



# What's New and Cool Things You Can Do with DB2 Web Query

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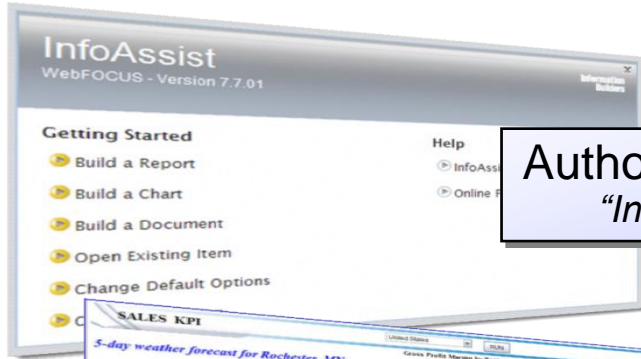
Blog: [db2webqueryi.blogspot.com](http://db2webqueryi.blogspot.com)

[QU2@us.ibm.com](mailto:QU2@us.ibm.com)



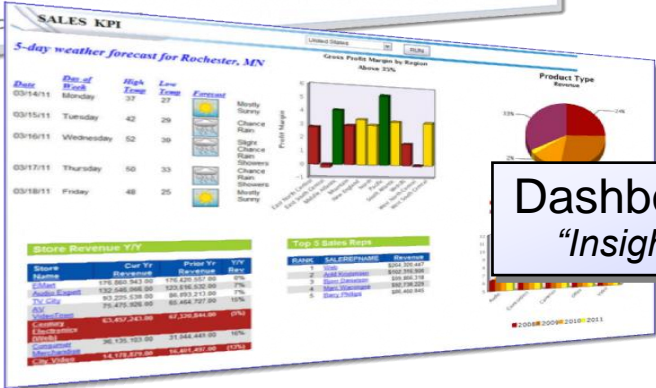
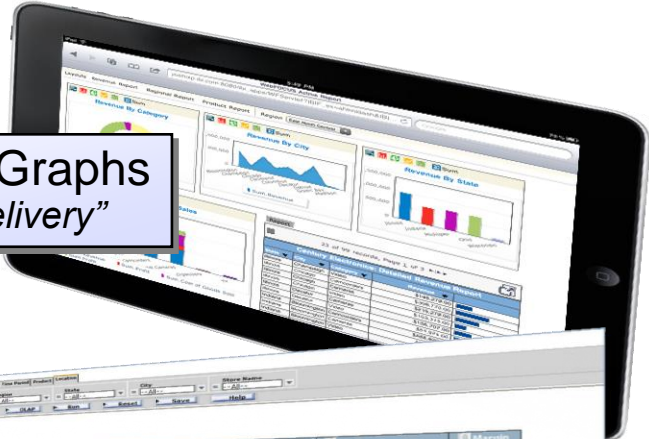
# DB2 Web Query for i – Intuitive, Insightful, Extensible

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



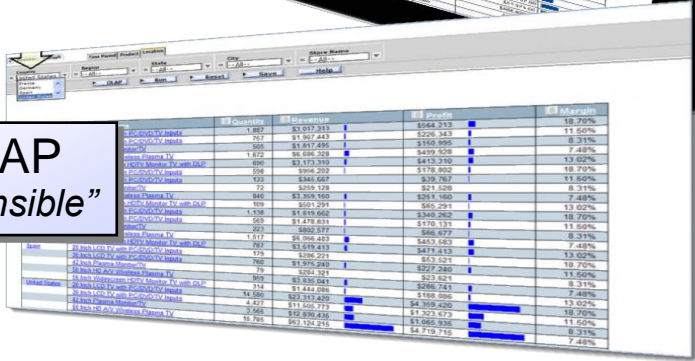
**Authoring Tool**  
"Intuitive"

**Reports & Graphs**  
"Flexible delivery"



**Dashboards**  
"Insightful"

**OLAP**  
"Extensible"



Providing Analytics and Query/400 Modernization for the IBM i Client  
 Low Cost Solution Offering Value Upgrade from Query/400  
 Leveraging Best Practice Meta Data Layer Approach  
 Leveraging DB2 for i Advanced Query Optimization Technology



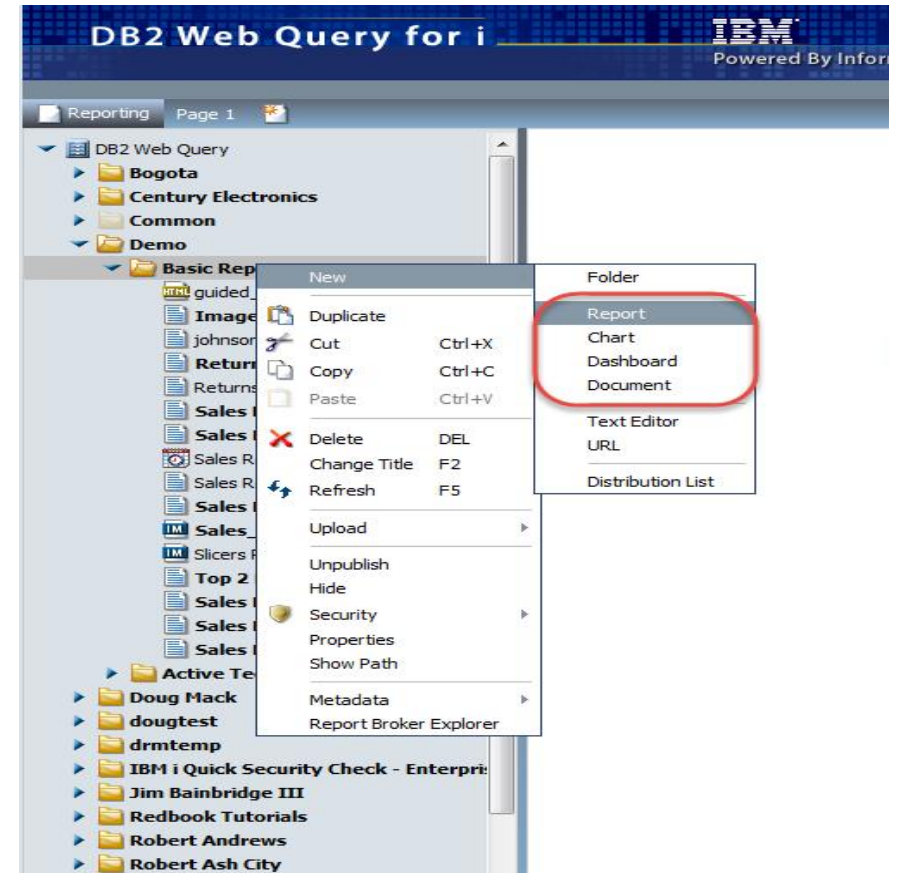
## Integration With DB2 for i and IBM i

- All DB2 Web Query components are installed in IBM i
  - And jobs run in a specific web query subsystem
- Licensing/PTF/Backup/HA for DB2 Web Query align with current IBM i practices
- Automate report execution/delivery or ETL processes with IBM i Job Scheduler
  - Standard Edition only
- Query/400 import
  - Discovery tool also included in EZ-Install
- Consume existing RPG or DB2 Stored procedures, SQL Views or User Defined Functions to meta data for seamless use in reports
- Library List Management
- Run time user exit options
  - Customized audit collection or change job attributes on the fly
- CL Commands to start/stop, create or refresh meta data, run reports or schedule
- Sample reports/dashboards for the Systems Administrator
  - Part of EZ-Install package
- Adherence to any IBM i Security Implementation
  - Also supports single sign on
- Not having to move data around (unless you want to with the ETL tool)
- Can take advantage of DB2 analytical extensions (e.g., OLAP in 7.3, EVI Aggregates in 7.1)



## IBM DB2 Web Query for i User Interface

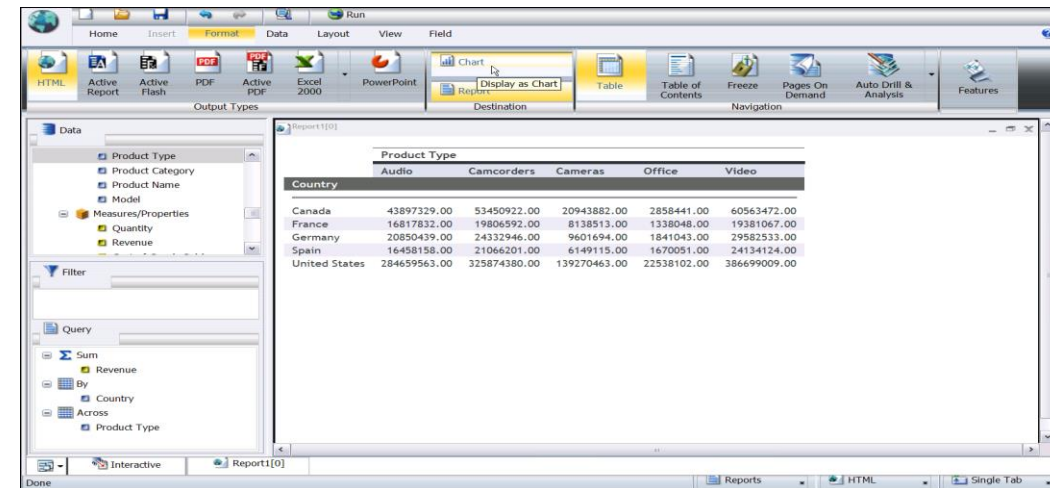
- The jumping off point for working with DB2 Web Query
  - BI Portal – the End User Standard Interface
    - Run Reports
    - Edit Reports
    - Schedule Report
    - Work with folders
    - Work with Change Management
    - Sync reports via Mobile Favorites Folder
    - Set up Security
    - Build a personal Dashboard
  - InfoAssist – Report Authoring Tool invoked with right-click and NEW at the folder level or with right-click EDIT at report level





## Build/Edit Reports and Dashboards with InfoAssist

- Web based Report Authoring component (built into Express or Standard)
- Invoked from BI Portal (web) or Developer Workbench (Windows)
- Intuitive office-like interface
  - Tool bars (Ribbon) change based on selected tab
- WYSIWYG layout area
- Build reports, charts, graphs, maps, dashboards
- Output types
  - Excel including pivot tables
  - “Active” technologies (good for mobile devices)
  - PDF, File, Print, Database
  - Auto drill down (OLAP) report
  - HTML, HTML5, Flash
  - Powerpoint





# DB2 Web Query Installation and Setup (in less than 2 hours)

With the NEW **EZ-Install Package**





## What is the EZ-Install Package

- A single downloadable image that you can request that includes:
  - DB2 Web Query **Version 2.2** at the LATEST PTF Group Level.
  - Includes:
    - An optional pre-req checker
    - Express and Standard Edition
    - Data Migrator and Developer Workbench
    - Sample “Century Electronics” Database including MetaData over the database so you can run self guided tutorials out of the box
      - » Library QWQCENT
  - Sample IBM i System Administration Reports
  - DB2 Web Query Auditing/Monitoring Reports
  - Query/400 Discovery Tool
  - All of the Tutorial Reports already completed
    - (but this would be cheating if you didn’t do the tutorials yourself)





## What is the EZ-Install Package

- Request the Package by sending email to [QU2@us.ibm.com](mailto:QU2@us.ibm.com)
  - Include your name, company name, and serial # of system you plan to install on
- You'll receive an email with installation instructions and a second email with a link to a box.com website
  - The download of pre-req checker is FAST. The download and subsequent upload of the EZ-Install package can be lengthy based on network speeds
  - The actual installation after uploading to your system is 15-20 minutes
- Considerations:
  - If you've already got Version 2.x installed, this will UPGRADE that version
  - If you've already installed Version 1, this can co-exist
    - And if you've done work in Version 1, you can run MIQWEBQRY to move all your reports and meta data into Version 2.2
  - This is trial software
    - You can run everything **for 70 days** but if you want to have it permanently you should work with your IBM Business Partner to process an upgrade order
    - Applying license keys will restrict you to what you own – Express or Standard and # of user licenses





## Installing with EZ-Install

### – Installation Process:

- Add a user you designate as a DB2 Web Query Administrator (don't use and Qxxx please)
- Restore of DB2 Web Query Sample Database and Meta data (needed for self guided tutorials)
- Restore of Audit and Sample IBM i System Admin reports
- Ask you a few questions along the way

### – After completion, go to [ibm.biz/db2wqezinstall](http://ibm.biz/db2wqezinstall)

- Build your first report
- Learn additional authoring capabilities
- Run System Admin reports and learn how they were built
- Run Query/400 Discovery Tool
- Load up a completed set of Tutorial Reports for more samples
- Learn about Developer Workbench
- Learn about DataMigrator

You are in: [DB2 Web Query for i Wiki](#) > [DB2 Web Query EZ Install](#)

### DB2 Web Query EZ Install

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**Congratulations!** If you're here, it hopefully means you have successfully installed the DB2 Web Query EZ-Install Pa

- Build your first report! Click [here](#) for instructions.
- Learn more about building reports. Click [here](#) to download a set of self guided InfoAssist Tutorials!
- Learn more about the Sample IBM i [administration reports](#)
- Query/400 [Discovery Tool](#) and sample reports
- Instructions on how to install a completed set of the tutorial reports are [here!](#)
- Learn about DB2 Web Query Developer Workbench with this [user's guide](#).
- Install and learn more about the power of ETL with [DataMigrator](#).

Comments (0)

Versions (21)

Attachments (8)

About

# Sample Reports for the Systems Administrator

- Built over IBM i Services
  - SQL interfaces into system information
  - Services delivered at various levels of OS and TRs

Cross System/LPAR Auto Refreshing Utilization Dashboard

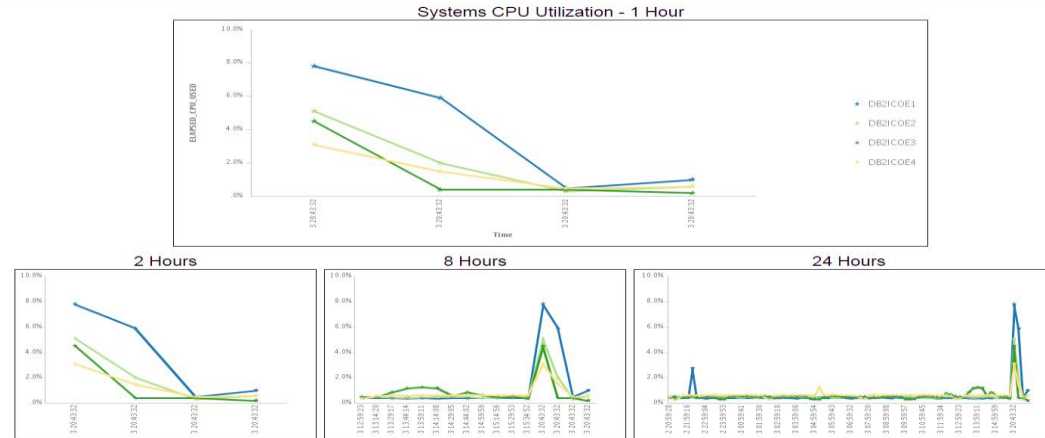
Top xx Jobs by:

- CPU time
- I/O count
- Temp. Storage

**IBM i Administration Samples**

- Get Status of Sys Admin Reports
- PTF Group Currency Report
- Pool File Usage
- Subsystem summary report
- System CPU Dashboard**
- System environment info report
- System(s) status dashboard
- Systems CPU Utilization over 1 hour
- Systems CPU Utilization over 2 hours
- Systems CPU Utilization over 24 hours
- Systems CPU Utilization over 8 hours
- Top 10 jobs by CPU chart
- Top 10 jobs by disk I/O chart
- Top 10 jobs by temp storage chart
- Top 10 spool file consumers chart
- Top 10 spool files by output queues cha

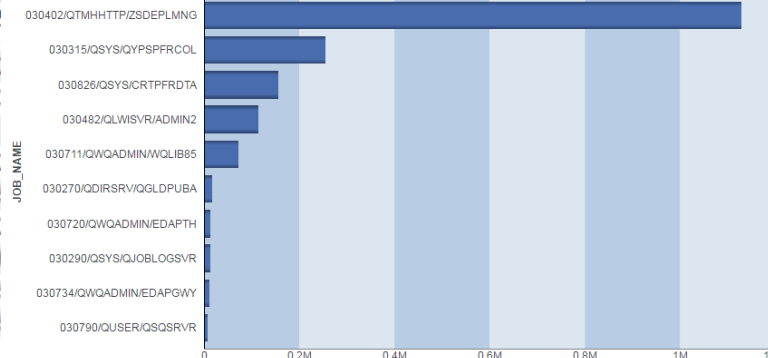
db2icoe3.rchland.ibm.com:12331/webquery/run.bip?BIP\_REQUEST\_TYPE=BIP\_RUN&BIP\_folder=IBF5%253A%252F%252FRepository%252FIBM\_L\_Administration\_Samples&BIP\_item=System\_CPU\_Dashboard.htm&IBL\_random=1



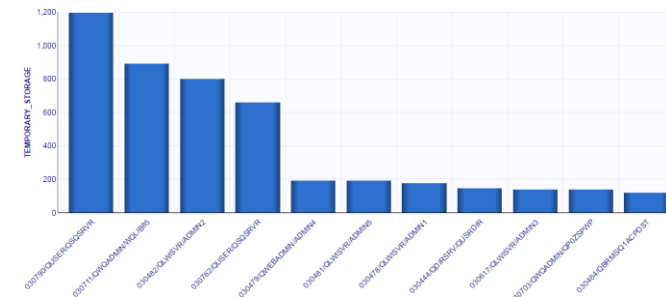
Top 10 Jobs by CPU Time

JOB_NAME	CPU_TIME
030402/QTMHHTTP/ZSDEPLMNG	29824
030503/QTMHHTTP/ZSDAEMON	15136
030482/QLWISVR/ADMIN2	4459
030711/QWQADMIN/WQLIB85	3061
030464/QBRMS/Q1ACPDST	1874
030481/QLWISVR/ADMIN5	1447
030637/QSECOFR/QINAV/MNSRV	1172
030703/QWQADMIN/QP0ZSPWP	579
030315/QSYS/QYSPFRCOL	499
030401/QTMHHTTP/ZSJOBQMNG	465

Top 10 Jobs by Disk I/O

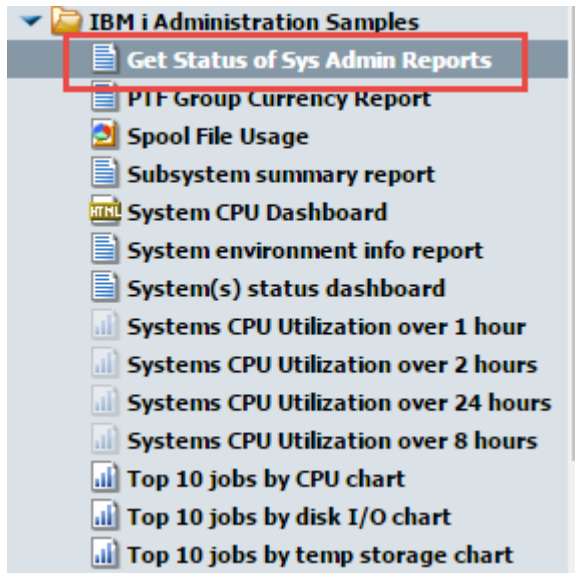


Top 10 Jobs by Temp Storage



# Determine Which Reports Will Run on Your System

- Depending on level of OS and TR, we'll tell you which reports are enabled



## Validate Sys Admin Report Status

REPORT_NAME	REPORT_STATUS	PTF_GROUP_NAME	Installed PTF Group Level	Required PTF Group Level	Release Data of Required Group PTF	FULL_PATH
Get Status of Sys Admin Reports	AVAILABLE	IN BASE	.	.	.	IBFS:/WFC/Repository/IBM i Administration Samples/Get Status of Sys Admin Reports.fex
PTF Group Currency Report	AVAILABLE	SF99702	14	14	2016/11/10	IBFS:/WFC/Repository/IBM i Administration Samples/Group_PTF_currency_report.fex
Spool File Usage	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/Spool File Usage .fex
Subsystem summary report	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/Subsystem summary report.fex
System environment info report	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/System environment info report.fex
System CPU Dashboard	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/System CPU Dashboard.htm
System(s) status dashboard	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/Systems_status_dashboard.fex
Top 10 jobs by cpu chart	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/Top 10 jobs by cpu chart.fex
Top 10 jobs by disk io chart	AVAILABLE	SF99702	14	9	2015/11/20	IBFS:/WFC/Repository/IBM i Administration Samples/Top 10 jobs by disk io chart.fex
Top 10 jobs by temp storage chart	AVAILABLE	IN BASE	.	.	.	IBFS:/WFC/Repository/IBM i Administration Samples/Top 10 jobs by temp storage chart.fex

drill down to report

## Sample: System(s) Status

- Can support multiple LPARs/Servers
  - System Status
  - Top 10 Reports per LPAR
- Exploits QSYS2.SYSTEM\_STATUS\_INFO view to get information about your system

- Uses an SQL Procedure to assemble information gathered from various LPARs via DRDA and present them together
  - Stored Procedure for this provided
- Exception Reporting highlighted in RED
- Could add to an HTML Dashboard and enable Auto Refresh

Host Name	Total Jobs in System	Active Jobs in System	Interactive Jobs in System	Active Threads in System	Elapsed Time	Elapsed CPU Used	Current CPU Capacity	Average CPU Utilization	Minimum CPU Utilization	Maximum CPU Utilization	System ASP Storage	Total Auxiliary Storage	System ASP Used	Test
DB2ICOE1	522	192	.00	645	1	.20	2.00	.18	.00	99.71	1488922	1488922	79.66	
DB2ICOE2	5729	235	.00	1026	1	.40	2.00	.18	.00	99.67	954437	954437	49.10	
DB2ICOE3	7509	300	.00	1303	1	.30	4.00	.66	.00	2.30	6242936	6242936	24.75	
DB2ICOE4	3241	248	.00	958	1	.10	2.00	.09	.00	.14	6242936	6242936	14.49	

*Run on January 3, 2017 at 14.48.07*

# Sample: Installed Product Info and PTF Currency check

- Exploits SYSTOOLS.GROUP\_PTF\_CURRENCY (View)
- Can color code and sort on where you are down level

53 of 53 records, Page 1 of 1								
Installed Product Information								
PRODUCT_ID	LICENSE_TERM	RELEASE_LEVEL	FEATURE_ID	PRODUCT_TEXT	USAGE_LIMIT	USAGE_COUNT	GLOBAL_COUNT	LICENSED_USER_COUNT
5722IP1	V5R3M0	V5R3M0	5050	IBM Infoprint Server for iSeries	.	.00	.00	
			5101	IBM Infoprint Server for iSeries PS to AFP transfo	.	.00	.00	
5733WQX	V2R1M0	V2R1M0	5050	IBM DB2 Web Query for i	.	4.00	6.00	
			5101	Web Query Express Edi				
			5102	Web Query Standard Ec				
			5103	Web Query Option 3				
			5104	Web Query Developer U				
			5105	Web Query Developer V				
			5106	Web Query Runtime En				
			5107	Web Query JD Edwards				
			5108	DataMigrator				
			5109	DataMigrator				
			5110	Web Query Option 10				
			5111	Web Query Option 11				
			5112	Web Query Option 12				
			5113	Web Query Option 13				
			5114	Web Query Option 14				
			5115	Web Query Option 15				
5761CM1	V6R1M0	V6R1M0	5050	Communications Utilite				
5761DP4	V6R1M0	V6R1M0	5050	DataPropagator for i5/O				
5770AF1	V7R2M0	V7R2M0	5050	IBM AFP Utilities				
5770BR1	V7R2M0	V7R2M0	5050	Backup Recovery and I				
			5101	BRMS-Network Feature				
			5102	BRMS-Advanced Funct				
5770DE1	V7R1M0	V7R1M0	5050	DB2 Extenders				
5770HAS	V7R2M0	V7R2M0	5051	PowerHA for i Enterpris				
			5052	PowerHA for i Standard				
			5053	PowerHA for i Express				
			5054	Reserved				
			5055	Reserved				
5770JS1	V7R2M0	V7R2M0	5050	IBM Advanced Job Sch				
5770PT1	V7R2M0	V7R2M0	5050	IBM Performance Tools				

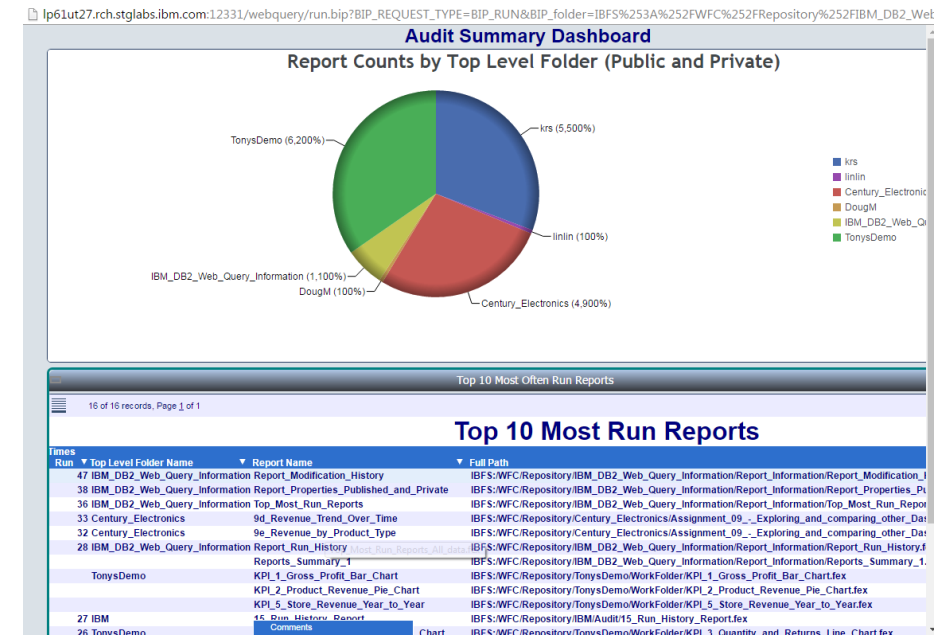
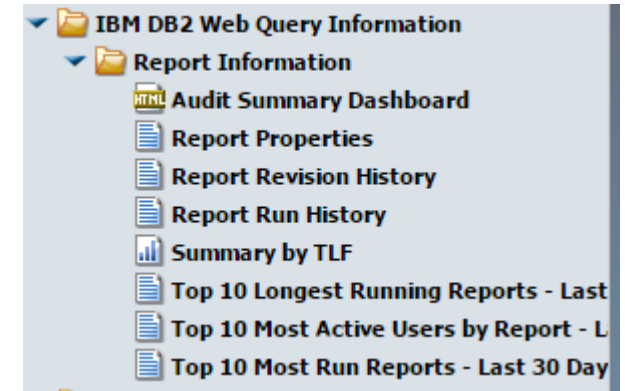
  

PTF Currency Report							
Status	PTF Group ID	PTF Name	Installed Level	Level Available	Date of last IBM Update		
INSTALLED LEVEL IS CURRENT	SF99364	710 WebSphere App Server V6.1	9	9	09/09/2013		
	SF99480	720 WebSphere App Server V8.0	6	6	02/01/2016		
	SF99637	710 DB2 Web Query for IBM i V1.1.2	9	9	12/12/2013		
	SF99747	720 DB2 Web Query for i V2.1.0	14	14	03/30/2016		
	SF99766	720 Print PTFs	3	3	01/07/2015		
UPDATE AVAILABLE	SF99145	710 Performance Tools	9	11	05/17/2016		
	SF99363	710 WebSphere App Server V7.0	16	19	04/11/2016		
	SF99366	710 Print PTFs	8	12	01/07/2015		
	SF99368	710 IBM HTTP Server for i	37	42	07/01/2016		
	SF99369	710 IBM i integration with BladeCenter and System x	13	16	12/18/2014		
	SF99380	710 WebSphere App Server V8.0	11	15	02/01/2016		
	SF99381	710 WebSphere App Server V8.5	10	16	08/14/2016		
	SF99481	720 WebSphere App Server V8.5	8	9	08/14/2016		
	SF99647	710 DB2 Web Query for i V2.1.0	13	14	03/30/2016		
	SF99658	720 DB2 Web Query for i V2.1.1	2	3	03/30/2016		
	SF99701	710 DB2 for IBM i	38	40	04/28/2016		
	SF99702	720 DB2 for IBM i	12	13	07/14/2016		
	SF99710	Current Cumulative PTF Media Documentation	14283	16120	05/19/2016		
	SF99713	720 IBM HTTP Server for i	15	16	07/01/2016		
	SF99714	720 Performance Tools	2	4	05/17/2016		
SF99716	720 Java	9	10	06/21/2016			
SF99717	720 Technology Refresh	3	4	05/19/2016			
SF99718	720 Group Security	29	36	08/09/2016			
SF99719	720 Group Hiper	60	71	08/23/2016			
SF99720	Current Cumulative PTF Media Documentation	15311	16127	05/20/2016			
SF99767	720 720 TCP/IP PTF	2	3	06/25/2016			
SF99775	720 Hardware and Related PTFs	14	17	04/25/2016			
SF99776	720 High Availability for IBM i	3	5	07/22/2016			



# DB2 Web Query Auditing Reports

- Pre-built reports that answer these kinds of questions about DB2 Web Query Reporting Environment
  - Who is running the most reports?
  - Which reports are being run the most?
  - Which reports are taking the longest time to run?
  - How many reports are in each folder?
  - When was a report last used?
  - When was a report last modified?
- Initial summary dashboard with additional detailed reports behind it



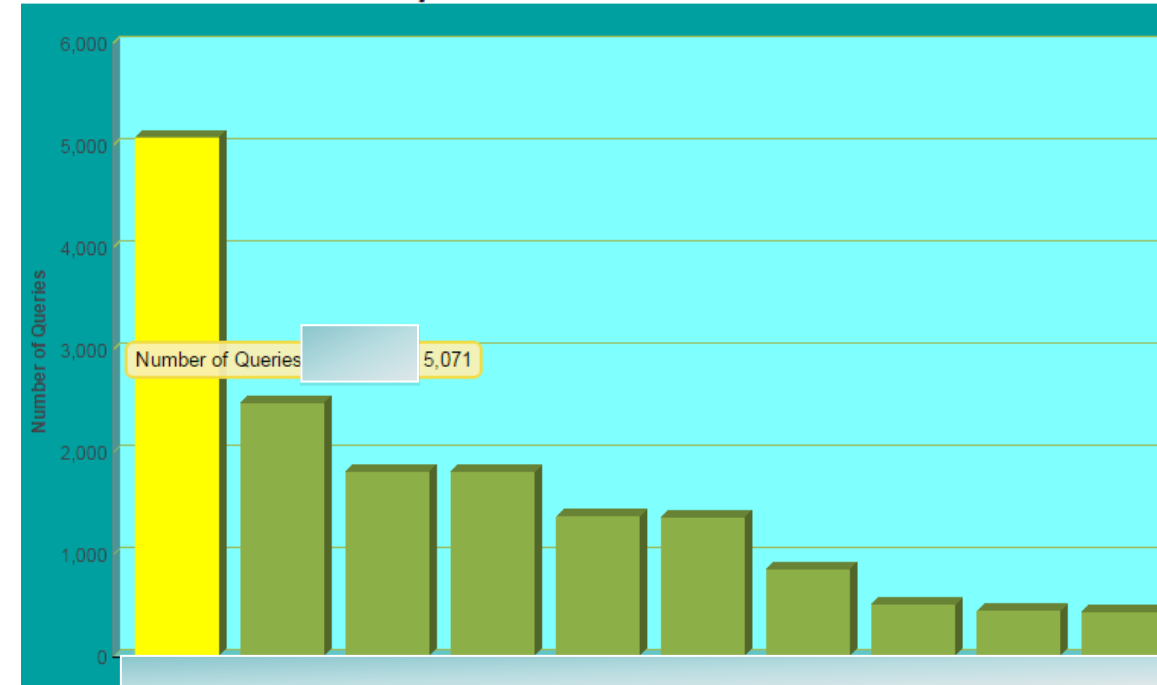




## Query/400 Discovery and Analysis Prototype

- IBM Built Discovery tool generates information from your Query/400 definitions
  - Which files are accessed the most in Query/400 definitions?
  - Which fields are used the most in selection criteria or result sets?
  - Which queries are “chained”?
  - Which queries were last used over a year ago?
- With this information in hand, you can:
  - Determine which queries are obsolete or redundant
  - Build a strategy to MODERNIZE into DB2 Web Query

*Top Files used in Queries*







# Self Guided Tutorials

- EZ-Install ships the “Century Electronics” Sample Database
  - The sample database is the basis for over 14 chapters of self guided tutorials in the IBM Redbook(s)
    - 2.1 Tutorials will work fine w/ 2.2
    - 2.2 Tutorials are in draft mode but published
  - Library/Schema QWQCENT
  - EZ-Install also provides all the meta data over the database so you can start right into the tutorials
- EZ-Install also provides all the tutorials in COMPLETED form
  - Tons of SAMPLE reports
  - Shipped via a “change management” package that you can import – follow instructions on [ibm.biz/db2wqezinstall](http://ibm.biz/db2wqezinstall)

You are in: DB2 Web Query for i Wiki > DB2 Web Query EZ Install

## DB2 Web Query EZ Install

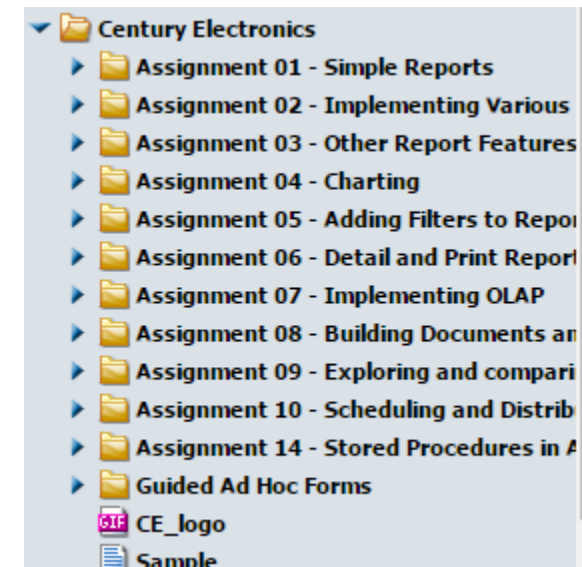
Like | Updated today at 9:32 AM by drmack2 | Tags: None | Add tags

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**Congratulations!** If you're here, it hopefully means you have successfully installed the DB2 Web Query EZ-Install Package. Now What?

- [Build your first report! Click here for instructions.](#)
- [Learn more about building reports. Click here to download a set of self guided InfoAssist Tutorials!](#)
- [Learn more about the Sample IBM i administration reports](#)
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[Comments \(0\)](#) [Versions \(21\)](#) [Attachments \(8\)](#) [About](#)



# Completed Tutorial Reports



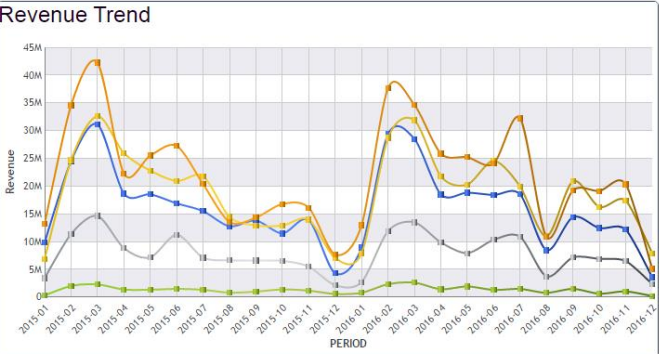
## Product Type Indicators

Product Types

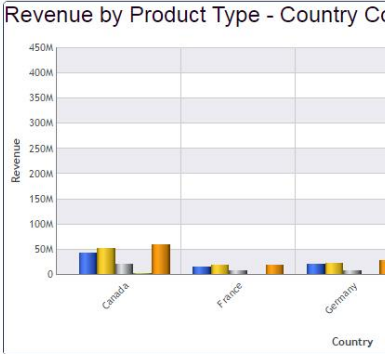
- All Products
- Audio
- Camcorders
- Cameras
- Office

Run

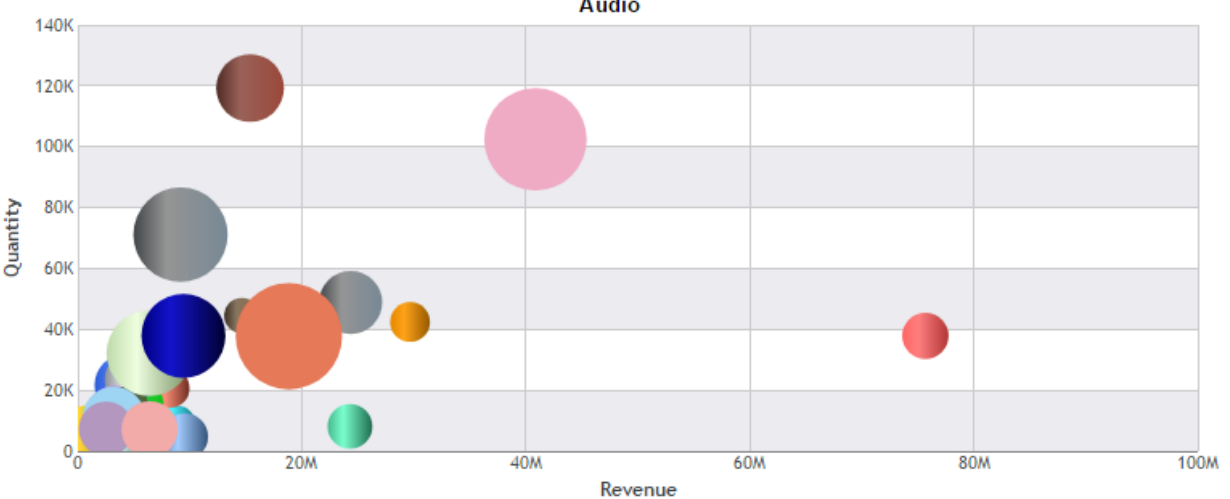
### Revenue Trend



### Revenue by Product Type - Country



### Audio



- Audio/Video Receiver
- CD Recorder with 50GB Hard Disc Drive
- Home Theater 5.1 System
- Micro 5.1 System
- MP3 Digital Audio Computer
- AM / FM Stereo Tuner
- Digital CD Turntable
- Home Theater 7.1 THX System
- Modular Components Series Preamp 5.1
- MP3 Digital Audio Computer 10GB
- CD Changer / CD Player
- Home Theater Surround System
- Micro HiFi Stereo System
- Multichannel Super Audio CD Player
- MP3 Digital Audio Computer 4GB

Measures
Graph
Order Date Hierarchy
Product Info
Store Locations

Order Year: --All--

Order Qtr: --All--

Order Month: --All--

OLAP
Run
Reset

Product Category	2015		2016	
	Count	Revenue	Count	Revenue
<a href="#">Amplifiers/PreAmps/Tuners</a>	759	\$19,896,918.00	793	\$22,477,510.00
<a href="#">Audio Systems</a>	724	\$64,356,707.00	660	\$57,988,973.00
<a href="#">CD Players and Recorders</a>	664	\$27,740,934.00	642	\$26,106,525.00
<a href="#">MP3</a>	1,698	\$20,764,481.00	1,622	\$22,727,107.00
<a href="#">Receivers</a>	675	\$18,090,638.00	662	\$17,816,475.00
<a href="#">Speakers</a>	1,978	\$40,071,006.00	1,969	\$44,646,047.00



## Other Cool Things

- See Session at 11 on Thursday for how to modernize Query/400 reports
- Visualize Data with Geographical Maps
- Work with Reports from Mobile Devices
- Embed reports into customer Applications
- Automate building/updating Data Warehouse or Mart

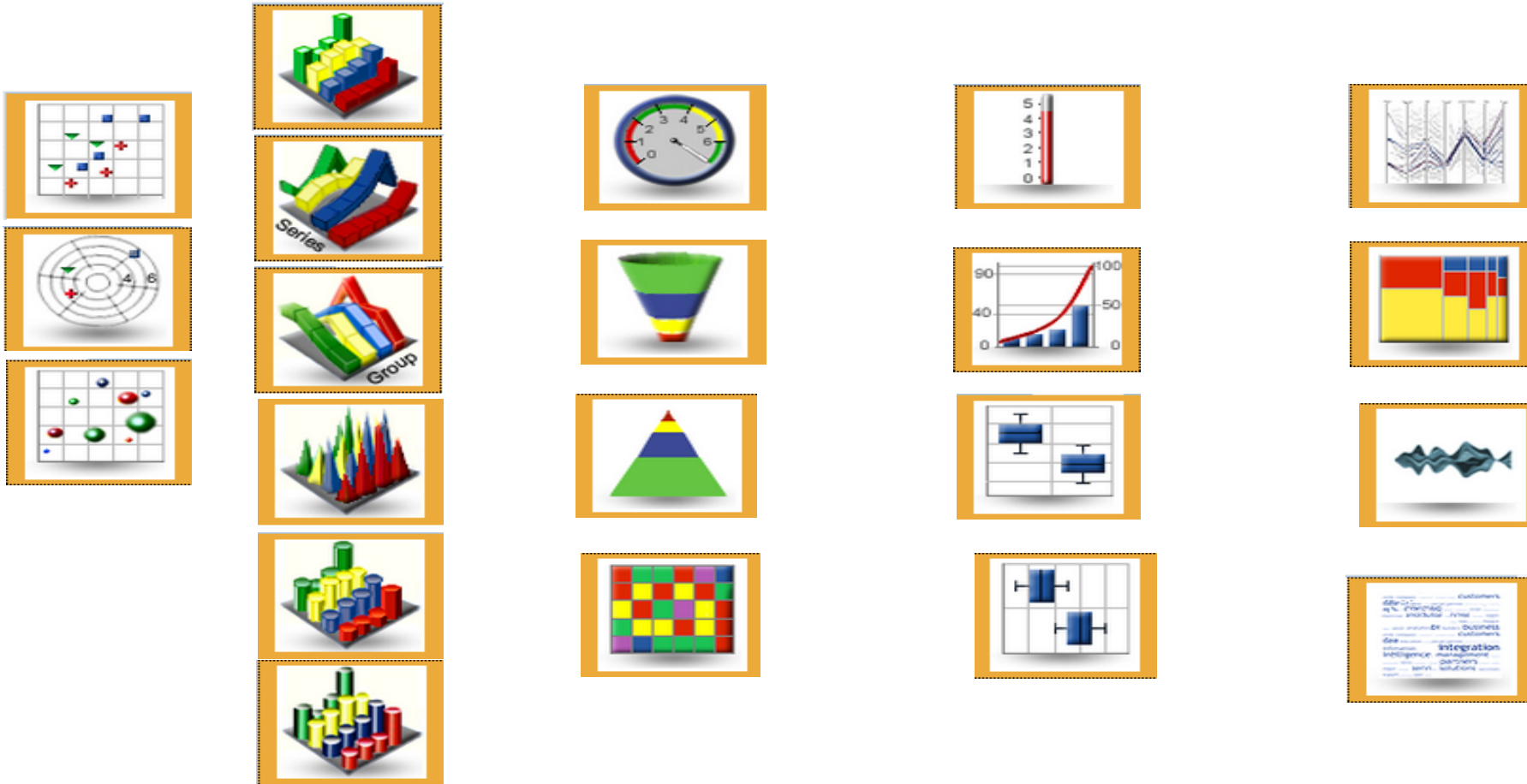


# Small Sampling of Chart Types





# ...and some more – 3D, Scatter, Wordmaps, Gas gauge, etc.

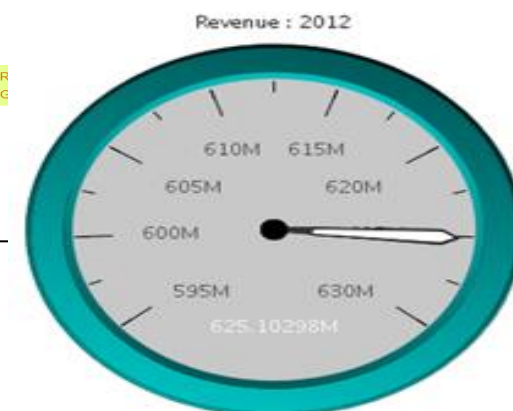
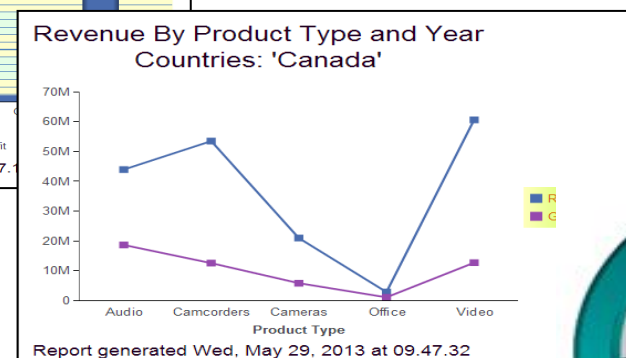
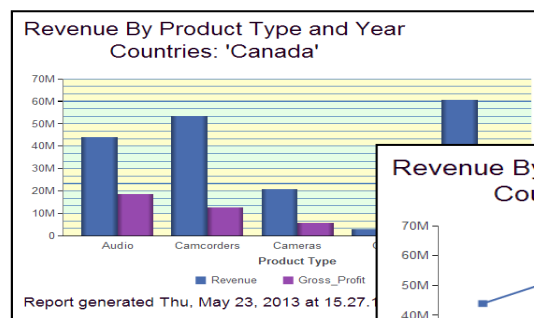


## Custom Chart Features

- Custom Chart Features allow one to adjust the appearance of a chart, add layers of information, or customize the labels that identify the data that is displayed.
- Some Custom Chart Features are only available with specific Chart Types or Chart Output Types
  - For example, rotating a chart or displaying reference lines are features that are only available with HTML, HTML5, PDF, Excel, or PowerPoint output formats.

- Custom Chart Features include:

- Page Heading/Page Footing
- **Grid Lines**
- Axis Options and Labels
- **Legend Options**
- Data Labels Options
- **Gauge Options**
- Active Technologies Report Options

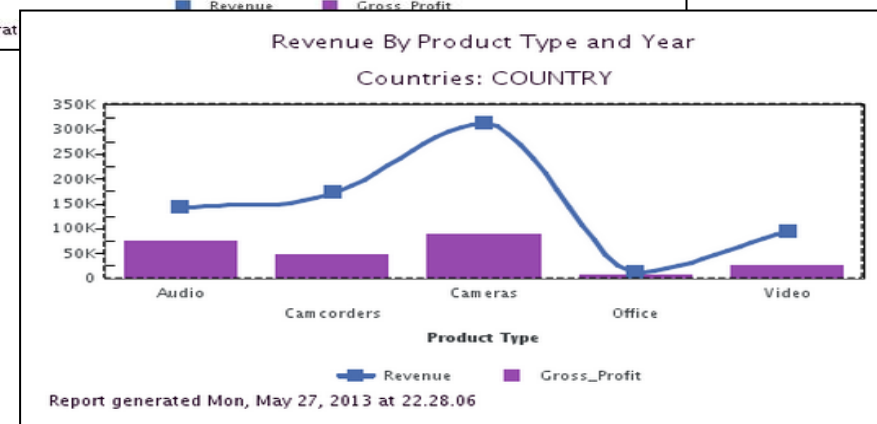
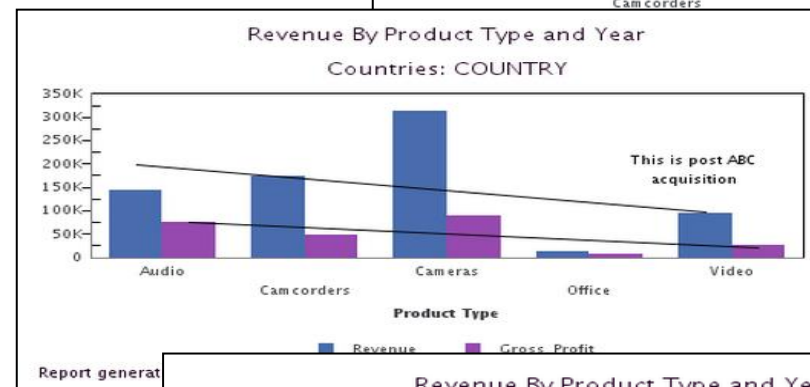
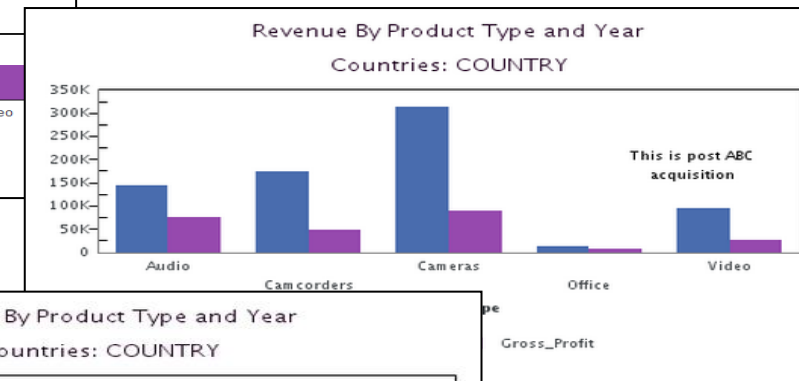
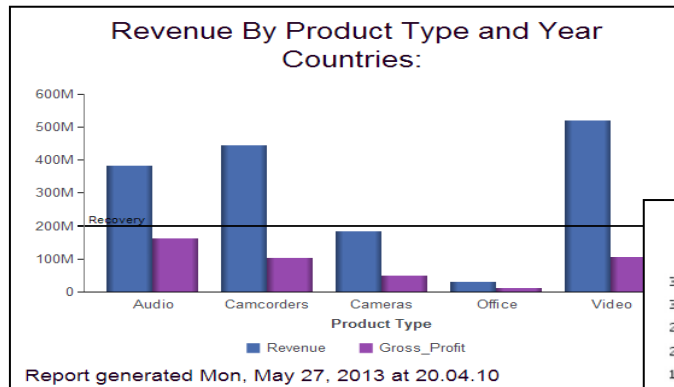






# You Can Also:

- Rotate a Chart
- Display Reference Lines
- Display Annotations
- Use Axis Assignment in Multiple-Axis Charts
- Change the Text for the Axis Title
- Display Trendlines
- Customize the Display of Legend Labels
- Display Data Labels
- Customize the Display of Markers
- Display Smooth Lines

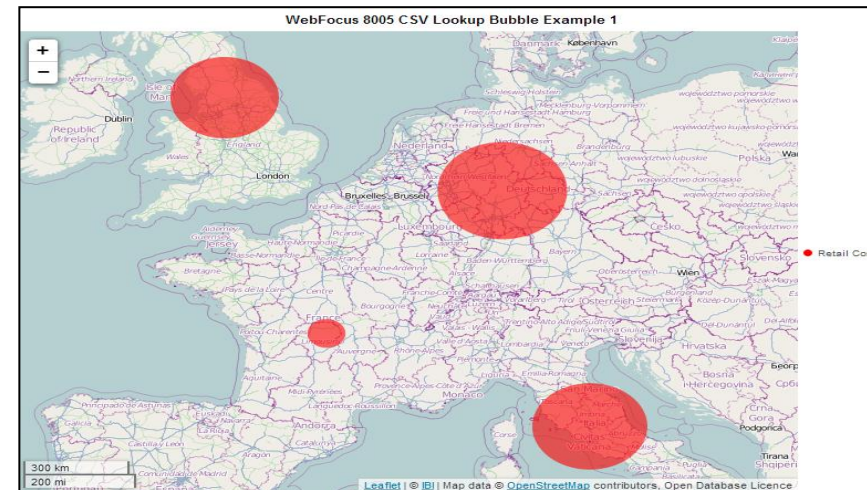
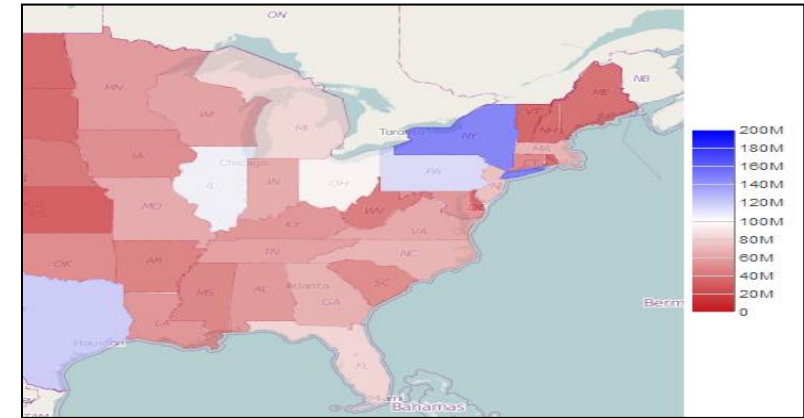






# Geographical Maps

- Many Maps to choose from
  - Some need to be “enabled”
  - Can also pull maps down from the web (need to be in a specific format)
- Two types: Choropleth and Bubble
- Associate data with a geographical region, postal code, latitude longitude
- Can tailor maps through stylesheets
  - Customize the heat scale (color gradient)
  - Fill color of bubble
  - Opacity



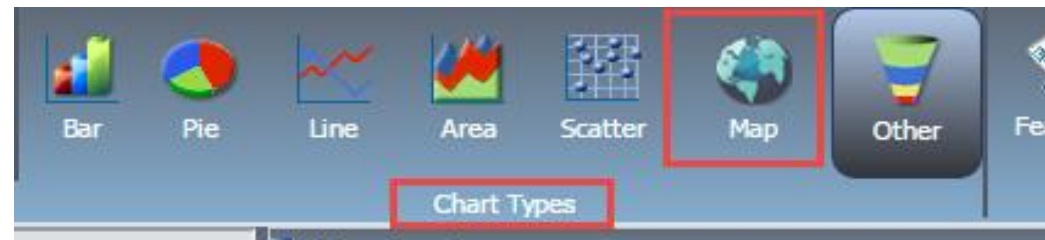


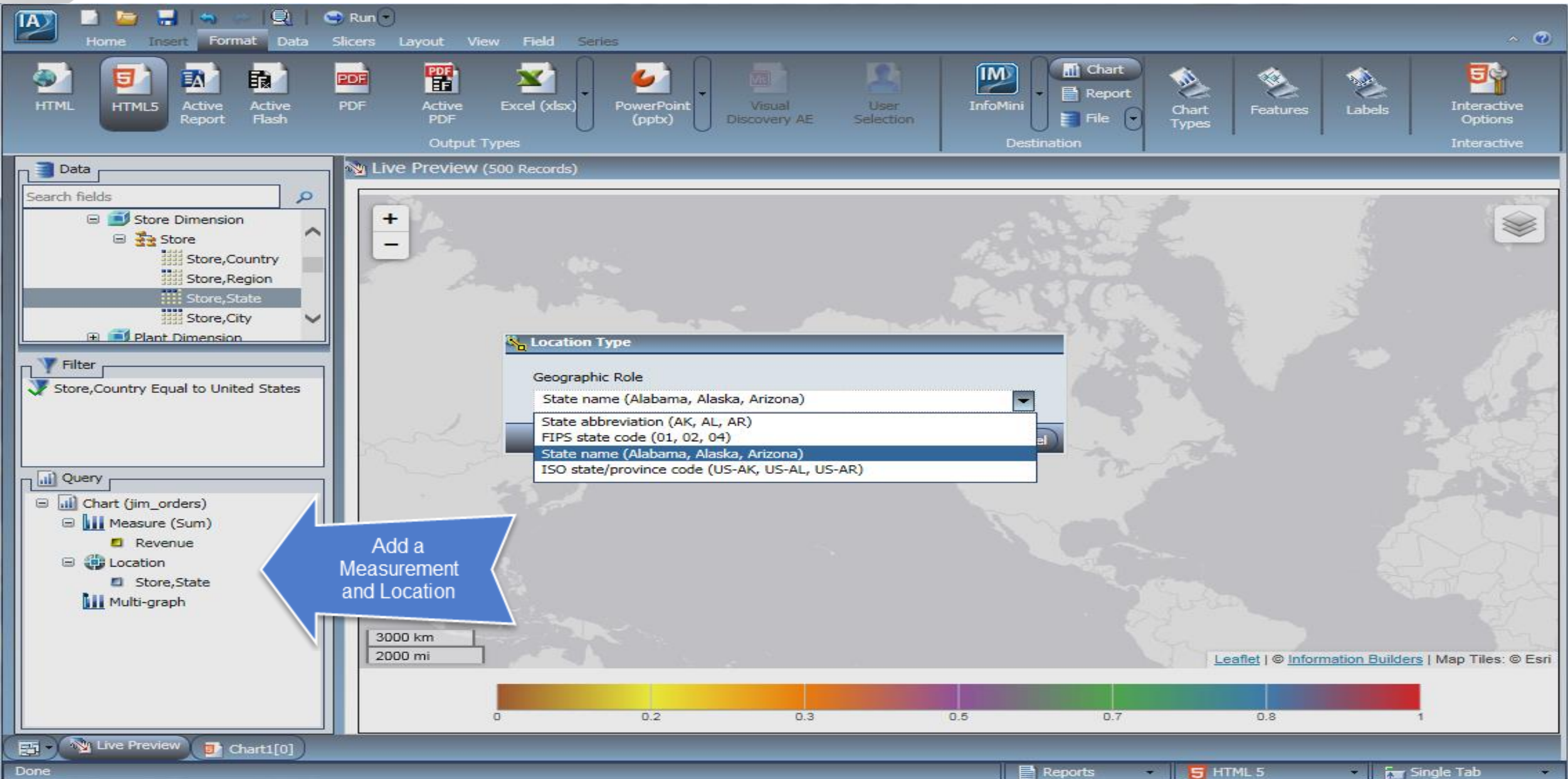
## Building a Map

- Choose Format type of HTML5



- Select the MAP Tool





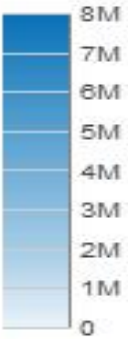
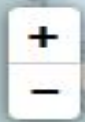
The screenshot displays the IBM Power Systems software interface. At the top, there is a ribbon menu with tabs for Home, Insert, Format, Data, Slicers, Layout, View, Field, and Series. Below the ribbon is a toolbar with various icons for output types (HTML, HTML5, Active Report, Active Flash, PDF, Active PDF, Excel (xlsx), PowerPoint (ppbx), Visual Discovery AE, User Selection), destination (InfoMini, Chart, Report, File), and interactive options (Chart Types, Features, Labels, Interactive Options).

The main workspace is divided into several panels:

- Data Panel:** Contains a search field and a tree view of dimensions. The 'Store Dimension' is expanded, showing 'Store, Country', 'Store, Region', 'Store, State', and 'Store, City'. The 'Plant Dimension' is also visible.
- Filter Panel:** Shows a filter applied: 'Store, Country Equal to United States'.
- Query Panel:** Shows a chart named 'jim\_orders' with a measure of 'Revenue' and a location of 'Store, State'. A multi-graph is also visible.
- Live Preview Panel:** Displays a map of the United States with a data popup for 'Location Type'. The popup shows a dropdown menu for 'State name (Alabama, Alaska, Arizona)' with options for 'State name (Alabama, Alaska, Arizona)', 'State abbreviation (AK, AL, AR)', 'FIPS state code (01, 02, 04)', and 'ISO state/province code (US-AK, US-AL, US-AR)'. A blue arrow points to this panel with the text 'Add a Measurement and Location'.

At the bottom, there is a status bar with 'Done', 'Live Preview', 'Chart1[0]', 'Reports', 'HTML 5', and 'Single Tab'.

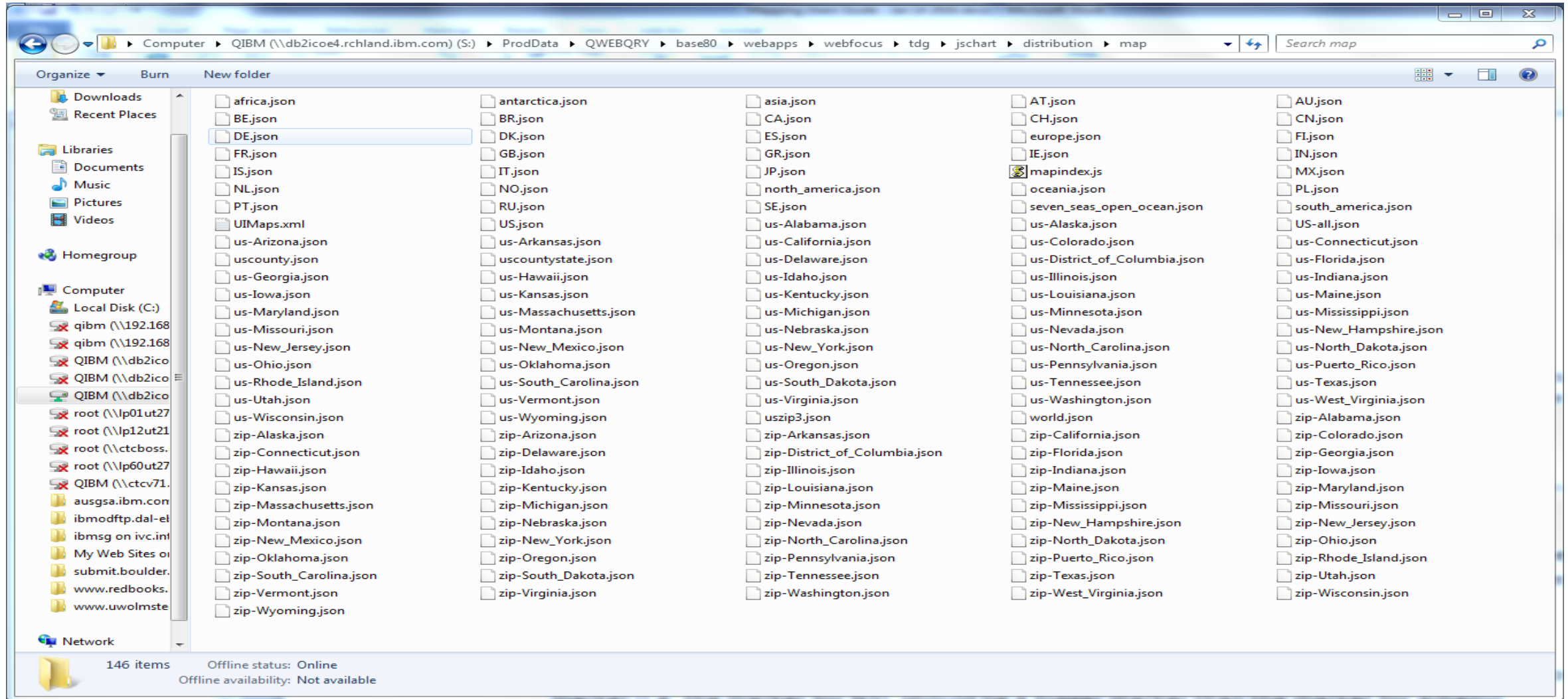




500 km  
500 mi

Leaflet | © IBM | Map data © OpenStreetMap contributors, Open Database Licence

# Many More Maps Included but Need to Enable



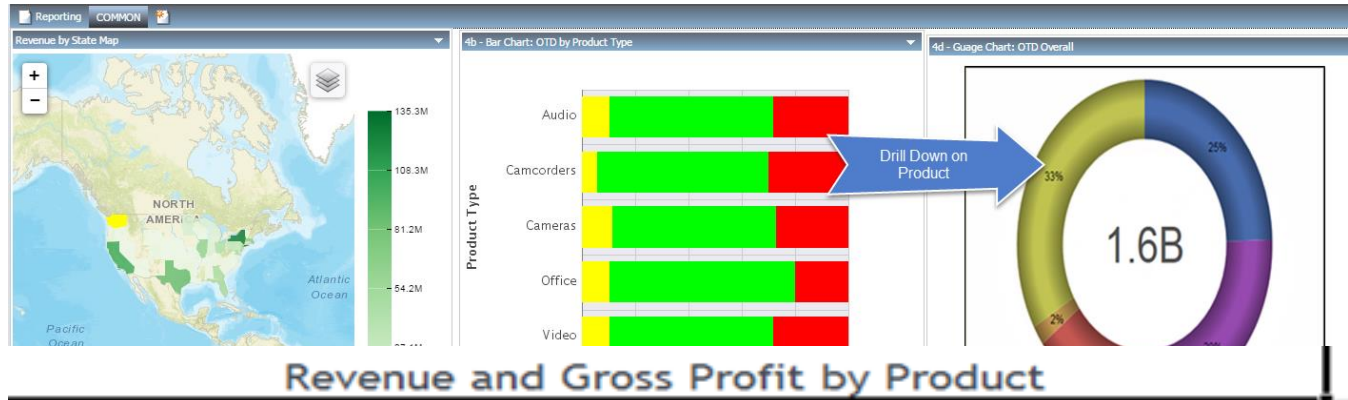


# Insert the Map Onto a Dashboard





# Drill Down to a Detail Report



Revenue and Gross Profit by Product

Product Type	Product Category	Revenue	Gross Profit	Gross_Profit_Compute
Camcorders	DVD Camcorders	379,376,637.00	79,003,287.00	20.82%
Video	DVD	329,872,045.00	81,103,145.00	24.59%
Cameras	Digital Cameras	184,103,667.00	50,774,837.00	27.58%
Video	TV	168,799,539.00	18,027,839.00	10.68%
Audio	Audio Systems	122,345,680.00	40,062,860.00	32.75%
Audio			60,036,063.00	70.87%
Audio			16,008,999.00	29.73%
Camcorders			17,411,091.00	33.78%
Audio			17,052,928.00	39.21%
Audio	Amplifiers/PRE	42,574,426.00	16,634,858.00	39.26%
Audio	Receivers	35,907,113.00	12,909,113.00	35.95%
Video	VCR	21,688,621.00	5,417,671.00	24.98%
Office	Handheld and PD	18,533,190.00	4,465,770.00	24.10%
Camcorders	Digital8 Camcor	13,614,953.00	7,102,353.00	52.17%
Office	Organizers	11,712,495.00	6,755,190.00	57.68%

**Our Enhanced Query/400 Report!**



Prepared on 11/21/16 at 16.32.32





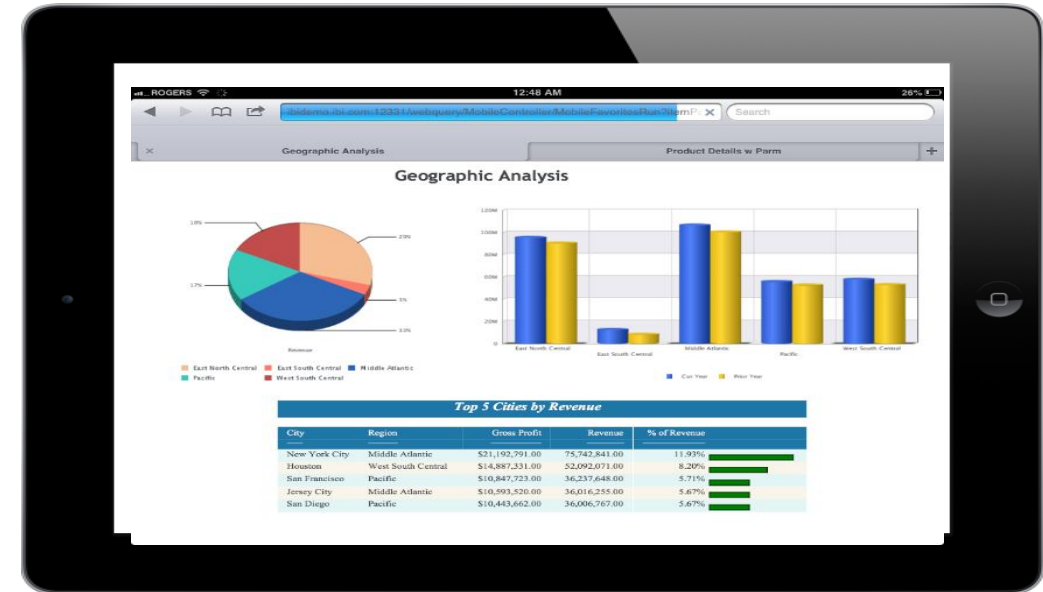
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# Deploy Reports to Mobile Devices



## Deploy to Mobile Device

- Build reports once, deploy to any device
  - Dynamic detection of the device
    - Converts to “mobile”
    - Renders appropriate content for the device
- No charge android and apple apps “Mobile Faves” for managing reports and connections
  - Synchronize reports w/ Mobile Faves folder in BI Portal
  - Receive reports in email and work offline
  - Use the client’s browser to connect to your system and access via the BI Portal

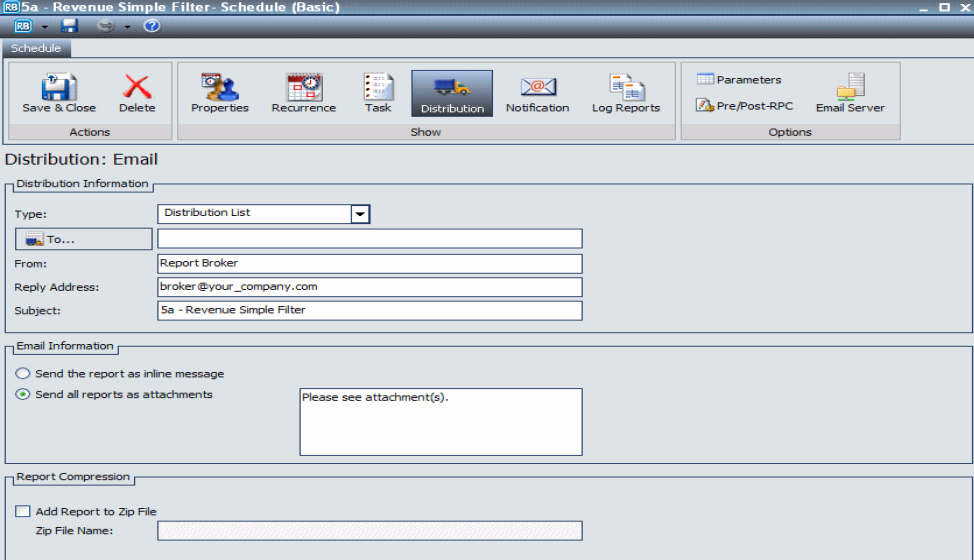


See video at: [ibm.biz/db2webqueryi](http://ibm.biz/db2webqueryi)

Take “DB2 Web Query End User Demos” link

# Schedule the Report to Run in the Background

- Two options:
  - DB2 Web Query Specific Job Scheduler
    - GUI Interface
    - Standard or customized schedules
      - Can exclude dates (e.g., holidays)
    - Email, FTP, or save to repository
    - Burst the report based on key field
    - Logging and notification functions
  - CL Command to add to your IBM i job scheduler
    - Run job as part of a job stream
      - After end of day processing run reports and distribute
    - Can pass parameters from CL program
    - Email, FTP, Save to IFS or network driver
      - Include report as email attachment or link to file in in IFS or network drive



5a - Revenue Simple Filter - Schedule (Basic)

Save & Close Delete Properties Recurrence Task Distribution Notification Log Reports Parameters Pre/Post-RPC Email Server

Distribution: Email

Distribution Information

Type: Distribution List

To: [ ]

From: Report Broker

Reply Address: broker@your\_company.com

Subject: 5a - Revenue Simple Filter

Email Information

Send the report as inline message

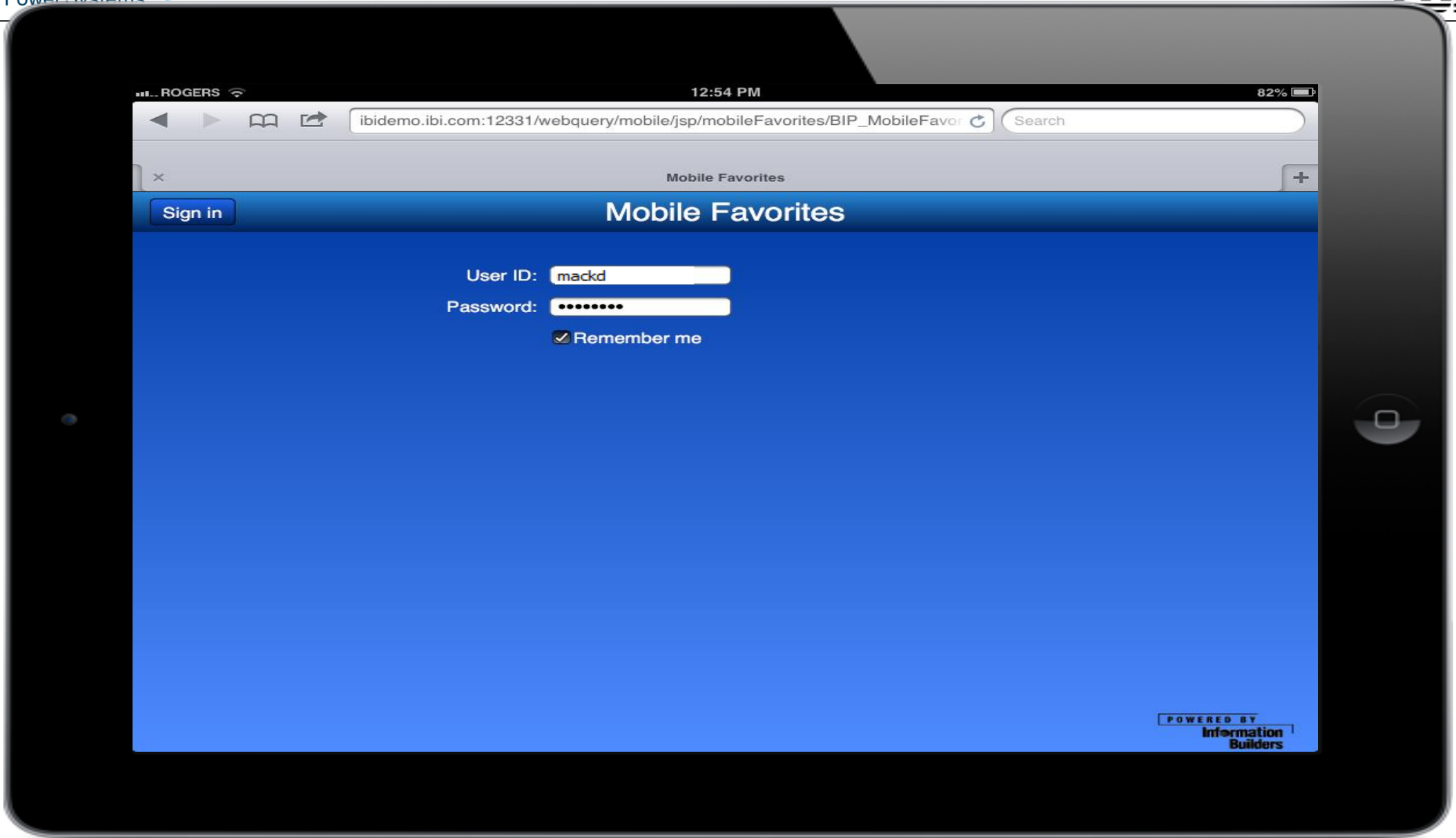
Send all reports as attachments

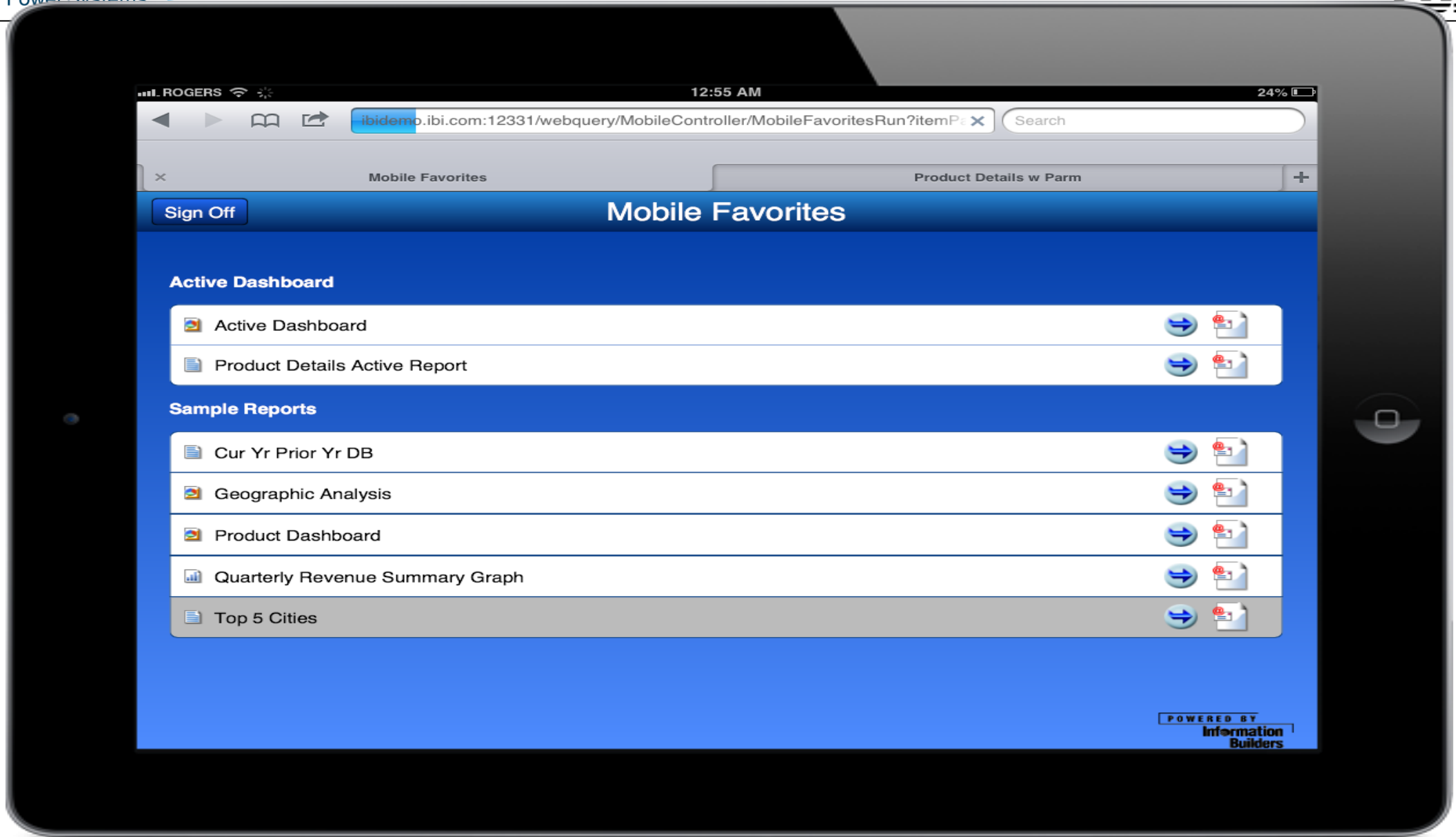
Please see attachment(s).

Report Compression

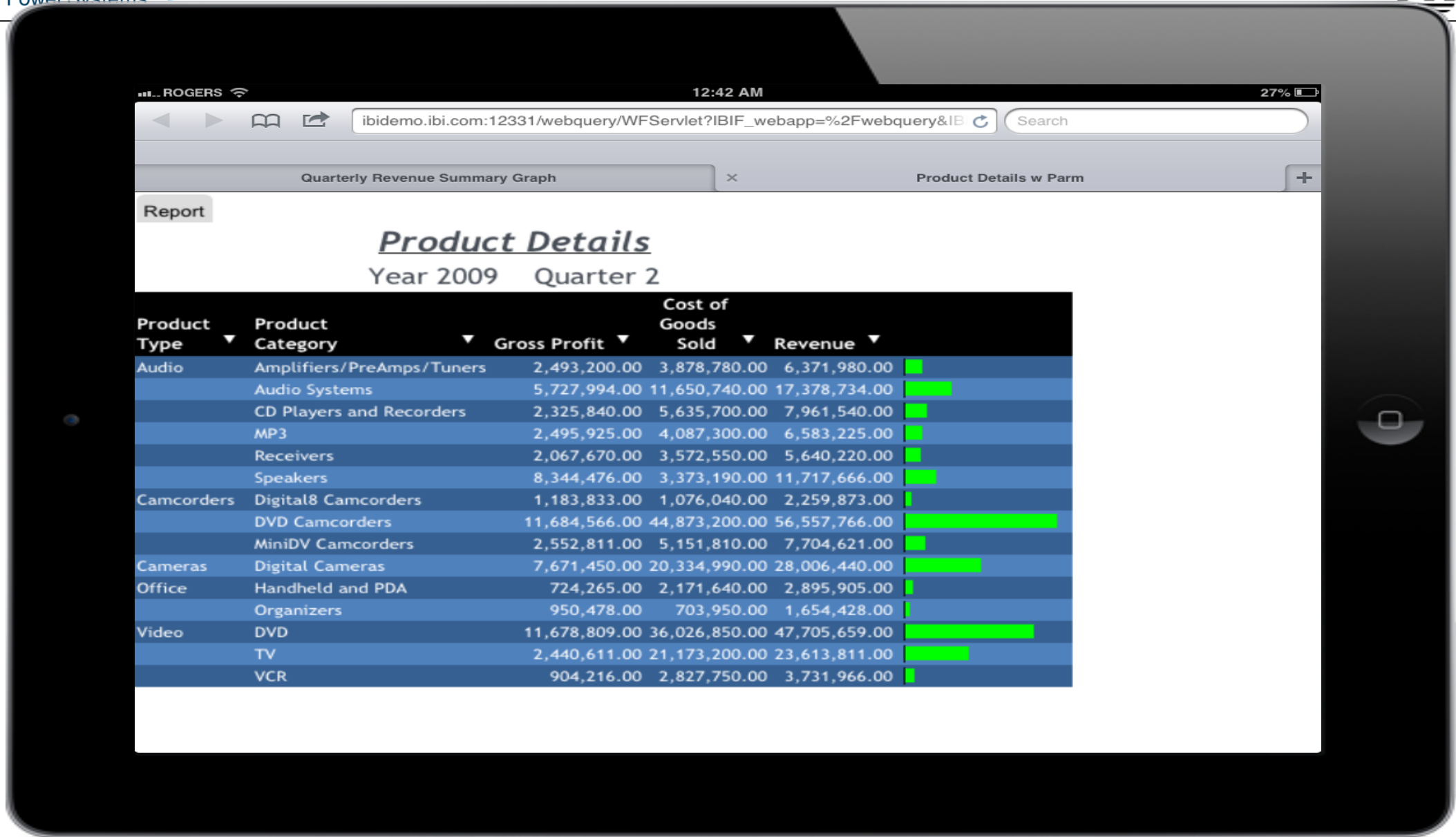
Add Report to Zip File

Zip File Name: [ ]









12:42 AM 27%

ibidemo.ibi.com:12331/webquery/WFServlet?IBIF\_webapp=%2Fwebquery&IB Search

Quarterly Revenue Summary Graph Product Details w Parm

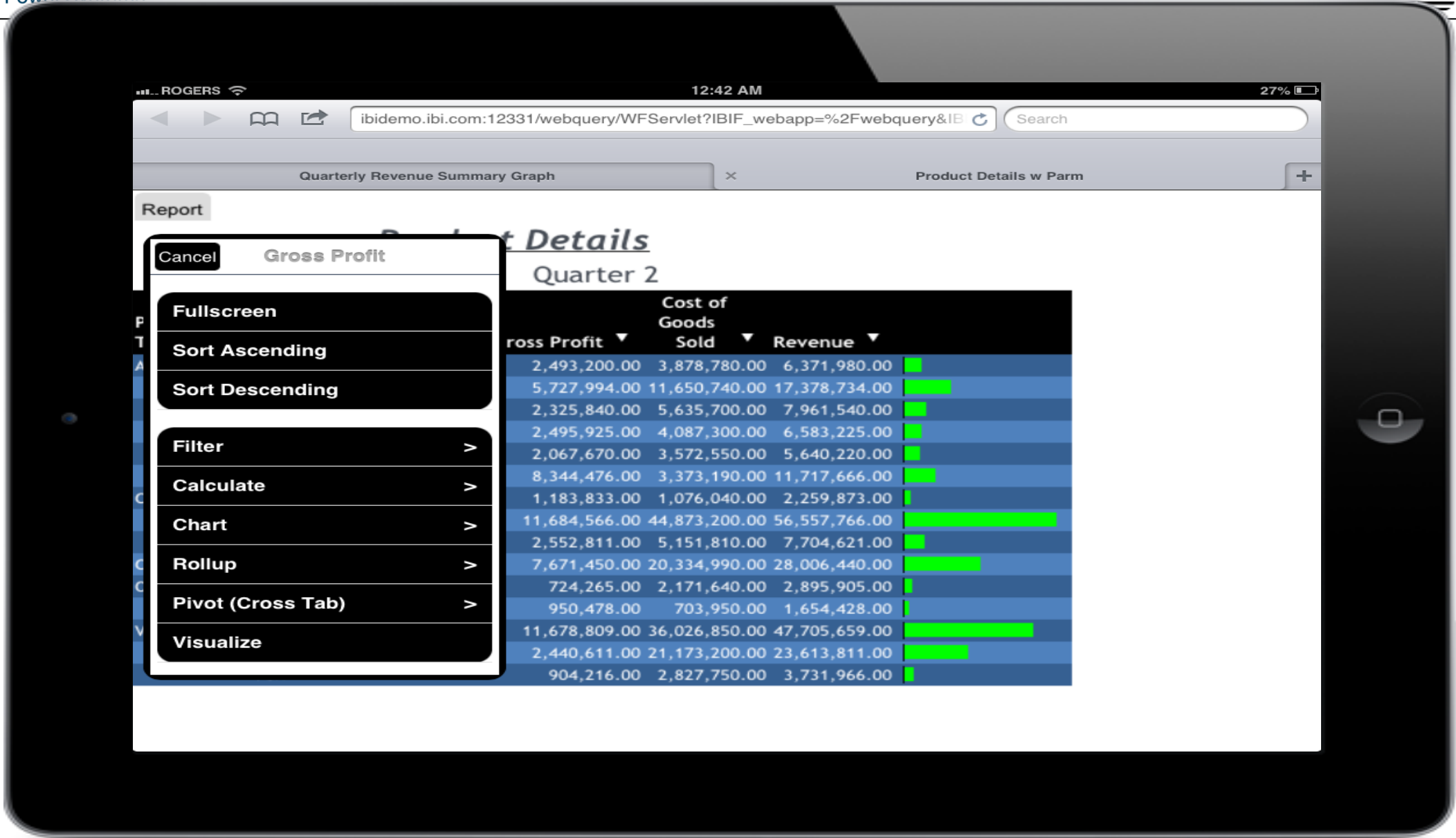
Report

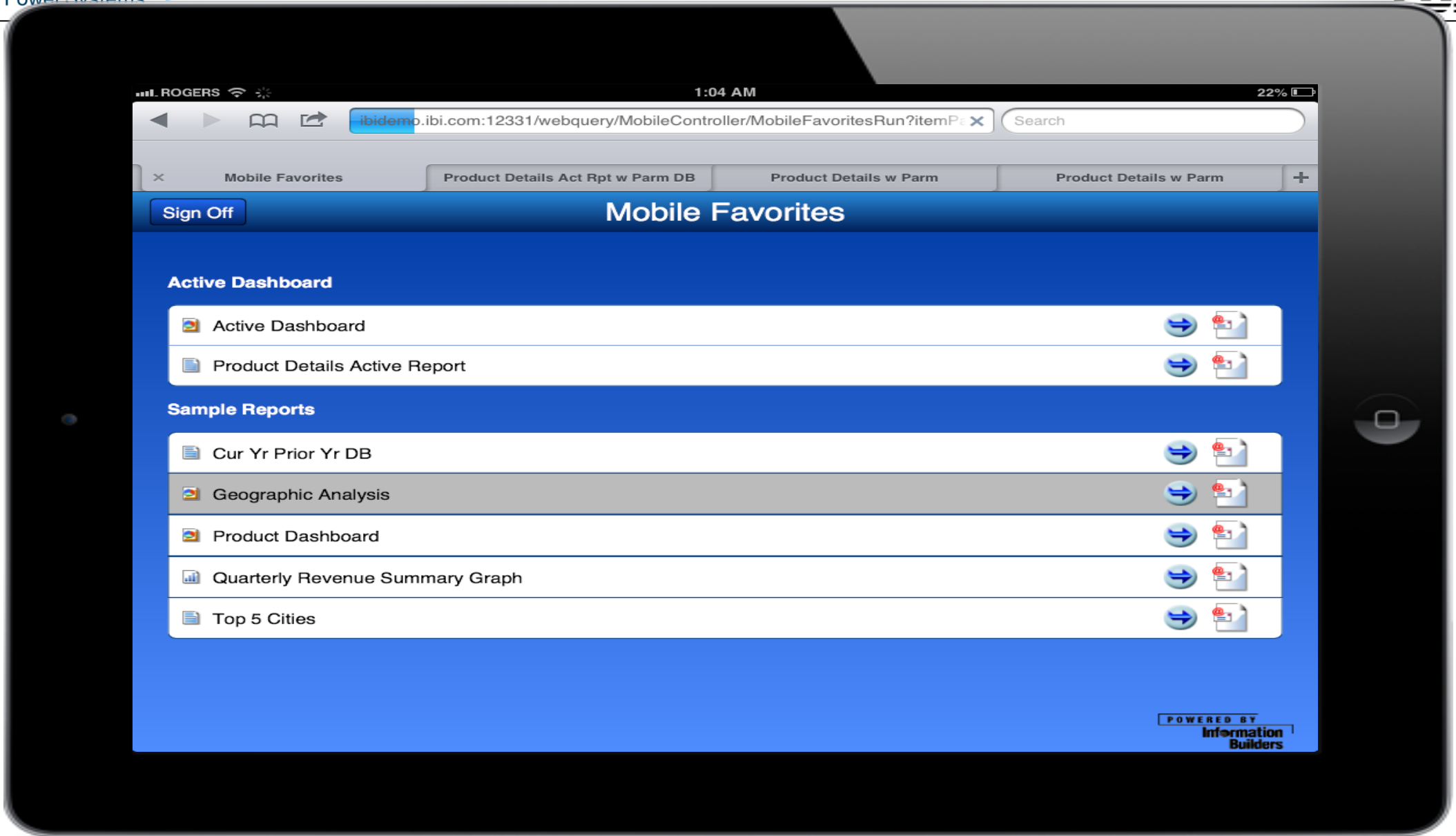
### Product Details

Year 2009 Quarter 2

Product Type	Product Category	Gross Profit	Cost of Goods Sold	Revenue	
Audio	Amplifiers/PreAmps/Tuners	2,493,200.00	3,878,780.00	6,371,980.00	<div style="width: 10%;"></div>
	Audio Systems	5,727,994.00	11,650,740.00	17,378,734.00	<div style="width: 30%;"></div>
	CD Players and Recorders	2,325,840.00	5,635,700.00	7,961,540.00	<div style="width: 15%;"></div>
	MP3	2,495,925.00	4,087,300.00	6,583,225.00	<div style="width: 12%;"></div>
	Receivers	2,067,670.00	3,572,550.00	5,640,220.00	<div style="width: 8%;"></div>
	Speakers	8,344,476.00	3,373,190.00	11,717,666.00	<div style="width: 25%;"></div>
Camcorders	Digital8 Camcorders	1,183,833.00	1,076,040.00	2,259,873.00	<div style="width: 5%;"></div>
	DVD Camcorders	11,684,566.00	44,873,200.00	56,557,766.00	<div style="width: 45%;"></div>
	MiniDV Camcorders	2,552,811.00	5,151,810.00	7,704,621.00	<div style="width: 10%;"></div>
Cameras	Digital Cameras	7,671,450.00	20,334,990.00	28,006,440.00	<div style="width: 35%;"></div>
Office	Handheld and PDA	724,265.00	2,171,640.00	2,895,905.00	<div style="width: 3%;"></div>
	Organizers	950,478.00	703,950.00	1,654,428.00	<div style="width: 4%;"></div>
Video	DVD	11,678,809.00	36,026,850.00	47,705,659.00	<div style="width: 40%;"></div>
	TV	2,440,611.00	21,173,200.00	23,613,811.00	<div style="width: 18%;"></div>
	VCR	904,216.00	2,827,750.00	3,731,966.00	<div style="width: 2%;"></div>





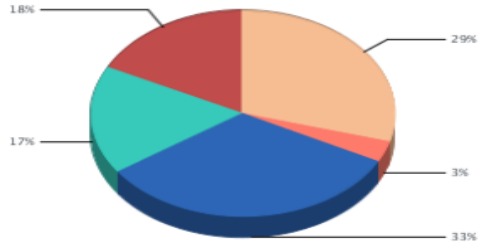


12:48 AM 26%

ibidemo.ibi.com:12331/webquery/MobileController/MobileFavoritesRun?itemP... Search

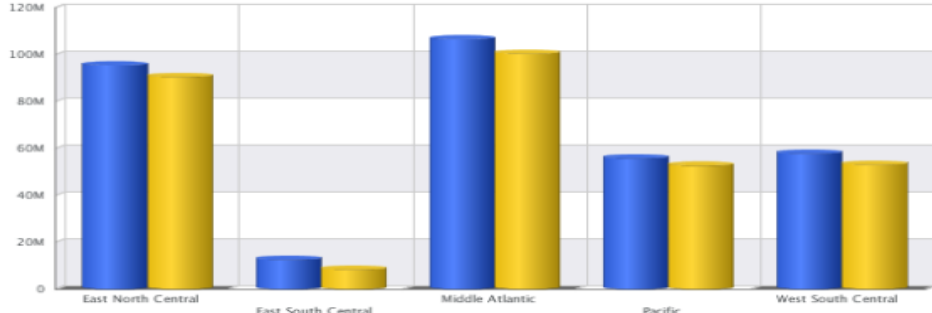
Geographic Analysis Product Details w Parm

### Geographic Analysis



Revenue

- East North Central
- East South Central
- Middle Atlantic
- Pacific
- West South Central



Cur Year Prior Year

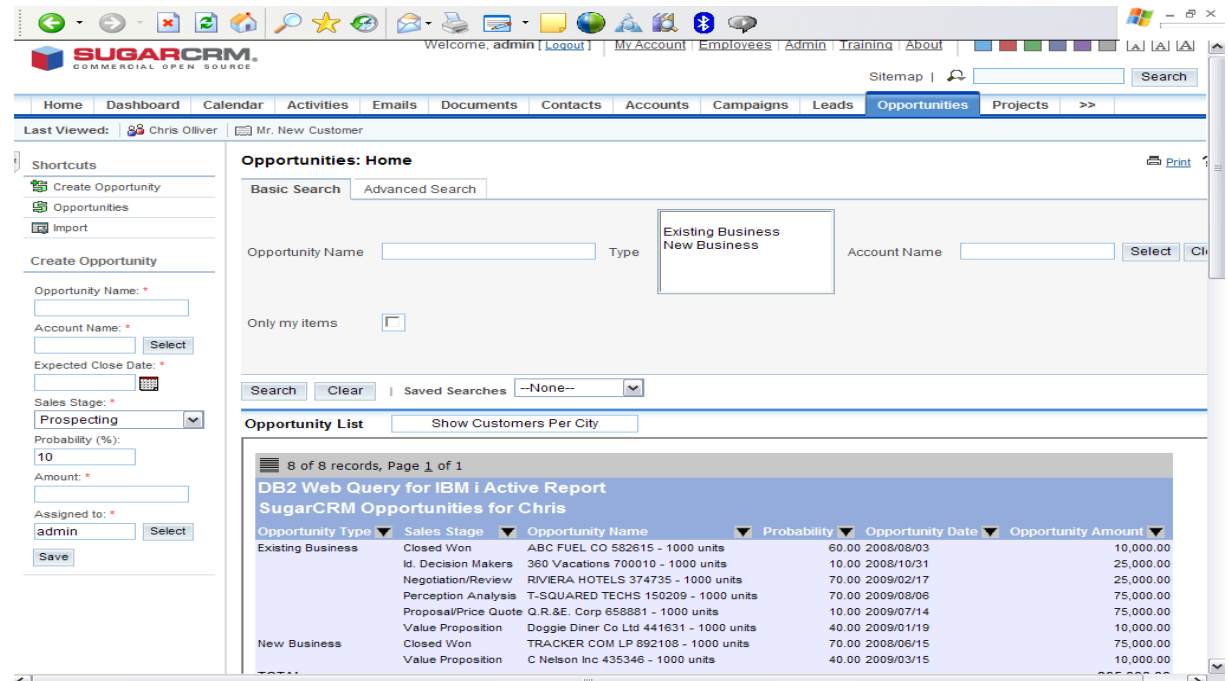
Top 5 Cities by Revenue				
City	Region	Gross Profit	Revenue	% of Revenue
New York City	Middle Atlantic	\$21,192,791.00	75,742,841.00	11.93%
Houston	West South Central	\$14,887,331.00	52,092,071.00	8.20%
San Francisco	Pacific	\$10,847,723.00	36,237,648.00	5.71%
Jersey City	Middle Atlantic	\$10,593,520.00	36,016,255.00	5.67%
San Diego	Pacific	\$10,443,662.00	36,006,767.00	5.67%



# Embed a Report into an Existing Application

## Accessing Report from Custom App

- Simplifies access for end users
- Does not require client to use standard DB2 Web Query BI Portal
- Integrate the report as part of another application
- URL interface to access report: built on top of REST Web Services
  - You could code to REST Web Services too, but....why?
- Requires Standard Edition



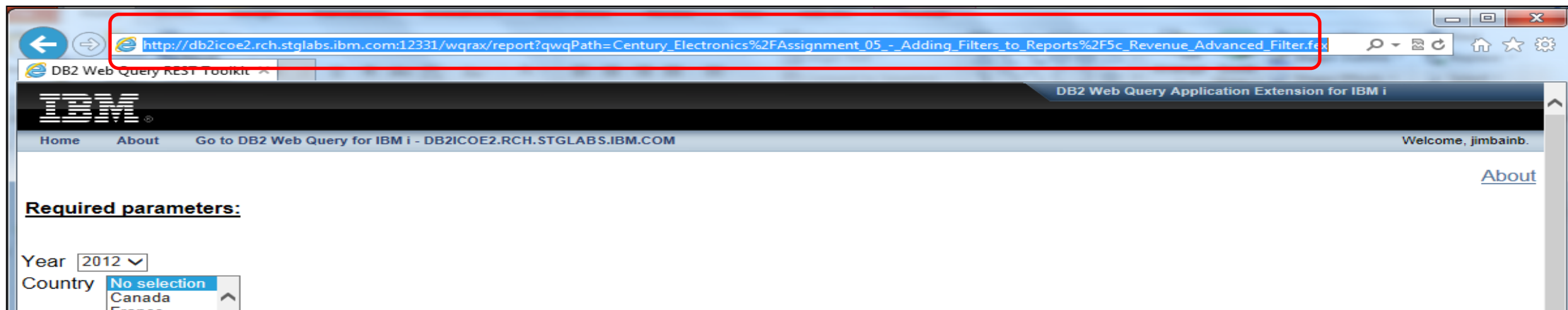
The screenshot shows the SugarCRM interface. The top navigation bar includes 'Home', 'Dashboard', 'Calendar', 'Activities', 'Emails', 'Documents', 'Contacts', 'Accounts', 'Campaigns', 'Leads', 'Opportunities', and 'Projects'. The 'Opportunities' section is active, showing a search interface with fields for 'Opportunity Name', 'Type' (with a dropdown menu showing 'Existing Business' and 'New Business'), and 'Account Name'. Below the search fields is a table titled 'Opportunity List' with 8 records. The table has columns for 'Opportunity Type', 'Sales Stage', 'Opportunity Name', 'Probability', 'Opportunity Date', and 'Opportunity Amount'. The data is as follows:

Opportunity Type	Sales Stage	Opportunity Name	Probability	Opportunity Date	Opportunity Amount
Existing Business	Closed Won	ABC FUEL CO 582615 - 1000 units	60.00	2008/08/03	10,000.00
	Id. Decision Makers	360 Vacations 700010 - 1000 units	10.00	2008/10/31	25,000.00
	Negotiation/Review	RIVIERA HOTELS 374735 - 1000 units	70.00	2009/02/17	25,000.00
	Perception Analysis	T-SQUARED TECHS 150209 - 1000 units	70.00	2009/08/06	75,000.00
	Proposal/Price Quote	Q.R.&E. Corp 658881 - 1000 units	10.00	2009/07/14	75,000.00
	Value Proposition	Doggie Diner Co Ltd 441631 - 1000 units	40.00	2009/01/19	10,000.00
New Business	Closed Won	TRACKER COM LP 892108 - 1000 units	70.00	2008/06/15	75,000.00
	Value Proposition	C Nelson Inc 435346 - 1000 units	40.00	2009/03/15	10,000.00

## WQRAX – Direct Mode

Direct mode - provides ability to invoke a report URL directly.

- URL interface to report execution. For example:  
[http://your\\_server:12331/wqrax/report?qwqPath=My\\_Top\\_Level\\_Folder/My\\_Report.fex](http://your_server:12331/wqrax/report?qwqPath=My_Top_Level_Folder/My_Report.fex)
- The URL is static and persistent
- The URL can be used in many ways:
  - Link to it from a web page or PC application.
  - Set it as the source of an HTML iframe (in-line frame) on an existing web page.
  - Email the link to your colleagues.
- To use the URL, any end users will need to have access to the IBM i and be valid DB2 Web Query users







# Constructing the Direct URL

## Put the pieces together

1. Start with the http server portion of the URL:

[http://your\\_server:12331/wqrax/](http://your_server:12331/wqrax/)

2. Append the standard report indicator substring:

[report?qwqPath=](#)

3. Finally, append the report path (contains the folder path and report name)

[My\\_Top\\_Level\\_Folder/My\\_Report.fex](#)

4. When you are finished, the URL will look something like this:

[http://your\\_server:12331/wqrax/report?qwqPath=My\\_Top\\_Level\\_Folder/My\\_Report.fex](http://your_server:12331/wqrax/report?qwqPath=My_Top_Level_Folder/My_Report.fex)

5. Optional: If the report uses prompted filtering, you can append the values to the end of the URL string -  
&variable\_name = value

[http://your\\_server:12331/wqrax/report?qwqPath=My\\_Top\\_Level\\_Folder/My\\_Report.fex](http://your_server:12331/wqrax/report?qwqPath=My_Top_Level_Folder/My_Report.fex)



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# Automate the untangling of data into a Data Warehouse



## Build a Data Warehouse or Data Mart

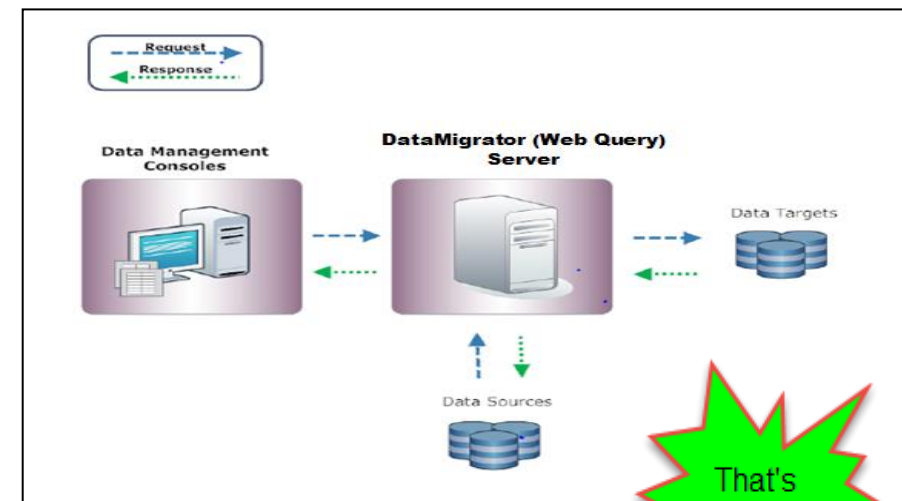
- Business Intelligence queries against databases designed for transaction processing on systems tuned for transaction processing....can be problematic
  - Data not in multidimensional formats – the query bangs on the data till it hurts
  - Data in detail level, not summary – aggregations done at run time
  - Data cleansing/transformation work is being done at report run time
  - Data consolidation done at run time – cross system joins are painful
  - Data represents just TODAY's Status, not point in time history
    - “Who was the sales rep that covered ACME back in 2012?” can't be answered
  - Systems are tuned for transaction processing, not optimized for queries
  - Security is a concern if querying production data that is not locked down



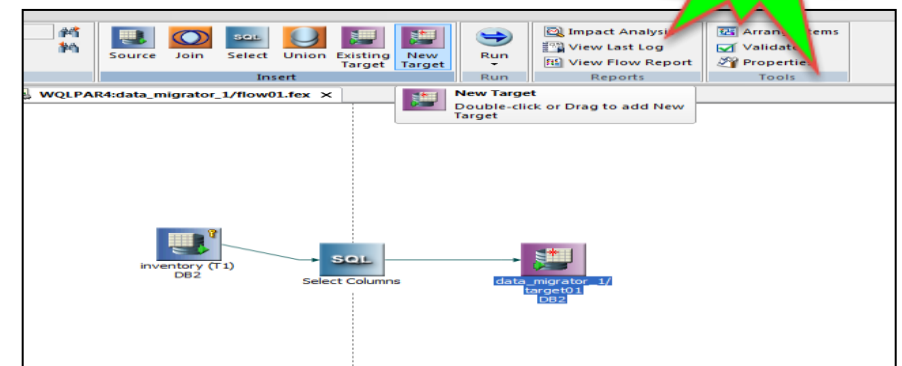


# DB2 Web Query DataMigrator ETL (Extract, Transformation, Load)

- Product ID 5733-WQM
  - Requires either DB2 Web Query Express or Standard Edition
  - Standard Edition required for non DB2 relational databases as a data source
    - Msoft SQLServer, MySQL, Postgres, Oracle, etc.
  - One license of DB2 Web Query Developer Workbench is required to set up data and process flows



- ETL for IBM i
  - Like DB2 Web Query, all server code and ETL objects run in and/or are stored in IBM i



- Log Based Data Replication
  - Replace deprecated product DataPropagator



## Summary

- There are many more cool things you can do with DB2 Web Query
  - Personal or sharable Dashboards
  - Set up Date Dimension table (shipped with product) to deal with date attributes and data functions
  - Create a self service reporting environment through guided ad-hoc forms
  - Embed reports from within Excel
  - Change the look and feel of reports using Style Sheets
    - Add an image, set default color schemes
- But the BEST way to get started is request EZ-Install package!
  - Send email to [QU2@us.ibm.com](mailto:QU2@us.ibm.com) and include name, company name, and serial number of system you plan to install DB2 Web Query onto.



# To Learn More

- DB2 Web Query for i Website
  - [Ibm.biz/db2webqueryi](http://ibm.biz/db2webqueryi)
- DB2 Web Query for i Wiki
  - [Ibm.co/db2wqwiki](http://ibm.co/db2wqwiki)
- DB2 Web Query Getting Started Enablement:
  - <https://ibm.biz/db2wqconsulting>
- Demonstrations:
  - Wizard Analytics: <https://ibm.biz/DB2WQWizards>
  - End User Demos: <https://ibm.biz/db2wqreportingdemos>
  - Getting Started Videos: <https://ibm.biz/db2wqgettingstarteddemos>
- Follow DB2 Web Query guy Doug Mack on twitter at @mckdrmoly or check out his blog at <http://db2webqueryi.blogspot.com/> for all the latest

