



Software for
Business Intelligence

BizInt Smart Charts

Patents & IP Sequences | Clinical Trials | Drug Pipelines

BizInt Smart Charts for Patents Version 5.4

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Fall 2020

www.bizint.com

Topics today

- Key features in Version 5.4
- Refresher on combine and update
- Current development work
- Upcoming events

BizInt Smart Charts

for Patents

Patent Databases

Provide data on patents filed worldwide

- STN - Classic (including STNext) & New STN
- Questel Orbit.com (including FULLPAT)
- Minesoft PatBase
- Derwent Innovation
- Clarivate Cortellis IP, Integrity Patents
- GQ LifeSciences LifeQuest



STN Transcript support

BizInt Smart Charts

for Patents

- A series of improvements to our STN reader
- More reliable structure image extraction
- Fixed issues with incomplete records
- DEFULL
- *Looking at options for better KWIC support*

FTO families from Orbit.com

BizInt Smart Charts

for Patents

- In BizInt Smart Charts for Patents 5.4 we combine two existing fields, Patent Family and Family Status (top line data extracted from Legal Status Actions)

Patent Family		
Patent	Kind	Date
EP 2951159	B1	2018-08-22
EP 2951159	A1	2015-12-09
WO 2014116849	A1	2014-07-31
US 9643928	B2	2017-05-09
US 20160002170	A1	2016-01-07
JP 6437456	B2	2018-12-12
JP 2016505071	A	2016-02-18
RU 2666144	C2	2018-09-06
RU 2015134420	A	2017-03-03
TW I685487	B	2020-02-21
TW 201444800	A	2014-12-01
AU 2014209319	B2	2018-04-19
AU 2014209319	A1	2015-08-27
IL 240066	B	2019-08-29
IL 240066	A	2015-09-24
CN 105452227B	B	2018-05-29
CN 105452227	A	2016-03-30
MX 360048	B	2018-10-19
MX 2015009617	A	2016-04-20
HK 1217331	A1	2017-01-06
DK 2951159T	T3	2018-11-19
ES 2694297	T3	2018-12-19

Family Status			
Pub No.	State	Status	Expiry
EP 2951159 A1	ALIVE	GRANTED	2034-01-23
WO 2014116849 A1	DEAD	LAPSED	2016-07-24
US 9643928 B2	ALIVE	GRANTED	2034-01-23
JP 2016505071 A	ALIVE	GRANTED	2034-01-23
RU 2015134420 A	ALIVE	GRANTED	2034-01-23
CA 2899024 A1	ALIVE	PENDING	2034-01-23
SG 11201505748U A	ALIVE	PENDING	2034-01-23
KR 20150129679 A	ALIVE	PENDING	2034-01-23
HK 1217331 A1	ALIVE	GRANTED	2034-01-23
AU 2014209319 A1	ALIVE	GRANTED	2034-01-23
CN 105452227 A	ALIVE	GRANTED	2034-01-23
MX 2015009617 A	ALIVE	GRANTED	2034-01-23
DK 2951159T T3	ALIVE	GRANTED	2034-01-23
ES 2694297 T3	ALIVE	GRANTED	2034-01-23
IL 240066 A	ALIVE	GRANTED	2034-01-23
TW 201444800 A	ALIVE	GRANTED	2034-01-23

FTO families from Orbit.com

BizInt Smart Charts

for Patents

- Linking the Patent Family and Family Status in two available views.

FTO Family with Expiry					
Pub No.	Kind	Pub Date	State	Status	Est Expiry
EP 2951159	B1	2018-08-22			
EP 2951159	A1	2015-12-09	ALIVE	GRANTED	2034-01-23
WO 2014116849	A1	2014-07-31	DEAD	LAPSED	2016-07-24
US 9643928	B2	2017-05-09	ALIVE	GRANTED	2034-01-23
US 20160002170	A1	2016-01-07			
JP 6437456	B2	2018-12-12			
JP 2016505071	A	2016-02-18	ALIVE	GRANTED	2034-01-23
RU 2666144	C2	2018-09-06			
RU 2015134420	A	2017-03-03	ALIVE	GRANTED	2034-01-23
TW I685487	B	2020-02-21			
TW 201444800	A	2014-12-01	ALIVE	GRANTED	2034-01-23
AU 2014209319	B2	2018-04-19			
AU 2014209319	A1	2015-08-27	ALIVE	GRANTED	2034-01-23

FTO Family			
Pub No.	Kind	Pub Date	Status
EP 2951159	B1	2018-08-22	
EP 2951159	A1	2015-12-09	GRANTED
WO 2014116849	A1	2014-07-31	LAPSED
US 9643928	B2	2017-05-09	GRANTED
US 20160002170	A1	2016-01-07	
JP 6437456	B2	2018-12-12	
JP 2016505071	A	2016-02-18	GRANTED
RU 2666144	C2	2018-09-06	
RU 2015134420	A	2017-03-03	GRANTED
TW I685487	B	2020-02-21	
TW 201444800	A	2014-12-01	GRANTED
AU 2014209319	B2	2018-04-19	
AU 2014209319	A1	2015-08-27	GRANTED

- There is a problem with publication level data from PatBase 2.0 in Version 5.4
- We made improvements in AN/TI/CLM extraction, detecting and preferring English versions - PatBase 2.0 changed the representation of languages in the XML
- We fixed a bug which caused only one publication from each family to be imported - this now causes extra “runt” rows in the chart when you include Legal Status from PatBase 2.0

- There is a problem with publication level data from PatBase 2.0 in Version 5.4
- If you use publication level data from PatBase, hold off a little while for Version 5.4.1

- In BizInt Smart Charts for Patents 5.4 we improve the extraction and display of Legal Status data from PatBase.
- Latest Legal Status from all selected authorities.

Latest Legal Status	Latest Legal Status Table		
	Pub	Date	Event
AT263171 E [2011-12-15]: - (LSLE / REN) CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	AT263171 E	2011-12-15	- (LSLE / REN) CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE
AU200142085 A1 [2001-10-15]: + (LSPB) published / reissued	AU200142085 A1	2001-10-15	+ (LSPB) published / reissued
AU785385 B2 [2007-03-29]: + (LSGT) granted / extensions (spc, cpc, pte)	AU785385 B2	2007-03-29	+ (LSGT) granted / extensions (spc, cpc, pte)
BG106155 A [2002-08-30]: + (LSPB) published / reissued	BG106155 A	2002-08-30	+ (LSPB) published / reissued
BG65134 B1 [2007-03-30]: + (LSGT) granted / extensions (spc, cpc, pte)	BG65134 B1	2007-03-30	+ (LSGT) granted / extensions (spc, cpc, pte)
BRPI0105563 A [2010-05-11]: - (LSLE / B08K) LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART.	BRPI0105563 A	2010-05-11	- (LSLE / B08K) LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)
CA2368966 AA [2011-08-16]: - (LSLE / FZDE) DEAD	CA2368966 AA	2011-08-16	- (LSLE / FZDE) DEAD

PatBase enhancements

BizInt Smart Charts

for Patents

- In BizInt Smart Charts for Patents 5.4 we improve the extraction and display of Legal Status data from PatBase.
- Estimated Expiry Date (present as a special event type)

Family Status Expiry			Latest Expiry Date
Pub No.	State	Exp Date	
KR 20160000319 A	ALIVE		2034-06-24
KR 101788665 B1	ALIVE	2034-06-24	(KR101788665 B1)

PatBase enhancements

BizInt Smart Charts

for Patents

- In BizInt Smart Charts for Patents 5.4 we improve the display of PCT publication numbers from PatBase.
- Using four-digit years for all WO publications 2004 and later.

Patent Family		
Patent	Kind	Date
WO 2008098105	A1	2008-08-14
EP 2114388	A1	2009-11-11
EP 2114388	A4	2011-08-17
EP 2114388	B1	2015-05-20
JP 2010518111	T2	2010-05-27
JP 5363997	B2	2013-12-11

Support for New Integrity

- You can create drug pipeline reports from **Cortellis Drug Discovery Intelligence** (next generation of Integrity) using BizInt Smart Charts Drug Development Suite 5.2 and newer.
- Patents are supported in BizInt Smart Charts for Patents 5.4
- You can **update** reports from the classic Integrity platform with data from the new platform.



IP Sequence Databases

Provide data on sequences filed in patents

- GenomeQuest (Geneseq, GQ-PAT)
- STN (USGENE, DGENE, PCTGEN)
- **New! CAS Biosequences on GenomeQuest**



CAS Biosequences on GenomeQuest

CAS Biosequences: gq_cas_proteins									
	Title	Patent Sequence Location	Alignment	CAS Registry Number	CAS Name	Biosequence Modifications		Role	
						Position	Modification		
35	Soybean nucleic acids and encoded proteins associated with transcription in plants and their uses for plant improvement	SEQID 263138; claimed	Q: 1 N-AFDAAAF 8 S: 52 NKAFDAAAF 60	672458-79-6	Transcription-associated protein (Glycine max clone PAT_MRT3847_79635C.1.pep fragment)			Biological Study, Unclassified; Biological Use, Unclassified; Properties; Biological Study; Uses	
36	Sorghum nucleic acids and encoded proteins and their uses improvement of transgenic plants	SEQID 46304; claimed	Q: 1 MLR--HQM 7 S: 10 MLRAAHQM 18	752630-89-0	Protein (sorghum clone LIB3480-022-P1-K1-C6.pep fragment)			Biological Study, Unclassified; Biological Use, Unclassified; Properties; Biological Study; Uses	
37	Chimeric antigen receptors containing a chlorotoxin domain		Q: 1 ECCG-I-KCI 8 + S: 17 ECCGGIGKCV 26	2095313-89-4		1	bridge, cysteine-1 to cysteine-18, disulfide bridge	Properties; Therapeutic Use; Biological Study; Uses	
						4	bridge, cysteine-4 to cysteine-25, disulfide bridge		
						15	bridge, cysteine-15 to cysteine-30, disulfide bridge		
						18	bridge, cysteine-1 to cysteine-18, disulfide bridge		
						19	bridge, cysteine-19 to cysteine-32, disulfide bridge		
						25	bridge, cysteine-4 to cysteine-25, disulfide bridge		
						30	bridge, cysteine-15 to cysteine-30, disulfide bridge		
32	bridge, cysteine-19 to cysteine-32, disulfide bridge								



Software for
Business Intelligence

BizInt Smart Charts

Literature Databases

Provide data on technical and scientific publications

- **Biomedical** (Embase, Biosis, Medline)
- **Scientific** (SciSearch, Chemical Abstracts, PQSciTech, etc.)
- **Technical** (INSPEC, RAPRA, GEOREF, etc.)
- **Hosts:** STN (Classic & New), SciFinder, Dialog, Ovid, PubMed



Integrating data from separate records

Combine charts from different sources with File | Combine Reference Rows is a utility to combine multiple records from the same family into one “row”

Records grouped by “Common Family”

Matching publication numbers in the family

Tools | Identify Common Patent Family

Database	Common Family	Patent Family		
		Patent	Kind	Date
Derwent World Patents Index	US 2014356956	US20140356959	A1	20141204
Derwent World Patents Index	US 2014356956	US20140356956	A1	20141204
		WO2014197568	A2	20141211
		WO2014197568	A3	20150312
		CA2914638	A1	20141211
FAMPAT	US 2014356956	US 2014356956	A1	2014-12-04
		US 2014356959	A1	2014-12-04
		US 9287133	B2	2016-02-23
GQPAT Gold+ Proteins	US 2014356956	US20140356959		20141204
GQPAT Gold+ Proteins	US 2014356956	US20140356956		20141204
PatBase	US 2014356956	US 2014356959	A	2014-12-04
		US 2014356956	A	2014-12-04
		AU 2014274939	AA	2014-12-11
		WO 14197568	A2	2014-12-11
		WO 14197568	A3	2015-03-12
		CA 2914638	AA	2015-12-04
		KR 20160014036	A	2016-02-05

Create reports integrating key IP data...

CAS-9 - GenomeQuest, PatBase, DWPI (new STN), FAMPAT

	Title	Database	Patent Family			Family Status				Probable Assignee	Sequence Locations				
			Patent	Kind	Date	Pub No.	State	Status	Expiry		Seq. ID Number	% Identity	Length	Location	
1.	Modulating expression of a target nucleic acid comprises providing to the cell a guide RNA including a transcriptional activator or repressor domain as a fusion protein, and providing to the cell a nuclease null Cas9 protein	1.1 DWPI	US 2014356959	A	2014-12-04	US 20140356956 A1	ALIVE	PENDING	2034-06-04	PRESIDENT AND FELLOWS OF HARVARD COLLEGE	US20140356959-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.3
		1.2 DWPI	US 2014356956	A	2014-12-04	US 9267135 B2	ALIVE	GRANTED	2034-06-04		US20140356956-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.4
		1.3 GPATPRT link	AU 2014274939	AA	2014-12-11	WO 14197568									
		1.4 GPATPRT link	WO 14197568	A2	2014-12-11	WO 14197568									
		1.5 Patbase link	WO 14197568	A3	2015-03-12	CA 2914638	AA	2015-12-04							
		1.6 FAMPAT link	KR 20160014036	A	2016-02-05										
		1.1 DWPI			1.5 Patbase				1.6 FAMPAT					1.5 Patbase	
2.	New bacteriophage comprises polynucleotide expressing RNA-directed DNA-binding polypeptide comprising nuclease module, and targeting module comprising guide RNA, for restricting growth of host cell, and for preparing antiseptic composition	2.1 DWPI	WO 15070193	A1	2015-05-14	WO 201570193 A1	ALIVE	PENDING	2034-11-11	RADIANT GENOMICS INC	US20150132263-0002	100.00	1368	claim: 19; 20	2.3
		2.2 DWPI	US 2015132263	A	2015-05-14	US 20150132263 A1	ALIVE	PENDING	2034-11-11		US20150353901-0002	100.00	1368	claim: 19; 20	2.4
		2.3 GPATPRT link	US 2015353901	A	2015-12-10	US 20150132263 A1									
		2.4 GPATPRT link				US 20150132263 A1									
		2.5 Patbase link				US 20150353901 A1									
		2.6 FAMPAT link													
		2.1 DWPI			2.5 Patbase				2.6 FAMPAT					2.5 Patbase	

choosing content by rules...

	Title	Database	Patent Family		
			Patent	Kind	Date
1.	Modulating expression of a target nucleic acid comprises providing to the cell a guide RNA including a transcriptional activator or repressor domain as a fusion protein, and providing to the cell a nuclease null Cas9 protein	1.1 DWPI	US 2014356959	A	2014-12-04
		1.2 DWPI	US 2014356956	A	2014-12-04
		1.3 GPATPRT link	AU 2014274939	AA	2014-12-11
		1.4 GPATPRT link	WO 14197568	A2	2014-12-11
		1.5 Patbase link	WO 14197568	A3	2015-03-12
		1.6 FAMPAT link	CA 2914638	AA	2015-12-04
			KR 20160014036	A	2016-02-05
		1.1 DWPI			1.5 Patbase
2.	New bacteriophage comprising a polynucleotide expressing RNA-directed DNA-binding polypeptide comprising nuclease module, and targeting module comprising guide RNA, for restricting growth of host cell, and for preparing antiseptic composition	2.1 DWPI	WO 15070193	A1	2015-05-14
		2.2 DWPI	US 2015132263	A	2015-05-14
		2.3 GPATPRT link	US 2015353901	A	2015-12-10
		2.4 GPATPRT link			
		2.5 Patbase link			
		2.6 FAMPAT link			
		2.1 DWPI			2.5 Patbase

linking unique content...

Family Status				Probable Assignee
Pub No.	State	Status	Expiry	
US 20140356956 A1	ALIVE	PENDING	2034-06-04	PRESIDENT AND FELLOWS OF HARVARD COLLEGE
US 9267135 B2	ALIVE	GRANTED	2034-06-04	
1.6 FAMPAT				1.5 Patbase
WO 201570193 A1	ALIVE	PENDING	2034-11-11	RADIANT ECONOMICS INC
US 20150132263 A1	ALIVE	PENDING	2034-11-11	
US 20150353901 A1	ALIVE	PENDING	2034-11-11	
2.6 FAMPAT				2.5 Patbase

...and summarizing data elements.

Sequence Locations				
Seq. ID Number	% Identity	Length	Location	
US20140356959-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.3
US20140356956-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.4
US20150132263-0002	100.00	1368	claim: 19; 20	2.3
US20150353901-0002	100.00	1368	claim: 19; 20	2.4

Detecting Changes in Reports

BizInt Smart Charts

for Patents

- BizInt Smart Charts allows you to easily update reports with new data, flagging new, changed, and unchanged records.

PatBase: Mousetraps - Updated								
	Title	Row Status	Patent Family			International Patent Class	Patent Assignee	New Publications
			Patent	Kind	Date			
1	Falle zum Fangen von Maeusen und aehnlichen Kleintieren; Trap to catch mice and other small rodents has two housing parts one open at the top and pivotably positioned on an other open a	Added	DE 102004053106	B3	2006-03-30	A01M23/18 A01M23/22 A01M23/00	HAFFNER HEINO	DE 102004053106 B3
2	PIEGE A SOURIS; Mousetrap has drum with two open ends two heightened inner walls at open ends and adhesive layer applied on inner wall of drum	Added	GB 200322688 GB 2406257 DE 20315618 FR 2860955	A0 A1 U1 A3	2003-10-29 2005-03-30 2003-12-04 2005-04-22	A01M23/00 A01M23/00	HSU TSU NENG LAI CHUN CHIEH	GB 200322688 A0 GB 2406257 A1 DE 20315618 FR 2860955 A3
3	Mausefalle; Mousetrap for use in garden has catch container designed as bottle and including pivot that is twistably supported on support p	Updated	DE 102004052292	A1	2006-05-04	A01M23/02 A01M23/04 A01M23/00	WENK KARL HEINZ	
4	TESTING A PIPELINE IN AN IC	Updated	WO 2006006132 EP 1766428	A1 A1	2006-01-19 2007-03-28	G01R31/3185 G01R31/28	KONINKL PHILIPS ELECTRONICS NV VAN KAAM KEES WIELAGE PAUL	EP 1766428 A1
5	Straight-through type mouse-trap	Unchanged	CN 2724423	Y	2005-09-14	A01M23/08 A01M23/00	TANG QIAOFEI	

Detecting New Publications

- A new column reports the new publications in each row of the table.

PatBase: Mousetraps - Updated

	Title	Row Status	Patent Family			International Patent Class	Patent Assignee
			Patent	Kind	Date		
1	Falle zum Fangen von Maeusen und aehnlichen Kleintieren; Trap to catch mice and other small rodents has two housing parts one open at the top and pivotably positioned on an other open a	Added	DE 102004053106	B3	2006-03-30	A01M23/18 A01M23/22 A01M23/00	HAFFNER HEINO
2	PIEGE A SOURIS; Mousetrap has drum with two open ends two heightened inner walls at open ends and adhesive layer applied on inner wall of drum	Added	GB 200322688 GB 2406257 DE 20315618 FR 2860955	A0 A1 U1 A3	2003-10-29 2005-03-30 2003-12-04 2005-04-22	A01M23/00 A01M23/00	HSU TSU NENG LAI CHUN CHIEH
3	Mausefalle; Mousetrap for use in garden has catch container designed as bottle and including pivot that is twistably supported on support p	Updated	DE 102004052292	A1	2006-05-04	A01M23/02 A01M23/04 A01M23/00	WENK KARL HEINZ
4	TESTING A PIPELINE IN AN IC	Updated	WO 2006006132 EP 1766428	A1 A1	2006-01-19 2007-03-28	G01R31/3185 G01R31/28	KONINKL PHILIPS ELECTRONICS NV VAN KAAM KEES WIELAGE PAUL
5	Straight-through type mouse-trap	Unchanged	CN 2724423	Y	2005-09-14	A01M23/08 A01M23/00	TANG QIAOFEI

New Publications

DE 102004053106
B3

GB 200322688 A0
GB 2406257 A1
DE 20315618
FR 2860955 A3

EP 1766428 A1

Detecting Changes in Reports

BizInt Smart Charts

for Patents

- With the ability to report New Publications across databases (seen here at the record level).

	Title	Database	Row Status	Patent Family			New Publications
				Patent	Kind	Date	
5 .1	Fermented fruit solutions for cleaning compositions ✓	FAMPAT	Unchanged ✓	WO 201540442	A1	2015-03-26	
				WO 201540506	A1	2015-03-26	
				WO 201540444	A1	2015-03-26	
5 .2	SOFTENING COMPOSITIONS INCLUDING FERMENTED FRUIT SOLUTIONS AND METHODS FOR MAKING AND USING THE SAME	PatBase	Added	WO 15040506	A1	2015-03-26 ✓	WO 2015040506 A1 #
				WO 15040445	A1	2015-03-26	WO 2015040445 A1
				WO 15040444	A1	2015-03-26	WO 2015040444 A1
				WO 15040442	A1	2015-03-26	WO 2015040442 A1
6 .1	Processed edible product comprising a polyelectrolyte complex and an antimicrobial compound ✓	FAMPAT	Unchanged ✓	WO 201534360	A1	2015-03-12 ✓	
6 .2	PROCESSED EDIBLE PRODUCT COMPRISING A POLYELECTROLYTE COMPLEX AND AN ANTIMICROBIAL COMPOUND	PatBase	Added	WO 15034360	A1	2015-03-12	WO 2015034360 A1 #

Detecting Changes in Reports

BizInt Smart Charts

for Patents

- Here summarized at the family level, showing only the truly new publications in the context of the report.

	Title	Database	Row Status	Patent Family			New Publications
				Patent	Kind	Date	
5.	Fermented fruit solutions for cleaning compositions	5.1 FAMPAT link	Updated	WO 15040506	A1	2015-03-26	WO 2015040445 A1
		5.2 Patbase link		WO 15040445	A1	2015-03-26	
				WO 15040444	A1	2015-03-26	
				WO 15040442	A1	2015-03-26	
		5.1 FAMPAT				5.2 Patbase	
6.	Processed edible product comprising a polyelectrolyte complex and an antimicrobial compound	6.1 FAMPAT link	Updated	WO 201534360	A1	2015-03-12	
		6.2 Patbase link					
		6.1 FAMPAT				6.1 FAMPAT	6.1 FAMPAT

Updating reports (Row status)

- “Added” means this **record** is new in this report
- “Updated” means the record was seen before but has new/changed information
- “Unchanged” means the record has not changed from the baseline
- Row Status reflects what happened to the record at that row.

Row Status in Reference Rows - New

- “Added” means this **group** of related records (same family, drug, trial) is new in this report
- “Updated” means the baseline had this group before, but has new/changed information, possibly from added records
- “Unchanged” means the group has not changed from the baseline
- Row Status reflects what happened to the group at that row.

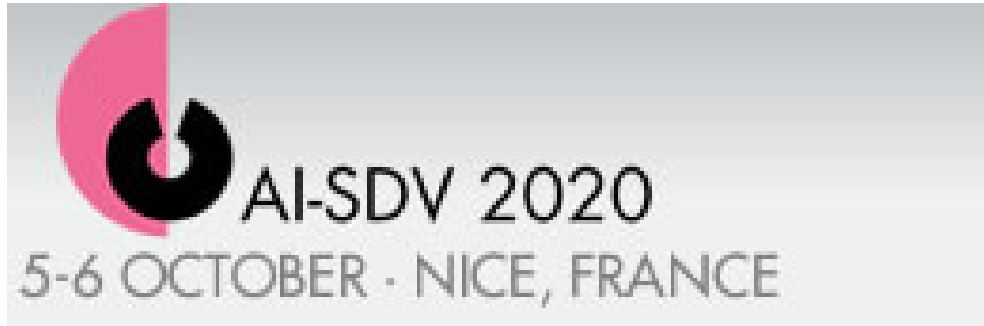
Current development work

BizInt Smart Charts

for Patents

- Improvements to Reference Rows
- Image quality improvements
- MARPAT
- BLAST on STN
- PubMed text support
- Identify Common Document

Upcoming Events



***Product Update
Available for virtual meetings***

Upcoming Events



October 26-30

Monday, Oct 26 - Workshop
Wednesday, October 28 - Plenary
Product reviews, breakouts



Software for
Business Intelligence

BizInt Smart Charts



Software for
Business Intelligence

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Questions?



THE JOURNEY CONTINUES