The Only Augmented Analytics Platform Purpose-Built for Life Sciences and Healthcare



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This documentation has been created for v2024.77 It is also valid for subsequent software versions as long as no new document version is shipped with the product.



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No Warranties and Limitation of Liability. Every effort has been made to ensure that this document is an accurate representation of the administrative features offered by WHIZ.AI platform. However, the development of the software is a continuous process. So, small inconsistencies may occur. We would appreciate any feedback on this document. Send comments via email to: support@whiz.ai

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Preface

This Admin manual intends to help you know about WhizAI and its functionalities; it gives you a broad overview of the out-of-the-box admin features and functions of WhizAI along with the necessary information and instructions about using WhizAI through different interfaces.

Intended Audience

This guide is intended primarily for WhizAl Administrators.

Related Documents

Along with this Admin manual, you can refer to the following documents:

- WhizAl User Manual
- Configurations Guide
- Adding Calculated Metrics Guide

Contacting WhizAl

For any support, you can reach to WhizAI support team in any of the following ways:

- Website: <u>https://whiz.ai</u>
- Email: <u>support@whiz.ai</u>

Introduction

WhizAI is the first and only purpose-built cognitive insights platform for life sciences, empowering users to get answers to their business questions by simply asking via voice, and text on the web and mobile. WhizAI is trained in the language and data of life sciences, enabling it to answer even the most complex questions from billions of records in seconds. Fast, easy, and scalable, WhizAI is the trusted partner of choice at the top global life sciences companies. Asked. Answered. Instantly. Learn more at https://whiz.ai/

Administering WhizAl

WhizAI provides administrator privileges to configure the platform according to the requirements and administer the platform for future changes and updates. This chapter covers the following topics:

Performance Monitor

- <u>Dashboard</u>
- <u>User Logs</u>
- <u>Audit Logs</u>

Users & Security

- <u>Users</u>
- User Group
- <u>Authorization</u>
- <u>Roles</u>
- <u>Email Templates</u>

Data Modeler

- Data Connections
- Data Models
- <u>Script Editor</u>
- <u>Metric Configurations</u>
- <u>Calculations</u>
- Example Queries

Content Manager

- Branding
- Configurations
- <u>Service Configurations</u>

• <u>Utilities</u>

NLP Workbench

- <u>Synonyms</u>
- <u>Replacements</u>
- Business Actions
- NLQ Analyzer
- Narrative Templates

<u>Usability</u>

Performance Monitor

Performance Monitor provides an analytics overview and keeps track of the performance of WhizAI data. Performance monitoring helps to monitor the behavior of the data and understand the parameters that impact the WhizAI application performance in real time. This section describes the dashboards, user logs, and audit logs.

Dashboard

The **Analytics Overview** dashboard gives you a quick analytics overview of WhizAI. To access the dashboard:

- 1. From the top navigation options, click **Admin**.
- 2. From the left-side menu, click **Performance Monitor > Dashboard**.



Some of the statistics that you can view on the dashboard are:

- 1. Queries Answered
- 2. Users Configured
- 3. Active Users
- 4. Active Users & Incoming Queries Trend
- 5. Top Users



Edit Layout

To edit the layout of the dashboard:

- 1. On the top-right corner of the **Analytics Overview** page, click **Edit layout** Edit layout
- 2. Click **Compact layout.**
- 3. Click Restore defaults.
- 4. Click Save.

Share Results

To share the results of the dashboard cards:

- 1. On the Analytics Overview page, hover on any of the cards, e.g., Active Users
- 2. Click the icon and select **Share**.



A new window opens. You can share the response of the selected card with Users/Groups.

- 3. Enter the name of the User/Group and click Search.
- 4. Select the listed Users/Groups.
- 5. Add comments in the given text box.
- 6. Click Share.



		Received a series of the serie	Share response w	ith	1	()Help 🦼 🤇
đ	Performance _ Monitor	Analytics Overview	Users	Groups		
	Dashboard		Q Search by name			
	Oser Logs	Queries Answered	Select all		lsers	Edit layout
	Users & + Security +	2024-01-16 - 02-14 / 2023-12-1	<	(+)	1-16 02-14 Queries Count Jame	Queries Count 🔸
.:.	Data Modeler +	69.77K		+	pi.automation.test1@whiz.ai	9,031.00
	Content +	Queries Count ▲ +39.10%(+19.61K)	A a	+	ustom@whiz.ai	5,308.00
	Manager		A	(T)	i.automation.facvm@whiz.ai	4,226.00
.	Workbench +	Active Users & Incoming Queries	Add comment		regorian@whiz.ai	3,757.00
		100			lustom2	3,689.00
		85.00			i.automation.fas@whiz.ai	3,459.00
		75 72.00 74.00	Cancel	Share	i.automation.fas3@whiz.ai	3,192.00
		50 John Start		41.00	i.automation.pinboards.test@whiz.ai	2,898.00

User Logs

With WhizAI, every time a user asks a question, the query and result get logged and authenticated. In User Logs, you can view the activities of each user. The **User Logs** screen displays the questions each user has asked and the responses they receive from WhizAI.

To view user logs:

- 1. From the top navigation options, click **Admin**.
- 2. From the left-side menu, click **Performance Monitor > User Logs**.

	🖗 whiz.ai	Explorer Pinboards Alert	ts Explain Adr	min						?		N
Ĩ	Performance Monitor	User Logs		94,018 messages in total					sh			
[Dashboard User Logs Audit Logs	2024-11-11 - 2024-12-10 V Select M Show Filters	<u>1-50</u> of 69,640 《 〈 〉 》			0 0 0						
10	User & 🔔	EXPRESSION V	USER V	TYPE V	CHANNEL T	PLATFORM V	SENT AT 🔻	STATUS V	LANGUAGE V		HELPFUL?	V
	Security	Show me weekly trx of past 6 weeks	heightan Sjudical	Statement	Web/Mobile		12/10/24, 10:45 am	Success	en			
.:.	Data Modeler +	Reset	high an Devile a	Command	Web/Mobile	L	12/10/24, 10:45 am	Unknown	en			
R	Content Manager +	Show trend of TRx including Anom	height an differing a	Statement	Web/Mobile	Ţ	12/10/24, 10:44 am	Success	en			
	NLD	Reset	high an the trail	Command	Web/Mobile		12/10/24, 10:44 am	Unknown	en			
₩¢.	Workbench +	HCP TRx Average Growth	Hander, J	Statement	Web/Mobile	Ţ	12/10/24, 10:44 am	Failure	en			
		What will be the weekly trx by regi	high an Division	Statement	Web/Mobile	Ţ	12/10/24, 10:44 am	Success	en			

From the logs, you can analyze whether you received the correct answer or if there is any ambiguity. In case of ambiguity, the data is messaged on the backend to deliver the correct results. If an answer needs to be corrected, IT administrators map the question to a specific dataset to deliver the required results.

To view user log details:

1. On the top-right corner of the **User Logs** page, click **Refresh** to view the latest user log.



2. Click a particular **User Log** row to open the Whiz Response dialog box.

This dialog shows the response displayed to the user's query.

🥡 🖓 whiz.ai	Explorer Pinboards Alerts Ex	xplain Admin				(2 4 🛛
Performance Monitor Dashboard	User Logs	Whiz Response Expression: Show trend of TRx including A User Name:	nomaly for dallas territory for last 3 months	×	1-51	94,018 messages in total	2 Refresh
User Logs					STATUS V		HELPFUL?
Audit Logs		Preview	NLP Response				
Security +	Show me weekly trx of past 6 weeks			0:45 am	Success	en	
Data	Reset	TRx [Weekly] 2022-01-29 - 04-29 TRx Dallas		0:45 am	Unknown	en	
Modeler +	Show trend of TRx including Anomaly for dallas t	🛱 Data Controls	Ø Search	0:44 am	Success	en	
Content +	Reset	Week 个	TRx	0:44 am	Unknown	en	
	UCD TBy Austrage Crowth	29 Jan to 04 Feb, 2022	7.05K	0.44 am	Failura		
Workbench +		05 Feb to 11 Feb, 2022	9.72K	0. 44 am			
	What will be the weekly trx by regions by brands	12 Feb to 18 Feb, 2022	5.06K 💿	0:44 am	Success	en	
	Reset	19 Feb to 25 Feb, 2022	7.04K	0:43 am	Unknown		
		26 Feb to 04 Mar, 2022	9.72K o				
	Show Anomaly on TRx monthly trend for southw	05 Mar to 11 Mar, 2022	7.00K	0:43 am	Success	en	
	Reset	12 Mar to 18 Mar, 2022	8.29K	0:43 am	Unknown	en	
		19 Mar to 25 Mar, 2022	12.13K 💿	0.40			
	HCP TRX Average Growth	26 Mar to 01 Apr, 2022	4.98K o	0:42 am	Failure		
	What will be the monthly trx by regions by distri	02 Apr to 08 Apr, 2022	8.11K	0:42 am	Success	en	
	Reset	09 Apr to 15 Apr, 2022 16 Apr to 22 Apr, 2022	8.86K 7.54K	0:42 am	Unknown		
	Monthly TRx trend including anomaly for southw	Total	102.05K	0:41 am	Success	en	
	Reset	Data: TRx as of 2022-05-06 Generated in: 4.28 sec	× h = *	0:41 am	Unknown	en	
	What will be weekly trx by regions by districts fo	Source: FAS - Automation Was this helpful? Yes No		0:41 am	Success	en	
	Reset			0:41 am	Unknown	en	

The **User Logs** dashboard displays the information of the selected period as given below:

Field	Description
Expression	Shows the question the user enters in the Conversation box.
User	Shows the name of the user.
Туре	Shows the type of question the user has asked. Whether a statement or a command
Channel	 Shows the channel that the user is configured for: Web/Mobile Skype Slack SMS MS Teams
Platform	 Shows the platform of the system on which the user is accessing WhizAI: Windows Mac Linux
Sent At	Shows the date and time when WhizAI sent the response to the user.



Field	Description								
Status	Shows status messag Success: If Wh Failure: If Wh Unknown No NLP Unauthorized No Data Blank	ies: hizAI successful izAI could not re	ly respo espond	onded to to the q	o the qu uestion	estion aske asked by t	ed by th he use	ne user. r.	
Language	Shows the language	in which the qu	estion v	vas aske	d.				
Helpful	View the response th response.	e user gets to th	neir que	estion. C	lick the	View Resp	oonse i	con to v	view the
	EXPRESSION V	USER 🛦	TYPE V	CHANNEL V	PLATFORM V	SENT AT 🔻	STATUS 🔻	LANGUAGE 🔻	HELPFUL? V
	TRx, NRx, NBRx for Purple Tea	si aderativ petpeticai	Statement	Web/Mobile	Ţ	02/1/24, 03:36 pm	Success	en	View Response
	Reset	si actorestor (scil)erte al	Command	Web/Mobile	Ţ	02/1/24, 03:36 pm	Unknown	en	
	Tennessee	Mondar	Statement	Web/Mobile	Ţ	02/1/24, 03:36 pm	Success	en	

The following table describes the options that you can find on the User Logs page.

Option	Description
Date	Displays the logs for the selected date or date range or period. You can enter a date range or select the relative period or a particular date.
Select Model	Displays the logs for the selected data model. You can select single or multiple data models from the drop-down list.
Select Users	Displays the logs for the selected users. You can select a single user or multiple users from the drop-down list.

The following table describes the buttons that you can find on the **User Logs** page.

Button	Description
Statements	Displays the user logs for the statements that the user entered in the Conversation box. The list hides the commands that you have entered.
Show Filters	Displays the filter below the column labels. You can click the filters and select the value you want to see on the list. For more information, see <u>Filtering</u> the user logs.

Export User Logs

The user can export logs in the XLS format.

1. From the <u>User Logs</u> page, click the icon and select **Export as XLS**.



) whiz.ai	Explorer Pinboards Aler	ts Explain Adr	min					?	4	N
Ĩ	Performance Monitor	User Logs						94,01	3 messages in total	C Ref	resh
	Dashboard User Logs Audit Logs	2024-11-11 - 2024-12-10 Select N Show Filters Select N	Aodel 💌 🚦		•	Statements		1-50 of 69,640	« 〈 〉 》 Export as XLS	:	
	User & + Security +	EXPRESSION V	USER V	TYPE V	CHANNEL V	PLATFORM V	SENT AT 🔻	STATUS V	Show system logs	HELPFU	JL? V
÷		Show me weekly trx of past 6 weeks	inighter (Spelic al	Statement	Web/Mobile	—	12/10/24, 10:45 am	Success	Configure		
.:.	Data Modeler +	Reset	inightan dipolitical	Command	Web/Mobile	L	12/10/24, 10:45 am	Unknown	en		
	Content Manager +	Show trend of TRx including Anom	in ight and don't of	Statement	Web/Mobile	Ţ	12/10/24, 10:44 am	Success	en		
		Reset	insight an elements of	Command	Web/Mobile	Ţ	12/10/24, 10:44 am	Unknown	en		
ц¢	NLP Workbench +	HCP TRx Average Growth	Mandar 2	Statement	Web/Mobile	Ţ	12/10/24, 10:44 am	Failure	en		
		What will be the weekly trx by regi	inipraecipetical	Statement	Web/Mobile		12/10/24, 10:44 am	Success	en		

2. On the **Export User Logs** dialog, select the options as shown in the following figure:



- 3. In the Limit number of exported logs text field, enter the number of logs that you want to export.
- 4. Click Download.

The XLS file is downloaded with the selected number. of user logs.

Show System Logs

The user can view system logs.

1. From the <u>User Logs</u> page, click the icon and select **Show system logs**.



) whiz.ai	Explorer Pinboards Aler	ts Explain Adr	min					?	4	N
Ĩ	Performance Monitor	User Logs						94,01	8 messages in total	C Refre	esh
	Dashboard User Logs Audit Logs	2024-11-11 - 2024-12-10 V Select N Show Filters	Aodel 💌 🗄	Select Users V Sto		Statements		1-50 of 69,640 《 〈 〉		nu	
	l ker &	EXPRESSION V	USER V	TYPE V	CHANNEL T	PLATFORM V	SENT AT 🔻	STATUS V	Show system logs	HELPFUL	2 🔻
1	Security +	Show me weekly trx of past 6 weeks	to apply an experiment	Statement	Web/Mobile	e 📮	12/10/24, 10:45 am	Success	Configure		
.:.	Data Modeler +	Reset	Indefinition (2014) and	Command	Web/Mobile	e 📮	12/10/24, 10:45 am	Unknown	en		
	Content Manager +	Show trend of TRx including Anom	Indefinition	Statement	Web/Mobile	e 📮	12/10/24, 10:44 am	Success	en		
	NIP	Reset	insights and disable at	Command	Web/Mobile	e 📮	12/10/24, 10:44 am	Unknown	en		
₩ ² Ct	Workbench +	HCP TRx Average Growth	Plantar J	Statement	Web/Mobile	e 📮	12/10/24, 10:44 am	Failure	en		
		What will be the weekly trx by regi	Indefinient Dépublication	Statement	Web/Mobile	e 📮	12/10/24, 10:44 am	Success	en		

Configure

The user can configure the columns displayed on the user logs page.

1. From the <u>User Logs</u> page, click the icon and select **Configure**.

) whiz.ai	Explorer Pinboards Aler	rts Explain Ad	min					2		Ν
Ĩ	Performance Monitor	User Logs						94,01	B messages in total	C Refre	esh
	Dashboard User Logs Audit Logs	2024-11-11 - 2024-12-10 V Select Model V Select Users V Statements Show Filters						<u>1-50</u> of 69,640	Image: Constraint of the second se	nu	
	Lloor S	EXPRESSION V	USER V	TYPE T	CHANNEL T	PLATFORM V	SENT AT 🔻	STATUS V	Show system logs	HELPFUL	.? 🔻
÷.	Security +	Show me weekly trx of past 6 weeks	insightsour 20 white al	Statement	Web/Mobile	Ţ	12/10/24, 10:45 am	Success	Configure		
.:.	Data + Modeler +	Reset	independence (https://di.al	Command	Web/Mobile	—	12/10/24, 10:45 am	Unknown	en		
	Content Manager +	Show trend of TRx including Anom	Insightsoanbillenhigal	Statement	Web/Mobile	_	12/10/24, 10:44 am	Success	en		
	NLD	Reset	indetrane Separtitud	Command	Web/Mobile	Ţ	12/10/24, 10:44 am	Unknown	en		
11 ² 01	Workbench +	HCP TRx Average Growth	Hantar,2	Statement	Web/Mobile		12/10/24, 10:44 am	Failure	en		
		What will be the weekly trx by regi	indgener (hpwhitz)	Statement	Web/Mobile	L	12/10/24, 10:44 am	Success	en		

The Table Configuration dialog is displayed:

Table Configuration	×
Columns order	
Column Name	
Expression	
User	
Туре	×
Channel	×
Platform	✓
Sent at	~
Status	\checkmark
Language	\checkmark
Helpful?	\checkmark
Channel ID	
Data Model	
User Role	
User Tags	
	Restore defaults
Cancel	APPLY

- 2. Select the checkboxes for the required columns.
- 3. Click **Apply** to save the changes.

The **Restore defaults** option allows the user to return to the default columns.

Filter User Logs

On the **User Logs** page, you can filter the user logs based on the date and usernames.

User Logs					
2023-04-06 - 2023-05-0! 🗸	èelect Model	▼ Select Users	▼ Stat	ements Show	v Filters
EXPRESSION V	USER V	TYPE V	CHANNEL V	PLATFORM V	SENT AT 🔻
marketshare		Statement	Web/Mobile	L	05/5/23, 06:39
Reset		Command	Web/Mobile	Ţ	05/5/23, 06:39

• **Date**: Shows options to select the dates and filter the records for a particular period.

Note: You can either specify the starting date and ending date as the custom range, OR WhizAI also has options to view data for relative dates. For example, you can view the details over a week, a quarter, a month, or a year.

- **Models:** List the available data models on WhizAI. Select the required data model whose logs you want to see.
- **Users**: List the users available on WhizAI. Select the required users whose logs you want to see. By default, the logged user appears in the field.
- Statements: Click this option to view only the statement type of user logs.



For more information about column-level filters, see <u>Filtering</u> and <u>Sorting</u> the log records.

Audit Logs

In WhizAI, user queries and results get logged and authenticated. In **Audit Logs**, you can view and track the activities of each user.

To view Audit Logs:

- 1. From the top navigation options, click **Admin**.
- 2. From the left-side menu, click **Performance Monitor > Audit Logs**.

🛞 whiz.ai	Explorer Pinboards	Alerts Explain	Admin					?		Ν
 Performance Monitor 	Audit Logs						148,051 messages in total	f	C Refree	sh
Dashboard	2024-11-11 - 2024-12-10 🗸		▼ Show Filters			<u>1-50</u> o	f 148,051 《 〈 〉 》	• • •		
Audit Logs	USERNAME V	TIMESTAMP V	MODULE V	ACTIONS V	REQUEST ID V	LANGUAGE 🔻	METADATA			ß
User & +	 replace/by/size 	12/10/24, 11:09 am	Workspace	Expand card	42125444	en				
Data + Modeler	1 Inspine Type and	12/10/24, 11:09 am	Workspace	Expand card	94073531	en				
✓ Content Manager +	DC	12/10/24, 11:09 am	Pinboard	List	93488704	en				
NLP Workbench +	1 Internetinetta	12/10/24, 11:09 am	Explain	Analyze	78425118	en	Anomalies			
	· Hipsontavita	12/10/24, 11:09 am	Pinboard	Show	98387980	en	My Pins[284]			

3. To view the latest Audit Log, click **Refresh**.

Refer to the Audit Logs guide to view the audited list of actions.

By default, the audit logs show the user activity for the past 30 days. However, you can configure custom periods and view the details as required. You can search for a particular user and view the information for that user.



From the Audit Logs page, you can view details of user activities and the corresponding timestamps.

For example: For the **Pinboard module**, you can see details such as who created or accessed a **pinboard**, the actions taken by the user on the pinboard or any card.

Remember! To view the details of the actions performed, hover the cursor over the user detail and then click the **View Response** icon as shown below:



Ĩ	Performance _ Monitor	Audit Logs						167,171 messages in total	2 Refresh
	Dashboard	2024-10-23 - 2024-11-21 🗸	Select Users 💌	Show Filters				0-0 of 0 < >	
	User Logs Audit Logs	USERNAME V	TIMESTAMP V	MODULE V	ACTIONS V	REQUEST ID 🔻	LANGUAGE V	METADATA	
:4	User & + Security +	Q QA-Testuser2	11/21/24, 12:29 pm	Workspace	Model Info View	23020032	en		View Response
.:.	Data + Modeler +	Q QA-Testuser2	11/21/24, 12:29 pm	Pinboard	Show	15885149	en	Tag[750]	F

Configure

The user can configure the columns displayed on the audit logs page.

1. From the <u>Audit Logs</u> page, click the İ icon and select **Configure**.

S.	🔋 whiz.ai	Exp	olorer Pinboards	Alerts Explain	Admin				2 4 N
Ĩ	Performance Monitor	Aud	lit Logs					1	48,051 messages in total
	Dashboard	2024	-11-11 - 2024-12-10 🗸	Select Users 🔹	Show Filters			<u>1-50</u> of 148	,051 « 〈 〉 》
	User Logs Audit Logs	USERI	NAME V	TIMESTAMP V	MODULE V	ACTIONS V	REQUEST ID V	LANGUAGE 🔻	Configure
*	User & + Security	1	Indexediation	12/10/24, 11:09 am	Workspace	Expand card	42125444	en	
.:.	Data Modeler +	1	Inighter Texture	12/10/24, 11:09 am	Workspace	Expand card	94073531	en	
R	Content Manager +	DC	Douguit-C	12/10/24, 11:09 am	Pinboard	List	93488704	en	
ış‡¢r	NLP Workbench +	I	sugaran tipetcar	12/10/24, 11:09 am	Explain	Analyze	78425118	en	Anomalies
		1	inighter Species	12/10/24, 11:09 am	Pinboard	Show	98387980	en	My Pins[284]

The following Table Configuration page is displayed:

Table Configuration	\$
Columns order	
Column Name	
Username	Image: A start of the start
Timestamp	\checkmark
Module	✓
Actions	×
Language	×
Metadata	✓
Platform	
	Restore defaults
Cancel	ΔΡΡΙΥ

- 2. Select the checkboxes for the required columns.
- 3. Click Apply.

The **Restore defaults** option allows the user to return to the default columns.



Audit log for admin activities

WhizAI logs all the actions on the **Admin** module. The audit log will have key components such as **event logging, user name, and timestamping details**. The audit log will help analyze the user actions and provide insights on data modeler usage analytics. The admin audit log will be visible under the Audit Log page against the Data Modeler module.

Module	Action
	New Data Model
	Refresh
	Search
	Import Model
	Export Model
	Edit model name
Data Modeler	Run
	Gear settings change
	Edit
	Activate
	Deactivate
	Quick data model
	Run via schedule
	New
	Search
	Сору
Connection	Edit
	Delete
	Verify
	Update
Metric configurations	Bulk update
	Export
	New
	Edit
Functions	Import
	Save
	Bulk update
	Bulk delete
	Edit
	Delete
	Import
Calculated metrics	Save
	Bulk update
	Bulk delete
	New query
Farmer la service de la	Edit
Example queries	Delete
	Search

Below admin actions will be logged in the audit log:



	Import
	Export
	Delete
	Bulk delete
	Updates to Avatar
Bronding:	Updates to brand logo
Бгалоілд	Updates to agent name
	Updates on Show Advanced settings
	Show filters
Athe stantions	Reset filters
Authorizations	Configuration
	Export as XLS
Utilition	Send messages and images to users
Oundes	Update system status and downtime message



Users & Security

This section covers the details of WhizAI users and security. It describes the management of user profiles, their roles, and the authorization process.

Users

The **Users** page displays the details of all users available on WhizAI. You can add a new user, edit the user details, and deactivate a user.

On the **Users** page, click the **Show Filters** button to enable the column-level custom filters. You can then select the appropriate values in the columns to view the required users.

🥡 🎘 whiz.ai	Explorer Pinboards	Alerts	Explain Admin					?		Ν
 Performance + Monitor + 	Users Show Filter	s								0 0 0
💼 User & _	Name ↑	Last Active	Role	Access Channels	Tags		Data Model	Actions		
Security	a .M.	13 days ago	Analyst	Web/Mobile			FAS - Automation			
User Group Authorization	an Ant	4 days ago	Analyst	Web/Mobile			FAS - Automation			
Roles	A Akay	18 hours ago	Admin	Web/Mobile			FAS - Automation-LLM			
Email lemplates	at Antophene	a day ago	Admin	Web/Mobile			FAS - Field Analytics			
Content +	A Meany	21 hours ago	Admin	Web/Mobile	system		FAS - Automation			
NLP +	an Andrews		Admin	Web/Mobile			User Logs			
• ••••Rochen	A Anna	6 days ago	Analyst	Web/Mobile			FAS - Automation			
	ant Analysi automatics	la -	Admin	Web/Mobile	testtag	whiz	User Logs			
	a atomicals		Admin	Web/Mobile	testtag	whiz	User Logs			
	a qi automationia.	19 days ago	Admin	Web/Mobile	testtag	whiz	User Logs			+
					Page size		1 To 10 from 197 K	< Page 1 from 2	20 > :	×

Create New User

To create a new user:

• On the lower-right corner of the **Users** page, click the plus icon 🛨 to open the **Create User** page.

Ĩ	Performance Monitor	+	\leftarrow Create User					
÷	User & Security	-	User name Last Active - never	Permission				
	User Group Authorization	n	ACCOUNT Name Enter user name	Sending email is disabled as per the setting of the global flag "Enable Email notification for user creation" EMAIL TEMPLATE				
	Roles Email Templates		Email mail@sample.com	Select Email Template				
.:.	Data Modeler	+	Role Analyst	B I U S <> >> IE IE Heading <				
<u>M</u>	Content Manager	+	Language English					
ц¢	NLP Workbench	+	Available Data Models None Tags + Add tags					
			Cancel Create User	Send mail to admin				

- In the ACCOUNT fields,
 - Enter Name.
 - Enter **Email**.
 - Select a **Role** for the user.
 - Select the **Language**.
 - Select the **Available Data Models** to which you want to give the user access. You can select multiple data models.
 - Add **Tags** for the user.
- In the **EMAIL TEMPLATE** section, select the Email template from the drop-down.

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5	

For more information, refer to the section **Email Template**. For more information on the fields in the email text, refer to the **Handbook** option on the right.

• Click **Create User** to save the user account details.

Configure Access Channels

Configure the Access Channels for the user.



The Access Channel section is enabled only after you save the user account details.

• Click the channel that you want to configure for the user.



 Performance + Monitor + 	← Edit User	
User & - Security -	N Last Active a few seconds ago	Authorization Permission E Logs
Users User Group	ACCOUNT	ACCESS CHANNELS
Authorization Roles	Name	Web/Mobile SMS Teams Slack Skype Email
Email Templates	Email	Login uhwetter, docilientile al
Data + Modeler +	Role 🗸	Password (1)
Content + Manager +	Language	Default page
NLP + Workbench +	English ~ Available Data Models	Cancel Saue Channel
	All Tags	Cancer Save Channer
	Documentation × + Tag	

- Enter appropriate details for the selected channel. In case the password is communicated through email, you may skip to enter the password in this step.
- Set the authorization for the user. For more information, see <u>Authorizing the users for metrics</u>.
- Click Save Channel.

Edit User Details

To edit user details:

- On the User's page, select the user record to edit. Click the **Edit User** icon for the user whose details you want to edit.
 - On the **Edit User** page, make the necessary changes. Add or remove the access channels. For more information, see <u>Creating a New User</u>.
 - Click Save.

Enable/ Disable Features

As an Administrator user, you can enable or disable access to WhizAI features from the User Interface. Go to **Users & Security > Users > Edit User** page > **Permissions**. The **User Permissions** page is displayed. From this page, you can click the toggle button against each permission to enable or disable access to that feature.



Administering WhizAI

				×	
ø	Performance + Monitor	← Edit User	User Permissions	^	
	Licer S	N	About us		
*	Security -	Last Active a few seconds ago	Profile Page		
	Users		Logout Option		
		ACCOUNT	Onboarding		S CHANNELS
	Authorization	Name	Features Notifications		
		N	Landing Page		b/Mobile SMS Teams Slack Skype Email
	Koles	Email	Slicer		
	Email Templates	shout as the first is a	Cohorts		Annt mag a characteristic a cal
	D.		Service Configuration		rd î
···	Modeler +	Role	Branding		
		Admin	Training		
2	Content + Manager +	Language	Explorer		page
		English	Pinboards		./dashboard/boards/123
ц¢	NLP Workbench +	Available Data Models	Cards XLS Export		
			Cards CSV Export		Cancel Save Channel
			Explain		
		Documentation × + Tag	▶ Alert		
			Data Modeler		
		Cancel	Cancel	Apply	

Following is the list of permissions you can enable or disable for the selected user:

Permission		Description		
About us		Enable/disable the About Us option from the Profile menu. This option allows you to view version information along with other product details.		
Profile Page		Enable/disable access to the Profile Settings option from the Profile menu. You can view your personal information, security details, language preferences, and preferred landing page on the User Settings page.		
Logout Option		Enable/disable the option to log out from the Profile menu. This feature allows you to log out from the WhizAI platform.		
Onboarding		Enable/disable the Get started option from the Profile menu. This option provides a guided way for new users to get started with the product.		
Features Notification		Enable/disable the What's New option from the Profile menu. This option allows you to view the new product features.		
Landing Page		Enable/disable the Preferred Landing Page option on the User Settings page accessed from the Profile Settings in the Profile menu.		
Slicer		Enable/disable the Slicers menu option from Explorer. This feature helps to capture and apply the most frequently used filter values with a single click in both Explorer and Pinboard areas.		
Cohorts		Enable/disable the Cohorts option from Explorer. This feature allows you to group entities with specific conditions and a single target dimension		



Permission		Description				
Service Configuration		Enable/disable the Service Configuration menu option from the Content Manager on the Admin page. This feature				
Explorer		Enable/disable the access to the Explorer menu.				
	Spell Checker	Enable/disable the spell check functionality. This option allows you to click the misspelled red word and get a list of suggested correct spellings.				
	Auto Suggestions	Enable/disable the "Auto Suggestions" functionality. When enabled , this feature provides suggested names of dimensions, metrics, and entities based on the phrase the user begins typing. This helps avoid spelling errors and streamlines the process of data entry. For example, if a user types "Ala," they may receive suggestions such as "Alabama" and "Alaska".				
	Guided Analytics (BETA) Suggestion	Enable/disable the functionality. Additional Backend Configuration is needed to enable this feature. This feature provides suggested queries that you may want to ask based on the previous response.				
Pinboards		Enable/disable access to the Pinboards menu options.				
	Pinboard Manager	Enable/disable access to the Pinboard manager from the Pinboard menu and Pinboard tab.				
	Card Sharing	Enable/disable the access to share Pinboards. This feature is used to share pinboards a card with individual users or user groups from the Explorer or Pinboard area.				
	Copy Board	Enable/disable the option to copy a Pinboard.				
	Create Board	Enable/disable the option to create a new Pinboard from a card on Explorer or from the Pinboard navigation menu.				
	Narratives	Enable/disable the access to get a data summary (narratives) displayed in response to an NLQ or from any applicable card on Pinboards.				
	Filters Progress Bar	Enable/disable the access to apply filters on a Pinboard.				
	JSON Import/Export	Enable/disable the option to import or export JSON from the Pinboards and Pinboard navigator.				
	Annotations	Enable/disable the access to the annotation option on the cards.				
Cards XLS Export		Enable/Disable the Card XLS Export option on the Explorer and Pinboard cards.				
Cards CSV Export		Enable/disable the Card CSV Export option on the Explorer and Pinboard cards				
Explain		Enable/disable access to the 'ExplAIn' module which includes Anomalies, Key Drivers, etc. It is mandatory to enable this configuration to use any of the Explain features.				



Permission		Description			
	Invoke Key Driver Analysis	Enable/disable access to the option for triggering the PoP/YoY and selected period analysis (KDA) via NLQ or from any applicable card. To use this configuration, it is mandatory to enable the Explain configuration.			
	View Narratives	Enable/disable access to get a summary of the data (narratives) for an NLQ or from any applicable card. To use this configuration, it is mandatory to enable the ' Explain ' configuration			
	Invoke Anomaly Detection	Enable/disable the access to invoke anomaly detection from a workspace or a pinboard card. To use this configuration, it is mandatory to enable the 'Explain ' configuration.			
	Invoke Predictions	Enable/disable the access to invoke prediction via NLQ or 'ExplAIn' from an applicable workspace card. To use this configuration, it is mandatory to enable the 'Explain ' configuration			
	Explain Workbench	Enable/disable access to the 'Explain Workbench'. To use this configuration, it is mandatory to enable the 'Explain ' configuration.			
Alert		Enable/disable permission for the selected user to access the Alerts tab. If you enable the option, you can access the Alerts Tab and receive alert notifications. Only the users with active alert permissions will be added to the recipient list for creating alerts. If you disable the option, you cannot create new alerts, launch alerts, or subscribe to any alerts. You can access the existing or scheduled alerts only.			
	Create Alert	Enable/disable the create alert option from Explorer's response, data point, and cards. If you disable this option, you cannot create new alerts, launch alerts, or subscribe to any alerts.			
	Share Alert	Enable/disable the access to share alerts with other users in the system while creating an alert. This can be done through the Recipient tab while creating the alert.			
Data Modeler		Enable/disable the access to configure a new Data Model from the Data Modeler feature available on the Admin page.			
Branding		Enable/disable branding access. The Branding option is available under Content Manager on the Admin Page. This feature allows you to customize the WhizAI agent's avatar and Brand Logo to personalize their experience.			
Training		Enable/disable to shut down the training machine node available under the NLP Workbench on the Admin page.			

Authorize Users for Data

WhizAI supports authorization both by rows and columns in the data source. To authorize users for data:

- 1. In the user record, click the **Edit User** icon for the user to edit the authorization.
- 2. Click **Authorization**.



 Performance + Monitor + 	← Edit User	
User & _ Security -	N Last Active 2 hours ago	Authorization Permission E Logs DEACTIVATE
Users User Group	ACCOUNT	ACCESS CHANNELS
Authorization Roles	Name	Web/Mobile SMS Teams Slack Skype Email
Email Templates	Email	Login
=== Data + Modeler +	Role 🗸	Password ()
🖍 Content + Manager +	Language	Default page E.g. /dashboard/boards/123
VLP Workbench +	English Vailable Data Models	Carrel Save Channel
	All Tags	
	Documentation × + Tag	
	Cancel Save	

The Authorization page appears where you can set the authorization for the user. For more information, see <u>Authorization</u>.

Deactivate User

When you deactivate a user, the user cannot access WhizAI through any interface. To deactivate a user:

- 1. In the user record, click the **Edit User** icon corresponding to the user you want to deactivate.
- 2. On the **Edit User** dialog, click the **Deactivate** button.

 Performance + Monitor + 	← Edit User	
user & _ Security -	N N Last Active 2 hours ago	Authorization Permission E Logs
Users User Group	ACCOUNT	ACCESS CHANNELS
Authorization Roles	N Email	Web/Mobile SMS Teams Slack Skype Email
Templates	Role	Password (1)
Content +	Admin	Default page
NLP Workbench +	English ~	
	Available Data Models All Tags	Cancel Save Channel
	Documentation × + Tag	
	Cancel Save	



Deactivate Access Channels

When you create a new user, you can add the different channels through which the user can access WhizAI. Later, you can also deactivate a specific channel or all channels.

After deactivating a channel, the user cannot log in to WhizAI through that channel.

Note: As an administrator, if you deactivate your own Web/Mobile channel, only another Administrator can enable your access.

To deactivate access channels:

- From the **Users** page, click the **Edit User** icon to view the Editing User details page.
 - From the **ACCESS CHANNELS** section, click the access channel tab that you want to deactivate.

 Performance + Monitor + 	← Edit User			
User & _ Security -	N N Last Active 2 hours ago	Authorization Permission E Logs		
Users User Group	ACCOUNT	ACCESS CHANNELS		
Authorization	Name			
Roles	Ν	Web/Mobile SMS Teams Slack Skype Email		
Email	Email	Login		
Templates	(heart to clocilles) (c. a)	siteset an des (hal is at		
Data +	Role	Password (
Modelei	Admin ~			
Content +	Language	Default page		
	English			
NLP Workbench +	Available Data Models			
		Cancel Save Channel		
	Tags			
	Documentation × + Tag			
	Cancel Save			

• Clear the **Active** check box and click **Save Channel**. A message appears for successfully saving the changes.

User Group

As a WhizAI Administrator, you can add and define user groups from the **Admin** console > **Users & Securities** > **User Group**. When you want to share responses, cards, pinboards, alerts, and so on, user groups facilitate efficient communication, targeted sharing, collaboration, and privacy.

Add New User Group

• Go to the Admin console > Users & Security > User Group.



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Performance +	User Group			
- Monitor	Group Name	User Count	Descriptions	Actions
Security -	Arrest Hole SecLOroup	4		
Users User Group	Automation Analysis	2	Test	
Authorization	Diskaged Chara Tard	7		
Roles		7		
Email lemplates	Suge.105	2	Test	
Data Modeler +				
Content + Manager +				
NLP +				
				_
				+
			Page size: To 4 from 4	K K Page 1 from 1 > >I

• Click • icon to create a new user group. The **Create User Group** page is displayed.

Note! Gen	reral tab is displayed by default.		
 Performance + Monitor + 	← Create User Group		
User & - Security - Users	User Group Name General Users		
Authorization Roles Email Templates	Name* Enter User Group Name Description Enter Description		
Data + Modeler +			
🖍 Content + Manager +			
NLP Workbench +			
		Cancel	Create

• Enter Name, and Description of the group.



• Click the **Users** tab > **Add Users** to display the **Add Users** dialog. From this **Add Users** dialog, select users that you want to add to the group, and click **Save**.

♂ Performance + Monitor +	← Create User Group	Add Users	×
User & - Security -	User Group Name	Search by name Select all	
Users User Group	General Users	A A (+)	
Authorization Roles		· And ·	Add Users
Email Templates	User Name	Anthop Toese	Actions
Data + Modeler +			
Content + Manager +			
🗳 NLP Workbench +		AT API Testing +	
		A API_User18 +	
		Cancel Save	ize: • OToOfromO K < PageOfromO > >1
			Cancel Create

• Selected users are added to the user group. Click Create to add the new user group to the system.

Ś	Performance + Monitor +	$\leftarrow CreateUserGroup$		
÷	User & _ Security _	User Group Name		
	Users User Group	General Users		
	Authorization Roles			Add Users
	Email Templates	User Name	Role	Actions
	Data + Modeler +	АА	Analyst	
A MARS	Content + Manager +	Analyst automation test	Admin	
¢	NLP Workbench +	Aphide Resident	Analyst	
		Aporto Bhole to	Admin	
			b	
				Page size: To 4 from 4 K < Page 1 from 1 > >I
				Cancel Create

Note! WhizAI also displays the **Role** of added users. (For example, Admin or Analyst). You can remove users from the group from the Actions column.



Edit or Delete User Group

- Go to the Admin console > Users & Security > User Group.
 - From the **Actions** column, click **Edit** *i* to edit the selected user group fields or **Delete** *i*, to delete the selected user group

Authorization

The **Authorization** page displays information about each user's access to metrics and dimensions of the selected data model. The Administrator has access to all metrics and dimensions of a data model.

8	🔋 whiz.ai	Explorer Pinboards Alerts	Explain	Admin			3 🦛 N
6	Performance + Monitor + User & _	Authorization Data Model FAS - Automation Show	Filters			(7) <u>1-20</u> of 1	97 « 〈 〉 》
	Security	USER A	ENABLED V	ALL METRICS V	TRX V	ACTION TAKEN V	CALL GOAL
	User Group	AA.		ALL	ALL	ALL	ALL
[Authorization	Apr: 7		ALL	ALL	ALL	ALL
	Roles	Akthat		ALL	ALL	ALL	ALL
	Email Templates	Akshar Pavar		ALL	ALL	ALL	ALL
.:.	Data Modeler +	Alcoso		ALL	ALL	ALL	ALL
45	Content	Anitute Park		ALL	ALL	ALL	ALL
<u></u>	Manager ⊤	Annol		ALL	ALL	ALL	ALL
ц¢	NLP + Workbench	And oil automation (soil		ALL	ALL	ALL	ALL

The Administrator has permission to assign the row level and column level security by modifying the user access as per the data model and metrics.

For example: if an Admin user authorizes a user to access only specific metrics, the user can see those metrics in the Context bar of the Conversation Box. If the user asks any question beyond the authorized metrics, the user will see a warning message stating they are not allowed to access the respective data. As every data model has different metrics and dimensions, the Administrator must perform the authorization separately for each model.

Note! As an administrator, if you configure only one data model for a user, which is the default data model, you cannot change the permissions. You need to add another data model and then only make the changes in the permissions. To know about adding a data model, see <u>creating a new user</u>.

Authorize User

- Go to the **Authorization** page and edit the access rules for a particular user.
 - From the Metrics drop-down list, select a metric as required.
 - Click Add Dimensions and then select a dimension.
 By default, WhizAI assigns access to 'All' the dimensions for the selected metric.
 - From the Dimensions drop-down list, you can select the dimension as required.

Important! Please note the following points when you are configuring the authorization settings: If a user has an existing authorization setting and on top of it you apply the global authorization setting, the system shall override the existing settings and apply the new one.



If a particular user has a global authorization setting and then if you apply a different setting that would restrict the user from viewing all the data, even in this case, the system overrides the existing setting and applies the new configuration.

Edit User Access for Dimensions

WhizAI Administrators can set authorization for users so that they cannot view specific dimensions in the entire product, that is, WhizAI Explorer, cards on the pinboard, 'Info' page, and filters. Such users can view the details for the rest of the dimensions, except these 'hidden' dimensions. In case you are not authorized to view certain (hidden) dimensions, then, you get a corresponding message on WhizAI Explorer and also on the cards on the pinboard.

To edit the access to a particular dimension:

1. Go to the Admin console > Users & Security > Authorization.

🎊 whiz.ai		Explorer Pinboards	Alerts Explain	Admin			3 🦛 N
 Performance Monitor User & Security 	+	Authorization Data Model FAS - Automation	Show Filters			() 	1-20 of 197 《 〈 〉 》
Lisers		USER A	ENABLED V	ALL METRICS V	TRX V	ACTION TAKEN V	CALL GOAL V
User Group		.M.		ALL	ALL	ALL	ALL
Authorization	1	Apr: 7		ALL	ALL	ALL	ALL
Roles	_	Alchar		ALL	ALL	ALL	ALL
Email Templa	tes	Alcha Pavar		ALL	ALL	ALL	ALL
Data Modele	r +	Alexer		ALL	ALL	ALL	ALL
Content	-	Anisati-Padi		ALL	ALL	ALL	ALL
Manager	Manager +	Janei		ALL	ALL	ALL	ALL
NLP Workbench	+	Analysi automation (aut		ALL	ALL	ALL	ALL

2. Hover the cursor on the user entry and click the **Edit access rules** icon to display the **Edit Authorization for <User name>** dialog.

	🔋 whiz.ai	Explorer Pinboards Alerts	Admin		0 4 N
<u>ب</u> پ	Performance + Monitor + User &	Authorization Data Model FAS - Automation v Show Fil		?	1.20 of 192 《 〈 〉 》
	Users	USER 🛦	ENABLED Ψ all metrics Ψ . NRX Ψ . TRX Ψ		ACTION TAKEN
	User Group	AA			ALL
	Authorization	Apr 7	Edit Authorization for	×	ALL
	Roles	Alabar			ALL
	Email Templates	Alcher Fanar	Metrics		ALL
	Data + Modeler +	Abrany	All metrics Dimensions	✓ ✓ Greset Greset	Central,Southeast,Southwest ALL
	Content +	And	+		ALL
	манадст	Analyst automation test)	ALL
ц¢	NLP + Workbench	API Testing			ALL



3. On the **Edit Authorization for <User name>** dialog, click + icon to display the **Add Filters** dialog. On this dialog, hover the cursor on the dimension that you want to hide for the user and on the vertical ellipses; then click **Hide**.

 Performance + Monitor + 	Authorization	Add Filters	×		
User &	Data Model FAS - Automation	Q Search dimension			
Users	USER 🛦 Eb	Dimensions			ACTION TAKEN
User Group	AA	Access Category	+		
Authorization	1000	Account Type	+		
Roles	Anna	Active Flag	+		
Email Templates	ALC IN THE SEC.	Additional Low Dec Target	+		
Data + Modeler +	Alexer	Address	(+)	lidwest,Northeast,South Central,Southeast,Southwest n,Plabenil	
. Content	Anal	Administration Mode	+		
Manager +	Analysis and senation loss	Age	+		
NLP Workbench +	API Testing	Age Group	+		
	api.automation.fas.spanish@whiz.ai	Area	+		
	api.automation.test10@whiz.ai	Call Sequence	+		
	api.automation.test11@whiz.ai				
	api.automation.test12@whiz.ai	ОК			
	api.automation.test13@whiz.ai				ALL

4. Select the Dimension from the list and click **Save**.

Performance +	Authorization	Add Filters	×		
User & - Security	Data Model FAS - Automation V Reset Fil	P Search dimension			
Users	USER ▲ ENAB	Dimensions		TRX T	ACTION TAKEN V
User Group		Access Category		•	
Authorization	N	Account Type	+	ALL	
Roles		Active Flag	+		
Templates		Additional Low Dec Target	+		
Data Modeler +		Address	+		
Content		Administration Mode			
🖉 Manager 🧮		Age	+		
NLP Workbench +		Age Group	+		
		Area	+		
		Call Sequence	+		
		Cancel	Save		

5. Select the values for the added dimension and click Save.



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 Performance + Monitor + 	Authorization				
User & _ Security	FAS - Automation Reset	Filtere x	~		? <u>1-1</u> of 1 ()
Users	USER 🛦 EN	Edit Authorization for 🗮	^	TRX V	ACTION TAKEN V
User Group	N				
Authorization	N	All metrics		ALL	ALL
Roles		Airmetrics			
Email Templates		Dimensions Access Category *	🖓 Reset		
Data		Select values	▼		
••• Modeler +		Administration Mode *			
Content + Manager +		Select values	▼	⊳	
NUD		-	÷		
Workbench +		(
			Cancel Save		

Export Authorization Settings

You can export the authorization settings to an XLS file. If you have filtered the records, only the available records are considered with exporting the authorization settings.

To export authorization settings:

1. From the <u>Authorization</u> page, click the 🗈 icon and then select **Export as XLS**.

	Performance + Monitor +	Authorization				
	User & _ Security _	Data Model FAS - Automation Reset Film	re ¥	×		⑦ <u>1-1</u> of 1 < →
	Users		Edit Authorization for	^	TRX V	ACTION TAKEN V
	User Group		Metrics			
	Authorization	N	All metrics	•	ALL	ALL
	Email Templates		Dimensions Access Category *	🕂 Reset		
	Data +		Select values	T		
	Content		Administration Mode *	~	Þ	
1	∠ Manager T		+			
	Workbench +					
			Ca	ncel Save		

2. From the Export Authorization Settings dialog, perform the following actions:





- 3. Toggle the option to choose the column ordering in the exported XLS file.
- 4. Click the **Download** button.

The XLS file is downloaded with the authorization settings of the available users.

Configure Columns

To configure the columns on the authorization page:

1. From the <u>Authorization</u> page, click the icon and select **Configure**.

(3)	Performance + Monitor + User &		Authorization Data Model FAS - Automation	Iters			3 1-20 of 192 《 <	Menu > >> :
	Security Users		USER A	ENABLED V	ALL METRICS V	NRX V	TRX V Con	ort as XLS
	User Group		AA		ALL	ALL	ALL	ALL
	Authorization		Apry P		ALL	ALL	ALL	ALL
	Roles		Alchay		ALL	ALL	ALL	ALL
	Email Templates		Alchay Pavar		ALL	ALL	ALL	ALL
-=-	Data + Modeler +		January .		ALL	ALL	Region : Mid-Atlantic, Mid-Central, Midwest, Northeast, South Central, Southeast, South Product Name : Emarun, Arobi, Ofasan, Plabenil	west ALL
	Content +		Arrol		ALL	ALL	ALL	ALL
K Manager	Manager		Analyst automation test		ALL	ALL	ALL	ALL
	NLP Workbench +		API Testing		ALL	ALL	ALL	ALL

The following Table Configuration dialog is displayed:



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3	Performance + Monitor	Authorization	Table Configuration	×		
	User & _	FAS - Automation Show Filters	Columns order		(*) <u>1-20</u> of 192 (*) *	
	Security		Column Name			ACTION
	Users		User			TAKEN
	User Group	AA	Enabled	\checkmark		ALL
	Authorization	120	All metrics			AU
			NRx			
	Roles	Akshav	TRx		b	ALL
	Email Templates	Althouthang (Action Taken			
			Call Attainment			
	Data +	Alber	Call Frequency		tral,Midwest,Northeast,South Central,Southeast,Southwest	ALL
	- Housier		Call Goal			
	Content	Areal	Call Volume			ALL
×	Manager	Analyst automation test	Clicked Emails			
	NLD		customer_cnt			
10	Workbench +	API Testing	HCP Total Prescription			ALL
		ani automation fas spanish@whiz ai	HCP TRx Average			ALL
		aprilation and a supplimon evinizion	Material Number			

- 2. Select the checkboxes of the required columns.
- 3. Click Apply.

The **Restore defaults** option allows the user to return to the default columns.

Support Non-Admin User Authorization for Data Modeler

As an Administrator user, you can set permissions for non-administrator users so that they can access the Data Modeler UI solution to build their data models. To set this permission:

- Go to Admin > Users & Security > Users.
 - Go to the non-admin user (Analyst) you want to assign the permission to and then click edit WhizAI displays the Edit User page.
 - Click Permissions from the top-right corner of the screen. The User Permissions dialog is displayed.

Performance + Monitor	← Edit User	User Permissions About us			
User &	N N	Profile Page		uthorization Permission	
Security	Last Active a few seconds ago	Logout Option			
Users		Onboarding			
User Group	ACCOUNT	Features Notifications		S CHANNELS	
Authorization	Name	Landing Page			
	Ν	Slicer		b/Mobile SMS Teams	Slack Skype Email
Email	Email	Cohorts			
	shwetae.doc@whiz.ai	Service Configuration		wetae.doc@whiz.ai	
Data .	Pole	Branding		rd (j)	
Modeler +	Admin	Training			
Content	Admin	▶ Explorer			
Manager +	Language	▶ Pinboards		page	
NLD	English	Cards XLS Export		, /dashboard/boards/123	
Workbench +	Available Data Models	Cards CSV Export			
		▶ Explain		Cancel	Save Channel
		▶ Alert			
	Documentation × + Tag	Data Modeler			
	Cancel	Cancel	Apply		



• Click the toggle against Data Modeler to set user permissions and click **Apply**. After this permission is set, the non-admin user can go to the profile menu and check that the **Data Modeler** option is available.



Important! Once permission is enabled for non-admin users to use WhizAI Data Modeler, please note that they get access only to the data models they have personally created using the Data Modeler solution, specifically under Data Models, Data Connections, Script Editor (access to all the scripts available in the system), Metric Configurations, Calculations, and Example Queries

Roles

Roles are grouped permissions that you can assign to a user. When you create a new user (Admin user or non-Admin user), you must select a role for that user.

	🔋 whiz.ai	E	xplorer	Pinboards	Alerts	Explain	Ad	dmin						?	N
Ĩ	Performance + Monitor		Roles												
*	User &		ID 🔺			ROLE N	IAME 🔻	V							
	Security		1			Admi	n								
	Users		2			Analy	/st								
	Authorization														
ſ	Roles														
1	Email Templates														
.:.	Data Modeler +														
	Content + Manager +														
ц¢	NLP + Workbench														

The **Roles** page is view-only. On this page, you can view the currently available roles for the user. Contact the WhizAI support team to enable additional roles for the users.

Email Templates

When you add users to WhizAI, they are notified by email. You can add and define a template from **Admin** console > **Users & Security** > **Email Templates**.


🎊 🛱 whiz.ai	Explorer Pinboards Alerts Explain Admin	? 4 N
 Performance + Monitor + User & - Security - 	User Email Templates (1 templates) Template Type Language New User English	New Template
Users User Group Authorization	Template Title Description Created At Last Modified Image: Complex Compl	Actions
Roles Email Templates	New Template Name Iorem ipsum 11/22/24, 05:35 pm 11/22/24, 05:35 pm	₽ ∠ 🗊
Data Modeler +		
Content + Manager +	l≩ I	
NLP Workbench +		
	1 To 1 from 1 K K Page	e 1 from 1 > >I

When adding a new user, you can select a predefined email template.

 Performance + Monitor + 	\leftarrow Create User	
user & - Security -	User name Last Active - never	Permission
Users User Group	ACCOUNT	EMAIL TEMPLATE
Authorization Roles	Name Enter user name	Select Email Template New Template Name
Email Templates	Email mail@sample.com	Preview Welcome Text B $I \cup \oplus \leftrightarrow m$ $\exists \equiv \exists$ Heading $\bullet \oplus A \land \exists \equiv \exists \equiv \exists$ TOPO: here will be default contract.
■■■ Data + Modeler +	Role 🗸	
✓ Content + Manager +	Language English	
Workbench +	Available Data Models None	
	Tags + Add tags	ß
	Cancel Create User	Send mail to admin

The following variables from the template get dynamically replaced by the values that you enter for the new user.

- #user_name#
- #user_email#

Similarly, the following variables are replaced with values entered for the Admin email, and Feedback email, which are set from the **Admin** console > **Content Manager** > **Configurations**.

• #feedback_email#



• #admin_email#

The values for the following variables are taken from the system configuration.

- #password_reset_link#
- #login_url#
- #redirectUrl#
- #reset_token#

You can enable or disable email notifications for new user creation from the **Admin** console > **Content Manager** > **Configurations.** You can also add an Admin email, to which a user creation email will be sent. Refer to the configurations <u>Admin Email</u> and <u>Email Notifications</u> for more information.



Data Modeler

Prerequisites

To use the data in the data modeler (the UI solution of WhizAI), the data should be in a transformed format. After the user is ready with the transformed dataset (de-normalized format) the user can use the data modeler to load the dataset into the system with all the required specifications and make it available for the business user to start accessing those datasets. Data modeling in WhizAI is the process of building a data model for the application and populating it with the data. During this process, the application learns about the data elements, metadata, relationships, hierarchies, and many more details. After the end-to-end workflow is processed, the application becomes ready to generate and present the analytical data to the business users. WhizAI offers you a user interface to complete the complex, technical task of creating a data model. You can design and build a data model.

The key data modeling steps are:

- Data extraction
- Data transformation
- Data validation
- Model preparation
- Data ingestion or live connections
- Model training
- Application configurations
- Periodic model run

The UI module of the data modeler system supports the following:

- Model preparation
- Data ingestion or live connections
- Model training
- Application configurations
- Periodic model run

With the help of the different elements in the Data Modeler UI, you can create a new model, connect to the transformed data, link the data model with one or more data sources, and apply data modeling and data load specifications. After the model is configured, you can trigger the run to perform the data ingestion into the model.

Data Connections

Data connections help to set up connections with the source data and connect it to ingest data into the WhizAI system. You need to establish a connection between the source data (transformed data - csv file, database table, etc.) and the data model to ingest data into the data model.

Prerequisites

The first step is to refine raw data and transform it into a specific format accepted by the WhizAI system. After the data is ready, you can add the data connections. WhizAI accepts the following formats:

- There must be at least one date column in every data source.
- The primary date column must be in yyyy-mm-dd format.
- The name of the data source should be unique within as well as across all the data models in the given system.
- Data should be in a de-normalized format.
- In the case of .csv or Parque files, make sure they are well-formatted.

The Data Connections page shows a list of connections created by users.



🥡 whiz.ai	Explorer Pinboards Alerts	Explain Admin				(2 4 N
Performance + Monitor +	List of Connections				2	I	New Connection
Security +	Connection Name	Data Source Type	Author	Created At	Last Modified ↓	Status	Actions
Data Modeler	Test_V77	Local Files	🐻 Degestrikati	12/09/24, 05:53 pm	12/09/24, 05:53 pm	Verified	e 2
Connections Data Models	test_model_local_file_connection_0	Local Files	H Masjarjousi	12/05/24, 05:28 pm	12/05/24, 05:28 pm	Verified	e 2 1
Script Editor	Test_PG	PostgreSQL	· Automation Substitution	11/28/24, 07:53 pm	11/28/24, 07:53 pm	Verified	e 2
Configurations	Automation_Analyst_local_file_connection_0	Local Files	In Saya Analysi	11/28/24, 03:37 pm	11/28/24, 03:37 pm	Verified	₽ Z 1
Example Queries	Automation_Local	Local Files	· topr thep	11/28/24, 03:35 pm	11/28/24, 03:35 pm	Verified	₽ Z 1
🖉 Content + Manager +	Test_Customer_Hierarchy_New	Amazon S3	A shaked	11/28/24, 03:24 pm	11/28/24, 03:24 pm	Verified	₽ Z 1
Workbench +	Test_Automation	Local Files	Contraction (11/28/24, 12:03 pm	11/28/24, 12:03 pm	Verified	₽ ∠ 1

The **Data Connections** page has columns that are described in the table below:

Column Name	Description
Connection Name	The name of the data connection
Data Source Type	Currently, WhizAI supports six types of data sources (Amazon S3, local files, remote files, system storage, redshift, PostgreSQL, and Snowflake).
Author	Name of the user who created the data connection
Created At	Date when the data connection was added to WhizAI
Last Modified	Date when the data connection was updated.
Status	Displays the status of the data connection as verified or unverified based on whether the connection was tested or not.
Actions	 Copy - Creates a copy of the connection from an existing connection. The status will be unverified. Test the connection to proceed further. Edit - Edit the data connection parameters. Delete - Delete the selected data connection.

Create New Connection

- 1. Go to Data Modeler > Data Connections and from the top-right corner, click New Connection.
- Enter the Name of your data connection and click Next. The Select Data Source Type page is displayed.
- 3. Select the data source type and click Next.
- 4. Enter the set parameters for the selected data source type.
- 5. Click Test Connection to test the connection. Click Save to save the data connection.

Edit Connection

- 1. Click the **edit** *l*icon for the data connection.
- 2. Edit the required parameters.
- 3. Click Save.



4. Click **Test connection**.

Note! You can edit a data connection, only if the connection is not linked to any models.

Delete Connection

1. Click **Delete** to remove a connection. The following confirmation dialog pops up.

Performance + Monitor +	List of Connections				٦	lew Connection
Security +	Connection Name	Data Source Type Author	Created At	Last Modified ↓	Status	Actions
📲 Data Modeler –	Test_V77	Local Files	12/09/24, 05:53 pm	12/09/24, 05:53 pm	Verified	0 Z 1
Data Connections Data Models	test_model_local_file_connection_0	Facul Files NS Miranian Soundi	12/05/24 05:28 pm ×	12/05/24, 05:28 pm	Verified	@ Z 8
Script Editor	Test_PG	Are you sure?	:53 pm	11/28/24, 07:53 pm	Verified	e 2 t
Configurations	Automation_Analyst_local_file_connection_0	Do you want to delete the connection "Test_V77"? undone.	This cannot be :37 pm	11/28/24, 03:37 pm	Verified	@ Z 1
Example Queries	Automation_Local		:35 pm	11/28/24, 03:35 pm	Verified	e 2 î
Content + Manager +	Test_Customer_Hierarchy_New	Cancel	e lete :24 pm	11/28/24, 03:24 pm	Verified	₽ Z î
Workbench +	Test_Automation	Local Files	11/28/24, 12:03 pm	11/28/24, 12:03 pm	Verified	₽∠î

2. Click Delete. A message appears 'Connection Deleted.

Note! You can delete a data connection only if the connection is not linked to any models.

Data Source Type

There are various types of data sources. Amazon S3, local files, system storage and remote files are filebased batch connections. Whereas PostgreSQL, Redshift, and Snowflake are database-driven inputs with live connections.





Batch: Data is fetched from the source system and ingested into the WhizAI system.

Live: Data will have connectivity to the system, the system will create a live connection, and data will remain in the chosen PostgreSQL, Redshift, or Snowflake system. The system will fetch the data at run time using the live connections on user actions.

The available data source types are:

- <u>Amazon S3</u>
- Local Files
- <u>Remote Files</u>
- <u>System Storage</u>
- <u>Google Cloud Storage</u>
- PostgreSQL
- <u>Redshift</u>
- <u>Snowflake</u>
- <u>Trino</u>

Amazon S3

Prerequisites

- Druid supports only one Amazon S3 'Region' value at a time. Hence, the Amazon S3 connection must belong to the same region that is configured in the Druid system. To manage the 'region' value in druid refer to <u>https://druid.apache.org/docs/latest/development/extensions-core/s3.html</u>
 - The list of folders inside the Amazon S3 bucket path will be considered separate data sources.

Example

Consider following folder structure inside the S3 bucket path 'MyBucket' -

> 🧎 Myllanian	Interney
	Employ
	koptly
	Bagnes
	Educational alignet rates

All the folders shown on the right side will be treated as separate data sources. Each of these folders can have multiple sub-folders or files. They will be treated as containers of the same parent data source folder. During the model run, all child folders and files will be included in the data load.

[]

Note! All the files inside the folder identified as 'Data source' must have the same structure and format. Any file present at the same level as the data source folder(s) will be ignored. For example - 'Data-file-01' in the above image.

For a more detailed description of each of the parameters, refer to the following link: <u>https://docs.aws.amazon.com/AmazonS3/latest/userguide/VirtualHosting.html#path-style-access</u>



Performance + Monitor +	Data Source Type: Amazon S3
User & + Security +	S3 Bucket Name* Path Inside The Bucket
Data – Modeler –	An Amazon 53 bucket name Path inside the bucket where the required files are placed.
Data Connections	File Type * Delimiter * CSV Comma
Data Models	Region*
Script Editor	US_EAST_2
Metric Configurations	AWS Access Key AWS Secret Key
Calculations	Access key ID generated when creatine AWS security credentials. Secret access key generated when creatine AWS security credentials.
Example Queries	Use IAM role To use IAM roleset in the AWS environment.
Content + Manager +	
NLP + Workbench +	Back Save Test Connection

Parameter	Description
S3 Bucket Name	An Amazon S3 bucket name. Each bucket name must be unique across all AWS accounts.
Path Inside The Bucket	The path inside the bucket where the required files are placed.
File Type	CSV, Parquet.
Delimiter	Comma, pipe, semicolon, space, and tab.
Region	AWS Regions
AWS Access Key	Access key ID generated when creating AWS security credentials.
AWS Secret Key	A secret access key is generated when creating AWS security credentials.

Local Files

Prerequisites

Ensure that the file name is the same as the name of the data source that needs to be ingested in the given data model for incremental data ingestions.

Rules/Limitations

The total size across all the files in a single connection should not exceed 50 MB.

For a more detailed description of each of the parameters, refer to the table below.



Performance + Monitor +	Data Source Type: Local Files
User & + Security +	Select File Type * Delimiter *
Data _ Modeler _	CSV Comma V
Data Connections	Files*
Data Models	En
Script Editor	
Metric Configurations	Browse files
Calculations	
Example Queries	
Content + Manager +	Back Save
* NLP Workbench +	

Parameter	Description
Select File Type	WhizAI supports two types of files:
	CSVParquet
Delimiter	The CSV files support comma, pipe, semicolon, space, and tab delimiters. In the case of Parquet, delimiters are not necessary.
Files	You can add multiple files with the same delimiter.
Download	You can download the file on your local drive. Click on the Download icon ^L against the file and download the file. Note! The downloaded file is stored in the downloads folder

Remote Files

Prerequisites

Ensure that the file name is the same as the name of the data source that needs to be ingested in the given data model for incremental data ingestions.

For a more detailed description of each of the parameters, refer to the table below.



	🕦 whiz.ai	~2	Explorer 🖆 Pinboards (①) Alerts 🍿 Explain 🔗 Adm	in		(i) Help	N
Ĩ	Performance Monitor	+	Test_doc_connection - Set Paramet	ers			
:	Users & Security	+	Elle Tune *		Delimiter *		
.:.	Data Modeler	-	CSV	*	Comma	r	
	Data Connections		Remote Files *				
	Data Models						
	Script Editor						
	Metric Configurations	5					
	Calculations						
	Example Queries						
	Content Manager	+	Provide comma separated list of HTTP URLs where each URL directly points t	o the required file.			
			User Name		Password		
ц¢	NLP Workbench	+	lear News for LTTD subsection in a 3 block if estautheatication is as	uticad	Descured for LITTO adheritication. Los of ithirad if each adheritication is required		
			Oser i varme lor in i i P authentication. Leave it blank in hot authentication is rec		Password for FFFFFF addrend autor. Leave it blank if not authentication is required.		
					Back Save Test Connection	h	

Parameter	Description
File Type	 WhizAl supports two types of files: CSV Parquet
Delimiter	The CSV files support comma, pipe, semicolon, space, and tab delimiters. In the case of PARQUET, delimiters are not necessary.
Remote Files	Enter a comma-separated list of HTTP URLs that are pointing to the required file.
User Name	Enter the user name required for HTTP authentication. The field is blank if authentication is not required.
Password	Enter the HTTP authentication password. The field is kept blank if authentication is not required.

System Storage

System Storage accepts a bucket and the path within the bucket as input. At this specified path, there must be child folders. Each child folder is treated as a separate data source when the model is configured with this connection. A data source folder can include child files, subfolders, or a hierarchy of folders.

Prerequisites

All child files within a data source folder must adhere to the same schema, column delimiter, and multi-value delimiter.

On the Set Parameters page, enter the following parameters

- Minio Bucket Name
- Path Inside The Bucket
- File Type Select either CSV or PARQUET
- Delimiter Select from the list of delimiters (Comma, Pipe, Semicolon, Space, Tab)



Performa Monitor	ance +	Data Source Type: System storage		
User & Security	+	Minio Bucket Name *	Path	h Inside The Bucket
🚦 Data Mo	deler –	A Minib bucket name	Path	n inside the bucket where the required files are placed.
Data Connect	ions	File Type *	Deli	imiter*
Data Mo	dels	CJY		Comma
Script Ed	litor			Back Save Test Connection
Metric Configur	ations			Dack Save Test connection
Calculati	ions			
Example	Queries			
Content Manager	+			
NLP Workber	nch +			



Once such a connection is used in the model, the connection URL cannot be modified.

Google Storage Cloud

For a detailed description of each of the parameters, refer to the following link - <u>https://cloud.google.com/storage/docs/introduction</u>

đ	Performance + Monitor +	Test province for - Set Parameters Data Source Type: Google Cloud Storage
	User & + Security +	GCP Bucket Name* Path Inside The Bucket
.:.	Data – Modeler –	A Google Cloud Storage bucket name Path inside the bucket where the required files are placed.
	Data	File Type * Delimiter *
	Connections	CSV Comma
	Data Models	Key JSON File
	Script Editor	
	Metric Configurations	En
	Calculations	\bigvee
	Example Queries	Browse files
	Content + Manager +	
¢	NLP + Workbench +	Back Save Test Connection

Parameter	Description		
GCP Bucket Name	GCP bucket name. Each bucket name must be unique.		
Path Inside The Bucket	The path inside the bucket where the required files are placed.		
File Type	The file type. The options are CSV, Parquet		
Delimiter	The options available are Comma, pipe, semicolon, space, and tab.		
Key JSON File	A key JSON file is a private key certificate in JSON format from the Google Cloud platform, which is generated by default when the private key is created.		



Follow the steps given below to configure the data source

- 1. Go to the Infra repository of the environment to open the values.yaml file.
- 2. Add the following configuration for the GCS bucket for Druid

```
gCloudStorage:
enabled: true
secretName: google-cloud-key
google:
gcsAPIKey: <private API key: client generated API key>
```

3. Add the druid-google-extensions to the configurations for each Druid service such as: broker,coordinator, historical, middle Manager, and router:

```
druid_extensions_loadList: '["druid-google-extensions", "druid-s3-
extensions", "druid-parquet-extensions", "druid-histogram", "druid-
datasketches", "druid-lookups-cached-global", "postgresql-metadata-
storage"]'
```

4. The Druid pool will restart automatically for the first time. For reinstallation, run the following helm upgrade command to complete the configuration helm upgrade --install app -f ./values.yaml --version <release version> oci://957637304843.dkr.ecr.us-east-2.amazonaws.com/whiz

PostgreSQL

Rules/Limitations

Additional steps are required after the successful model run to execute the NLQ on the workspace area of the product.

For a more detailed description of each of the parameters, refer to the table below.

Ĩ	Performance + Monitor +	Test provident of the set of the			
*	User & + Security	Host."	Port*		
	Data – Modeler –	The database instance endpoint.	5432 The port on which the DB instance is liste	ning.	
	Data Connections	Schema * public			
	Data Models	schema Name of the database.			
	Script Editor	Database *			
	Metric Configurations	Name of the database to connect.			
	Calculations	User Name *	Password *		
	Example				
	Queries	User name	Password		
	Content +	Advanced Parameters			
<u>~</u>	Manager '				
ц¢	NLP + Workbench				
		Comma saperated list of advanced parameters in the key-value format. Examples can be proxy ser	rver settings, private key authentication etc. F	For example - useSSL=t	true,useProxy=10.1.10.1
			Back	Save	Test Connection



Parameter	Description
Host	The database instance endpoint.
Port	The port on which the database instance is listening.
Schema	The Schema name of the database. The default is 'public.'
Database	The name of the database to connect.
User Name	The username.
Password	The password.
Advanced Parameters	Comma-separated list of advanced parameters in the key-value format. For example, proxy server settings-private key authentication. Use SSL-true. use proxy -10.1.10.1

Redshift

Prerequisites

Before you can connect to a Redshift database, you must also whitelist the IP addresses on your database server on the port you want to connect to.

Rules/Limitations

Additional steps are required after the successful model run to execute the NLQ on the workspace area of the product. Please contact the system administrator for more details.

For a more detailed description of each of the parameters, refer to the table below

đ	Performance + Monitor	Data Source Type: Redshift	
;	User & + Security	Host*	Port*
.:.	Data _ Modeler _	The database instance endpoint.	5439 The port on which the DB instance is listening.
	Data Connections	Schema * public	
	Data Models	schema Name of the database.	
	Script Editor	Database *	
	Metric Configurations	Name of the database to connect.	
	Calculations	User Name *	Password*
	Example Oueries		
	daarioo	Advanced Parameters	Password
P.5	Content + Manager +		
¢,	NLP Workbench +		
		Comma separated list of advanced parameters in the key-value format. Examples can be proxy sen	ver settings, private key authentication etc. For example - useSSL-true,useProxy=10.1.10.1
			Back Save Test Connection

Parameter	Description
Host	The database instance endpoint.
Port	The port on which the database instance is listening.
Schema	The Schema name of the database.
Database	The name of the database to connect.
User Name	The username.



Password	The password.
Advanced Parameters	Comma-separated list of advanced parameters in the key-value format. For example, proxy server settings-private key authentication. Use SSL-true. use proxy -10.1.10.1

Snowflake

Rules/Limitations

Additional steps are required after the successful model run to execute the NLQ on the workspace area of the product. Please contact the system administrator for more details

For a more detailed description of each of the parameters refer to the table below

đ	Performance + Monitor	• Set Parameters Data Source Type: Snowflake		
*	User & + Security	Account Number *	Role*	
.:.	Data – Modeler –	Account number	Specifies the default access control role to use in the Snowflake session initiated by the driver.	
	Data	Schema*	Database*	
	Data Models	Schema	Name of the database to connect.	
	Script Editor	Warehouse*		
	Metric Configurations	Specifies the virtual warehouse to use once connected, or specifies an empty string,		
	Calculations	User Name*	Password *	
	Example Queries	User name	Password	
		Additional Parameters		
<u> </u>	Manager +			
¢	NLP + Workbench			
		Comma separated list of advanced parameters in the key-value format. Examples can be proxy server settings, private key authentication etc. For example - private_key_file=/tmp/ras_keyp8.private_key_file_pvd=dummyPassword		
			Back Save Test Connection	

Parameter	Description			
Account Number	The account number			
Role	Default access control role to be used in the snowflake session initiated by he driver.			
Schema	The Schema name of the database.			
Database	The name of the database to connect.			
Warehouse	Specifies the virtual warehouse to use after being connected.			
User Name	The username.			
Password	The password.			
Advanced Parameters	Comma-separated list of advanced parameters in the key-value format. For example, proxy server settings-private key authentication.			



Trino

Using the **Trino SQL engine**, you can integrate with data sources. Trino is a connector that supports a wide range of databases. Through Trino, the portal can connect to additional databases.

Prerequisites

For the Trino connection to work, the Airflow library should have the entry '**Trino_sqlalchemy**' Go to <u>https://trino.io/docs/current/connector.html</u> to get a list of supported databases as shown in the figure below.

🐰 🛛 Trino 439 Documentat	ion Q Search Trino 9.1k Stars - 2.7k Forks
Trino 439 Documentation Overview Installation Clients Security Administration Query optimizer Connectors Accumulo Atop	Connectors This section describes the connectors available in Trino to access data from different data sources. Accumulo Atop BigQuery Black Hole
BigQuery	Cassandra
Black Hole	ClickHouse
Cassandra	Delta Lake
ClickHouse	Druid
Delta Lake	Elasticsearch
Druid	Google Sheets
Elasticsearch	Hive
Google Sheets	Hudi
Hive	Iceberg
Hudi	Ignite
Iceberg	JMX
Ignite	Kafka
JMX	Kinesis
Kafka	Kudu
kalka	Nuu
Kinesis	Local File
Kudu	MariaDB
Local File	Memory
MariaDR	MongoDB

Click on the connector to view configuration settings as shown in the figure below:

🎸 🛛 Trino 439 Documentati	on Qs	earch	9.3k Stars · 2.7k Forks
Trino 439 Documentation Overview Installation Clients Security Administration Query optimizer Connectors Accumulo	MySQL connector The MySQL connector allows querying and creating tables in an external MySQL instance. This can be used to join data between different systems like MySQL and Hive, or between two different MySQL instances. Requirements	∕lusQL	Contents Requirements Configuration Connection security Data source authentication Multiple MySQL servers General configuration properties Appending query metadata Domain comparing threehold
Atop BigQuery Black Hole Cassandra ClickHouse Delta Lake Druid	To connect to MySQL, you need: • MySQL 5.7, 8.0 or higher. • Network access from the Trino coordinator and workers to MySQL. F port.	Port 3306 is the default	Domain compaction threshold Procedures Case insensitive matching Non-transactional INSERT Type mapping MySQL to Trino type mapping Trino to MySQL type mapping Timestamp type handling
Google Sheets Hive Hudi Iceberg Ignite	Configuration To configure the MySQL connector, create a catalog properties file in etc example, example.properties, to mount the MySQL connector as the in the file with the following contents, replacing the connection properties a setup:	/catalog named, for ysql catalog. Create is appropriate for your	Decimal type handling Type mapping configuration properties Querying MySQL SQL support UPDATE
JMX Kafka Kinesis Kudu Local File MariaDB	<pre>connector.name=mysql connection-url=jdbc:mysql://example.net:3306 connection-user=root connection-password=secret The connection-url defines the connection information and parameter PDD defines The sector for the UDD and the sector for the sector</pre>	to pass to the MySQL	SQL DELETE Fault-tolerant execution support Table functions guery(varchar) -> table Performance



Follow the steps given below to configure the database:

- 1. Go to the Infra repository of the environment to open **values.yml** and add a new entry **Trino_sqlalchemy.**
- 2. Add Trino connector details as shown in the figure below:

- 3. Provide a URL for your database.
- 4. Restart Trino coordinator.
- 5. Restart model manager.

To view the Trino connection on UI, go to Data Modeler -> List of connections page .

The List of Connections page shows all schemas added through the Trino connection.

For example, MySQL connection is created with the syntax **trino_<connection name>_<schema name>** as shown in the figure below:

Performance + Monitor +	List of Connection	S					New Connection
Security +	Connection Name	Data Source Type	Author	Created At	Last Modified	Status	Actions
Data Modeler –	local2511_latest	Local Files	· inprihage	11/25/24, 07:04 pm	11/25/24, 07:04 pm	Verified	₽∠ ©
Data Connections Data Models	local2611	Local Files	💌 tapethap	11/26/24, 02:51 pm	11/26/24, 02:51 pm	Verified	P 2 0
Script Editor	mapusecase3	Local Files		11/14/24, 12:04 am	11/14/24, 12:04 am	Verified	PZ Ó
Metric Configurations	mapusecases2	Local Files	A 100	11/14/24, 12:02 am	11/14/24, 12:02 am	Unverified	₽ Z û
Example Queries	NullDimS3	Amazon S3	-	11/13/24, 03:51 pm	11/13/24, 03:51 pm	Verified	P 2 8
🖉 Content + Manager +	pmsa_updated_data	Amazon S3	W MARKA	09/19/24, 06:38 pm	09/19/24, 06:38 pm	Unverified	₽∠ 8
NLP + Workbench	Postgres	PostgreSQL	💌 tapethap	10/25/24, 05:06 pm	10/25/24, 05:06 pm	Verified	₽ ∠ Ō

Initially, the connection status will be set to **Unverified**. To confirm or reconfirm the connection, click the **Unverified** button.

Now, the Trino connection is ready, and you can create a new data model using this connection. Currently, the Trino connection is tested and verified for PostgreSQL and MySQL databases.



Note! Trino connection cannot be edited from the user interface.

Limitations

• By default, all Trino connections will be automatically configured within the system. These default connections will have an **unverified status.**



- To exclude certain catalogs, configure those catalogs as zookeeper properties under **TRINO_IGNORE_CATALOGS**.
- To disable Trino, set the **TRINO_ENABLE** property to false in the zookeeper.
- Only one Trino server can be configured for the system using the zookeeper properties **TRINO_HOST** and **TRINO_PORT**.
- Incorrect Trino configurations used for any Trino connection cause the system to become unresponsive for an extended period. In such cases, performing a hard refresh is recommended to resume normal activities. In case of such repeated instances, restarting the model manager may be required. It is recommended to ensure appropriate connection configurations to avoid further issues.

Remove identical metrics from multiple data sources

When constructing a model using multiple data sources, it is common for these sources to have identical metrics. However, this can lead to errors during model creation, as ideally, each metric should belong to one data source only. Resolving this issue typically involves manually deselecting identical metrics from each data source, which can be time-consuming.

WhizAI now offers a streamlined solution to resolve conflicts in one shot. You can now easily view all identical metrics across all data sources from a model from a single popup dialog. You can select a preferred data source for each metric, resolving conflicts.

To address identical metric conflicts, follow these steps:

• Click Admin-> Data Modeler-> Data Models to open the List of Data Models page.

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A Performance + Monitor +	List of Data Models									Refresh	New Data Model	
Security '	Model Name	Data Process Mode	Author	Created At	Last Modified ↓	Sched	Last Run	Next Run	Last Run Status	Run Manually	Actions	
Bata Modeler – Data	V77 Lang WZ-37259 🥡 🥒	Batch		11/28/24, 12:03 pm	12/10/24, 12:47 pm	None	12/10/24, 12:35 pm	None	Failed	Run	≑∠ <	
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Manager +	Test_Snowflake Batch 🥼	Batch	•••	12/02/24, 04:07 pm	12/02/24, 04:08 pm		None	None	None	Run	\$ Z 🖸	
Workbench +	Test_New_Calc_Dependencies (i) 🖉	Batch	-	11/29/24, 04:37 pm	11/29/24, 06:33 pm		11/29/24, 04:38 pm	None	Failed	Run	\$ Z 🖸	
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	CheckOrderDimension (i) 🖉	Batch		11/21/24, 12:57 pm	11/21/24, 03:02 pm		11/21/24, 02:43 pm	None	Success	Run	≑∠ ⊂	
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- Select the relevant Data Model and click Edit to open the **Define Columns** page.
- Identify columns marked with warning signs indicating identical metrics and click the warning sign icon.
- A new pop-up window displays all identical metrics and their corresponding data sources, with preselected values.



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Example Queries	Call Method [String]	⊟:	Webex	Live	Live	Telephone	Telephone	Telephone	Webex	Telephone
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	Channel [String]	äŧ	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
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	CLM Flag (String)	ä	Yes	Yes	Yes	No	No	Yes	Yes	Yes
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	Team (String)	⊟:	TI	ТЗ	ТЗ	T2	T2	TI	T3	т1
		**		03	02	01	D1	00	03	00
									Back Save	Next

• Unselect the irrelevant data sources and select one data source to retain for each metric.

Performance _ Monitor	✿ v73_Tag0_LiveasBatcł	(Duplicate metrics				Create Model
Dashboard	Review and update dimensions, metri outlet_dat (+13)	Q Search			Clone		
User Logs	_	Metric	Datasource Name	-			
	Column		SALES_REG			Data-4	Data-5
User & Security +	Σ	Decile	Snowflake_reg 🔽		7	V	▽
Data Modeler –	Sales Force [String]		testdata multidate			HBVTS	HBVTS
Data Connections	MDMID [Numeric]		multidate2 multidate4	D2		12932436	12932436
Data Models			multidate3				
Metric	NPINUM [Numeric]	TRx	Snowflake_reg 🔽 SALES_REG			1689113177	1689113177
Configurations Calculations	VEEVAID [String]		SNOWFLAKE_AUTOMATION		D	0011200001MHiy5AAD	0011200001MHiy5AAD
Example Queries	SHAID [Numeric]		multidate2 multidate4			49615632	49615632
Manager +	MSID [Numeric]		multidate3			7081537	7081537
NLP +		Test Column 1	Snowflake reg 🔽	_		Non Target	Non Target

• Click "Save" to confirm your selections or "Cancel" to abort them. You are redirected to the Define Columns page.



Note! The Save button is enabled only when no data source is selected or a maximum of one data source is selected for each metric.



- Click **Next** or **Save** on this page to commit the changes to the model and update the data dictionary.
- To discard any changes and revert to the previous state, click "**Refresh**." Warning signs will reappear next to data sources and columns again.
- Click **Back** to return to the **List of Data Models** page.

Bulk-select identical metrics from multiple data sources in a single Model

While resolving warnings for identical metrics on the Define Columns page, when you select one data connection, all other data connections should automatically be disabled. This eliminates user efforts to manually deselect other data connections.

• On the **Define columns** page, if there are identical metrics across data connections, you will see warning signs against the data source tab.

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Ŕ	Performance – Monitor – Dashboard User Logs	Review and update dimensions, metric sales_nbrx(+1)	Define Column as and primary date co sales_d1_add_data.	S 🕢 Jumns csv 🛆 sales_nbrx_c	11_add_data.csv 🖉			Create Model	÷
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.:.	Data Modeler –	Customer Name [String]	Change to Metric opt	ion in not available Losonh Harvey rry Timestamp	Anthony Martinez	Michael Fleming	Michael Fleming	Kevin Charles	book
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	Metric Configurations	Customer Sub Group [String]	1 Indivisual Prof	Indivisual Prof	Indivisual Profes	Indivisual Prof	Indivisual Prof	Indivisual Professionals	
	Calculations	Customer Subtype [String]	Medical Doctor	Medical Doctor	Medical Doctor	Medical Doctor	Medical Doctor	Physician Assistant	
1	Example Queries Content + Manager +	Customer Subtype Code [Numeric]	5230	5230	5230	5230	5230	5239	
16 ¹	NLP Workbench +	Customer Super Type Code [String]	Ë Retail	Retail	Retail	Retail	Retail	Retail	
							Back	Save	

- Click the warning icon to open a pop-up showing metrics identical to other data sources for the model.
- For each identical metric, select the data source from the drop-down list.
- Save button is enabled.
- You have the option to resolve warnings for one or more metrics and save your selections.
- If any metrics remain unresolved, a warning sign still appears next to the data source. Once all identical metrics are resolved, the warning sign disappears.
- You can cancel your actions at any time by clicking the Cancel button.



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- After performing the process as mentioned in the step above (#2), the popup disappears, and you are navigated to the Define **Columns** page.
- Click the SAVE or NEXT button to commit the changes done on the Define Columns page to the underlying data dictionary.
- Click the **Refresh** button to abort the changes.
- Click the **Back** button to abort the changes and return to the Data Models page.

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Ĩ	Performance _ Monitor _ Dashboard User Logs	☆ V74_S3_1505 - D Review and update dimension call_plan_dm (+11)	Define s, metrics	Columns and primary date columns employee_roaster_dm	salesgoal_dm _sob_swi	tch_dm ℓ call_plan_d	m marketing_dm tes	Crea st_age_ds sales_nbrx_d	te Model : m sal >
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Data Modeling

WhizAI offers a great level of flexibility to your data workflows by offering independent management of data modeling and data load processes. With this feature, you can configure a data model with one connection



and switch to another seamlessly with an adaptable production connection. Once your data model is fully formed with all its components, it becomes a versatile asset that can connect to production data in real-time or batch mode, ensuring consistent schema compatibility.

You can configure a data model as mentioned below:

- Directly on the UI without a schema file- In the beginning you do not have the data source. You can
 execute **Data Modeling** and **Data Load** processes independently, irrespective of a specific user
 interface.
- 2. Using a schema file (CSV) without any data- You work with the entire model configuration to test **Model Manager**
- 3. Using a schema file (CSV) with dummy data- You work with the dummy file to test the **Data Model** configuration.

Once your backend is ready you can switch your connection to the actual database. When you trigger a model with your prepared data model, you will experience; Models executing successfully, accommodating any NLP updates or APP layer enhancements made to the model. This ensures that your model updates accurately reflect real-world conditions, enhancing the reliability and accuracy of your data processes.

Configuring a connection with consistent schema compatibility

You can reuse an existing model for a different connection with the same schema. Whatever is new in your model configuration is accommodated, ensuring seamless integration, and consistent schema compatibility.

Migrating data model configurations within environments

You can migrate the data model configurations from one WhizAI environment to another WhizAI environment. For example, you can migrate models from the 'Development' environment to the 'QA' environment to the 'Production' environment, etc. To migrate the models, you must export the models from the source environment and then import these exported models to the target environment.

- 1. Login to the source environment from where you want to migrate a model.
- 2. Go to Data Modeler > Data Models > List of Models page.
- 3. From the top-right corner, click i icon.
- 4. Click Export, to open the Export Data Model Configuration dialog.
- 5. From the drop-down list, select the data model to be exported, and click **Download** to download a JSON file for the selected model.
- 6. Login to the target environment (where you want to import the exported model).
- 7. Go to the Data Modeler > Data Models > List of Models page.
- 8. From the top-right corner, click icon.
- 9. Click Import; to open the Import Data Model Configuration dialog.
- 10. Drag and drop the configuration JSON file exported from the source environment and click **Import**. OR

Click **Browse files** to select the JSON file and then click **Import**. The imported data model gets added to the List of Models.



Moving existing Airflow-driven data model configurations to the Data Modeler UI solution

You can move existing Airflow-driven configurations to Data Modeler and run the model on the UI.

Prerequisites

Make sure you have **WhizDMimport** dag available and enabled on the Airflow v2.2.5 or above.

Airflow DAGs	Security -	Browse - Admin	n Docs	3 <i>▼</i>			07:	28 UTC -	AA -
DAGs									
All 13 Active 7 F	Paused 6			Filter DAGs by tag			Search DAGs		
DAG	Owner	Runs 🕕	Schedule	Last Run 🕕	Next Run 🕕	Recent Tasks 💿		Actions	Links
Alerts_FA_Dag	whizuser		0 0 * * fri		2022-10-07, 00:00:00 🊯			► Î	
Alerts_UL_Dag	WhizUser		0 */6 * * *		2022-10-07, 00:00:00 🚺			ÞŌ	
FAS_BASE	Whiz		None					► Ō	
FAS_MULTICAL	Whiz		None					► Ō	
simple_dag	Chaitanya		None						
UserLogDag	Ganesh		0 */6 * * *	2022-10-07, 00:00:00 🕕	2022-10-07, 06:00:00 🌒	000000000			
us_log_dag	Sukruti A		None					► Ī	
WhizDMImport	Whiz	907	None	2022-09-30, 12:57:08 🕕		3		► Ō	
WhizFlow	Whiz	23 61	None	2022-10-07, 05:50:41 🚯		0000700	1 5	ÞŌ	
WhizFlow_obs	Whiz		None					► Ō	

To move existing model configurations:

- 1. Go to WhizDMimport dag.
- 2. Click **Trigger DAG** ►.
- 3. Click Trigger DAG w/ config.

Airflow DAGs Security	y∞ Browse∞ Admin∞ Docs∞			07:30 UTC - 🛛 🗛 -
O DAG: WhizDMImport				Schedule: None Next Run: None
Tree Graph 🖬 Calenda	ar 📱 Task Duration 📑 Task Tries	🛓 Landing Times 📃 Gantt 🔥 Details	s <> Code	
2022-09-30T12:57:08Z	Runs 25 V Update			Trigger DAG Trigger DAG w/ config
PythonOperator		queued 🗧 running 🔳 success 📕	failed up_for_retry up_for_reschedule	upstream_failed iskipped ischeduled ideferred ino_status
O [DAG] etart dm_import end	0 ^{40^{10,10,22}} 0 ^{40^{70,10,11}} 0 ^{40^{30,10,21}}			Auto-refresh C

4. Provide a valid configuration JSON as shown in the following figure and click **Trigger**.



Airflow DAGs Security Browse Admin Docs	09:23 UTC -	AA
Trigger DAG: WhizDMImport		
2022-10-03 09:16:19+00:00		
Configuration JSON (Optional, must be a dict object)		
<pre>1 { "code": " ", "import_configuration": { "application_base_url": "http://whiz-application:9999", "region": " ", "username": " , "jassword": " , "sa_access_key": " , "sa_access_key: " ,</pre>	h can be accessed via ((params))	
O Unpause DAG when triggered		
Trigger Cancel		

Note! For more information on this configuration, refer to Understanding the WhizDMimport configuration JSON.

5. You can check the status of the DAG as shown in the following figure.

XAirflow DAGs Security- Browse- Admin- Docs-	13:10 UTC - 🤼 -
DAG: WhizDMImport	SUGCESS Schedule: None Next Run: None
👤 Tree 📑 Graph 🛱 Calendar 🧧 Task Duration 🛱 Task Tries 📥 Landing Times	E Gantt ▲ Details <> Code
Image: 2022-09-30T12:57.09Z Runs 25 Run manual_2022-09-30T12:57.08+00	Status: success C Task ki dm_import Earther Right V Update Find Task Find Task Find Task
PythonOperator	Duration: 2Min 42.714Sec [alloci duration 2.114Sec [alloci duration 2.214] [alloci duration: 2Min 42.714Sec [alloci duration: 4Min 4
	UTC: Auto-refresh C Endet 2022.09.30, 13.06.36 Endet 2022.09.30, 13.06.18
	start → dm_import → end

After a successful DAG run, all the configurations will be available on the Modeler UI. You can Edit, Configure, and Run these imported models, as required.

Support multiple transformations across data sources within a model

When creating or modifying a model with a large number of metrics and dimensions, it becomes laborious to individually search and change each column from **metrics to dimensions** or vice versa. WhizAI now provides an efficient method to change column types in bulk.

- Click Admin-> Data Modeler->Data Models to open the List of Data Models page.
 - Create a new data model or edit the data model from the list. Go to the Define Columns page.
 - Click (ellipsis icon) adjacent to the Create Model to view the following options in the drop-down menu:
 - Change dimensions to metric
 - Change metrics to dimension
 - Click "**Change dimensions to metric**" to trigger a pop-up listing all dimensions from the selected data source., with checkboxes to select the dimensions to convert to metrics. You can select one or



more dimensions for conversion. The conversion should allow any dimension to be converted to a metric, including time dimensions, ensuring that at least one-time dimension is selected for the data source.

Note! You are accountable for transforming the columns from dimensions to metric. The system does not restrict you from adding any column as a metric.

- Click "**Save**" to confirm the transformation or "**Cancel**" to abort them. You are redirected to the Define Columns page.
- Click **Next** or **Save** on this page to commit the changes to the model and update the data model details. The dimensions converted to metrics should now be available in the Data Dictionary.
- To discard any changes and revert to the previous state, click "Refresh."
- Click **Back** to return to the **List of Data Models** page.

Similar functionality is available for converting metrics to dimension, with a pop-up listing all metrics from the selected data source and checkboxes to select metrics for conversion. There should be no restrictive validation for this conversion, allowing any metrics to be converted to dimensions. Care should be taken to ensure that there is at least one metric in the selected data source.

The pop-ups for "**Change metrics to dimension**" and "**Change dimensions to metric**" include a search window to facilitate finding specific metrics or dimensions. Partial matches should display all probable matches for selection.

Important! If a metric or dimension is changed to the other type (through a bulk update or otherwise), the change should be applied to all metrics and dimensions across all data sources.

Change to Metric action for all non-numeric dimensions and the primary date/timestamp column is disabled to avoid data discrepancies. For example, the column **Customer** will not have the menu option 'Change to Metric,' or the **Weekend date** column will not have the 'Change to Metric' menu option. The following rules apply for columns in the **Define Columns** page.

• Columns marked as string, cannot be converted to metric. **Change to Metric** menu option will not be visible for such columns. For example,



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User Logs Audit Logs	sales_nbrx (+1) → Column ↑	ales_d1_add_data.csv	v <u>∧ sales_nbrx_d</u> Data-2	1_add_data.csv 🖉	Data-4	Data-5	Data-6	
🚢 User & Security 🕂		▼ 7	V	▼	V		γ	E Hand
Data Modeler – Data Connections	Customer Name [String]	Change to Metric option Charlos Huff Č Change to Primary	in not available Loconb. Harvey Timestamp	Anthony Martinez	Michael Fleming	Michael Fleming	Kevin Charles	dbook
Data Models	Customer Sub Category [String]	🗄 Change to Dimensi	ion	Professionals	Professionals	Professionals	Professionals	I
Script Editor Metric Configurations	Customer Sub Group [String]	Indivisual Prof	Indivisual Prof	Indivisual Profes	Indivisual Prof	Indivisual Prof	Indivisual Professionals	
Calculations	Customer Subtype [String]	Medical Doctor	Medical Doctor	Medical Doctor	Medical Doctor	Medical Doctor	Physician Assistant	
Example Queries	Customer Subtype Code [Numeric]	5230	5230	5230	5230	5230	5239	
NLP + Workbench +	Customer Super Type Code [String]	Retail	Retail	Retail	Retail	Retail	Retail	
						Back	Save Nex	t

• Columns marked as Primary timestamp cannot be converted to metric. Change to Metric and Change to dimension menu options will not be visible for such columns. For example,

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Ĩ	Performance _ Monitor _ Dashboard User Logs	Review and update dimensions, metrics sales_nbrx(+1)	efine Columns and primary date colu sales_d1_add_data.cs	imns w ∠	rx_d1_add_data.csv			С	reate Model	:
	Audit Logs	Column 🏹 🔨	Data-1	Data-2	Data-3	Data-4	Data-5	Data-6		_
÷	User & Security +	date	V	▼	Υ	v	V		7	Handb
.:.	Data Modeler –	Customer birth date [Date]	0 Current date form	25-11-1075 at is dd-MM-yyyy	25-11-1975	13-12-2004	25-06-1983	06-04-2004		o ok
	Data Connections Data Models	Graduation training end date [String]	☐: Change to Dimens	ion 🗶	Not Available	Not Available	Not Available	Not Available		
	Script Editor	Graduation training start date [String]	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available		
	Configurations Calculations	Transaction Date [Date]	2019-01-01	2019-01-02	2019-01-03	2019-01-04	2019-01-05	2019-01-06		
	Example Queries									
Z	Content + Manager +									
16 ¹²	NLP + Workbench +									
							Back	Save	Next	



Bulk update using 'Change dimensions to metric' and 'Change metrics to dimensions' menu options

You can convert multiple dimensions into metrics and vice versa in a single operation.

- Change dimensions to metric option displays numeric dimensions only.
- There is no restriction on the **Change metrics to dimension** option.

If the same dimension or metric exists in multiple data sources, only one entry is displayed and once modified, all instances are updated across all data sources.

- On the **Define columns** page, click the next to the Create model button. You will see two options in this drop-down list:
 - Change dimensions to metric
 - Change metrics to dimension

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Performance - Monitor - Dashboard User Logs	Review and update dimensions, metric call_plan_dm (+11)	Columns s and primary date columns employee_roaster_dm	salesgoal_dm _sob_swi	tch_dm ∠ call_plan_di	n marketing_dm tes	Crea Change dimen tt_age_ds Change metric	sions to metric to dimension
Audit Logs	Column	Data-1	Data-2	Data-3	Data-4	Data-5	Data-6
🚢 User & Security +	Υ	 y	Y	Υ	V	Y	Hand
📰 Data Modeler –	Account Type [String]	нсо	HCO	НСО	HCO	НСО	нсо
Data Connections Data Models	ACTVFLG [String]	Active	Active	Active	Active	Active	Active
Script Editor Metric	Additional Low Dec Target [String]	Non - Low Dec Target	Non - Low Dec Target	Non - Low Dec Target	Non - Low Dec Target	Non - Low Dec Target	Non - Lo
Configurations Calculations	Administration Mode [String]	Injectable	Injectable	Injectable	Injectable	Injectable	Injectable
Example Queries	Alternet Name [String]	Not Available	Not Available	Not Available	Not Available	Not Available	Not Avail
Content + Manager +	APVPEDFLG [String]	Approved	Not Approved	Not Approved	Not Approved	Not Approved	Not Appr
NLP + Workbench	Area ID (String)	NAT01	NAT01	NAT01	NAT01	NAT01	NAT01
					Ba	ck Save	Next

• Change dimensions to metric

- i. Click "Change dimensions to metric" to open a popup.
- ii. The popup displays a list of **only numeric type dimensions** from all data sources. The list excludes primary timestamps.
- iii. You can select one more dimension to convert to metric.
- iv. Click the Save or Next button to commit the changes done on the Define Columns page to the underlying data dictionary.
- v. Click the **Refresh** button to abort the changes.
- vi. Click the **Back** button to abort the changes and return to the Data Models page.
- vii. A search facility is available to search for a specific dimension across all data sources. Search results show partial matches as well.



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Performance _ Monitor _ Dashboard	Review and update dimensions, metric call_plan_dm (+11)	Change dimensions to me	etric	_dm marketing_dm tes	Crea t_age_ds sales_nbrx_dr	te Model m sal 🕽
Audit Logs	Column	Columns	Select all	Data-4	Data-5	Data-6
User & Security +	v	Company ID [Numeric]		v	 y	
Data Modeler –	Account Type (String)	Customer birth year [Numeric]		НСО	нсо	нсо
Data Connections	ACTVFLG [String]	Customer Subtype Code [Numeric]		Active	Active	Active
Data Models Script Editor	Additional Low Dec Target [String]	Customer Type Code [Numeric] ⊟t IMSID [Numeric] ⊟t	et	Non - Low Dec Target	Non - Low Dec Target	Non - Lo
Metric Configurations Calculations	Administration Mode [String]	MDMID [Numeric]		Injectable	Injectable	Injectabl
Example Queries	Alternet Name [String]	Region Company Code [Numeric]		Not Available	Not Available	Not Ava
Content + Manager +	APVPEDFLG (String)	SHAID [Numeric]		Not Approved	Not Approved	Not App
NLP Workbench +	Area ID (String)	Cancel S	ave	NAT01	NAT01	

• Change metrics to dimension

- i. Click "Change dimension to metric" to open a popup.
- ii. The popup displays a list of **all metrics** from all data sources.
- iii. You can select one more metric to convert to dimensions.
- iv. Click the Save or Next button to commit the changes done on the Define Columns page to the underlying data dictionary.
- v. Click the **Refresh** button to abort the changes.
- vi. Click the **Back** button to abort the changes and return to the Data Models page.
- vii. A search facility is available to search for a specific metric across all data sources. Search results show partial matches as well.

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Performance - Dashboard User Logs	Review and update dimensions, metric call, plan, dm (+11)	Change metrics to dimensi 9 Search	×	ın_dr	n marketing_dm tes	Crea it_age_ds sales_nbrx_dr	te Model n sal 🕨	
Audit Logs	Column	Columns	Select all		Data-4	Data-5	Data-6	
🚢 User & Security 🕂	V	customer_cnt [Numeric] II		8	V	7		Handt
📲 Data Modeler –	Account Type (String)	Customer birth date [Date] 11			НСО	НСО	нсо	bo ok
Data Connections	ACTVFLG [String]	KAISERFLG [Numeric] II			Active	Active	Active	
Data Models Script Editor	Additional Low Dec Target [String]	NPINUM [Numeric] all Sales Goal [Numeric] all		et	Non - Low Dec Target	Non - Low Dec Target	Non - Lo	
Configurations	Administration Mode [String]	Total Volume [Numeric] ill Call Plan End Date [Numeric] ill			Injectable	Injectable	Injectable	
Example Queries	Alternet Name [String]	Call Plan Start Date [Numeric] II			Not Available	Not Available	Not Avail	
L Content +	APVPEDFLG [String]	Call Plan Working Days Counter [Numeric]	il 📄		Not Approved	Not Approved	Not Appr	
NLP +	Area ID IStrinol	Cancel Sav	re		NAT01	NAT01	NAT01	
					Ba	ck Save	Next	

If you make changes as stated in the above steps, to any identical metric or dimension, it is converted across all data sources.



Limitation!

For live data connection, column data types are fetched as defined in the schema. For example, if a column is defined as Varchar in the schema, it is fetched and displayed as a String even if the data has numeric values. For such columns, the Change to Metric option is not available.

As a workaround, follow the steps below

- Correct the schema of the live connection data source.
- Declare the correct data type for the columns.
- Reverify the connection.
- Refresh the Data Modeler screen.

Understanding the WhizDMimport configuration JSON

The following table explains different fields in the WhiDMimport configuration.

JSON field	Description/Function
Code	This is the Unique Identifier of your choice
application_base_url	This is the application URL with the port number: <u>http://whiz-application:9999</u>
Region	It is the AWS S3 region corresponding to the access key
Username	Login credential: This is your login ID
Password	Login credential: This is your login password
s3_access_key	AWS S3 access key, to be provided by the customer
s3_secret_key	AWS S3 secret key, to be provided by the customer
s3_bucket	Bucket to be used for data storage
current_solution_dir	Directory used for existing ETLs by the Airflow-driven DAGs.

Assessing data connection changes impact

You can assess the impact of replacing, switching, or modifying any existing used data connections in your data models. This ensures that the changes are acceptable and can be implemented without causing any unexpected impact.

Additionally, if the underlying connection table structures change after modeling, you will receive a warning on opening the model, to prevent surprise failures or unexpected behavior.

When you edit an existing data model by switching connections or changing table structures, the system will conduct an impact assessment and display a warning popup. This popup will include details about the missing columns and a list of potential impact areas.

	🥼 whiz.ai	💫 Explorer 📑 Pinboards 🤇)) Alerts 🍿 Explain 🔗 Admin			Help 4 5
(K	Performance – Monitor – Dashboard	List of Data Models	Warning! Column discrepancies found in selected connections and existing Data Modelling Which may have following impact		Refresh	New Data Model
	User Logs	Model Name	Business categories. Hierarchies and Attributes will be auto undated or reproved	t Run Status	Run Manually	Actions
1	User & Security +	Carlos and the State	 Permissions, Pinboards, User defaults, Slicers, Business action and computations may have to be manually reconfigured. 	ne -		¢ Z 💿
	Data Modeler –	Destroyed 2 Z	Column Discrepancy Details Doctesting1_0867bdb8-0e0f-495f-8fdc- (Existing connection) 6da61ab4f47d	ne		¢ Z 💿
	Data Connections	to parente privatar (1)	testdata.csv (Datasource) DocTesting_28ceac26-56ad-447e-a5ab-2eededffb085			•
	Data Models Script Editor	Internation (International -)	'Address' Column missing 'Customer' Column missing	cess		۰۷ 🕐
	Metric Configurations	Test (Annual or (Annual Annual of C	'Preferred Mode of Engagement' Column missing 'Territory Name' Column missing	cess		¢ Z 🜑
	Calculations Example Queries	he interain (a during 1)	'Decile' Column missing 'Territory ID' Column missing 'CustomerID' Column missing	cess		۰۷ 🜑
L	Content + Manager +	Upload section	'Sales Force' Column missing			
40	NLP +	Quick Data You Can Move Your	Click OK to accept the impact and proceed further or Click Cancel to retain existing Data Modelling.			
		Browsef	Cancel OK			

Once you click the OK button, the following changes will occur immediately:

Dimension Removal

- Business Categories:
 - The removed dimensions will be eliminated from existing business categories. If a business category has no entities remaining, the category itself will be removed.
- Hierarchies:
 - If one or more dimensions are missing in a hierarchy, the child dimensions will be promoted to parent status. If there is only one or no dimensions remaining the hierarchy will be removed.
- Attributes:
 - If an attribute of a dimension is removed, it will disappear from the data dictionary (DD). If the parent dimension of an attribute is removed, the attribute will be restored as a dimension.
- Entity Synonyms:
 - If a synonym of a dimension is removed, it will disappear from the DD. If the parent dimension of a synonym is removed, the synonym will be restored as a dimension.
- Dependent Dimensions in Metrics:
 - If a dimension is removed from a data source, all metrics in the data source will reflect this change in their list of dependent dimensions.
- Primary Time Dimension:
 - If the time dimension is removed, the next available time column will be considered the primary time column. If no time dimension remains, the modeling will fail.
- Column Type Changes:
 - If a column type changes from string/date to numeric, the dimension can become a metric, but this change must be explicitly marked and will not occur automatically.

Metric Removal

- Business Categories:
 - The removed metric will be eliminated from existing business categories. If a business category has no entities remaining, the category itself will be removed.



- Data Source Impact:
 - If no metrics remain in a data source, the modeling will fail.
- Column Type Changes:
 - If a column type changes from numeric to string, the column will no longer be considered a metric. It will be treated as a removal of a metric (triggering the above impacts) and the addition of a new dimension column (deselected by default).

Changes after Running the Data Model

After running the model from the data modeler, additional impacts will be handled:

Dimension Removal

- Dependent Dimensions in Calculations:
 - If a dimension is removed from a data source, all calculated/API metrics in the data source will reflect this change in their list of dependent dimensions.

Metric Removal

- Computations:
 - The removed metric will be eliminated from the list of computations for all defined computations and will not appear in the configurations.

This structured approach ensures that you are adequately informed of the potential impacts of the changes and can take necessary actions to maintain the integrity of data models.

A manual definitions update is required for the functionalities listed below:

- Permissions
- Pinboards
- User defaults
- Slicers
- Business action
- Cohorts



Data Models

To add a data model in WhizAI:

- 1. Go to Data Modeler > Data Models. The List of Data Models page is displayed.
- 2. Click New Data Model to open the New Data Model page.
- 3. Enter a name for the data model, as required.
- 4. Select the data process mode, as required. WhizAI allows you to select either Batch or Live as the data process mode. For more information on data process mode, refer to the section <u>Selecting the data source type</u>.
- 5. Select a data connection, as required.
- 6. In case a connection does not exist, you can click Create a New Connection to add a new data connection.
- 7. Click Next. The Define Columns page is displayed. You can define the data sources and columns in the data model from this page. For more information, refer to the <u>Understanding the Define</u> <u>Columns</u> section.
- 8. Click Next. The Data Dictionary page is displayed. You can configure the data dictionary from this page. For more information, refer to the <u>Understanding the Data Dictionary</u> section.
- 9. Click Next. The Data Load Configurations page is displayed. For more information, refer to the <u>Understanding the Data Load Configuration</u> section.
- 10. From the left side, select the data source and add corresponding configurations on the left-hand side.
- 11. Click Save & Close. The data model is created and WhizAI displays it under the List of Models page. After these steps are completed, the data model is ready and displayed in the table on the **List of Models** page.

Click **Run** against the data model to begin data ingestion.

- 12. If data pipeline fails in NLP Import with error message "Failed to import hierarchies," User need to follow below steps before taking 2nd run:
 - a) Disable NLP Import: In Data Modeler>Data Model>Configuration Settings > NLP tab, uncheck the NLP Import option, then click Save
 - b) Set Data Load to False: In Data Modeler > Data Model > Edit Model > Data Load configurations page, set Enable Load to False.
 Re-run the model. Once model run is finished,
 Now verify model should come up with configured hierarchies.

List of Data Models

The List of Data Models page displays the data models added to WhizAI.



	🧶 whiz.ai 💫	Explorer 🖪 Pinboards (①) Alerts (🕅 Explain 🔗 Admin			🕄 Help 🔺 💽
Ĩ	Performance Monitor +	List of Data Models			Refresh	New Data Model
	Users & Security + Data Modeler -	Model Name	Data Process Mode	Author	Created At	Last Modified ↓
	Data Connections	Sanity_SnowFlake 🕧 🖋	Live	AD Automation DataModeler	02/19/24, 02:47 pm	02/19/24, 02:50 pm
	Data Models Script Editor	Automation_Sanity (\hat{t}) 🖉	Batch	AD Automation DataModeler	02/19/24, 02:41 pm	02/19/24, 02:43 pm
	Metric Configurations	Test_Local_Quick (i)	Batch	D Dargenie	02/15/24, 10:22 am	02/19/24, 11:13 am
	Example Queries	Test_Automation_NewImpExpModel (i)		AD Automation DataModeler3	02/19/24, 12:45 am	02/19/24, 12:45 am
<u>_</u>	Content Manager +	Quick Data Model	Quick Data Model			
ц¢	NLP Workbench +	You Can Move Your CSV Files H Browse files	lere	-E)		

The table below describes the columns in the **Data Model** page:

Column Name	Description
Model Name	Business-friendly name of the data model
Data Process Mode	This is the storage (Batch or Live)
Author	Name of the user who created the data model
Created Date	Date when the data model was added to WhizAl
Last Modified	Date when the data model was updated
Schedule	Schedule the model run. You can specify the frequency schedule for the model run.
Last Run	Displays the status of the last run status
Next Rune	
Last Run Status	
Run Manually	Action button to Run the model for the data ingestion and model update
Actions	Options to Configure, Edit, or Deactivate the model

From this page, you can perform the following tasks:

- Add a new data model
 - Rename data model
 - Run a data model from the table displayed on this page
 - Activate/ de-activate a data model
 - Quickly add a data model with a CSV file as the data source
 - Configure a data model
 - Edit a data model
 - Schedule data model run

Rename Data Model

- 1. From the data model record, click the **Edit** *l*icon against a data model.
- 2. Edit the data **Model Name**.
- 3. Click Save.



Activate/ Deactivate Data Model

Click the toggle option under the **Actions** column to activate or deactivate the data model. You cannot use a deactivated data model for any data ingestion in the future.

List of Data Models p				Refresh	New Data Model
Model Name	Created At	Last Modified $ \checkmark$	Last Run Status	Run Manually	Actions
Customer_Hierarchy (i) 🖉	08/22/23, 02:54 pm	11/24/23, 11:14 am	Failed	Run	deactivate

Note! Contact your system administrator in case a data model must be deleted permanently from the system.

As an Administrator user, if you deactivate a data model, you can no longer see it on WhizAI Explorer; however, you continue to see it on the **Data Models** page.

Quickly Add Data Model

- Go to **Data Modeler** > **Data Models** > **List of Data Models** page and from the bottom of the page, either click **Browse** or drag and drop CSV files from your local machine.
 - Enter a name for the data model and click **Next**. The **Define Columns** page is displayed.

🔬 whiz.ai	R Explorer	🎦 Pinboards	(1) Alerts	∰ Explain	Se Admin				(i) Help		N
Data – Modeler – Data Connections	List of Data Mo P Model Name	Data Process M	tode Au	ithor C	Created At	Last Modified ↓	Last Run Status	Refresh Run M	New Data Mod Aanually	el	tion
Script Editor Metric Configurat Calculations Example					No Rows	No Rows To Show					
Queries	Upload saction Quick Data M You Can Move Your CS Browse file Market Access Whiz1	Aodel SV Files Here SS 4.csv		1 Contraction of the second seco		Model Name Market Access Whiz 14 Name can container characters, numbe Next	rs, underscores and hyphen	only			



Data Modeler – Data Connections	A - Define Columns Review and update dimensions, m Market Access Wh	etrics an Marl	d primary date co ket Access Whiz1	olumns 4.csv 🖉				Create Me
Data Models	Column		Data-1	Data-2	Data-3	Data-4	Data-5	Data-6
Metric	COTCD [String]	;	cot01	cot01	cot04	cot04	cot04	cot01
Configurat	COTCD Description (String)	;	Wholesaler	Wholesaler	Long Term Care Facility	Long Term Care Facility	Long Term Care Facility	Wholesaler
Calculations	Payment Type [String]	ö:	Medicaid	Medicare	Medicare	Medicaid	Medicaid	Medicare
Example Queries	Duplicate Flag [String]	;	NO	YES	NO	NO	NO	YES
	Equivalent Units [Numeric]	at	808.264	428.26136	261.6732	952.26472	603.26472	248.3392
	Equivalent Units Counter [Num	the fairs	546	381	181	980	758	722
	NRx [Numeric]	al	700.48	555.08	972.486	324.24	871.24	907.12
	NRx Units [Numeric]	at	720	126	706	546	427	307

• Click Next to continue to build the data model by building the data dictionary and configuring it.

Note! For the complete steps to build a data model, refer to the WhizAI Administrator's Guide.

Configure Data Model

When you run a data model, WhizAI loads the data, processes the NLP-related information, and stores it in the system. Based on the data dictionary, some configurations that are required by the application are captured, such as the details of base metric, computation metric, fraction size, etc. Refresh the model listing page to load the status of all the models, which reflects the status of previous runs.

æ	Performance + Monitor	Review a	Test_V77 ~ Data Model Configuration Review and update the following configurations across different tabs before running the data model										
4	User & + Security		NLP App	lication	Notifications								
	Data Modeler – Data Connections	C Ena Togeners	able Import ate the latest NLP information files during the pipeline run.	NLP Entities Overwrite To delete edsting NLP information files and over enabled.	write with new when import is								
	Data Models	Cle To clean	anup And Update up and update with new NLP files in the database.	Downtime Mode Set this flag to avoid downtime during the NLP er									
	Metric Configurations	Global se	nerate User Synonyms titing to enable the file based synonyms as input.	Global setting to enable the system generated sy	nonyms.								
	Calculations Example Queries	C Exc To exclud	clude Last Period Day the last period day while resolving the time expression.	Use Translate Cache To use the cache to get the language translation i	nformation. Default is false.								
	Contract	Entity Ro	ot Directory	Backup Directory									
Ľ	Manager +	/app	/models/whizpy/framework/solution/outputs/nlp	backups/nlp									
			he entity root directory.	Path at which NLP files will be stored as backup.									
12	NLP +	Default C	Context Time	Languages									
		YTD)	English	*								
		Time exp		To enable NLP information processing on selected lang	juages.								
		Base Mor	del Language										
		Eng	lish	Auto translate Automatically translate the names and description									
		Language	in which the source data and details are defined.	from the base model language to the selected lan									
		To perfor	okup On Language Folder m lookup on the language folder.										
					Back Save								

1. **NLP** - Improves the intelligence of the system about the data.



- 2. **Application** Captures logical information about data such as base metric, computation metric, fraction size, etc.
- 3. Notifications Model failures are to be notified.

NLP Tab

A Performance + Monitor +	Test_V77 ~ Data Model Configuration Review and update the following configurations across different tabs before running the data model				
🛎 User & + Security +	NLP Application Notifications				
Data Modeler – Data Connections	Enable Import To generate the latest NLP information files during the pipeline run. To delete existing NLP Information files and overwrite with new when import is enabled.				
Data Models	Cleanup And Update Downtime Mode To dean up and update with new NLP files in the database. Set this flag to avoid downtime during the NLP entity refresh				
Metric Configurations	Global setting to enable the file based synonyms as input. Global setting to enable the system generated synonyms.				
Calculations Example Queries	Exclude Last Period Day To exclude the last period day while resolving the time expression. To use the cache to get the language translation information. Default is false. Radium Directory				
🖍 Content + Manager +	/app/models/whizpy/framework/solution/outputs/nlp backups/nlp Path of the entity root directory. Path at which NLP files will be stored as backups.				
VLP + Workbench	Default Context Time Languages YTD English				
	Time expression example, ytd To enable NLP Information processing on selected languages. Base Model Language English Language in which the source data and datalis are defined. Language in which the source data and datalis are defined.				
	Lookup On Language Folder To perform lookup on the language folder. Back Save				

The model configuration details for the NLP tab are described in the table below:

Field	Input Type	Description	Default Value
Enable Import	Checkbox	The flag controls whether the generated NLP model should be imported into the NLP service or not.	True
NLP Entities Overwrite	Checkbox	To delete existing NLP information files and overwrite them with new ones when import is enabled.	True
Cleanup And Update	Checkbox	To clean up and update with new NLP files in the database.	True
Downtime Mode	Checkbox	Set this flag to avoid downtime during the NLP entity refresh.	False
Generate User Synonyms	Checkbox	Global setting to enable the file-based synonyms as input.	True
Generate System Synonyms	Checkbox	Global setting to enable the system generated synonyms.	True
Exclude Last Period Day	Checkbox	To exclude the last period day while resolving the time expression.	True
Use Translate Cache	Checkbox	To use the cache to get the language translation information. The default is false.	False
Entity Root Directory	Textbox	Path of the entity root directory.	<local path=""></local>
Backup Directory	Textbox	Path of the directory where the NLP files backup is stored.	<local path=""></local>



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Field	Input Type	Description	Default Value
Default Context Time	Textbox		YTD
Languages	Drop-down menu	List of languages. You can select multiple languages from the list to enable information processing in the selected languages,	
Base Model Language	Drop-down	Language in which the source data and details are defined. You can select a language from the list of available languages.	English
Auto translate	Checkbox	Automatically translate the names and descriptions of metrics and dimensions from the base model language to the selected language.	False
		Enable the checkbox to automatically translate the information into the language selected from the Languages field.	
Lookup On Language Folder	Checkbox	If this model involves multiple language translations, specify here.	False

Application

đ	Performance + Monitor +	Review and update the following configurations ac	ON oss different tabs before running the data model	
ä	User & + Security +	NLP	Application	Notifications
.:.	Data Modeler – Data	Enable Import To generate the latest configuration during the pipeline run.	Set this flag to avoid model downtime during the data	a model load.
	Connections Data Models	Export Configuration To export the configurations in the JSON format at defined path.	Data Model Code Test_V77 Code as a particular to the data special	
	Script Editor	Default Datasource	Code value assigned to the data model. Reference Time Datasources	
	Metric Configurations		▼ Select	~
	Calculations	Default Datasource to be set as reference for the time information.	Destination datasources to be set as reference for the time	normation.
	Example Queries			Dack Save
L	Content + Manager +			
₩¢	NLP + Workbench			

The model configuration details are described in the table below:

Field	Input Type	Description	Default Value
Enable Import	Checkbox	If the system should automatically import generated application settings during the model execution. Enable the option to generate the lates configuration during pipeline run.	True
Zero Downtime Mode	Checkbox	To avoid downtime during the data model load process, this option allows for seamless loading of data models. Enable the option to avoid model downtime during data model.	False



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Export Configuration	Checkbox	If the system should export the application-level configurations into a local file in the backend file storage. Enable the option to export the configurations in JSON format at the path defined.	True
Data Model Code	Textbox	Code value assigned to the data model.	
Default Datasource	Drop-down	List of available data sources. As a data modeler admin, you can select a default datasource, from the list of available sources. The selected datasource is designated as the default datasource in the list displayed under the reference date on the Explorer tab.	
Reference Time Datasources	Drop-down	List of available datasources. As a data modeler admin, you can select multiple datasources from the available list. Thus, you have the option to specify the number of datasources displayed under the reference date option on the Explorer tab.	

Notifications

Ĩ	Performance + Monitor +	Review and update the following configuration	Term of P - Data Model Configuration Review and update the following configurations across different tabs before running the data model			
ä	User & + Security	NLP	Application Notifications			
.:.	Data Modeler –	To send model run notifications on Slack	To send the notification on the pipeline failure.			
	Connections	Slack User ID	Notification Template Path			
	Data Models		configurations/notifications			
	Script Editor	Enter slack user id.	Path of the JSON template containing the format required to form the notification message.			
	Metric Configurations	Slack URL	Webhook URL			
	Calculations	Slack URL to direct the notifications.	Webhook URL to direct the notifications.			
	Example Queries		Back Save			
Ľ	Content + Manager +					
16 ²³	NLP + Workbench					

The model configuration details are described in the table below:

Field	Input Type	Description	Default Value
Notify on Slack	Checkbox	Enable the option to send the model run notification on Slack.	False
Notify On Failure	Checkbox	Enable the option to send the model run failure notification.	False
Slack User ID	Textbox	Slack user ID. A notification message about the successful or failed model run is sent to the specified user ID.	<user id=""></user>
Notification Template Path	Textbox	Path of the JSON template containing the format required to form the notification message.	


Slack URL	Textbox	Slack URL to direct the notifications.	
Webhook URL	Textbox	Webhook URL to direct the notifications.	

Access Logs for Data Model Run

After a data model run is triggered, to view the status of each task:

1. From the Last Run Status column, click Success or Failed. You can view the status of each model run task.

Performance + Monitor +	List of Data Models ഉ	Refresh	New Data Model						
Security +	Model Name	ated At	Last Modified ↓	Sche	Last Run	Next Run	Last Run Status	Run Manually	Actions
Data Modeler –	test_model 🕧 🗶	05/24, 05:28 pm	12/05/24, 05:28 pm	None	None	None	None	Run	⇔ ∠ 💿
Data Models	FAS - Automation (i) 🖉	23/24, 12:12 pm	12/05/24, 05:05 pm	None	10/23/24, 11:03 pm	None	Success	Run	≎ ∠ 💽
Script Editor Metric	Test_Snowflake Batch (i) 🖉	02/24, 04:07 pm	12/02/24, 04:08 pm		None	None	None	Run	\$∠ 💿
Calculations	Test_New_Calc_Dependencies () 🖉	29/24, 04:37 pm	11/29/24, 06:33 pm		11/29/24, 04:38 pm	None	Failed	Run	۵ 🖉 🌣
Example Queries	Customer_Hierarchy (i) 🖉	28/24, 03:24 pm	11/28/24, 03:55 pm		11/28/24, 03:24 pm	None	Failed	Run	۵ ۷ 🗢
Manager +	Automation_Analyst (i) 🖉	28/24, 03:37 pm	11/28/24, 03:37 pm		None	None	None	Run	۵ ۷ 🗢
Workbench +	FAS - Map i	14/24, 12:02 am	11/27/24, 02:42 pm	None	11/27/24, 02:32 pm	None	Success	Run	۵ ۷ 🜑
	WZ-36476 (i) 🖉	21/24, 03:10 pm	11/26/24. 03:21 pm		11/26/24, 02:57 pm	None	Success	Run	۵ ۷ 🜑
	WZ-35052 (i) 🥒	25/24, 04:42 pm	11/26/24, 03:11 pm		11/26/24, 02:58 pm	None	Success	Run	۵ ۷ 🜑
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Note! Click **Refresh**, to fetch the latest status of the tasks.

2. Click **View Log**, to open a third-party web interface **Airflow** where you can log in and view the logs.

Airflow	12:01 UTC ~	→]Log In
Sign In		
Enter your login and password below:		
Password:		ß
Sign In		

After logging in to Airflow, you can view the workflow log for the selected task.

Note: Please contact WhizAI support or solutions team to configure the username and password to log in to Airflow.

On successful data model upload, to access the data model, you may need to refresh the page, do a fresh login, or sometimes may even need to clear the browser cache and access the created data model. You can see the info area and the context and run queries to see the data in the response.

View Data Connection Details

On the **List of Models** page, you can view the data connection and the active data sources. To view the data connection and the data source for a model:



- 1. From the **Admin** console go to **Data Modeler** > **List of Data Models** page.
- 2. Under the **Model Name** column, click the **Connection Details** icon to view the Data connection and the data source(s).

Edit Data Model

On the List of Models page, you can edit the data model name and parameters.

- Click the **Edit** 🖉 icon under the **Actions** menu against a data model to open the Edit Model dialog.
 - Edit the Data Connections from this dialog or Create a New connection for the existing model.
 - Click Next to open the Define Columns page. Refer to Define Columns for details.
 - Click Next to open the Data Dictionary page. Refer to the Data Dictionary for details.
 - Click Next to open the Data Load Configurations page. Refer to the Data Load Configurations for details.
 - Click Save & Close to save the data model.

Define Columns

After you create a new data model by defining the data model name, data process method, and data connection, the Define Columns page opens. On the 'Define Columns' page, you can review data, review columns, and review timestamps.

- 1. From the left side of the page, one or more data sources can be selected from a list of data sources.
- 2. On the right side of the page, you can see columns that allow you to configure the data model.

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	Script Editor	CustomerID [Numeric]	.	Change to Metric	12931480	12931480	12931480	12931480	12931480		
	Metric Configurations	MDMID [Numeric]	ä:	Ochange to Primary Timestamp	12931480	12931480	12931480	12931480	12931480		
	Calculations	NPINUM [Numeric]	al	[™]	1598216426	1598216426	1598216426	1598216426	1598216426		
	Example Queries	VEEVAID [String]	ä:	0011200001MHj0gAAD	0011200001MHj0gAAD	0011200001MHj0gAAD	0011200001MHj0gAAD	0011200001MHj0gAAD	0011200001MHj0g		
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щ¢	NLP Workbench +	TRGTFLG [String]	∷	Non Target	Non Target	Non Target	Non Target	Non Target	Non Target		
								Back	ave Next		

3. Click Next.

Note! There should be at least one date field column selected in each of the data sources with a **yyyy-mm-dd** format.

Review Data: You can preview the fetched data's top 50 -100 records. Based on the data type, the system identifies and automatically categorizes the data into the following types:



- Primary Timestamp
- ä₁ Dimension
- Metric
- a. Primary timestamp.
- b. Dimensions (non-numeric values).
- c. Metrics (numeric values).

Review Columns: If any column is not classified correctly, you can change it by clicking the option shown below. You can change the column to the required type.

Review Timestamps: There should be only one primary timestamp column. You can change a required column to the primary timestamp type, provided it has the YYYY-DD-MM format. For more details, refer to the <u>Handbook</u>. WhizAI supports multiple date formats as listed below. The option to change the date format will be required only if the system has incorrectly identified the date format.

- yyyy-MM-dd
- yyyy/MM/dd
- yyyy-MM-dd HH:mm:ss
- yyyy-MM-dd HH:mm:ss.SSS
- dd/MM/yyyy
- dd-MM-yyyy
- MM/dd/yyyy
- MM-dd-yyyy

To change the date format:

- 1. Against the **Date** column, click the icon to view the menu options.
- 2. To edit the current date format, click the *leave* icon.
- 3. On the **Date Formats** dialog, select the required date format from the dropdown list.

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4. Click **Confirm** on the Date Formats dialog to update the date format. You are redirected to the **Define Columns** page.



Important! If you try to edit any column other than that holding the date format, for example, numeric value, then the system will display an error message.

Data Dictionary

The data dictionary is an ensemble of all the selected columns from the selected data sources in the previous step. Some columns are auto populated, e.g., name, descriptions, NLP generations, etc. You can define the relationships between different columns and provide attributes, synonyms, or computation details for the metric. The data dictionary provides more understanding of the data to the WhizAI system. The data dictionary is configured so that the system learns more about the data and generates an appropriate response to the user's queries.

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	Data Connections		▼		7	V		7		7		Hand
	Data Models	Sales Force	Sales Force	Sales Force	On Dimension & E	ntity				testda	ta1.csv	book
	Script Editor	✓ Geo (2)										
	Metric	Region Name	Region Name	Region Name	On Dimension & E	ntity				testda	ta1.csv	
	Calculations	Territory Name	Territory Name	Territory Name	On Dimension & E	ntity				testda	ta1.csv	
	Example Queries	CustomerID	CustomerID	CustomerID	On Dimension & E	ntity				testda	ta1.csv	
	Content	MDMID		MDMID	On Dimension & E	ntity				testda	ta1.csv	
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The **Data dictionary** page has the following two tabs:

- Dimension
- Metrics

Dimension Tab

The columns on the **dimension** tab, are described in the table below:

Column Name	Value
Group	Group name
Name	Display the name used in the system
Description	Description of the column
NLP Generation	On Dimension & Entity - For each column, the system understands the values and the dimension name. None - The system stops recognizing the column. On Dimensions - The system recognizes dimension names but not values associated with the column.
Google translate	WhizAI supports five languages. The user needs to select the translate check box to enable language detection. The user needs to provide a language file separately.
Exclusions	The system will not recognize columns marked as exclusions.



Column Name	Value
Dimension Synonyms	If a column name is referred to by another name, e.g., change_type, system_type, or chng_type user needs to provide a list of values to the system to recognize as synonyms.
Source	Auto-populated columns source column from where data will be ingested.
Destination	Destination dataset where the data set will get populated.
Code	Unique name by which each of the columns will be recognized.
Level type	Implicitly set as Dimension for a plain dimension entry. If this dimension is part of a hierarchy, this is set as Level. If this is an attribute to another dimension, set it as Attribute.
Level	For a Metadata entity, level means the hierarchy class it belongs to. For an Instance entity, level means the column name from the data source.
Hierarchy Class	Defines the hierarchy code to which the entity belongs to.
Parent	Defines the metadata code for the attributes of the main entity. For others, this is left blank. This field is applicable for the attributes only.
Entity Synonym Source	
Generate System Synonyms	
Generate User Synonyms	
Data Types	

The user can access additional functionality on the dimension tab, of the **Data Dictionary** page using the following buttons:

- 1. Upload Data Description
- 2. <u>Business Category</u>
- 3. <u>Hierarchy</u>
- 4. <u>Attributes</u>
- 5. Entity Synonyms

Data Descriptions

Business Data Descriptions are informative descriptions of the dimensions and metrics in your business. These descriptions provide a better understanding of the business terms and help you understand the business by asking relevant queries in WhizAI.



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2	Users & Security +	Dimension Metrics					Upload Data Description	Business Category	Hierarchy Attribut		
	Data Modeler –	Group	vel Type	Level	Hierarc	hv Class Pare	nt Entity Svn	onym Source Ger	ierate System Synonyms	Generate User Sync	
	Data Connections			V	Upload Data Descrip		×	7		Handbo	
	Data Models	Sales Force	mension	Sales Force	Delimiter	Tab	-				
	Script Editor Metric Configurations	CustomerID	mension	CustomerID							
		MDMID	mension	MDMID	File	Choose File No fi	Choose File No file chosen				
	Calculations	VEEVAID	mension	VEEVAID							
	Example Queries	SHAID	mension	SHAID		Back	Apply				
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You can configure Business Data Descriptions by fetching the descriptions of dimensions and metrics from the source database and uploading a CSV file of these descriptions to the data dictionary.



Steps:

- 1. On the **Dimension** tab on the **Data Dictionary** page, click **Upload Data Description**
- 2. Select the **Delimiter** from the drop-down options. You can select any one from the options Tab, Comma, Pipe, Semicolon, Space.
- 3. Click **Choose File**; browse and select the. CSV file which has data descriptions.
- 4. Click Apply.



Business Category

You can add and configure business categories to include specific metrics and dimensions according to different business areas. These business categories are displayed on the data model Info page. You can add multiple business categories to a model.

To add a new business category:

• On the Dimension tab on the Data Dictionary page, click Business Category The following **Business Category** dialog opens.

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🐇 Users & Security 🕂	Dimen: Group	Business Category	Metrics	Dimensions	Attributes Entity Synonyms Synonyms Generate User Sync
Data Connections Data Models	Sales	No results found	No results found	No results found	Handbook
Script Editor Metric Configurations	Custo	No results forma	No results found	No results round	
Calculations Example Queries	VEEV				
🗶 Content + Manager +	IMSIE				
NLP Workbench +	PDRP Rows: 44	Generate from Data Sources			Filtered: 44
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• On this **Business Category** dialog, add the Business Category.

Note! You can use the **Generate from Data Sources** option to automatically add business categories for each data source selected for a model. For more information, refer to the following example where, after clicking 'Generate from Data Sources;' WhizAI has added a business category for the data source (salesgoal.csv) in the model. You can edit or delete the category as required.

- From the **Metrics** drop-down select the required metrics.
- From the **Dimensions** drop-down select the required dimensions.
- Click **Save Changes** to update the data model.

The updated Business Categories are visible after a successful data model run.

Hierarchy

You can create and manage hierarchy groups to define a set of parent-child relationships amongst the group of dimensions.

You need to build hierarchies through the system as the data loaded into the WhizAI system is flat.

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	Audit Logs Users & Security +	Group	Hierarchy Groups test Add	Hierarchy Levels	xclusions Dimension Synonyms
	Data Modeler –	COTCD Geo1 (4)	Geo1	Area Name	
	Data Connections Data Models Script Editor	Area Name Region		District Territory Name	N
	Metric Configurations	Territory Name			
	Example Queries	Payment Type			
2	Content + Manager +	Rows: 122	Cancel	Save Changes	Filtered: 122
16 ⁰	NLP Workbench +	Ľ			Back Next

To add/edit the hierarchy group:

- 1. On the **Dimension** tab on the **Data Dictionary** page, click **Hierarchy**
- 2. Enter the names of the **Hierarchy Group.**
- 3. Click **Add**.
- 4. For the hierarchy group, select the Hierarchy Level from the list of available dimensions.
- 5. Click Save Changes.

You can also delete the hierarchy group and the hierarchy labels.

Attributes

You can manage the mapping between the parent dimension and one or more attribute dimensions. The attributes page allows you to link ID and name columns.



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	Audit Logs	Group	Parent Dimensions	Attribute Dimensions	Exc	clusions	Dimension S	ynonyms	
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- 1. On the **Dimension** tab on the **Data Dictionary** page, click **Attributes**
- 2. Select a Parent Dimension from the list.
- 3. Search for the required value under Attribute Dimensions for the selected parent **dimension** and select it.
- 4. Click Save Changes.

Entity Synonyms

You can select different options to define synonym values for the entities of a given dimension. If one column is a synonym of another column, you can link the two columns together. Additional options are available to load synonyms through files.

To select entity synonyms:

- 1. On the **Dimension** tab on the **Data Dictionary** page, click **Entity Synonyms**
- 2. Select the **Dimension**.
- 3. Under Entity Synonym Sources, select the required column name.
- 4. Select the required type(s).
 - a. Auto Generate The system uses its library to link the synonyms.
 - b. Generate from file Generates the synonym value from the selected file.
- 5. Click Save Changes.

Note! Additional steps are required to upload the required file in a specific format containing the synonym information. Please contact the system administrator for more information.

For more details, refer to the Handbook.

You can add synonyms for dimension entities by uploading a Microsoft Excel (XLSX) file having synonyms for the dimension entities.



Note! The structure and column sequence in the Excel file must be as shown in the following figure. Column B heading can be "SupplierName" or "Name".

	А		В	С	D	E	F	G	Н	I	J
1	CODE		SupplierName	syn1	syn2	syn3	syn4	syn5	syn6	syn7	syn8
2	Northeast		Northeast	NE	North East						
3	Southeast		Southeast	SE	South East						
4	Northwest		Northwest	NW	North West						
5	Southwest		Southwest	SW	South West						
6	1										
7											
8	Entities for	the	dimension		Synonym	s for the e	entities				
9	"Region"				0,11011,111						
10											
11											
12											
13	Dimen	sior	1								
14											
15	•										
	Regi	on	Therapeutic Area	+			1	1	1	1	

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Note! The Microsoft Excel file name is case-sensitive and must be "UserDefinedSynonyms.xlsx." The sheet name (Region) in the XLSX file is case-sensitive and must match the code of the dimension.

To add entity synonyms:

- 1. Prepare the entity synonym Microsoft Excel file for the required dimensions.
- 2. On the Data Dictionary page click Entity Synonyms.

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Data Modeler -	Group	Dimensions	Entity Synonym Sources	Exclusions Dimension Synonyms
Data Connections		Q Search		The second secon
Data Models	COTCD	COTCD	Generate from file	, ž
Script Editor	COTCD Description	COTCD Description		
Metric Configurations	Payment Type	Payment Type		
Calculations	Duplicate Flag	Duplicate Flag Contract procurement		
Example Queries	Contract procurement	Target Status		
	Target Status	Target Type		
Manager +	Target Type	Market Decile Group		
NLP Workbench +	Market Decile Group	Choose File No file chosen		
	Rows: 122	Cancel	Save Changes	
	L			Back Next

3. On the Entity Synonyms dialog, click **Choose File** and select the file having the entity synonyms. The Excel file gets uploaded.



4. From the **Dimensions** list select the dimensions for which the synonyms are defined in the uploaded file and select **Generate from file** option.

Dimensions	Entity Synonym Sources
p Search	· · · · · · · · · · · · · · · · · · ·
Product type	Auto Generate
Date	No results found
Territory	
State	
State Code	
Area	
Therapeutic Area	
Region	
Customer	

5. Click Save Changes.

Note! The synonyms for the entities are added only after a successful run.

Use Data Dictionary UI to select the NLP Data Source for a Dimension

From the data sources defined in the data model, you can choose a datasource for a dimension. The chosen data source is then used for NLP updates for the selected dimension(s).

• On the **Data Dictionary** page, Dimension tab select the column **NLP Datasource** from the column configuration.

Note! The **NLP Datasource** column is by default not selected. You must select it from the column configuration.



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*	Users & Security +	Dimension Me	trics			Upload Data Description	Business Category Hierarchy	Attributes Entity Synonyms
.:.	Data Modeler –	Group	□ Name	Description	NLP Generation	= 7	Exclusions Dimension Synonym	is Source
	Data Connections		▼	V		Search	▼	▼ ▼
	Data Models	Sales Force	Sales Force	Sales Force	On Dimension & Entity	 Exclusions Dimension Synonyms 		testdata1.csv
	Script Editor	CustomerID	CustomerID	CustomerID	On Dimension & Entity	Source		testdata1.csv
	Metric	MDMID	MDMID	MDMID	On Dimension & Entit	NLP Datasource		testdata1.csv
	Calculations	VEEVAID	VEEVAID	VEEVAID	On Dimension & Entity	Code Level Type		testdata1.csv
	Example Queries	SHAID	SHAID	SHAID	On Dimension & Entity	✓ Level		testdata1.csv
	Cartant	IMSID	IMSID	IMSID	On Dimension & Entity			testdata1.csv
	Manager +	TRGTFLG	TRGTFLG	TRGTFLG	On Dimension & Entity			testdata1.csv
ц¢	NLP Workbench +	PDRPFLG	DRPFLG	PDRPFLG	On Dimension & Entity			testdata1.csv
		Rows: 44				Total Rows: 44		Filtered: 44
								Back

• From the **NLP Datasource** column, select the datasource for the required dimension(s). This datasource is used for NLP updates for the corresponding dimension.

Metrics Tab

On the **Data dictionary** page, the columns on the metric tab are described in the table below.

Column Name	Value
Name	The name of the metric
Description	The description of the metric
NLP Generation	On Metric - For each column, the system understands the metric names. None - The system stops recognizing the column as a metric. It will be loaded into the system, but it will not be displayed or available via NLP queries that the system supports.
Aggregator	It is a part of the Druid system. Four types of Aggregators are supported (Min, Max, Count, Sum). The sum is required for metric values such as volume, revenue, sales, etc.
Source (Read- Only)	List of data sources for the dimensions. The source from where the column is picked up.
Destination (Read- Only)	Destination dataset in which columns will be populated. Usually, there is a one-to-one mapping between the source and destination, but it may vary in complex scenarios.
Code (Read-Only)	Unique identifier for the column.
Type (Read-Only)	By default, all metrics coming from the data source are set as 'Base' type. Computed metrics are computed using the base metric generated at run time.
Data Type	Data type of the metric.

Edit Multiple Dimensions and Metrics in Data Dictionary

The bulk edit option in the data modeler allows you to simultaneously select multiple dimensions or metrics while defining the data dictionary and editing some fields for the selected dimensions or metrics.



Edit Dimensions

To edit multiple dimensions:

- 1. On the **Dimensions** tab, select the desired dimensions from the **Name** column and click **Edit** *i* con at the bottom of the page.
- 2. On the **Dimensions** tab, you can select multiple dimensions and edit the following attributes:
 - NLP Generation
 - Google Translate
- 3. Click Save.

Edit Metrics

To edit multiple metrics:

- 1. On the **Metrics** tab, select the desired metrics from the **Name** column and click **Edit** 🖉 icon at the bottom of the page.
- 2. On the Metrics tab, you can select multiple metrics and edit the following attributes:
 - NLP Generation
 - Aggregator
- 3. Click Save
- 4. On the Metric records page, Click Next.

Note! Changes will only be saved to the backend when you click Next on the Data Dictionary page.

Data Load Configurations

All the batch mode connection data sources get ingested into the target system (default is Druid). Druid requires ingestion specifications. The system auto-populates the default configurations. The user is expected to review the same.



Note! Separate configurations are required to be specified for each of the batch mode data sources.

Configuration Settings:

- By default, **enable load** is set to true for all batch mode connections. It implies that when you run a model, you should load the data as per the specifications. If you want to disable the load for the next model run set, **enable the load** to be false. Set to false for all live connections.
- **I/O Configuration** is a Druid-specific configuration that is in the JSON format. It has information about the input data source, delimiters, and header information. This is populated automatically by the system based on the choice of a connection made previously but can be customized by the end user. The JSON is as expected by the Druid ingestion mechanism.
- **Tuning Configuration** This JSON primarily defines performance tuning for the data load, such as the number of threads to use for faster loads.

• **Granularity Specification** – Granularity is a Druid-specific configuration in the JSON format. Granularity governs how to bucket data across the time dimension (aggregate data by hour, day, minute, etc.).

This JSON specifies the time granularity that should be used when interpreting incoming data. This is helpful in cases where the incoming data is at a more granular level than the queries require, and the system should aggregate the data during the data loading itself.

The granularitySpec is responsible for configuring the following operations:

- o segmentGranularity Partitioning a datasource into time chunks. (Default day)
- o queryGranularity Truncating the timestamp, if desired. (Default none)
- Intervals Specifying which time chunks of segments should be created, for batch ingestion. (Default - null)
- o Rollup Specifying whether ingestion-time rollup should be used or not. (Default true)
- Transformation Specifications A Druid-specific configuration in the JSON format. The transforms
 list allows you to specify a set of expressions to evaluate on top of input data. Each transform has a
 "name" which can be referred to by your dimensionsSpec, metricsSpec, etc. If some changes should
 be made to the data while loading as offered by Druid.

For configuration specifications, refer to the link: <u>https://druid.apache.org/docs/latest/ingestion/ingestion-spec.html#</u>

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 Performance + Monitor + 	My_Expression2 - Data Load configurations Review and update the properties for each destination data source ingested	d into the druid. Applicable only for the file based connections.
Security +	Destination data sources	Configurations / sales_2021-08-08.csv
Data Modeler –		Enable Load
Data Connections	▼ MyExp3	
Data Connections	V72-emp_align.csv	uue ad bo
Data Models	sales_2021-08-08.csv	1/o Configuration
Script Editor Metric Configurations		["type":"index_parallel";"inputFormat": {"type":"tsv";"delimiter":"\t;"itstDelimiter":";";"findColumnsFromHeader":tr ue];"inputSource";["type":"http://uris":["http://minio:9000/whiz-data- area/MyExp3.8a250fd3-b78e-4419-80a2-d9c39b4b3a1d/sales_2021- 08-08 csv"]]"appendToExisting";false}
Calculations		i/o configuration JSON block as required by druid
Example Queries		Tuning Configuration
Content +		{"type":"index_parallel","partitionsSpec": {"type":"dynamic"],"maxNumConcurrentSubTasks":2}
NLP +		
- vvorkbench		Tuning configuration JSON block as required by druid
		Granularity Specification
		{"type":"uniform":"rollup":false,"intervals": []"queryGranularity":"none","segmentGranularity":"week"}
		Back Save & Close

On the Data Load Configurations page, click Save & Close to create a successful model.

For more details, refer to the <u>Handbook</u>.



Schedule Data Model Run

The Administrator can specify the frequency (fixed timelines) schedule for the model run. To schedule a model run,

- Go to Admin -> Data Modeler -> Data Model to open the List of Data Models page.
 - Select the data model and click None under the Schedule column to open the Schedule for <datamodel name> dialog:

8	🎉 whiz.ai	A Explorer Pinboards (①) Alerts	M Explain & Admin			(i) H	lelp 🔌	5
Ĩ	Performance + Monitor	List of Data Models				Refresh New Dat	a Model	
:¢	Users & + Security +	Model Name	Created At	Last Modified ↓	Schedule	Last Run	Next Run	I.
.:.	Data Modeler – Data Connections	TestNew_1202 (i) 🖉	02/12/24, 02:27 pm	02/12/24, 03:49 pm	None	02/12/24, 02:42 pm	None	
	Data Models	test_api (į) 💉	02/9/24, 05:08 pm	02/9/24, 05:08 pm	None	None	None	
	Metric Configurations	LiveAsBatch (i) 🖉	02/9/24, 03:59 pm	02/9/24, 04:23 pm	None	02/9/24, 04:04 pm	None	
	Calculations	SchedulerModel 🥡 🖉	02/8/24, 12:22 pm	02/8/24, 12:36 pm	None	02/8/24, 12:30 pm	None	
1	Example Queries Content Manager +	newline (Ì) 🖉	02/8/24, 10:19 am	02/8/24, 10:51 am	None	02/8/24, 10:40 am	None	
₩ ^{\$}	NLP +	TestSanity72 (i) 🖉	02/5/24, 10:18 am	02/5/24, 10:31 am	None	02/5/24, 10:18 am	None	
		Upload section						
		Quick Data Model You Can Move Your CSV Files He Browse files	re	Ð				

• Click Add to create a new schedule.

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6	Performance _ Monitor	List of Data Models	
	Dashboard User Logs	P Schedule for TestZero_Downtime	New Data Model :
5	Audit Logs	Mod Schedule Last Run Last Run Status NLP Undate Actions	None None
.:	Data Modeler -	Test:	None None
	Data Connections Data Models	Feb1 No Rows To Show	None Success
	Script Editor Metric	Con	None Success
	Configurations Calculations	Test Note: Pipeline scheduling cannot over lap each other.	None Success
	Example Queries	Upload s OK	None Success
ųž	NLP +	You Can Move Your CSV Files Here	
		Browse files	



• Enter the model scheduling parameters.

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Performance + Monitor +	List of Data Models			Tech New Data Model
Security +	Moc	× Schedule for SchedulerModel	;	st Run Next Run
Data Modeler -	Test!	Data Source DimMetricDate.csv	+ Add	12/24, 02:42 pm None
Data Models Scrint Editor	test_	Date & Time Monday, February 12 4:30 PM v		ne None
Metric Configurations	Liver	Timezone (GMT +05:30) India Standard Time		'9/24, 04:04 pm None
Calculations Example Queries	Sche	Recurrence Does not repeat		'8/24, 12:30 pm None
n Content + Manager +	newl Note: Pipeline scheduling cannot ove	NLP Update		'8/24, 10:40 am None
Workbench +	Test	Cancel OK		'5/24, 10:18 am None
	You Can Move Your CS	W Files Here		
		5		

 Click OK to save the schedule changes. Once saved, the data model displays the Schedule, Last Run time, and the Next Run time for the model.

Frequency-based scheduling inputs

- Data Source The default value for the data source is set to the attached file within the relevant data connection. You can choose a different data source or multiple data sources if required.
- Date & Time Start date and time for the scheduled run.
- Timezone Timezone for the schedule
- Recurrence Periodicity can be daily, weekly, monthly, and yearly, For example, Every 2 days/Every 2 weeks/Every 2 months/Every 2 years.
 - For weekly, additional input should be the day of the week. For example, Weekly on Thursday
 - For Monthly, additional input should be the day of the month.
 - NLP Update Check the flag if you want to update NLP entities.

Note! If one schedule is in execution and you trigger a second schedule for the same model, the later execution will not succeed. Only one execution at a time will be processed. If a first scheduled execution fails, it will not be re-triggered automatically. Therefore, scheduling should be done cautiously to ensure sufficient time intervals between two schedules involving the same model to avoid conflicts.



Sync Up the Manual Data Model with Data Modeler UI

Models created manually do not have the new functionalities of metrics configuration, calculation, and example queries.

You must create these entries manually using the **Sync-up API** to transfer these entities from the application to the UI.



Note! A manual model can be created by running the manual DAG from Airflow. Once DAG runs successfully, the data model is created and is available in the product.

Sync-up API

Run the API given below to sync up the entity transfer for the manual model.

PUT: http://{URL}/modelManager/model/appmodel/{modelname}?filter=fromAppTo

The API request does not require a request body.

After the API runs successfully, the following changes are observed:

- Manual data models are displayed on the List of Data Models page.
- Model configurations from the application are displayed on the Metrics Configurations page.
- Calculations are displayed on the Calculations page.
- Example queries are displayed on the Example Queries page.

Script Editor

The Script Editor is a development platform that allows you to create and manage scripts that can be integrated with the WhizAI solution. You can write a script in JavaScript or Python and save it as a 'Custom script'.

Script customization allows you to define and provide input parameters for your scripts, enabling dynamic and flexible script creation. This enables you to tailor scripts to specific use cases without modifying the core logic.

These custom scripts can be used for:

• Computations

For building a calculated metric. For example, Market share can be calculated from existing metrics to get the market share of a product for the other products.

• Application plugins

Write a script to get condition-based custom responses for an NLQ

From the Script Editor UI, you can:

- Add new custom scripts.
- Manage (edit, delete, rename) existing custom scripts.
- View all the existing scripts (custom scripts and system scripts)

User Interface

From the **Admin** console, click **Data Modeler** > **Script Editor** to open the **List of Scripts** page. This page lists all the available (custom and library) scripts.

🔬 whiz.ai	Explorer Pinboards Ale	rts Explain Admin				2 4 N
 Performance + Monitor + 	List of Scripts (5 Scripts)					
Security +	Script Type Executable	 Script Source 	Custom			New Script
🚛 Data Modeler –	Name	Language	Туре	Updated By	Last Modified	Actions
Data Connections	Υ	Υ	Υ	Υ	γ	
Data Models	slotFilling	JavaScript	Application Plugin	Tagar Chage	11/13/24, 12:30 pm	P 🖉 🖻
Script Editor Metric Configurations	WhizCalMultiDatasource_Test	JavaScript	Computation	Oneshare	11/15/24, 10:13 am	P 🖉
Calculations	static_multiplier	JavaScript	Computation	Shanaham	12/4/24, 06:27 pm	P 🖉 🗊
Example Queries	growth-test	JavaScript	Computation	Oneshare	12/3/24, 05:34 pm	P 🗹
Manager	AlertScript	JavaScript	Alert	Japa Dage	12/10/24, 08:26 pm	P 🖉 🗊
Workbench '						
					1 To 5 from 5 K K Pa	ge 1 from 1 > >I

The following table explains different sections and columns on the Script Editor page:

Field	Description
Script Type	Filters the scripts by script type 'Executable' or 'Library.'
Script Source	Filters the scripts by script type 'Custom' or 'System.'
Name	Displays the unique name of the script.
Language	Displays the programming language in which the script is written.
Туре	Shows the purpose for which the script is created. The script type can be defined only for Executable scripts where the script source is Custom.
Updated By	Displays the name of the user who updated/modified the script. The details are available only for Custom scrips.
Last Modified	Displays the date and time when the script was modified. The details are available for Custom scripts.
Actions	Provides options to copy, edit, and delete the custom scripts. For the system scripts, only the View Response action is available.

Add Custom Scripts

- 1. Go to Admin console > Data Modeler > Script Editor.
- 2. To add custom scripts, click **New Script**. The Script Editor page opens as shown in the following figure:



Ĩ	Performance + Monitor	Script Editor		
*	User & + Security +	Information	Editor	Show/Hide Info section
 	Data Modeler-Data Connections-Data Models-Script Editor-Metric Configurations-Calculations-Example Queries-Content Manager+NLP Workbench+	Name Script Name Name Script Description Script Description Language JavaScript Script rogramming language Type Executable or library Use for Script The Sage of the script or library Select the usage of the script or library	<pre>1 (() => { 2 3 // Execute dataQuery and get dataFrame 4 let df = dataAccessManager.eval(dataQuery); 5 6 // Apply some filter on dataFrame 7 // df.filter(Filter.gt("TRX", 5000.00)); 8 9 // If parameter has been passed with key name "customParameter", 10 // same can be accessed via "config" object 11 // console.log(config["customParameter"]); 12 13 // Return dataFrame 14 return df; 15 16 })((); </pre>	
				Back Save

3. In the **Information** section of the new script page, enter the script name, select script language, script type, use for, and input variable name.

Note! For a description of these fields, refer to the section Options on the Information section of the new script page.

4. Add your script in the Editor section.

▶ **Note!** When you are adding a custom script, you can hide the Information section on the script editor user interface and use the entire screen space to write/edit scripts. To hide the Information section, click and clear the Show/Hide Info Section option.

5. Click **Save**.

To view added computations, go to the WhizAI Explorer > Conversation box, and click Model Info.



The data model information page displays different metrics and computations.



Field Analytics data model information		
Example Queries	All Activity Sales Speaker Pro	ogram
Sales contribution by specialty		
What are my TRx sales?	Q Search	
Show me my TRx marketshare by brand		
Show me reach for current year	+ Dimensions	- Metrics
Who are my top performing	► Customers	► Call Goal
accounts?	 Geography 	 Call Volume
Who are my worst performing	▶ Lot	customer_cnt
Show ma my TPy and NPPy sales by	Products	Emails - Clicked
product	 Regions 	► HCP_Count
What is my TRx marketshare by	Access Category	 Naive Volume
region?	Account Type	► NBRx_NAME
Who are my top performing	Active Flag	▼ NRx
customers by TRx marketshare?	Additional Low Dec Target	Contribution
What are my total calls by region?	Address	Market Share
Show me my weekly trend by product	Administration Mode	Growth
Show me TRx vs NBRx trends for last	Age	
8 weeks	Age Group	Departmention
Show me count of customers and	BubbleChart_Address	Penetration
total calls by engage willingness	BubbleChart_City	Productivity
Show me the distribution of sales of	BubbleChart_Country	Market Volume
specially group across the regions	BubbleChart_State_Code	Market Volume Growth
What is my call goal attainment for this quarter?	BubbleChart_Zip_Code	Median
Which territories have highest calls in	Call Sequence	► Sales Goal
Northeast?	Call Status	 Sample quantity



Note! Additional steps are required to register the custom scripts into the system. Please contact WhizAI support for more information.

New Script Page

The following table explains the purpose of different options on the information section of the new script page:

Option	Description / Use
Name	Unique name for the script.
Script Description	Description for the defined custom script.
Language	Option to select the script programming language for the script, JavaScript, or
	Python.
Туре	Option to select script type Executable or Library. Executable : For these scripts, you do not need to declare any function in the program, and you can directly start with the program content. Library : Library scripts need function declarations that can be used in any other scripts.
Use for	Option to select usage of the script, Computation, Alert , or Application Plugin . Computation : Scripts for adding computations on the base metric.



	 Alert: Scripts for creating customized alerts using the existing alert creation functionality Application Plugin: Scripts for achieving condition-based response from NLQs.
Alert Message Generation	When you select the Alert option from the Use For drop-down menu, then the Alert Message Generation toggle is seen. Enable this option to generate an alert message through the script.
Input Variable name	This name refers to the input object. The variable name is set as: arguments: when you select Use for as Computation config : when you select Use for as Alert or Application Plugin.
Output type	Shows the type of output variable. The output type is set as: List: when you select Use for as Computation. Boolean: when you select Use for as Alert or Application Plugin
Input Parameters Declaration	The input parameter declaration is a JSON editor box that accepts JSON input in descriptor format. This format is used to describe the input parameters for alerts in the script. The defined parameters (text, numeric, or JSON type) will be accessible in the script as members of an object array. Once the input parameters are defined for an alert script, they will be visible in the Alert editor when the condition is selected as Script.

Edit Existing Scripts

You can add a new custom script by using any of the existing scripts. You can create a copy of an existing script (custom), modify this copied script, and save it as a new custom script. To add a new custom script by using the existing script:

- 1. Go to the script that you want to copy, and from the **Actions** column, click the copy icon
- 2. Enter a name for the new custom script and click **Create**.

c	Performance + Monitor	List of Scripts (3 Scripts)						
147	User & + Security +	Script Type Executable	Script Source	Custom				New Script
	Data Modeler	Name	Language	Туре	Updated By		Last Modified	Actions
	Data	Υ	5	r	Y	7		7
	Data Models	defaultAlertScript	JavaScript	e a Copy of slotFilling	×		10/26/24, 12:50 pm	e 2 🗊
	Script Editor Metric	slotFilling	JavaScript		Chape		11/13/24, 12:30 pm	e 2 0
	Configurations Calculations	WhizCalMultiDatasource_Test	JavaScript	50 characters. Name can contain undersco	Create		11/15/24, 10:13 am	e 2 🗊
	Example Queries							
2	Content + Manager +							
	Workbench +							

3. Script Editor window opens. From this new window, from the Information section, you can change the script programming language and script usage. In the Editor section, modify the script and click Save.



Ĩ	Performance + Monitor +	Script Editor		
*	User & + Security	Information	Editor	Show/Hide Info section
.i.	Data Modeler-Data Connections-Data Models-Script Editor-Metric Configurations-Calculations-Example Queries+NLP Workbench+	Name Script Name Name Script Description Script Description Language JavaScript Script programming language Type Executable Executab	<pre>(() => { // Execute dataQuery and get dataFrame let df = dataAccessManager.eval(dataQuery); // Apply some filter on dataFrame // df.filter(Filter.gt("TRX", 5000.00)); // If parameter has been passed with key name "customParameter", // same can be accessed via "config" object // console.log(config["customParameter"]); // Return dataFrame return df; })(); </pre>	
			4	Back Save

A new script gets added to the list.

Input Parameter Declaration for Alert Scripts

Input Parameters Declaration is a descriptor schema used to define and validate script input parameters using a key, title, control type, description, etc, for script customization. This enables dynamic input handling for tailored script execution.

To add or edit the Input Parameter Declaration, follow the steps below:

• Go to Admin console > Data Modeler > Script Editor to open the List of Scripts page as shown below:

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Ĩ	Performance + Monitor +	List of Scripts (5 Scripts)							
4	User & + Security +	Script Type Executable	 Script Source 	Custom			N	lew Scr	ipt
.:.	Data Modeler – Data	Name	Language	Туре	Updated By	Last Modified	Actio	ns	
	Data Models	slotFilling	JavaScript	Application Plugin	Tape Dage	11/13/24, 12:30 pm	P,	2 🖻	
	Script Editor Metric	WhizCalMultiDatasource_Test	JavaScript	Computation	(honitae)	11/15/24, 10:13 am	P,	2 🗇	
	Calculations	static_multiplier	JavaScript	Computation	Onestan	12/4/24, 06:27 pm	₽.	2 🗊	
	Example Queries	growth-test	JavaScript	Computation	Oundram	12/3/24, 05:34 pm	P,	2	
=ů	Manager '	AlertScript	JavaScript	Alert	Tagar Diagar	12/10/24, 08:26 pm		2 🗊	
ιų.	Workbench '								
						1 To 5 from 5 K K Pag	e 1 from 1	> >	1



• To add input parameter declaration to custom alert scripts, click **New Script** or click the **edit** icon. For the new script, select **Alert** from the **Use for** drop-down menu.



Tip! For editing, the alert type is already selected for you.

 In the Information section of the Script Editor, enter or edit the Input Parameters Declaration details as shown in example below:

Example: Following is the sample Input Parameter Declaration

Input Parameters Declaration	×
1 [2 descriptors": 3 [
4 ('Key': 'numberOfCuisones', 5 "u': (6 "title: 'No of custones', 7 "control: 'sinput',	
8 "description": "Top N number of customers to be input for the calculation of criteria" 9 18 } 11]	
12 } 13	
с	lancel Apply

- Click **Apply**. The Input parameter declaration is now applied to the selected Alert script.
- Click **Save.** The script is created successfully.

Create Alerts using Script

For detailed information about Alert Manager, refer to the Alert Manager topic in the User Manual. go to the **Create Alert** icon > select **Script** radio button and select the **Alert Type** name from the drop down. The dynamically Input parameter field is generated as configured by you in the script editor with its corresponding tool tip is as shown below.



Alert_test			× FAS - Cycle
Add Conditions	Delivery N	Viethod	Recipients
Scope For Metric TRx	For Period Current week ~		
Alert Type alert_test testing parameterized script alert No of customers Top N number of customers to be input for	the calculation of criteria	<u>v</u>	Script
		Cancel	Next

Metric Configurations

You can use the **Metric Configurations** option to view and edit the default configurations of the metrics in a selected data model.

To view and edit the configurations of a metric:

1. Go to Admin console > Data Modeler > Metric Configurations.

Ŕ	🗃 whiz.ai	Explorer Pinboards Alerts E	xplain Admin	😨 🦺 (N
ې پ	Performance + Monitor + User & + Security +	Data Model Entity FAS - Automation Base M	etric Value NRx	
.:.	Data – Data Connections	Percent	Absolute ~	Set if the metric value is represented as Percent
	Data Models	Aggregator	Sum 👻	Aggregation rule to summarize the data
Γ	Script Editor Metric Configurations	Decimal Places	5 .	Decimals supported for the metric
1	Calculations	Enable Smart Total	Default	Enabling total row on the Workspace
	Example Queries	Enable Ascending order		Set if a lesser numeric value of the metric means a better value. Ex: Rank
Ľ	Content + Manager +	Time Independent		Set if the metric is time independent. i.e. its values doesn't change with time.
щ ²⁰	NLP Workbench +	Calendar	Model-default	Calendar to be referred for the metric
		Units		Display unit. For example: "\$". In case if the unit is different as per different members in a particular dimension then provide the list of member codes and units to be used, as per following example for "Region" dimension: {"Mid-Central": "unit 1", "Mid-Atlantic"; "unit 2"}. Also make sure to mention code of the dimension in the 'Unit Dimension' field (here "Region").



- 2. Select the data model from the **Data Model** drop-down list.
- 3. From the **Value** drop-down, select the metric(s) for which you want to edit the default configurations.
- 4. To edit the configuration, select the configuration and edit the parameters.
- 5. Click Save.

The following table explains different configurations that you can view and edit.

Configuration	Input Type	Description
Percent	Drop-down	Sets the metric numeric value as Absolute or as Percentage. The default value is Absolute
Aggregator	Drop-down	To define the aggregation rule to summarize the data. You can select the following aggregators:
		 Sum Average Count Max Min
		The default value is set as Sum.
Decimal Places	Drop-down	To define the decimals supported for the metric. You can select any numeric value between 0 to 9. The default value is set to 2.
Enable Smart Total	Drop-down	To enable the Total row on the workspace. You can enable or disable the total row
Enable Ascending order	Checkbox	Sets the order in which the metric data will be displayed in response. The default is False. When set as True: Metric values in the response are displayed in ascending order.
Time Independent	Checkbox	To decide whether the selected metric is time-independent or not. Time-independent metrics display varying responses to the same input at different instances of time.
Calendar	Drop-down	Sets the Calendar for the selected metric. (Gregorian or Custom) The default value is Gregorian.
Units	Text box	Sets the unit for the selected metric. For example: USD, EUR, etc.
Unit Dimension	Drop-down	Sets the dimension entity for the selected metric.
Prefix Unit	Checkbox	Sets the position of the unit as prefixed to metric value or as postfixed. Unit by default comes after the metric value.
Aggregable	Checkbox	Set the Aggregability of selected metric data as True or False. The default is True. When set as False: the aggregate metric value is not displayed in the response.
Fiscal Year Calendar	Drop-down	Enable/disable whether data model date interpretation should follow fiscal calendar behavior.
Fiscal year Offset	Textbox	Month start offset for Fiscal Year. O means it will start from January 1 for February
Data Consistency	Checkbox	



Configuration	Input Type	Description
Smart Total Scope Change	Checkbox	

Define Metric Type for the Key Driver Analysis (KDA)

Tip! This is required only if there are one or more non-aggregable metrics available and they are required to be used in the Key Driver Analysis (KDA) analysis.

- 1. Go to the Admin console > Data Modeler > Metric Configurations.
- 2. Select the required data model from the dropdown list.
- 3. Select the metric as required. The system populates metric-specific configurations.
- 4. Select **Aggregable** and set the value in the dropdown against **Aggregable** to **true**. This dropdown contains the following three values.
 - **Default**: Default value is false. select when you are doing KDA analysis of aggregable metrics
 - o false: Select when you are doing KDA analysis of aggregable metrics
 - **true**: Select when you are doing KDA analysis of non-aggregable metrics.
- 5. Click Save.
- 6. Refresh the page, to see the changes on UI.

Calculations

From the Calculations page, you can add and configure the calculated metrics and functions. To access the Calculations page:

1. Go to Admin console > Data Modeler > Calculations. to display the Calculations page.

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رب ۱	Performance + Monitor + User & + Security +	Calculations Data Model Ianguages Select Data Model English		
.=.	Data – Modeler –			
	Data Connections			
	Data Models			
	Script Editor			
	Metric Configurations			
	Calculations	Please Select Any One Data Model To Proceed!		
	Example Queries	Thas selection one balantice to roced.		
N	Content + Manager +			
ц¢	NLP + Workbench +			

2. On this page, select the data model from the **Data Model** drop-down. The **Functions** tab is displayed. This tab shows all the functions existing in the system. From this tab, you can add and configure new functions.



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	Performance + Monitor + User & + Security + Data -	Calculations	English		Refresh	New	/ Function	:
	Data Connections	Code	Name	Description	Metrics		Calculat	ion De
	Data Models		Υ	Υ		7		
	Script Editor	Market Volume Growth PY	Market Volume Growth PY	DESC Market Volume Growth PY	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	C
	Configurations	Growth	Growth	DESC Growth	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	C
	Calculations	Market Volume Change	Market Volume Change	DESC Market Volume Change	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
	Example Queries	Moving Average	Moving Average	DESC Moving Average	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
	Content + Manager +	Evolution Index	Evolution Index		NRx,NBRX,Naive Volume,TRx,Switch Volume		Script	U
		Market Share Growth	Market Share Growth	DESC Market Share Growth	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	U
Щ ² ст	NLP Workbench +	Market Volume Change PY	Market Volume Change PY	DESC Market Volume Change PY	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	U
		Previous Market Share	Previous Market Share	DESC Previous Market Share	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	ß
								-
		P / 0				Reset	Sav	e

Note! From the Calculated Metrics tab, you can add and configure calculated metrics. Newly added calculated metrics or functions are not immediately reflected on the user interface. They reflect on the user interface, only a few minutes after adding the metric or function.

Add and Configure Calculated Metric

Calculated Metrics (or Calc Metrics) are user-defined metrics that are computed from existing base metrics.

To add and configure a Calculated Metric:

- 1. Go to the **Admin** console > **Data Modeler** > **Calculations**. The **Calculations** page is displayed.
- 2. Select the data model from the **Data Model** drop-down.
- 3. Click the **Calculated Metrics** tab. The **Calculated Metrics** tab displays all the existing calculated metrics and their configurations for that data model.
- 4. Click New Calculated Metrics. The New Calculated Metric dialog is displayed.



	New Calculated Metrics
Codo	Unique function code
Code	
Name	Primary reference name
Description	Additional details
Calculation Details	Formula 🕑
Synonyms	Comma separated list of synonyms of the dimension na
Decimal Places	2
Percent	
Calendar	Calendar for metric

5. In this New Calculated Metrics dialog, add the required details.

Note! For detailed descriptions of the fields on the New Calculated Metrics dialog, please refer to the section Understanding the New Calculated Metric dialog

6. Click the **Edit** icon against the **Calculation Details** field. The **Edit Calculation Details** dialog is displayed. In this dialog, you must add a **Script** or **Formula** for your metric.

	Edit Calculation Details	×
Туре	Script 💿 Formula	
	0	
Configuration		
	Cancel Save	



Note! For detailed descriptions about the Calculation Details option on the New Calculated Metrics dialog, please refer to the section "Understanding the Edit Calculation Details dialog."

- 7. If you select the **Formula**, add the configuration required for the calculated metric. Two types of formulas can be added:
 - Legacy formula Legacy formulas are developed using custom code, spreadsheet formulas, or specific business rules that have been in use for a considerable period.
 - Metadata formula A metadata formula, on the other hand, is a formula that leverages metadata or data-driven calculations available within the system or data source.

Script Formula	
{	
{ "name": "Total TRx", "type": "sum", "column": "TRx", "nullReplacement": 0 ,, { "name": "Total NRx", "type": "sum", "type: "type: "sum", "type: "sum", "type: "sum", "type: "	
U = 1, U, UA (D, .U	
	"nullReplacement": 0 }{ "name": "Total NRX", "type": "sum", "action att in the point

- 8. If you select **Script**, add the required script from the drop-down menu. These scripts are stored in the script library in the **Script Editor** section of the data modeler.
- 9. Click **Save** on this Edit Calculation Details dialog. You will be redirected to the **New Calculated Metrics** dialog.
- 10. Click **Save.** Your calculated metric gets added to the system.

Note! The calculated metrics displayed on the screen are data source specific, we must select the data source correctly where we want to add/configure the Calculated Metric.

The values in the table below represent the hypothetical values for the calculated metric: Code Customer Count. The value changes as per the business requirement

Attribute Name	Description / Use
Code	Unique identifier for the calculated metric
Name	Unique name for the calculated metric
Description	Short description of the calculated metric



Attribute Name	Description / Use
Calculation Details	Calculation inputs for the metric. (Script or Formula)
	Script : You can choose a pre-existing script. This script contains the necessary calculations for the calculated metric. For more information, refer to the section Understanding the Edit Calculation Details dialog.
	Formula : Add the configuration for the calculation inputs. Default Value: Formula.
Synonyms	Comma-separated list of the synonyms for the calculated metric. You can use the synonym from this list in your query.
Decimal Places	Number of decimal points to be displayed for the calculated metric value
Percent	Checkbox to set the metric value representation in percentage. This is enabled by default.
Calendar	Select the calendar to be referred to for the calculated metric (Custom, or Gregorian, or Model-default)
Enable Smart Total	To enable total values (row) on the response
Enable Ascending order	To set the order in which the metric values will be displayed in response. When selected: metric values in the response are displayed in ascending order. Tip : Select this when the small numeric value of a metric is considered a better value. For example, Rank
Time Independent	Select this checkbox if the calculated metric is time-independent (that is, when metric values do not change with time).
Aggregable	Select if aggregation is supported on the calculated metric.
Dynamic Period	Select this check box if the calculated metric supports dynamic comparison (PoP or YoY)
Comparison period	Select the dynamic comparison period for the calculated metric. Available options: N/A : Not Applicable Compound Annual Growth Rate (CAGR) Period over period (PoP) Year over year (YoY)
CAGR Number of	The number of years (n) for CAGR (Compound Annual Growth Rate) calculation
Years	The parameter 'n' refers to the duration or length of time for which the CAGR is calculated.
Prefer SQL	Select this checkbox
Units	Units : Set the unit for the calculated metric. For example: USD, EUR, etc. Unit Dimension: Set the dimension entity for the selected metric. Prefix Unit : To set the position of the unit as prefixed to metric value or as postfixed. Unit by default comes after the metric value.
Fiscal Year Calendar	Select whether data model date interpretation should follow fiscal calendar behavior or not
Fiscal Year Offset	Set the month start offset for the Fiscal Year. 0 means it will start in January, 1 for February
Business Categories	Select the business category from the drop-down list.
Data Consistency	Scope: This applies to all base and computational metrics. When checkbox is selected, the customer list remains correct for the metrics belonging to the same data source. The customer list may change for metrics belonging to different data sources.
Smart Total Scope Change	Scope: This applies to all base and computational metrics. When checkbox is selected, the totals will remain consistent even when metrics are from different data sources and there is a period adjustment when sorting.
Relative TD Time Comparison	Scope: It is applicable to all time period buckets such as MTD, QTD, HTD, YTD, and time comparison metrics such as growth, EVI etc. Select this checkbox to calculate Evolution Index (EVI). When this checkbox is selected for TD buckets, Relative TD Time Comparison is



Attribute Name	Description / Use
	applied. When this checkbox notes selected for non-TD buckets, such period filters are
	unaffected by Relative TD flag and behave according to the flag set at the comparison field.

Edit Calculation Details

Attribute Name	Description / Use
Туре	 Script: used for complex calculation. Select the script from the dropdown. If no script is available, you can add the script in the Script Editor. Formula: Calculation formulas that do not require a script
Configuration	If you select Script : Configurations are necessary if you want to change certain parameters in the script. If you select Formula : You must add configuration with calculation inputs.

Add and Configure Function

WhizAI offers predefined standard functions. These functions are configured using mathematical calculations on the metrics. These functions provide additional information and insights into your data. Some examples of these predefined functions are:

- Average
- Contribution
- Growth
- Market share

Using the **Functions** tab on the **Calculations** page you can add and configure custom functions.

To add and configure a Function:

- 1. Go to the Admin console > Data Modeler > Calculations. The Calculations page is displayed.
- 2. Select the data model from the **Data Model** drop-down. The **Functions** tab displays all the existing functions and their configurations for that data model.



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Performance + Monitor + Security + Data -	Calculations	Ianguages English		Refresh	New	Function	:
Data Connections	Code	Name	Description	Metrics		Calculati	on De
Data Models	γ	v	γ		V		
Script Editor	Market Volume Growth PY	Market Volume Growth PY	DESC Market Volume Growth PY	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
Configurations	Growth	Growth	DESC Growth	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
Calculations	Market Volume Change	Market Volume Change	DESC Market Volume Change	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
Example Queries	Moving Average	Moving Average	DESC Moving Average	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
🖍 Content +	Evolution Index	Evolution Index		NRx,NBRX,Naive Volume,TRx,Switch Volume		Script	D
NUD	Market Share Growth	Market Share Growth	DESC Market Share Growth	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	C
Workbench + Market Volume Change PY Market Volume Cha	Market Volume Change PY	DESC Market Volume Change PY	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	C	
	Previous Market Share	Previous Market Share	DESC Previous Market Share	TRx,NBRX,NRx,Naive Volume,Switch Volume		Script	D
							-
	e Z î				Reset	Save	

3. Click **New Functions.** The **New Functions** dialog is displayed.

Code	Unique identifier of the function
Name	Name of the Function
Description	Brief description of what the function does
Metrics	Select
Calculation Details	Formula 📵
Calculation Details Synonyms	Formula 🚯
Calculation Details Synonyms Decimal Places	Formula Discrete Synonyms

4. In this dialog, add the required details.

Note! For detailed descriptions of the fields on the New Functions dialog, please refer to the section Understanding the New Functions dialog.



5. Click the **Edit** icon against the **Calculation Details** field. The **Edit Calculation Details** dialog is displayed. In this dialog, you must add a **Script** or **Formula** for your function.

Edit Calculation Details	×
Script 🖲 Formula	
0	
Cancel Save	
	Script Formula Image: Cancel Save

Note! For detailed descriptions of the Calculation Details option on the New Functions dialog, please refer to the section Understanding the Edit Calculation Details dialog.

- 6. If you select the **Formula**, add the configuration required for the function. Two types of formulas can be added:
 - Legacy formula Legacy formulas are developed using custom code, spreadsheet formulas, or specific business rules that have been in use for a considerable period.
 - Metadata formula A metadata formula is a formula that leverages metadata or data-driven calculations available within the system or data source.

Note! When the model is loaded through the model manager the default functions listed below are added to assist with calculating metrics: MarketShare, Growth, Average, Contribution, Penetration, Productivity, Market Volume, Market Volume Growth. However, you still need to manually map these functions to the applicable metrics based on their specific requirements.

7. If you select **Script**, add the required script from the drop-down menu. And add the configuration as required. These scripts are stored in the script library in the **Script Editor** section of the data modeler.



	Edit Calculation Details	×
Туре	Script 💿 Formula	
	0	
Configuration		
	Cancel Save	

- 8. Click **Save** on this Edit Calculation Details dialog. You will be redirected to the **New Functions** dialog.
- 9. Click **Save.** Your function gets added to the system.

Attribute Name	Description / Use
Code	Unique identifier for the function
Name	Unique name for the function
Description	Short description of the function
Metrics	An array that lists the metrics on which the function is applied
Calculation Details	Calculation inputs for the function. (Script or Formula) Script : You can choose a pre-existing script. This script contains the necessary calculations for the function. For more information, refer to the section Understanding the Edit Calculation Details dialog . Formula : Add the configuration for the calculation inputs. Default value: Formula.
Synonyms	Comma-separated list of the synonyms for the function. You can use the synonym from this list in your query.
Decimal Places	Number of decimal points to be displayed for the function value
Percent	Checkbox to set the function value representation in percentage
Enable Smart Total	To enable total values (row) on the response

New Functions



Attribute Name	Description / Use
Enable Ascending order	To set the order in which the function values will be displayed in response. When selected: function values in the response are displayed in ascending order. Tip : Select this when the small numeric value is considered a better value. For example: Rank
Aggregable	Select if aggregation is supported on the function.
Dynamic Period	Select this check box if the function supports dynamic comparison (PoP or YoY)
Comparison period	Select the dynamic comparison period for the function. Available options: N/A : Not Applicable Compound Annual Growth Rate (CAGR) Period over period (PoP) Year over year (YoY)
CAGR Number of Years	The number of years (n) for CAGR (Compound Annual Growth Rate) calculation The parameter 'n' refers to the duration or length of time for which the CAGR is calculated.
Prefer Sql	
Prefix Unit	To set the position of the unit as prefixed to function value or as postfixed. Unit by default comes after the metric value.
Units	Units : Set the unit for the function. For example: USD, EUR, etc.

Edit Calculation Details

Attribute Name	Description / Use	
Туре	 Script: used for complex calculation. Select the script from the dropdown. If no script is available, you can add the script in the script editor. Formula: JSON that does not require the script and works on application and druid. 	
Configuration	If you select Script : Configurations are necessary if you want to change certain parameters in the script. If you select Formula : You must add configuration with calculation inputs.	

Managing Calculated Metrics and Functions

You can copy, edit, delete, import, and export the lists of **Calculated Metrics** and **Functions**.


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	Data Connections			Code		Name	Description	Metrics	E	xport	ulutio	
	Data Models				7		▼		Ŷ			
	Script Editor	r		Market Volume Growth PY		Market Volume Growth PY	DESC Market Volume Growth PY	TRx,NBRX,NRx,Naive Volume,Switch Volume		Scrip	t	C
	Configuration	15		Growth		Growth	DESC Growth	TRx,NBRX,NRx,Naive Volume,Switch Volume	Import Export Concentration Script Script Script Script Script	C		
	Calculations	ations		Market Volume Change		Market Volume Change	DESC Market Volume Change	TRx,NBRX,NRx,Naive Volume,Switch Volume		Scrip	t	D
	Queries			Moving Average		Moving Average	DESC Moving Average	TRx,NBRX,NRx,Naive Volume,Switch Volume		Scrip	t	D
<u>"</u>	Content Manager	+		Evolution Index		Evolution Index		NRx,NBRX,Naive Volume,TRx,Switch Volume		Scrip	t	U
				Market Share Growth		Market Share Growth	DESC Market Share Growth	TRx;NBRX;NRx;Naive Volume;Switch Volume		Scrip	t	C
NLI Wo	Workbench	+		Market Volume Change PY		Market Volume Change PY	DESC Market Volume Change PY	TRx,NBRX,NRx,Naive Volume,Switch Volume		Scrip	t	C
				Previous Market Share		Previous Market Share	DESC Previous Market Share	TRx,NBRX,NRx,Naive Volume,Switch Volume		Scrip	t	C
												-
	Copy Edit Delete								Reset		Save	

The **Calculations** page > **Functions** tab lists all the functions for the selected data model in an editable table.

The **Calculations** page > **Calculated Metrics** tab lists all the calculated metrics for the selected data model in an editable table.

You can edit the values directly within the table, except for the "Code" column, which is not editable. This allows you to make changes to the function configurations conveniently.

Creating a copy of the function or a calculated metric:

- 1. Select the function or calculated metric and click the copy icon The Clone Functions or Clone Calculated Metric dialog is displayed with pre-populated details of the selected function.
- 2. Edit the details as required.

Note! The code and name must be unique. In such a case, an appropriate error message will be displayed to prompt you to choose a distinct code or name.

3. Click Save.

Editing the function or a calculated metric:

- 1. Select the function or the calculated metric that you want to edit.
- 2. Double-click on any cell to edit the value.



Note! You cannot edit the Code column.

To edit multiple functions or calculated metrics:

1. Select the functions or calculated metrics that you want to edit.



- 2. Click the **Edit** icon. The **Edit Functions** or **Edit Calculated Metric** dialog is displayed.
- 3. Edit the details as required.
- 4. Click Save.

Deleting a function or calculated metric:

You can delete one or multiple rows by selecting them and clicking on the delete icon ^{III} located at the bottom left of the screen.

Note! System functions essential for the system's functioning cannot be deleted.

Importing functions or calculated metrics:

1. Click the vertical ellipsis icon from the top right corner of the **Calculations** page.

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: الا	Performance + Monitor + User & + Data - Modeler -	Calculations Data Model FAS - Automation Calculated Metrics Functions	ages sh		Refresh New Calculated	Metric
	Data Connections	Code	Name 🗸	Data Source	Description Export	
	Data Models Script Editor	Product Rank	Product Rank	sales_automation	Product Rank	Script
	Metric	Reach	Reach	call_plan_automation	Number of total customers detailed	Script
	Configurations	Number of Doctors	Number of Doctors	sales_automation	Number of Doctors	Formula
	Example	HCP Total Prescription	HCP Total Prescription	sales_automation	HCP Total Prescription	Formula
	Queries	HCP TRx Average	HCP TRx Average	sales_automation	HCP TRx Average	Formula
<u>_</u>	Content + Manager +	Speaker Program Attendee Count	Speaker Program Attendee Count	speakerprogram_automation	The Number of attendees in the speaker program	Formula
-0	NLP.	Call Frequency	Call Frequency	call_plan_automation	Ratio of Total calls made to Total number of HCPs called	Script
liber.	Workbench '	h + Sales Attainment Sales Attainment	Sales Attainment	sales_automation	Sales Attainment	Script
		Call Attainment	Call Attainment	call_plan_automation	Ratio of Total calls made to Total number of HCPs called	Script
		P Z 0			Reset	Save

- 2. Click **Import**. The dialog to Import functions or calculated metrics is displayed.
- 3. Click the **Choose File** button.
- 4. Select the file that you want to import and click **Apply**. The functions or calculated metrics from the selected file get imported.



Note! When you import a function(s) or calculated metric(s), functions or metrics with the same name are overwritten. In such a case, a warning message pops up, informing you about the same.

Exporting functions or calculated metrics:

1. Click the vertical ellipsis icon from the top right corner of the **Configurations** page.



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 Performance + Monitor + 	Calculations Data Model FAS - Automation	iges sh			
Security +	Calculated Metrics Functions			Refresh New Calculated	d Metric
Data Connections	Code	Name	Data Source	Description Expor	t
Data Models V V V Data Models Product Rank Product Rank sales_automation Product Rank	Product Rank	Script			
Metric	Reach	Reach	call_plan_automation	Number of total customers detailed	Script
Configurations	Number of Doctors	Number of Doctors	sales_automation	Number of Doctors	Formula
Example	HCP Total Prescription	HCP Total Prescription	sales_automation	HCP Total Prescription	Formula
Queries	HCP TRx Average	HCP TRx Average	sales_automation	HCP TRx Average	Formula
Content +	Speaker Program Attendee Count	Speaker Program Attendee Count	speakerprogram_automation	The Number of attendees in the speaker program	Formula
	Call Frequency	Call Frequency	call_plan_automation	Ratio of Total calls made to Total number of HCPs called	Script
Workbench T	Sales Attainment	Sales Attainment	sales_automation	Sales Attainment	Script
	Call Attainment	Call Attainment	call_plan_automation	Ratio of Total calls made to Total number of HCPs called	Script
	P 2 T			Reset	Save

- 2. Click **Export**. The dialog to Import functions or calculated metrics is displayed.
- 3. From the dropdown, select the functions or calculated metrics that you want to export.
- 4. Click **Download**. A JSON file with selected functions or calculated metrics gets downloaded.

Note! When running the model for a data model, the functions configured on the function configuration screen remain intact and unaffected by the model execution.

Saving the configurations does not freeze the screen, even if there is an update to the natural language processing (NLP) component. If the NLP update fails, the user is notified about the failure but is still able to go back and save the configurations again.

Example Queries

You can use this option to add Example Queries on the data model **Info** page. You can add a single query at a time, or you can add multiple queries by importing an Excel file having multiple queries.



Note! It is recommended that the structure and column sequence in the MS Excel file should be as shown in the following figure.



	Α	В	С	D
1	id	statement	description	lang
2	1	Sales contribution by specialty	Sales contribution by specialty	en
3	2	What are my TRx sales?	What are my TRx sales?	en
4	3	Show me my TRx marketshare by brand	Show me my TRx marketshare by brand	en
5	4	Show me reach for current year	Show me reach for current year	en
6	5	Who are my top performing accounts?	Who are my top performing accounts?	en
7	6	Who are my worst performing accounts?	Who are my worst performing accounts?	en
8	7	Show me my TRx and NBRx sales by product	Show me my TRx and NBRx sales by product	en
9	8	What is my TRx marketshare by region?	What is my TRx marketshare by region?	en
10	9	Who are my top performing customers by TRx marketshare?	Who are my top performing customers by TRx marketshare?	en
11				
12				
13				
14		Title of the sheet must be SuggestedQueries		
15				
16				
17				
4	•	SuggestedQueries +	•	

Note! The name of the sheet is case-sensitive and must be "SuggestedQueries."

To add a single example query:

4.7

1. Go to the Admin console > Data Modeler > Example Queries.

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 Performance + Monitor + User & Security + 	Example Queries (0 Queries) Data Model Finglish	New Query :
Data –	Queries Description Business Category	Actions
Data Connections	Υ Υ	Ϋ
Data Models		
Script Editor		
Metric Configurations		
Calculations		
Example Queries	No records	
Content +		
NLP Workbench +		

- 2. From the **Data Model** drop-down, select the data model for which you want to add **Example Queries**.
- 3. Click **New Query**; Create Query dialog opens. On this dialog, add Query, Query Description, and then click **Save**.



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Ĩ	Performance + Monitor	Example Queries (19)	Queries)		
:	User & + Security	Data Model FAS - Automation	Englich -		New Query :
	Data _ Modeler _	Queries	Create Query	×	jory Actions
	Data		Query		▼
	Data Models	II Sales contribution to			Z ū
	Script Editor Metric	# 🔲 trx for last 5 weeks	Query Description (optional)		2 0
	Configurations Calculations	II What are my total d			∠ â
	Example Queries	II Show me the distrit	Business Category		2 â
Ľ	Content + Manager +	II What are my sales t		Save	2 🗇
ц¢	NLP Workbench +	II What is frequency f		Save	2 🛱
		I Show me YTD NBRx	by product	Activity, Sales	Z Õ
					Reset Save

The query gets added for the data model.

Performance . Monitor	Example Queries (19 Queries)		
Security +	FAS - Automation v English v		New Query
Data – Modeler –	Queries Description	Business Category	Actions
Data Connections	▼	γ	7
Data Models	# 🔲 Sales contribution by specialty	Sales	2 ā
Script Editor	H Vhat are my total calls by region? Total Calls in Region Discription Test Test		<i>L</i> □
Metric Configurat Calculations	H Show me the distribution of sales of speciality group across the re Test Desc	Sales. Activity	2 10
Example Queries	H What are my sales trend week over week? Desc Test Desc Test	Sales	2 🖻
🖉 Content +	What is frequency for Angel Olsen	Activity, Sales	2 D
NLP Workbench +	Show me YTD NBRx by product	Activity. Sales	<u>/</u> 🗇
	Show me address for Aaron King	Sales	<u>/</u> 10
	H Give me list of growing regions for NBRx for Trexine QTD	Sales	∠ î
	What are my TRx sales?	Sales	∠ î
	Show me TRx. NBRx growth ?	Sales	<i>L</i> [—]
	" Channess These AllBhashands for last 0 secols	C-1	1 前
	ΰ.		Reset Save

Note! From the Actions column, you can edit or delete the query.

The query gets added to the data model Info page as well.



Example Conversations	$\supset \mathbf{O}$	Model Info	III My Pins
9 Search	ofor FAS - Automation	Q (S)	
Activity			
Show me the distribution of sales of specialty group across the regions			
What is frequency for Angel Olsen			
Show me YTD NBRx by product	Was this helpful? Yes No		No Pins Yet!
Sales			It seems you haven't added any pin here.
Sales contribution by specialty			Get started now!
Show me the distribution of sales of specialty group across the regions			
What are my sales trend week over week?			
What is frequency for Angel Olsen			Lo
Show me YTD NBRx by product			
Show me address for Aaron King			
Give me list of growing regions for NBRx for Trexine QTD			
What are my TRx sales?			
Show me TRx, NBRx growth ?			
Show me TRx vs NBRx trends for last 8 weeks			
Show me list of HCPs I have not called in last 4 weeks			

To add multiple example queries:

- 1. Go to the Admin console > Data Modeler > Example Queries.
- 2. Click the menu icon and then **Import**.

Ĩ	Performance Monitor	Example Queries (19 Queries)	
; ;	User & + Security	Data Model Language FAS - Automation English	New Query
	Data – Modeler –	Queries Description Business Category	Import Export
	Data	Ϋ	Ŷ
	Data Models	Image: Sales contribution by speciality Sales	2 🖻
	Script Editor	Image: Image: Trx for last 5 weeks trx for last 5 weeks	2 🗉
	Metric Configurat Calculations	What are my total calls by region? Total Calls in Region Discription Test Test	2 D
	Example Queries	Image: Show me the distribution of sales of specialt Test Desc Sales, Activity	2 🖻
	Content Manager +	Image: Image: Solution of the sector of t	2 🗊
11. ²⁷⁴	NLP Workbench +	Image: Image: Second system Image: Second system Activity, Sales	2
		Image: Show me YTD NBRx by product Activity, Sales	2 🗊
			Reset Save

3. **Import Example Queries** dialog opens. On this dialog, click **Choose File** and select the Excel file having example queries.



Import E	xample Queries	×
File	Choose File SuggestedQueries.xlsx	
	Back Apply	

4. Click **Apply** to add Queries for the data model. Close the **Import Example Queries** dialog.

Note! From the Actions column, you can edit or delete the query.

Queries get added to the data model **Info** page as well.

Limitations

There are a few challenges when importing example queries:

- The column sequence should be maintained as below. Any change in the sequence results in incorrect ordering in the output.
 - o statement
 - o description
 - o language
 - o business category
- If any column is left empty in the .xlsx sheet, it will pick up the value in the next column and add its content to the current empty cell.
- There is no method to assign a specific cell to a particular column based on the header while importing.

You can associate **Example Queries** with relevant business categories. Additionally, you can specify the language for each created example query.

Map Example Queries to Business Categories

- Click Admin->Data Modeler->Example Queries. You can view all example queries configured for a model, categorized by language.
- Each example query displays the business categories mapped to it. All the business categories available for the model can be mapped to example queries.
- You can assign one or more business categories to any example query and have the option to remove existing category mappings.
- Any changes made are promptly reflected in the information panel of the model. You can import example queries using an XLSX file, which includes language and business category settings. The XLSX format is provided as an attachment.

Note! The example queries file is imported irrespective of the selected language.

• Exporting example queries is possible through the export feature. Regardless of the language selection on the user interface, all sample queries are exported.



XLSX file format:

The standard XLSX file format is:

Example:

The table below lists the sample file for Example Queries

ID	statement	description	language	Business Category
1142	tendencia TRx	Reg	es	Sales
1119	Top 10 regions	Test	es	CRM
1120	Show me count of customers and total calls by engage willingness	Show me count of customers and total calls by engage willingness	es	CRM
1121	Which territories have highest calls in Northeast?	Which territories have highest calls in Northeast?	es	Sales
1122	What are my total calls by region?	What are my total calls by region?	en	Sales Activity CRM
1123	Who are my top performing accounts?	Who are my top performing accounts?	en	
1124	Who are my worst performing accounts?	Who are my worst performing accounts?	en	
1125	Show me my TRx and NBRx sales by product	Show me my TRx and NBRx sales by product	en	
1126	Show me the distribution of sales of specialty group across the regions	Show me the distribution of sales of specialty group across the regions	en	Sales Activity CRM
1127	What is my TRx marketshare by region?	What is my TRx marketshare by region?	en	CRM
1128	What is my call goal attainment for this quarter?	What is my call goal attainment for this quarter?	en	CRM
1129	Which doctors have clicked emails in last week and their NBRx?	Which doctors have clicked emails in last week and their NBRx?	en	CRM
1130	What are the top 50 retail customers by Arobi TRx?	What are the top 50 retail customers by Arobi TRx?	de	CRM
1131	Show me my TRx marketshare by brand	Show me my TRx marketshare by brand	de	Activity



1132	What is frequency for Angel Olsen	What is frequency for Angel Olsen	it	Sales Activity CRM
1133	Show me YTD NBRx by product	Show me YTD NBRx by product	it	Sales Activity CRM
1134	Who are my top performing customers by TRx marketshare?	Who are my top performing customers by TRx marketshare?	de	Sales
1135	Show me TRx vs NBRx trends for last 8 weeks	Show me TRx vs NBRx trends for last 8 weeks	fr	Sales
1136	Whoaremyworstperformingacco unts	Who are my worst performing accounts?	fr	Activity

Limitations:

- All the columns in the XLSX should be populated for each row without any null value.
- For importing the XLSX, the first row should be the header as defined in the format.

Customize display Order of example queries

You can reorder example queries sequence as per your requirement. Once you save the new order, you can see those in the saved order on the model info panel of Explorer. Follow the steps as below to reorder example queries

- Go to Admin->Data Modeler->Example Queries
- Select the Data Model
- User drag and drop button to re-order the example queries. Once you re-order, Save and Reset buttons are enabled. If you want to save the reordering, Click Save. Click Reset if you want to reset to the old order. Once you reset, the Save and Reset button will be disabled.



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 Performance + Monitor + User & + Security + 	Data Model Language FAS - Automation English		New Query
Data Modeler	Queries Description	Business Category	Actions
Data		Σ	Υ
Data Models	Sales contribution by speciality	Sales	1
Script Editor Metric	Image:		2 🗇
Configurations Calculations	Image: What are my total calls by region? Total Calls in Region Discription Test Test		1
Example Queries	E Show me the distribution of sales of special Test Desc	Sales, Activity	1
✓ Content Manager +	Image: Image: What are my sales trend week over week? Desc Test Desc Test	Sales	1
NLP Workbench +	What is frequency for Angel Olsen	Activity, Sales	1
	II Show me YTD NBRx by product	Activity, Sales	1 Î
	ά		Reset Save

Note! You can do reordering only when there is no search or filter.

No pagination will be available for the listing of suggested queries to support the reordering of queries.

Content Manager

The Content Manager comprises branding, configurations, and utilities.

Branding

The **Branding** page allows you to configure your WhizAI instance, as required. You can upload your own brand's Avatar and brand logo to personalize WhizAI. Click AGENT AVATAR or BRAND LOGO to upload a new avatar or logo.



Refer to the following table for information on the branding elements and their specifications.

Branding Element	Description	Specifications
Agent Avatar	Agent avatar is the digital character that represents the users or systems and acts on their behalf in the virtual environment.	Use PNG or SVG image with 1:1 aspect ratio and a minimum size of 50pixel.
Brand Logo	A Brand Logo is a unique symbol or design that identifies and represents a company.	Use PNG, SVG, or JPG images with an aspect ratio of 1:1 to 5:1 and a minimum height of 40 pixels.
Favicon	A Favicon is a small unique icon that represents a product visually across browser tabs.	Use a PNG or ICO file with a minimum of 32x32 pixels in size.
Agent Name	The unique identifier for the agent avatar to be used across the product.	Text
Website Title	The title of a website is at the top of a window, indicating the content or function of that window.	Text
Theme CSS	The editor window allows users to customize the colors and styles of the application using CSS code.	CSS code

To add custom CSS styling:

1. Go to Admin console > Content Manager > Branding. The Branding page is displayed.



2. In the **THEME CSS** dialog, you can add a custom CSS code and customize the specific elements on the page, as required.

For example, you can customize the Highchart colors palette to change the default colors used in the charts.



Note! You can configure the colors in which the dimensions are displayed in all the visualization options.

3. Click Save.

Configurations

The **Configurations** page displays options that Administrator users can use for:

- Configuring general system settings
 - Enabling/disabling key product features

The Configurations are divided into two tabs

- Application Tab: Displays all the global configurations categorized by feature.
- Data Model Tab: Displays the data model-specific configurations.



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 Performance + Monitor + 	Configurations	
User & + Security +	Application Data Model	
Data + Modeler +	Ø Search	Expand all
Content – Manager –	General >	
Branding Configurations	Alerts >	
Service Configuration	NLP >	
Utilities	Data Modelling >	
Workbench +	Natural Language Generation >	
	Pinboards >	
	Visualization >	
	Explain >	
	Explorer >	

The Configurations are listed alphabetically under each section on each tab.

As an Administrator user, you can configure the following options:

Application Tab

Configuration	Input	Default Value	Description
General			
About Us	Checkbox	True	Enable or disable the About Us (WhizAI) details from the Profile menu. When WhizAI is embedded in another application, you can uncheck the option to hide the WhizAI details.
Admin email	Textbox	<email address=""></email>	Displays the administrator's email address. An email notification is sent to the admin when a new user is created if the Email Notification configuration is set to True.
Branding	Checkbox	True	Enable or disable this option in the Content Manager on the Admin page.



Configuration	Input	Default Value	Description
			Enable the option to
			modify the product
			branding such as logo.
			avatar, and brand-specific
			colors on the WhizAl user
			interface
CSV Card Export	Checkbox	Тгие	Enable or disable
	Checkbox	inde	individual card exports as
			CSV from Explorer or
			Pinboard area
Cohort	Checkbox	Тгие	Enable or disable the
Conort	CHECKDOX	hue	Cohorts option
Default Page	Dron-down	Workspace	Displays the default
Delautrage	Diop-down	Workspace	landing page on login
			Vou can soloct a page
			from the drop down list
			as the default landing
			as the default landing
			The cost is a cost is the large
			The options available are:
			Workspace
			Dashboard
Email	Checkbox	True	Enable/disable email
Notification			notifications during user
			creation.
			If this option is enabled
			and the SMTP server is
			configured email
			notifications will be sent
			during user creation
Features	Checkbox	False	Enable/disable the
Notifications	Checkbox		What's New option
Notifications			You can enable this
			option to view the
			released new features on
			the What's New dialog
			accessible from the
			Profile menu
Feedback	Textbox	<email address=""></email>	Displays the email
Pecipiont's Empil	TEXIDOX		addross where user
Recipient's Linan			foodback is received
			Lisors can share feedback
			from the links on Evolution
			from the links on Explorer
Holplink	Toythoy		Displaye the LIPL for
	IEXIDOX		
			accessing
			documentation.
			Click the Help
			option 🕐 in the
			top navigation to
			open the



Configuration	Input	Default Value	Description
			 documentation at the configured URL. If the textbox is empty, the system will open the default product help. To disable the help, feature, enter "void" in the textbox.
Landing Page	Checkbox	True	Enable/disable the Preferred Landing page feature under the Profile settings.
Languages	Drop-down	Select All	Displays the list of languages available in the environment. You can select one or more languages from the list. The options available are: English French German Italian Spanish (Mexico) Spanish (Spain) Spanish (USA)
Logout Option	Checkbox	True	Enable or disable the logout option under the profile menu. Enable the option to view Logout under the Profile menu.
Onboarding	Checkbox	False	Enable or disable this option to provide guided instruction for new users. Enable this option to view the Getting Started under the Profile menu.
Profile Page	Checkbox	True	Enable or disable the user profile menu.
Slicer	Checkbox	Treu	This feature helps to capture and apply the most frequently used filter values with a single



Configuration	Input	Default Value	Description
			click on both explorer
			and pinboard areas.
Use Websocket	Checkbox	True	Enable/disable the
for Cards API			communication mode
			between UI and backend
			for card actions.
XLS Card Export	Checkbox	True	Enable or disable this
			option to control
			Individual card export as
			Riphoard area
Alorts			
Alert	Chackbox	True	Enable/disable alort
Alen	CHECKDOX	lide	
			Select the checkbox to
			enable the alerts feature
			This option should be
			enabled to manage and
			receive alerts.
			/┌┌┩
			Additional
			permissions are
			required to create
			alerts.
	<u>र</u> ।		
Alert Email Body	Textbox	Dear User, I his is a patification amount inform your that the	Inis configuration allows
Template		notification email to inform you that the	users to customize the e-
		Please refer the subject for the alert	while generating alort
		context < n > Conserved < n	email notifications The
		context.	placeholder text
			"[[alertname]]" in the
			template will be replaced
			by the actual alert name
			while sending emails to
			recipients.
Create Alert	Checkbox	True	Enable/disable the create
			alert option.
			Enable this option to set
			alerts on a given scope
			with specific conditions.
Maximum	Textbox	1000	The maximum number of
Records per			records to be included in
Alert			web notifications. If the
			alert retrieves more
			records than this limit, the
			excess will be excluded
			nom me web
			The value should be
			between 1 and 50000



Configuration	Input	Default Value	Description
Maximum Records per Email	Textbox	500	The maximum number of records to be included in email notifications. If the alert retrieves more records than this limit, the excess will be excluded from the email. The value should be between 1 and 10000
Share Alert	Checkbox	True	Enable/disable the Share Alert recipient tab while creating the alert. Enable this option to allow the user to select multiple recipients while setting an alert.
NLP Datab Siza	Taythay	10000	This size is utilized by NLD
Batch Size	Textbox		when accepting data for updating entities, the batch size defines the transaction size for the database.(ZkPath = /whiz/nlp/BATCH_SIZE)
Enable LLM Service	Checkbox	False	Enable or disable LLM service. Setting this flag informs Whiz that the LLM service
Enable LLM for NLQs	Checkbox	False	The trained LLM is specifically used to evaluate Natural Language Queries (NLQs). Tip ! Ensure that the ENABLE LLM SERVICE flag is enable in conjunction with this flag.
Java Options	Textbox	-Xmx6G -Xms6G -XX:+UseG1GC - XX:MaxGCPauseMillis=3000 - XX:ParallelGCThreads=8 - XX:StringTableSize=2000003 - XX:+UseStringDeduplication -verbose:gc -XX:+PrintGCDetails	These values are the default NLP memory parameters, with the default set to 8GB. They can be increased as per requirements.(ZkPath = /whiz/nlp/JAVA_OPTS)
Load Parallel Model	Checkbox	True	Load the Data Model in parallel during startup. (ZkPath = /whiz/nlp/LOAD_PARALL EL_MODEL)



Configuration	Input	Default Value	Description
Models	Textbox	,none,	This value represents a comma-separated list. For example, if we have two models, abc and xyz, this is how they are configured. The default value is ,none, indicating that all models available in the NLP DataBase should be loaded. (ZkPath =
			/whiz/nlp/MODELS)
Data Modeling			
Data Modeler	Checkbox	True	Enable/disable the data modeler option. When enabled, the 'Data Modeler' option is available on the admin menu for users to manage connections, models, and other data modeling configurations
Dimension Identifiers in Data Modeler	Textbox	id,Id,ID,Code,code,CODE	Displays a list of dimension identifiers in a data model. The configuration accepts a comma-separated list of texts. When creating a data model, if a numeric column name starts with or matches exactly with any of these specified texts, the column is considered a dimension instead of a metric by default.
Script Editor	Checkbox	True	Enable/disable the Script Editor feature. You can select this option, to enable the script editor for the setup, in the Data Modeler menu.
Supported Date Formats in Data Modeler	Textbox	yyyy-MM-dd,yyyy/MM/dd,yyyy-MM-dd HH:mm:ss,yyyy-MM-dd HH:mm:ss.SSS,dd-MM- yyyy,dd/MM/yyyy,MM/dd/yyyy,MM-dd- yyyy	Displays a list of configuration accepts the comma-separated list of Date formats within and beyond the Date formats specified in the Admin Guide.
Use Shared Storage in Entity Ingestion	Checkbox	True	If enabled, the intermediate data will be stored in a shared web



Configuration	Input	Default Value	Description			
	-		location else it will be			
			stored in the local file			
			system, during the NLP			
			entity load.			
Natural Languag	e Generation	1				
Auto Narratives	Textbox	GPT4	Selected models will be			
Model			used for auto narratives. If			
			'ChatGPT' is selected,			
			then Chat GPT Api key			
			must be configured.			
GPT Api Key	lextbox	<api key=""></api>	Displays the API key.			
			You can enter the API key			
			required to generate the			
			Chat GPT narratives.			
GPT Endpoint	lextbox	<ur><ur>URL></ur></ur>	Displays the URL pointer			
URL			to the GPT model. This			
			URL is required when GPT			
			is used to generate			
Norrativos	Chackbox	True	Enchla or dischla tha			
Indifatives	Checkbox	nue				
			Narratives transform the			
			data into a natural			
			language for users to			
			understand the data and			
			analyze it better			
Narratives	Textbox	1	This will control			
Thread Pool			parallelization for			
			narratives generation.			
Pinboard	Checkbox	True	Enable or disable			
Narratives			pinboard level narratives			
Notifications			notifications at data load			
			event.			
Pinboard	Drop-down menu	HTML	Describe the format in			
Narratives			which the pinboard			
Summary Style			narratives summary			
			needs to be generated.			
Pinboard	Checkbox	True	Enable or disable			
Summary			Pinboard summary, which			
			is generated using LLMs.			
Pinboards	Pinboards					
Annotations	Checkbox	True	Annotations provide a			
			collaborative way for			
			users to communicate			
			and highlight important			
			data on the cards by			
			adding comments.			
			Select the checkbox to			
			enable annotations to			
			write notes for the data			
1	1		l content.			



Configuration	Input	Default Value	Description
Card Action Timeout	Textbox	60000	Displays the time in milliseconds for which the user interface should wait for a response from the card action API.
Card Sharing	Checkbox	True	Enable or disable this option to control the sharing of a card with individual users or user groups from the Explorer or Pinboard area.
Copyboard	Checkbox	True	Enable or disable this option to control creating a copy of the pinboard. When enabled, you can create a copy of your Pinboard
Createboard	Checkbox	True	Enable or disable this option to create a new pinboard from a card in Explorer or from the pinboard navigation menu.
JsonImportExpo rt	Checkbox	True	This feature downloads the pinboard as a JSON file to help migrate it from one setup to another.
Pinboard Manager	Checkbox	True	This serves as a landing page for the pinboards, to view them by categories, group them by customized labels, and carry out the most frequent operations.
Visualization			
Concurrent Card Fetch	Textbox	2	Displays the number of card responses fetched concurrently.
Map Configurations	Textbox	<pre>{"World":{"map":"world","joinBy":["iso- a3","code"],"Country":{"UAE":"ARE","USA ":"USA","Chad":"TCD","Cuba":"CUB","Fiji" :"FJI","Guam":"GUM","Iraq":"IRQ","Mali":" MLI","Niue":"NIU","Oman":"OMN","Peru": "PER","Togo":"TGO","Aruba":"ABW","Beni n":"BEN","Chile":"CHL","China":"CHN","E gypt":"EGY","Gabon":"GAB","Ghana":"GH A","Haiti":"HTI","India":"IND","Iran ":"IRN","Italy":"ITA","Japan":"JPN","Kenya" :"KEN","Korea":"KOR","Libya":"LBY","Mac ao":"MAC","Malta":"NLT","Nauru":"NRU"," Nepal":"NPL","Palau":"PLW","Qatar":"QAT ","Samoa":"WSM","Spain":"ESP","Tonga":"</pre>	This enables the map visualization. An appropriate mapping of the geographic level to its code should be in place.



Configuration	Input	Default Value	Description
configuration		TON!" "I IS A "·" I ISA" "Yemen"·"YEM" "And	Description
		ola":"ΔGO" "Belize":"BL7" "Bhutan":"BTN"	
		"Brazil":"BRA" "Canada":"CAN!" "Congo	
		""COG" "Cyprus" "CYP" "France" "FRA"	
		Greece"."GRC" "Guinea"."GIN" "Guyana".	
		"GLIV" "Israel":"ISR" " Iersey":" IEV" " Iorda	
		001 , Isidei : ISiC , Seisey : 321 , Soida	
		Malawi":"MM/I" "Movico":"MEX" "Monaco"	
		"."NER" "Norway"."NOR" "Panama"."PAN"	
		"Poland""POL " "Russia""RUS" "Rwanda"	
		"RWA" "Sarbia" "SRB" "Sudan	
		"·"SDNI" "Sweden"·"SWE" "Taiwan"·"TWNI"	
		"Turkey"."THR" "Tuyalu"."THV" "Haanda".	
		"IIGA" "7ambia" ·"7MB" "Albania" ·"ALB" "	
		Algeria"·"D7A" "Andorra"·"AND" "Armeni	
		a"·"ARM" "Austria"·"ALIT" "Bahamas"·"BH	
		S" "Babrain" "BHR" "Belarus" "BI R" "Belgi	
		um"·"BEI "Bermuda"·"BMII" "Burundi"·"	
		BDI" "Croatia":"HRV" "Czechia":"CZE" "De	
		nmark"·"DNK" "Ecuador"·"ECU" "Fritrea"·"	
		FRI" "Estonia"·"FST" "Finland"·"FIN" "Gam	
		bia	
		":"GMB"."Georgia":"GEO"."Germanv":"DE	
		U","Grenada":"GRD","Hungarv":"HUN","Ic	
		eland":"ISL","Ireland":"IRL","Jamaica":"JA	
		M","Lebanon":"LBN","Lesotho":"LSO","Lib	
		eria":"LBR","Mayotte":"MYT","Morocco":"	
		MAR","Myanmar":"MMR","Namibia":"NA	
		M","Nigeria":"NGA","Romania":"ROU","Se	
		negal":"SEN","Somalia":"SOM","Tokelau":	
		"TKL","Tunisia":"TUN","Ukraine":"UKR","Ur	
		uguay":"URY","Vanuatu":"VUT","Vietnam":	
		"VNM","Anguilla":"AIA","Bahamas	
		":"BHS","Barbados":"BRB","Botswana":"B	
		WA","Bulgaria":"BGR","Cambodia":"KHM"	
		,"Cameroon":"CMR","Colombia":"COL","	
		Comoros	
		":"COM","Curaçao":"CUW","Djibouti":"DJI	
		","Dominica":"DMA","Eswatini":"SWZ","Et	
		hiopia":"ETH","Guernsey":"GGY","Hondur	
		KIR, Malaysia: MIYS, Maldives: MDV,	
		Wongolia: Wing , Pakistan: PAK , Parag	
		uay . LIVE, FILCALLE . FOIN , FOLLUGAL : PK T" "Réunion":"RELL" "Slovekie":"SV/K" "Slove	
		n, Neurilon . NEO, Slovakia . SVN, Slov	
		"THA" "Trinidad"."TTO" "Zimbahwa"."ZM	
		F" "Argentina"·"ARG" "Australia"·"AHS" "	
		Gibraltar"·"GIB" "Greenland"·"GRI " "Guat	
		emala":"GTM"."Holv See	
		":"VAT","Indonesia":"IDN","Lithuania":"LT	



Configuration	Input	Default Value	Description
	•	U","Mauritius":"MUS","Nicaragua":"NIC","	•
		Singapore":"SGP","Sri	
		Lanka":"LKA","uni_st_am":"USA","Azerbaij	
		an":"AZE","Bangladesh":"BGD","Cabo	
		Verde":"CPV","China,	
		PRC":"CHN","Guadeloupe":"GLP","Italy -	
		IT":"ITA","Kazakhstan":"KAZ","Kyrgyzstan":	
		"KGZ","Luxembourg":"LUX","Madagascar"	
		:"MDG","Martinique":"MTQ","Mauritania":	
		"MRI", "Montenegro": "MNE", "Montserrat"	
		: MSR , Mozambique : MOZ , Oosta	
		Rica: CRI, San Marina III (CMDIII) Cauch alla a III (CVCIII) Catara	
		tica":"ATA" "Taiikistan":"TIK" "Uzbakistan":	
		IICA . ATA , TAJIKISIATI . IJK , UZDEKISIATI . "IIZR" "Afabapistap":"AEG" "El	
		Salvador":"SIV" "Islo of	
		Man":"IMN" "Netherlands":"NI D" "New	
		Zealand"·"NZI " "Philippines"·"PHI " "Polan	
		d - PI "·"POI " "Puerto Rico"·"PRI" "Saint	
		Lucia":"LCA"."Serbia - RS":"SRB"."South	
		Sudan":"SSD","Switzerland":"CHE","Timor	
		-	
		Leste":"TLS","canada_name":"CAN","Burki	
		na Faso":"BFA","Buvet	
		Island":"BVT","Germany -	
		DE":"DEU","Ireland -	
		IE":"IRL","Netherlands ":"NLD","Saudi	
		Arabia":"SAU","Sierra	
		Leone":"SLE","South	
		Africa: ZAF, Turkmenistan: TKM, Coo	
		Guiana":"GUE" "Great	
		Britian"·"GBR" "Guinea-	
		Bissau"."GNB" "Liechtenstein"."LIE" "NFW	
		CALEDONIA":"NCL"."AMERICAN	
		SAMOA":"ASM","CZECH	
		REPUBLIC":"CZE","CÔTE	
		D'IVOIRE":"CIV","FAROE ISLANDS	
		":"FRO","NORFOLK	
		ISLAND":"NFK","UNITED	
		KINGDOM":"GBR","WESTERN	
		SAHARA":"ESH","cayman	
		ISLANDS":"CYM","ALAND	
		ISLANDS":"ALA","CAYMAN ISLANDS	
		CTIVI, KAZAKNSTAN-	
		ISLAND"."CXR" "FRENCH	
		POLYNESIA":"PYF", "PAPUA NEW	
		GUINEA":"PNG"."BRUNEI	
		DARUSSALAM":"BRN","EQUATORIAL	



Configuration	Input	Default Value	Description
j		GUINEA":"GNQ"."MARSHALL ISLANDS	
		"·"MHI " "Republic of	
		Korea"·"KOR" "SAINT	
		BARTHÉLEMY"."BLM" "South Africa -	
		7Δ "·" 7Δ F" "WALLIS AND	
		FUTUNA"."WIF" "Dominican	
		Republic": "DOM" "RUSSIAN	
		FEDERATION"""RUS" "ANTIGUA AND	
		REPUBLIC ""DOM" "PALESTINE STATE	
		EMIRATES":"ARE" "SAINT KITTS AND	
		MADIANA ISI ANDS ""MAND" "SAINT	
		MAADTENI (DI ITCH DADT)""SYM" "TI IDVS	
		ISLANDS [MALVINAS]"·"FLK" "FRENCH	
		SOUTHERN TERRITORIES	
		"·"ATF" "PAI ESTINIAN NATIONAL	
		AUTHORITY":"PSF", "BRITISH INDIAN	
		OCEAN TERRITORY ":"IOT", "BOLIVIA	
		(PLURINATIONAL STATE	
		OF)":"BOL","MICRONESIA (FEDERATED	
		STATES OF)":"FSM","SAINT VINCENT	
		AND THE GRENADINES": "VCT", "HEARD	
		ISLAND AND MCDONALD	
		ISLANDS":"HMD","LAO PEOPLE'S	
		DEMOCRATIC REPUBLIC ":"LAO","	
		BONAIRE, SINT EUSTATIUS AND SABA	
		":"BES", "VENEZUELA (BOLIVARIAN	
		REPUBLIC OF)":"VEN","UNITED STATES	
		MINOR OUTLYING ISLANDS	
		":"UMI","CONGO (THE DEMOCRATIC	
		REPUBLIC OF THE)":"COD","KOREA (THE	
		DEMOCRATIC PEOPLE'S REPUBLIC	
		OF)":"PRK","SOUTH GEORGIA AND THE	



Configuration Input	Default Value	Description
	SOUTH SANDWICH	•
	ISLANDS":"SGS","united kingdom of	
	great britain and northern ireland	
	":"GBR"}},"world":{"map":"world","joinBy":	
	["iso-	
	a3","code"],"country":{"US":"USA","Chad"	
	:"TCD","Cuba":"CUB","Fiji":"FJI","Guam":"	
	GUM","Iraq":"IRQ","Mali":"MLI","Niue":"NI	
	U","Oman":"OMN","Peru":"PER","Togo":"T	
	GO","Aruba":"ABW","Benin":"BEN","Chile	
	":"CHL","China":"CHN","Egypt":"EGY","Ga	
	bon":"GAB","Ghana":"GHA","Haiti":"H11",	
	: KEIN, KORA : KOR, LIDYA : LBY, MAC	
	AO : IVIAC , IVIAILA : IVILI , INAULU : INKU ,	
	"Samoa"" (///////////////////////////////////	
	TON!" "Yemen": "YEM" "Angola": "AGO" "B	
	elize"·"BL7" "Bhutan"·"BTN" "Brazil"·"BRA"	
	"Canada"·"CAN" "Congo	
	":"COG"."Cvprus":"CYP"."France":"FRA"."	
	Greece":"GRC","Guinea":"GIN","Guvana":	
	"GUY","Israel":"ISR","Jersey":"JEY","Jorda	
	n":"JOR","Kuwait":"KWT","Latvia":"LVA","	
	Malawi":"MWI","Mexico":"MEX","Monaco"	
	:"MCO","Niger	
	":"NER","Norway":"NOR","Panama":"PAN"	
	,"Poland":"POL","Russia":"RUS","Rwanda":	
	"RWA","Serbia":"SRB","Sudan	
	":"SDN","Sweden":"SWE","Taiwan":"TWN"	
	, "Iurkey": "IUR", "Iuvalu": "IUV", "Uganda":	
	Algeria: DZA, Andorra: AND, Armeni	
	a : ARIVI , AUSTIA : AUT , Danamas : DH S" "Robrein":"RUP" "Robrus":"RI P" "Rolei	
	um":"BEL" "Bermuda":"BMIL" "Burundi":"	
	BDI" "Croatia"·"HRV" "Czechia"·"C7F" "De	
	nmark":"DNK"."Ecuador":"ECU"."Eritrea":"	
	ERI", "Estonia": "EST", "Finland": "FIN", "Gam	
	bia	
	":"GMB","Georgia":"GEO","Germany":"DE	
	U","Grenada":"GRD","Hungary":"HUN","Ic	
	eland":"ISL","Ireland":"IRL","Jamaica":"JA	
	M","Lebanon":"LBN","Lesotho":"LSO","Lib	
	eria":"LBR","Mayotte":"MYT","Morocco":"	
	MAR", "Myanmar": "MMR", "Namibia": "NA	
	M","Nigeria":"NGA","Romania":"ROU","Se	
	negal":"SEIN", "Somalia":"SOM"," lokelau":	
I	"TKL","Tunisia":"TUN","Ukraine":"UKR","Ur	



Configuration	Input	Default Value	Description
configuration	mput	""BUS" "Barbados" "BPB" "Botswapa" "B	Description
		. DIIS, Dalbados. DIC, Dotswalia. D M/A" "Bulgaria":"BGR" "Cambodia":"KHM"	
		"Camoroon":"CMR" "Colombia":"COL" "	
		Comoros	
		"."COM" "Curacao"."CLIW/" "Diibouti"."DII	
		"Dominica"·"DMA" "Eswatini"·"SW7" "Et	
		hiopia"·"ETH" "Guernsey"·"GGY" "Hondur	
		as"·"HND" "Hongkong"·"CHN" "Kiribati"·"	
		KIR"."Malaysia":"MYS"."Maldives":"MDV"."	
		Mongolia":"MNG","Pakistan":"PAK","Parag	
		uay":"PRY","Pitcairn":"PCN","Portugal":"PR	
		T", "Réunion": "REU", "Slovakia": "SVK", "Slov	
		enia":"SVN","Suriname":"SUR","Thailand":	
		"THA","Trinidad":"TTO","Zimbabwe":"ZW	
		E","Argentina":"ARG","Australia":"AUS","	
		Gibraltar":"GIB","Greenland":"GRL","Guat	
		emala":"GTM","Holy See	
		":"VAT","Indonesia":"IDN","Lithuania":"LT	
		U","Mauritius":"MUS","Nicaragua":"NIC","	
		Singapore":"SGP","Sri	
		Lanka":"LKA","Azerbaijan":"AZE","Bangla	
		desh":"BGD","Cabo Verde":"CPV","China,	
		PRC":"CHN","Guadeloupe":"GLP","Kazakh	
		stan":"KAZ","Kyrgyzstan":"KGZ","Luxembo	
		biguo": "MOZ" "Oosta Pica": "CPI" "San	
		Marino":"SMR" "Souchelles":"SYC" "Sotarc	
		tica"·"ATA" "Taiikistan"·"TIK" "Lizbekistan"·	
		"UZB" "Afghanistan" [•] "AFG" "Fl	
		Salvador":"SLV"."Isle of	
		Man":"IMN","Netherlands":"NLD","New	
		Zealand":"NZL","Philippines":"PHL","Puert	
		o Rico":"PRI","Saint Lucia":"LCA","South	
		Sudan":"SSD","Switzerland":"CHE","Timor	
		-	
		Leste":"TLS","canada_name":"CAN","Burki	
		na Faso":"BFA","Buvet	
		Island": "BVI", "Netherlands	
		: NLD, Saudi Arabia : SAU, Sierra	
		Africa":"7AE" "Turkmonistan":"TKM" "Coo	
		k Islands "."COK" "French	
		Guiana"."GUF" "Guinea-	
		Bissau":"GNB","Liechtenstein":"LIE","NFW	
		CALEDONIA":"NCL","United	
		States":"USA","AMERICAN	
		SAMOA":"ASM","CZECH	
		REPUBLIC":"CZE","CÔTE	
		D'IVOIRE":"CIV","FAROE ISLANDS	
		":"FRO","NORFOLK	



Configuration	Input	Default Value	Description
•		ISLAND":"NFK","UNITED	•
		KINGDOM":"GBR","WESTERN	
		SAHARA":"ESH","cayman	
		ISLANDS":"CYM","ÅLAND	
		ISLANDS":"ALA", "CAYMAN ISLANDS	
		":"CYM","SLOVAK	
		REPUBLIC": "SVK", "SOLOMON	
		ISLANDS":"SLB","CHRISTMAS	
		ISLAND":"CXR","FRENCH	
		POLYNESIA":"PYF","PAPUA NEW	
		GUINEA": "PNG", "BRUNEI	
		DARUSSALAM":"BRN"."EQUATORIAL	
		GUINEA":"GNO"."MARSHALL ISLANDS	
		":"MHL"."Republic of	
		Korea":"KOR"."SAINT	
		BARTHÉLEMY":"BLM", "WALLIS AND	
		FUTUNA": "WIF". "Dominican	
		Republic":"DOM", "RUSSIAN	
		FEDERATION":"RUS"."ANTIGUA AND	
		BARBUDA":"ATG"."DOMINICAN	
		REPUBLIC ":"DOM", "PALESTINE, STATE	
		OF":"PSF", "TRINIDAD AND	
		TOBAGO": "TTO". "SYRIAN ARAB	
		REPUBLIC":"SYR"."UNITED ARAB	
		EMIRATES":"ARE", "SAINT KITTS AND	
		NEVIS":"KNA", "SAO TOME AND	
		PRINCIPE":"STP", "VIRGIN ISLANDS	
		(U.S.)":"VIR","BOSNIA AND	
		HERZEGOVINA":"BIH","SVALBARD AND	
		JAN MAYEN":"SJM","COCOS (KEELING)	
		ISLANDS ":"CCK", "VIRGIN ISLANDS	
		(BRITISH)":"VGB","CENTRAL AFRICAN	
		REPUBLIC ":"CAF", "MOLDOVA (THE	
		REPUBLIC OF)":"MDA","NORTHERN	
		MARIANA ISLANDS ":"MNP","SAINT	
		PIERRE AND MIQUELON":"SPM","SINT	
		MAARTEN (DUTCH PART)":"SXM","TURKS	
		AND CAICOS ISLANDS ":"TCA", "UNITED	
		STATES OF AMERICA ":"USA","IRAN	
		(ISLAMIC REPUBLIC OF)":"IRN","SAINT	
		MARTIN (FRENCH	
		PART)":"MAF", "TAIWAN (PROVINCE OF	
		CHINA)":"TWN","REPUBLIC OF NORTH	
		ISLANDS [MALVINAS]":"FLK","FRENCH	
		OCLAIN TERRITORY TOT, BULIVIA	
		STATES OF)":"FSM","SAINT VINCENT	



Configuration	Input	Default Value	Description
	-	AND THE GRENADINES":"VCT", "HEARD	•
		ISLAND AND MCDONALD	
		ISLANDS":"HMD","LAO PEOPLE'S	
		DEMOCRATIC REPUBLIC ":"LAO","	
		BONAIRE, SINT EUSTATIUS AND SABA	
		":"BES", "VENEZUELA (BOLIVARIAN	
		REPUBLIC OF)":"VEN","UNITED STATES	
		MINOR OUTLYING ISLANDS	
		":"UMI","CONGO (THE DEMOCRATIC	
		REPUBLIC OF THE)":"COD","KOREA (THE	
		DEMOCRATIC PEOPLE'S REPUBLIC	
		OF)":"PRK","SOUTH GEORGIA AND THE	
		SOUTH SANDWICH	
		ISLANDS":"SGS","united kingdom of	
		great britain and northern ireland	
		":"GBR"}},"Levels":{"State":{"key":"Country	
		"},"Country":{"key":"World"}},"levels":{"Stat	
		e":{"key":"country"},"Country":{"key":"worl	
		d"}},"Country":{"CAN":{"map":"canada","S	
		tate":{"Yukon":"Y1","Quebec":"QC","Alber	
		ta":"AB","Nunavut":"NU","Ontario":"ON","	
		Scotia":"INS","Saskatchewan":"SK","INew	
		Brunswick : INB , British	
		Columbia : BC , Frince Edward	
		Torritorios":"NT" "Nowfoundland and	
		Labrador":"NL"}"ioinBy":["bc-	
		a2" "code"]} "IND":{"map":"india" "State":{	
		"Goa"·"GA" "Assam"·"AS" "Bibar"·"BR" "D	
		elhi"·"DI " "Kerala"·"KI " "Orissa"·"OR" "Pu	
		niab":"PB","Sikkim":"SK","Guiarat":"GU","	
		Harvana":"HR","Manipur":"MN","Mizoram"	
		:"MZ","Tripura":"TR","Nagaland":"NL","Jha	
		rkhand":"JH","Karnataka":"KA","Meghalay	
		a":"ML","Rajasthan":"RJ","Chandigarh":"C	
		H","Puducherry":"PY","Tamil	
		Nadu":"TN","Lakshadweep":"LD","Mahara	
		shtra":"MH","Uttaranchal":"UT","West	
		Bengal":"WB","Chhattisgarh":"CT","Dama	
		n and Diu":"DA","Uttar	
		Pradesh":"UP","Andhra	
		Pradesh":"AP","Madhya	
		Pradesh":"MP","Himachal	
		Pradesh":"HP","Arunachal	
		Pradesh": "AR", "Jammu and	
		Kashmir: JK, Dadra and Nagar	
		naveii : UN }, JOINBY :[nc-	
		az, coue j;, usa :{ map : usa , state :{	
		0"""ID" "Maine"""ME" "texas""TY" "Alaska	
		":"AK", "Hawaii":"HI", "Kansas":"KS", "Nevad	



Configuration	Input	Default Value	Description
	-	a":"NV","Oregon":"OR","Alabama":"AL","	-
		Arizona":"AZ","Georgia":"GA","Indiana":"I	
		N","Montana":"MT","Vermont":"VT","Wyo	
		ming":"WY","florida":"FL","Arkansas":"AR"	
		,"Colorado":"CO","Delaware":"DE","Illinoi	
		s":"IL","Kentucky":"KY","Maryland":"MD","	
		Michigan":"MI","Missouri":"MO","Nebrask	
		a":"NE","New	
		York":"NY","Oklahoma":"OK","Virginia":"V	
		A","Alaska_st":"AK","Louisiana":"LA","Min	
		nesota":"MN","Tennessee":"TN","Wisconsi	
		n":"WI","Calitornia":"CA","New	
		Jersey":"NJ","New	
		Mexico":"NM","Washington":"WA","Conn	
		Dakota : ND , Pennsylvania : PA , Rhode	
		Island : KI , South Dakata":"SD" "Massachusette":"MA" "New	
		Hampshire":"NIH" "Most	
		Virginia":"\\\\/" "North	
		Carolina":"NC" "South	
		Carolina"."SC" "District of	
		Columbia":"DC"}."joinBv":["hc-	
		a2","code"]}},"country":{"IND":{"map":"co	
		untries/in/in-	
		all","state":{"Goa":"GA","Assam":"AS","Bih	
		ar":"BR","Delhi":"DL","Kerala":"KL","Orissa	
		":"OR","Punjab":"PB","Sikkim":"SK","Gujar	
		at":"GU","Haryana":"HR","Manipur":"MN",	
		"Mizoram":"MZ","Tripura":"TR","Nagaland	
		":"NL","Jharkhand":"JH","Karnataka":"KA",	
		"Meghalaya":"ML","Rajasthan":"RJ","Chan	
		digarh":"CH","Puducherry":"PY"," Iamil	
		Nadu":"TN","Lakshadweep":"LD","Mahara	
		sntra : IVIH , Uttaranchai : UI , West	
		n and Diu":"DA" "Littar	
		Pradesh":"IIP" "Andhra	
		Pradesh":"AP","Madhya	
		Pradesh":"MP","Himachal	
		Pradesh":"HP","Arunachal	
		Pradesh":"AR","Jammu and	
		Kashmir":"JK","Dadra and Nagar	
		Haveli":"DN"},"joinBy":["hc-	
		a2","code"]},"USA":{"map":"usa","state":{"I	
		owa":"IA","Ohio":"OH","Utah":"UT","Idaho	
		":"IU", "Maine":"ME", "Texas":"TX", "Alaska":	
		AK, "Hawaii":"HI", "Kansas":"KS", "Nevada	
		: INV , Oregon : OK , Alabama : AL","A	
		"Indiana""" N" "Montana"""MT" "\/ermont	
		":"VT","Wyoming":"WY","Arkansas":"AR"."	



Configuration	Input	Default Value	Description
		Colorado":"CO","Delaware":"DE","Illinois" :"IL","Kentucky":"KY","Maryland":"MD","M ichigan":"MI","Missouri":"MO","Nebraska" :"NE","New York":"NY","Oklahoma":"OK","Virginia":"V A","Alaska_st":"AK","Louisiana":"LA","Min nesota":"MN","Tennessee":"TN","Wisconsi n":"WI","California":"CA","New Jersey":"NJ","New Mexico":"NM","Washington":"WA","Conn ecticut":"CT","Mississippi":"MS","North Dakota":"ND","Pennsylvania":"PA","Rhode Island":"RI","South Dakota":"SD","Massachusetts":"MA","New Hampshire":"NH","West Virginia":"WV","North Carolina":"SC","District of Columbia":"DC"},"joinBy":["hc- a2","code"]}}	
Merge axes for metrics with same units	Checkbox	True	Enable or disable the option to display metrics with same unit of measure on a single scale. When enabled, the metrics with the same units will automatically be displayed on a single scale by default whenever a new response is triggered in charts with multiple metrics. This reduces the need for users to manually merge axes for each response, enhancing chart readability and efficiency.
Pivoted Table Threshold	Textbox	5000	Maximum number of data-frame rows that can be rendered by a pivoted table without causing performance issues. When this threshold is exceeded, a table is not rendered, and a warning is shown instead.



Configuration	Input	Default Value	Description
Table Metric formatting threshold	Textbox	999	Any number below this value will be always fully displayed without shortening in tables.
Ul Memory Cache Disable Context Api Caching	Checkbox	False	Enable the setting to ensure we do not send HTTP requests to fetch the cards with the same filters twice during the session. You can uncheck this option to disable client- side caching of the pinboard cards when applying filters.
			Note: By default, this option is enabled.
UI Memory Cache Disable Page Api Caching	Checkbox	False	Disable client-side caching of the page API responses in paginated tables. Enable the setting to ensure we do not send HTTP requests to fetch the same table page with the same sorting twice during the session.
			Note! By default, this option is enabled.
UI Memory Cache Item Size Limit	Textbox	500000	Displays the maximum amount of RAM in bytes for storing a single item in the in-memory cache. By default, the value is set to 5,000,000 (5 MB). Lowering this value may decrease the browser's memory usage but it may disable the advantages of caching for large



Configuration	Input	Default Value	Description
UI Memory	Textbox	10000000	Displays the total limit of
Cache Total Size			RAM in bytes for the in-
Limit			memory cache.
			The total limit is set to
			100,000,000 (100 MB) by
			default.
			Lowering this value may
			decrease the browser's
			memory usage but it may
			disable the advantages of
			caching for large
F undain			responses.
Explain	Chackbox	True	Tick to make the ExplAin
Explain	Спесквох	Irue	Tick to make the explain
			level Nete: Features
			under the ExplAin will
			individually.
Explain	Checkbox	True	Tick to enable access of
Workbench			the explain workbench.
			Note: Make sure to
			enable the same for the
			required users via the
			user permissions.
Explorer	Checkbox	True	Explorer is an ad hoc
			querying interface for
			quick data analysis.
			Enable/disable this
			option to view the
			Explorer menu.
			You can disable this
			option to remove the
			Explorer view. You will be
			redirected to the next
			available module.
Invoke Anomaly	Checkbox	True	Enable or disable
Detection	Charlibau	Taua	Anomaly Detection.
	Спескрох	True	Drivers Applysis
Drivers Analysis	Chackbox	Falso	Enable or disable
Predictions	CHECKDOX	i alse	Predictions
Tredictions			1 When prediction is
			not configured Data
			available time frames
			shown will match in
			below cases
			a. Duration
			before ref
			date for which
			data is not



Configuration	Input	Default Value	Description
comgunation			available asked in NLQ b. Duration after ref date for which data is not available asked in NLQ 2. When prediction is configured. Data available time frames shown will not match in below cases. a. Duration before ref date for which data is not available asked in NLQ b. Duration after ref date for which data is not available asked in NLQ
Open ExplAIn result on the new Browser tab	Checkbox	True	Tick to open the period- over-period and other ExplAIn analysis results always on the new browser tab.
Explorer	Γ		
Example Key Business Questions	Checkbox	True	Enable or disable the option to display the Example Conversation panel. You can enable the option to display the example questions on the Example Conversation panel in the Explorer. You can disable the option to display the example questions in the
AutoSuggestion	Checkbox	True	iviodei into panel. Enable or disable
S			autoSuggestions.
Guided Analytics (BETA) Suggestion	Checkbox	False	Enable or disable guided analytics suggestion.
Spellchecker	Checkbox	True	Enable or disable spellchecker.



Data Model Tab

The **Configurations** page also displays options that you can set for a particular data model. From limiting the number of entities to be shown in a response to configuring time buckets in 'Period' filters on Pinboards, WhizAI offers plenty of configuration options. According to the set configurations, WhizAI tailors and displays the data in results, values in filters, granularity in chats, etc.

Ś	🛱 whiz.ai	Explorer Pinboards Alerts Explain Admin	?	4	N
(1)	Performance + Monitor +	Configurations			
÷	User & + Security	Deset		Savo	
.:.	Data + Modeler +	Application Data Model Data Model Data Model CFAS-Automation Data Search		Expand	
<u>I</u>	Content – Manager –			Схрани	
	Branding	General >			
	Configurations	Alerts >			
	Configuration	Natural Language Generation >			
ц. ²⁰	NLP + Workbench	Visualization >			
		Explain >			
		Explorer >			
		Data Modelling >			

Remember! WhizAI shows different configurations according to the selected data model.

depending on the data model):				
Configuration	Input	Description		
General				
Data Export/ Download format	Textbox	Describes the format of the exported file.		
Enable Cache	Checkbox	 Why to enable: when we enable whiz analytical store (data level cache), the result of these queries are stored in memory. So next time when any of the same query comes in for the analytical store, it will result in the user from the cache. It will not return the query in the druid. Thus, it will take less time to process the query and enable better performance from the system. When to enable: When data is static Note! For dynamic data, and or stream data enable cache is not used as it will give old result. 		
Logging	Checkbox	 When to enable: When you are adding a new model, testing a new feature, debug actual druid query. Why enable: Data source properties Info - flag Logging - true/false" Whenever a query is fired from the system UI, that becomes a druid query in the backend for the whiz analytical store. What result it has returned, if you want to 		

As an Administrator user, you can configure these options for a data model (and many more configurations depending on the data model):



Configuration	Input	Description
		store it in some database then you can enable this flag as true just for debugging perspective.
		application logs table created by each user, to analyze the time frame, which query was fired and what result it gave.
Period time buckets	Textbox	Applicable time buckets for the 'Period' filter.
Alerts	1	
Trigger Alerts on Data Load	Checkbox	Whether to enable or disable triggering of alerts on successful data load. If enabled, all alerts for the data model will be triggered on a successful data load.
Natural Langu	age Gener	ation
Default AutoNLG	Textbox	This mapping will be used in generating default narratives. Add augmented function for intent datapoint as follows and save the configuration:
		<pre>"dataNarration": { "dataPoint": ["ytd()", "describe()", "pop()", "nxn(4)", "nxn(13)", "nxn(52)"] }</pre>
GPT Board Narratives Prompt	Textbox	This will provide prompt for board narratives for model GPT. For example, # OBJECTIVE #ROLE: You are an expert in the USA pharmaceutical and life sciences domain.Input: You are given texts, segmented by <cards>, each segment between </cards> represent a text summary derived from a tabular data/dataframe Conduct a comprehensive analysis of the given INPUT_TEXT ###################################



Configuration	Input	Description
		and for values indicating improvement or success Use to format the numbered list. Conclude each insight/statement with tag Ensure proper opening and closing tags. ####################################
GPT Card Narratives Prompt	Textbox	This will provide prompt for card narratives for model GPT. For example, # OBJECTIVE # ROLE: You are an expert in the USA pharmaceutical and life
		sciences domain.Input: You are given Data Objects, key-value pairs derived from tabular data/dataframe Conduct a comprehensive analysis of the INPUT_TEXT Focus on integrated analysis rather than isolating details. ####################################
		STYLE #- Enclose the summary/response with <html> and </html> tags Highlight key entities in bold using tags Use for highlighting values indicating a decline or issue and for values indicating improvement or success Use to format the numbered list. Conclude each insight/statement with tag Ensure proper opening and closing tags.####################################</span
		AUDIENCE #- Typical Audience is Sales and Operations Teams. ####################################
		points, not exceeding 250 words. Fewer than 5 bullet points are acceptable if sufficient Avoid fabricating information beyond what is provided in Data Objects Do not repeat any insight or information Do not give any title or label for the insights/summary/response Don't infer post facto analysis, notes as part of narrative Use metrics as provided, including all abbreviations and units,
		without expanding or altering them unless explicitly specified Do not suggest action steps, investigations in the narrative Ensure insights are substantiated by quantitative data, minimizing reliance on qualitative conclusions. ####################################
Narratives	Checkbox	We can enable or disable narratives.
System Board Narratives	Textbox	This will provide prompt for board narratives for model System. For example,
Prompt		# KOLE #You are an expert in the USA pharmaceutical and life sciences domain. You are given texts, segmented by <cards>, each segment between</cards>



Configuration Input		Description		
		represent a text summary derived from a tabular data/dataframe. Your job is to conduct a comprehensive analysis of the INPUT TEXT by focusing on integrated analysis rather than isolating details and then		
		generate a summary.		
		######################################		
		success Use to format the numbered list. Conclude each insight/statement with tag Ensure proper opening and closing tags.		
System Card	Textbox	<pre>####################################</pre>		
Narratives Prompt	TEXIDUX	For example, # ROLE #- You are a data expert in the pharmaceutical and life sciences domain. You are given Data Objects which contains key-value pairs derived from tabular dataframe. Your job is to conduct a comprehensive analysis of the INPUT DATA OBJECT by focusing on integrated analysis rather than isolating details and then		
		generate a summary. ####################################		


Configuration	Input	Description
Visualization Add board	Checkbox	OUTPUT STYLE #- Enclose the response with <html> and </html> tags Highlight key entities in bold using tags Use for highlighting values indicating a decline or issue and for values indicating improvement or success Use to format the numbered list. Conclude each insight/statement with tag Ensure proper opening and closing tags. ####################################</span
filter automatically for cross filtering		present on the board, then the system will add it automatically as board filter and apply it across the board.
Allow to roll- up/drill-down in hierarchies	Checkbox	This will enable or disable the roll-up drill-down in the hierarchy on cards that are in tabular response for more data exploration.
Default chart granularity	Drop- down menu	Default time granularity for trend charts
Enable row highlighting	Checkbox	Enable or disable this to highlight specific records on the card against which the filters are applied in order to compare the highlighted records against the rest of the card data.
Flat table configuration	Textbox	We can configure dimension sets which should be represented in flat table on UI
Followup action	Textbox	We can configure follow-up actions for dimensions. When to enable? Follow-up actions are valuable in scenarios where data exploration involves multi-level analysis, data drilling, or the need to view top values or related categories. They are particularly useful when users want to explore data in a guided and interactive manner. Eq. Follow-Up Action: "Primary Specialty Group Name" dimension



Configuration	Input	Description
		Text: "Top 25 Primary Specialty Name for %s" Extend: true
		Explanation: Primary Specialty Group Name dimension: This dimension represents groups of primary specialties.
		Text: The "text" key contains the action description, which is "Top 25 Primary Specialty Name for %s." The "%s" placeholder will be replaced with the selected value from the "Primary Specialty Group Name" dimension. Extend: The "extend" key is set to "true," indicating that this follow-up action extends the analysis based on the selected value.
		Why enable? Configuring follow-up actions for dimensions allows users to perform additional actions or analysis based on their initial selections. Follow-up actions provide a way to drill down or explore data further based on the context of the selected dimension value
		<pre>{""Customer Type for %s","extend":true},"Customer Type":{"text":" Customer Subtype for %s","extend":true},"Customer Subtype":{"text":"Customer for %s","extend":true},"Area Name":{"text":" Region for %s","extend":true},"Region":{"text":" Districts for %s","extend":true},"District":{"text":"Territory Name for %s","extend":true},"Territory Name":{"text":" Customer Name by %s","extend":true},"Customer System":{"text":"Customer Name for %s","extend":true},"Customer System":{"text":"Customer Name for %s","extend":true},"</pre>
Initial Filter Item Count	Textbox	Sets the initial number of records to load in non-hierarchical filters upon opening, enhancing data loading efficiency and user experience.
		Tip! The value should be between 50 and 5000
Minimum	Textbox	Minimum number of records to be considered for query optimizations.
threshold		Tip! The value should be between 10000 and 10000000
Multiselect	Textbox	Defines the maximum number of entries allowed to be set in a given filter.
inter innit		Note! Recommendation would be to keep it equal to or lower than the 'Initial Filter Item Count' value.
		Tip! The value should be between 2 and 100000
Number of records displayed on	Textbox	Default number of entities on first page of server-side paging for multi dimension list-based responses. (e.g., Territories by Brands by Sales)
the first page for multidimensio		Tip! The value should be at least 1
n response		



Configuration	Input	Description			
Number of records displayed on	Textbox	Default number of entities on first page of server-side paging for single dimension list-based responses. (e.g., Accounts by Sales)			
the first page for single		Tip! The value should be at least 1			
dimension response					
Number of records to be shown by	Textbox	Default number of entities for single dimension list-based responses. (e.g., Accounts by Sales)			
default		Tip! The value should be at least 1			
Rich Annotations	Checkbox	Enable or disable this to add more specific tracking details bound by an ETA to the usual annotations, which are simply text.			
Show Date Value as Range					
Show total by filtered values in hierarchy view	Checkbox	Use this configuration for hierarchy responses where parent level values should be considered based on the child hierarchy filters applied. This impacts the column totals as well.			
Thetasketch row buffer size	Textbox	Configure this with the value 16384 for a large amount of data load to manage memory efficiently.			
		Note! This value should be tuned as per the speed, accuracy, and memory requirements of each setup.			
Time comparison method for growth calculation	Textbox	Whether growing/declining comparison should be PoP / YoY.			
Top N comparison threshold	Textbox	Number of records to consider for arriving at final result set for two time period comparison.			
lineshold		Note ! The value should be at least 5000			
Visualization configuration	Textbox	Visualization configuration for Map/Network/Multitimeline etc charts.			
Visualization model	Checkbox	Enable or disable this to show the user all the alternate best-fit visualization options to switch to, generated by the visualization AI engine.			
Week date labels in charts	Textbox	Configure this offset value to help align the data with a specific day you consider the beginning of the business week or the data load. Start Date of Business Week = Reference Date + Offset Value. For eg. 2020-05-02 + 1 day = 2020-05- 03			
Week offset for data load	Textbox	Value which defines the week offset of data load based on the week definition.			



Configuration	Input	Description				
Explain		· ·				
Invoke Anomaly Detection	Checkbox	We can enable or disable Anomaly Detection.				
Invoke Key Drivers Analysis	Checkbox	We can enable or disable Key Drivers Analysis.				
Invoke Predictions	Checkbox	Whether to enable or disable Predictions.				
Regression Analysis in Key Drivers (Beta)	Checkbox	Whether to enable or disable regression analysis under key Drivers.				
Explorer						
Dimension Selection for Smart Search	Textbox	To enable explorer smart search on the selected dimensions.				
Disable dimensions for Auto Suggestion	Textbox	To disable autoSuggestion on the selected dimensions.				
Entity suggestions	Checkbox	This includes complete data model suggestions for NLQ completion.				
Maximum Suggestions Count	Textbox	This will control the count of suggested words shown to the users.				
NIq suggestions	Checkbox	We can enable or disable nlq suggestions.				
No of NLQ suggestions	Textbox	No of NLQ suggestions to be shown.				
Predict faq	Checkbox	We can enable or disable faq.				
Predict ner	Checkbox	Predictive suggestions				
Predictive suggestions	Checkbox	This includes predictive next word suggestions for NLQ completion.				
Smart Search Default Dimension	Textbox	Smart Search Default Dimension.				
Spell checks	Checkbox	This includes spell checks and suggestions.				
Threshold for Smart Search	Textbox	The smart search results will display these many entities in the explorer smart search window.				
Training status	Textbox	When to enable? When you want to shut down the training machine node. For example, {"in_progress":false}				
Data Modellin	g					



Configuration Input		Description				
Business Week Start Date	Textbox	Set when data is available at weekly granularity. Mention any date(in YYYY-MM- DD format) which indicates start date of the business week.				
Cascades	Textbox	This will enable data-driven cascading between sets of dimensions that are reflected in the filters on pinboards.				
		[["Customer Group", "Customer Sub Group", "Customer Category", "Customer Sub Category", "Customer Type", "Customer Subtype", "Customer Name"], ["Area", "Region", "District", "Territory"]				
Common Textbox This will enable to configure hierarchy relationship between a set of dimensions, which are reflected in the filters on pinboards and card						
properties		<pre>{ "sales": { "dimensions": [{</pre>				
Custom calendar	Checkbox	Whether to enable or disable custom calendar.				
Data storage granularity	Textbox	Granularity at which data is stored in the data model. It could be a week, month, or quarter. For example, {"default":"week"}				
Default Metric	Drop- down	This will define default metric for data model. Sets the selected metric as the default metric for the selected data model. This default metric is set in the context.				
		Note! You can now set the base metric, calculation metric or API metric as the default metric.				



Configuratior	n Input	Description
Default calendar	Drop- down	This will define default calendar for data model.
Dimension attributes	Textbox	We can configure additional attributes/dimensions to be displayed along with asked dimension in NLQ. When to enable?
		Data Exploration: to explore data from different angles and levels of granularity.
		Drill-Down Analysis: to select specific attributes to investigate data at a more detailed level.
		Contextual Filters: Set Default attributes to set up a context for data analysis, ensuring that users start with relevant data without explicitly specifying each dimension.
		Eg. Default geography:
		 Default product Default market
		Default time
		These attributes represent default values for the "Geography".
		They act as default filters when users query or interact with the NLQ system. For example, if a user does not specify a particular geography or product, the default values will be applied to narrow down the data scope.
		Map visualizations: Attributes like latitude and longitude support geospatial analysis and the creation of geographical visualizations like maps.
		Eg. BubbleChart_State_Code:
		 Physician_Territory
		These attributes are associated with a bubble chart and provide geographical information, such as latitude and longitude, and physician territory details. Bubble charts are often used to visualize data with geographic dimensions and an additional numerical metric for the color coding of the data.
		Comparative Analysis: Attributes like customer tier, age group, or product names enable users to compare data across different segments or categories.
		Why enable? Dimension attributes are additional properties associated with specific dimensions in NLQ (Natural Language Query). These attributes provide more context and granularity to the data, enabling users to explore and analyze the data in more detail.
		<pre>{ "Default Geography": { "Default Product": {}, "Default Market": {},</pre>



Configuration	Input	Description
		"Default Time": {}, "Default Metric": {}
		<pre>}, "District": { "Product Name": {}</pre>
		<pre>}, "Territory Name": { "Product Name": {}, "Region": { "metrics": {</pre>
		"TRx": {}, "NRx": {}
		<pre></pre>
		<pre>"Region": { "Customer Name": {}, "Product Name": {}, "District": {}</pre>
		<pre>}, "BubbleChart_State_Code": { "Latitude": {}, "Longitude": {}, "Physician_Territory": {}</pre>
		<pre>}, "Customer Name": { "Customer Tier": {}, "Region": {}, "District": {}, "Product Name": {}, "Territory Name": {}</pre>
		}
Dimension level default data filters	Textbox	We can configure dimension level default data filters for NULL, N/A etc data values. When to enable? The filters are configured to exclude records where the values for the specified dimensions are either NULL or "NA" (Not Available or Not Applicable).
		Why enable? Dimension level default data filters are preconfigured filters applied to specific dimensions to exclude specific data values from analysis. These filters automatically remove data records with values such as NULL or N/A from the dataset before presenting it to users.
		{ "Latitude": [{ "torne": "NOT"
		"values": [null, "NA"
		}
		"Longitude": [{



Configuration	Input	Description
	-	"type": "NOT",
		"values": [
		null,
		"NA"
		}
Dimension's	Textbox	Configure this for a dimension to access the additional information using
additional		external links. One can see these links on the response data points on hover.
details		When to enable? Use this config on any response when you want to have
		external links to a URL, or an image configured for every data point.
		Explanation of Dimension's Additional Details:
		Why enable? For every customer they have some unique link configured in
		some data source. For every data source you see the view link, or view image. i.e.
		additional details of a data point.
		l link"• (
		"title": {
		"en": "View link"
		}
		}, Nóme mella - f
		"Image": { "title"· {
		"en": "View Image"
		}
		},
		"dimensions": { "Customer Name": [
		"customerURL": {
		"type": "link",
		"source": "sales", "ignore timestern", folce
		"dimensionality": [
		"Customer Name"
]
		}
		}
		"Product Name": [
		{
		"productURL": {
		"type": "image", "source": "sales"
		"ignore timestamp": false,
		"dimensionality": [
		"Product Name"
]
		}
		,]
		}
Fiscal Year	Textbox	Month start offset for Fiscal Year. 0 means it will start from January, 1 for February
Offset		and so on.



Configuration	Input	Description					
Fiscal Year calendar	Checkbox	Enable/disable whether data model date interpretation should follow fiscal calendar behaviour.					
Hidden entities	Textbox	We can configure dimensions/metrics/reports etc which should not be shown to end user.					
Multi-Valued Dimension Codes	Drop- down	List of dimension codes whose values are multi-valued in data source					
Numeric Dimension Codes	Drop- down	List of dimension codes whose values are numeric. Example - 'Age'					
User identifier column name	Textbox	Column name in which user identifier is stored.					
User's Default Context Configuration	Textbox	<pre>Configure this to setup user defaults for the explorer query area and default pinboard filters based on business needs. { "base": "Default Geography", "metric": "customer_cnt", "attributes": [{ "code": "Default Product", "type": "DefaultDimension" }, { "code": "Default Market", "type": "DefaultDimension" }, { "code": "Default Geography", "type": "Default Geography", "type": "Default Market", "type": "DefaultDimension" }, { "code": "Default Geography", "type": "DefaultDimension" }, { "code": "Default Geography", "type": "DefaultDimension" }, { "code": "Default Metric", "type": "DefaultDimension" }, { "code": "Default Metric", "type": "Metric" }, { "code": "Default Time", "type": "Time" }] } </pre>					

Service Configuration

The Service Configuration page displays the Zookeeper details for the Metadata service. Users can edit/update the Zookeeper settings. Updates take effect after restarting the respective services/pods.



🔬 whiz.ai	Explorer Pinboards Alerts Admin	?	4	N
 Performance + Monitor + 	Service Configuration			
User & +	P Search		Expand	all
Modeler +				-
🖍 Content – Manager –	Al_Manager >			
Branding	Al_Service_Training >			
Configurations Service	Alert >			
Utilities	Application >			
NLP Workbench +	Auth >			
	Common >			
	Jasper >			
	Metadata >			
	Reset		Save	



Configuration	Input	Default Value	Description
Al Manager			•
AI SERVICE SPARK CONF	Text box	{"workerInstances":1,"worker	
IG		Cores":1,"workerMemory":"1	
		gb","executorCores":1,"execu	
		torMemory":"1g"}	
BENCHMARK-	Text box	0	
LOG_THRESHOLD			
CALENDAR_CUSTOM_AD	Text box	add_custom_calendar	
D_TOPIC_NAME			
CALENDAR_CUSTOM_RE	Text box	remove_custom_calendar	
MOVE_TOPIC_NAME			
DB_CONN_MAX_POOL_SI	Text box	200	
ZE			
DB_ONN_MIN_IDLE	Text box	50	
INSIGHTS_CONTRIBUTOR	Checkbox	True	
S_CREATE_CARDS_FOR_A			
LL_SIGNIFICAN_MEMBERS			
INSIGHTS_CONTRIBUTOR	Text box	10	
S_MEMBERS_THRESHOLD			
INSIGHTS_CONTRIBUTOR	Text box	30	
S_SIGNIFICANT_MEMBERS			
_THRESHOLD			
INSIGHTS_CONTRIBUTOR	Text box	10	
STHRESHOLD			
INSIGHTS_TIME_ESTIMATE	Text box	{"contributorAnalysis":{"presc	
_CONGFIG		ribeTimeLimit":120,"seconds	
		PerDimCombnForAggrMetric	
		":0.06155,"secondsPerDimCo	
		mbnForNonAggrMetric":0.37	
		5}}	
JAVA_OPTS	Text box	-Xmx8G -Xms8G -	
		XX:+UseG1GC -	
		XX:MaxGCPauseMillis=3000 -	
		XX:ParallelGCThreads=8 -	
		verbose:gc	
LOG_LEVEL	Text box	Info	
SEND_MSG_RETRY_INTER	Text box	10000	
VAL			
SUBSCRIPTION_RETRY_IN	Text box	10000	
TERVAL			
TOMCAT_THREAD_POOL_	Text box	2500	
SIZE			
AI_Service_Training			
CAUSAL_CONFIDENCE_IN	Checkbox	Irue	
IERVAL_FLAG			
CELERY_CONCURRENCY	lext box	1	
JOBLIB_NUM_PROCESSES	lext box	1	
LOG LEVEL	l lext box	Into	



Configuration	Input	Default Value	Description
MINIO_AI_SERVICE_BUCK	Text box	ai-share	
ET			
MINIO_BUCKET_NAME	Text box	prediction	
NUM_PROCESSES	Text box	12	
NUM_THREADS	Text box	8	
PREDICTION_BUCKET	Text box	whiz-data-area	
SAVE_LATEST_N_MODELS	Text box	3	
Alert	I		
BENCHMARK_LOG_THRES	Text box	60000	
HOLD			
CALENDAR_CUSTOM_AD	Text box	add_custom_calendar	
D_TOPIC_NAME			
CALENDAR_CUSTOM_RE	lext box	remove_custom_calendar	
HTTP CONNECTION TIM	Toxt box	300000	
EOUT	Text Dox	30000	
JAVA OPTS	Text box	-Xmx8G -Xms8G -	
_		XX:+UseG1GC -	
		XX:MaxGCPauseMillis=3000 -	
		XX:ParallelGCThreads=8 -	
		verbose:gc	
LOG_LEVEL	Text box	INFO	
MAX_NOTIFICATION_PER	Text box	50000	
_ALERT			
SEND_MSG_RETRY_INTER	Text box	10000	
VAL			
SUBSCRIPTION_RETRY_IN	Text box	10000	
TERVAL			
Application			
ADMIN_DATASOURCE_C	Text box	user_logs	
ODE			
AUTH_TOKEN_MAX_AGE	Text box	28800	
AVATARS_URL	Text box	/avatars	
BENCHMARK_LOG_THRES	Text box	0	
HOLD			
BOARD_SUMMARY_CONC	Text box	5	
URRENCY			
BOARD_SUMMARY_INPUT	Text box	ados	
FORMAT			
CLIENT_NAME	Text box	CLIENT_NAME	
ENABLE_CACHE	Checkbox	False	
HTTP_CONNECTION_TIM	Text box	10000	
EOUT			
JAVA_OPTS	Text box	-Xmx16G	
KEY_ALIAS	Text box	whiz	
LOGIN_MAXIMUM_FAILED	Text box	10	
_ATTEMPTS			



Configuration	Input	Default Value	Description
LOGIN UNLOCK IN MINU	Text box	10	
TES			
LOGOUT_TARGET_URL	Text box	https://example.whiz.ai/logou	
		t	
LOG_LEVEL	Text box	INFO	
MESSAGE_BUFFER_SIZE	Text box	10	
MICROSOFT_APP_ID	Text box	MICROSOFT_APP_ID	
MICROSOFT_APP_PWD	Text box	MICROSOFT_APP_PWD	
SEND_MSG_RETRY_INTER	Text box	10000	
VAL			
SMPT_PASSWORD	Text box	<password></password>	
SMTP_ADDRESS	Text box	smtp.gmail.com	
SMTP_PASSWORD	Text box	<password></password>	
SMTP_PORT	Text box	587	
SYSTEM_USERS_TAG	Text box	sytem	
TEAMS_AUTH_URL	Text box	https://login.microsoftonline.	
		com/botframework.com/oaut	
		h2/v2.0/token	
T_AND_C_ENABLED	Checkbox	False	
USER_DOWNLOADS_BUC	Text box	1	
KET_EXPIRATION_DAYS			
USER_DOWNLOADS_BUC	Text box	whiz-user-downloads	
KET_NAME			
WEB_CLIENT_MAX_INACT	Text box	10800	
Auth	I	1	
GOOGLE_CLIENT_ID	Text box	<clientidhere></clientidhere>	
GOOGLE_CLIENT_SECRET	Text box	<clientsecrethere></clientsecrethere>	
KEY_ALIAS	Text box	whiz	
KEY_PASS	Text box	whiz-password	
LOGOUT_TARGET_URL	Text box	https://2024-	
		77.whiz.ai/logout	
MAX_AUTH_AGE	lext box	7200	
Common		1	
SMTP_ADDRESS	Text box	smtp.gmail.com	
SMTP_ENABLE_STARTTLS_	Checkbox	True	
AUTO			
SMTP_PASSWORD	lext box	<pre><password></password></pre>	
SMIP_PORI	lext box	587	
SMIP_USER_NAME	lext box	assistant@whiz.ai	
WHIZ_PASSWORD_RESET_	lext box	https:// <env>.whiz.ai/reset-</env>	
LINK		password	
Jasper			
CALENDAR_CUSTOM_AD	lext box	add_custom_calendar	
CALENDAR_CUSIOM_RE	lext box	remove_custom_calendar	
LOG_LEVEL	lext box	vVarn	



Configuration	Input	Default Value	Description
USER DOWNLOADS BUC	Text box	1	
KET EXPIRATION DAYS			
USER_DOWNLOADS_BUC	Text box	whiz-user-downloads	
KET_NAME			
Metadata		· ·	
BATCH_SIZE	Text box	10000	
DB_NAME	Text box	nlpdb	
DISABLE_NON_ENGLISH_	Check box	True	
APPROXIMATION			
HIKARI_MIN_IDLE	Text box	20	
JAVA_OPTS	Text box	-Xmx24G -Xms24G -	
		XX:+UseG1GC -	
		XX:MaxGCPauseMillis=3000 -	
		XX:ParallelGCThreads=8 -	
		verbose:gc	
LANG	Text box	En,tr	
LOAD_PARALLEL_MODEL	Checkbox	True	
MAX_POOL_SIZE	Text box	100	
MEMORY_PROFILE	Checkbox	False	
THREAD_COUNT	Text box	1000	
TOMCAT_THREAD_POOL_	Text box	1000	
SIZE	T		
WHIZ_MODEL_MANAGER	lext box	http://whiz-model-	
		manager:8886	
	T I		
	Text box	<secret_key></secret_key>	
NLP	Chadybay	True	
	Checkbox		
	CHECKDOX	Inde	
APPLY MI INTENT SERVI	Chackbox	Тпио	
	CHECKDOX	Inde	
APPLY MI INTENIT SERVI	Textbox	fr	
CE FOR LANGUAGES	TEXEDOX		
APPLY WHIZ INTENT	Checkbox	Тгие	
CUSTOM INTENT APPLY	Checkbox	True	
PRE PROCESSING	Oneckbox	1140	
CUSTOM INTENT CONFI	Textbox	0.9	
DENCE THRESHOLD			
CUSTOM INTENT MODEL	Textbox	IntentClassifier	
CUSTOM_INTENT_MODEL	Textbox	0	
CUSTOM_INTENT_SERVIC	Textbox	http://whiz-	
E_URL		ai:5000/evaluate_custom_inte	
		nt	
JAVA_OPTS	Textbox	-Xmx6G -Xms6G -	
		XX:+UseG1GC -	



Configuration	Input	Default Value	Description
g		XX:MaxGCPauseMillis=3000 -	
		XX:ParallelGCThreads=8 -	
		XX:StringTableSize=2000003	
		-XX:+UseStringDeduplication	
		-verbose:ac -	
		XX:+PrintGCDetails	
LANG	Textbox	en,fr	
LINGUISTIC INTENT PREF	Textbox	en#linguistic.fr#ml.de#linguist	
ERENCES		ic,it#linguistic	
LOAD_PARALLEL_MODEL	Checkbox	True	
MAX_POOL_SIZE	Textbox	100	
MEMORY_PROFILE	Checkbox	False	
MODELS	Textbox	,none,	
NLG_APPROACH	Textbox	System	
NLG_SERVICE_URL	Textbox	http://whiz-nlp-	
		models:5001/generate_narrat	
		ion	
SEMANTIC_LLM_SERVICE_	Textbox	http://103.127.31.167:8084/g	
URL		enerate	
SEMANTIC_MAX_TOKEN	Textbox	200	
SEMANTIC_TEMPERATURE	Textbox	0	
STARTING_POINT_DATE	Textbox	Default:2016-06-	
		01,lifesciences:2016-06-01	
WEEK_START_DAY	Textbox	Default:FRIDAY, lifesciences:F	
		RIDAY, janseen: SUNDAY	
WHIZ_INTENT_CONFIDEN	Textbox	0.9	
CE_THRESHOLD			
WHIZ_INTEN	Textbox	WhizIntent	
T_MODEL			
_WHIZ_INTENT_MODEL_V	Textbox	0	
ERSION			
min_words_for_language_	Textbox	3	
detection			
Partner	•		
AIRFLOW_PASSWORD	Textbox	<password></password>	
AIRFLOW_USERNAME	Textbox	admin	
ALLOWED_DATE_FORMAT	Textbox	уууу-ММ-	
S		dd,yyyy/MM/dd,yyyy-MM-dd	
		HH:mm:ss,yyyy-MM-dd	
		HH:mm:ss.SSS,dd-MM-	
		yyyy,dd/MM/yyyy,MM/dd/yyy	
	<u> </u>	y,MM-dd-yyyy	
JAVA_OPTS	Textbox	-Xmx8G -Xms8G -	
		XX:+UseG1GC -	
		XX:MaxGCPauseMillis=3000 -	
		XX:ParallelGC1hreads=8 -	
		verbose:gc	
Local Storage Download	lextbox	1000	
limeout	1		



Configuration	Input	Description	
MINIO_ACCESS_KEY	Textbox	<access_key></access_key>	
MINIO_BUCKET	Textbox	whiz-data-area	
MINIO_REGION	Textbox	us-east-2	
MINIO_SECRET_KEY	Textbox	<secret_key></secret_key>	
S3_ACCESS_KEY	Textbox	<access_key></access_key>	
S3_SECRET_KEY	Textbox	<secret_key></secret_key>	
SEND_MSG_RETRY_INTER	Textbox	10000	
VAL			
SMTP_ENABLE_STARTTLS_	Checkbox	True	
AUTO			
SMTP_PASSWORD	Textbox	<password></password>	
SMTP_USER_NAME	Textbox	assistant@whiz.ai	
SPECIAL_HARDCODED_M	Textbox	id,Id,ID,Code,code,CODE	
ETADATA_COLUMNS			
SUBSCRIPTION_RETRY_IN	Textbox	10000	
TERVAL			
SYNCHRONIZATION_MAX	Textbox	3	
_SECONDS			
SYNCHRONIZATION_MIN_	Textbox	1	
SECONDS			
TRINIO_ENABLE	admın@whız.aı	False	
TRINO_HOST	lextbox	trino	
TRINO_IGNORE_CATALO	lextbox	system,tpcds,tpch	
GS	<u>т</u>	0000	
	Textbox	8080	
	lextbox	admin@whiz.ai	
	Спескрох	Irue	
CALENDAR CUSTOM AD	Taythay	add austam calandar	
D_TOPIC_NAME	Textbox	add_custom_calendar	
CALENDAR_CUSTOM_RE	Textbox	remove_custom_calendar	
	<u> </u>		
JAVA_OPIS	lextbox	-Xmx8G -Xms8G -	
		XX:+UseGTGC -	
		XX:INIAXGCPauseIVIIIIIS=3000 -	
		XX:ParallelGCThreads=o -	
	Toythoy		
	Textbox		
	Toxtbox	1] not spowflako cliont idbo Spo	
R	Textbox	wflakeDriver	
SNOWFLAKE_PASS	Textbox	changelt	
	Textbox	jdbc:snowflake://tz00379.east	
_		-us-	
		2.azure.snowflakecomputing.	
		com	
SNOWFLAKE_USER	Textbox	user1	
Slack-Druid			



Configuration	Input	Default Value	Description
LOG_LEVEL	Textbox	ERROR	
SMTP_ADDRESS	Textbox	smtp.gmail.com	
SMTP_AUTHENTICATION	Textbox	plain	
SMTP_DOMAIN	Textbox	example.com	
SMTP_ENABLE_STARTTLS_	Checkbox	True	
AUTO			
SMTP_PORT	Textbox	587	
SMTP_USER_NAME	Textbox	assistant@whiz.ai	

tilities

The **Utilities** page has the functionality to communicate with the users. You can send messages and images to users and update system status and downtime messages.

To configure utilities:

- 1. Click the **Utilities** page.
- 2. Click Send message.
- 3. Click Update config.

) whiz.ai		Explorer Pinboards Alerts Admin		?	Ν
Ĩ	Performance Monitor	ŀ	Utilities			
:	User & H Security		Communicate with Users			
.:.	Data Modeler [⊣]		Send messages and images to users	Send message		
	Content Manager		Update system status and downtime message	Jpdate config		
	Branding Configurations					
	Service Configuration					
	Utilities					
ц¢	NLP Workbench					



NLP Workbench

The NLP technology helps computers understand Natural/human language. Workbench is a framework that supports the production of software by integrating a variety of activities to meet a specific need while limiting or eliminating the need for multiple programming languages. WhizAI NLP Workbench learns and improves automatically by using previous results, without being specifically programmed by a person.

NLP Workbench user interface:

8	🛱 whiz.ai	Explorer Pinboards Alerts	Admin		2 🦛 N
(1)	Performance + Monitor +	Synonyms Data Model Language	Level		135465 entities in total
÷	User & + Security +	FAS - Automation v English	Enter a level (optional) Search		1-15 of 135,465 《 〈 〉 》
	Data + Modeler +	ENTITY NAME	LEVEL	ENTITY CODE	SYNONYMS
	Content + Manager +	Active	ACTVFLG / ACTVFLG	Active	Add +
-10	NLP.	Covered Restricted	Access Category / Access Category	Covered Restricted	(Add +
цр."	Workbench Synonyms	Covered Unrestricted	Access Category / Access Category	Covered Unrestricted	(Add+)
	Replacements Business	Not Covered	Access Category / Access Category	Not Covered	Add +
	Actions NLQ Analyzer	Unknown	Access Category / Access Category	Unknown	Add +
	FAQ Training Narrative	НСО	Account Type / Account Type	НСО	Add +
	Templates	НСР	Account Type / Account Type	НСР	(Add+)

WhizAI NLP Workbench comprises:

- <u>Synonyms</u>
- <u>Replacements</u>
- Business Actions
- <u>NLQ Analyzer</u>
- <u>Narrative Templates</u>



Refer to the following diagram, to get an overview of NLP Workbench and its capabilities.

NLP Workbench



Synonyms

Synonyms are the additional terms that refer to an entity, and it is an important concept in Natural Language processing.

) whiz.ai	Explorer Pinboards Alerts	Admin		0 4 N
Ĩ	Performance + Monitor +	Synonyms			135465 entities in total
÷	User & + Security +	Data Model Language FAS - Automation Image: Comparison of the second se	► Level Enter a level (optional) ▼ Ø Search		1-15 of 135,465 《 〈 〉 》
	Data + Modeler +	ENTITY NAME	LEVEL	ENTITY CODE	SYNONYMS
	Content +	Active	ACTVFLG / ACTVFLG	Active	(Add+)
.¢	NLP	Covered Restricted	Access Category / Access Category	Covered Restricted	Add +
Ē	Synonyms	Covered Unrestricted	Access Category / Access Category	Covered Unrestricted	Add +
	Replacements Business	Not Covered	Access Category / Access Category	Not Covered	Add+
	Actions NLQ Analyzer	Unknown	Access Category / Access Category	Unknown	Add+
	FAQ Training Narrative	НСО	Account Type / Account Type	НСО	Add +
	Templates	НСР	Account Type / Account Type	НСР	Add+

For example, the 'Central California Foundation' is an entity in WhizAI, which represents the hospital, and 'California' as a state. Now, when you ask your question that contains the word 'California,' 'CA,' or CCF, you might want to find either California as a state or as the Central California Foundation hospital.

For WhizAI to understand your intent, it refers to the synonyms configured for the entity. WhizAI matches the keywords in the question with all synonyms and then identifies the correct entity for your intent.

So, in the example, if 'California' and 'CCF' are configured as synonyms for the 'Central California Foundation' entity, WhizAI displays the 'Central California Foundation' entity when the question contains those synonyms.

You can configure the synonyms for the entities in the selected data model and the selected dimension.

Adding a synonym for an entity

To add a synonym for an entity:

- 1. On the Synonym page, select the **Data Model**, **Levels**, and **Language** to list the entities.
- 2. Search for the entity for which you want to add synonyms.
- 3. In the **Search Entity** field, enter the entity name.

The Synonyms page is updated for the searched entity name.

Entity Name	Level	Entity Code	Synonyms	Make sure to apply the same changes for other languages
Academic	Account Type / Account Type	Academic	Academic \times	Academics × Add+

4. In the Synonyms column, click the **Add+** button. WhizAI allows you to enter a synonym, as required.

Entity Name	Level	Entity Code	Synonyms	① Make sure to apply the same changes for other languages
Academic	Account Type / Account Type	Academic	Academic \times	Academics ×

5. Enter the synonym, as required, and press **Enter** key or a **Tab** key to save the synonym.



- 6. (Optional) Delete the unwanted synonyms.
 - a. Press the **Esc** key to discard the synonym that you are typing.
 - b. Click the cross icon for the synonym you want to delete after adding it.

Note! WhizAI automatically adds the plural forms of the synonyms you add. For example, if you add *tablet* as a synonym; WhizAI also adds *tablets* as a synonym.

Updating synonyms for an entity

When you update synonyms in one language, make sure to apply the changes in other languages as well. Of course, WhizAI shows a warning message about this, as shown in the following figure:

Synonyms Home / Admin / Synony	ms				Reminder	to apply changes in
Data Model		Level		Language		guages
Life Sciences Viz	•	Enter a level (optional)	-	English	~	Search Entity
Entity Name	Level		Synonyms		(j) Make sure	to apply the same changes for other languages

Migrating synonyms

You can migrate user-added synonyms within environments. For example, from the 'QA' environment to the 'Dev' environment, from the 'Dev' environment to the 'Production' environment etc. For this, you have to export the synonyms from the selected data model of the source environment, and then import these synonyms for the same data model on the target environment.

Exporting Synonyms

To export synonyms:

1. From the **Synonyms** page, click the **Menu** icon to open the drop-down list.



2. Click **Export**. WhizAI shows the **Export Synonyms** dialog.

3. Select the Data Model.

WhizAI shall export all the user-added synonyms from the data model you select from this list.

4. Click **Download**. WhizAI downloads a JSON file having all the user-added synonyms.

Note! Only user-added synonyms are exported. System-generated synonyms are not exported.



Importing Synonyms

To import synonyms:

1. From the **Synonyms** page, click the **Menu** icon to open the drop-down list.



2. Click Import.

WhizAI shows the dialog box where you can drag and drop a JSON file containing synonyms.

- 3. You can drag and drop a JSON file or click **Browse files** to browse and select the file from your local drive.
- Click Got it! to import the JSON. WhizAl imports the synonyms and shows a success message.

Replacements

The replacement page displays the list of original tokens and their replacement to be considered when generating the response.

In the industry, there are specific terms used for a specific purpose. These terms are known only to a specific set of people in that industry.

In WhizAI, the Administrator can configure the replacement word for such terms so that WhizAI can correctly understand those terms while generating the response.

You can manage the Replacements in all the G5 languages, that is, you can add, edit, and delete them, as required. There are two ways to do this:

- You may switch to French from the Profile settings, thereby switching the entire platform's UI to French, then go to the Replacements page (which gets displayed in French) to add it. OR
- You may continue to use the platform in English and open the Replacements page. From this page, you can switch to French, as shown in the following figure, and add the Replacement, as required

The replacement terms can be for text terms or regular expressions.

Text terms

- Som report full-stack by product group by months for share for last 6 months
- Ytw ytd

Regular Expressions

• ([0-9]+)\s?[xX]\s?[0-9]+ - POP for last \$1 weeks



Adding the replacement term

1. On the **Replacement** page, click the plus icon at the lower-right corner of the page.

🔬 whiz.ai	Explorer Pinboards Alerts Admin				2 🦛 N
 Performance + Monitor + 	Replacements				
User & +	Select Model Select Language	Show Filters			<u>1-15</u> of 17 〈 〉
- Security	ORIGINAL TOKEN	REPLACEMENT V	TYPE 🔻	MODEL V	DESCRIPTION V
Data + Modeler +	<	less than	regex		Internal bundled replacement
. Content	>	greater than	regex		Internal bundled replacement
Manager +	([0-9]+)\s?[xX]\s?[0-9]+	PoP for last \$1 weeks	regex		Internal bundled replacement
₩ NLP Workbench	improve	growing	text	FAS - Automation	Description
Suponyme	(MoM mom)	Month Over Month	text	FAS - Automation-LLM	
Replacements	(mtd MTD)	Month Till Date	text	FAS - Automation-LLM	
Business	[Nn]egative	less than 0	regex		Internal bundled replacement
Actions	[Pp]ositive	greater than O	regex		Internal bundled replacement
NLQ Analyzer	(qoq QoQ)	Quarter Over Quarter	text	FAS - Automation-LLM	
FAQ Training	(qtd QTD)	Quarter Till Date	text	FAS - Automation-LLM	
Templates	reducing	declining	text	FAS - Automation	

2. In the **Add Replacement** dialog box, select and add appropriate values.

Add Replacement	
Replacement type	
💿 Text 📃 Regex	
Model	
Select model	∇
Language	
English	$\overline{\mathbf{v}}$
Enter original text to replace Enter replacement for the original text	t
Enter replacement for the orig	inal text
Description	

- a. Select the **Text** or **Regex** option for the type of replacement term that you want to add.
- b. Click the **Model** drop-down list and select the model.
- c. From the Language drop-down list, select the language for the replacement.



- d. In the **Original** field, enter the original token or term.
- e. In the **Replacement for the original text** field, enter the replacement term for the specified original text.
- 3. Click the **Add** button.

Exporting Replacements

To export replacements:

1. From the **Replacements** page, click the **Menu** icon to open the drop-down list.



- 2. Click **Export**. WhizAI shows the **Export Replacements** dialog.
- 3. Select the **Data Model**. WhizAI shall export all the replacements from the data model you select from this list.
- 4. Click **Download**. WhizAI downloads a JSON file having all the replacement terms.

Importing Replacements

To import replacements:

1. From the **Replacements** page, click the **Menu** icon to open the drop-down list.



- 2. Click **Import**. WhizAI shows the dialog box where you can drag and drop a JSON file containing replacements from other data models.
- 3. You can drag and drop a JSON file or click **Browse files** to browse and select the file from your local drive.
- 4. Click **Got it!** to import the JSON file. WhizAI imports the replacements and shows a success message.

Business Actions

In an organization, many people perform various business actions on various objects, like products, product groups, etc.



In WhizAI, **Business Actions** captures the business actions and then connects the subject and object to these actions. Here the subject is an entity that is performing an action, and an object is an entity for which the subject performs the action.

You can manage your business actions also in German, French, Italian, and Spanish. Thus, you can add, edit, and delete them, as required. There are two ways to do this:

- You may switch to from the Profile settings, thereby switching the entire platform's UI to French, then go to the Business Actions page (which gets displayed in French) to add it. OR
- You may continue to use the platform in English and open the Business Actions page. From this page, you can switch to French, as shown in the following figure, and add the Business Action

For example, an employee (Subject) sells (action) product name (object). Here both employee and product names are connected to the sell action.

Business Actions allows you to configure various actions and connect subjects and objects to these actions. Business Actions helps in getting the correct response when the question contains only subject and action or only object and action.

For example, who sold the most, top products bought in the last two months.

Configuring business actions

To configure business actions:

- 1. On the Business Actions page, click the **Data Model** drop-down list and select the data model for which you want to configure the business actions.
- 2. At the lower-right corner of the page, click the plus icon.

English	 ✓ Show 	Filters		<u>1-2</u> of 2 〈 〉
	OBJECT V	RELATIONS	RESULT V	DESCRIPTION V
sold	^{Metadata} Brand		Units	
buy	Metadata Brand		Units	
	English Action sold buy	English Show ACTION ▼ OBJECT ▼ sold Metadata Brand buy Metadata Brand	English Show Filters ACTION V OBJECT V RELATIONS sold Metadata Brand buy Metadata Brand	English Show Filters ACTION V OBJECT V RELATIONS sold Metadata Brand Units buy Metadata Brand Units

4. In the **Add Business Action** dialog box, select and add appropriate values.



Add Business Action	
Language	
English	\sim
Subject Type	
Metadata Instance	
Subject	
Select a subject of the action	\sim
Action	🔏 Edit lis
Select an action verb	\sim
Object Type	
 Metadata Instance 	
Metadata Instance Dbject	
Metadata Instance Select an object of the action	~
Metadata Instance Select an object of the action	~
Metadata Instance Object Select an object of the action Result Select a resulting metric	~

- 5. In the **Subject Type** section, connect the business action to the subject.
 - a. Click the **Subject** field and select who is performing an action.
 - b. Click the **Action** column and select the action that you want to associate.

If the required action is not listed, add an action.

- Click the **Edit list** link.
 - a. In the Edit Actions List dialog box, click **Add** to add a new action.



- b. Enter the action name and click the **OK** button.
- 6. In the **Object Type** section, connect the business action to the object.
 - a. Click the **Object** field and select the option on whom the action is performed.
 - b. Click the **Result** drop-down list and select the result expected for the selected subject-to-object relationship through action
- 7. (Optional) In the **Description** field, enter the description for the relation.



8. Click the Add Action button. The action is added on the Business Actions page.

NLQ Analyzer

NLQ Analyzer is an option in WhizAI that is provided for advanced-level users to debug the NLP engine used in the platform.

The NLQ Analyzer page provides the option to run queries and get the result in a code and JSON format.

Note! Only users with advanced-level programming knowledge can access this feature.

- 1. On the NLQ Analyzer page, click the **Data Model** drop-down field and select the data model for which you want to perform debugging.
- 9. In the **Query** field, enter the query.
- 10. Click **Post** or press the **Enter** key. WhizAI displays the response to the query in a code format.

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Ø	Performance Monitor	+	NLQ Analyzer			
2	Users & Security	+	Simple mode Advanced mode			
	Data Modeler	+	Data Model Query FAS - Field Analytics * TRx volume			
P	Content Manager	+	Verbose		POST	
ø	NLP Workbench	-	Response			
	Synonyms Replacements Business Actions NLQ Analyzer Narrative Templates		<pre>2 { 3 *entity*: "NLG", 4 ************************************</pre>			
			19 "TRx" 20 1			_

Note! Use the Verbose option to get a more detailed response.

Narrative Templates

Narratives

NLP engine analyzes, processes, and understands the natural language questions and the responses for those questions. Along with this, the NLP engine also provides narratives which is additional valuable information about the responses. This additional information gives you insights into what were the average sales, minimum sales, maximum sales, total sales etc. Narratives provide contextual information around WhizAI response / visualizations and make responses more comprehensible. Narratives enable effective consumption of data / information that you are analyzing.



To view the Narratives in the response, enable the 'Narratives' option as shown in the following figure:

Top Regions by TRx Reference Date: 2022-05-06 Period: 2022-01-01 - 2022-05-06 Metric: TRx Columns		Narratives Anomalies	
Region	TRx \downarrow	Predictions	
1 Mid-Atlantic	5,579,978.50	Key Drivers	C
2 Mid-Central	5,502,699.06	Workbench	~
3 West	4,998,216.63	WORDCHCH	¥.
4 Midwest	4,960,737.09		
5 Southeast	4,726,744.04		
6 Southwest	4,334,003.28		
7 Northeast	3,926,407.92		
8 South Central	1,231,693.83		
Total	35,260,480.34		
Data: TRx as of 2022-05-06 Generated in: 3.24 Sec Source: FAS - Field Analytics	‡ Table € P	ie 🔡 Tree Map 🛛 Ik Column 🛹 I	Pareto Ĉ Donut ≓ Bar

Note! The Narratives dialog shows the narrative generated for the response.

Custom Narratives

Using the expanded NLP coverage offered by WhizAI, you can intelligently generate and automate custom narratives. This efficient feature allows you to design and generate more accurate and actionable narratives. You can customize the narratives according to the source data (metrics/metadata). If the system generated narrative is complex, you can simplify it, using a custom template builder. If you want deeper insights, you can configure the narrative accordingly.

For example: When you ask for trends for a year, you might find short-term / medium-term trends very useful OR when you ask for top brands/regions, you might also want to know their brand/region performance as well. You can build such Custom Narratives from the **Custom Narrative Templates** page

Understanding the Custom Narrative Templates page

This page shows a list of the templates added to WhizAI for a selected data model. You can manage the custom narrative template/s from this page.



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Performance + Monitor +	Custom Narrative	Templates (1 Ten	nplates)					New Template
Security +				_				
Data + Modeler +	Template Name	Intent	Scope	Source	Source ID	Last Updated	Language	Status
	∑	7		▼ ▼	▽	dd-mm-yyyy 🗖 🏹	Ŷ	▽
🖍 Content + Manager +	AnomalyTemp	All		Model		26.11.2024	English	
Workbench								
Synonyms								
Replacements								
Business Actions								
NLQ Analyzer								
FAQ Training								
Narrative Templates								
						Page size: 100 🔻 1	To 1 from 1 K K	Page 1 from 1 > >I
	• 2 *							

The following table explains the different columns on the **Custom Narrative Templates** page:

Column Name	Description					
Template Name	This column has a list of all the available templates in the system. The user gives the template name while template creation. Template names can be modified later on as well.					
Intent	he intent of the NLQs					
Scope	The scope of the NLQs is defined by metrics, dimensions, entities, and computation.					
Source	Displays the source of the template, whether it is Data Model template or card template					
Source ID	ID of the template					
Last Updated	Date when the template was last updated.					
Language	Languages in which template is supported.					
	You can check the status of existing templates.					
	Draft status: The template is not ready yet, work is ongoing on the template.					
	Inactive status: Work on the template is complete but the template is not quite ready yet.					
Status	Active status: The template is ready.					
	Note: Only 'Active' status templates will be triggered.					



You can apply filters to above mentioned columns to find specific templates. To do this, enter the filtering condition in the search box or click on the filter icon.

Custom Narrative Templates (1 Templates)							
FAS - Automation	Anomaly	-					New Template
Template Name	Intent	Scope	Source	Source ID	Last Updated	Language	Status
Σ	▽		Σ	Σ	dd-mm-yyyy 🗂 🏹	γ	γ

You can add a custom narrative template in two ways:

• You can select intent such as Top N, Bottom N, Data point, Time comparison, etc, based on this selected intent, the system suggests NLQ, and the response for this NLQ becomes available, then you can add a custom narrative based on this response.

Note! For every data model, sample NLQ must be mapped to each available intent. For more information, refer to the WhizAI Configuration guide.

• You can enter NLQ, and based on this NLQ, the system automatically sets the intent, and the response for this NLQ becomes available, then you can add a custom narrative based on this response.

Adding a custom narrative template by adding an NLQ

- 1. From the Admin console go to **NLP workbench** > **Narrative templates**. To open the Custom Narrative Templates page.
- 2. From the top-left side of this page, select the data model for which you want to create a narrative template
- 3. Click **New Template**. The new template creation page displays.



) whiz.ai		Explorer Pinboards Alerts Admin			?		N
Ĩ	Performance Monitor	+	Template Name	Template Status Type On Off Dat	Source a Model	Selected	Model Automat	ion:
:	User & Security	+	Natural Language Query	Intent				_
.:.	Data Modeler	+		Proceed		Set	Intent	
<u>"</u>	Content Manager	+						
₩¢.	NLP Workbench	-						
	Synonyms							
	Replacement	S						
	Business Actions			Please type a NLQ or select an intent to proceed.				
	NLQ Analyze	r						
	FAQ Training							
	Narrative Templates							
					Reset		Create	

- 4. On the new template creation page, enter:
 - a. Name for the template
 - b. Enter your query in the Natural Language Query field.
- 5. Click **Proceed**. WhizAI identifies the intent of the NLQ and sets it in the Intent drop-down list and also displays the response.

🎊 whiz.ai	Explorer Pinboards Alerts Admin	2 🦛 N
Performance + Monitor +	Cemplate Name	Template Status Type Source Selected Model
Security +	Natural Language Query	Intent
Data + Modeler +	Show me TRx in last month Proceed based	ed on the NLQ Data Point Set Intent
🖉 Content 🔔	Narratives	+ Add Scope
🐔 Manager 👎	Template Builder × B I U S ·> II II Heading · · · ·	E E E Preview NLG
NLP Workbench	Functions Controls - Select font •	
Synonyms	Search Type here	TRx Reference Date: 2022-05-06 Period: 2022-04-02 – 2022-0
Replacements	Card Context	
Business	Describe	
NLO Analyzer	NXN	7,828,184.63
FAQ Training		Response for the NLQ
Narrative		
Templates		·
		Reset Create

6. Click **+Add Scope** to add scope objects to your template. The following **Template Scope** page displays.



		Template Scope		×
Click on any value to edi	t			+ Add scope
Dimensions	Metrics	Computations	Instances	
		No Rows To Show		
	Cancel		Save	

\square

Note! By adding scopes, you can apply a narrative for a specific metric, dimension, computation, or instance. Also, you can combine and add multiple scope objects for different metrics, dimensions, computations, or instances.

If the added NLQ has an object defined in the Scope, then the custom template associated with that scope object is triggered. If scope is not added to a template, then the default template mapped for the intent is triggered.

7. Click +Add Scope.

8. From the table, click the individual cells to add dimensions, metrics, computations, and instance level scope to your template.

		Template Scope		×
Click on any value to edit				+ Add scope
Dimensions	Metrics	Computations	Instances	
Any	Any 🕅	Any	Any	Î
	Cancel		Save	



Dimensions	Metrics	Computations	Instances	
Dimensions	manas	computations	mstances	
Any	Select all	Ø Search	Any	Î
	Reach			
	Sales Attainment			
	Sales Goal			
	Sample quantity			
	Speaker Program	Attendee Count		
	Speaker Program	Count		
	Switch Volume			
	TRX			
		Template Scope		
Click on any value to ed	lit	Template Scope		+ Add scope
Click on any value to ed Dimensions	lit Metrics	Template Scope	Instances	+ Add scope
Click on any value to ed Dimensions Any	IIt Metrics	Template Scope Computations Any	Instances Any	+ Add scope
Dimensions Any	III Metrics TRx	Template Scope Computations Any	Instances Any	+ Add scope
Click on any value to ec Dimensions Any	IIt Metrics TRx	Template Scope Computations Any	Instances Any	+ Add scope
Click on any value to ed Dimensions Any	IIIt Metrics TRx	Template Scope Computations Any	Instances Any	+ Add scope
Click on any value to ed Dimensions Any	IIt Metrics TRx	Template Scope Computations Any	Instances Any	+ Add scope

Note! User authorization is considered when you add scope to your narrative template.

- 9. Click **Save**. The scope gets added to the template.
- 10. Add the custom narrative in the **Narratives** section.

Template Name My Data Point Template	Template Status Type Source Selected Model
Natural Language Query	Intent
Show me TRx in last month Proceed	Data Point 👻 Set Intent
Narratives	Preview of generated narrative + Add Scope
Template Builder X B I U \Leftrightarrow \Leftrightarrow $i \equiv$ $i =$ </td <td>Preview NLG</td>	Preview NLG
P Search VTD (ytd.metricName) is (ytd.smartValue)	TRx in last month 7.83M YTD TRx is 35.26M
Card Context Describe	TRx Reference Date: 2022-05-06 Period: 2022-04-02 - 2022-0
NxN POP Add your narratives in this section	TRx 7,828,184.64
Use these 'click and select' options to add functions and controls building block to your narrative	
	Reset Create

Note! As you add your narrative text, you can preview the generated narrative in the Preview NLG section as shown in the following figure.

You have to configure this custom narrative. For more information on how to configure the custom narratives, go to the Configuring Narratives for Intents section.

11. Click **Create**. The template gets added to the custom narrative template page.

Adding a custom narrative template by setting the intent

- 1. From the Admin console go to **NLP workbench** > **Narrative templates**. The Custom Narrative Templates page displays.
- 2. Click **Create**. The new template creation page displays.
- 3. Enter the Name for the template.
- 4. Click Set Intent to enable the Intent drop-down list.
- 5. From the **Intent** drop-down list, select the intent for which you want to create the custom narrative template.



tural Language Query		Intent
NLQ text		2 Set Inter
	Please type a NLQ or select an intent to proceed.	Ø bearch Multidimensional Time Comparison Multidimensional Time Series Time Comparison Time Series Time Series Time Series Time Series Top N Top N Entity Comparison Top N Entity Comparison Top N Time Comparison

6. Click **Set Intent**. Sample query mapped to the selected intent gets added to the Natural Language Query field. Response to this query is also displayed as shown in the following figure.

Template Name My Top N Template Natural Language Query show me Nrx by region this month	Sample query mapped to the intent gets added here Proceed	Template Status On Orr	Type Source Selected Model Data Model FAS - Field Analytics
Narratives	_		+ Add Scope
Template Builder × B I Functions Controls Type here Ø Search Card Context Average Max	<u>J</u> � ↔ ₩ ∞ iΞ ≔ Heading • <u>A</u> À <u>E</u> <u>E</u> <u>E</u> <u>E</u> <u>E</u>	Preview NLG Top Regions by N Reference Date: 2022 Columns Region Mid-Central	Rx 05-06 Period: 2022-04-30 - 2022-0 ▼
Min		2 Midwest 3 Mid-Atlantic	283,284.44 280.075.49
		4 Southwest 5 Southeast	261,977.34 251,567.62
		WhizAI response for the query	Reset Create

7. Click **+Add Scope** to add scope objects to your template. The following **Template Scope** page displays.



		Template Scope		
Click on any value to ed	it			+ Add scope
Dimensions	Metrics	Computations	Instances	
		No Rows To Show		
	Cancel		Save	

Note! By adding scopes, you can apply a narrative for a specific metric, dimension, computation, or instance. Also, you can combine and add multiple scope objects for different metrics, dimensions, computations, or instances.

8. Click +Add Scope.

9. From the table, click the individual cells to add dimensions, metrics, computations, and instance level scope to your template.

		Template Scope		:
Click on any value to ed	it			+ Add scope
Dimensions	Metrics	Computations	Instances	
Any	Any 🖑	Any	Any	Ô
	Cancel		Save	


Click on any value to e	dit			+ Add scope
Dimensions	Metrics	Computations	Instances	
Any	Select all	Ø Search	Any	Ô
	NameCount			
	NRx			
	Patient Count	Ð		
	Product Rank			
	Reach			
	Sales Attainment			
	Sales Goal			
	Cancel			
Click on any value to e	dit			+ Add scope
Dimensions	Metrics	Computations	Instances	
Any	NRx	Any	Any	

- 10. Click **Save**. The scope gets added to the template.
- 11. Add the custom narrative in the **Narratives** section.



Template Name My Top N Template		TemplateStatus Type Source	Selected Model
Natural Language Query		Intent	
show me Nrx by region this month	Proceed	Top N 👻	Set Intent
Narratives		Preview of generated narrative	+ Add Scope
Template Builder × B Z U 4	G (◇) () G⊃ () ⊟ ⊞ Heading → () <u>A</u> <u>)</u> () E Ξ ∃ ≣ -	Preview NLG	0
P Search Contributions	me) is the best contributing (max.dimensionName) with naxentity.smartValue) ((max.smartValue)) of total (max.metricName).	Mid-Central is the best cont Region with 15.11% (286.9) South Central is the least co	ributing () of total NRx. ptributing
Card Context min.entityNar Average contribution	ne) is the least contributing (min.dimensionName) with inentity.smartValue) ((min.smartValue)) of total (min.metricName).	Region with 3.48% (66.1K) o	of total NRx.
Max		Top Regions by NRx Reference Date: 2022-05-06 Period	: 2022-04-30 — 2022-0
Min	Add your narratives in this section	Columns 👻	Ø Search
Total		Region	NRx ↓
1		1 Mid-Central	286,899.30
		2 Midwest	283,284.44
Jse these 'click and select' options to add functions and controls building block to your narrative		3 Mid-Atlantic	280.075.49
		Reset	Create

Note! As you add your narrative text, you can preview the generated narrative in the Preview NLG section as shown in the following figure. You have to configure this custom narrative. For more information on how to configure the custom narratives, go to the Configuring Narratives for Intents section.

Template Selection for narrative generation

If you have multiple templates created for one intent, template selection for narrative generation will be based on the scope added to the template. For more information, refer to the following table.

Intent	Scope: Metric	Custom template	Example NLQ	Template selection for narrative generation
			TRx by brands	T1 is triggered
Тор N	TRx	T1	NRx by brands	T1 is not triggered. Default will be triggered for NRx
			TRx, NRx by brands	T1 is triggered for TRx. Default will be triggered for NRx
			TRx by brands	T2 is not triggered. Default will be triggered for TRx
Тор N	NRx	T2	NRx by brands	T2 is triggered
			TRx, NRx by brands	T2 is triggered for NRx. Default will be triggered for TRx
Тор N	TRx, NRx	Т3	TRx by brands	T3 is triggered



	NRx by brands	T3 is triggered
	TRx, NRx by brands	T3 is triggered

Supported intents

Following are the intents that are detected from your natural language queries (NLQs).

- Bottom N
- Bottom N Entity Comparison
- Bottom N Time Comparison
- Bottom N Time Series
- Data Point
- Entity Comparison
- Multi Series Time Comparison
- Multidimensional
- Multidimensional Time Comparison
- Multidimensional Time Series
- Time Comparison
- Time Series
- Time Series Entity Comparison
- Time Series Time Comparison
- Top N
- Top N Entity Comparison
- Top N Time Comparison
- Top N Time

Functions supported for Intents

Following table lists the functions supported for different intents.

Function and Supported Intents	Sample NLQ and Narrative
Max (To create a narrative around Maximum value) Supported Intents: All intents are supported except data point	NLQ: Top Regions this month Narrative: NORTHEAST region has the highest NRx of 24.16K this month
Min (To create a narrative around Minimum value) Supported Intents: All intents are supported except data point	NLQ: Top Regions this month Narrative: WEST region has the lowest NRx of 15.26K this month.
Average (To create a narrative around Average value) Supported Intents: All intents are supported except data point	NLQ: Top Regions this month Narrative: Average TRx recorded per region is 19.89K this month. (Global Average)
Total (To create a narrative around Total value) Supported Intents: All intents are supported except data point	NLQ: Top Regions this month Narrative: Total TRx recorded across all regions is 10M



Describe (To create a narrative around a single data point summary) Supported Intents: Datapoint, Time Comparison, Entity Comparison	NLQ: TRx in Boston MA last week Narrative: TRx growth was 5% last week
Contribution_MaxEntity (To create a narrative around contribution (%) of top performing entity) Supported Intents: Top N, Bottom N	NLQ: NRX for Top Regions this month Narrative: NORTHEAST region has the highest NRx of 33% (24.16K) this month
Contribution_MinEntity (To create a narrative around contribution (%) of least performing entity) Supported Intents: Top N, Bottom N	NLQ: NRX for Top Regions this month Narrative: WEST region has the lowest NRx of 20%(15.26K) this month.
Contribution_TopN_Entities (To create a narrative around contribution (%) of a group of top 'n' entities) Supported Intents: Top N, Bottom N	NLQ: NRX for Top Regions this month Narrative: Top 3 regions contribute 50% of the total NRx in this month.
Contribution_BottomN_Entities (To create a narrative around contribution (%) of a group of bottom 'n' entities) Supported Intents: Top N, Bottom N	NLQ: NRX for Top Regions this month Narrative: Bottom 3 regions contribute 10% of the total NRx in this month.
Contribution_MaxEntity (To create a narrative around contribution (%) of top performing entity in the overall time period) Supported Intents: Top N Time Series, Bottom N Time Series	NLQ: NRX for Top Regions by months Narrative: The NORTHEAST region has the highest NRx of 33% (24.16K) in this time period.
Contribution_MinEntity (To create a narrative around contribution (%) of least performing entity in the overall time period) Supported Intents: Top N Time Series, Bottom N Time Series	NLQ: NRX for Top Regions by months Narrative: WEST region has the lowest NRx of 20%(15.26K) in this time period.
Contribution_TopN_Entities (To create a narrative around contribution (%) of a group of top 'n' entities in the overall time period) Supported Intents: Top N Time Series, Bottom N Time Series	NLQ: NRX for Top Regions by months Narrative: Top 3 regions contribute 50% of the total NRx in this time period.
Contribution_BottomN_Entities (To create a narrative around contribution (%) of a group of bottom 'n' entities in the overall time period) Supported Intents: Top N Time Series, Bottom N Time Series	NLQ: NRX for Top Regions by months Narrative: Bottom 3 regions contribute 10% of the total NRx in this time period.



Growth_MaxAbsChange (To create a narrative around highest Absolute change growth in a given time period) Supported Intents: All types of Time Series intents	NLQ: TRx monthly trend last year Narrative: TRx recorded the highest growth of 2.46M (32.26%) in March 2021
Growth_MinAbsChange (To create a narrative around slowest Absolute change growth in a given time period) Supported Intents: All types of Time Series intents	NLQ: TRx monthly trend last year Narrative: TRx recorded the lowest growth of -2.41M (- 23.81%) in April 2021
Growth_MaxPercentChange (To create a narrative around highest Percent change growth in a given time period) Supported Intents: All types of Time Series intents	NLQ: TRx monthly trend last year Narrative: TRx recorded the highest growth of 2.46M (32.26%) in March 2021
Growth_MinPercentChange (To create a narrative around slowest Percent change growth in a given time period) Supported Intents: All types of Time Series intents	NLQ: TRx monthly trend last year Narrative: TRx recorded the lowest growth of -2.41M (- 23.81%) in April 2021
NxN (To create a narrative around weeks comparison (4x4 or13x13)) Supported Intents: Datapoint, Time Comparison, Entity Comparison, Time Series, Time Series Time Comparison	NLQ: TRx monthly trend last year Narrative: TRx declined by - 0.91% in last 4 weeks
NxN_MaxEntity (To create a narrative around weeks comparison for top performing entity) Supported Intents: Top N, Bottom N, Top N Time Series, Bottom N Time Series, Top N Time Comparison, Bottom N Time Comparison	NLQ: Top Regions by TRx Narratives: South Central declined by - 17.62% (-50.06K) in last 4 weeks South Central declined by - 10.17% (-95.9K) in last 13 weeks
NxN_MinEntity (To create a narrative around weeks comparison for least performing entity) Supported Intents: Top N, Bottom N, Top N Time Series, Bottom N Time Series, Top N Time Comparison, Bottom N Time Comparison	NLQ: Top Regions by TRx Narratives: Mid-Central declined by - 5.17% (-63.07K) in last 4 weeks Mid-Central grew by 2.07% (79.93K) in last 13 weeks
MaxPrimary (To create a narrative around Maximum value in 1st column of a comparison response. This could be Current Period for a time comparison or 1st entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Arobi was the top Product with 2.41M NRx with a -0.22% decline in this time.



MinPrimary (To create a narrative around Minimum value in 1st column of a comparison response. This could be Current Period for a time comparison or 1st entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Emarun was the highest declining Product with -43.76K (-7.68%) NRx
TotalPrimary (To create a narrative around Total value in 1st column of a comparison response. This could be Current Period for a time comparison or 1st entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Total TRx in 2022 was 1M while in 2021 it was 590K
AveragePrimary (To create a narrative around Average value in 1st column of a comparison response. This could be Current Period for a time comparison or 1st entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Average TRx in 2022 was 100K while in 2021 it was 80K
MaxSecondary (To create a narrative around Maximum value in the 2nd column of a comparison response. This could be Previous Period for a time comparison or 2nd entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands
MinSecondary (To create a narrative around Minimum value in the 2nd column of a comparison response. This could be Previous Period for a time comparison or 2nd entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands
TotalSecondary (To create a narrative around Total value in the 2nd column of a comparison response. This could be Previous Period for a time comparison or 2nd entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Total TRx in 2022 was 1M while in 2021 it was 590K
AverageSecondary (To create a narrative around Average value in 2nd column of a comparison response. This could be Previous Period for a time comparison or 2nd entity in an entity comparison) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Average TRx in 2022 was 100K while in 2021 it was 80K
MaxAbsChange (To create a narrative around Maximum Absolute Change value in a comparison response) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Plabenil was the highest growing Product with 2.98K change (0.14%) NRx
MinAbsChange (To create a narrative around Miinimum Absolute Change value in a comparison response) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: Trexine was the highest declining Product with -40.3K change (-1.86%) NRx



MaxPercentChange (To create a narrative around Maximum Percentage Change value in a comparison response) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: The biggest % growth of 0.14% was seen by Plabenil
MinPercentChange (To create a narrative around Minimum Percentage Change value in a comparison response) Supported Intents: Top N/ Bottom N Time Comparison, Top N/ Bottom N Entity Comparison	NLQ: Top Growing Brands Narrative: The biggest % decline of -10.14% was seen by Trexine
YTD To create a narrative around YTD data Supported Intents: Datapoint, Time Series, Time Comparison, Time Series Time Comparison	NLQ: TRx monthly trend last year Narrative: YTD TRx was 100M
YTD_MaxEntity To create a narrative around YTD data for top performing entity Supported Intents: Top N, Top N Time Series, Bottom N, Bottom N Time Series	NLQ: NRX for Top Regions this month Narrative: YTD Mid-Central recorded 5.41M NRx
YTD_MinEntity To create a narrative around YTD data for least performing entity Supported Intents: Top N, Top N Time Series, Bottom N, Bottom N Time Series	NLQ: NRX for Top Regions this month Narrative: YTD South-Central recorded 5.41M NRx
MaxOfDimension(N) To create a narrative around Maximum value for Nth dimension in a multi- dimensional NLQ Supported Intents: Multi-dimensional, Multi-dimensional time series	NLQ: Brands By Regions Narrative: Arobi was the highest contributing Product with 606.95K TRx
MinOfDimension(N) To create a narrative around Minimum value for Nth dimension in a multi- dimensional NLQ Supported Intents: Multi-dimensional, Multi-dimensional time series	NLQ: Brands By Regions Narrative: Emarun was the least contributing Product with 135.62KTRx
ContributionOfMaxEntityOfDimension(N) - (To create a narrative around contribution (%) of top performing entity of Nth dimension) Supported Intents: Multi-dimensional, Multi-dimensional time series	NLQ: Brands By Regions Narrative: Arobi was the highest contributing Product with 20% (606.95K) TRx
Contribution_MinEntity_Dimension(N) - (To create a narrative around contribution (%) of least performing entity of Nth dimension) Supported Intents: Multi-dimensional, Multi-dimensional time series	NLQ: Brands By Regions Narrative: Emarun was the least contributing Product with 5% (135.62K) TRx
YTD_MaxEntity_Dimension(N) - (To create a narrative around YTD data for top performing entity of Nth Dimension) Supported Intents: Multi-dimensional, Multi-dimensional time series	NLQ: Brands By Regions Narrative: YTD Mid-Central recorded 5.41M NRx
YTD_MinEntity_Dimension(N) - (To create a narrative around YTD data for least performing entity of Nth Dimension) Supported Intents: Multi-dimensional, Multi-dimensional time series	NLQ: Brands By Regions Narrative: YTD South-Central recorded 5.41M NRx



Contribution_MaxEntity_Of_Dimension1_In_MaxEntity_Of_Dimension2 To create a narrative around contribution (%) of top performing entity of Dimension 1 in top entity in Dimension 2 Supported Intents:	NLQ: Brands By Regions Narrative: Arobi contributed 20% (606.95K) TRx in Midwest
Contribution_MaxEntity_Of_Dimension2_In_MaxEntity_Of_Dimension1	NLQ: Brands By Regions
To create a narrative around contribution (%) of top performing entity of	Narrative: Midwest
Dimension 2 in top entity in Dimension 1	contributed 25% (606.95K)
Supported Intents:	TRx in Arobi

Configuring Narratives for Intents

Refer to the following configuration of narratives for data point intent. You can follow similar steps for other intents.

Configuring narratives for Data Point intent

You can configure narratives for 'Data point' intent using the Describe, NxN, and YTD functions. For more information on the use of these functions, refer to the following example NLQ and configured narrative for the same. Example NLQ: Show me TRx in last month



Note ! The following example is for reference only. You can refer to this example to configure different narratives.

To configure the custom narrative:

1. Go to the new template creation page and enter NLQ. For example: 'Show me TRx in last month' and click **Proceed**.

WhizAI detects intent in your query and displays a response to your query as shown in the following figure.

← My Data Point Template			Template Status Type Source Selected Model
Natural Language Query Show me TRx in last month	Proceed	WhizAI detects the intent from the entered query	Data Point - Set Intent
Narratives Template Builder X B I Functions Controls Q Search Card Context Describe NxN POP YTD	<u>U</u> \$ <> זז כ∋ i⊟ i⊟ Head	ding • <u>A •</u> 臣 三 三 二 —	+ Add Scope Preview NLG TRx Reference Date: 2022-05-06 Period: 2022-04-02 - 2022-0 TRx 7,828,184.64 WhizAI response for the entered query
			Reset Create



You can add narrative text and **Describe**, **NxN**, **POP**, and **YTD** function blocks in the template **Narratives** section, and based on this text and the function code, the narrative is displayed in the **Preview NLG** section.

2. To add narrative around the **Describe** function, click **Describe**.

Click and select options are displayed as shown in the following figure.

Constant Con											Template Sta	ntus Type Source	e Selected Model el FAS - Field Analytics
Natural Language Query show me TRx in west this week			Proceed							Intent	ata Point	Ŧ	Set Intent
Narratives Template Builder X Functions Controls	B I Type here	<u>U</u> S	<> 99 G	⊞ Head	ing •	<u>A</u> <u>A</u>	<u>8</u> E	ΞΞI	≣│-		Preview NLG		+ Add Scope
Search Card Context											TRx Reference Date: 20	22-05-06 Perioc	1: 2022-04-30 — 2022-0
Metric Name Computation Metric Value	e these optic me, computa ue to your n	ons to ac ation, an	ld metric nd metric								TRx	264,608.24	
Metric Smart Value NxN POP													
												Reset	Create

3. Click **Metric Name**; the building block for metric name gets added to your narrative and the metric name gets added to the Preview NLG section as shown in the following figure.

Template Name My Data Point Template	Template Status Type Source Selected Model On Off Data Model FAS - Field Analytics
Natural Language Query show me TRx in west this week Proceed	Intent Metric name (TRx) gets added to the narrative + Add Scope
Template Builder × Functions Controls Ø I U I	Preview NLG II TRx III TRx Reference Date: 2022-05-06 Period: 2022-04-30 – 2022-0 TRx 264,608.24
РОР	Reset Create

4. Add narrative text and the building block for metric value. For example, refer to the following figure.



Natural Language Query Internation show me TRx in west this week Proceed Narratives Template Builder B I U ⊕ <> I I ⊕ E E E E I I Search International Image Controls Image Co	nt tive text and metric value gets d to your narrative + Add Scope Preview NLG
Template Builder X B I U So iii iii Heading A A E E E I <t< th=""><th>Preview NLG</th></t<>	Preview NLG
Card Context Building block for metric value Describe Marrative text Metric Name Computation Metric Value Metric Smart Value NxN POP	TRx this period is 264.61K TRx Reference Date: 2022-05-06 Period: 2022-04-30 - 2022-0 TRx 264.608.24

5. To add a narrative around the YTD function, click YTD.

← My Data Point Template		Template Status Type Source Selected Model
Natural Language Query show me TRx in west this week	Proceed	Intent - Set Intent
B I Functions Controls Q Search	U ↔ n c> iE Heading < A ▲ E E E = - .metricName in this period is (describe.smartValue)	+ Add Scope Preview NLG TRx in this period is 264.61K
Card Context Describe NxN		TRx Period: 2022-05-06 Period: 2022-04-30 - 2022-0 TRx 264,608.24 26
POP YTD		
		Reset Create

6. Click **YTD** > **Metric Name**.

The building block for metric name gets added to your narrative and the metric name gets added to the Preview NLG section as shown in the following figure.



Template Name K My Data Point Template	Template Status Type Source Selected Model
Natural Language Query	Intent
show me TRx in west this week Proceed	Metric name (TRx) gets added to the Arrative Set Intent
Narratives	+ Add Scope
Template Builder Functions Controls > Search Describe NxN POP YID Metric Name Computation Metric Smart Value	Preview NLG TRx in this period is 264.61K YTD TRx Reference Date: 2022-05-06 Period: 2022-04-30 - 2022-0 TRx 264,608.24
	Reset Create

7. Add narrative text and the building block for metric value and click **Create**.

For example, refer to the following figure.

Template Name ← My Data Point Template				Template Status Type Source Se	elected Model AS - Field Analytics
Natural Language Query show me TRx in west this week	Proceed	Intent Narrativ added to	e text a o your r	nd metric value gets narrative	Set Intent
Template Builder × Functions Controls Q Search Describe NxN	B I U ↔ n ↔ i ≡ Heading × A ▲ E Ξ ≡ - (describe.metricName) in this period is (describe.smartValue). .		Previe TRx i YTD TRx Referen	w NLG in this period is 264.61K. TRx is 5M. ce Date: 2022-05-06 Period: 2022	2-04-30 - 2022-0
POP YTD Metric Name Computation Metric Value Metric Smart Value			TRx	264,608.24	
				Reset	Create

Configuring narrative for Top N intent

You can use the following functions to create narratives for Top N intent.

- Average
- Max.
- Min.
- Total



Refer to the following example to configure a narrative:

Example NLQ: Show me NRx by region this month

Note! Following example is for reference only. You can refer to this example to configure different narratives.

To configure the custom narrative:

1. To add a narrative around the **Max** functions, click **Max**.

Template Name My New Top N Template Natural Lansace Owey	Template Status Type Sour	ce Selected Model del FAS - Field Analytics
show me Nrx by region this month Proceed	Top N	Set Intent
Narratives		+ Add Scope
Template Builder X B I U \Leftrightarrow $i\Xi$ Heading A Δ Ξ Ξ $=$ Functions Controls O Search	Preview NLG	0
Card Context Average	Top Regions by NRx Reference Date: 2022-05-06 Perio	d: 2022-04-30 – 2022-05-2 Ø Search
Max	Region	NRx 4
Min	1 Mid-Central	286,899.30
lotal	2 Midwest 3 Mid-Atlantic	280.075.49
	4 Southwest	261,977.34
	e Cauthaast	264 647 42
	Res	et Create

Click and select options are displayed as shown in the following figure.

Template Name	Template Status Type Sou	rce Selected Model del FAS - Field Analytics
Natural Language Query	Intent	
show me Nrx by region this month Proceed	Top N	✓ Set Intent
Narratives		+ Add Scope
Template Builder × B I U · <th>Preview NLG</th> <th>D</th>	Preview NLG	D
Max Contribution_MaxEntity	Top Regions by NRx Reference Date: 2022-05-06 Peri	od: 2022-04-30 – 2022-05-2 Ø Search
✓ Contribution_TopN_Entities	Region	NRx \downarrow
✓ Max	1 Mid-Central	286,899.30
Max_TopN_Entitles	2 Midwest	283,284.44
V NXN MaxEntity	3 Mid-Atlantic	280,075.49
YID_MaxEntity	4 Southwest	261,977.34
	Re	set Create

2. To create a narrative around weeks comparison for the top performing entity; click **NxN_MaxEntity**.



Template Name My New Top N Template	Template Status Type On Off Data	Source Selected Model Model FAS - Field Analytic
Natural Language Query	Intent	
show me Nrx by region this month Proceed	Top N	✓ Set Intent
Narratives		+ Add Scope
Template Builder × B I U G III Heading × A ▲ E E III - Functions Controls O Search Search IIII Heading × A ▲ E E IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Preview NLG	0
Max V Contribution_MaxEntity	Top Regions by NRx Reference Date: 2022-05-06	Period: 2022-04-30 – 2022-05-2. Ø Search
✓ Contribution_TopN_Entities	Region	NRx \downarrow
✓ Max	1 Mid-Central	286,899.30
✓ Max_TopN_Entities	2 Midwest	283,284.44
✓ NxN_MaxEntity	3 Mid-Atlantic	280,075.49
VTD_MaxEntity	4 Southwest	261,977.34
	c Coutboast	151 527 20
		Reset Create

3. Enter number of weeks for comparison and then click **Entity Name** from the **Datarow Context**.

Template Name My New Top N Template		mplate Status Type Source On Off Data Mode	Selected Model FAS - Field Analytics
Natural Language Query Show me Nrx by region this month Proceed Narratives ar	intent ax entity fro ided to you	m the response get r narrative	s Set Intent + Add Scope
Template Builder × B I U ⊕ (>) # Heading ▲ ▲ E E E I I Functions Controls Controls ()	Pre	♥ iew NLG I-Central	0
NxN_MaxEntity Enter No. of weeks A Building block for max entity name No of weeks which will be used for max	Top Refer	Regions by NRx Ince Date: 2022-05-06 Period	2022-04-30 - 2022-05-2 Ø Search NRx ↓
Datarow Context Entities Entity Name Dimension Name	1 Mi 2 Mi 3 Mi	d-Central dwest d-Atlantic	286,899.30 283,284,44 280,075,49
 ✓ Secondary 	4 So	ıthwest	261,977.34
		Reso	t Create

4. To use if-else conditions to add narrative around growth or decline; click **Controls**.



Template Name My New Top N Template	Template Status Type On Off Data	Source Selected Model Model FAS - Field Analytics
Natural Language Query show me Nrx by region this month Proceed	Top N	✓ Set Intent
Narratives		+ Add Scope
Template Builder X B I U Image: Non-Second definition of the second definition of the seco	Preview NLG Mid-Central recorde	c) d
NxNLMaxEntity EnterNo.ofweeks 4	Top Regions by NRx Reference Date: 2022-05-06	Period: 2022-04-30 – 2022-05-2 Ø Search
No of presis which will be used for non emplosi	Region	NRx \downarrow
Datarow Context Explored	1 Mid-Central	286,899.30
Entity Name	2 Midwest	283,284.44
Dimension Name	3 Mid-Atlantic	280,075.49
✓ Secondary	4 Southwest	261,977.34
		Reset Create

5. Click **Controls** and then click **If-else**.

Template Name My New Top N Template Natural Language Query show me Nrx by region this month Proceed	Template Status Type Sou (on on) Data Mo	e Selected Model del FAS - Field Analytics e Set Intent + Add Scope
Template Builder × Functions Controls > Search E If If If If If If	Preview NLG Mid-Central recorded Top Regions by NRx Reference Date: 2022-03-06 Per Region 1 Mid-Central 2 Mid-Central	C3 od: 2022-04-30 – 2022-05-2.
	 Mid-Atlantic Southwest 	280,075.49 261,977.34
	Re	set Create

6. Select root level function, function, and operator from the respective dropdowns.



_							
)	-	Select a operator	-	Select a function	ot level functic 🔻	Select a ro	if (
	-	Select a operator		Select a function	ot level functio 💌	Select a ro	if (

 Enter condition argument, number of weeks for comparison and then click Insert. Condition gets added to your narrative.

N×N	~	AbsChange/Value	 greater than 	~	Function	~	N×N	 AbsChange/Value
No. of weeks					Function			Enter No. of weeks
					Value			52
weeks which will be used for nx	m analysis.							No of weeks which will be used for nxn analysis.

8. Now, you have to define the added condition by adding narrative text and/or function building blocks. Refer to the following figures.

Naratives + Add Segret Template Builder N	My New Top N Template Natural Language Query show me Nrx by region this month Proceed	On (Off) Data 1 Internt Top N	Alodel FAS - Field Analytics Set Intent
Template Builder ×	Narratives		+ Add Scope
3 Mid-Atlantic 280,075,49 4 Southwest 261,977,34	Template Builder × Functions Controls Ø Search Controls If if if if-else	ing A A E E Image: A transmitted and	(placehotder for else) Period: 2022-04-30 – 2022-05-2 Ø Search 286,899.30 283,284.44 280,075.49 261,977,34

Similarly, you can configure the following types of example narratives:

- Short term (4 weeks) TRx growth 4.65% 50.61 K was higher than medium-term (13 weeks) 3.32 %
- o Short term TRx growth was higher than log-term (52 weeks) 0.29% 41.68K



For information on use of if-else blocks refer to the following narrative examples.

Narratives If added condition is true; This narrative is displayed in Preview NLG Preview HLG Image: Search I	My New Top N Template Natural Language Query show me Nrx by region this month	Proceed	(on or) Dat	Model FAS - Field Analytics Set Intent
 ✓ Datarow Context ✓ Primary ✓ Secondary ✓ Abschange ✓ Value Smart Value ✓ Percent Change ✓ Value ✓ Secondary ✓ Abschange ✓ Value ✓ Secondary ✓ Value ✓ Value ✓ Secondary ✓ Value ✓ Value<!--</th--><th>Template Builder × Functions Controls 9 Search sumpa</th><th>If added condition is true; This narrative is displayed in Preview NLC 4x4maxentity.context.entityName recorded 4x4maxentity.percentChange.smartValue (4x4maxentity.percentChange.smartValue) (4x4maxentity.percentChange.smartValue) (4x4maxentity.percentChange.smartValue)</th><th>Preview NLG Mid-Central record decline in last 4 we</th><th>+ Add Scope</th>	Template Builder × Functions Controls 9 Search sumpa	If added condition is true; This narrative is displayed in Preview NLC 4x4maxentity.context.entityName recorded 4x4maxentity.percentChange.smartValue (4x4maxentity.percentChange.smartValue) (4x4maxentity.percentChange.smartValue) (4x4maxentity.percentChange.smartValue)	Preview NLG Mid-Central record decline in last 4 we	+ Add Scope
Value Smart Value ^ PercentChange Value Value 2 Mid-Central 2 Mid-Central 2 88,699,00 2 Mid-West 2 83,284,44	 Datarow Context Primary Secondary AbsChange Volume 	Jactine End of In-else Jin last 4 weeks. If added condition is not true; This narrative is displayed in Preview NLG	Top Regions by NRx Reference Date: 2022-05-4	06 Period: 2022-04-30 - 2022-05-2
→ Mid-Atlantic 280,075.49 → YTD_MaxEntity 4 Southwest 261,077.34	Smart Value PercentChange Value Smart Value YTD_MaxEntity		1 Mid-Central 2 Midwest 3 Mid-Atlantic 4 Southwest	286,899.30 283,284,44 280,075,49 261,977,34

9. Similarly, you can configure a narrative around **Min** functions. Refer to the following configured narrative.

Template Name ← My New Top N Template				Template Status Type : On Or Data	Source Selected Model Model FAS - Field Analytics
Natural Language Query			Intent		
show me Nrx by region this month	Proceed		Тој	νN	✓ Set Intent
Narratives		Narrative configured using functio Max, NxN_MaxEntity	ns-		+ Add Scope
Template Builder ×	B I U ↔ ↔ ↔ ↔ 등 \\ □ □ \\ Heading → <u>A</u> A \\ □ \\ □ \\ □ \\ □ \\ □ \\ □ \\ □	∃≣ -		Preview NLG	0
Functions Controls ρ Search	(4x4maxentity.context.entityName) recorded (4x4maxentity.absChange.smartValue)) growth Else (4x4maxentity.per	tValue > 0 (4x4maxentity.percentChange.smartVa centChange.smartValue) (ilue) (Mid-Central recorded decline in last 4 weeks	-5.17% (-63.07K)
Entity Name Dimension Name AbsChange	(4x4maxentity.absChange.smartValue)) decline End of if-else in last 4 wee	:ks.	[South Central recorde decline in this period.	d -17.62% (- 50.06K)
Value Smart Value ^ PercentChange	4x4minentity.context.entityName 4x4minentity.absChange.smartValue 4x4minentity.absChange.smartValue) growth Else 4x4minentity.perce	Value > 0 4x4minentity.percentChange.smartVal eentChange.smartValue) (ue)(op Regions by NRx reference Date: 2022-05-06	Period: 2022-04-30 - 2022-05-2
Value Smart Value	(4x4minentity.absChange.smartValue)) decline End of if-else in this period	l.			Ø Search
✓ YTD_MinEntity		<u>†</u>	:	Region	NRx \downarrow
		Negative configured using functions	1	Mid-Central	286,899.30
lotal		Min, NxN_MinEntity	2	Midwest	283,284.44
					Poet
					Create

10. Click **Create**, to save your template.

Similarly, you can follow the same steps to add templates for the following intents.

- Entity comparison
- Time Comparison
- Time Series
- Time Series Entity Comparison
- Time Series Time Comparison



- Multidimensional
- Multidimensional Time Series
- Top N
- Top N Entity Comparison
- Top N Time comparison
- Top N Time Series
- Bottom N
- Bottom N Entity Comparison
- Bottom N Time comparison
- Bottom N Time Series

For more information, you can refer to the following examples of configured narratives.

Example 1: Narratives for Top-N Time comparison intent

Example NLQ: 4x4 by brands for NRx

← Top N-Time Comparison temp	plate	Template Status Type : On Orr Data	Source Selected Model Model FAS - Field Analytics
Natural Language Query		Intent	
4x4 by brands for NRx	Proceed	Top N Time Comparison	✓ Set Intent
Narratives			+ Add Scope
Template Builder X	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Preview NLG	0
Functions Controls	(maxprimary.context.entityName) was the top (maxprimary.context.dimensionName) with (maxprimary.primary.smartValue)	Arobi was the top Proc and -0.22% (-5.2K) dec	duct with 2.41M NRx cline
9 Search	maxprimary.percentChange smartValue) (maxprimary.percentChange smartValue)	In absolute change ter- highest growing Produ	ms, Plabenil was the act with 0.14% (2.98K)
Average	decline End of if-else	change while Trexine w declining Product with change	was the <mark>highest</mark> 1 -1.86% (-40.3K)
Max	In absolute change terms, maxabschange.context.entityName) was the maxabschange.absChange.value > 0 highest growing Else slowest	Arobi declined by -0.2 weeks	22% (-17.23K) in last 13
Min	declining End of if-else (maxabschange.context.dimensionName) with (maxabschange.percentChange.smartValue) (Top Products by NRx	
Total	(maxabschange.absChange.smartValue)) change while (minabschange.context.entityName) was the	Reference Date: 2022-05-06	Period: 2022-04-09 - 2022-05-0
	minabschange.percentChange.smartValue) ((minabschange.absChange.smartValue)) change	Columns	Ø Search
	13x13maxentity.absChange.value > 0		NRx
	(13x13maxentity.context.entityName) grew by (13x13maxentity.percentChange.smartValue) (2022-04-09 - 2022-05-06 / 20
	13x13maxentity.absChange.smartValue Else declined by 13x13maxentity.percentChange.smartValue (13x13maxentity.absChange.smartValue) End of if-else in last 13 weeks.	: Product	2.063.724 2.060.743
		2 Arobi	2.409.441 2.414.639
			Reset Create

Example 2: Narratives for Time Series intent Example NLQ: TRx by months for last year



Template Name My Time Series template		Template Status Type Source Selected Model on off Data Model FAS - Field Analytics
Natural Language Query		Intent
TRx by months for last year	Proceed	Time series
Narratives		+ Add Scope
Template Builder ×	B I U ↔ ↔ •• ↔ •• ⇔ ⊨ ≔ Heading · A ↔ E = = = -	Preview NLG
	Maximum (max.metricName) of (max.smartValue) was recorded in (max.period)	Maximum TRx of 10.1M was recorded in March 2021
9 Search	Minimum (min.metricName) of (min.smartValue) was recorded in (min.period)	Minimum TRx of 7.6M was recorded in February 2021
Card Context	Average (average.metricName) recorded per (context.granularity) was (average.smartValue)	Average TRx recorded per month was 8.6M
Average	YTD (ytd.metricName) is (ytd.smartValue)	YTD TRx is 35.3M
Min	(growthmaxpercentchange.primary.metricName) recorded highest growth of (growthmaxpercentchange.percentChange.smartValue) (growthmaxpercentchange.absChange.smartValue) in (growthmaxpercentchange.primary.period)	
NxN		TRx Trend [Monthly] Reference Date: 2022-05-06 Period: 2021-01-02 - 2021-12-3
Total	growthminpercentchange.primary.metricName) recorded minimum growth of growthminpercentchange.percentChange.smartValue) (11M
YTD	(growthminpercentchange.absChange.smartValue)) in (growthminpercentchange.primary.period)	
		Reset Create

Editing a narrative template

- 1. From the **Admin** console go to the **NLP Workbench** > **Narrative Templates**.
- 2. Select the template that you want to edit and click the **Edit** option at the bottom as shown in the following figure.

Template Name	Intent	Scope	Source	Sour	Last Updated $\ \downarrow$	Language	Status
	▼		▼	v	dd-mm-yyyy 🗖 🔻	∀	
My Multidimensional tem	Multidimensional	> 1 scope(s) applied	Model		16.03.2023	English	
My Time Series template	Time series	> 1 scope(s) applied	Model		16.03.2023	English	
] Top N-Time Comparison	Top N Time Comparison	> 1 scope(s) applied	Model		16.03.2023	English	
My New Top N Template	Top N	> 1 scope(s) applied	Model		16.03.2023	English	
Rahul_Demo_TopN_Trend	Top N Time series		Model		15.03.2023	English	
Rahul_Demo_Summary	Data Point		Model		15.03.2023	English	
Rahul_Demo_TopN_Time	Top N Time Comparison		Model		15.03.2023	English	
Rahul_Demo_Multidimen	Multidimensional		Model		15.03.2023	English	
Rahul_Demo_Trend	Time series		Model		15.03.2023	English	
Rahul_Demo_TopN	Top N		Model		13.03.2023	English	
02-Top N	Top N	> 1 scope(s) applied	Model		13.03.2023	English	
Anomaly narrative	Anomaly		Model		22.12.2022	English	
1 to 12 of 12 K < Page 1 of 1 > >1							

3. Add or remove information in the **Narratives** section.

You can also change the template scope to include different dimensions, metrics, entities, or instances.



Template Name My Multidimensional template	Template Status Type So On Off Data M	ource Selected	Model ield Analytics
Natural Language Query	Intent		
Trx by brand by region Proceed	Multidimensional	· ·	
Narratives			+ Add Scope
Template Builder × B I U ↔ w ↔ w ↔ i ⊟ ⊟ Heading × A ↔ E Ξ ∃ = -	Preview NLG		0
Functions Controls (maxofdimension1.entityName) was the best contributing (maxofdimension1.amertson1.dimension1.amertson2.maxofdimension1.smartValue) (of total (maxofdimension1.metricName). It recorded p Search (maxofdimension1.smartValue) (maxofdimension1.smartValue) (of total (maxofdimension1.metricName). It recorded	Arobi was the best con 31.20% (32.1M) of tota -0.85% (-20.8K) decline	tributing Prod I TRx . It recor in last 4 wee	uct with ded ks.
Card Context 4x4maxdimension1.absChangevalue >0 (4x4maxdimension1.percentChange.smartValue) ((4x4maxdimension1.absChange.smartValue)) growth Else 4x4maxdimension1.percentChange.smartValue) ((4x4maxdimension1.absChange.smartValue)) Average weeks.	Mid-Atlantic was the b Region with 15.50% (1 recorded 1.48% (18K) (est contributii 6M) of total TI growth in last	ng Rx . It 4 weeks.
Max Min was the best contributing maxofdimension2.dimensionName with	TRx by Product, Region Reference Date: 2022-05-06	Period: 2021-01-0	2 - 2021-12-3
Total (maxofdimension2.smartValue) (f maxofdimension2.smartValue) of total (maxofdimension2.metricName) . It recorded	Columns		Ø Search
4x4maxdimension2.percentChange.smartValue) ((4x4maxdimension2.absChange.smartValue)) growth Else (4x4maxdimension2.percentChange.smartValue) ((4x4maxdimension2.absChange.smartValue)) decline End of if-else in last		Mid-Atlantic	Mid-Central
4 weeks.	Product 个	TRx	TRx
	Arobi	4,881,749.6	5,006,138.7
	Emarun	1,055,649.0	1,051,667.0
	Ofasan	1,205,098.5	1,102,590.6
	P1 1 1	1000 150.0	1105 101 5
		Reset	Save

4. Click Save.

Cloning a narrative template

You can also clone a template, using the clone option you can copy the attributes and other data of the selected template, and you can create a new narrative template from this selected template.

To clone a template:

1. Select the template that you want to clone and click the **Clone** option at the bottom as shown in the following figure.

emplate Name	Intent	Scope	Source	Sour	Last Updated $~\psi$	Language	Status
v	7		7	v	dd-mm-yyyy	7	
My Top N Trend template	Top N Time series	> 1 scope(s) applied	Model		16.03.2023	English	
My Multidimensional te	Multidimensional	> 1 scope(s) applied	Model		16.03.2023	English	
My Time Series template	Time series	> 1 scope(s) applied	Model		16.03.2023	English	
] Top N-Time Comparison	Top N Time Comparison	> 1 scope(s) applied	Model		16.03.2023	English	
My New Top N Template	Top N	> 1 scope(s) applied	Model		16.03.2023	English	
Rahul_Demo_TopN_Trend	Top N Time series		Model		15.03.2023	English	
Rahul_Demo_Summary	Data Point		Model		15.03.2023	English	
Rahul_Demo_TopN_Time	Top N Time Comparison		Model		15.03.2023	English	
Rahul_Demo_Multidimen	Multidimensional		Model		15.03.2023	English	
Rahul_Demo_Trend	Time series		Model		15.03.2023	English	
Rahul_Demo_TopN	Top N		Model		13.03.2023	English	
02-Top N	Top N	> 1 scope(s) applied	Model		13.03.2023	English	
						1 to 13 of 13	K < Page 1 of 1 >

2. New template creation page opens, here you must add a new unique name for the template, and then you can change the narrative according to the requirement and click the **Create** option to create a new template.



atural Language Query show me Nrx trend by region for last year Proceed	Intent In
Image: Image:	+ Add Scope

Customizing narratives displayed on a specific card on a pinboard

WhizAI allows you to customize the narratives shown on individual cards.

Note! These changes can be initiated from the Narratives options displayed on cards in pinboards only, not from responses.

To customize the narrative from the card:

1. Go to the card on the pinboard and click the **Narratives** icon ¹. Narrative is displayed as shown in the following figure.

Columns 🔻		Ø Search	Narratives			
Region	TRx \downarrow		Total TRx recorded across all regions is 35,26M YTD.			
Mid-Atlantic	5,579,978.50		Average TRx recorded per region is 4.41M			
Mid-Central	5,502,699.06		Mid-Atlantic region has the highest TRx			
West	4,998,216.63		(5.58M) while South Central region has th lowest TRx (1.23M) YTD.			
Midwest	4,960,737.09					
Southeast	4,726,744.04					
Southwest	4,334,003.28					
Northeast	3,926,407.92					
South Central	1,231,693.83					
Total	35,260,480.34					
	6					

2. Hover the cursor on the narrative; Edit option displays.





3. Click the **Edit** icon.

The custom template that triggered the custom narrative opens as shown in the following figure.

Template Name Template Status ← Template Name Natural Language Query show me Nrx by region this month Proceed	s Type Source Selected Model) Data Card Level Template FAS - Field Analytics Intent Top N Add Scope + Add Scope
Template Builder Functions Controls Search Card Context Average Max Min Total Contributionmaxentity,metricName Contributionmaxentity,metricName Contributionmaxentity,metricName Contributionmaxentity,entities Contributionmaxentity,dimensionName	Preview NLG South Central Region has the lowest NRx (66.1K) while Mid-Central Region has highest NRx (286.9K) NRx 15.1198 Region Mid-Central Mid-Central Region NRx 3.48% Region South Central South Central Region
	Reset Save

If the card has Auto-generated narrative, and you click the **Edit** icon; a blank narrative template opens, and you can create a new card-level custom narrative using this template.

4. Edit the narrative, as required, and click **Save**. Change the template status to Active.



Template Name Tem My New Card Template	nplate Status Type Source Selected Model
show me Nrx by region this month Proceed	Top N - Set Intent
Narratives	+ Add Scope
Template Builder X B I U \Leftrightarrow IE Heading \bigstar E E E E I I	Preview NLG C
Functions Controls Average average.metricName p Search	Average NRx recorded is 237.31K in this month
Card Context (min.metricName) has highest (max.metricName) ((min.smartValue)) while (max.entityName) has highest (max.metricName) ((max.smartValue))	South Central Region has the lowest NRx (<u>66.1K</u>) while Mid-Central Region has highest NRx (286.9K)
Average Contributionmaxentity.metricName Contributionmaxentity.computation Contributionmaxentity.smartValue Max Contributionmaxentity.entities Contributionmaxentity.e	NRx 15.11% Region Mid-Central Mid- Central Region
Min Total	Top Regions by NRx Reference Date: 2022-05-06 Period: 2022-04-30 – 2022-05
	Reset Save

5. Go back to the card and open the narrative. The updated Narrative is displayed as shown in the following figure.

Image: Region TRx ↓ Average TRx recorded 1 Mid-Atlantic 5579,7850 South Central Region Mit 1,23M) while Mid-Atlant TRX (5,98M) 2 Mid-Central 5502,699,06 TRX 15,83% Region Mit Region Mit Region 3 West 4,998,216,63 TRX 15,83% Region Mit Region Mit Region 4 Midwest 4,960,737,09 TRX 3,49% Region Mit Region 3 Southeast 4,340,0328 TRX 3,49% Region South Region 7 Northeast 3926,407,92 392,6407,92 8 SouthCentral 1231,693.83 TRX 15,83%	is 4.41M in ytd aas the lowest TRx (intic Region has highest d-Atlantic Mid-Atlantic i:h Central South Central
i Mid-Atlantic 55797850 South Central Region Minipul Mid-Atlantic i Mid-Central 5502.69906 12.300 / while Mid-Atlantic i Wat 69821663 FR 15.83% Region Minipul Mid-Atlantic i Midwat 496073709 TR 15.83% Region Minipul Mid-Atlantic i Southeast 472674404 TR 3.49% Region Minipul Mid-Atlantic i Southeast 43400328 TR 3.49% Region Minipul Mid-Atlantic i Southeast 63264972 43400328 i Southeast 52649792 5264972 i Southeast 1231.69838 1231.69838	nas the lowest TRx (intic Region has highest d-Atlantic Mid-Atlantic th Central South Central
2 Mid-Central 5502,699.06 TRX (5.50M) 3 West 4.998,216.63 TRX (5.50M) 4 Midwest 4.960,737.09 TRX 3.49% Region Mite Region 5 Southeast 4.726,744.04 TRX 3.49% Region Mite Region 6 Southeast 4.334,003.28 TRX 3.49% Region Mite Region 7 Northeast 3.926,407.92 TRX 3.49% Region Mite Region 6 South Central 3.216,933.8 TRX 3.49% Region Mite Region	d-Atlantic Mid-Atlantic
Wext 4,998,216.63 TRx 15.83% Region Mid Region 4 Midwest 4,900,737.09 Trx 3.49% Region Mid Trx 3.49% Region Mid Trx 3.49% Region Mid Trx 3.49% Region Mid Region 5 Southwest 4,262,744.04 334.003.28 Trx 3.49% Region Mid Region 7 Northeast 3,264.07.92 32.64.07.92 Trx 3.49% Region Mid Region 8 Southwest 3,264.07.92 32.64.07.92 Trx 3.49% Region Mid Region	id-Atlantic Mid-Atlantic
4 Midwest 4,960,737.09 TRx 349% Region South 5 Southwest 4,726,744.04 TRx 349% Region South 6 Southwest 4,334,003.28 Region 7 Northeast 3,266,07.97 Region 8 South Central 1,213,9383 Region	th Central South Central
Southwest SouthWest	an contrar obtain contrar
Southwest 4,334,003.28 Northeast 3,926,407.92 South Central 1,231,693.83	
Northeast 3,926,407.92 South Central 1,231,693.83	
© South Central 1,231,693.83	
Total 35,260,480.34	

Note! If updated narrative is not displayed immediately, close the narrative dialog and open it again.

 Click Save to save the card change. Now, this updated narrative is attached to this card only.



Columns		Ø Search	Narratives	
Region	TRx \downarrow		Average TRx recorded is 4.41M in ytd	
1 Mid-Atlantic	5,579,978.50		South Central Region has the lowest TRx (
2 Mid-Central	5,502,699.06		TRx (5.58M)	
3 West	4,998,216.63		TRx 15.83% Region Mid-Atlantic Mid-Atlantic Region	
4 Midwest	4,960,737.09		TRx 3.49% Region South Central South Centra	
5 Southeast	4,726,744.04		Region	
6 Southwest	4,334,003.28			
7 Northeast	3,926,407.92			
8 South Central	1,231,693.83			
Total	35,260,480.34			

Note! If any action is performed on the card (for example: filter, drill down etc.), you have to refresh the narrative by closing the narrative dialog and opening it again.

Usability

The usability section consists of the common functions/operations used across the WhizAI UI.

Searching

You can enter the name of the field that you want to search and hit the search icon. The system will search and display the records.

List of Data Mod	lels ×				
Code	Model Name	Data Source Type	Created At	Last Modified $ \checkmark$	Active
lifesciences	Commercial Analytics	Druid	12/26/18, 04:36 pm	07/18/22, 05:32 pm	True
TestMultiConnection	TestMultiConnection	Druid	05/24/22, 01:57 pm	05/24/22, 06:07 pm	True
redshift new connection	redshift new connection	Druid	05/20/22, 01:19 pm	05/20/22, 01:19 pm	True

Pinning Columns to the Left /Right/No pin

On the first tab, you can pin a selected column to the left or right or select the no pin option.



Code		≡			Data Source T	уре	Created At
lifesciences	Ś	Pin Column		▶	Pin Left		12/26/18, 04:36 pm
TestMultiConnect		Autosize This C Autosize All Co	Column lumns		Vin Right		05/24/22, 01:57 pm
redshift new conr		Reset Columns			Druid		05/20/22, 01:19 pm

Auto-size Column

You can auto-size selected columns, or you have the option to auto-size all columns.

Reset Column

You can reset selected columns.

Hide/Show Columns

On the second tab, you can either hide columns or show columns you select.

Code	=		Data Source Type				
lifesciences	Search		Druid				
TestMultiConnect	 Code Model Name Data Source Type 	 Code Model Name Data Source Type 					
redshift new conr	 Created At Last Modified Active 		Druid				
collibra	Actions		Sql				

Filtering

You can filter the records on all pages. To apply filters to records:

- 1. Click the **Show Filters** button to make these filters visible.
- 2. In the filter fields, select the required value to display the records accordingly.
- 3. Click the **Reset Filters** button to view all records again.

Sorting

You can click the column headings to sort the values in ascending or descending order. At a time, you can sort the records only by one column. The Up arrow indicates the sorting in ascending order. The Down arrow indicates the sorting in descending order.

Handbook

You can refer to a handbook available on the right side of the WhizAI application window.

