

WHAT'S NEW AND RELEASE NOTES Release: 2020.9

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NEW FEATURES AND IMPROVEMENTS

DATA PREPARATION

Apply number formatting

In this release, dataset modelers can control how to display values in numeric columns. The column format defines how values are displayed in a dataset and in visualizations on a storyboard. Number formats only determine the appearance of the values but do not change how the actual values are stored.

You can format numeric columns as number, currency, or percentage. Each format has its own set of properties. For example, you can define how many decimals to show, what separator symbols to use for decimals and thousands, select the appearance of negative numbers, or whether to use abbreviations for large numbers such as K, M, G, B, or T.

You can define a number format in Step 2 and Step 3 of the dataset preparation process. For example, in the **Data preview** table, point to a numeric column, click **column options**, and then select **Format**.

	🖍 Sample - V	World Sales					80 🖩		
Da	Data preview V Show hidden columns Show 100 C rows								
					SALES				
rs	Quantity	Unit Price	Discount	Gross Sales	Planned Gross Sales	Manufacturing Cost	Sales Cost		
	#	# t = :	#	#	#	#	#		
	15	Rename Change role	7%	167.40	190.8400	3.60	8.35		
	30	Change aggregation •	3%	1978.80	1.7018K	40.80	44.58		
	25	Column info	5%	1021.25	919.1300	21.50	25.43		
	48	Hide	8%	1324.80	1.5103K	28.80	31.50		
	20	Clean 🕨	5%	323	293.9300	6.80	11.46		
	15	Format 🕅	5%	1425	1.3538K	30	33.50		
	10	\$200	4%	1920	1.7664K	40	43.40		
	15	\$12	2%	176.40	201.1000	3.60	8.53		
	7	\$112	6%	736.96	751.7000	15.68	19.74		

In the **Column format** dialog, select which format type to apply: **Number**, **Currency**, or **Percentage**. Then, you can customize the individual format properties as needed.

No	of Transactions	No of Customers	Quantity	Unit Price	Discount	Gross Sales	Planned Gross Sales
#	COLUMN FOR	TAN		×	#	#	
10	Specify a numbe	er format for Unit Price				1425	1353.75
6	Format as		Negative values			1920	1766.40
10	Currency	•	-1234	•		27648	24053.76
3	Decimal places		Display units			1187.50	1246.88
9	2 *		Auto	*		1425	1539
7	Decimal separat	or	Currency			1920	1843.20
3	Period (.)	•	US dollar (\$ / U	ISD) 🔻		1187.50	1330.00
10	Thousands sepa	arator	Display currency			1380	1435.20
9	Comma (,)	•	Symbol	•		14332.50	13902.52
8			Prefix	Suffix		4185	3975.75
2			\$			3880	3918.80
10						1426.88	1312.73
4						2184	1943.76
4				CANCEL	ок	2250	2250
8		64	30	60	5.00%	1710	1949.40

Apply date & time formatting

This release also allows you to control the appearance of the columns containing dates, date-time, or time information. The column format defines how values are displayed in a dataset and in visualizations on a storyboard. Date formats only determine the appearance of the values but do not change how the actual values are stored.

For a date column, you can select a format from a predefined list. For example, you can choose to display a long date, a short date, include a weekday, or spell out month names:

- 03-Dec-20
- 12/03/20
- 03/12/20
- 03/12/2020
- 2020-12-03
- December 03, 2020
- 03-Dec-20 13:30:00
- 03-Dec-20 1:30:00 PM
- Thursday, December 3, 2020
- Thu, December 3, 2020

You can select a date format in Step 2 and Step 3 of the dataset preparation process. For example, in Step 3, go to the **Data preview** table, point to a date column, click **column options**, and select **Format**. In the **Column format** dialog, select a format and click **OK**.

Data preview $ \smallsetminus $					
Sales Date	Iten	COLUMN FORMAT			🗙 it Price
	#	Specify a date format for Sa	les Date		
Jan 1 2017	33	03/12/20	•		2
Feb 1 2017	33	✔ 03/12/20			3
Mar 1 2017	37	2020-12-03			3
Apr 1 2017	17	December 03, 2020)
May 1 2017	39	Dec 3 2020 15:19:19			7
Jun 1 2017	41	03-Dec-20 15:19:19			00
Jul 1 2017	16			0411051	10
Jan 1 2018	23			CANCEL	UK

#	#	#	#	#		•
5	COLUMN FORMAT				× 41.38	2.19
5	Specify a time format f	or New time			41.39	2.19
5	18:45:08	t			41.43	2.17
4.50	✓ 18:45:08				41.38	2.18
4	6:45:08 PM				41.39	2.18
4.50	6:45 PM				41.39	2.18
4.50	18				41.38	2.18
5	6				41.38	2.18
4.50					41.39	2.19
			CA	NCEL OK		

For a time column, you can also select one of the predefined formats.

Rename all columns in a table

Before, you could bulk rename columns only in the last step of the data preparation process. The user experience has been improved, and now, you can rename all table columns right after you select a data source for a dataset.

In the **Selected items** section, hover over a selected table and click **Rename all columns**. Then, in the **Rename all columns** dialog, you can choose how to rename the columns:

- Add prefix Add a data source name or a custom string in front of the column name.
- Add suffix Add a data source name or a custom string after the column name.
- Format Capitalize the column names: only first letter, all uppercase, or all lowercase.
- **Replace** Enter the text that you want to replace and specify a new text. For example, you can substitute the underscore with the space character.

CHOOSE TABLES TO IMPORT		
TABLES	SELECTED ITEMS	
Q Search	Q Search	
 dbo Countries\$ Customers Customer ID Customer Country 	dbo Customers Custor Rename all columns Customer Country	
Customer State	Customer State RENAME ALL COLUMNS Customer City	\times
 Customer City Customers per Store Type 	Add prefix Add suffix Source name Source name	
	Capitalize first letter Capitalize first letter	
	Replace with	
	Example: Sales.Sales_Date	
	CANCEL	Ж

Dataset columns structured in Tableau

When you work with DataClarity datasets in Tableau, the dataset columns are now organized by data sources. If you open a Tableau workbook file generated for a dataset, the columns are grouped in folders by data sources the same way as in Data Preparation.

			Data	Analytics	\$
			🖯 Sample - V	Vorld Sales	
			Search	م	7 Ⅲ •
			Folders		
More act	ions		 Location: City Countring Abc Manage Abc Manage 	s ry er er Avatar	^
Sample - World S	MSSQL 10	.15.16.184	Abc Region	1	
Explore			🕀 State (Code	
Modify 🕨			> E Products	i	
Duplicate			v 🗁 Sales		
Analyze with	Tablfau		🛱 Sales [Date	
Edit certification	Power BI		# Discou	int .	
alian a	Qlik		# Enterta	ainement Cost	
Snare •	Cognos		# Gross	Sales Sales Variance	
Delete	Cognos		# Items	per Transaction	
			# Manuf	acturing Cost	
			# Market	ting Cost	
			# No of 0	Customers	
			# No of 1	Transactions	¥
			🖯 Data Source	Sample - World Sa	ales 🖳 🗄

Consistent naming for aggregations

The aggregation options are now using the same naming conventions in Step 2 and Step 3 of the data preparation process, as follows:

- Sum (instead of Total)
- Average (instead of Avg)
- Minimum (instead of Min)
- Maximum (instead of Max)

Items per Transactio	n No of Transactions	No of Customers	Quantity	Unit Price
# 1∓	A Rename	#	#	#
33	S Aggrediation	Sum	30	68
17	Clean	Average	48	30
41	10	Count	15	100
16	6	Minimum Maximum	10	200
11	10	9	12	2400
26	3	9	5	250
24	10	12	48	87
33	9	14	15	100

In the **Explore dataset** pages, the aggregation options are also using non-abbreviated names consistently.

\downarrow		Items p	er Tran	No of	Transactions	Quantity	
		≡	Y				
	*	Pin Colun	nn	,	3	10	
					2	10	
	Σ	Value Ago	gregation	•	Average	8	
		Autosize	This Column		Count	25	
	Autosize All Columns		First	8			
			Last	10			
	.≞	Group by	Items per Transa	action	Minimum	15	
					Maximum	25	
		Reset Col	lumns		Sum	15	
	Expand All		, , , , , , , , , , , , , , , , , , , ,	15			
		Collapse	All		3	10	
			44		2	25	
		Expand A Collapse	All 44		3	15 10 25	

Rename columns used in calculations

Now, when creating dataset calculations, you can rename any column that is used in a calculation formula. If you do so, the dataset calculations are automatically updated to use the new column names. Note that you still need to review the calculations created in storyboards if any of the input columns have been renamed in Data Preparation. This constraint will be removed in the upcoming release.

Sales V Store Types Locations Products							
Supply Cost #	Profit <u>I</u> # † :	Planned Profit #	Profit Variance <i>fx</i>	Gross Sales Variance <i>fx</i>			
1.70	1820.46	1543.43	277.03	277.03			
1.51	1214.63	1400.10	-185.47	-185.47			
1.35	1308.27	1237.02	71.25	71.25			
1.77	1765.63	1612.03	153.60	153.60			
24.05	25520.31	21926.07	3594.24	3594.24			
1.25	1088.94	1148.32	-59.38	-59.38			
4.00	3536.10	3689.78	-153.68	-153.68			

TM1 Cube View connection details

When connecting to the TM1 Cube View, the **Server** and **Port** fields have been merged into a single **URL** field, where you can provide the full address (including the protocol and port) to the server with TM1 cube view.

ADD DATA CONNECTION	×
Connection details Caching	CUBE VIEW Analytics
Username and Password 🔹	Twit Cube view data source connection
URL	
http://10.12.12.225:8001	
Username	Test your connection
george.becker	After you fill in the data connection
Password	something goes wrong, an error
•••••	message will be displayed.
Cube Name	
Ask user for credentials	
off O-	
Connection name	
TM1 Cube View 10.12.12.225	
	TEST CONNECTION

STORYBOARDS

Date & number formatting

In this release, users can visualize the data columns with the number and date formatting applied in Data Preparation. For example, if a dataset modeler formatted a numeric column with price information as currency, the column will use this format by default.

The legacy local widget formatting has been renamed to **Default number format** and **Default date format**. By default, the local widget formatting is turned off and applies only to the columns with no defined formatting in Data Preparation.



If you select **On** for **Override for all columns**, all the columns will use local widget formatting. For example, the discount value of 7% (formatted as a percentage in Data Preparation) will be displayed as a number, 0.07.



If a dataset modeler changes some formats after you create visualizations for a given dataset, you will need to re-visualize your widgets to update the columns with the new formats.

HTML code widget

In this release, power users can use the **HTML code** widget to add an HTML code and execute it on a storyboard page. For example, you can add some new interface elements, customize pages, and use the **HTML button** and **HTML input** widgets to execute more complex scenarios.

To add your code in the widget, click manage html code, paste the code, and click Save. If you do not want to run the code when your storyboard is in Edit mode, turn on Execute in View mode only. This way, switching a storyboard to View mode will be a trigger to execute the code.

You can find the new widget in the **Widgets** pane, on the **Other widgets** tab.

×		WIDGETS ?	×
EQ.			
Data - HTML code 또 Execute in View mode only Off O	Please add HTML code	Q Search widgets	Ie HTML button
			•

HTML input widget

With the new **HTML input** widget, you can add a text field to enter some input data directly from the storyboard. The input data can be used in a script added in the **HTML code** widget or in the **Custom JavaScript code** section added for a storyboard page.

On the **data** tab, you define the field's reference data, add a default value and a placeholder to let users know what is expected in the text field for further processing.

You can find the new widget in the **Widgets** pane, on the **Other widgets** tab.

×		WIDGETS ?	\times
EQ.			00 0+ ?
Data —		Q Search widgets	
Name			
Store ID		Image & Web	-
ID			BUTTON
storeid	Enter the store ID	Image Web Page HTML co	de HTML button
Default value			
		I	
Placeholder		HTML input	
Enter the store ID			
		Social Media	+



HTML button widget

With the new **HTML button** widget, you can add and style a button on a storyboard page. The button can be used to run the script provided in the **HTML code** widget or in the **Custom JavaScript code** section for a storyboard page.

On the **data** tab, you define the button's reference data. On the **appearance** tab, you can specify its size, font, background color, and borders.

You can find the new widget in the **Widgets** pane, on the **Other widgets** tab.

×		WIDGETS ?	×
EQ.			00 0+ ?
Size —		Q Search widgets	
Size type			
px 👻		Image & Web	-
Width 100 Height 30	Button	Image Image Image Image Image Image Image Image Image	(BUTTOR) HTML button
Fonts +		Social Media	+
Background +			
Border +			

Add CSS and JavaScript to a storyboard page

In this release, advanced users can add JavaScript code and CSS to customize storyboard pages or to design additional elements on a page.

CUSTOM JAVASCRIPT CODE		×	
<pre>function bindButton() { jQuery("#my_button').off('click').on('cli jQuery(".page_nav:first").click(); }); }</pre>	ck',function() {		
setTimeout('bindButton();',1000);	Custom CSS Custom JS		
	Go to Page 1		

The new options are placed in the **Other** section of the **Pages** pane.

	PAGES ?	×
	Appearance	+
	Layout size	+
	Layout	+
	Layers	+
	Other	-
	Custom CSS code 도	
	Custom JavaScript code 크는	

To customize a page's appearance or some elements on a page with your custom CSS code, click **Manage custom CSS code**, and define the styles. For example, you can color each cell with a different color.

To add code to a storyboard page, click Manage custom JavaScript code. For example, you can add code for a button (widget) to open a certain storyboard page.

View storyboards' recipients in List view

Previously, the **Subscribers** column appeared as a shortcut to the **Share** dialog for each storyboard, even if it was not shared. The column has been renamed to **Shared with**, and the corresponding icon appears only if a storyboard is shared. Moreover, you can quickly see how many users received the storyboard: the first number represents group recipients, and the second one represents user recipients.

My storyboar	ds Shared with me ?	C			
Q Search story	/boards	+ NEV	N STORYBOARD		Certified only
	Name		Last updated	Shared with	
	Table	***	July 8, 2020, 2:59:43 PM		
	Sample - Profitability	***	October 2, 2020, 11:42:31 AM	<u></u> (1 2)	
	Sample - Product Segmentation	***	October 2, 2020, 11:42:31 AM		
	Sample - Multiple BI	***	October 2, 2020, 11:42:31 AM	🕾 (1 2)	
	Sample - Monthly Sales	•••	October 2, 2020, 11:42:31 AM	🙈 (0 1)	
	Sample - Geospatial Routing	***	October 2, 2020, 11:42:30 AM		
	Sample - Geospatial	***	October 2, 2020, 11:42:30 AM		

Filter data by one column in Table

If you use filtering actions with the **Table** widget, you can now choose which filtering value to use for the target widget. By default, clicking a cell will filter the data by the value in that cell. With the new **Filter by first column only** option, the data is filtered by a specific column no matter where a user clicks in the table row. In this case, the column used for filtering is the first column selected in the **Columns** field on the **data** tab.

You can find the new option on the **advanced** tab of the widget settings pane, in the **Actions** section.

⊘ ₫ ?	\times	ACTIONS ?			×
Actions Actions Actions (1 as source) Filter by first column only On	-	As source (1) As Q Search actions Name Filter by country	Event Left click	Action Filter	+ NEW -
Clear filter on cell toggle Off O— Animation and effects	+				



Clear filter on cell toggle in Table

In this release, you can choose how to interact with the filtering actions in the **Table** widget. Previously, clicking a cell for the second time always cleared the applied filter. If you set the new **Clear filter on cell toggle** setting to **Off**, the target widget will stay filtered even after the second consecutive click on the same table cell.

You can find the new option on the **advanced** tab of the widget settings pane, in the **Actions** section.

⊘ ♂ ?	\times	ACTIONS ?	×
		As source (1) As target	+ NEW -
Actions	-	Q Search actions	
Actions (1 as source) Filter by first column only Off O Clear filter on cell toggle On		Name Event Image: State of the state o	Action Filter
Animation and effects	+		

Use additional columns for visualization queries

Now, users have a dedicated field to add the columns that are not used directly in the visualization layout but are included in the query scope. For example, you create a complex script calculation based on some columns that should not be plotted on the visualization itself. In this case, you add these columns in the **Other** field on the **data** tab of the widget settings pane.

	Items per Transaction (Sum) $~~ imes$
	MyScript (Sum) 🍄 🛛 🗙
T	poltip
Tı	rellis
C	olor
	⊖ Stacked
0	ther
	Gross Sales (Sum) \times
	Discount (Sum) $~\times~$
	Unit Price (Sum) × Country ×

Other enhancements in Table

The **Table** widget has been enhanced to improve the user experience:

- When you change the **Group data** switch to **On**, each measure's aggregation automatically changes from NONE to the measure's default aggregation.
- When you hover over the column header, the divider line is shown to help you resize the column more quickly.

	Appliances		Aut	tomotive		Ele	ctronics
ntry	│	Unit Price	Profit	No of Custom	Unit Pr	Profit	No of Custom
Chile (4)	196.00	1.09K	10.86K	51.00	150.00	1.79K	205.00
Kosovo (4)	78.00	737.00	5.03K	17.00	54.00	582.52	131.00
Uzbekistan (4)	115.00	1.34K	15.13K	29.00	60.00	792.09	194.00
Mexico (4)	7.81K	1.68K	195.96K	4.24K	2.63K	187.88K	12.31K
Senegal (4)	145.00	1.1K	12.43K	33.00	150.00	1.79K	216.00
Germany (4)	5.31K	3.68K	363.67K	9.57K	6K	584.61K	17.49K
Switzerland (4)	1.72K	2.64K	102.27K	1.3K	6.04K	190.3K	2.96K
United Kingdom (4)	5.75K	3.38K	333.4K	6.64K	2.23K	168.66K	15.66K
Sierra Leone (4)	175.00	1.1K	8.39K	51.00	158.00	1.37K	176.00
Honduras (4)	221.00	714.00	8.73K	33.00	328.00	4.16K	239.00
Albania (4)	587.00	1.3K	31.04K	83.00	90.00	2.34K	474.00
Tunisia (4)	259.00	1.12K	14.35K	33.00	328.00	4.16K	308.00
Portugal (4)	2.19K	2.86K	65.34K	1.61K	5.81K	61.86K	3.12K
Thailand (4)	306.00	1.1K	11.39K	51.00	150.00	1.79K	455.00
Zambia (4)	244.00	1.02K	10.7K	31.00	328.00	3.66K	269.00

Column search in Filter & Highlighter

Now, selecting a column in the **Filter** and **Highlighter** widgets has become faster. Users can now search for a column directly in the **Column** field, and the column list is filtered as you type. Moreover, the columns are sorted alphabetically.





Text & date formats in Single Value

The **Single Value** widget can now display text and dates. The **Format** drop-down list now includes **Text** and **Date**. To use these display formats, you should create an aggregated calculation. For example, to view the earliest sales date, you can use a formula similar to *min([Sales Date])*.



Consistent naming for aggregations

The aggregation options are now using the same naming conventions in visualizations, script calculations, and in the **Table** widget. The "Total" aggregation has been renamed to "Sum."

When selecting aggregation for a column, you will see the full aggregation names like *Average* or *Maximum* on the menu. However, the visualizations' data settings and layout use the abbreviated options, such as (*Avg*) or (*Max*), which improve the readability of the labels.



Preview a script code

Previously, you could only preview the connector ID, output data type, and the columns selected for the script. Now, after adding code in the script editor, the code also appears in the **Calculations** pane as a preview. Additionally, when hovering over the preview area, you can see a message instructing how to open the script editor.

		5	Dimension	*
imensions	— import nun from skleai from skleai X = np. colu	npy as np rn.cluster import DBSCAN rn.preprocessing import S imn_stack(f_arg1,_arg2))	tandardScaler	
Products	X = Standa db = DBSC	To edit the calculation, cl	lick the Edit script button below	
Cales Sales	return resu	lt	₽	

The default size for some widgets

Now, instead of automatic snapping to a cell, some widgets have certain default sizes if you drag them from the **Widgets** pane to the page area:

- Single Value (default size 250x250px)
- Image (default size 250x250px)
- Text (default size 250x250px)
- Html button (default size 200x100)
- Html code (default size 200x100)
- Html input (default size 300x100)

If you want any of these widgets to be automatically snapped, add them from within a cell.



Cancel visualizing a widget

Previously, if a widget's data could not be visualized for some reason, the spinner was displayed infinitely with no possibility to cancel the query. Now, you can use the **Cancel** button to stop visualizing data when needed.



Percentage sign in Pareto charts

The Pareto charts now display a percentage sign after the numbers representing cumulative percentage on the respective axis and in tooltips.



DATA SCIENCE

Deploy custom Python libraries

Now, administrators can deploy the company's own custom Python libraries. The Python libraries location is now persistent, **python_server/scripts/**, where you can add any Python libraries needed for AI projects.

The libraries' location can be found in Kubernetes, under **Config and Storage > Persistent Volume Claims**. Click the **custom-python-script-pvc** and then open the volume name link. The **Path** is specified under the **Source** box.

INSTALLATIONS & CONFIGURATION

Deploy the platform behind the external SSL balancer

Administrators can now deploy the platform behind an external SSL balancer while the internal connection does not use SSL. The installation script now includes two new options:

- **Disable HTTPS** This option allows to select whether to enable HTTPS.
- **Disable built-in SSL termination** If an administrator enabled HTTPS, this option allows to place a gateway (reverse proxy) that will handle SSL offloading in front of the platform.



Create a tenant in Access Manager

Now, master administrators can create a fully configured tenant directly from the Access Manager interface. Under the realms drop-down list, click **Add realm** and then adjust realm configuration settings as needed.

Access Manager		
Select realm	REALMS	
Dataclarity	Realm	
Marketing	marketing	
Master	newtenant	
Newtenant		
ADD REALM		