

Analytics with IMS and QMF

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QMF for z/OS 11

- QMF for z/OS is a visual business intelligence tool that provides interactive dashboards, reports and analytics via modern interfaces such as the web and mobile devices.
 - Data Sources
 - Access to structured data sources via JDBC or ODBC
 - Accesses to website data plus Big Data via Hadoop or BigInsights.
 - Access to mainframe databases: DB2 and IMS
 - QMF pricing is based on the DB2 for z/OS footprint. **Access to all other data sources is at no additional cost and no per user charges either. This includes access to IMS.**
- For IMS DB customers:
 - QMP reports and dashboards can be created by directly accessing IMS DB data
 - Using the DB2 Analytics Accelerator Loader for z/OS, QMF for z/OS can query data from IMS in the DB2 Analytics Accelerator without impacting transactional workloads
 - Demo of IMS catalog access from QMF

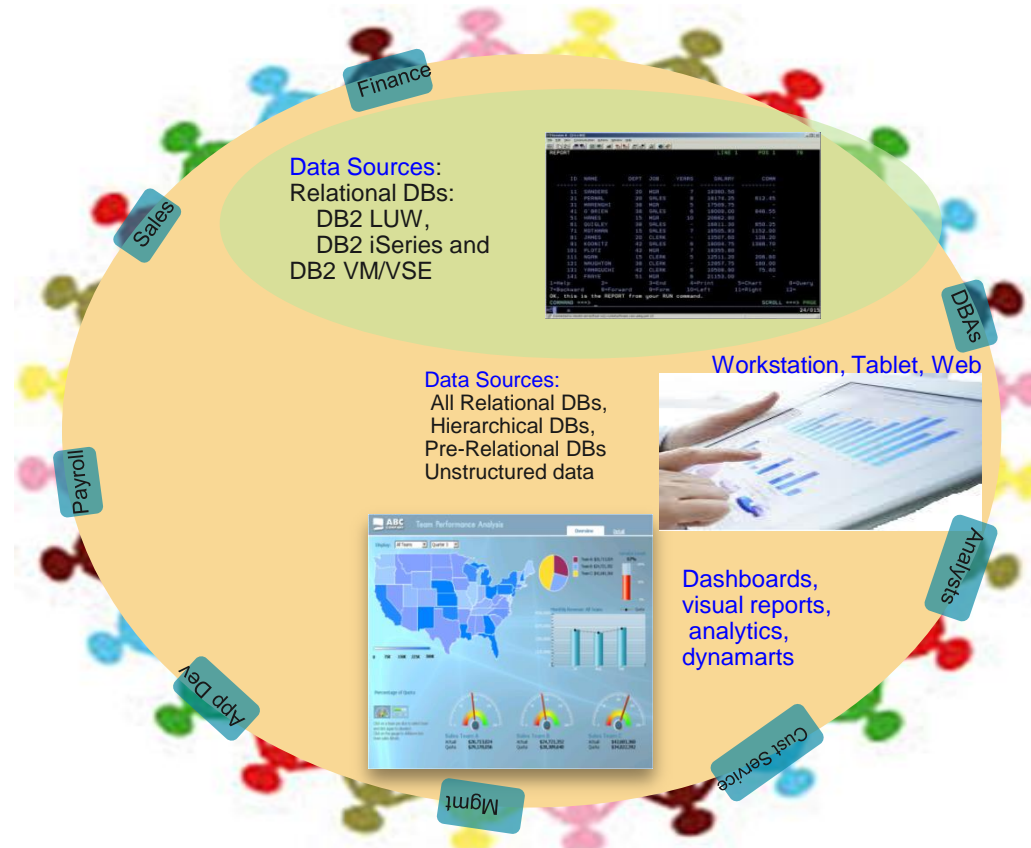


The Value of QMF for z/OS 11

- Includes QMF Classic Edition (QMF for TSO/CICS)
- QMF for z/OS 11 provides modern visual dashboards, reports, and analytics
- Quickly enhances QMF Classic Edition reports by allowing graphics and providing trend analysis
- Accessible from all current interfaces (web, workstation, **Mobile** devices)
- Workloads qualify for zIIP \$\$\$
- The ability to manipulate and create additional reports is available to the entire enterprise, not just IT personnel
- It supports a myriad of data sources **at no additional cost**

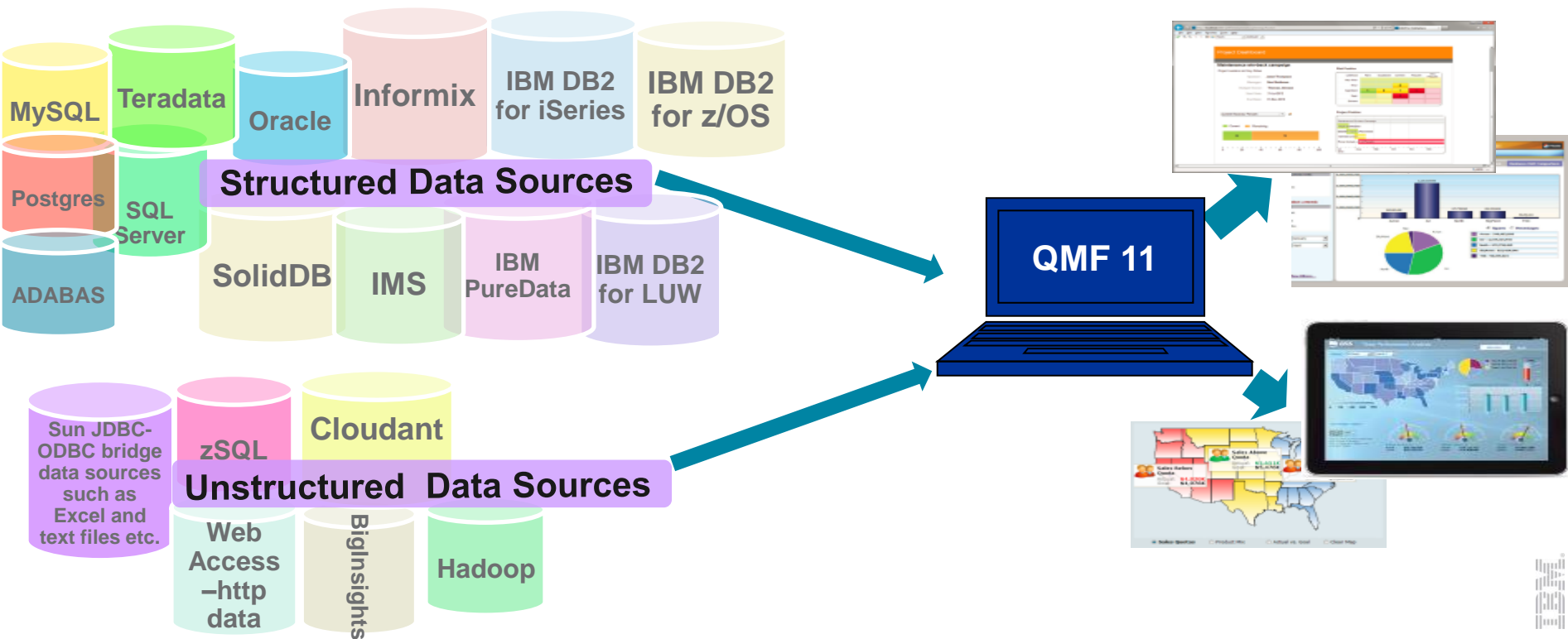
–Structured Data: Relational Data, Hierarchical Data

–Unstructured Data: Big Data, Web Data,

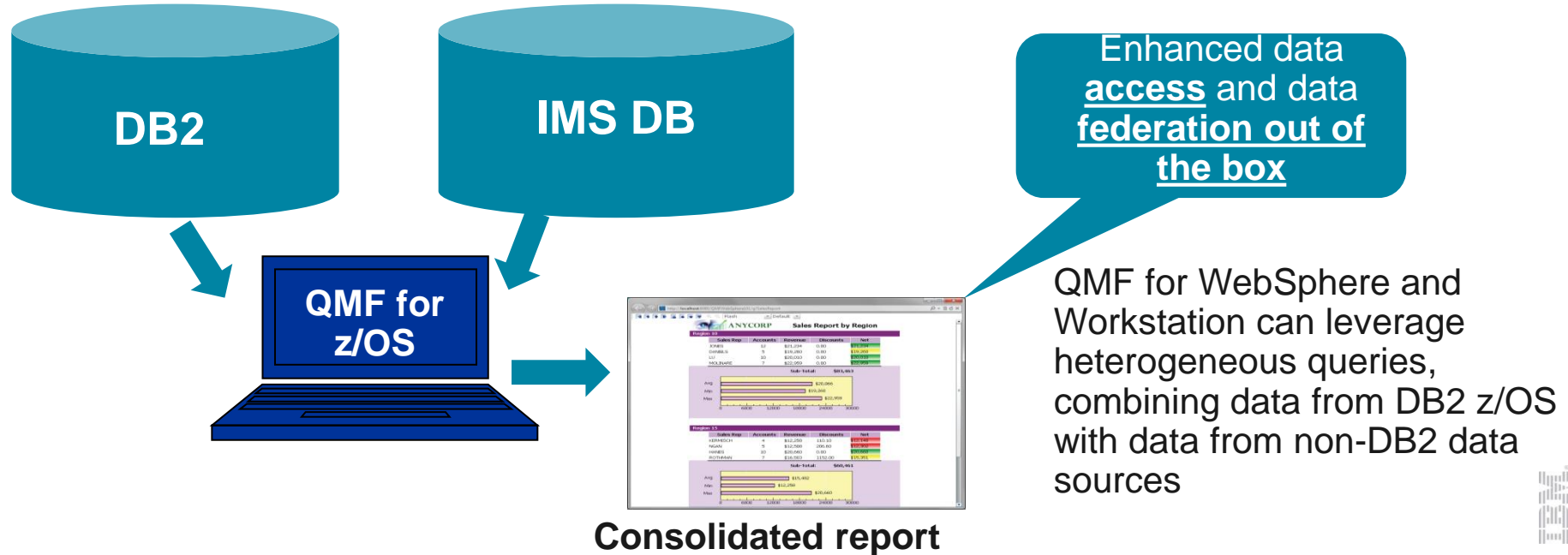


QMF for z/OS 11 offers *fast, simple connection* to a *broad spectrum of data sources*

QMF pricing is based on the DB2 footprint. **This allows it unlimited access to all other sources at no additional cost.**



QMF™ for z/OS 11 can marry data from DB2 and non-DB2 data sources for simple, unified reporting



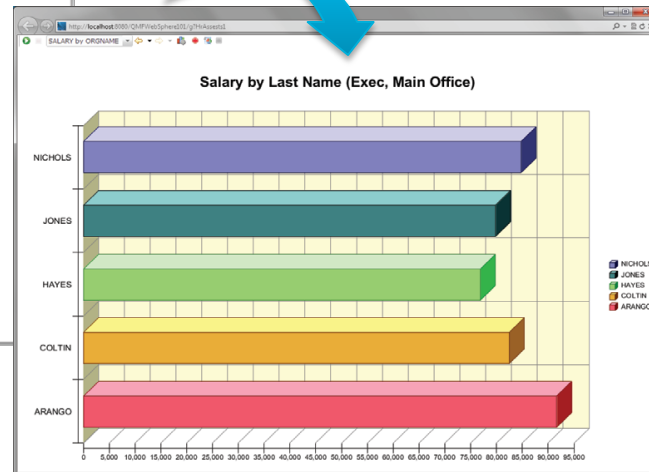
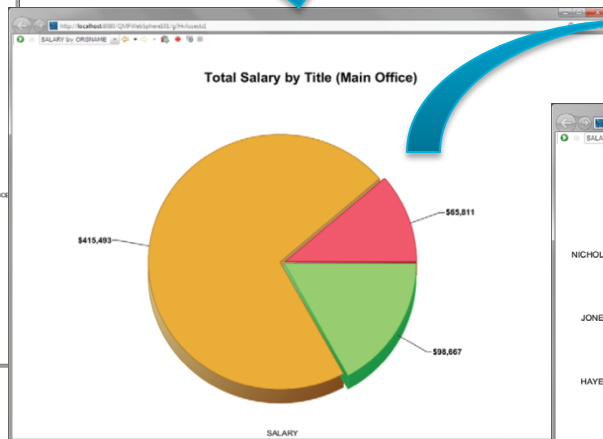
QMF™ for z/OS 11 goes where you go



Go Mobile!!

QMF for z/OS allows your users to access QMF dashboards and reports from their tablet devices... Build once, deploy everywhere.

QMF™ for z/OS 11 offers powerful drill-down capabilities with ease...

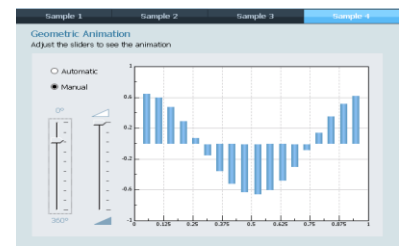
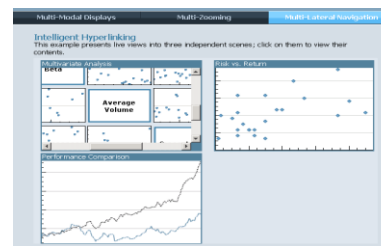
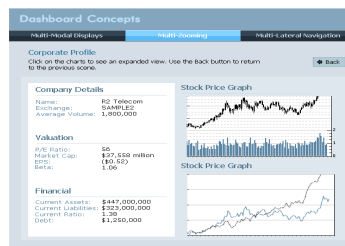
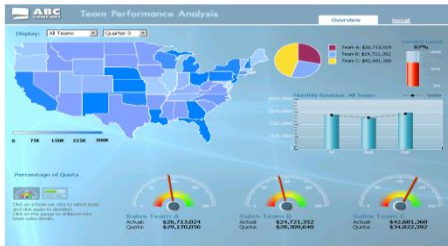


Interact with your data!



QMF for z/OS 11 and IMS solution highlights

- Maximize benefits from IMS environment
 - Allow users to graphically construct ad-hoc IMS queries
 - Create reports and dashboards that draw directly from IMS data
 - Roll out web-based graphical content that blends IMS data with relational, and unstructured data sources
 - Accessible from all current interfaces, web, workstation, tablets
 - IMS support is available with QMF for z/OS. QMF Classic Edition does not support IMS as a data source
- zIIP usage model
 - QMF JDBC workloads are zIIP-eligible



QMF 11 Interoperability with IMS

- Maximizes customer investments in IMS by making it easy, flexible and cost efficient to reuse and modernize IMS applications and data
- Provides direct access to IMS data from within QMF for z/OS, allowing customers to power ad-hoc queries, graphical reports and visual dashboards using IMS data
- QMF's support for multiple data access allows IMS data to be presented alongside that drawn from relational and multi-dimensional data sources



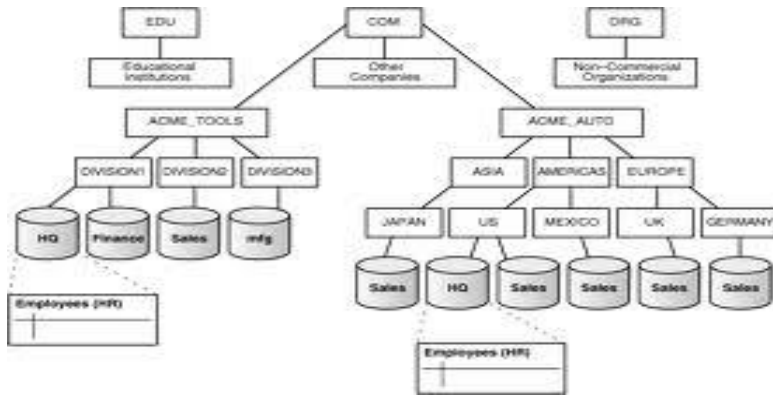
How does QMF work with IMS



Operational Business Intelligence - IMS access with QMF

- *Increase the value of your IMS investment*

- JDBC Open Data Access to IMS in a managed environment
- Users graphically construct ad-hoc IMS queries
- Create reports and dashboards that draw directly from IMS data
- Roll out web-based graphical content that blends IMS data with relational and multi-dimensional data sources
- Incorporate IMS data within federated queries
- QMF's JDBC workloads are zAAP eligible



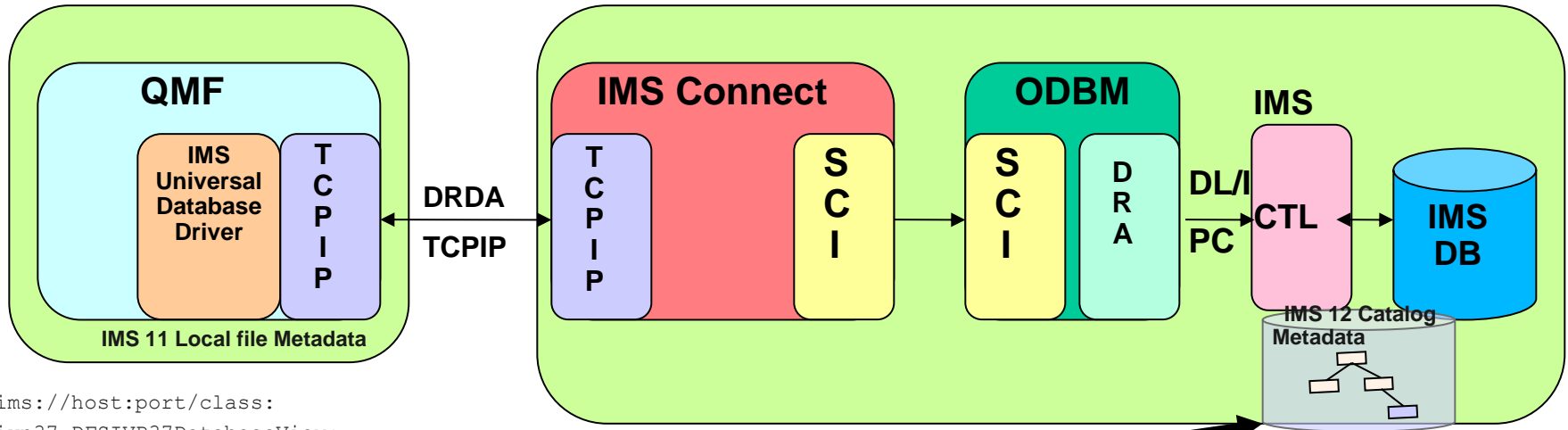
How it works...

IMS Open Database:

- IMS allows distributed access over TCP/IP using the IMS Universal Database Driver (JDBC)
- IMS Connect and Open Database Manager now work together as a DRDA server for IMS data

Workstation

Windows, Linux, and the Mac



```
jdbc:ims://host:port/class:  
//dfsivp37.DFSIVP37DatabaseView:  
dbViewLocation=C:/share/IMS Universal Drivers Metadata;fetchSize=0;  
jdbc:ims://host:port/DFSCP000:dpsbOnCommit=true
```

The IMS JDBC Driver

Innovative

Improved
Usability

Open
Standards

- The two Universal drivers for JDBC - IMS Universal DB Resource Adapter and IMS Universal JDBC Driver - offer a greatly enhanced JDBC implementation
 - JDBC 3.0
 - Local commit/rollback support
 - Standard SQL implementation for the SQL subset supported
 - Keys of parent segments are included in table as foreign keys
 - Updatable result sets
 - Metadata discovery API implementation
 - Uses metadata generated by DLIModel Utility as “catalog data”



For More Information

- *Information*
 - QMF for z/OS 11 Best Practices Videos
<https://ibm.biz/BdDG3N>
 - DB2 QMF family product page:
<http://www.ibm.com/software/products/us/en/qmf>
 - DB2 QMF Redbook
<http://www.redbooks.ibm.com/abstracts/sg248012.html>



Demo of IMS and QMF

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