Causality Link Software-as-a-Service Documentation

Last Updated: September 2023

The objective of Causality Link Software-as-a-Service ("SaaS") is to provide decision makers, analysts and researchers with a toolkit to explore the knowledge extracted from millions of news articles in a "wisdom of crowds" manner. Users can explore the past and future performance of countries, companies and industries.

The knowledge available in the SaaS application is based on a licensed worldwide collection of news articles written in 27 languages over the last 9 years coming in at a rate of 50,000 new articles each day. The first source in this collection comes from Moody's, which is an aggregator and distributor of 8,000 worldwide newspapers. The second source is MT Newswires which is a publisher of financial news. This set of content covers the full range of newsworthy topics relevant to markets.

The knowledge extracted is composed of a "Signal" and "Model", each of which apply across the country, company and industry categories.

The "Signal" is scored on a scale of 0-100 and measures the positive trend percentage ("PTP") for each indicator.

- A PTP of 0 indicates all authors are saying that the KPI is decreasing.
- A PTP of 100 indicates all authors are saying the KPI is increasing.
- A PTP of 50 indicates an evenly split consensus.

Each indicator is based on a Key Performance Indicator ("KPI") with additional descriptors providing the context in which the KPI was found. These descriptors take the form of a Location, Company, Product, Industry.

The "Model" is a representation, either in a graph or table, that displays the Causal Links (or relationships) between indicators. An example of a causal link is the relationship between USA-Interest Rate and USA-Inflation Rate.

The rest of this document describes the usage of the Causality Link SaaS software.



1. The upper bar

All the top panels which we will describe contain an upper bar that enables navigation between them.

The left part of the bar enables the user to toggle between the Dashboard panel ("Trending), the Portfolio panel, the Texts panel ("Analysis") and the Novelty Report panel. We are describing each of these panels in this document.



The right part of the bar gives access to a search mechanism, this documentation, and a pull-down menu for user customization.



The search mechanism works for Locations, Industries and Companies, and gives access for the selected item to four specific panels (Signal, Indicators, Model and Events) related to the searched entity. These panels are described in this document.

Note that these specific panels apply to specific levels in the ontology, and the system will automatically position the selection to the appropriate level. For example, these panels only work at the country level, so if you type "Paris" the system will suggest you "France" or if you type "Salt Lake City", the system will suggest "USA". If you type a ticker symbol, the system will suggest the public companies using this ticker symbol, and if you type the name of a product like "PS4" or "ES8", it will suggest the name of the lowest level listed company manufacturing this product (here "Sony" or "NIO").

The user customization pull-down menu region gives access to Favorites, the Time Machine, User parameters and the ability to Logout. These customization features are described in the Appendix part of this documentation.



2. Dashboard – Default Landing Page

- a. Top Indicators
 - i. This report is intended to serve as a daily summary of what is being discussed in the day's news. The five donut charts follow the five key concepts modeled in the Causality Link ontology.
 - ii. To drill into any concept and to find articles about that topic, click on any part of the donut chart, or make the selection within the five drop-down boxes below the donut charts. To reset, press the "X" to the right of the drop-down boxes.
 - iii. To adjust the time period, change the dropdown and select between "Forecasts", "Past and Present" or "Any Timeframe".
 - iv. To access the source text from which the signal was extracted, click the article title in the text table below the drop-down boxes.
 - v. To filter the donut chart and associated articles to only the companies within a portfolio, press the "star" in the top right corner and select the portfolio.
 - vi. To export a spreadsheet with the sentence mentions, including the Location, Indicator, Industry, Company, and Mention, click the download button.





- b. Top Events
 - i. This report is intended to serve as a daily summary of the <u>events</u> being discussed in the day's news. The six donut charts summarize the event metadata modeled in the Causality Link ontology.
 - ii. To drill into any event parameter, click on any part of the donut chart, or make the selection in the drop-down boxes below the donut charts. To reset, press the "X" to the right of the drop-down boxes.
 - iii. To adjust the time period, change the dropdown and select between "Forecasts", "Past and Present" or "Any Timeframe".
 - iv. To access the source text from which the signal was extracted, click the article title in the text table below the drop downs boxes.
 - v. To filter the donut chart and associated articles to only the companies within a portfolio, press the "star" in the top right corner and select the portfolio.
 - vi. To export a spreadsheet with the sentence mentions, including the Type of Event, the Industry (or Segment), the Location and Person, click the download button.





3. Portfolio

- a. Default Portfolio
 - i. The Default Portfolio is a prepopulated list of 20 companies that are commonly in the news and operate in a variety of sectors.
 - ii. Model: To access the Causality Link Causal Model for the company, click the 🖼. More information for the Causal Model described below.
 - iii. Signal: To access the Causality Link Signal for the company, click the 🕰. More information for the Signal described below.
 - iv. Indicators or Events: To access the Causality Link Indicators or Events for the company, click the 🖽 or 🛄.
 - v. Recent Mentions: Over the last 7 days, the total number of mentions of indicators of the company, by day. Selecting a bar will select the corresponding day.
 - vi. Recent Topics: The KPIs most frequently mentioned during the selected day, initialized as of today. Selecting a KPI will open a new panel corresponding to the quotes of the day including that KPI or one of its descendants, as well as the title of the article in which they were found and the attribution of the article.
 - vii. Stock statistics are provided, delayed up to 15 minutes.
 - viii. Portfolio: To view another portfolio, or build a new portfolio select the
 - ix. Alerts: To change whether daily email alerts will be sent to you for the companies listed within each portfolio, select the .

			ii	iii iv	v	vi		vii		viii ix
		Trending Portfo	lio Analysis Novelty Report							× Help × 💄 •
		Portfolio - I	Default							بې
		Symbol 🕤	Companies by Name 🗸 💿	Actions	Recent Mentions 3	Recent Topics 🕤	Latest 🕤	Change 🕤	Prior Change 🕤	Volume 🕤
		1 BABA	Alibaba	⊞%∿⊟		Total for 2023-03-30 Financial Activity Stock Price Ipo Plan	1460 180 195 \$98.55 (USD 114 81			20,117,745
		2 6006	Alphabet (Google)	⊞%∿Ö	h1.11	Total for 2023-04-06 Demand Usage Development Macroeconomic Indicators				21,864,200
i -]	3 AMZN	Amazon	⊞%10≛		Total for 2023-04-01 Demand Investment Revenue Production				45,175,393
-		4 AAPL	Apple	# % ℃ ⊟	1	Total for 2023-04-06 Deal				51,511,744
		5 T	AT&T	⊞%10Ö	1],]	No discussion on 2023-04-06				38,673,247
		6 BAC	Bank of America	⊞%1/⊟		Total for 2023-03-30 Stock Price Stock Statistics Total Count Plan	257 39 26 \$27.64 (USD 26 23) 1.215%	-1.220%	47,799,353



- b. Creating a New Portfolio
 - Click on the Star button, then "+ New Portfolio", then enter a name, then click the newly named portfolio.

Symbol (GS). Industries and Countries can also be



Search.

To add equities to the new portfolio, click the "+" sign on the left side of the page. The search function allows Companies to be added based on the Company name (Goldman Sachs), possible synonyms (Goldman) or Ticker

added to a portfolio to monitor their activity. It is also possible to add companies in bulk by selecting the "Or click here to add in bulk" option.

c. Email alerts

• Click on the Bell button to access the blank alerts panel:

Manage Email Alerts	
Email Preferences for Portfolio: Default	
New Forecasts Q	
Summarize the indicators for each portfolio target that were discussed each day as a forward looking statement, forecast, or future expectation.	
Novel Stories Q	
Each indicator and event for the target portfolio will be assessed for novelty relative to the past one hundred days. The most novel results, grouped by target, are summarized with associated quotes.	
Save Cancel	

- You can then either focus on forecasts for indicators/trends or also add events, by toggling the New Forecasts of Novel Stories.
- If you select New Forecasts, you will be able to modify a few parameters in the query, the only compulsory one being the Min Mentions. If you set it low (1 or 2) you will have more alerts and more errors. Above (that is 3 or 4) seems to be the sweet spot, and above again (5 or more) is restricted to the major news.



Manage Email Alerts	×
Email Preferences for Portfolio: Default	
New Forecasts Q	
Summarize the indicators for each portfolio target that were discussed each day as a forward looking statement, forecast, or future expectation.	J
Monitor 🥪 Companies 🛃 Industries 🚽 Countries	
Include Forecasts that are 皮 Up 🕝 Down 🖌 Flat	
Min Mentions 2 C	
Novel Stories Q	
Each indicator and event for the target portfolio will be assessed for novelty relative to the past one hundred days. The most novel results, grouped by target, are summarized with associated quotes.	
Save Cancel	

- If you select Novel Stories, you will receive an email on new indicators, trends and events based on their novelty, that is the percentage of similar mentions in the last 2 days vs the last 100 days, with a minimum of 20%.
- If you are not interested in all the KPIs or Events that are available, it is possible to select a subset of them in the "Novelty Report" panel and save this selection as a named filter. This name should be selected in the pull-down menu of "Saved KPI Selection" or "Saved Event Selection".
- Email alerts are generated daily to the email of the user right after 12 am UTC.

Man	age Email Alerts	
Sum	nmarize the indicators for each portfolio target that were discussed each day as a forward looking	
	ement, forecast, or future expectation. Novel Stories	
	h indicator and event for the target portfolio will be assessed for novelty relative to the past one dred days. The most novel results, grouped by target, are summarized with associated quotes.	
	Trends	
	Results per target 2	
	Saved KPI selection All Saved selections can be All BG-ESG BG-ESG ACM demo	
	Events ACM demo Results per target 2	
	Saved Event selection All Saved selections can be created using the selections button on the novelty report page	
Sav	Cancel	



4. Analysis: accessing the full texts of the corpus

Licensed SaaS users have the right to browse through the corpus of texts licensed by Causality Link.



The numbers in grey indicate the number of indicators detected, green is for trends, blue for causal links and orange for events.

The search bar enables keyword search across the corpus, while the star icon gives access to a pull-down menu of portfolio which can be used to filter the articles.

For more customization, one can open the modal window bar on the upper left side of the window:



This opens a temporary panel which will let the user select the publishers, authors, or languages of choice, as well as specify some time window for the searched texts.

That panel can either be pinned (or unpinned) using the button or closed using the right bar to that panel 🔄.

Article Filters]	¥
Le la	🖬 Publishers 👻	
	🖬 Author 🔫	
1	🖬 Symbols 👻	
E	🖬 Languages 🔻	
Art	icles Newer Than	
mm/dd/yyyy		
Ar	ticles Older Than	
mm/dd/yyyy		

Symbols refer to ticker symbols or company names and enable filtering texts to only those who contain a recognized reference to the selected companies.



5. Novelty Report and Alerts

- a. To generate a set of documents using the "Novelty Report", one has first to select a portfolio as the current portfolio, otherwise the "Default" portfolio will be used.
- b. The configuration panel is used to choose the number of past days (up to 7) scanned for relevant documents as well as to filter on all mentions or just the ones that correspond to a forecast.

Trending Portfolio Analysis Knowledge Other - Admin -		Search X Help - 2 -
Settings Settings Quey # Recent days to search: I Brecent days to search: I Fiters Minimum novelty: 20 Fiters Minimum novelty: 20 Bitters Minimum novelty: 20 Bitters Minimum novelty: 20 Bitters Bit	require implementing 75% fewer semiconducto battery. These changes are among the key inno Toyota (NYSE:TM) Toyota Argentina is making significant strides i recent years. The company is recycling wasten sewing workshops. The initiative recycles every	h I C A A A A A A A A A A A A A A A A A A
Causality Link, LLC © 2016-2023		Contact Us

- c. Once the desired changes in the configuration panel are done, the "Run Query" button triggers a query to the data lake to refresh the results.
- d. Any selection below the line will have an instant effect on the panel. For example, increasing the Minimum Novelty will tighten the filtered results to just the most novel ones, selecting or unselecting the "Causal Links", "Events" or "Indicators" toggle will filter mentions containing these detections. It is also possible to select the top KPIs of the Novelty Report by selecting them in the KPI selector. Multiple selections are authorized and selecting a high level KPI is equivalent to selecting all the lower-level ones. However, they can be unselected individually.
- e. The main topics are the companies, industries or countries that were in the portfolio, and which are the current context of the detections.



- f. The texts correspond to the transformation by a LLM of the quotes resulting from the Novelty filtering. The Novelty Score is the percentage of relevant detected mentions in the N past days over the mentions of the same display KPI tree + Target detected in the past 100 days. If N is 1, and the mention is detected at the same frequency every day in the past 100 days, the Novelty Score will be 0.01. However, if that detection never happened in the past 100 days but for today, the Novelty Score will be 1.00.
- g. The quotes are available by selecting "Show Quotes" and the full texts from which they were extracted are available when "Read" is selected.
- h. It is possible to save such KPI or Events selections as reusable Novelty Report filters

using the button in the upper right part of the window.



6. Entity specific panels

Four panels are dedicated to single entities among companies, industries, and countries. For each entity, these panels correspond to the detected indicators events, trends, and causal links. The main way to access these panels is to type the name of the entity in the upper right "Search" bar.

Once in any of these four panels, a second top bar appears below the initial one.

The left part of that bar enables the selection of any one of the four panels by clicking on any of the four icons, representing, from left to right: Indicators, Causal Links, Trend Signal (over 18 months), Events:



The right part of that bar contains a fixed part and a variable part. The fixed part is the "Toggle Filters" button whose action is explained in the Appendix.

The Events and the Causal Links panels only contain this part.

The Trends Signal panel adds the button "Reset Charts" which resets the parameters of the charts at their default value.



The Indicators panel adds the "View Headlines" button which opens a panel containing a summary of the news containing at least one detection of a KPI for the selected entity.



6.1 Entity Indicators

For simplicity, we will here use a company as the entity, but the panel is unchanged for any industry or country.

This panel provides a summary for the most discussed key performance indicators for an Entity.

- a. To change the sorting, change the "Indicators by" drop-down in the first column or press the column header on which to sort. Select the name of any indicator to view the drivers of that indicator (see 6.1.1).
- b. Recent Mentions: The number of mentions of the indicator in the last 7 days.
- c. Recently Discussed: The KPIs most recently discussed in the last 7 days.
- d. Causal Links: The number of causal statements citing a driver of the indicator
- e. Forecast: The Positive Trend Percentage, or PTP, that measures the percentage of forecasted trends that are upward. >50% represents a bullish forecast, <50% represents a bearish forecast, 50% represents a split consensus. Selecting the slide bar will open another panel explaining the evolution of this indicator in the past 18 months (see 6.1.2).
- f. When pressed, this button will show a graph for each of the KPIs of a company that compares the KPI history vs the stock price of that company. It is not operating for countries and industries.

Ind	icators of: Intel	ଟେ∿ପ			Toggle Filters
#	Indicators by Causal Links ÷	Recent Ø Mentions	C Recently Discussed Ø	Causal Links	e f Forecast Ø
1	Intel Production	438	Production 334 Supply Chain 53 Plants 37	341	86
2	Intel Revenue	170	Sales Volume 50 Sales 41 Deliveries 35	232	79
3	Intel Demand	125	Demand 40 New Orders 23 Customer Demand 20	176	98
4	Intel Profit	71	Results 36 Profit 15 Net Income 7	159	64
5	Intel Employment	65	Employees 37 Employment 20 Productivity 7	136	75
6	Intel Market	92	Market 86 Addressable Market 6	120	60
7	Intel Assets	207	Intellectual Property 130 Patent 35 Properties 27	83	50
8	Intel Risk	56	Risk 50 Risk Mitigation 5 Security Risk 1	80	33
9	Intel Investment	119	Investment 114 Capex 5	79	96
10	Intel Expenses	92	Expenses 92	75	70



6.1.1 Drivers of Indicator

This page is intended to serve as a tabular causal model for the selected Indicator (target).

- a. The score at the top of the page is the forecasted Positive Trend Percentage for the target indicator (Intel Profit on the screenshot below) for the current date.
- b. To change the grouping mechanism, change the "Drivers grouped by" drop-down.
- c. To change the sorting, change the "Then ordered by" drop-down.
- d. Recent Mentions: The number of references to this indicator in the past seven days. You can click this number to see all the source text.
- e. Forecast: The forecasted PTP for that indicator. To reveal underlying data and source texts that were leveraged to create this statistic, press the Forecast bar (more on this below).
- f. Relationship: The Positive Relationship Percentage. A negative score reflects a negative relationship, a positive score reflects a positive relationship. The white box shows the recent range of the relationship. To reveal underlying data and source text that were leveraged to create this statistic, press the Relationship bar (more on this below).
- g. Last Quoted: Refers to the date when the causal relationship was last mentioned.

Driv	vers of: Intel Profit ⊞		64 a a		Toggle Filters 🝸 📕
b	Drivers grouped by Indicator Group ÷	d	e	f	g
С	Then ordered by Frequency ÷ ?	Recent Mentions	Forecast @	Relationship @	Last Quoted 😧
1	Intel Revenue	174	80	89	8 FEB 2021
2	Intel Profit	71	64	-87	23 FEB 2021
3	Intel Production	445	87	43	19 JAN 2021
4	Intel Stock Price	64	25	44	25 JAN 2021
5	Intel Market	94	60		26 APR 2019
6	Intel Expenses	92	70	-233	24 JAN 2021
7	Intel Taxes		88		26 OCT 2018
8	Intel Risk	56	33	100	13 AUG 2020
9	Intel Assets	207	50	100	10 MAR 2021
10	Intel Investment	119	96	-100	31 MAR 2021
Show	v All				



6.1.2 Trends Signal over time

Upon selection of any Indicator Forecast slide bar, an embedded panel will expand to display the monthly evolution of that forecast over the past 18 months. That panel can have three different formats for this evolution and the orange arrow shows how to select the desired display format.



e-1 displays the monthly number of positive trends (green) and negative trends (red).

e-2 displays the trends over time for the selection and applies a statistical significance. Taller bars mean that the signal is less significant. Shorter bars mean that the signal is more significant.





e-3 displays the monthly evolution of the total number of mentions for the indicator.



For each of these three formats, it is possible to filter the detections and their count by using the pie charts above the bar charts or the associated pull-down menus.

Selecting any of the bars gives access to the underlying quotes and selecting any of them give access to the full text.

It is also possible to download the displayed mentions in a spreadsheet for further treatment.



6.1.3 Causal Links over time

Selecting a "Relationship" slider (see 6.1.1) will expand in place a new panel which displays the individual detections of that causal relationship over time.



f-1: This scatter plot charts each mention of the relationship with the corresponding strength (y-axis) over time (x-axis).

f-2: To change the date range, change the window on the x-axis.

f-3: To navigate to the source text, click on the text.

f-4: To go to the Reader for quick scan of all selected texts, click on "Read Articles" button.



6.2 Causal Model

The Causal Model is intended to serve as a graphic representation of the major drivers acting upon an entity: company, industry or country.



- a- The nodes represent Indicators or Events and their number the current PTP of that indicator, which will be green if it is above 50% indicating growth. Events are white. Double clicking on a node will open its drivers panel (see 6.1.1).
- b- The arrows represent causal relationships. Their thickness represents the frequency of mention of the relationship. Their direction represents the direction of the relationship. Their color represents a positive (green) or negative (red) relationship. Double clicking will open the Causal Relationship panel for that link (see 6.1.3).
- c- The modal window bar opens a configuration panel with more options.



This configuration panel lets the user choose: the Model Type (a), the graph size (b), the types of links shown on the model (c). The toggle button (d) will stop the graph layout mechanism, which could cause some spinning. Entering another entity name (such as another company) will trigger the display of the comparison between the two causal graphs of the main entity and the compared one.

Link Settings		Ŧ
Model Type		
Top by Link Count 🛛 🗸	a	
Link Filters		
Graph Size Small v	Ь	
Internal Links		¢
✓ Industry Links ✓ Company Links		
✓ Macro Links ✓ Event Links		
Physics d		
Compare Models		
Search	e	×

Types of links:

Internal Links: Intra-company relationship (e.g. NIO Production -> NIO Revenue) Industry Links: Between an industry and the company (Semiconductor Production -> NIO Production) Company Links: Between two different companies (NVIDIA Production -> NIO Production) Macro Links: Between a Location and the company (USA Interest Rates -> Intel Demand) Event Links: Between an Event and the company (China Epidemic -> NIO Revenue)



6.3 Trends Signal

The Signal provides a synthetic view into the trends associated with the entity being analyzed over time. It is most useful for public companies as trends can be compared to stock prices.



The orange curve represents the evolution of the stock price over the period with the scale on the right.

The blue curve represents the selected aggregation of PTPs with the 0-100 scale on the left. This Signal has been extracted from texts and represents the "consensus view" of the company, generated by collecting trends on selected key performance indicators, using a training window (90 days by default) and a half-life decay (30 days by default).

A configuration panel (a) enables a high degree of customization of that signal.

The top bar chart (b) represents the daily number of detected trends (green is positive, red is negative, and blue is flat or unknown). Clicking on a bar will display the quotes containing these trend mentions.

The bottom bar chart (c) represents the daily number of detected events.

The configuration panel can be opened, closed, or pinned.



The configuration panel main goal is to enable users to explore the different KPIs and Events influencing the company stock price.

Trends	Events General	¥					
Time Constraints							
Forecasts	• • a	*					
Aggregatio	n Settings	d					
Rolling Peri	od (days): Decay Period (d	lays):					
90	c 30						
Signal Weig	ihts b Toggle All Weights To	oggle Row Expansion					
1	Revenue	192 🗸					
1	Production	121 🗸					
1	Production	87					
1	Plants	13					
1	Production Capacity	12					
1	Supply Chain	9					
1	Stock Price	107 🗸					
1	Prices	84 🗸					
1	Profit	67 🗸					
1	Market	43 🗸					
1	Demand	30 🗸					

The trends that have been collected are categorized as "forecasted" trends (meaning they are to happen in the future) or "past and present" trends (meaning they already happened or are happening now). The Signal (blue line) is by default the trend forecasts but can be changed depending on user selection of this field (a).

The Key Performance Indicators (b) are the key ingredients in the Signal (blue line). The indicators can be removed by clicking on the indicator name (such as "Revenue"), or by changing the indicator weight to zero. They can also be increased to amplify the indicator impact. The Signal changes when changes are made to the Indicator Weights. "Toggle All Weights" will set all indicator weights to 0. "Toggle Row Expansion" will display all the underlying KPIs. The down arrow will expand just the underlying KPIs below the selected KPI (as demonstrated for "Production").



The training window and half-life period of the PTP can be adjusted (c) to fit the frequency of the mentions detections. For macro signals such as the price of oil or other commodities, a shorter decay period (such as 5 days) will create a more responsive signal. In general, it is best to keep the training window to about 3-5 times the half-life.

It is also possible to download the detections and quotes in a spreadsheet format (d).

The Events configuration panel provides a subset of the configuration capabilities of the Trends configuration panel because Events are not integrated in the Signal so far.

The General configuration panel is about the structured data imported in the graph.

Trends Events	Genera	al 📮	
Pricing Settings			
Show Price		Symbol Override	¢
Additional Symbol		Additional Symbol	

It is possible to toggle the orange curve (the stock price) with the Show Price toggle, or even to get a different ticker symbol for the orange curve in the Symbol Override editor.

It is also possible to add another ticker symbol (in the Additional Symbol editor) and toggle its presence as an additional white curve. This is useful to compare the performance of two companies, or to compare one company with the ETF of its industry.



6.4 Events

	Trending Portfolio Analysis Novelty Report		Search	× Help • 💄 •
Εv	ents of: Intel ⊞ જ ∿ 🗇			Toggle Filters 🔻
#	Events by Most Recent Event 🗸	Recent Mentions	? Forecast ?	Last Quoted ₍₂₎
	Intel Analyst Upgrade	16	2	Apr 7, 2023
2	Intel Project	64		Apr 7, 2023
3	Intel Plan	24		Apr 7, 2023
4	Intel Financial Activity	14		Apr 7, 2023
5	Intel Intellectual Property Activity	284	24	Apr 7, 2023
6	Intel Report	48		Apr 7, 2023
	Intel Deal	23		Apr 7, 2023
	Intel Collapse	8		Apr 7, 2023
9	Intel Product Activity	7		Apr 7, 2023
	Intel Review	21		Apr 7, 2023
	Intel Settlement	2		Apr 7, 2023
	Intel Lawsuit	14		Apr 7, 2023
	Intel Partnership	39		Apr 7, 2023
	Intel Employee Activity	9		Apr 6, 2023
15	Intel Achievement			Apr 6, 2023
16	Intel Analyst Downgrade	2		Apr 6, 2023
17	Intel M A Activity	13	2	Apr 6, 2023
	Intel Criminal Activity	20		Apr 6, 2023
19	Intel Company Announcement	5	•	Apr 6, 2023

The Events panel is simple as we do not generate a signal from Events, just record their mentions.

It is possible to filter the list of events by Name, by number of Recent Mentions, and Most Recent Event.

Selecting a number in the column "Recent Mentions" will give access to the corresponding quotes.

Selecting a number in the column "Forecast" will produce a simplified version of the 6.1.2 e-3 panel.



Appendix:

This part of the documentation focuses on three features that can be accessed through many panels: the static user configuration panel, the "Toggle Filters" button and the Full Text panel.

A1 User Configuration

The User Configuration panels are accessible through the drop-down menu on the utmost upper right part of the screens, with the screens.

This drop-down menu contains four items: "Favorites", "Time Machine", "My Profile", "Logout".

"Logout" is the simplest one, as it enables disconnection to the SaaS server, and the user will have to login again with his/her credentials to access the SaaS.

"My Profile" will give the user access to his/her information: first name, last name, email address and time zone. The user can also change his/her password and check his/her login history.

"Time Machine" will let the user select the "current date". By selecting a different date (in the past), the system will reposition itself as if "now" was that date, and all detections from texts that arrived after that date will be disregarded.

×				
E Reset				
Adjust the date on which the system will consider "now". All metrics and counts will be adjusted as if they were being viewed on the end of selected date (UTC). Press 'Reset' to show today's date. Press 'Apply' to see data for the shown date'				

Once the user has pressed the "Apply" button, a transient light orange upper bar will appear on most panels (but for the "Analysis" and the "Novelty Report" panels) to remind the user that he/she has changed the definition of "now", as well as to enable them to readjust this date, or get back to the regular "today".

Finally, the "Favorites" capability enables the user to get back to some of the texts he/she has bookmarked.



First time users will have an empty page of "Bookmarks and Favorites" (unles	s they have created
one or many portfolio) and the ability to Add a "Collection" by pressing the "+	+ Add" button.

Add Collecti	on	×
Name	Enter Name	
	Provide a full name for this collection.	
Symbols	Search	×
Authors	Search	×
Industry Groups	Search	×
Shared with	Search	×
Publishers	Search	×
	Save	

Collections are extended definitions of Portfolio: all Portfolios are automatically mapped into equivalent Collections and all Collections are Portfolios.

As for Portfolios, the user should select a name which should describe what topics that Collections cover. The symbols and Industry Groups have to be edited through the Portfolio editor (see 3).

In Collections it is possible to add a filter on Authors and Publishers.

It is also possible to share them among "compatible" named users.

Once a Collection or a Portfolio is created, it is possible to bookmark texts (using the icon).

Portfolio or Collections can be viewed as indexing and filtering mechanisms for quick selective access to topic-focused information.



A2 Filters

The "Toggle Filters" button which is present on all four Entity specific panels is an on/off switch that either lets all articles contribute to the panel, or only lets filtered articles contribute.

To establish an article filter, the user must press on the "Adjust Filters" Note icon just right of the "Toggle Filters" button.

For Indicators, this opens the following filter definition panel. A simpler panel is available for the three other panels.

Filters	×
Minimum Forecast	0 in %
Publishers	Publishers -
КРІ	All Search Q
Articles	Articles -
	Reset Done

The Minimum Forecast applies to the PTP forecast, is a number between 0 and 100 and will remove all indicators whose trend is below this minimum.

One can select filtered publishers through the Publishers pull down menu.

It is also possible to filter on multiple KPIs using the tree selector menu for KPI.

Finally, it is also possible to filter directly articles through the multi-selection possibilities of the Articles pull-down menu.

Selecting Done will apply the filter to the current panel. Selecting Reset will remove all selections.



A3 Full Texts

Almost all panels enable access to the visualization of the full text from which some quote was extracted.

The full text editor will look like this.

Strong partnership -- Jin Jiang Hotels and AccorHotels Group sign a Memorandum of Understanding

Published Apr 7, 2023, 8:11 AM by PR Newswire



Jointly explore $\ensuremath{\textit{sustainable development}}$ practices in the hospitality industry

Beijing, April 7, 2023 /PRNewswire/ - On April 6, the 5th meeting of the Sino-French Entrepreneurs Committee was held in Beijing. The heads of state of China and France, representatives of relevant government departments and entrepreneurs attended the conference. The conference had in-depth exchanges on topics such as trade, investment, technology, and tourism. At the meeting, Shanghai Jin Jiang International Hotel Co., Ltd. ("Jin Jiang Hotel" for short) and Yahua Hotel Management (Shanghai) Co., Ltd. ("Accor Hotels Group") signed a memorandum of understanding. The term of the memorandum of understanding ends in 2033.

The partners will promote relevant cooperation in the field of the <u>hotel industry</u>. In particular, they will reach a consensus on *reducing carbon emissions* in the hotel industry's ESG goals, and actively explore cooperation plans in sustainability-related metrics, finance, training, etc., to jointly promote the contribution of the hotel industry to the sustainable development goals.

Ms. Shen Li, CEO of Jin Jiang Hotel, said, "The hotel industry is one of the most dynamic and far-reaching economic industries in the world. Especially in China, it can make a decisive contribution to achieving the United Nations (UN) Sustainable Development Goals (SDGs). As influential hotel groups in the industry, Jinjiang Hotels and Accor Hotels hope to issue a clear call to action to the broader industry, calling for the promotion of responsible business practices in the hospitality industry and promoting relevant cooperation by motivating leadership decision makers and industry stakeholders to promote the contribution of the hospitality industry to sustainable development goals, particularly the reduction of carbon emissions in ESG goals."

Mr. Gary Rosen (Gary Rosen), CEO of <u>Accor Group Greater China</u>, said, "We are very excited to establish a strategic partnership with Jin Jiang Hotel, the world's leading hotel group. <u>Jinjiang</u> Hotels have an important position in the <u>Chinese market</u>, so <u>Accor is</u> confident that they will join hands with Jinjiang to create important practices that reduce environmental burdens without affecting the guest experience. <u>Accor is</u> committed to continuously innovating and making a positive environmental contribution to our communities. <u>Climate action</u> is at the heart of <u>AccorHotels Group's vision and business model</u>, and establishing a strategic partnership with Jin Jiang will open up new possibilities for us all to watch."

Industry insiders believe that the signing of this Memorandum of Understanding highlights the joint determination of Jinjiang Hotels Group and Accor Hotels Group to create new standards for ESG measures in the hotel industry and make broader environmental and social governance for China in reducing carbon emissions.

It is reported that the focus of this cooperation between the two parties is to define a measurement framework to *achieve* <u>ESG goals</u> tailored specifically to the <u>needs of</u> the <u>hotel</u> industry. The partners stated that they will achieve carbon peaks in 2030 and strive to achieve carbon neutrality by 2060. Achieving the specific goals will revolve around two main areas of focus: <u>sustainable</u> guest rooms and *reducing* <u>food waste</u>. In terms of developing sustainable guest rooms, the two sides hope to explore the creation of sustainable guest rooms, *reduce* <u>carbon emissions</u> from <u>construction</u> and operation, and *reduce* <u>utility costs</u> <u>such</u> as water electricity, etc. of both hotels by 10% by 2030 without affecting the guest experience. In terms of *reducing* <u>food waste</u>, the two sides hope to collaborate to create a standardized procedure <u>using</u> <u>common</u> technology to *reduce* <u>food waste</u> generated in all aspects of the procurement phase to guest service and catering services until the end of the guest's stay at both hotels. By 2030, the two parties will reduce <u>hotel food waste</u> by 30% The two sides hope that by creating <u>new</u> standards for <u>ESG measures</u> in the <u>hospitality</u> industry, they will not only achieve their respective <u>ESG goals</u>, but also <u>contribute to China's</u> <u>broader ESG efforts</u> to <u>reduce</u> <u>carbon emissions</u>.

Furthermore, in addition to formulating **ESG measurement** standards and **carbon emission** reduction targets in key areas, this MOU will also evaluate and explore potential business cooperation **opportunities in** sustainable finance. training. etc. The two sides hope to explore the possibility of using **sustainability**-related finance as a tool for achieving chance.

Under the title and the attribution, there is a pull-down menu and three buttons.

The pull-down menu is for toggling between the normal Reading mode and the Interactive mode. This second mode will enable the user to select a fragment of text and post a comment about its interpretation for Causality Link employees.

The first button will produce a list of all items detected in the text, which can be filtered by type. Selecting one of these items will position the text on this item and highlight it.



The second button will bookmark the current text in the user's Collection of choice.

The last button will only appear when the original language of the text was not in English, and will show this original version as in the following image:

Trending Portfolio Analysis Novelty Report	Search
Vertical Control Contrel Control Control Control Control Control Control Control Control	
According to information, junging lostes Loop is many explayed in force coefficience as interapering, interacting, etc., and is of one space reasks that in the according to an explayed in the coefficience of the coefficience o	応急気向後の携手線上 在不認明高等非熱的物態不長期汀無線及採着会認認量等変換。後常放力于不有加熱,并力物在はZB未加熱研得内蔵。「供行均陽降電量を開加原 更加機能和防治公務在、物料配工業品を認識合作に応力が起力用会生産的可能は、操作将本人支担以後。 全々人士以少、水洗販の通び使用、合同で的工具完成時代成準要調査案所を数力形成系を分布はSO機能的後指素。24年間石炭や物理拡大関数が更广泛20時間会通知時用 決心。
An one of the first instructional balant analysements compared to prevent the Otherse method. Accord balance for Darge in bandwareness () for new Accord balance in System, System, Accord balance in System, System, Accord balance in System, System, System, Accord balance in System, System, Accord balance in System, System, Accord	BS、本次次分合作物量增生之一作集量器。以其物物"用的增量过来具是意志能好的目录、合作效力等运程之机的考试器处的,力学的必须考试器中,有具有 低实现的等端引动发展着从此少增加最多个主要要运程不是、企業的计划发展过程的。因为外的发展和通过分子的发展的中,在于最低人能的的原则, 化学校、化学校、化学校、化学校、化学校、化学校、化学校、化学校、化学校、化学校、
	Incomentation Constant United States Sta

Selecting the button again will restore the initial display.

