# **Getting Started Guide**

# Welcome to Panoply

Panoply is a cloud-based automated data lake and warehouse. Using RedShift technology, Panoply can take you from data collection to querying and analysis in minutes!

This *Quick Start Guide*, combined with the 21-day free trial Panoply offers will allow you to get a feel for how Panoply works. If you haven't registered yet, simply click Free Trial, or if you already have an account, sign in to your panoply.io account.

Here's how to get started:

- 1. Select a data source
- 2. Collect the data
- 3. Query it
- 4. Connect any BI / external tool



# **Create Your Database**

Your Panoply database stores all your data, users, and permissions. Give it any name you want, such as your team, project or company name.

#### **Connect a Data Source**

The first time you log into Panoply, the data source screen appears. If this isn't your first time using Panoply, tap **Data Sources** in the left navigation bar bar.



Users familiar with Panoply can add data from one of the many data source categories we offer. Or they can tap  $\stackrel{\text{$\sc 1$}}{=}$  **File Upload** to load data without providing credentials.

For this tutorial we recommend picking Sample Data to load our public Pokémon Stats database. This will provide a fixed data set so that we can first show you around Panoply. If

you selected **Sample Data** then the Pokémon data connection auto populates for you. If you tapped any other option, you must fill out the required connection info in the displayed screen.

#### Collect

Tap Collect to start uploading the data. A progress bar shows you when the data is being analyzed, modeled and uploaded into Panoply.

Ş	≡	Connect all of your data sources			<b></b>
<b>♠</b> △		1 Data Sources	Source credentials and parameters	re encrypted Add Data Sou	ırce
		Sample Data		i	×
ং র		File name	Choose File pokemon.csv		
₽		Destination	Supported formats: CSV & TSV, JSON & JSON-lines, XLS, Web-distribution logs, query-string logs, gzip, zip, tar and more pokemon	Name of the target table where	
6		Advanced	Show	wish to save the data	e you
• •			Collect		
8					

# **Check Out Your Tables**

Your data uploads in just a few seconds! Wait for this message -

YES! Your data is ready. View 🗙

Now, you can explore!

Tap **View** in the message to see the tables generated for you. Or, you can tap **Tables** in the left bar and then tap on the **Pokémon** box. This shows you –

- Data A sample of the table's data so that you can get a feel for its structure.
- Metadata The list of columns and their data types. Metadata is then generated and added to the data you provided by Panoply.

=	pokemo	on							
	po	kemon	l						
	Data	a							Query
		id		_updatetime	number	name		type_1	type_2
	1	1		2017-11-07T13:27:22.713Z	1	Bulbasaur	Grass		Poison
	2	100		2017-11-07T13:27:22.713Z	100	Voltorb	Electri	c	
	3	103		2017-11-07T13:27:22.713Z	103	Exeggutor	Grass		Psychic
	4	104		2017-11-07T13:27:22.713Z	104	Cubone	Groun	d	
	5	107		2017-11-07T13:27:22.713Z	107	Hitmonchan	Fightin	g	
	Meta	adata Number	generation	1		Show Hidden (2)	Connec Host Database	tion Details db.dev.panoply.io elena20171029	
	x2	Number	number			×	PORT	5439 elena+20171029@p	anoply.io
	**	Text	name			×	PASSWORD	(same as your Pano Amazon Redshift or	ply.io password) Postgres

Metadata fields start with a double-underscore. For example, \_\_updatetime, as shown to the right.

• **Connection Details** – Lists database connection details. Use these to connect your external SQL tools to your Panoply data.

Clicking a column header from the **Metadata** view allows you to dig deeper into the table's inner structure. You can also rename the column, delete it, and change its type or other technical details. Generally, there's no need to change these values because Panoply automatically assigns them for you.

#### Query It

Your database is now ready for querying. It's time to get some insight!

Tap **Analyze** in the left bar. A simple workbench appears in which you can query your data.

-	Workbench				▶ ⊞ :	> #	۵.
1	SELECT "id", "updat	tetime", "number" FROM "	pokemon"		20	pokemon	
	e a	updatetime	number	name	N		
1	10	2017-05-08T10:39:41.324Z	10	Caterpie	Bug		
							-

You can also connect to your database using any external SQL tool.

Here's a simple query that lists the top 10 strongest Pokémon in order of their health. Type or copy this query into the editor –



Press **Shift** + **Enter** or click to run the query and display the results.

Here's how to break them up by type and to count the number of Pokémon of each type -



Let's dig deeper and compute the average and median speed for each type -



Great! Now you can play around and start changing the queries to find interesting correlations in the data.

Now, if you're feeling adventurous - try the query at the end of this document!

# Analyze Using External Tools

Now for what you really want – to analyze your data using your favorite BI or SQL tools! Panoply is a Postgres JDBC/ODBC compliant database. This means you can connect to it with almost any data querying software like Tableau, Looker, Spark or R. Use the following connection details –

- Driver Postgres
- Host db.panoply.io
- **Port** 5432
- **Database** The database name you used when you created your Panoply account. If you don't remember, look at the top-left corner of our UI.
- User Name and Password The same credentials you used to sign up to panoply.io . Don't remember them? Reset it.

Your connection details also appear in the Tables screen.

### What's Next?

Now that your data is set up, here's how to get the most out of our cool features -

• Add more data sources to consolidate and combine all your data into one place. Can't find the data source you need? It's open-source! You can add your own. Or shoot us an email and we'll build it for you!

- Schedule your data sources to update periodically.
- Use our SDK data source to stream data in real time.
- Transform your data to best fit your analytical needs.
- Invite your colleagues to collaborate with you have them add their own data sources and transformations.

# Cool Pokémon Query

SELECT
b.type_1,
b.color AS main_color,
<pre>round((b.num_in_main_color*1.0)/c.all_in_type,2) AS percent_of_main_color,</pre>
c.all_in_type
from (
SELECT
color, type_1, num AS num_in_main_color,
ROW_NUMBER() OVER (PARTITION BY type_1 ORDER BY num DESC) AS rank
From (
SELECT
<pre>color, type_1, count(*) AS num</pre>
FROM "pokemon"
GROUP BY color, type_1
ORDER BY count(*) DESC
) a
) b
LEFT JOIN (
SELECT
<pre>type_1, count(*) AS all_in_type</pre>
FROM "pokemon"
GROUP BY type_1
) c
ON b.type_1=c.type_1
WHERE
b.rank=1 AND b.type_1 IS NOT NULL
ORDER BY c.all_in_type DESC

# Get a Free T-Shirt!

Have you found an interesting insight with our Pokemon data? We'd love to see the query and the result! In return we'll send you a T-shirt! We've got awesome designs for you to choose from. Shoot us an email to homeone@panoply.io and we'll send a shirt your way!