

Db2 Web Query for i: *Gaining
Better Business Insights with
Db2 Web Query - the
Foundation for IBM i Analytics*

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<http://ibm.biz/db2webqueryi>

2020
iSight



Back to the Future – Circa 2000

Db2 for i adds **MANY** advanced technologies to process *analytical queries* over *large databases*

- Symmetric Multiprocessing
- In Memory like (Single Level Store)
- Columnar like (Encoded Vector Indexing)
- SQL Query Engine (with query re-write)
- Materialized Query Tables
- Star Schema Look-ahead Predicate Generation

Killing it on industry Business Intelligence benchmarks

- SAP BW

Killing it in competitive data warehouse bake-offs

- IBM Teraplex Center



Ye Ol' Teraplex Center

Is Your User Community Getting This?

Query . . . : QRYDAT11/REVGPFQRY

Position to line

Line1.2.3.4.5.6.7.8.

	Product Category	Product Type	Revenue	Gross Profit
000001	Amplifiers/PreA	Audio		
000002		TOTAL	42,374,428.00	16,634,858.00
000003				
000004	Audio Systems	Audio		
000005		TOTAL	122,345,680.00	40,062,860.00
000006				
000007	CD Players and	Audio		
000008		TOTAL	53,847,459.00	16,008,999.00
000009				
000010	Digital Cameras	Cameras		
000011		TOTAL	184,103,667.00	50,774,837.00
000012				
000013	Digital8 Camcor			7,102,353.00
000014				
000015				
000016	DVD			
000017				
000018				
000019	DVD Camcorders			81,103,145.00



When They Want This?



“It makes sense – the system is essentially a database machine, we should be giving customers the tools and applications to analyze that data on the same platform.”

–IBM i General Manager

Db2 Web Query for i – Intuitive, Insightful, Extensible

Fast, easy access to business information assets for query, reporting and analysis



INTEGRATED Business Intelligence and Data Warehousing for IBM i

MODERNIZE Query/400 or RPG Reporting Processes

LOW-COST IBM i Analytics Infrastructure

ALIGNED with Db2 for i Advanced Query Processing

Db2 Web Query Editions

Small – *EXPRESS* Edition: 5733-WQE

Functions: browser based meta data and report/dashboard development tools, All output types supported (html, pdf, excel, html analytical document etc.)

A user license is required for every user that needs to sign into Db2 Web Query.

Small shops only...more than 10 users? Consider Medium or Large

Medium – *SCHEDULER* Edition: 5733-WQB

Adds job scheduling and distribution function to Express Edition - supports pushing reports/dashboards out to any number of consumers (that receive reports but don't run reports interactively).

Email, FTP, Push to IFS/Network Drive – Integration with Mobile App



NEW

Medium – *RUNTIME USER* Edition: 5733-WQR

Adds virtually unlimited and concurrent interactive RUN TIME user licensing. Based on IBM i Group Profiles, each run time group license can support 1000's of users that can sign in and RUN (but only run) reports interactively.

Individual “authorized user” licenses still required for report/metadata editors

NOTE: You should always get price quotes from your IBM Business Partner

Supporting Large # of Users just got WAY LESS Expensive!

New Editions announced in June **Significantly Reduces Cost per User**

Db2 Web Query **Scheduler Edition 5733-WQB**

- Express + Job Scheduling
- Upgrade from Express or buy brand new
- Can support unlimited report “consumers”
 - Users can work with data offline
 - Support Mobile or At Home Workers more cost effectively
- Use GUI Scheduler or CL Commands

Db2 Web Query **RunTime User Edition 5733-WQR**

- Express + RunTime Licensing
- Upgrade from Express or buy brand new
- Uses IBM i Group profiles
 - Everyone in that group can run report concurrently
 - 2 Run Time Group licenses per core
- Users can run interactive reports with live data

COST PER USER

Developers	End Users	Express	Scheduler	RunTime User
2	10	\$403	\$395	\$395
2	20	\$402	\$215	\$215
4	50	\$401	\$103	\$103
8	100	\$400	\$66	\$66

OVER 50% Savings for 20 user system

OVER 75% Savings for 50 user system

Cost Per User: Adding users to Express vs. Upgrading to new Edition
Calculated using U.S. List Prices and includes SW Maintenance
Assumes you already own Express Edition + 2 user licenses

Learn More at <http://ibm.biz/db2wq-blog-neweditions>

Db2 Web Query Editions

Large – **STANDARD** Edition: 5733-WQS

Adds all the elements of the Small/Medium Editions PLUS

Non Db2 Database Adapters (e.g., Msoft SQLServer)

Simple API to embed reports in your own web applications

Required for use with JDEdwards adapter and non Db2 database access (source or target)
using DataMigrator

Data Warehousing – **DataMigratorETL** Edition: 5733-WQM

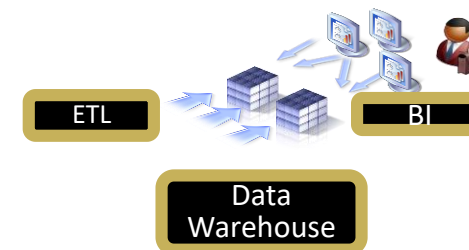
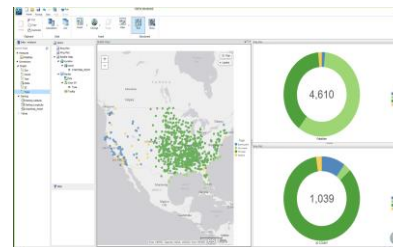
Adds to ANY of the previous Editions an ETL (extract/transformation/load) utility. Replicate, cleanse and transform data into an optimized analytics database in an isolated VM/Server.

Schedule “flows” from your IBM i job scheduler. With Standard Edition, access non Db2 databases. Pull data from journal receivers for “change-data-capture.”

NOTE: You should always get price quotes from your IBM Business Partner

What Can you Do With *Db2 Web Query for i*?

- **Simplify** the perspective of your database
- **Import and Modernize** Query/400
- Build reports/dashboards over **IBM i Services**
- Build powerful **interactive** dashboards
- **Distribute** reports/dashboards via email, etc.
- Embed reports/dashboards **in your apps**
- Build a **data warehouse** or ODS
- Sync reports with **mobile devices**
- Provide a report/dashboard frontend for your favorite **SQL query** or stored procedure
- Build **Slice and Dice** reports
- Reverse Engineer **Spool Files** into reports/dashboards
- Plot data on a **geographical map** image
- **Prepare data** for **advanced analytics** (AI/ML, Watson, R/Python)
- **Monitor security compliance** across all your systems/LPARs (Compliance and Reporting Tool)



Who Uses Db2 Web Query?

Executives - Dashboards to monitor Key Performance Indicators

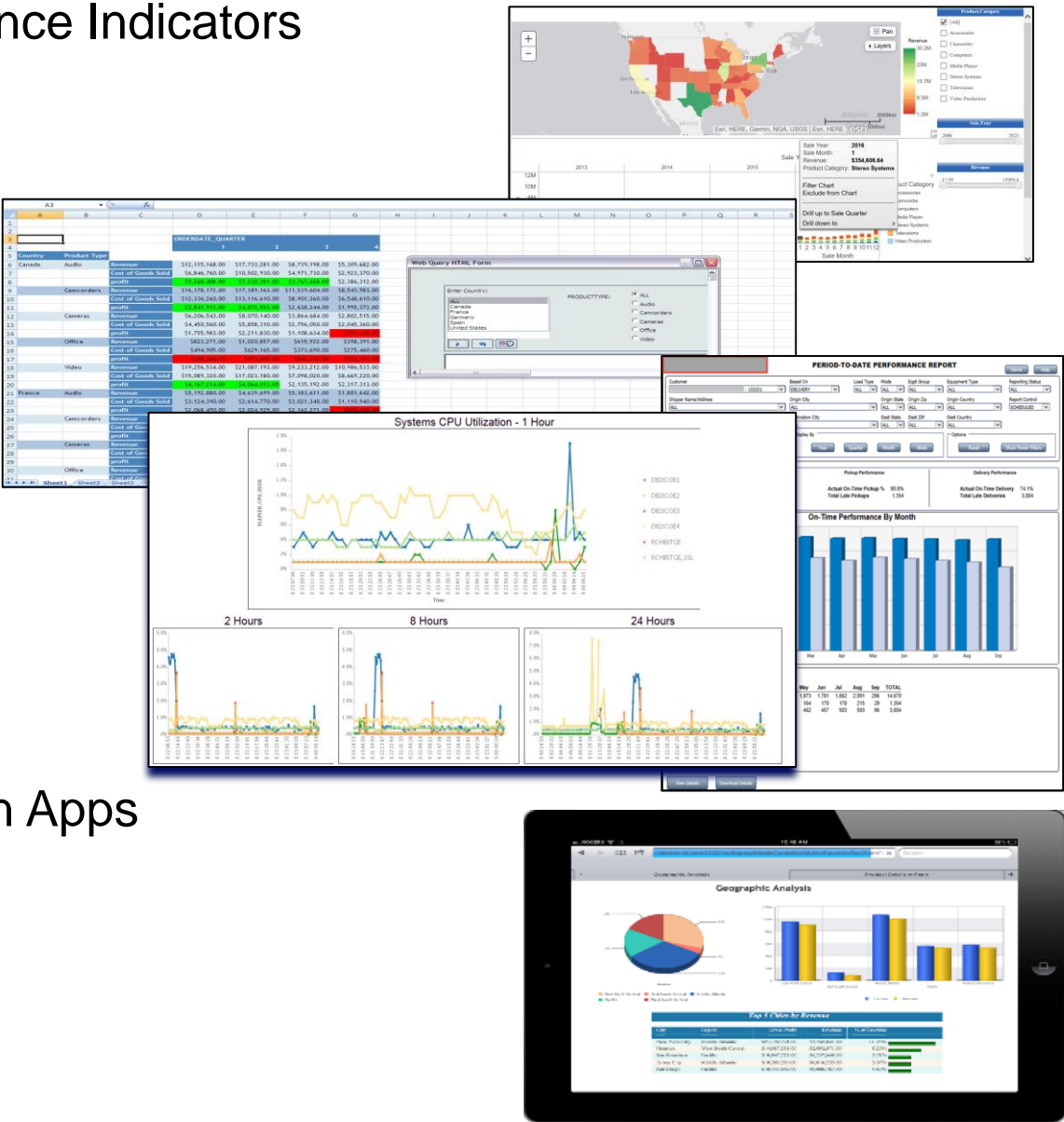
Finance Dept – they love their spreadsheets!

Business Analysts supporting the business
– Drill Anywhere Reports

Users on the Go
– Mobile Device Support

Applications
– Simple URL Construction API to Embed Reports in Apps

And YES, **IBM i Admins and Developers**
– IBM i Services



Who Uses Db2 Web Query?

Medium Sized Food Distributor

Financial analyst would spend 1 week out of every month doing spreadsheet consolidation to send out to stakeholders. Now she pushes a button and all data is consolidated automatically and distributed out.

Medium/Large Insurance Company

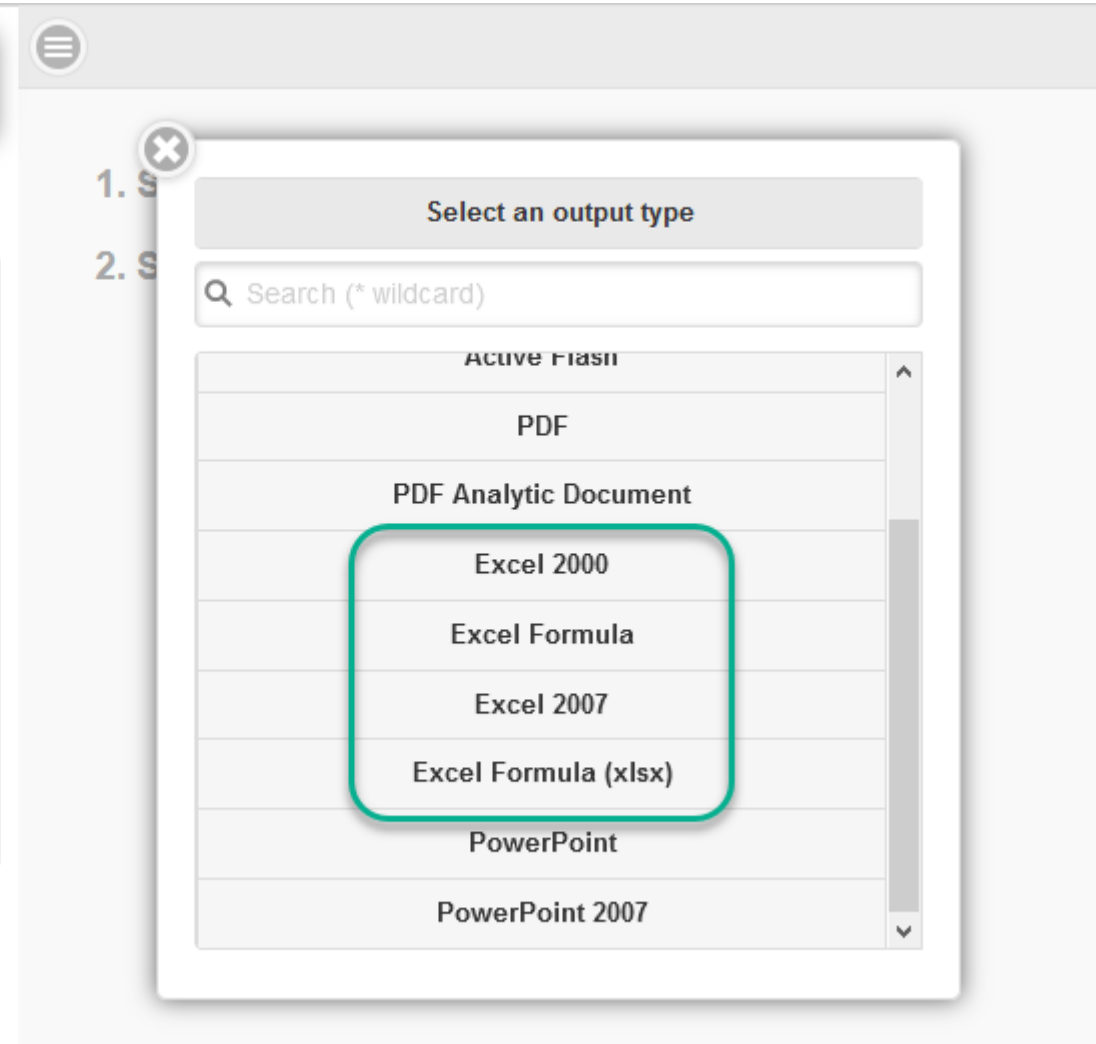
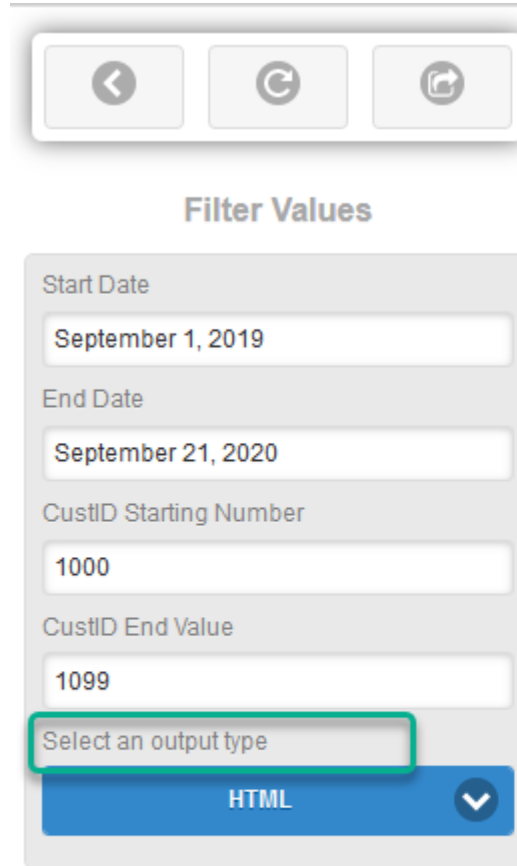
Acquired several companies over time, but each company is running on a separate server (same application, all IBM i). Used Db2 Web Query to build an IBM i based data warehouse to get cross company analysis of data.

Medium Sized SPA Services Company

Uses Db2 Web Query for inventory analysis by supplementing sales and inventory data with cloud-based weather forecast to set store level inventory to maximize sales

Db2 Web Query and Excel Integration

- Choosing Excel as an output for your report or chart
- Many formats
 - CSV, XLS, XLSX
 - Pivot Table
 - Multiple Sheets
 - Templates (coming in a future release)
- Specify output in report, **or let user choose at run time**
- Run report as OLAP or HTML Analytical Document first, and THEN choose to download to Excel



Now That's Cool!

Db2 Web Query and Excel Integration

- More than raw data – **preserve formulas and look and feel**

Sales Report					
Product	Product Category	Revenue	Cost of Goods Sold	Profit	Margin
Audio	Amplifiers/PreAmps/Tuners	\$42,374,428.00	\$25,739,570.00	\$16,634,858.00	39.26%
	Audio Systems	\$122,345,680.00	\$82,282,820.00	\$40,062,860.00	32.75%
	CD Players and Recorders	\$53,847,459.00	\$37,838,460.00	\$16,008,999.00	29.73%
	MP3	\$43,491,588.00	\$26,438,660.00	\$17,052,928.00	39.21%
	Receivers	\$35,907,113.00	\$22,998,000.00	\$12,909,113.00	35.95%
	Speakers	\$84,717,053.00	\$24,680,990.00	\$60,036,063.00	70.87%
Subtotal for Audio		\$382,683,321.00	\$219,978,500.00	\$162,704,821.00	42.52%
Camcorders	Digital8 Camcorders	\$13,614,953.00	\$6,512,600.00	\$7,102,353.00	52.17%
	DVD Camcorders	\$379,376,637.00	\$300,373,350.00	\$79,003,287.00	20.82%
	MiniDV Camcorders	\$51,539,451.00	\$34,128,360.00	\$17,411,091.00	33.78%
Subtotal for Camcorders		\$444,531,041.00	\$341,014,310.00	\$103,516,731.00	23.29%
Cameras	Digital Cameras	\$184,103,667.00	\$133,328,830.00	\$50,774,837.00	27.58%
Subtotal for Cameras		\$184,103,667.00	\$133,328,830.00	\$50,774,837.00	27.58%
Office	Handheld and PDA	\$18,533,190.00	\$14,067,420.00	\$4,465,770.00	24.08%
	Organizers	\$11,712,495.00	\$4,957,305.00	\$6,755,190.00	57.68%
Subtotal for Office		\$30,245,685.00	\$19,024,725.00	\$11,220,960.00	37.10%
Video	DVD	\$329,872,045.00	\$248,768,900.00	\$81,103,145.00	24.60%
	TV	\$168,799,539.00	\$150,771,700.00	\$18,027,839.00	10.68%
	VCR	\$21,688,621.00	\$16,270,950.00	\$5,417,671.00	24.98%
Subtotal for Video		\$520,360,205.00	\$415,811,550.00	\$104,548,655.00	20.09%
TOTAL		\$1,561,923,919.00	\$1,129,157,915.00	\$432,766,004.00	27.71%
Values generated on Mon, Sep 21, 2020					

Traffic
Lights


Aggregates
come in as
formulas vs.
pasted
values


Db2 Web Query and Excel Integration

- More than raw data – **auto create pivot tables**

1	Product Name	Product Category	Data	Total					
2	Audio/Video Receiver	Receivers	Sum of Revenue	\$4,302,778.00					
3			Sum of Cost of Goods Sold	2162200.00					
4			Sum of Profit	\$2,140,578.00					
5			Sum of Quantity	21622					
6			Sum of Returns	2272					
7	AM / FM Stereo Tuner	Amplifiers/PreAmps/Tuners	Sum of Revenue	\$950,822.00					
8			Sum of Cost of Goods Sold	477800.00					
9			Sum of Profit	\$473,022.00					
10			Sum of Quantity	4778					
11			Sum of Returns	461					
12	CD Changer / CD Player	CD Players and Recorders	Sum of Revenue	\$4,689,037.00					
13			Sum of Cost of Goods Sold	2827560.00					
14			Sum of Profit	\$1,861,477.00					
15			Sum of Quantity	23563					
16			Sum of Returns	2457					
17	CD Recorder with 50GB Hard Disc Drive	CD Players and Recorders	Sum of Revenue	\$5,788,755.00					
18			Sum of Cost of Goods Sold	4347000.00					
19			Sum of Profit	\$1,441,755.00					
20			Sum of Quantity	7245					
21			Sum of Returns	715					
22	D-VHS Digital Video Recorder	VCR	Sum of Revenue	\$1,120,290.00					
23			Sum of Cost of Goods Sold	963000.00					

PivotTable Fields

Choose fields to add to report: 


Search 

- ☒ Cost of Goods Sold
- ☒ Product Category
- ☒ Product Name
- ☒ Profit
- ☒ Quantity
- ☒ Returns
- ☒ Revenue

Drag fields between areas below:

Filters	Columns
Rows	Values
Product Name	Sum of Revenue
Product Category	Sum of Cost of Go...

☐ Defer Layout Update Update

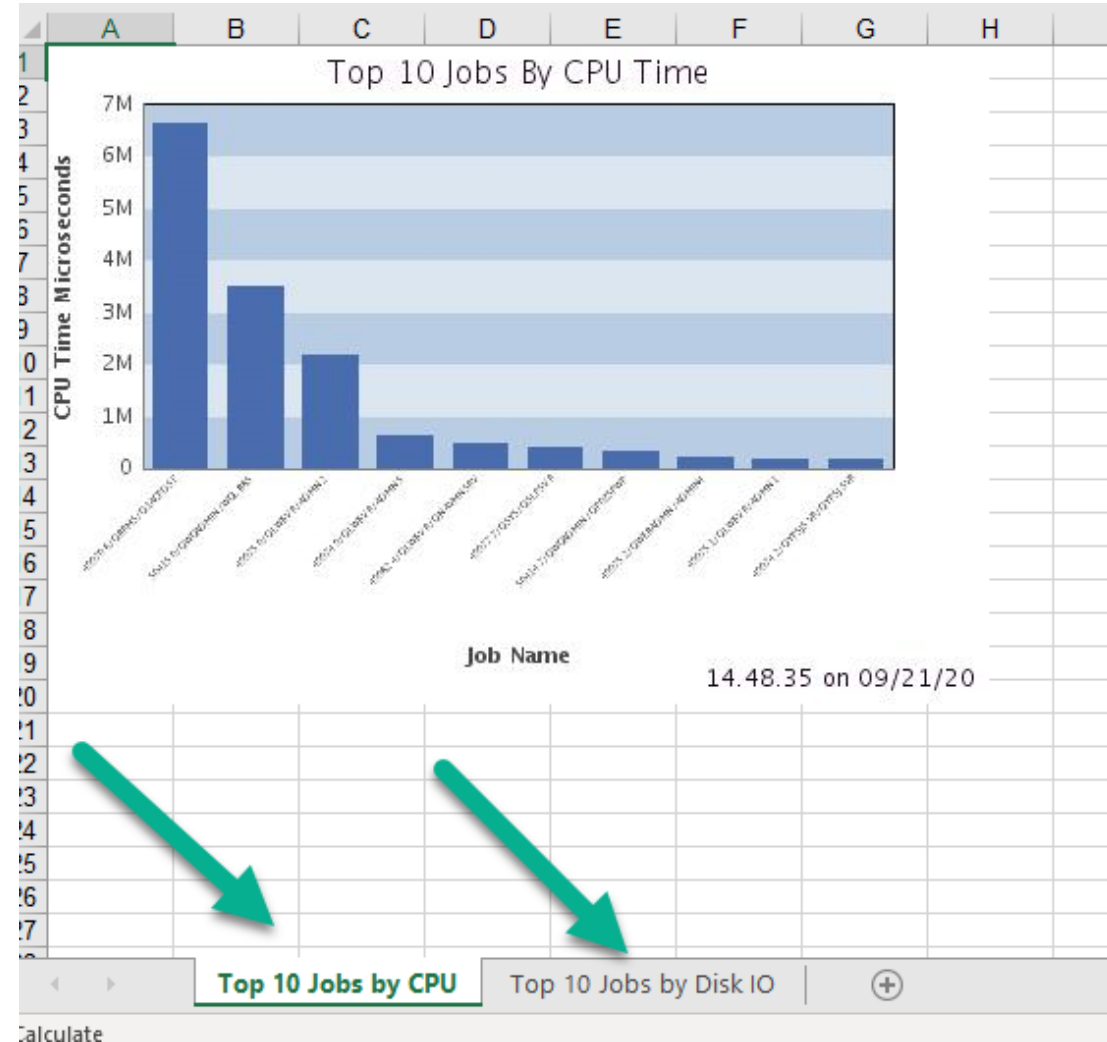
B. Sales Distribution - Excel P 

Db2 Web Query and Excel Integration

- More than raw data – **Multiple Sheets – Separated by data or separated by different reports!**

	A	B	C	D	E
1	Country	Product Type	Revenue	Cost of Goods Sold	Quantity
2	Canada	Audio	\$43,897,329.00	\$25,244,790.00	97,951
3		Camcorders	\$53,450,922.00	\$40,902,840.00	42,968
4		Cameras	\$20,943,882.00	\$15,110,280.00	42,018
5		Office	\$2,858,441.00	\$1,773,220.00	26,289
6		Video	\$60,563,472.00	\$47,879,740.00	48,878
7					
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Canada	France	Germany	Spain	United States
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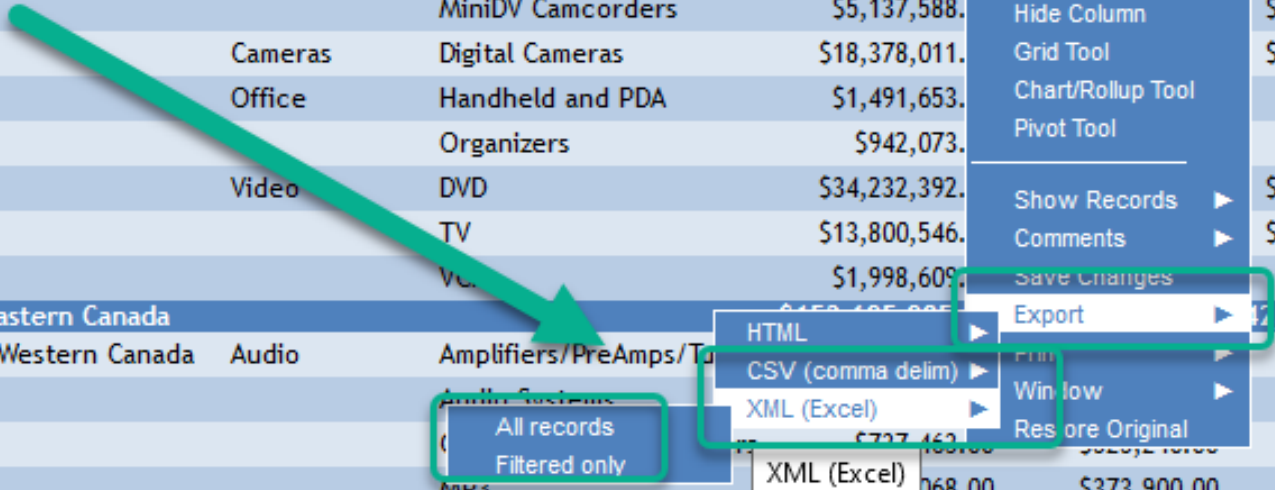
Db2 Web Query and Excel Integration

- More than raw data – **Allow data analysis first, and then dump into Excel with Analytical Documents**

358 of 358 records, Page 1 of 7

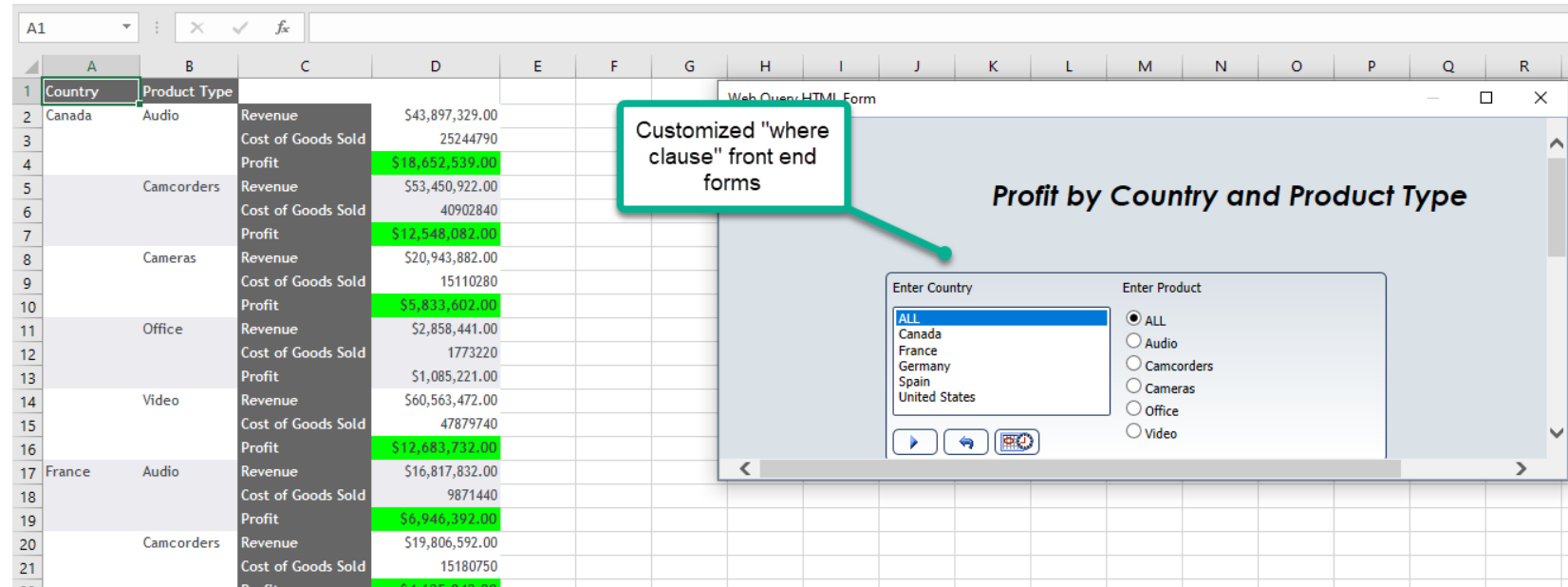
Gross Profit by Geo and Product

Country ▼	Region ▼	Product Type ▼	Product Category ▼	Revenue ▼	Cost of Goods Sold ▼	Profit ▼
Canada	Eastern Canada	Audio	Amplifiers/PreAmps/Tuners	\$3,641,071.	Sort Ascending	\$1,422,251.00
			Audio Systems	\$13,874,740.	Sort Descending	\$4,600,870.00
			CD Players and Recorders	\$4,862,691.	Filter	\$1,418,451.00
			MP3	\$4,078,820.	Calculate	\$1,630,310.00
			Receivers	\$3,325,818.	Chart	\$1,180,518.00
			Speakers	\$7,833,814.	Rollup	\$5,518,494.00
		Camcorders	Digital8 Camcorders	\$1,324,991.	Pivot (Cross Tab)	\$699,051.00
			DVD Camcorders	\$38,773,168.	Visualize	\$8,179,018.00
			MiniDV Camcorders	\$5,137,588.	Hide Column	\$1,747,078.00
		Cameras	Digital Cameras	\$18,378,011.	Grid Tool	\$5,113,311.00
		Office	Handheld and PDA	\$1,491,653.	Chart/Rollup Tool	\$355,433.00
			Organizers	\$942,073.	Pivot Tool	\$546,713.00
		Video	DVD	\$34,232,392.	Show Records	\$8,308,942.00
			TV	\$13,800,546.	Comments	\$1,552,646.00
			VO	\$1,998,609.	Save Changes	\$531,459.00
Subtotal: Eastern Canada				\$459,495,995.	Export	\$12,804,545.00
	Western Canada	Audio	Amplifiers/PreAmps/Tuners	\$1,998,609.	Print	\$543,854.00
			Audio Systems	\$1,998,609.	Win low	\$430,664.00
			CD Players and Recorders	\$1,998,609.	Restore Original	\$212,223.00
			MP3	\$1,998,609.		\$329,168.00
			Receivers	\$536,107.00		\$200,757.00
			Speakers	\$1,630,259.00		\$1,164,979.00



Db2 Web Query and Excel Integration

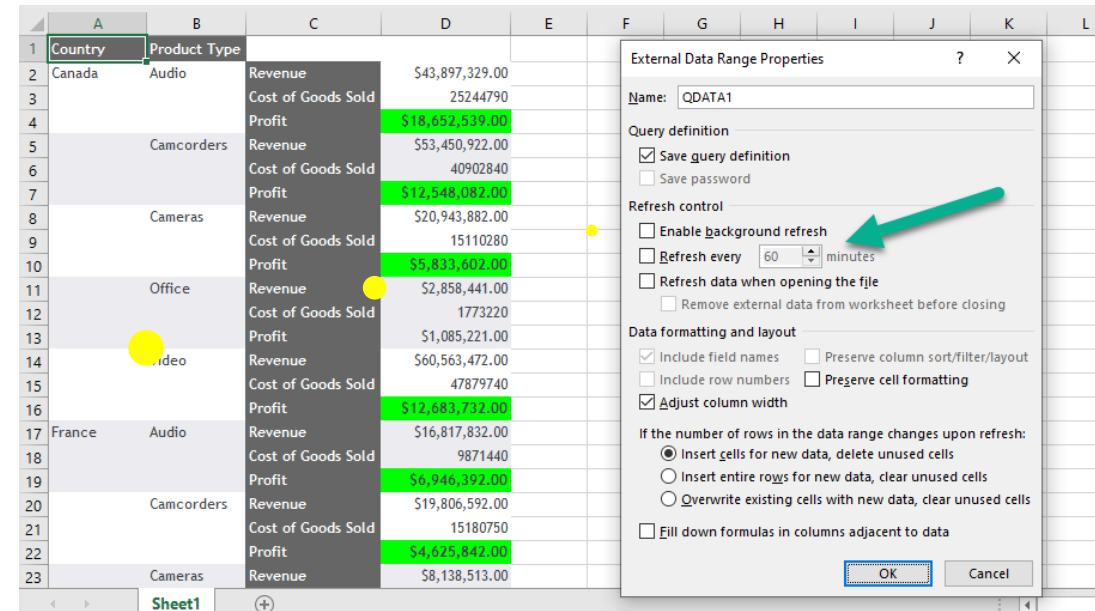
- Embed query into Excel
- Why?
 - Allow users that have formats, formulas, macros already defined in their spreadsheet and just want to refresh their data
 - Set up auto refreshing dashboard
- How?
 - Db2 Web Query Add-in
 - Included in ALL Editions



The screenshot shows an Excel spreadsheet with a web query result. The data is organized by Country and Product Type. A callout box points to the 'Web Query HTML Form' window, which is titled 'Profit by Country and Product Type'. The form includes a 'Customized "where clause" front end forms' section with a list of countries (ALL, Canada, France, Germany, Spain, United States) and a section for 'Enter Product' with radio buttons for ALL, Audio, Camcorders, Cameras, Office, and Video.

Country	Product Type	Revenue	Cost of Goods Sold	Profit
Canada	Audio	\$43,897,329.00	25244790	\$18,652,539.00
		\$53,450,922.00	40902840	\$12,548,082.00
		\$20,943,882.00	15110280	\$5,833,602.00
Camcorders	Cameras	\$20,943,882.00	15110280	\$5,833,602.00
		\$2,858,441.00	1773220	\$1,085,221.00
		\$60,563,472.00	47879740	\$12,683,732.00
Office	Video	\$16,817,832.00	9871440	\$6,946,392.00
		\$19,806,592.00	15180750	\$4,625,842.00
		\$8,138,513.00		

Now That's Cool!



The screenshot shows the 'External Data Range Properties' dialog box for the query 'QDATA1'. The 'Refresh control' section is highlighted, showing options for 'Enable background refresh', 'Refresh every 60 minutes', and 'Refresh data when opening the file'. The 'Data formatting and layout' section is also visible, showing options for 'Include field names', 'Include row numbers', 'Adjust column width', and 'Preserve column sort/filter/layout'.

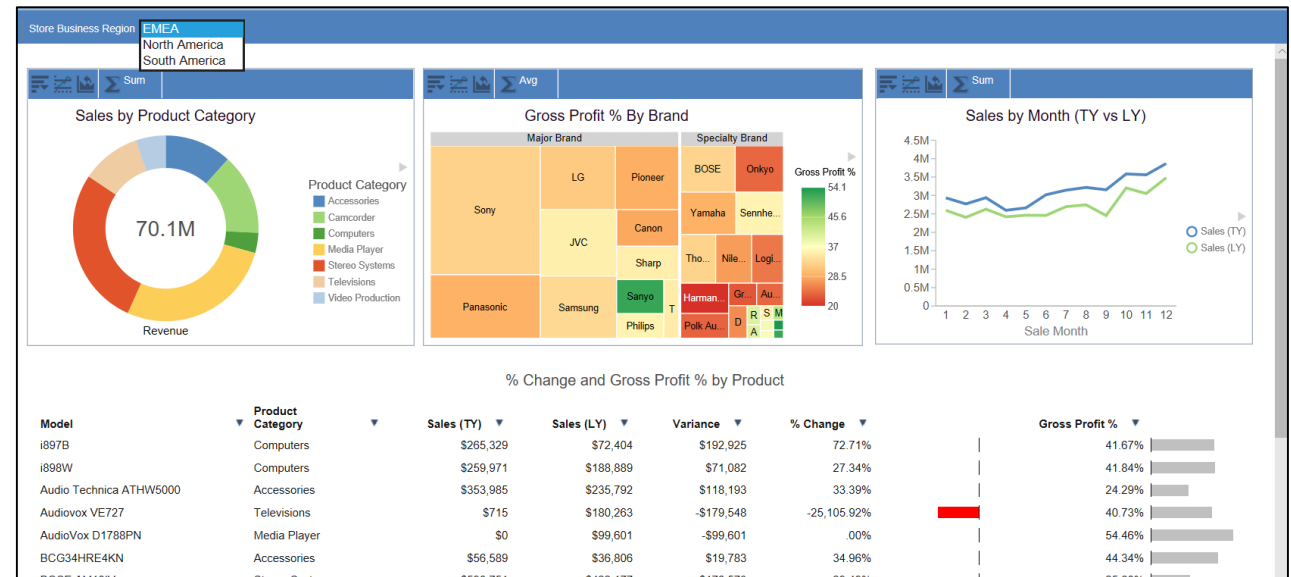
Country	Product Type	Revenue	Cost of Goods Sold	Profit
Canada	Audio	\$43,897,329.00	25244790	\$18,652,539.00
		\$53,450,922.00	40902840	\$12,548,082.00
		\$20,943,882.00	15110280	\$5,833,602.00
Camcorders	Cameras	\$20,943,882.00	15110280	\$5,833,602.00
		\$2,858,441.00	1773220	\$1,085,221.00
		\$60,563,472.00	47879740	\$12,683,732.00
Office	Video	\$16,817,832.00	9871440	\$6,946,392.00
		\$19,806,592.00	15180750	\$4,625,842.00
		\$8,138,513.00		

Dashboards

- Business Executives and Analysts use Dashboards to view the state of the business through Key Performance Indicators (KPIs)
- Every business is different but KPIs in general might take the following forms:
 - Current status of a metric/measurement (Sales YTD)
 - Trend analysis of a metric over time (Sales by year)
 - Geographic analysis to see performance by regions (Sales YTD by state)
 - Comparison of a metric to the same metric in a prior period (CYTD vs PYTD)
 - Forecasting of a metric into the future

- Can control amount of interaction

- Filters
- Drill downs
- Export data
- Data Discovery



Did Someone Say CHARTS?

Plot Data to Chart Type

Add Chart Features

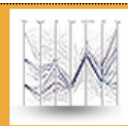
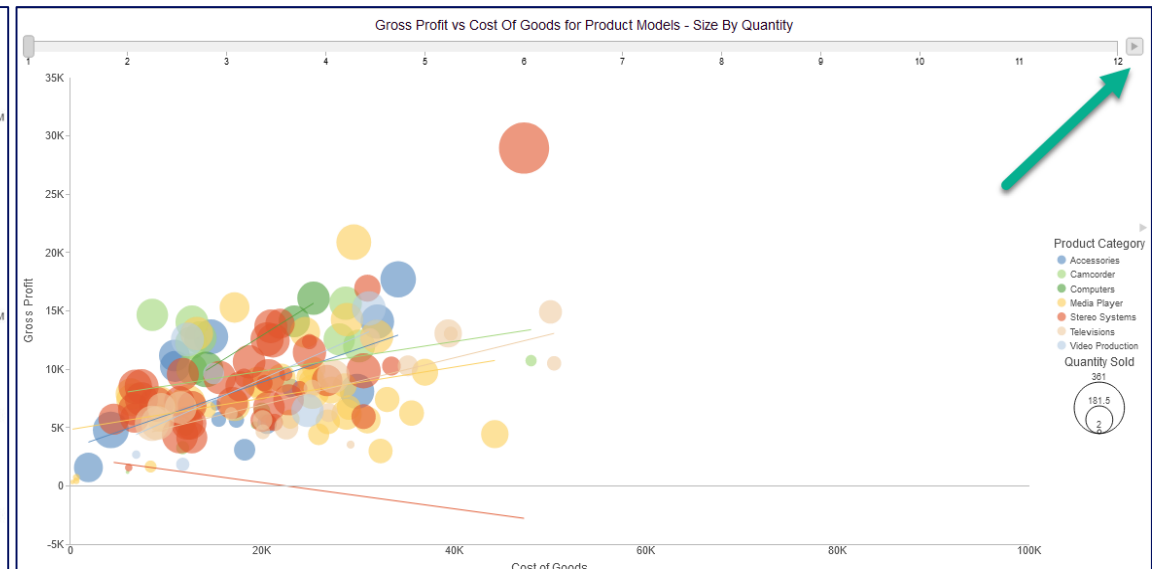
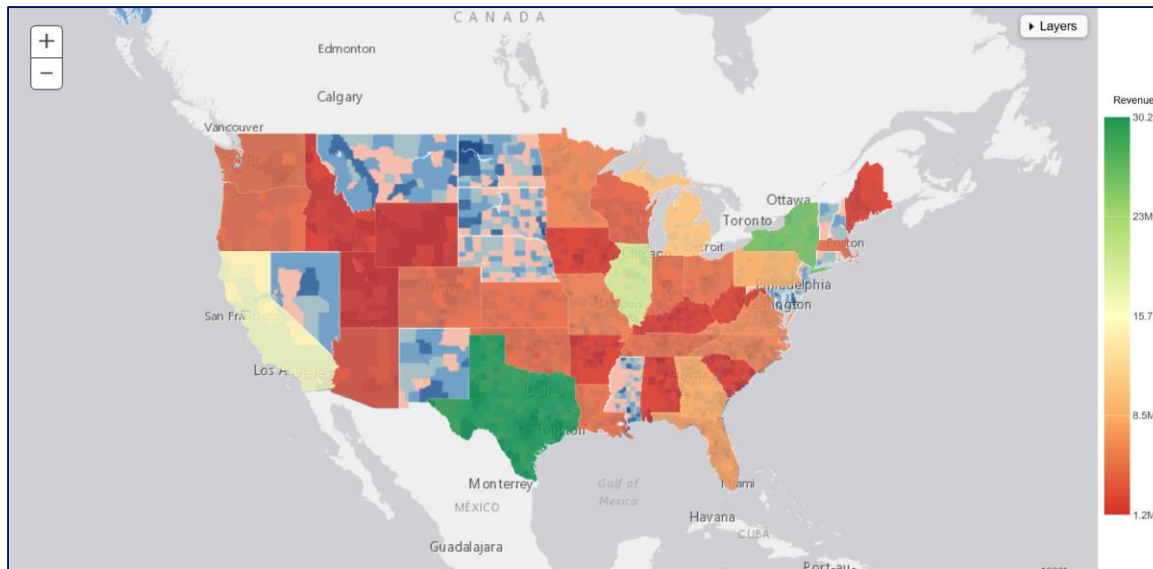
- Grid lines, annotation, reference lines, animation, etc.

Enable Drill Downs or HyperLinks

Include Chart in Dashboard

NEW Geographical Maps

- System must have internet connectivity



EZ-Install – The BEST Way to get a FAST Start

- EZ-Install is **HIGHLY RECOMMENDED** for installing webquery or upgrading from previous versions
 - Request it by sending an email to QU2@us.ibm.com, including name, company name, and s/n
 - It provides **VALUE ADD** way beyond just restoring the license program products

- Sample Reports, Tutorials, Utilities to help you get a **FAST START**

- Query/400 Discovery Tool
- Create Date Dimension Table (really cool)
- Sample Reports for the Systems Administrator
- Business oriented sample reports backed by tutorials

– **New EZ-Report**

- Tutorials and additional “how to” documentation provide guides to show you how the sample reports were built

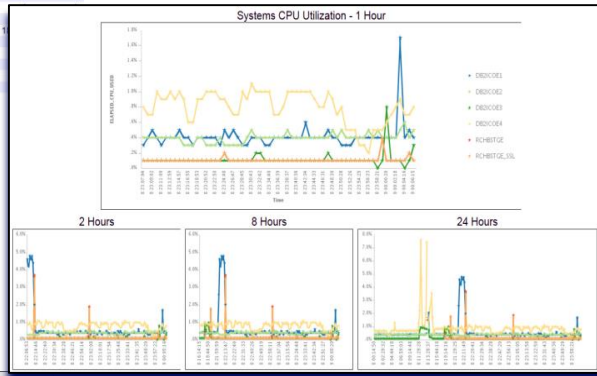


HELP us help you –
make sure your IBM
Business Partner is
using EZ-Install to
install or upgrade!

NEW (hidden gem)

IBM i Administration Samples folder

- | System | OS Release | Date Information Collected | Status | PTF ID | PTF Name | Installed Level | Level Available |
|-----------|----------------------------------------------|----------------------------|----------------------------|-----------|-----------------------------------------------|-----------------|----------------------------|
| DB2IOCE03 | V7R2M0 | 2019/04/18 | INSTALLED LEVEL IS CURRENT | SF97702 | Current Cumulative PTF Media Documentation | 10249 | 10249 |
| | | | | SF97021 | All PTF Groups except Cumulative PTF Package | 10 | 10 |
| | | | | SF97047 | DB2 Web Query for i V2.1.0 | 17 | 17 |
| | | | | SF97066 | Prest PTF's | 3 | 3 |
| | | | | SF97687 | T20 TCP/IP PTF | 4 | 4 |
| | | | | SF97069 | IBM i integration with BladeCenter and System | 1 | 1 |
| | | | | SF97075 | Hardware and Related PTFs | 33 | 33 |
| | | | | SF97076 | High Availability for IBM i | 10 | 10 |
| | | | | SF97002 | DB2 for IBM i | 24 | 25 |
| | | | | SF97018 | Group Security | 72 | 73 |
| | | | | SF97019 | Group HCP | 144 | 145 |
| | | | | SF97059 | IBM MQ for IBM i - v7.1.0v8.0.v9.0.v9.1.0 | 7 | 22 |
| | | | | SF99225 | IBM Open Source Solutions for i | 6 | 6 |
| | | | | SF92652 | Content Manager OnDemand for i - 5770.RD1 7.3 | 10 | 10 |
| | | | | SF94333 | DB2 Web Query for i V2.2.1 | 5 | 5 |
| | | | | DB2IOCE04 | V7R3M0 | 2019/04/18 | INSTALLED LEVEL IS CURRENT |
| SF97027 | Technology Refresh | | | | | | |
| SF97300 | Current Cumulative PTF Media Documentation | 1 | 1 | | | | |
| SF97031 | All PTF Groups except Cumulative PTF Package | | | | | | |
| SF99687 | T30 TCP/IP PTF | | | | | | |
| SF99686 | High Availability for IBM i | | | | | | |
| SF99333 | DB2 Web Query for i V2.2.0 | | | | | | |
| SF99581 | WebSphere App Server V8.5 | | | | | | |
| SF97003 | DB2 for IBM i | | | | | | |
| | | | RELATED GROUP | | | | |

[illegible]

	A					
	Order	Order	Requested	Actual	Receive	Sales Rep
	Number	Date	Ship Date	Ship Date	Date	
1	53042	2019-02-01	2019-05-18	2019-05-16	2019-05-19	Tiphaine
2	Le Gallic					
3	37984	2019-01-02	2019-12-30	2020-03-05	2020-03-09	Deiter
4	Wolf					
5	48694	2018-10-16	2018-11-28	2018-12-12	2018-12-23	Web
6	53042	2019-02-28	2019-05-29	2019-05-31	2019-07-03	Tiphaine
7	Le Gallic					
8	48433	2018-11-29	2019-01-18	2019-03-24	2019-04-11	Patrick
9	Infante					
10	34488	2019-02-28	2019-05-21	2019-05-22	2019-06-20	Web
11	78650	2018-06-03	2018-07-22	2018-08-07	2018-09-06	Marc
12	Gallie					
13	48746	2018-11-13	2019-01-13	2018-12-31	2019-01-11	Franck
14	Darriet					
15	36348	2019-05-01	2019-07-19	2019-07-20	2019-08-16	Bjorn
16	Danielsson					
17	38696	2019-08-06	2019-10-10	2019-09-28	2019-10-06	Marc

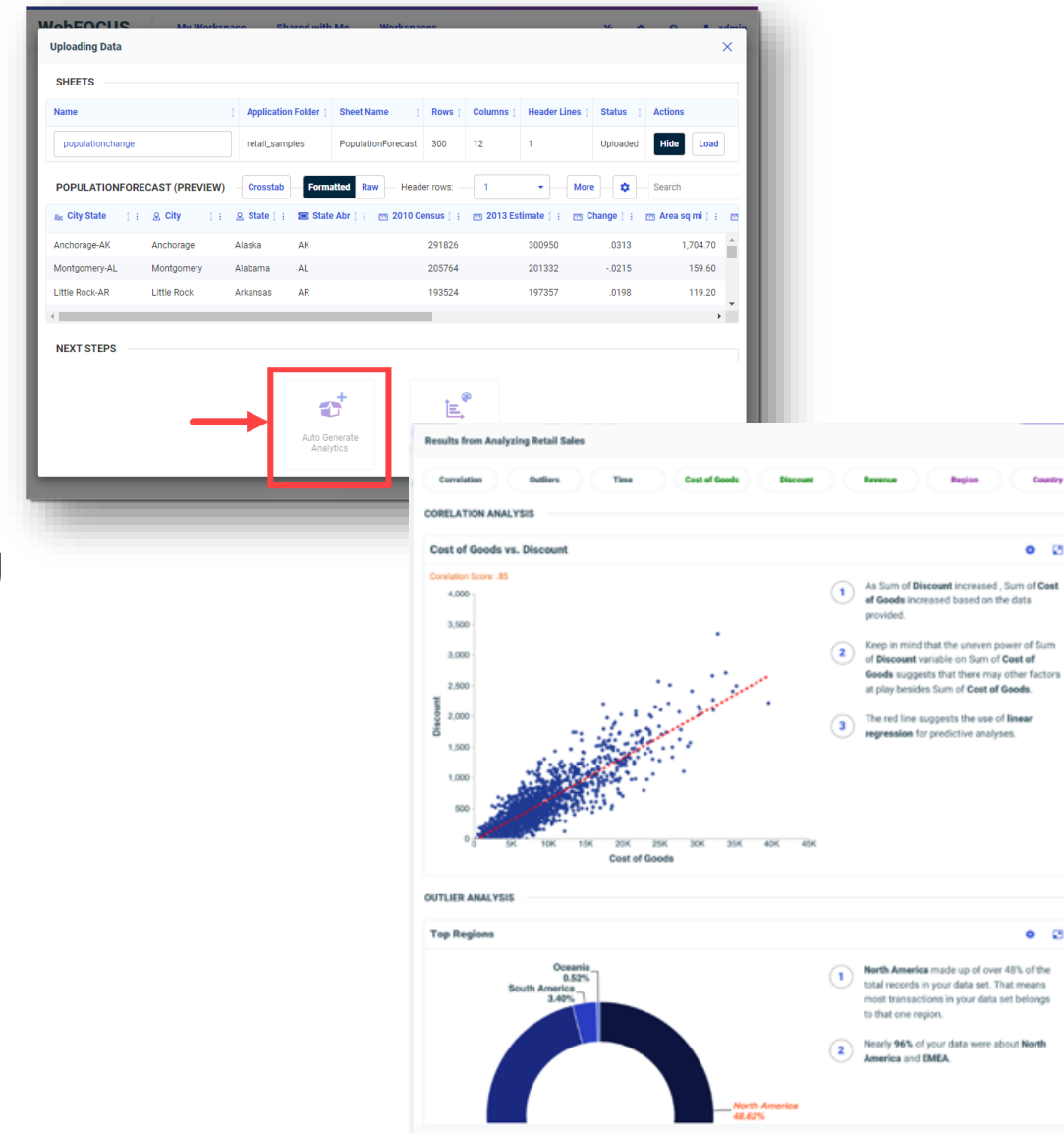
Add a Date to Date Table

Db2 Web Query Version 2.3

NEW

2020
iSight

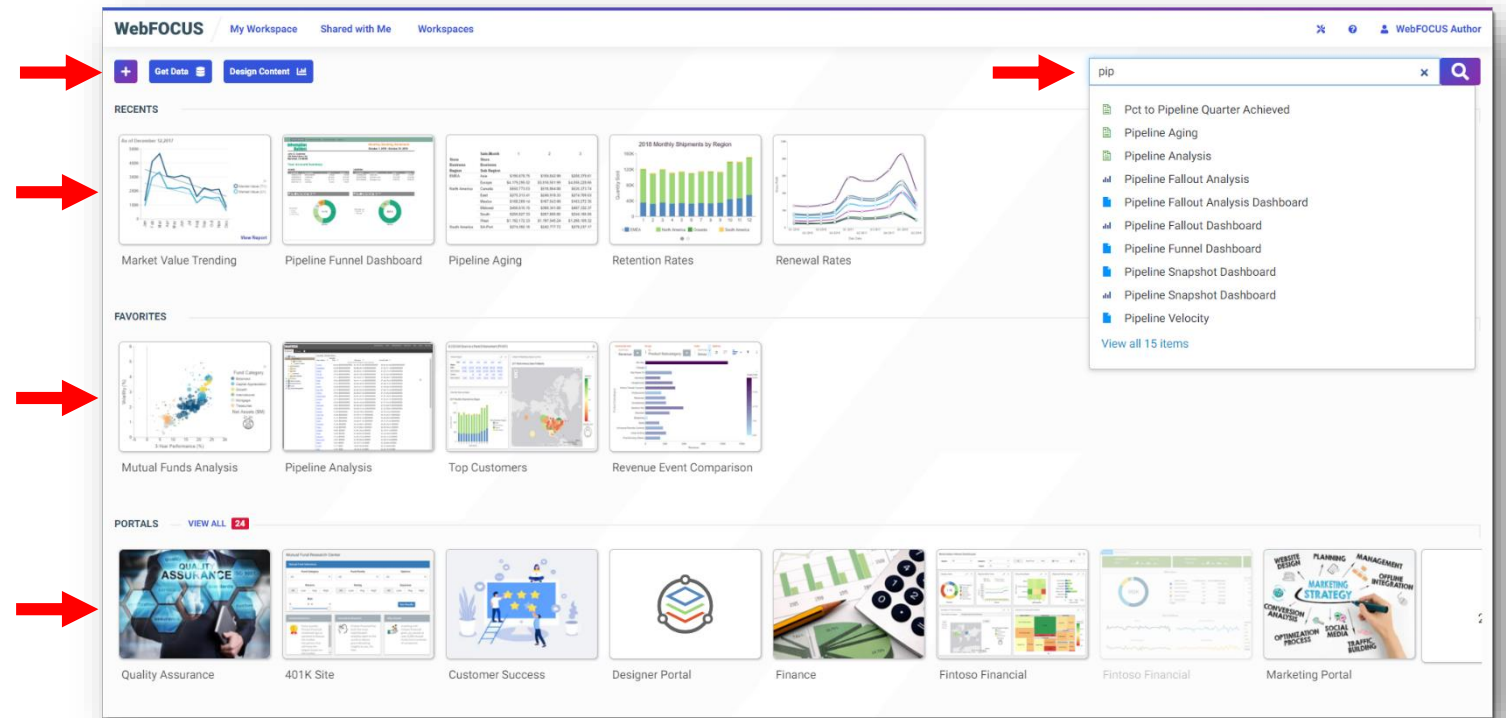

- Announced in October, GA in December
 - **Add elements of AI/ML analysis with business insights**
 - Auto generate data insights
 - **New Data Prep Facilities**
 - Simplified data transformations for one-time extracts
 - **New Page Designer and Home Page**
 - Highly visual and intuitive new user interface for building report
 - **New EZ-Install Q1 2021**
 - Use this to install for first time or for upgrades
 - **Supports IBM i 7.3 and up**
 - No charge upgrades if current on Db2 Web Query SW Maintenance



New Home Page Experience

Your most commonly used content and tools just a click away

- Tools organized by new task-oriented menus
- Recent, favorite, and portal content prominently featured



Note: The approach is to introduce new user interfaces slowly and with options to keep using the current interfaces

Auto Generate Insights

Increase productivity and gain insights through automatic generation of analytics


The screenshot displays the 'Uploading Data' window in WebFOCUS. It includes a table of uploaded sheets, a preview of the 'POPULATIONFORECAST' data, and a 'NEXT STEPS' section with two buttons: 'Auto Generate Analytics' (highlighted with a red box and arrow) and 'Visualize Data'.


Name	Application Folder	Sheet Name	Rows	Columns	Header Lines	Status	Actions
populationchange	retail_samples	PopulationForecast	300	12	1	Uploaded	<button>Hide</button> <button>Load</button>

POPULATIONFORECAST (PREVIEW) Crosstab **Formatted** Raw Header rows: 1 More Settings Search

City	State	City	State	State Abr	2010 Census	2013 Estimate	Change	Area sq mi
Anchorage-AK	Anchorage	Alaska	AK		291826	300950	.0313	1,704.70
Montgomery-AL	Montgomery	Alabama	AL		205764	201332	-.0215	159.60
Little Rock-AR	Little Rock	Arkansas	AR		193524	197357	.0198	119.20

NEXT STEPS


Auto Generate Analytics


Visualize Data

- Automatically analyze data sets via built-in ML models to find correlations and outliers
- User can adjust thresholds and sample size to focus on interesting areas of the data.
- Each visualization includes an automatically generated narrative to highlight important aspects of the data.

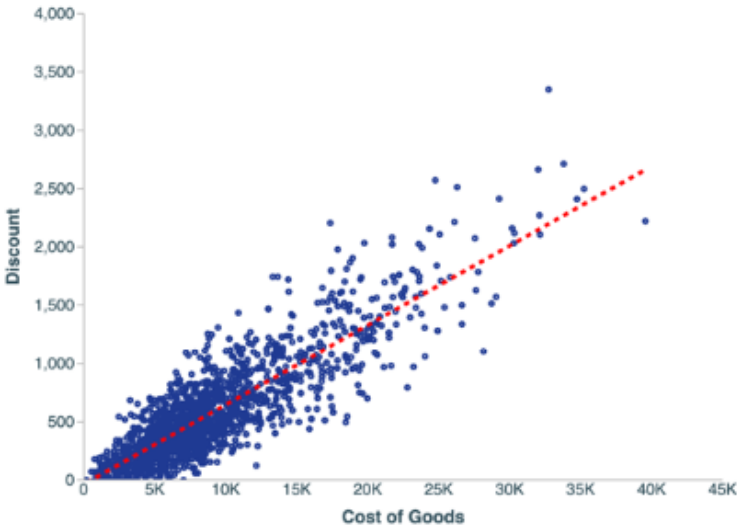
CORELATION ANALYSIS



Cost of Goods vs. Discount



Corelation Score: .85

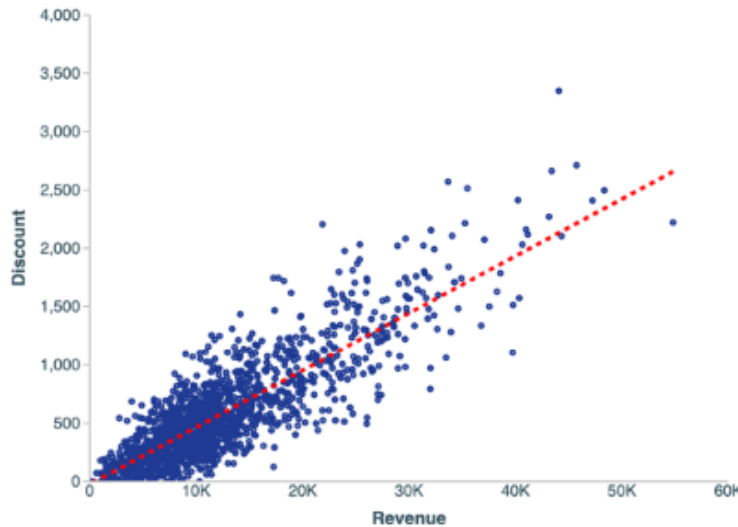


- 1 As Sum of **Discount** increased , Sum of **Cost of Goods** increased based on the data provided.
- 2 Keep in mind that the uneven power of Sum of **Discount** variable on Sum of **Cost of Goods** suggests that there may other factors at play besides Sum of **Cost of Goods**.
- 3 The red line suggests the use of **linear regression** for predictive analyses.

Revenue vs. Discount



Corelation Score: .85

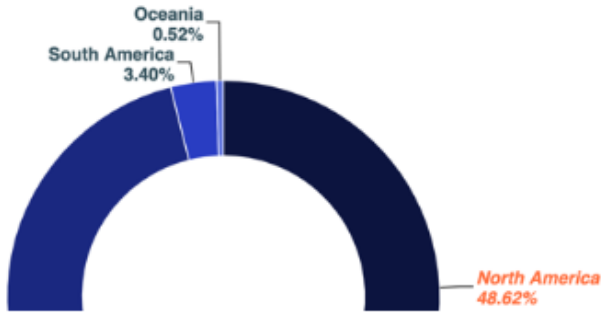


- 1 As Sum of **Discount** increased , Sum of **Revenue** increased based on the data provided.
- 2 When organized into group of similar Sum of **Discount** and Sum of **Revenue**, the majority of Sum of **Discount** are less than \$1,500 and the majority of Sum of **Revenue** are less than \$120,000.
- 3 The red line suggests the use of **linear regression** for predictive analyses.

OUTLIER ANALYSIS

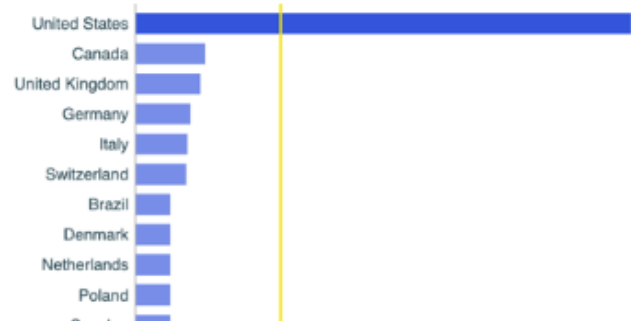


Top Regions



- 1 **North America** made up of over 48% of the total records in your data set. That means most transactions in your data set belongs to that one region.
- 2 Nearly **96%** of your data were about **North America** and **EMEA**.

Top 15 Countries



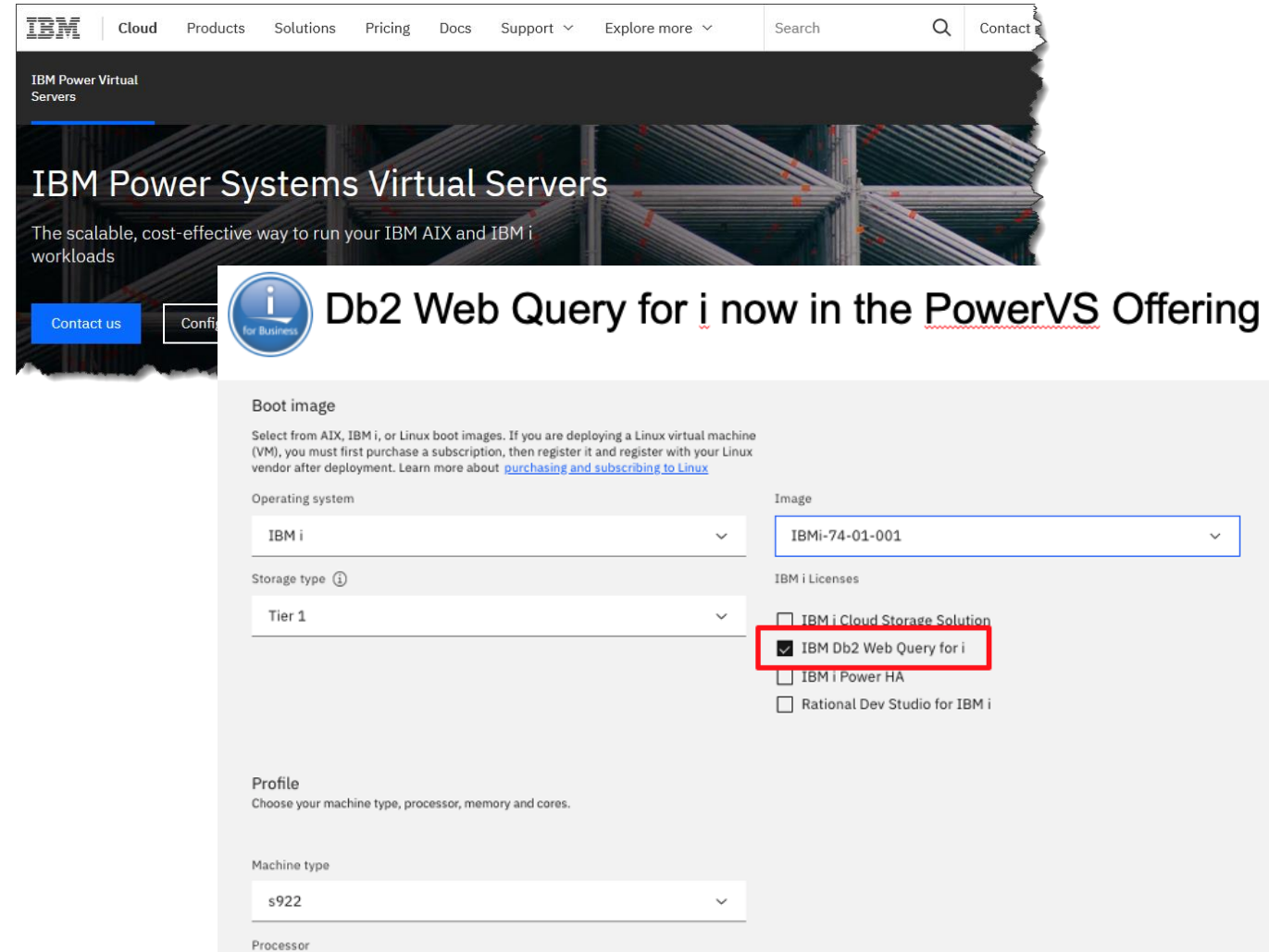
- 1 **United States** account for majority of all transactions.
- 2 This chart shows that the top **15** out of **20** countries in your data set.
- 3 **Greek** has the lowers number of transactions.

Db2 Web Query in the IBM Cloud

NEW

2020
iSight


- Announced in October, Available now
 - Db2 Web Query Added to the IBM Power Virtual Server Cloud Offering
 - <https://www.ibm.com/cloud/power-virtual-server>
 - Usage is turned on and off with selection of the offering
 - Licensed to Standard Edition with unlimited users
 - Job scheduling and distribution
 - Embed reports in your own applications via REST Web Services or URL construction API
 - Access non Db2 databases



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IBM Power Virtual Servers

IBM Power Systems Virtual Servers

The scalable, cost-effective way to run your IBM AIX and IBM i workloads

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Db2 Web Query for i now in the PowerVS Offering

Boot image
Select from AIX, IBM i, or Linux boot images. If you are deploying a Linux virtual machine (VM), you must first purchase a subscription, then register it and register with your Linux vendor after deployment. Learn more about [purchasing and subscribing to Linux](#)

Operating system
IBM i

Storage type
Tier 1

Image
IBMi-74-01-001

IBM i Licenses
☐ IBM i Cloud Storage Solution
☒ IBM Db2 Web Query for i
☐ IBM i Power HA
☐ Rational Dev Studio for IBM i

Profile
Choose your machine type, processor, memory and cores.

Machine type
s922

Processor

Additional Information

Db2 Web Query for i Website

- Ibm.biz/db2webqueryi

Db2 Web Query for i Wiki

- Ibm.biz/db2wqwiki

Db2 Web Query Getting Started Enablement:

- <https://ibm.biz/db2ilabservices>

Db2 Web Query Version 2.2.1

- <http://ibm.biz/db2wqv221blog>
- Videos: <http://ibm.biz/db2wq-221-videos>

EZ-Install

- <http://Ibm.biz/db2wgezinstall-info>



Follow Db2 Web Query guy Doug Mack on twitter at @mckdrmol or blog <http://db2webqueryi.blogspot.com/>

IBM



DANKE!