocates 50 percent of their time to run reports for the practice manager. The data volumes are smaller and report execution times are not critical as the staff member prepares report in advance for the practice manager.

Federated data
Federated data is appropriate for the medium-sized client with a local relational database that can be configured as a federated database system. The federated data integration method enables you to join existing data to IBM Watson Care Manager data. A federated database management system (DBMS) consists of a database instance that operates as a federated server, and a database that acts as the federated database, in this case the IBM Watson Care Manager reporting database. When configured, the federated database presents the database objects (known as nicknames) locally through a remote connection to the IBM Watson Care Manager reporting database. Federated data can also be used to present data locally from other client databases.

Data download
Data download is appropriate for the larger client who needs the greatest flexibility to use and mix IBM Watson Care Manager data with other local data. Data download provides the fastest report execution time possible. It is appropriate for an organization with skilled resources available to craft both a client download program and a local database schema. You can download only changed data to avoid large daily data transfer volumes.

How data is refreshed in the warehouse

The IBM Watson Care Manager SaaS offering includes a warehouse for BYOT workloads. A data refresh cycle runs every 2 hours that copies data from the application to the warehouse. The refresh is run every two odd hours, for example 9AM and 11AM.

The application data that is recorded after the last refresh date is not available. Coordinated Universal Time (UTC) is the time standard that is used in all reports that display a time.

Click here to see the Data Refresh view.

Configuring integration method options

The Db2 user ID and password authorize your access to the IBM Watson Care Manager reporting data warehouse. Before you can interact with the data warehouse, you must form a connection that uses the URL, port number, database name, and schema name. Your client executive provides all the relevant information.

Before you begin
Depending on the method used to run reports, certain information is required to integrate your external system with the IBM Watson Care Manager reporting data warehouse.

For setting up the flow from your system to the IBM Watson Care Manager reporting data warehouse, you must configure a specific IBM Watson Care Manager reporting data warehouse (URL), port number, database name, and schema name in your application. Your client executive provides you with the information once you submit a case on the Watson Health Support Portal.

For inbound TLS authentication purposes, you are provided with a user ID and password to secure the connection.

For secure network connectivity and allowlist purposes, you must provide the IP address of your application to your client executive.

About this task

To form a connection with the IBM Watson Care Manager reporting data warehouse, choose the appropriate option to retrieve the report data:

Procedure

- **Direct connection:**

    a) Obtain your IBM Watson Care Manager data warehouse (URL), port number, database name, and schema name from your client executive.

    b) Using the IBM Db2 database connector within your selected tool, enter the required information. A successful response provides access to the data views within your schema name.

- **Federated data:**

    a) Obtain your IBM Watson Care Manager data warehouse (URL), port number, database name, schema name, and list of views from your client executive.

    b) Using a federated database, enter the required information to set up the federation server.

    c) Create a nickname for each view that is required from the list of views. See the IBM Watson Care Manager reporting data catalog here. A successful response provides access to the view within your schema name.

- **Data Download**

    a) Obtain your IBM Watson Care Manager data warehouse (URL), port number, database name, and schema name from your client executive.

    b) **Note:** You must download only changed data to avoid large data transfer volumes. You can use the ingestion time attribute on each view to manage downloading only the data that was changed since the last download.

    Enter the required information into your development script. A successful response provides access to the data views within your schema name.

Chapter 3. Watson Care Manager data

Use the views available in the Watson Care Manager data warehouse to create custom reports and dashboards. A view is a group of related attributes that are used to create reports, for example, the Tasks views contain attributes that collectively display task information in reports.

The following are the views available in the Watson Care Manager reporting data catalog, which is available here.

Alerts

Groups attributes that relate to a client's alert details such as the alert name, priority, names of teams members who are notified about the alert, and the team member who created the alert. Use the attributes in the Alerts views to create Alert reports.

Assessments and questionnaires

Groups assessments and questionnaires attributes, for example, questions or answers. Use the attributes in the Assessments and Questionnaires views to create Assessments and Questionnaires reports.

Barrier

Groups barrier attributes, for example, category or status. Use the attributes in the Barrier views to create Barrier reports.

Client data

Groups attributes that relate to a client's demographic information, address, and contact information along with referral and utilization information for the client. It also contains a view that groups data that relates to tags recorded for clients and a view that groups data that shows who requested emergency access to a client and when. Use the attributes in the Client data views to create Client reports.

Consents

Groups attributes that relate to the client's consent, such as the consent type, status, expiry, and description of the consent record. Use the attributes in the Consents views to create Consents reports.

Custom data

Groups attributes that relate to information captured in respect of a custom client data type, such as the custom data type name, attribute name, or position. Use the attributes in the Custom data view to create Custom data reports.

Data Refresh

Groups attributes that relate to when data was last refreshed such as the date and time of the last refresh and the status of the refresh. Use the attributes in the Data Refresh view to understand when data was last copied from the application to the reporting warehouse.

Goals

Groups attributes that relate to information captured in respect of a client's goals, such as the goal type, source, and progress, along with team action, client action and progress comments views that allow you to identify team and client actions that are associated with the goal and progress comments recorded for the goal. Use the attributes in the Goals view to create Goals reports.

Notes

Groups attributes that relate to a note such as the priority, subject, status, and content text for the note and comments recorded for the note. Use the attributes in the Notes view to create Notes reports.

Program

Groups attributes that relate to a client's programs such as the program name, program enrollment status, and the completion date, along with goal, team action, client action, touchpoint and barriers

views that allow you to identify goals, team actions, client actions, touchpoints and barriers that are associated with the program. Use the attributes in the Program views to create Program reports.

Providers

Groups attributes that relate to a provider's details such as the provider name, status, contact details, and the team member who created the provider. Use the attributes in the Provider views to create Provider reports.

Services

Groups attributes that relate to services details such as the service name, description, status, start date, and the team member who created the service along with goal and barrier views that allow you to identify goals and barriers that are associated with the service. Use the attributes in the Services views to create Services reports.

Task

Groups attributes that relate to a task's details such as the task name, priority, category and whether the attributes are assigned to a role or a user. Use the attributes in the Tasks views to create Tasks reports.

Team and users

Groups attributes that relate to a user's details, such as their login ID, which workspaces they have access to, or what team role they are assigned. Use the attributes in the Team and user views to create Team and user reports.

Team actions

Groups attributes that relate to team actions, such as the name, category, status and completion details for the action. Use the attributes in the Team actions view to create Team actions reports.

Touchpoints

Groups attributes that relate to a touchpoint such as the subject, who the contact was with, the contact method, status, content text for the touchpoint and comments recorded for the touchpoint. Use the attributes in the Touchpoints view to create Touchpoints reports.

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