

Integrating SMA data with SPSS Modeler and Cognos BI

Subtitle: Accessing SMA data from SPSS Modeler. Creating custom Cognos reports on top of SMA data. Combining SMA data with internal customer data

Keywords: Social Media Analytics, SMA, SPSS Modeler, Cognos, Integration

Abstract: In this article you will learn how to access SMA data from SPSS Modeler to create Data Mining models based on social media data. You will find out how to configure SMA so you can leverage SPSS Modeler Text to perform additional Text Analytics on SMA data. You will also discover how to create custom Cognos reports on top of SMA data and how to combine SMA data with internal data on your local Cognos environment to derive additional business insight.

Outline:

Integration	Available for SaaS	Available for onprem
Scenario 1: Build Predictive Models on top of SMA data	No	Yes
Scenario 2: Performing additional Text Analytics on SMA data	No	Yes
Scenario 3: Creating custom Cognos Reports and Cognos Workspace Dashboards on the Cognos Server of the SMA installation using the available SMA Framework Manager package	Yes Note: SMA Software updates might impact customization	Yes
Scenario 4: Creating custom Cognos Reports and Cognos Workspace Dashboards on a separate Cognos Server modifying and publishing the SMA Framework Manager package	No	Yes -- Assuming a separate Cognos license is purchased and installed on a different server

Scenario 1: Build Predictive Models on top of SMA data

Denormalized views

Schema SMA

Content-focused views

Author-focused views

Create an ODBC data source for your project database

Accessing the SMA denormalized views from an SPSS Stream

Scenario 2: Performing additional Text Analytics on SMA data

Use Text Analytics nodes to perform additional analytics on Concept Mention Content

Scenario 3: Creating custom Cognos Reports and Cognos Workspace Dashboards on the Cognos Server of the SMA installation using the available SMA Framework Manager package

Examining the SMA Framework Manager package
Creating custom reports or Cognos Workspace dashboards
Saving custom reports and assigning permissions

Scenario 4: Creating custom Cognos Reports and Cognos Workspace Dashboards on a separate Cognos Server modifying and publishing the SMA Framework Manager package

Examining the SMA Framework Manager project
Editing the SMA Framework Manager project
Publishing the SMA Framework Manager project
Creating a data source in Cognos Administration
Exporting the SMA project Reports on the SMA Cognos server
Importing the SMA project Reports on your Cognos server

Integrating SMA data with SPSS Modeler and Cognos BI

IBM Social Media Analytics stores its extracted information within a “Social Media Warehouse”. There are different scenarios in which you may want to access this data:

1. You want to build predictive models on top of SMA data using SPSS Modeler.
2. You want to do further text analytics on top of SMA data using SPSS Modeler Text
3. You want to create custom reports and dashboards on the Cognos environment in the SMA installation using the existing Framework Manager package.
4. You want to create custom reports and dashboards on your local Cognos environment to combine SMA data with internal data

Each SMA project has its dedicated DB2 database, where the results are stored both in a denormalized form and a Star Schema form. Depending on the scenario, you will want to access SMA data in the denormalized or Star Schema form.

The denormalized version of the data, in which each row represents a certain piece of information (e.g: a mention of a specific product, an author of different posts, etc) is adequate for scenarios 1. and 2.

The star schema form is best suited for optimized access from Cognos 10 BI. Scenarios 3. and 4. benefit from the data stored in this form.

Scenarios 1, 2 and 4 require that you have completed the prerequisite of establishing DB2 connectivity from your local machine to the SMA Data Warehouse on the SMA data node. Scenario 4 also requires that you have also established DB2 connectivity between the machine where your local Cognos is running and the SMA Data Warehouse on the SMA data node.

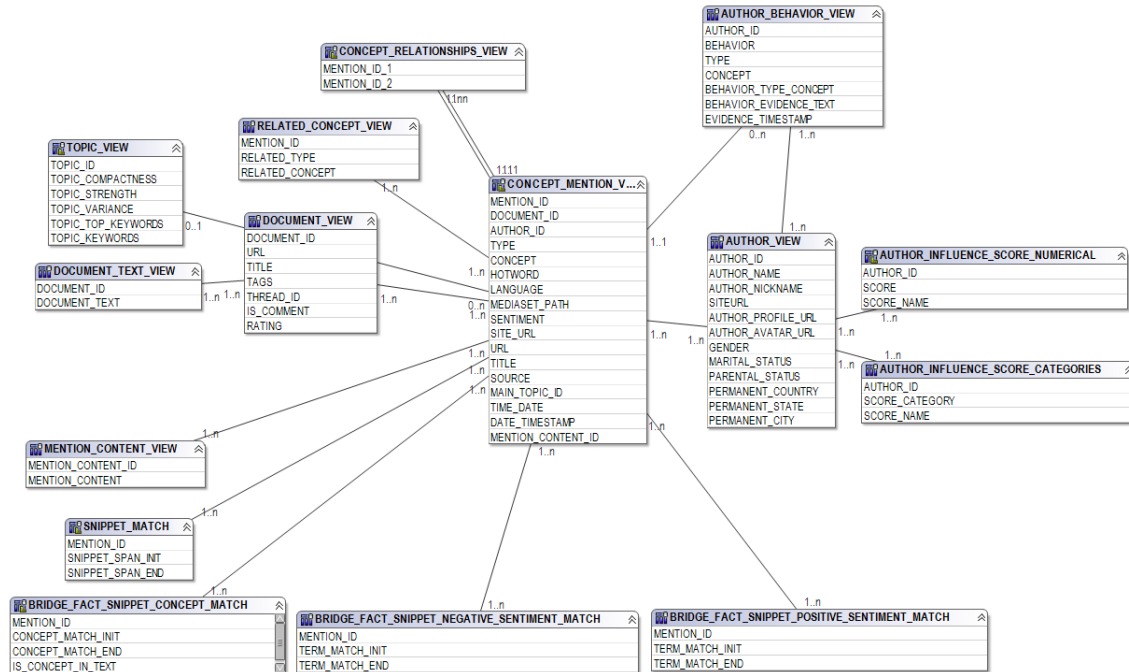
For the steps on how to establish DB2 connectivity refer to the following technote:
<http://www-01.ibm.com/support/docview.wss?uid=swg21633189>

Scenario 1: Build Predictive Models on top of SMA data

This scenario assumes that you have completed the prerequisite of establishing DB2 connectivity from your local machine to the SMA Data Warehouse and that you have IBM SPSS Modeler installed on your local machine.

Denormalized views

The following diagram depicts the available denormalized views and the cardinality of the logical relationships between them.



Each of these views is explained in detail in the next sections.

Schema SMA

The denormalized views are available in two schemas:

- On-premise users can access the views in the schema SMA (and SMA_SAAS)

Changes from IBM Social Media Analytics 1.2

Changed views in IBM Social Media Analytics 1.3

CONCEPT_MENTION_VIEW

In IBM Social Media Analytics 1.2, snippets for a certain concept could only be related to a single hotword. In SMA 1.3, a snippet for a certain concept can be related to multiple other concepts. If you are interested in the name(s) of the related concepts only, use the RELATED_CONCEPT_VIEW. If you want to establish a link between two related concepts that includes the full snippet information of both, use the CONCEPT_RELATIONSHIPS_VIEW.

New views in IBM Social Media Analytics 1.3

RELATED_CONCEPT_VIEW

CONCEPT_RELATIONSHIPS_VIEW

SNIPPET_MATCH

BRIDGE_FACT_SNIPPET_CONCEPT_MATCH

BRIDGE_FACT_SNIPPET_POSITIVE_SENTIMENT_MATCH
 BRIDGE_FACT_SNIPPET_NEGATIVE_SENTIMENT_MATCH
 DOCUMENT_TEXT_VIEW

Content-focused views

CONCEPT_MENTION_VIEW

Granularity: one entry for each detected concept within social media. If a “snippet” contains multiple concepts, this view will create multiple entries, one for each concept

- MENTION_ID Unique ID for this particular concept mention
- DOCUMENT_ID ID for the document this mention was found in
- AUTHOR_ID ID of the document author
- TYPE The name of the SMA theme for this concept
- CONCEPT The name of the detected concept
- HOTWORD “not available”. Deprecated, and only kept for backward compatibility to SMA 1.2
- LANGUAGE The language of the document (“English”, “German”, ...)
- MEDIASET_PATH The media set associated with the enclosing document
- SENTIMENT One of: “positive”, “negative”, “neutral” or “ambivalent”
- SITE_URL The URL of the social media site
- URL *The URL of the enclosing document
- TITLE *The title of the enclosing document
- SOURCE One of: “blogs”, “boards”, “news”, “reviews”, “video”, “twitter”
- MAIN_TOPIC_ID The ID of the evolving topic that best matches this mention
- TIME_DATE The date the document was published (granularity: day)
- DATE_TIMESTAMP The timestamp the document was published (granularity: minute)
- MENTION_CONTENT_ID The ID of the paragraph or snippet that contains the concept mention

Example:

MENTION_ID	DOC...	AUTHOR...	TYPE	CONCEPT	HOTWO...	LANGUAGE	MEDIASE...	SENTIMENT	SITE_URL	URL	TITLE	SOU...	MAIN_TOPIC...	TIME_DA...	DATE_TIMESTAI
26251	3	16568	Brands	Samsung	no hotword	English	none:none	positive	http://reviews.best...	http://revie...	SDI Corp - iH...	reviews		92	2013-02-24 2013-02-24 00:00
75449	3	16568	Other P...	Galaxy S	no hotword	English	none:none	positive	http://reviews.best...	http://revie...	SDI Corp - iH...	reviews		92	2013-02-24 2013-02-24 00:00
49861	4	15390	Brands	Samsung	Display	English	none:none	positive	http://reviews.us.s...	http://revie...	Samsung Gal...	reviews		\$null\$	2013-02-24 2013-02-24 00:00
86705	4	15390	Other P...	Galaxy S	Display	English	none:none	positive	http://reviews.us.s...	http://revie...	Samsung Gal...	reviews		\$null\$	2013-02-24 2013-02-24 00:00
19522	1	3158	Brands	Samsung	Display	English	none:none	positive	http://www.amazo...	http://ww...	Generic Scre...	reviews		\$null\$	2013-02-24 2013-02-24 00:00
15762	5	12584	Brands	HTC	GPS	English	none:none	positive	http://www.amazo...	http://ww...	iOttie One-To...	reviews		\$null\$	2013-02-24 2013-02-24 00:00
72353	1	3158	Other P...	Galaxy S	Display	English	none:none	positive	http://www.amazo...	http://ww...	Generic Scre...	reviews		\$null\$	2013-02-24 2013-02-24 00:00
52762	1	3158	Carriers	T-Mobile	Display	English	none:none	positive	http://www.amazo...	http://ww...	Generic Scre...	reviews		\$null\$	2013-02-24 2013-02-24 00:00
52761	1	3158	Carriers	Sprint	Display	English	none:none	positive	http://www.amazo...	http://ww...	Generic Scre...	reviews		\$null\$	2013-02-24 2013-02-24 00:00

RELATED_CONCEPT_VIEW

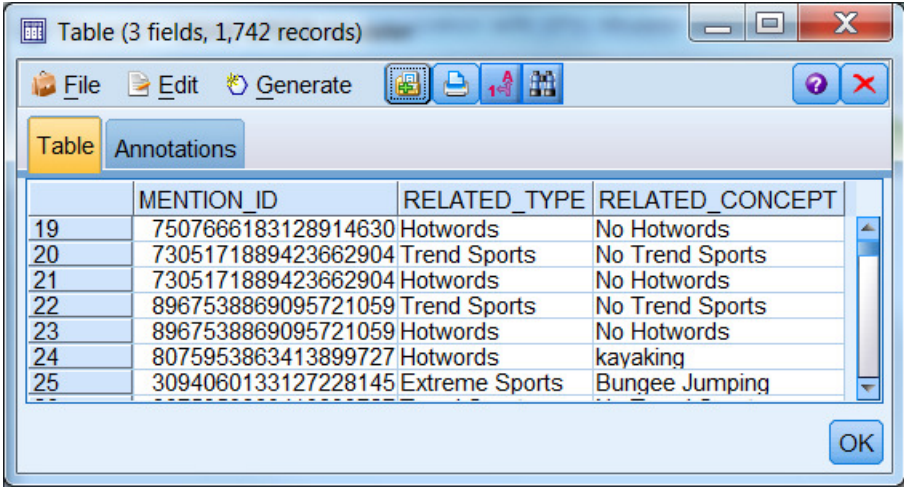
Granularity: one entry for each detected relationship between two concepts within a social media snippet.

MENTION_ID Unique ID of the first concept mention which is part of the relationship.

RELATED_TYPE Theme of the concept which is also mentioned in the snippet (in addition to the theme of the concept the mention_id refers to)

RELATED_CONCEPT Concept which is also mentioned in the snippet (in addition to the concept the mention_id refers to)

Example:



The screenshot shows a window titled "Table (3 fields, 1,742 records)". The window contains a table with the following data:

	MENTION_ID	RELATED_TYPE	RELATED_CONCEPT
19	7507666183128914630	Hotwords	No Hotwords
20	7305171889423662904	Trend Sports	No Trend Sports
21	7305171889423662904	Hotwords	No Hotwords
22	8967538869095721059	Trend Sports	No Trend Sports
23	8967538869095721059	Hotwords	No Hotwords
24	8075953863413899727	Hotwords	kayaking
25	3094060133127228145	Extreme Sports	Bungee Jumping

CONCEPT_RELATIONSHIPS_VIEW

Granularity: one entry for each detected relationship between two concepts within a social media snippet.

MENTION_ID_1 Unique ID of the first concept mention which is part of the relationship.

MENTION_ID_2 Unique ID for the second concept mention which is part of the relationship.

Example:

Table (2 fields, 1,742 records)

File Edit Generate

Table Annotations

	MENTION_ID_1	MENTION_ID_2
23	8075953863413899727	3094060133127228145
24	3094060133127228145	8075953863413899727
25	8075953863413899727	2
26	3094060133127228145	2
27	7041044149657934663	2
28	7041044149657934663	1
29	-5390404718598005720	2
30	-5390404718598005720	1
31	-2248256846035388646	2

OK

DOCUMENT_VIEW

- DOCUMENT_ID** The ID of the document
- URL** *The URL of the document
- TITLE** *The title of the document
- TAGS** *Any user-defined tags that got harvested along with the document
- THREAD_ID** Documents with the same **THREAD_ID** belong to the same “conversation thread”, e.g., they belong to the same forum thread
- IS_COMMENT** 1 if the document is a comment to a blog post, or a reply in a forum. 0 otherwise
- RATING** The rating of the document (for example, for user reviews). Note that this is not computed by SMA, but is provided (for some document types) as metadata in the incoming documents.

DOCUMENT_ID	URL	TITLE	TAGS	THREAD_ID	IS_COMMENT	RATING
243	http://twitter.com/J...	Should I get the IPh...	JMosesCastaneda	305409660121382912	0	not available
1	http://www.amazon...	Generic Screen Pr...	Cell Phones & Accessories	not available	0	not available
2	http://www.consum...	iOffer.com - My dau...	online	not available	0	not available
3	http://reviews.bestb...	SDI Corp - iHM61 S...	Reviews Home > Audio & ...	not available	0	not available
4	http://reviews.us.sa...	Samsung Galaxy S...	Reviews Home □ Verizon ...	not available	0	not available
5	http://www.amazon...	iOttie One-Touch ...	Cell Phones & Accessories	not available	0	not available
6	http://www.amazon...	Seagate Wireless ...	External Hard Drives	not available	0	not available
7	http://www.amazon...	Anker? Astro3 1000...	Electronics & Photo	not available	0	not available
8	http://www.amazon...	Mirror Screen Prote...	Cell Phones & Accessories	not available	0	not available
9	http://www.amazon...	Tech Armor HD Cle...	Cell Phones & Accessories	not available	0	not available

MENTION_CONTENT_VIEW

MENTION_CONTENT_ID The ID of this particular “snippet” or “paragraph” that surrounded a detected concept

MENTION_CONTENT *The text of the concept mention

Example:

MENTION_CONTENT_ID	MENTION_CONTENT
-9187313041449399283	Went from S3 to Note2 to Iphone 5. I jailbroke the I5 so now I have power toggles in
-9187329769021759664	accounting methods to move as much as 70 percent of its profits out of reach of the
-9187527794109878945	Letzteres ein Lowend Smartphone das ursprünglich für Indonesien geplant war. Und
-9187575961779165149	I used to work for AT&T, and I'm pretty sure an "early" upgrade option adds an addit
-9187902520604478632	"@nerdberry: BlackBerry Z10 Out Selling iPhone 5 and Samsung Galaxy S3 in Cana
-9188383152685312705	Take advantage of this deal before Amazon changes their mind. Nokia Lumia 920 4
-9188386344510264047	talking tom qnd ben for i phone, sony xperia.....n Talking Tom & Ben News app: o7n.
-9188729537765022393	The sony ericsson xperia x36 is an technologically converted smartphone: .AZk http
-9188742499524060595	I guess all 4.2.2 roms have this problem There was an additional fix in f

SNIPPET_MATCH

MENTION_ID The ID of this particular “snippet” or “paragraph” that surrounded a detected concept

SNIPPET_SPAN_INIT The position in the document text in which the “snippet” starts.

SNIPPET_SPAN_END The position in the document text in which the “snippet” ends.

Example:

	MENTION_ID	SNIPPET_SPAN_INIT	SNIPPET_SPAN_END
2	-5947970024234806751	1606	1801
3	2639375919550149276	0	266
4	-1518245569107461031	120	437
5	7546701515687783813	0	1065
6	-5225875048328610329	0	98
7	865232931454756182	0	211
8	2406251190272715271	0	591
9	-3416969708660177297	417	1134
10	5431771654611539996	0	349

BRIDGE_FACT_SNIPPET_CONCEPT_MATCH

Granularity: One entry per concept match. A concept mention may have one or more concept matches in a snippet. Allows custom applications to highlight the concept matches in the snippet.

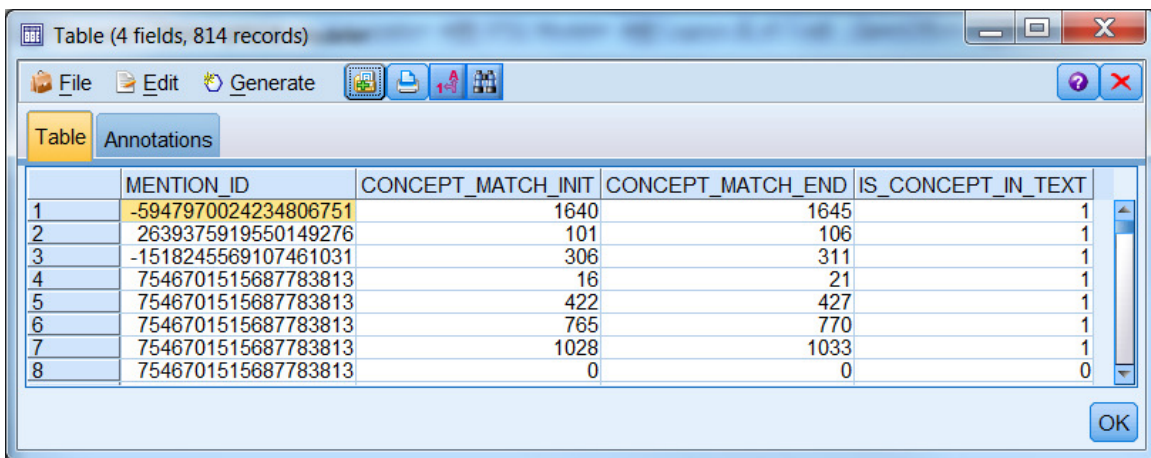
MENTION_ID The ID of this particular “snippet” or “paragraph” that surrounded a detected concept

CONCEPT_MATCH_INIT The position in the document text in which the concept match starts.

CONCEPT_MATCH_END The position in the document text in which the concept match ends.

IS_CONCEPT_IN_TEXT 1 if the concept mention has been detected in the document text. 0 if the concept mention has been detected in the overall title of a document of source “review” or “video”. In this case **CONCEPT_MATCH_INIT** and **CONCEPT_MATCH_END** both have a value of 0.

Example:



	MENTION_ID	CONCEPT_MATCH_INIT	CONCEPT_MATCH_END	IS_CONCEPT_IN_TEXT
1	-5947970024234806751	1640	1645	1
2	2639375919550149276	101	106	1
3	-1518245569107461031	306	311	1
4	7546701515687783813	16	21	1
5	7546701515687783813	422	427	1
6	7546701515687783813	765	770	1
7	7546701515687783813	1028	1033	1
8	7546701515687783813	0	0	0

BRIDGE_FACT_SNIPPET_POSITIVE_SENTIMENT_MATCH

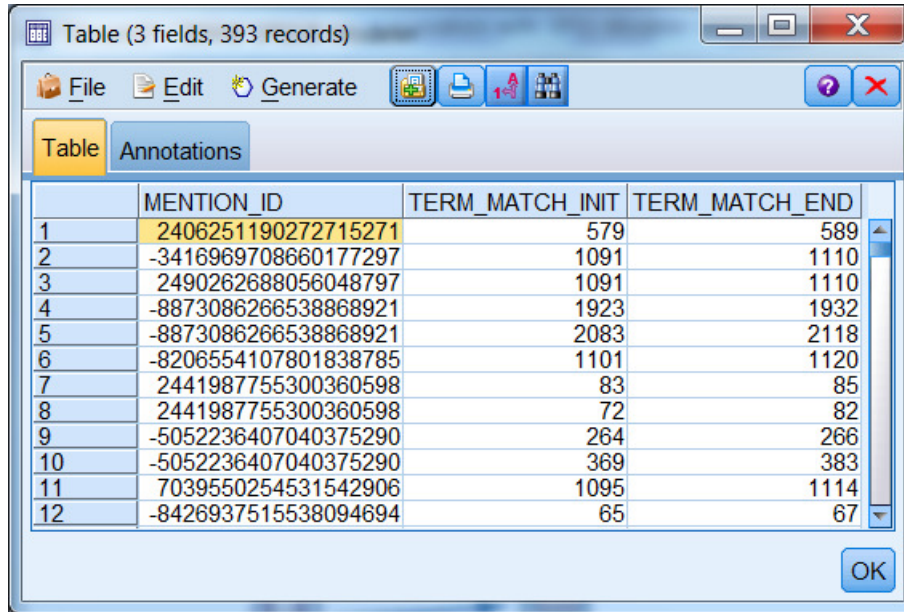
Granularity: One entry per positive sentiment match. A concept mention may be related to none, one or more positive sentiment matches in a snippet.

MENTION_ID The ID of this particular “snippet” or “paragraph” that surrounded a detected concept

TERM_MATCH_INIT The position in the document text in which the positive sentiment match starts.

TERM_MATCH_END The position in the document text in which the positive sentiment match ends.

Example:



The screenshot shows a window titled "Table (3 fields, 393 records)" with a menu bar (File, Edit, Generate) and a toolbar. Below the menu bar are two tabs: "Table" and "Annotations". The "Table" tab is active, displaying a table with 12 rows and 4 columns. The columns are labeled "MENTION_ID", "TERM_MATCH_INIT", and "TERM_MATCH_END". The first column contains row numbers from 1 to 12. The second column contains long alphanumeric strings. The third and fourth columns contain integers representing start and end positions. The first row is highlighted in yellow.

	MENTION_ID	TERM_MATCH_INIT	TERM_MATCH_END
1	2406251190272715271	579	589
2	-3416969708660177297	1091	1110
3	2490262688056048797	1091	1110
4	-8873086266538868921	1923	1932
5	-8873086266538868921	2083	2118
6	-8206554107801838785	1101	1120
7	2441987755300360598	83	85
8	2441987755300360598	72	82
9	-5052236407040375290	264	266
10	-5052236407040375290	369	383
11	7039550254531542906	1095	1114
12	-8426937515538094694	65	67

BRIDGE_FACT_SNIPPET_NEGATIVE_SENTIMENT_MATCH

Granularity: One entry per negative sentiment match. A concept mention may be related to none, one or more sentiment matches in a snippet.

MENTION_ID The ID of this particular “snippet” or “paragraph” that surrounded a detected concept

TERM_MATCH_INIT The position in the document text in which the sentiment match starts.

TERM_MATCH_END The position in the document text in which the sentiment match ends.

Example:

Table (3 fields, 55 records)

File Edit Generate

Table Annotations

	MENTION_ID	TERM_MATCH_INIT	TERM_MATCH_END
1	-1518245569107461031	366	397
2	-1518245569107461031	399	425
3	4953016770817600535	165	180
4	-8426937515538094694	29	42
5	-7956408791043664747	1547	1549
6	-7956408791043664747	975	1002
7	-7956408791043664747	1154	1160
8	8720750290373916067	418	432
9	3128868622501280608	3389	3432
10	424126645855034385	95	107
11	-6831210246148992594	16	66
12	7224281973767363526	151	158

OK

DOCUMENT_TEXT_VIEW

DOCUMENT_ID The ID of the document

DOCUMENT_TEXT **The text of the document

Example:

Table (2 fields, 531 records)

File Edit Generate

Table Annotations

	DOCUMENT_ID	DOCUMENT_TEXT
3	-1035808658688956260	This video was created using my iPhone 5s while doing a photo session with Brittany at the Nelson Ghost Town in Nevada....
4	-1036084236637456039	เปิดตัวกล้อง กล้อง Nikon D5300 + เลนส์ 18-140 VR คุณสมบัติน่าสนใจ APS-C CMOS ความละเอียด 24.1 ล้านพิกเซล *ไม่มี OLPF
5	-1146725153772205302	Gear used: Gibson ES 335, Ableton Live, Redline Reverb, Amplitube 3 (tube compressor, Nikon D5100.
6	-118947432722828639	Nikon Capture NX pro key - Get free Nikon Capture NX pro key - 2014Nikon Capture NX pro key - Nikon Capture NX pro key...
7	-1192203854229514419	Formerly 'Land To Sea Photography' is now 'Patrick D C Photography' View my extensive Sunset Galleries! http://patrickd...
8	-1195996739057092775	TOP 10 NIKON Digital SLR Cameras 1. Nikon D7100 24.1 MP DX-Format CMOS Digital SLR (Body Only) http://www.am...
9	-1283219677524159848	Get a great deal on amazon.com http://bit.ly/1cKAt1V Morros Pro DSLR This Rig Set is the complete professional syste...
10	-1305280398240642696	Price Drop Check Here http://click.linksynergy.com/fs-bin/click?id=cRp/0HM/LYk&subid=&offerid=325248.1&type=10&mpi...
11	-1430675575067128217	Get a great deal on amazon.com http://bit.ly/1cKAYTq Morros Pro DSLR This Rig Set is the complete professional syste...
12	-144413969364986112	This is my very first collab video and I am so happy with it! Also I love LaurDIY's videos and to remake one was a lot of fun!
13	-144780083167207642	First shot will win first shot will win. Before heading out to Idaho, I picked up a Stevens Savage Model 200 .300 Win Mag rifl...
14	-1451805355174570588	Beauty of Adriatic Sea Underwater HD Ravni, Istria, Croatia, European Union summer 2013. filmed with Nikon Coolpix aw1...

OK

TOPIC_VIEW

Granularity: One row per topic

- TOPIC_ID** The ID of a topic detected by SMA's topic detection algorithm
- TOPIC_COMPACTNESS** The more compact a topic is, the better it can "explain" the snippets assigned to it. Compactness ranges between 0 and 1 (higher is better).
- TOPIC_STRENGTH** The overall weight of the topic, i.e., the combined weight of all snippets that are assigned to this topic.
- TOPIC_VARIANCE** The degree of variance (between 0 and 1) within the weights of the snippets for this topic. Low variance means that many snippets have a similar weight (which can be high or low), whereas high variance means that this topic may contain both snippets that fit well into this topic (high weight) as well as some that do not fit well (low weight)
- TOPIC_TOP_KEYWORDS** The 5 most important keywords for this topic as comma-separated strings
- TOPIC_KEYWORDS** All keywords for this topic as comma-separated string

Example:

TOPIC_ID	TOPIC_COMPACTNESS	TOPIC_STRENGTH	TOPIC_VARIANCE	TOPIC_TOP_KEYWORDS	TOPIC_KEYWORDS
97	0.440	2049.247	0.105	nokia, windows, lumia, phone, camera	nokia, windows, lumia, phone, camera, dual, priced, devices, featur
93	0.586	365.375	0.106	s4, galaxy, s3, samsung, wait	s4, galaxy, s3, samsung, wait, htc, announced, phone, march, s4, r
78	0.515	479.528	0.110	tablet, xperia, sony, tablets, mwc	tablet, xperia, sony, tablets, mwc, show, announced, beating, globa
54	0.217	74.695	0.073	xperia, sony, ericsson, youtube, phone	xperia, sony, ericsson, youtube, phone, tests, tapataik, arc, x8, sola
40	0.369	325.900	0.160	perseus, xella, regret, brick, run	perseus, xella, regret, brick, run, kernel, forum, ban, leaked, head, n

Author-focused views

AUTHOR_VIEW

Granularity: One row per author

AUTHOR_ID	The ID of the author
AUTHOR_NAME	*The author name
AUTHOR_NICKNAME	*The author nickname
SITEURL	The site where this author got detected. SITEURL + AUTHOR_NAME uniquely describe an author across social media sources
AUTHOR_PROFILE_URL	*The link to the author’s profile on the social media site
AUTHOR_AVATAR_URL	*The link to the author's profile picture on the social media site
GENDER	“male”/“female”/“unknown”
MARITAL_STATUS	“true”/“unknown”
PARENTAL_STATUS	“true”/“unknown”
PERMANENT_COUNTRY	The country the author is located or “not available”
PERMANENT_STATE	The state the author is located or “not available”
PERMANENT_CITY	The city the author is located or “not available”

Example:

AUTHOR_ID	AUTHOR_NAME	AUTHOR_NICKNAME	SITEURL	AUTHOR_PROFILE_URL	AUTHOR_AVATAR_URL	GENDER	MARITAL_STATUS	PARENTAL_STATUS	PERMANENT_COUNTRY	PERMANENT_STATE	PERMANENT_CITY
-9.12E+18	konrado8790	konrado8790	http://www.youtube.com/	http://youtube.com/konrado8790	not available	Unknown	Unknown	Unknown	not available	not available	not available
0	not available	not available	not available	not available		Unknown	Unknown	Unknown	not available	not available	not available
-9.222E+18	z6bebqy7qfkcwtdc	z6bebqy7qfkcwtdc	http://www.youtube.com/	http://youtube.com/z6bebqy7qfkcwtdc	not available	Unknown	Unknown	Unknown	not available	not available	not available
-9.222E+18	Megan Brueggeman	EwwitsMegs	http://twitter.com	http://twitter.com/EwwitsMegs	https://pbs.twimg.com/profile_images/430394042174566401/sbYK4N-X_normal.jpeg	Unknown	Unknown	Unknown	not available	not available	not available
-9.221E+18	MesufFanis★69Ψ	17MesufFanis21	http://twitter.com	http://twitter.com/17MesufFanis21	http://pbs.twimg.com/profile_images/426357116853428225/Er6L-Cqv_normal.jpeg	Unknown	Unknown	Unknown	not available	not available	not available
-9.22E+18	thequantumgamez	thequantumgamez	http://www.youtube.com/	http://youtube.com/thequantumgamez	not available	Unknown	Unknown	Unknown	not available	not available	not available
-9.22E+18	Chuck's Burger Bar	ChucksBurgerBar	http://twitter.com	http://twitter.com/ChucksBurgerBar	http://pbs.twimg.com/profile_images/37880000709216996/63b9944c5912c516a893f	Unknown	Unknown	Unknown	Canada	not available	Hamilton
-9.219E+18	muviztv	muviztv	http://www.youtube.com/	http://youtube.com/muviztv	not available	Unknown	Unknown	Unknown	not available	not available	not available

AUTHOR_BEHAVIOR_VIEW

One author can express multiple behaviors, e.g., being the owner of X and a prospective owner of Y. Hence, this table contains one row *per individual behavior* exposed by an author.

AUTHOR_ID	The ID of the author
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BEHAVIOR The name of the behavior (e.g. “user”)

TYPE The theme associated with the behavior (e.g. “Smartphones”)

CONCEPT The concept associated with the behavior (e.g. “Galaxy S3”)

BEHAVIOR_EVIDENCE_TEXT A small snippet of text that shows why SMA thinks the author has exposed the behavior (e.g., “my S3”)

EVIDENCE_TIME_STAMP The timestamp of the mention where this behavior was recorded

Example:

AUTHOR_ID	BEHAVIOR	TYPE	CONCEPT	BEHAVIOR_TYPE_CONCEPT	BEHAVIOR_EVIDENCE_TEXT	EVIDENCE_TIME...
16566	User	Brands	Samsung	User::Brands::Samsung	my Samsung Galaxy S3	2013-02-24 00:00:00
6437	User	Brands	Samsung	User::Brands::Samsung	ich mein samsung	2013-02-24 00:49:00
8936	User	Brands	Samsung	User::Brands::Samsung	my new samsung galsxy s3 phone	2013-02-24 00:37:15
18792	User	Brands	Samsung	User::Brands::Samsung	my Samsung Galaxy S3	2013-02-24 00:37:14
16444	User	Brands	Samsung	User::Brands::Samsung	hat ein Samsung	2013-02-24 00:29:00
6449	User	Brands	Samsung	User::Brands::Samsung	now have a lovely white Samsung Galaxy S3	2013-02-24 00:27:55
14041	User	Brands	Samsung	User::Brands::Samsung	my Samsung HDTV	2013-02-24 00:00:00
578	User	Brands	Samsung	User::Brands::Samsung	my Samsung Galaxy S3	2013-02-24 00:00:00
18306	User	Brands	Samsung	User::Brands::Samsung	my Samsung Galaxy S3	2013-02-24 00:00:00
15698	User	Brands	Sony	User::Brands::Sony	have a sony ericsson xperia arc S	2013-02-24 00:44:48

SMA also provides the ability to collect 3rd party influence scores from social media authors. Moreover, SMA provides the capability to create “categories” or “bins” for certain value ranges of these influence scores. This information can be accessed through the following tables. In each table, there is one row per “author-influence score”-combination.

AUTHOR_INFLUENCE_SCORE_NUMERICAL

AUTHOR_ID The ID of the author

SCORE The numeric influence score

SCORE_NAME The name of the score (e.g., “Klout”)

Example:

AUTHOR_ID	SCORE	SCORE_NAME
4	42.285	Klout Score
11	43.941	Klout Score
12	44.133	Klout Score
27	40.771	Klout Score
32	45.126	Klout Score
34	22.372	Klout Score
44	49.818	Klout Score
54	25.817	Klout Score
56	30.512	Klout Score
75	43.805	Klout Score

AUTHOR_INFLUENCE_SCORE_CATEGORIES

AUTHOR_ID	The ID of the author
SCORE_CATEGORY	The value range, e.g., “[10-20]”
SCORE_NAME	The name of the score category (e.g., “Klout Category”)

Example:

AUTHOR_ID	SCORE_CATEGORY
4	[40-50)
11	[40-50)
12	[40-50)
27	[40-50)
32	[40-50)
34	[20-30)
44	[40-50)
54	[20-30)
56	[30-40)
75	[40-50)

Create an ODBC data source for your project database

Before you can access data from the SMA Data Warehouse you need to define an ODBC connection to the database for the project you are trying to access.

1. Assuming you are running Windows on your local machine, click **Start > Administrative Tools > Data Sources (ODBC)**
2. In the **System DSN** tab click **Add**
3. Select the **IBM DB2 ODBC DRIVER** and click **Finish**
4. Enter the **Data source name** you want to use to identify this data source
For example: **<DBNAME>_odbc**
5. In the **Database alias** drop down menu, select the alias of the project database you entered previously when cataloging the database and click **OK**

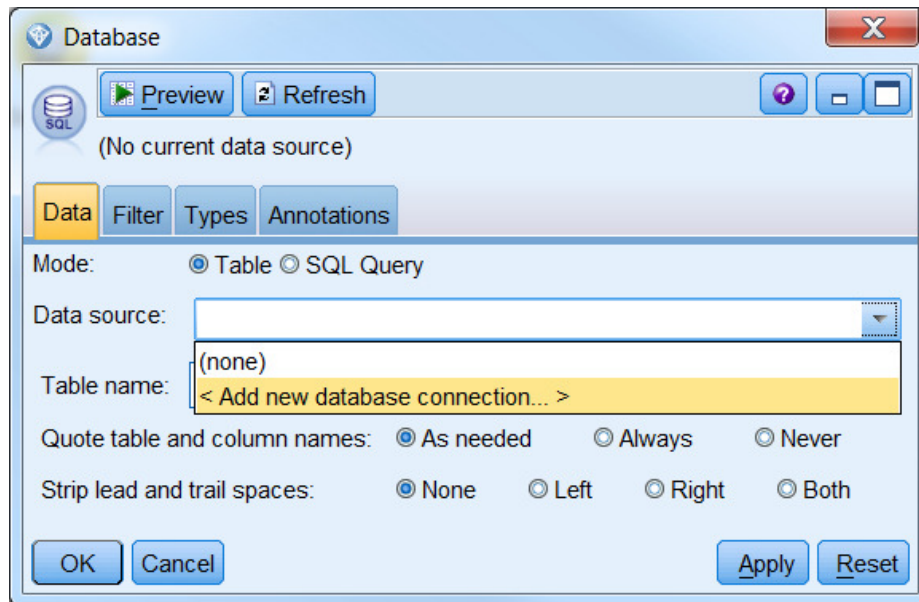
Accessing the SMA denormalized views from an SPSS Stream

Once you have created an ODBC data source, you can access SMA data from IBM SPSS Modeler using a **Database** Source node.

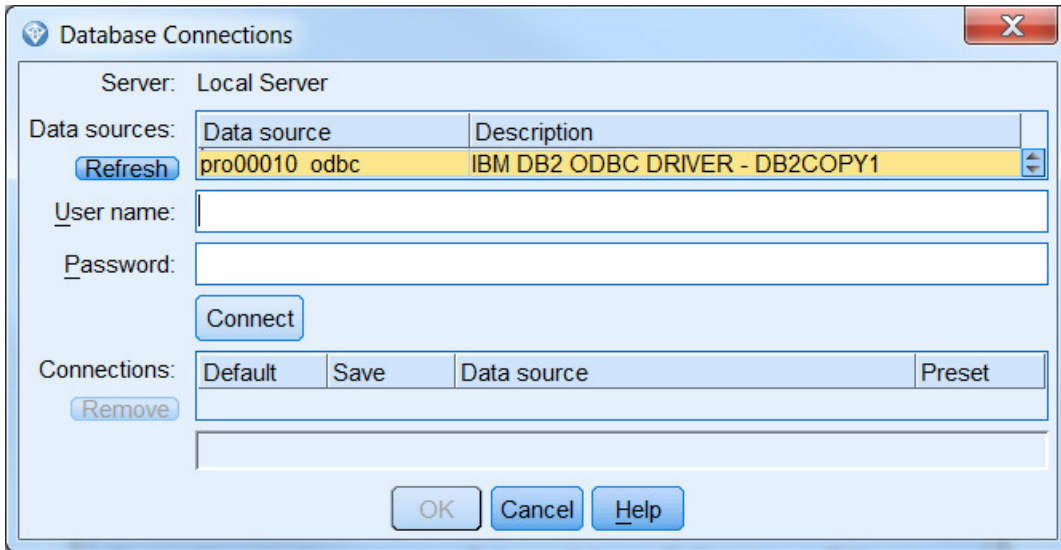
The denormalized views available under schemas SMA and SMA_SAAS are best suited for building predictive models.

To explore the content of these views:

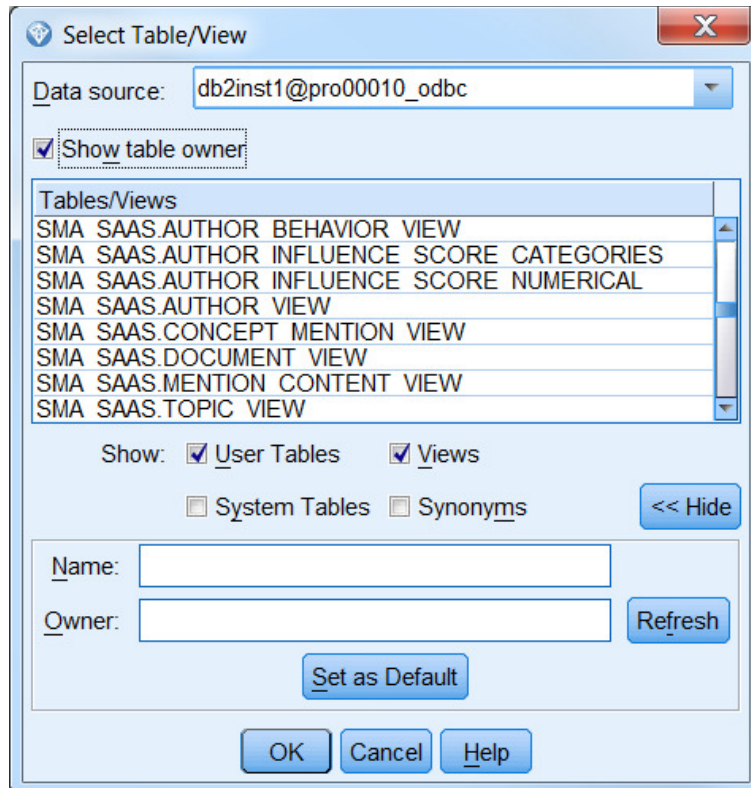
1. Create a new stream in SPSS Modeler: **File > New Stream**
2. Drag a **Database** source input node.
3. Double click the node, select the **Data Source** drop down menu and click on **<Add new database connection>**



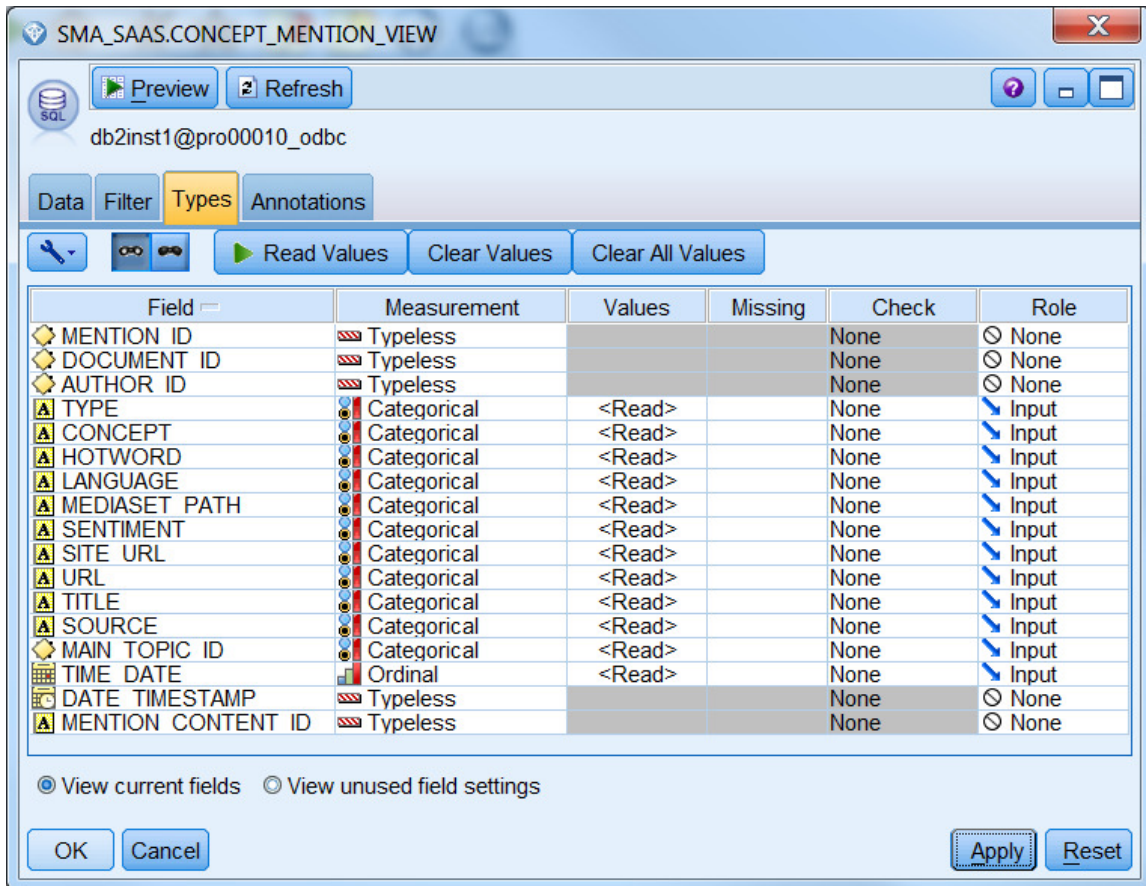
4. All defined ODBC data sources are displayed. Select the one that corresponds to the project database you want to access.



5. Enter the user that will establish the connection to the project database on the SMA data node
 - enter **db2inst1** as user name
6. Enter the **password** for the corresponding user and click **Connect**
7. Check the **Save** and **Default** checkboxes
8. Click on the Data source value for the new connection and press **OK**.



9. Click now the **Select** button next to Table name
10. On the Tables/Views list, you can see the available denormalized views under schema SMA_SAAS
11. Select the **CONCEPT_MENTION_VIEW**
12. Click **Apply**



13. Go to the Types tab and change the Measurement value for fields **MENTION_ID**, **DOCUMENT_ID**, **AUTHOR_ID**, **DATE_TIMESTAMP** and **MENTION_CONTENT_ID** to **Typeless**

14. Set the Measurement value for **MAIN_TOPIC_ID** to **Categorical**

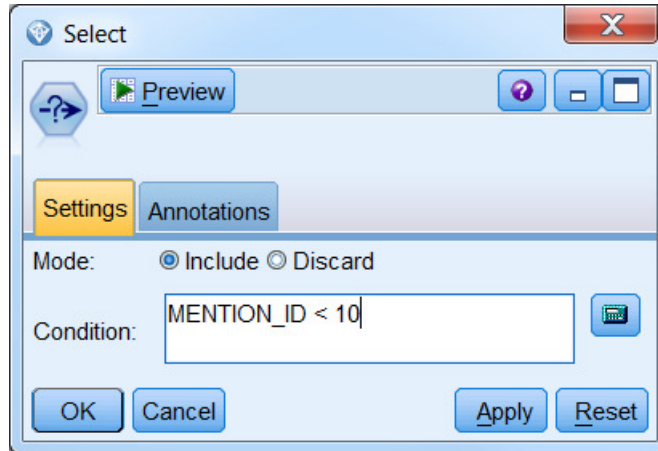
15. Set the Measurement value for **TIME_DATE** to **Ordinal**

16. Click **OK**

17. Click now on the **Record Ops** tab and drag a **Select** node onto the Canvas

18. Link the Database input node with the Select node. You can do that by right clicking the **Database** node, selecting **Connect...**, and then clicking the **Select** node

19. Double click the Select node, enter **MENTION_ID < 10** as condition and click **OK**



20. Click now on the **Output** tab and drag a **Table** node onto the Canvas
21. **Link** the Select node with the Table node. You can do that by right clicking the **Select** node, selecting **Connect...**, and then clicking the **Table** node
22. **Run** the stream by pressing **ALT + u**
23. The tables shows 9 rows where each row corresponds to a specific “**Concept mention**”

	MENTION_ID	DOCUMENT_ID	AUTHOR_ID	TYPE	CONCEPT	HOTWO...	LANGUA...	MEDIASET_PATH
1	9	33513	121266	Trend Sports	Parkour	no hotword	English	none::none
2	6	9786	100746	Extreme Sports	Bungee Jumping	no hotword	English	none::none
3	4	57978	88909	Trend Sports	Parkour	no hotword	English	none::none
4	3	153298	68052	Extreme Sports	Bungee Jumping	no hotword	English	none::none
5	2	154096	111971	Trend Sports	Parkour	no hotword	English	none::none
6	7	104203	72587	Extreme Sports	Bungee Jumping	diving	Filipino	none::none
7	8	101898	70777	Extreme Sports	Bungee Jumping	no hotword	English	none::none
8	1	136768	70442	Trend Sports	Parkour	no hotword	English	Facebook content:facebook.com
9	5	89679	64879	Trend Sports	Parkour	no hotword	Indonesian	Facebook content:facebook.com

Table (17 fields, 9 records) #2

File Edit Generate

Table Annotations

	SENTIMENT	SITE_URL	URL	TITLE
1	neutral	http://garboqueer.tumblr.com	http://garboqueer.tumblr.com/post/42893955031	caladarni:rolls over in be
2	neutral	http://twitter.com	restricted	restricted
3	neutral	http://twitter.com	restricted	restricted
4	neutral	http://twitter.com	restricted	restricted
5	neutral	http://twitter.com	restricted	restricted
6	neutral	http://twitter.com	restricted	restricted
7	neutral	http://twitter.com	restricted	restricted
8	neutral	http://www.facebook.com	http://www.facebook.com/100003036297223/posts/348758471902026	not available
9	neutral	http://www.facebook.com	http://www.facebook.com/150974235027918/posts/343778442394377	not available

OK

Table (17 fields, 9 records) #2

File Edit Generate

Table Annotations

	SOURCE	MAIN_TOPIC_ID	TIME_DA...	DATE_TIMESTAMP	MENTION_CONTENT_ID
1	blogs	98	2013-02-12	2013-02-12 02:53:00	25154992984640582
2	microblogs	24	2013-02-06	2013-02-06 14:31:57	4918265350625512733
3	microblogs	10	2013-02-17	2013-02-17 09:55:07	3324295509672134720
4	microblogs	59	2013-03-16	2013-03-16 04:13:10	3190018630893793626
5	microblogs	11	2013-03-16	2013-03-16 19:27:20	8937437983726123308
6	microblogs	\$null\$	2013-02-26	2013-02-26 20:15:05	2832618163407694906
7	microblogs	94	2013-02-26	2013-02-26 10:06:52	8301570324856659319
8	boards	43	2013-03-10	2013-03-10 08:38:59	537107471772880151
9	boards	58	2013-02-22	2013-02-22 20:22:26	1757250689317281872

OK

Scenario 2: Performing additional Text Analytics on SMA data

This scenario covers the steps needed to perform additional Text Analytics on SMA data using SPSS Modeler Text.

DB2 access is only available for SMA On Premise deployment.

Changes from IBM Social Media Analytics 1.2

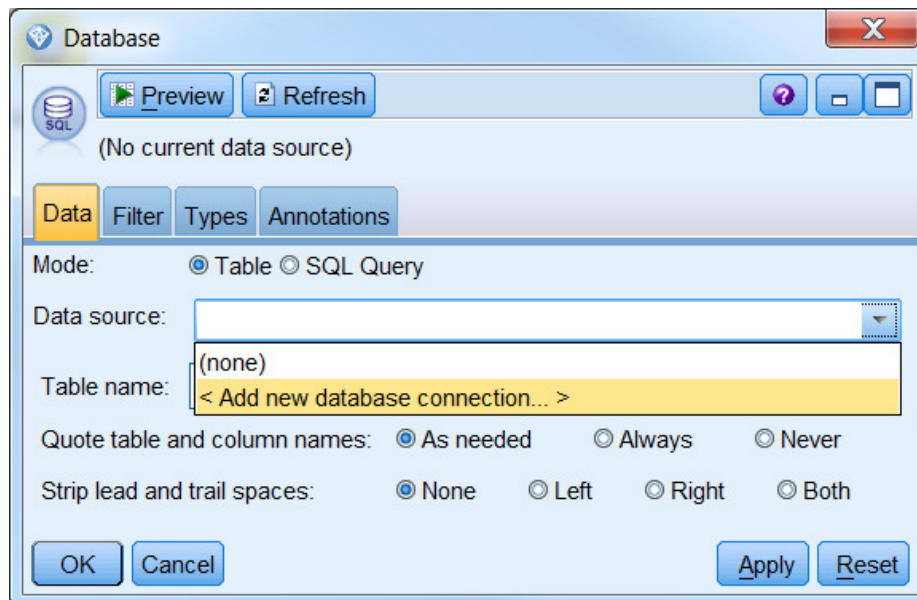
On-premise users of IBM Social Media Analytics 1.2 needed to follow a series of steps to make the snippet text available. These steps are no longer required in IBM Social Media Analytics 1.3

Access Snippet Text from the SMA project database

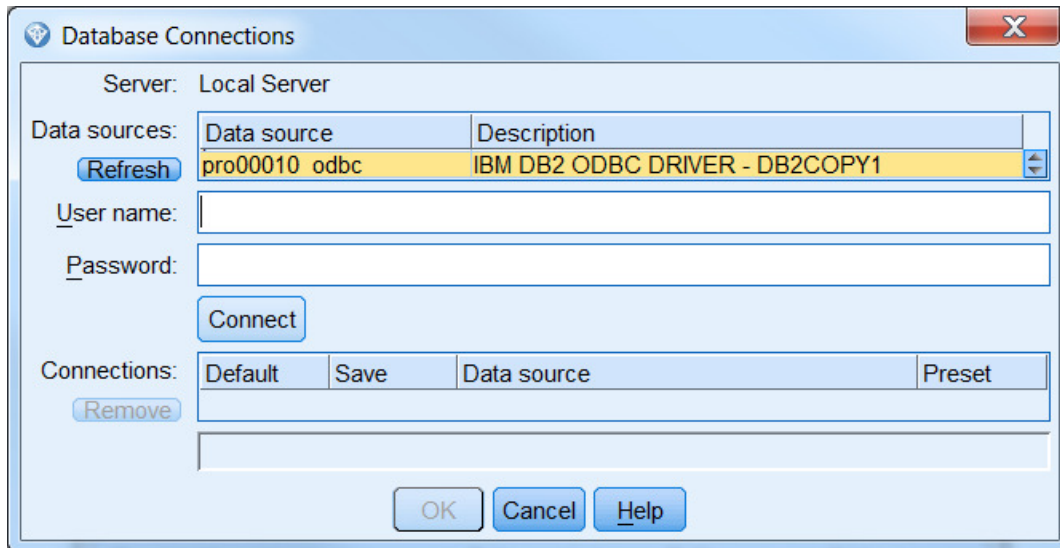
Here, you will be working with the MENTION_CONTENT_VIEW, different from the CONCEPT_MENTION_VIEW you were working with in the previous scenario. The MENTION_CONTENT column of the MENTION_CONTENT_VIEW contains the portion of the document text surrounding the concept mention.

1. Create a new stream in SPSS Modeler: **File > New Stream**
2. Drag a **Database** source input node.
3. Double click the node, select the **Data Source** drop down menu.
If you have already created a new Database connection, select it and continue on Step 8.

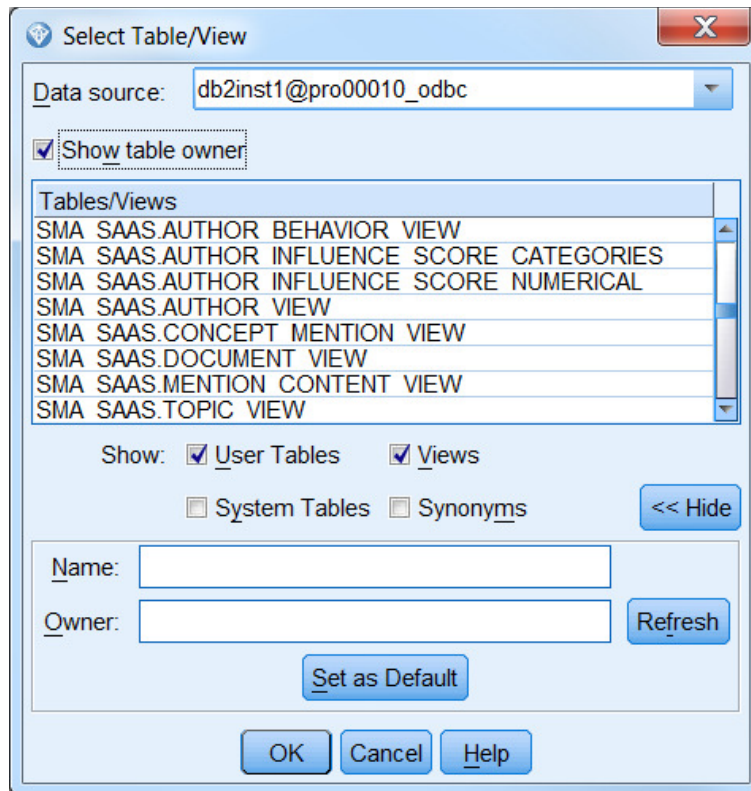
If not, click on **<Add new database connection>**



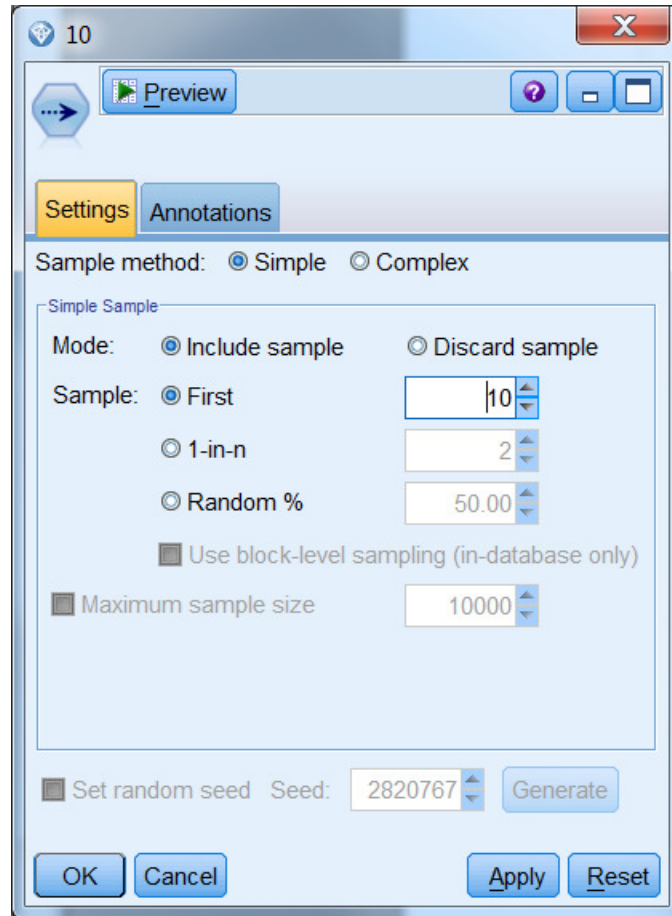
4. All defined ODBC data sources are displayed. Select the one that corresponds to the project database you want to access.



5. Enter the user that will establish the connection to the project database on the SMA data node
 - Enter **db2inst1** as user name
6. Enter the **password** for the corresponding user and click **Connect**
7. Check the **Save** and **Default** checkboxes
8. Click on the Data source value for the new connection and press **OK**.



9. Click now the **Select** button next to Table name
10. On the Tables/Views list, you can see the available denormalized views under schema SMA_SAAS
11. Select the **MENTION_CONTENT_VIEW**
12. Click **Apply**
13. Click **OK**
14. Click now on the **Record Ops** tab and drag a **Sample** node onto the Canvas
15. **Link** the Database input node with the Sample node. You can do that by right clicking the **Database** node, selecting **Connect...**, and then clicking the **Sample** node
16. Double click the Sample node, configure it to select the the first 10 records by entering **10** in the **First** text box and click **OK**



17. Click now on the **Output** tab and drag a **Table** node onto the Canvas
18. **Link** the Sample node with the Table node. You can do that by right clicking the **Sample** node, selecting **Connect...**, and then clicking the **Table** node
19. **Run** the stream by pressing **ALT + u**
20. The tables shows 10 rows where each row corresponds to a specific “**Concept mention text**”

Use Text Analytics nodes to perform additional analytics on Concept Mention Content

To perform additional text analytics on the text content of concept mentions:.

1. Click on the **IBM SPSS Text Analytics** tab and drag a **Text Mining** node onto the Canvas

2. **Link** the Sample node with the **Text Mining** node. You can do that by right clicking the **Sample** node, selecting **Connect...**, and then clicking the **Text Mining** node
3. Double click the Text Mining node, and select **MENTION_CONTENT** in the **Text field** drop down menu.
4. Configure the Text Mining node to perform additional text analytics on the MENTION_CONTENT field.



Scenario 3: Creating custom Cognos Reports and Cognos Workspace Dashboards on the Cognos Server of the SMA installation using the available SMA Framework Manager package

This scenario details how you can create custom Cognos Reports and Cognos Workspace Dashboards based on the Framework Manager (FM) package which is already deployed on the Cognos Server of your SMA installation for your SMA project. For this scenario we assume you have already created a SMA project and have named it *MyProject*

Changes from IBM Social Media Analytics 1.2

In IBM Social Media Analytics 1.2, Reporting users could only filter their type and concept selections according to a list of so-called “hotwords”, found within the dimension DIM_HOTWORD. In IBM Social Media Analytics 1.3, Reporting users can use *any* theme as additional filter to their theme and concept selections. A new dimension called DIM_TYPE_CONCEPT_2 has been introduced to support this filtering scenario.

New FM dimensions in IBM Social Media Analytics 1.3

DIM_TYPE_ROLE_2
DIM_TYPE_CONCEPT_2

Dropped FM dimensions in IBM Social Media Analytics 1.3

DIM_HOTWORD

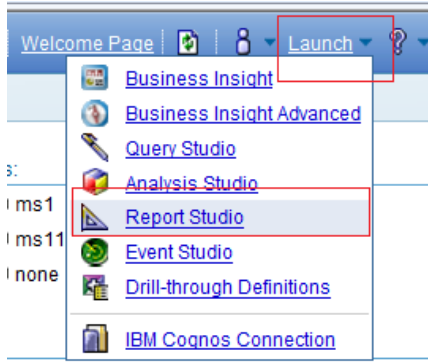
Examining the SMA Framework Manager package

Before you create custom Reports and Cognos Workspace Dashboards it is useful to understand the SMA FM package. Each SMA project has a specific FM package.

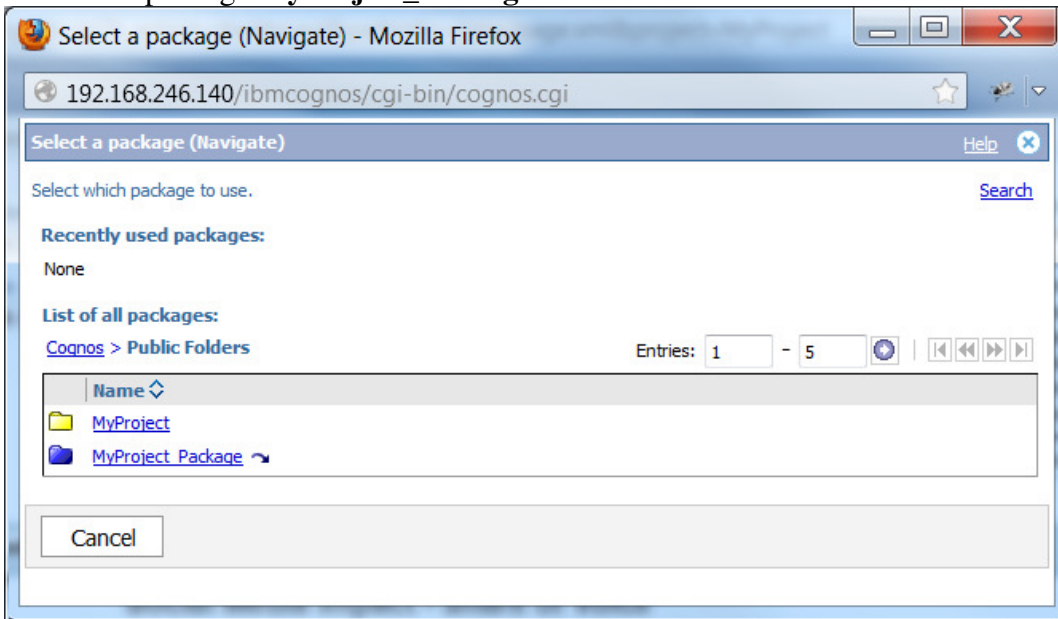
1. In your browser navigate to http://<SMA_UI_NODE>/welcome
2. Login into your project using user name <myproject>_admin (replacing <myproject> with your project name). Contact your system administrator for your password if not known.
3. As user enter **myproject_admin** (replace myproject with your project name) and password (default password is temp4Now*) .
4. Hover the mouse over MyProject and select **Reporting**



5. On the Reporting page click on “Launch” on the top right corner, select “Report Studio”



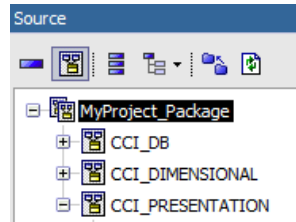
6. Select package MyProject_Package



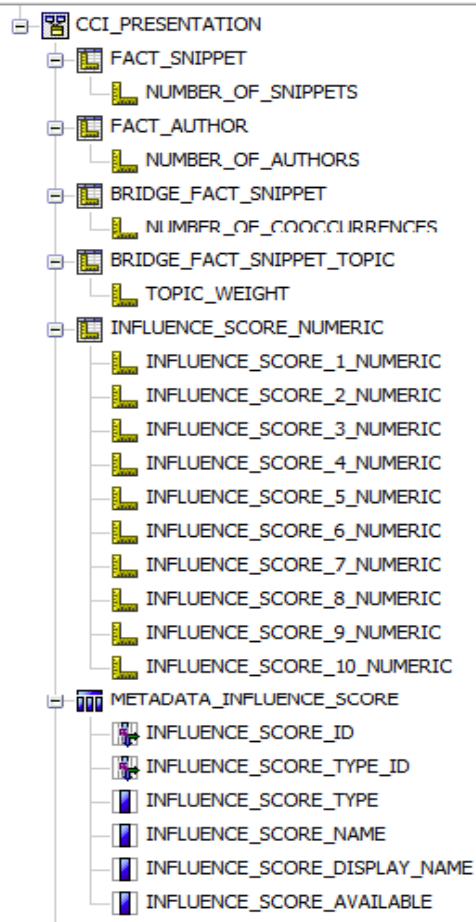
7. Click on Create New



8. Select **Blank**
9. On the Source panel you can examine the structure of the Framework Manager package. The package contains 3 namespaces: CCI_DB, CCI_DIMENSIONAL and CCI_PRESENTATION. Under the CCI_PRESENTATION namespace you find all regular dimensions and measure dimensions needed to create custom reports.



10. Expand the CCI_PRESENTATION namespace



11. There are 5 measure dimensions available:
FACT_AUTHOR contains a single measure **NUMBER_OF_AUTHORS** which can be used for example to determine the number of authors, for example talking about a certain concept, or located in a certain country.

FACT_SNIPPET contains a single measure **NUMBER_OF_SNIPPET** which represents the number of times a specific concept is mentioned.

BRIDGE_FACT_SNIPPET contains a single measure **NUMBER_OF_COOCCURRENCES** which represents the number of times any two concepts are mentioned together in the same snippet.

BRIDGE_FACT_SNIPPET_TOPIC contains a single measure **TOPIC_WEIGHT** which represents how well the snippet containing a specific concept mention fits into a specific topic. The topic weight value ranges from 0 to 1. A value of 1 means that all terms defining a topic are contained in the snippet text where the concept mention was found. A value of 0.5 means that half of the terms defining a topic are contained in the snippet text where the concept mention was found.

The weight of a certain topic is the sum of the topic weights of the concept occurrences for that specific topic.

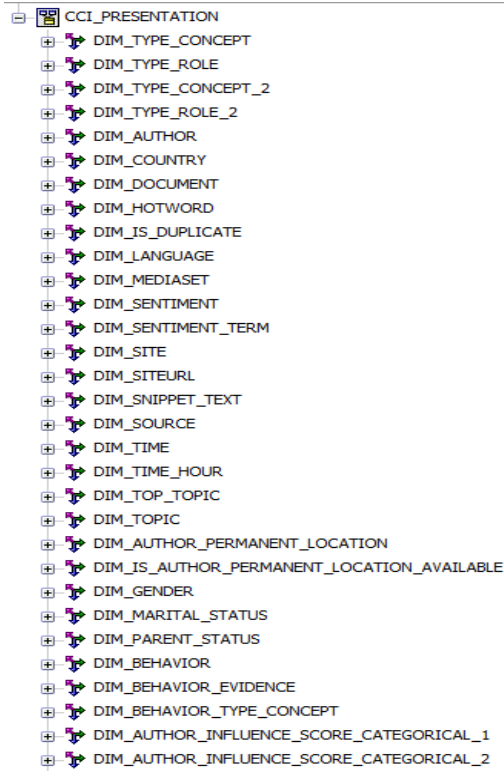
INFLUENCE_SCORE_NUMERIC contains 10 measures **INFLUENCE_SCORE_X_NUMERIC** with X ranging from 1 to 10. Each **INFLUENCE_SCORE_X_NUMERIC** value corresponds to the influence score value of a certain author. The value of X corresponds to the value of the column **INFLUENCE_SCORE_TYPE_ID** in the **METADATA_INFLUENCE_SCORE** query subject and can be used to find out which influence score is represented by the **INFLUENCE_SCORE_X_NUMERIC** measure.

For example if the **METADATA_INFLUENCE_SCORE** query subject contains the following rows:

INFLUENCE_SCORE_TYPE_ID	INFLUENCE_SCORE_TYPE	INFLUENCE_SCORE_NAME
1	numeric	Klout
2	numeric	PeerIndex

measure **INFLUENCE_SCORE_1_NUMERIC** represents the Klout score and **INFLUENCE_SCORE_2_NUMERIC** represents the PeerIndex value.

12. Scroll down now to inspect the available regular dimensions:



13. The available dimensions can be classified into 3 categories:

1. Document related dimensions
2. Author related dimensions
3. Snippet related dimensions

14. **Document related dimensions** contain information that is related to a social media document:

DIM_COUNTRY: Contains the country of the site where the social media document was posted.

DIM_DOCUMENT: Each entry in this dimension corresponds to a social media document, defined by a specific URL.

DIM_LANGUAGE: Contains the language in which the social media document was written.

DIM_MEDIASET: Contains the mediasets defined in the SMA Configuration UI which help categorize different sites.

DIM_SITE: Contains the name of each site.

DIM_SITEURL: Contains the site URL of each site.

DIM_SOURCE: Contains the source of the document: “blogs”, ”boards”, news”, ”reviews”, ”video” or ”twitter”.

DIM_TIME: Contains the date information on which a document was published. It is used to filter data based on the Start Date and End Date values selected in the Search Options

DIM_TIME_HOUR: Contains the timestamp information on which a document was published up to the hour. It is used to display the data in the Trend Charts. It

contains two hierarchies that allow grouping documents by Year > Week > Day > Hour and by Year > Quarter > Month > Day > Hour

15. Author related dimensions contain information that is related to a social media author:

DIM_AUTHOR: Contains the information related to the author of a certain social media document (post, news article, blog entry, comment...). Each author is uniquely identified by the author name and the site url. For every site there is a special author “not available” which groups all author whose name is not available.

DIM_AUTHOR_PERMANENT_LOCATION: Contains the location derived from what an author has specified in his author profile, structured in Country > State > City.

If only City information is present State and Country try to be automatically derived by SMA.

If a document for a specific author contains a different location than what was found in a previous document by the same author, the author location is updated, so only the latest information is contained in the database.

DIM_GENDER: Specifies the gender of an author. This may be automatically derived by SMA based on the author name. Possible values are “Male”, “Female” or “Unknown”

DIM_MARITAL_STATUS: Specifies the marital status of an author. This may be derived from the text of a document. Possible values are “Yes” (for married), “No” (for not married) and “Unknown”.

DIM_PARENT_STATUS: Specifies the parent status of an author. This may be derived from the text of a document. Possible values are “Yes” (for a parent), “No” (for not a parent) and “Unknown”.

DIM_BEHAVIOR: Specifies behavior information about an author. Possible values are “User”, “Prospective User”, “Recommender” and “Detractor”. A specific author may be assigned none, one or multiple of this behavior states.

DIM_BEHAVIOR_TYPE_CONCEPT: Specifies information about an author with respect to a specific concept. A certain user may be “User” of “product1” and “product2”, “Recommender” of “product2” and “Prospective User” of “product 3”. This user may post content also about “product4” for which he may not have any related “behavior status”.

DIM_BEHAVIOR_EVIDENCE: This dimension contains the evidence string that SMA used to derive a certain behavior relation between a user and a certain Concept.

For example, if SMA derived that “User 1” is “Prospective User of product1” because he mentioned “I want to get product1”, this string will be the “behavior evidence”.

DIM_AUTHOR_INFLUENCE_SCORE_CATEGORICAL_X: Each of these dimensions, where X ranges from 1 to 15, contains the possible categories a user can be assigned to for a certain influence score. The value of X corresponds to the value of the column INFLUENCE_SCORE_TYPE_ID in the METADATA_INFLUENCE_SCORE query subject and can be used to find out which influence categorical score is represented by the DIM_AUTHOR_INFLUENCE_SCORE_CATEGORICAL_X dimension.

For example if the METADATA_INFLUENCE_SCORE query subject contains the following rows:

INFLUENCE_SCORE_TYPE_ID	INFLUENCE_SCORE_TYPE	INFLUENCE_SCORE_NAME
1	categorical	Klout Categories

dimension DIM_AUTHOR_INFLUENCE_SCORE_CATEGORICAL_1 contains the possible categories for the influence score defined as “Klout Categories” whereas the dimension DIM_AUTHOR_INFLUENCE_SCORE_CATEGORICAL_2 contains the possible categories for the influence score defined as “PeerIndex Categories”

16. Snippet related dimensions contain information that is related to a social media snippet

DIM_TYPE_ROLE: Contains the role of the theme that is assigned to a social media snippet. Roles are assigned to themes in the SMA project configuration and can be any of: “Brands”, ”Products”, “Features”, ”Spokespeople”, ”Events” , ”Campaign Messages”, “No Role”.

DIM_TYPE_CONCEPT: Contains the theme and concept assigned to a social media snippet. Themes and concepts defined in the SMA project configuration. Each social media snippet is always assigned to one theme and one concept.

DIM_SENTIMENT: One of: “positive”, ”negative”, ”neutral” or “ambivalent”. The sentiment of the social media snippet refers to the concept assigned to the social media snippet, captured in DIM_TYPE_CONCEPT.

DIM_TOPIC: Contains all the evolving topics a concept mention is assigned to.

DIM_TOP_TOPIC: Contains the the best fitting evolving topic for a specific concept mention.

DIM_SNIPPET_TEXT: Contains the portion of the document text that is assigned to the social media snippet.

DIM_TYPE_ROLE_2: Contains the roles of themes that can be used as additional filter.

DIM_TYPE_CONCEPT_2: Contains the themes and concepts that can be used as additional filter. Note that this hierarchy also contains the special concept “No <Theme Name>”. This allows users to filter for snippets that contain a concept from DIM_TYPE_CONCEPT, but not from the selected theme in

DIM_TYPE_CONCEPT_2

Creating custom reports or Cognos Workspace dashboards

Once you have a good understanding of the SMA Framework Manager package you are ready to create custom reports that make use of the package, or Cognos Workspace Dashboards that leverage already available reports, or parts of them.

1. Navigate to this link:
<http://ibmtvdemo.edgesuite.net/software/analytics/cognos/videos/HTVs/sma-1-3/index.html>
2. Select “Share Your Results” to view a video detailing the steps to create a custom Cognos Workspace dashboard

Saving custom reports and assigning permissions

After you have created your custom Cognos report or Cognos Workspace dashboard you need to save it under a Cognos folder and assign the proper permissions to this folder so only users of that project can have access to the custom reports or dashboards.

1. Click on “Save” to save your report.
2. Create a folder named **MyProject_Custom** (replace MyProject with your project name) under the Public Folders and use it to save all your custom reports.
3. From IBM Cognos Connection, click on the Settings icon to the right of the MyProject_Custom folder



4. Click on **Permissions** tab.
5. Check **Override the access permissions acquired from the parent entry** if this option is unchecked
6. **Select all** the existing permissions and click on **Remove**.
7. Click on **Add**
8. Click on **Cognos**
9. Click on the two blue arrows pointing to the right to see all the available entries until you locate **SMA Project MyProject Users**
10. Select the checkbox for this role.
11. Click on the **Green Arrow** to add this role to the selected entries and then click **Ok**

Select entries (Navigate) - MyProject_Custom Help

Navigate the folders, search, or type the names of the users, groups, roles and namespaces to add. Select the entries you want and [Type](#) [Search](#)
click the Add button to update the Selected entries list.

Available entries

[Directory](#) > [Cognos](#)

Show users in the list

Entries: 15 - 29 ⌂ ⏪ ⏩

<input type="checkbox"/>	Name
<input type="checkbox"/>	Readers
<input type="checkbox"/>	SMA Project MyProject Administrators
<input type="checkbox"/>	SMA Project MyProject Users

➔

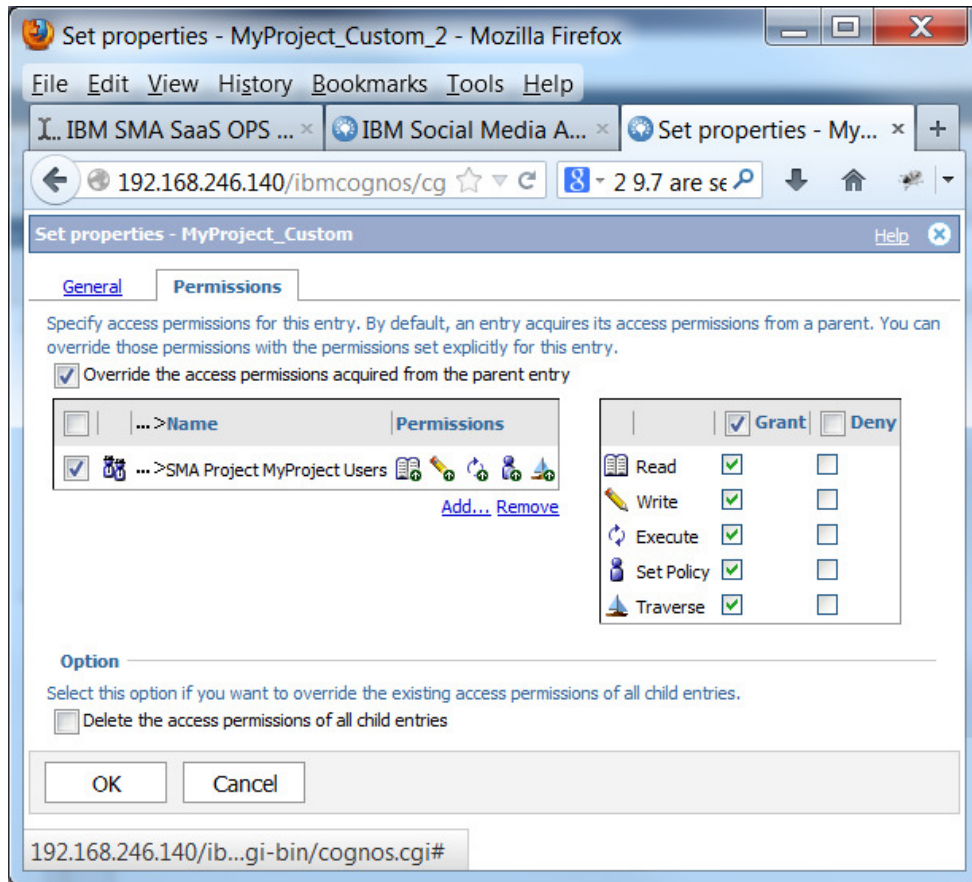
Selected entries

Entries: 1 - 1 ⌂ ⏪ ⏩

<input type="checkbox"/>	...> Name
<input type="checkbox"/>	...> SMA Project MyProject Users

[Remove](#)

12. Select the checkbox to the left of the SMA Project MyProject Users entry and click on the **Grant** checkbox to select all permissions
13. Click **OK** to grant all the selected permissions



Scenario 4: Creating custom Cognos Reports and Cognos Workspace Dashboards on a separate Cognos Server modifying and publishing the SMA Framework Manager package

This scenario details how you can create custom Cognos Reports and Cognos Workspace Dashboards on your own Cognos server environment that accesses the SMA data located in the SMA data node. It details how to publish the SMA Framework Manager (FM) package into your Cognos Server. For this scenario we assume you have already created a SMA project and have named it MyProject

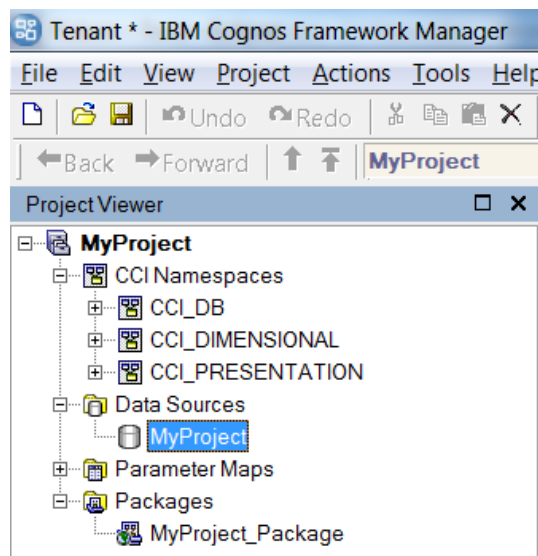
If you are currently hosting the application, the following requirements must be met:

- Ensure you have established db2 connectivity from your local machine running Windows where you are running IBM Cognos Framework Manager and the SMA data node and from the machine where your Cognos Server is installed to the SMA data node.
- Locate the FM Manager project located on the UI node under <cognos_bi_server_install_dir>/tenant-reports/MyProject (e.g: /opt/ibm/cognos/c10_64/tenant-reports/ MyProject)

Examining, editing and publishing the SMA Framework Manager project

Examining the SMA Framework Manager project

1. Copy the Framework Manager project onto your Windows machine where Framework Manager is installed.
2. Open IBM Cognos Framework Manager on your local Windows environment
3. Select Open a project... and navigate to the **Tenant.cpf** file contained in the **MyProject** folder you copied in step 1.
4. Expand the **CCI Namespaces** to view the Namespaces defined:



- Namespace CCI_DB contains the relational query subjects that map to the views contained on the project database on the SMA data node
- Namespace CCI_DIMENSIONA contains the regular and measure dimensions built on top of the query subjects on CCI_DB namespace
- Namespace CCI_PRESENTATION contains shortcuts to the dimensions on namespace CCI_DIMENSIONAL and to some of the query subjects on namespace CCI_DB. Only the shortcuts contained in the CCI_PRESENTATION namespace are referenced in the Report specifications used by SMA.

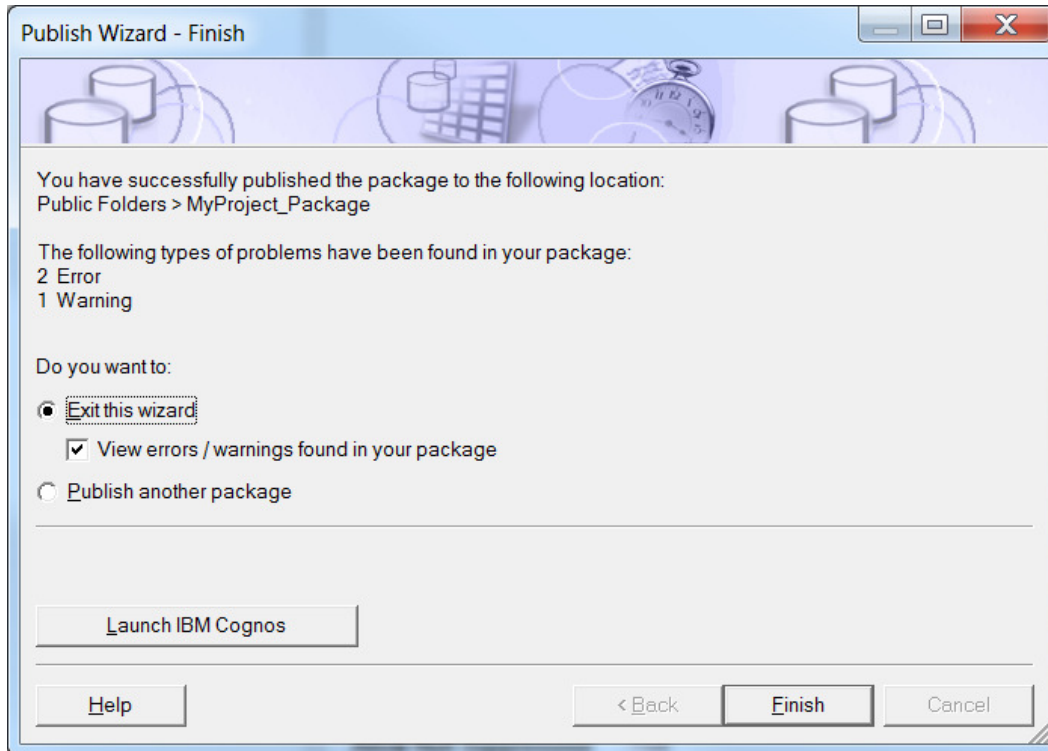
5. Expand the Data Sources folder and click on the MyProject data source.
6. Under the Properties panel, the value of the property Schema will show the database schema containing the star schema views which give access to SMA data
 - On-premise users can access the views in the schema **CCI**
7. Make sure you have the appropriate value for the Schema value.

Editing the SMA Framework Manager project

1. If you want to extend the Framework Manager project run the Metadata Wizard to import your internal data that you want to combine with SMA data
2. Make sure you edit the **MyProject_Package** so the objects you want to make available to the Report creator are contained in the package.

Publishing the SMA Framework Manager project

1. Expand the Packages folder
2. Right-click on the package **MyProject_Package** and select **Publish Packages...** on the context menu.
3. On the Publish Wizard, select the location on your Cognos server where you want to publish the package and click **Next**.
4. If you wish, add the roles for user and administrator access to the package and click Next.
5. **Uncheck** the **Verify the package before publishing** and click **Publish**
6. A warning message stating that error are found in the package will be shown. Click **Yes** to confirm that you want to publish the package regardless of the errors found.
7. The Finish page of the Publish Wizard is shown. This page should display 2 Errors and 1 Warning. Click Finish to view the details of these errors and warnings.



8. The warnings state that several determinants will be ignored. The 2 errors state that the [CCI_DIMENSIONAL].[DIM_TIME].[TIME_HIERARCHY_YEAR_MONTH_DAY].[DAY_LEVEL] level does not have any query item with a role of "Caption" specified. You can ignore these 2 errors.

Creating a data source in Cognos Administration

1. The Framework Manager project references a data source called MyProject which needs to be created in your Cognos server pointing at the project database on the SMA data node
2. Open IBM Cognos Administration
3. Click on the Configuration tab
4. Click on the New Data Source icon



5. Enter your project name as name. Eg: MyProject and click **Next**
6. Select IBM DB2 as type.
7. Uncheck the Configure JDBC connection if you are not planning to use Dynamic Query Mode.
8. Click **Next**
9. As DB2 database name enter the <PROJECT_DB_ALIAS> you used when cataloging the SMA project database on your cognos server

10. Under Signons select the Password checkbox
11. Enter the user that will establish the connection to the project database on the SMA data node
 - Enter user **db2inst1**
12. Enter the password for the corresponding user and click **Next**
13. Click **Finish**
14. You now create a new report on your Cognos server that uses the MyProject_Package which references the MyProject datasource which will access the data from the project database on the SMA data node.

Exporting the SMA project Reports on the SMA Cognos server

It is possible that you don't want to create new reports from scratch on your Cognos server but you want to extend the already existing reports that are shipped with SMA.

1. On the SMA Welcome login with use **cogadmin**
2. Hover over project MyProject and click **Reporting**
3. On the Reporting page click on **Launch** on the top right corner and select **IBM Cognos Connection**
4. Click on **Launch** and select **IBM Cognos Administration**
5. Go to the **Configuration** tab and select **Content Administration**



6. Click the New Export icon
7. The New Export Wizard open. As name enter **MyProject_export**
8. Click **Next**
9. Leave **Select public folders and directory content** checked and click **Next**
10. Click on **Add...**
11. Select the checkbox to the left of **MyProject** and click on the **green arrow** pointing to the right
12. Click **OK**
13. Click **Next**
14. Click **Next** once again
15. Click **Next** a third time
16. On the next page you are asked to enter a name for the archive file that will be created after running the Export action. Leave **MyProject_export** as name and click **Next**
17. Review the summary of the Export Wizard and click **Next**

IBM Cognos Administration cogadmin Log Off | Welcome Page | Launch ? IBM.

[Status](#) [Security](#) [Configuration](#) [Index Search](#)

[Data Source Connection](#)
[Content Administrator](#)
[Distribution Lists and Co](#)
[Printers](#)
[Styles](#)
[Portlets](#)
[Dispatchers and Services](#)
[Query Service Caching](#)

Review the summary - New Export wizard Help

The Export wizard is ready to export to the deployment archive.
 If you want to change any settings, click Back.
 If you are satisfied with the settings and want to select whether to run, schedule, or save only, click Next.

Deployment specification

Name: MyProject_export **Description:**

Deployment archive

Name: MyProject_export **Encryption:** Do not encrypt the content of the archive

Public folders content

...> Name	Target name	Disable after import
...> MyProject	...> MyProject	

Options:
 Do not include report output versions
 Do not include run history
 Do not include schedules

Directory content
 Do not include Cognos groups and roles
 Do not include distribution lists and contacts
 Do not include data sources and connections

General Options
 Do not include access permissions
 Do not include references to external namespaces
 Set the owner to the owner from the source
 Apply to new and existing entries
 Recording level: Basic

18. Leave Save and run once selected and click Finish

19. Leave Now selected and click Run

Run with options - MyProject_export

Specify when you want to run this export.

Time:
 Now
 Later:

Content:

Name
<input checked="" type="checkbox"/> Content store
<input checked="" type="checkbox"/> Public Folders
<input checked="" type="checkbox"/> ...> MyProject

20. Select the checkbox **View the details of this export after closing this dialog** and click **OK**

21. Click **Refresh** until Exports completes

The screenshot shows a web interface for viewing an export deployment record. The title bar reads 'View an export deployment record - MyProject_export' with a 'Help' link on the right. Below the title bar, it says 'View the details of this particular run.' There are two columns of information: 'Start time: April 19, 2013 12:24:48 PM' and 'Completion time: April 19, 2013 12:24:51 PM'. Below that, 'Status: Succeeded'. A 'Messages' section follows, with a table containing one entry: 'CM-REQ-2299 Export is complete. 217 object(s) were exported. 0 object(s) failed.' The table has columns for 'Message' and 'Name'. Below the messages is a 'Deployment archive' section with 'Name: MyProject_export'.

22. Click **Close**

23. The exported zip file will be available on the SMA UI node under **/opt/ibm/cognos/c10_64/deployment/MyProject_export.zip**

24. Contact your IT administrator to obtain this zip file

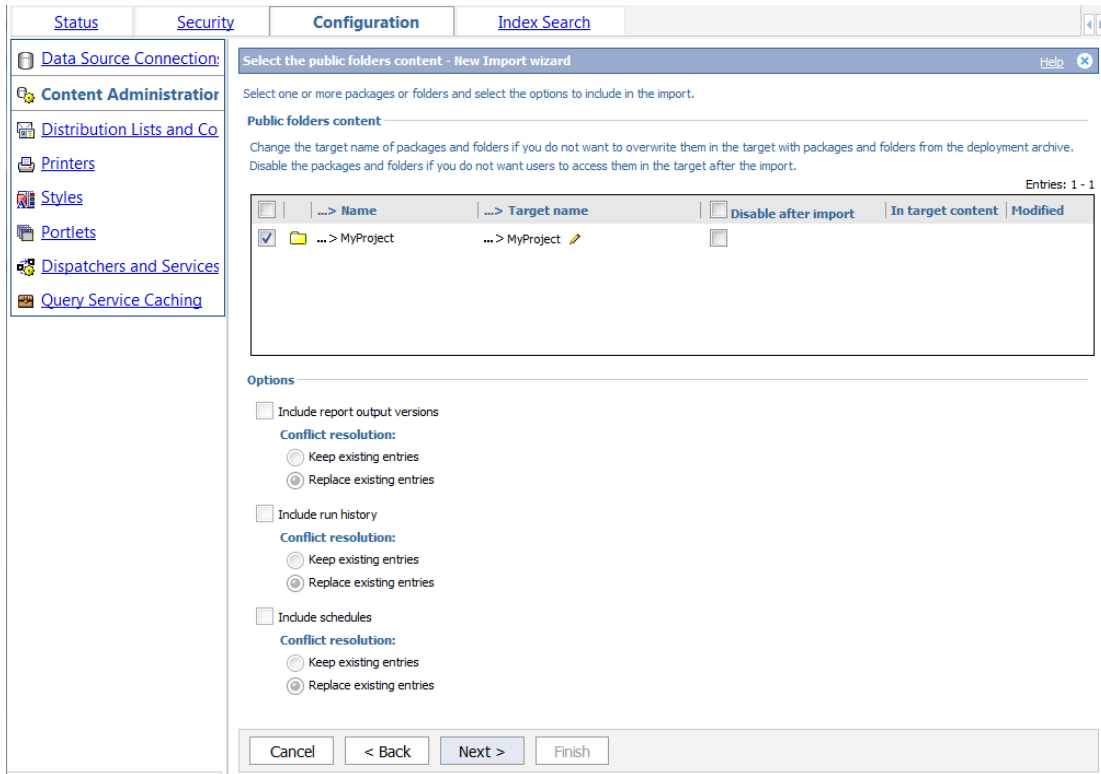
Importing the SMA project Reports on your Cognos server

Once you have obtained the zip file generated in the previous section you can import it into your Cognos server

1. Copy the **MyProject_export.zip** file it in the deployment folder under the Cognos installation directory of your Cognos server in your Cognos enviroment
2. Go to Cognos Administration on your Cognos server and click on the **New Import** icon



3. Select **MyProject_export** as Deployment archive and click **Next**
4. Modify the name to **MyProject_import** and click **Next**
5. Select the checkbox to the left of MyProject and click Next



6. Click **Next** again

7. Review the Summary of the Import Wizard and click **Next** a third time

Review the summary - New Import wizard Help

The Import wizard is ready to import into the target environment.
 If you want to change any settings, click Back.
 If you are satisfied with the settings and want to select whether to run, schedule, or save only, click Next.

Deployment specification

Name: MyProject_import Description:

Deployment archive

Name: MyProject_export

Public folders content

...> Name	Target name	Disable after import	In target content	Modified
...> MyProject	...> MyProject			

1 - 1

Options:

Do not include report output versions
 Do not include run history
 Do not include schedules

Directory content

Do not include Cognos groups and roles
 Do not include distribution lists and contacts
 Do not include data sources and connections

General Options

Do not include access permissions
 Do not include references to external namespaces
 Set the owner to the owner from the source
 Apply to new and existing entries
 Recording level: Basic

8. Leave **Save and run once** selected and click **Finish**
9. Leave **Now** selected and click **Run**
10. Select **View the details of this import after closing this dialog** and click **OK**
11. Click **Refresh** until the import completes

View an import deployment record - MyProject_import Help

View the details of this particular run.

Start time: April 19, 2013 12:41:00 PM **Completion time:** April 19, 2013 12:41:07 PM

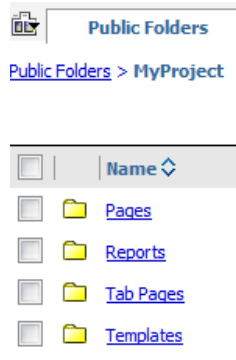
Status: Succeeded

Messages

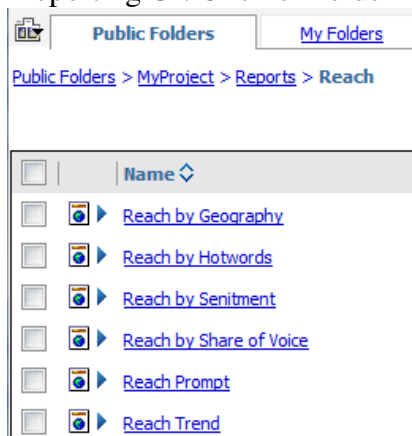
Entries: 1 - 1

Message	Name
CM-REQ-2300 Import is complete. 217 object(s) were imported. 0 object(s) failed.	/

12. Click **Close**
13. Click **Launch** and select **IBM Cognos Connection**
14. Under **Public Folders** there is now a folder called **MyProject**. Click on it.



15. The **Reports** folder contains multiple folders, each corresponding to one of the sections on the SMA Reporting UI. Click on folder **Reach**



16. You can now open any of the available reports on Report Studio and build faster your custom reports by modifying existing ones.