



BI – Qlikview Architecture



QV Hardware Example

Server	Name	RAM	CPUs	QV Version	License
Prod Client Facing	ABC_1	512	32	12.0 SR1	A12345
Prod Loads	ABC_2	512	32	12.0 SR1	A12345
Dev	ABC_3	256	32	12.0 SR1	A12345





Product Overview



QlikView Developer

Development tool to create:

- 1) Data extract, transformation and Load
- 2) Graphical User Interface (presentation layer)

Windows desktop or server based

Creates QVW and QVD files



QlikView Server

QlikView Server (QVS) combined with QlikView Web Server Access Point portal

In-Memory analytics engine

Handles QlikView Client/Server communication

Client Authorization against directory providers (AD, eDirectory..)

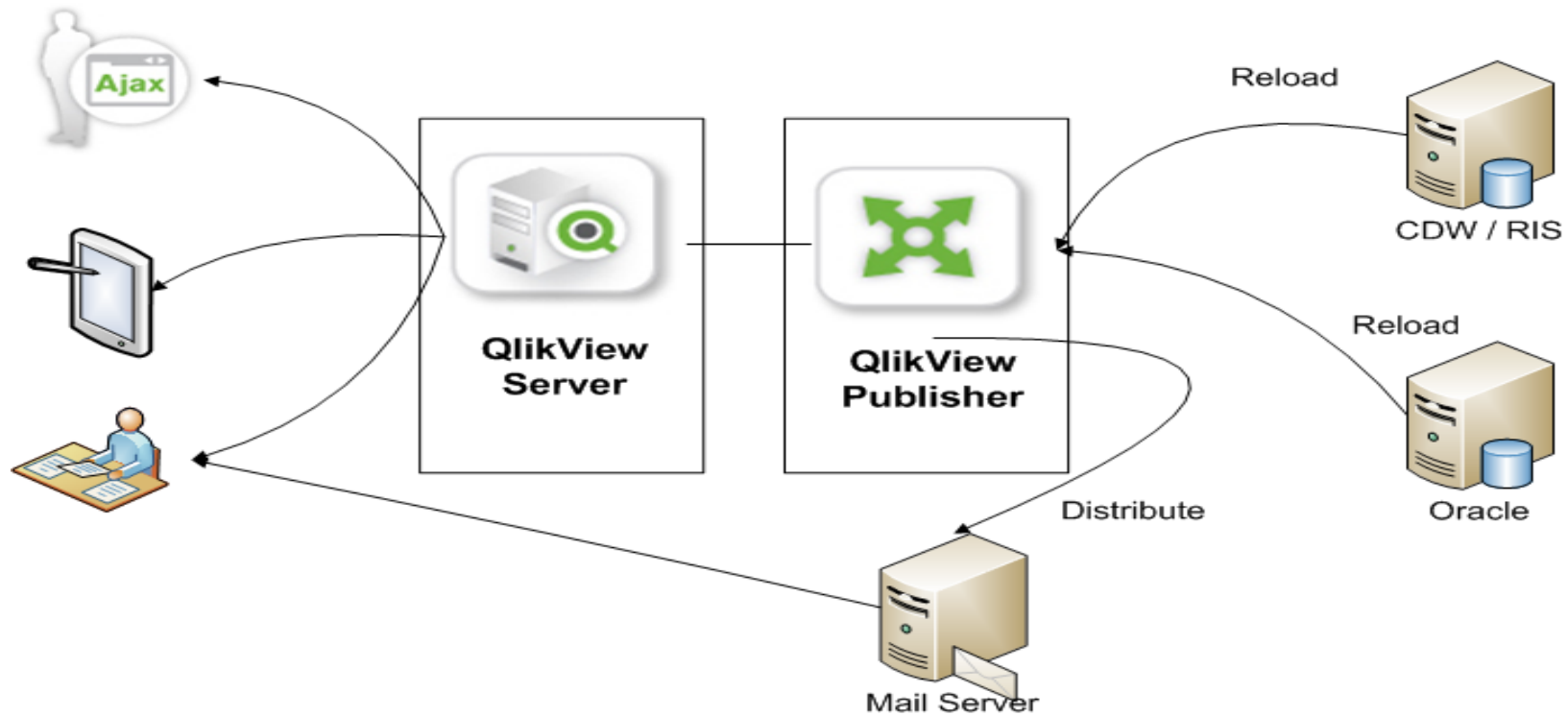


QlikView Publisher

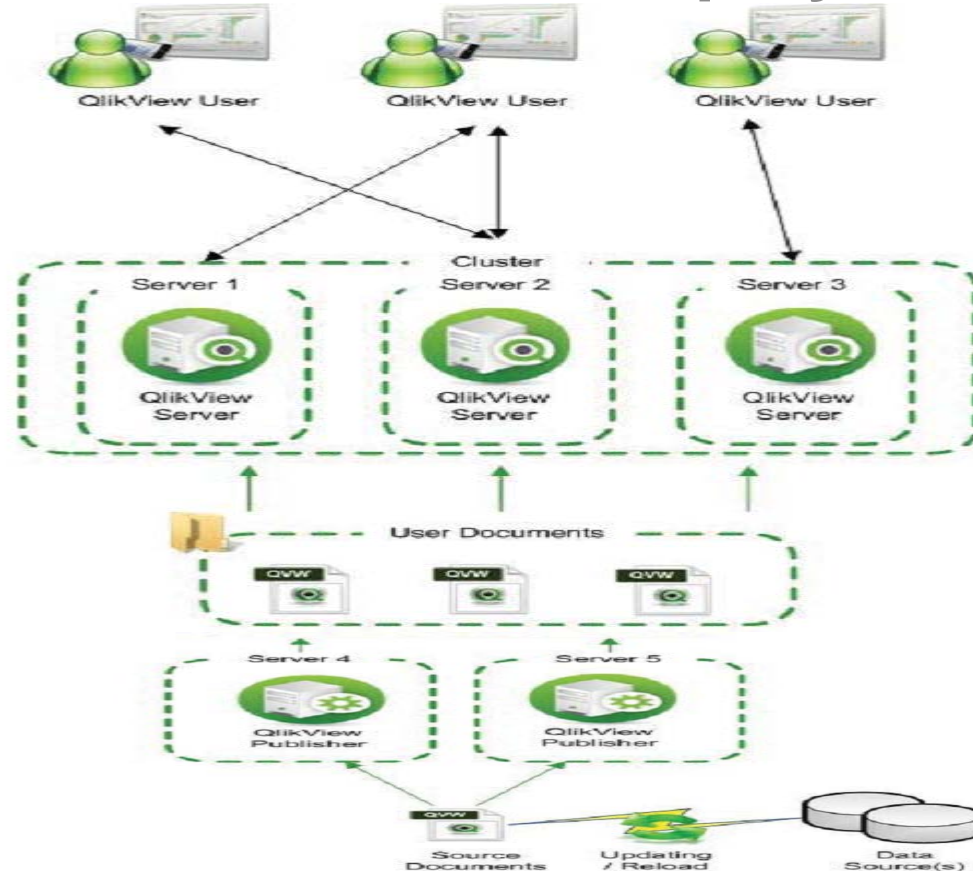
Performs:

- 1) Loading data directly from data sources using QVW files
- 2) Distribution service to reduce and distribute data and documents
- 3) Contains Management Console (QMC) - scheduling

QV Config



Multi Server Deployment



QV folder structure example

- QVDGenerator – The QV Script to extract data and create data models (facts and dimensions; e.g.

QVDs_SummerClass/QVDs_Summer_class1.qvw
/QVDs_Summer_class2.qvw
/QVDs_Summer_class3.qvw

Etc...

- DataSource – Folders for subject areas Extracts/Data Models (facts and dimensions) QVDs; e.g.

QVDs_SummerClass/QVDs_Summer_class1.qvd
/QVDs_Summer_class2.qvd
/QVDs_Summer_class3.qvd

Etc..

QV folder structure example

- ExternalData – Items that are being read into a QV QVW for processing;
e.g. Targets_SummerClass.xlsx
Attendance.xlsx
Etc...
- Includes – Text files to be included in the QVLoader QVWs for connection strings and variables to be shared and to provide one place to update variables within;
e.g. Oracle_DB1_Connection.txt
DB2_Connection.txt
MySQL_Connection.txt
Etc...

QV folder structure example

- DataModels – Data Model QVWs;
e.g. SummarClass_DM.qvw
- Application – Visual QVWs (dashboard); e.g. SummarClass_APP.qvw
- Backups - production version backup.
- LogFiles – LOGS for the system admin
- Utility – QVWs for the system admin
e.g. QlikViewServerPerformance.qvw
- Misc: SectionAccess; N-Printing; QlikMaps; QlikSense

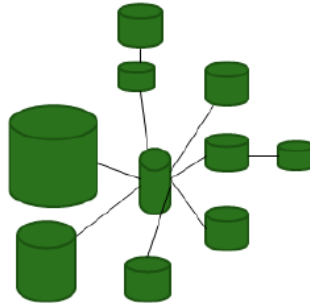
QlikView Best Practice



Best Practices Guidelines: Development Data Models

Represented below are diagrams of 3 basic data models that can be built in QlikView (along with many other combinations). Using these 3 examples we can demonstrate some of the differences in performance, complexity and flexibility between them.

**Option 1
Snowflake**


















**Option 2
Star Schema**



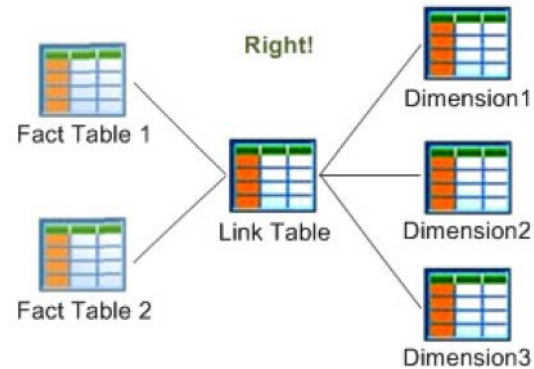
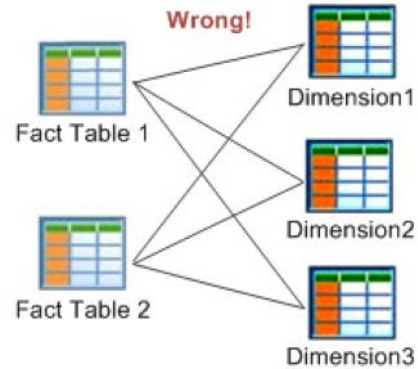
**Option 3
Single Table**



	Option 1 Snowflake	Option 2 Star Schema	Option 3 Single Table
Response Time			
RAM consumption			
Script run time			
Flexibility Model			
Complexity Script			

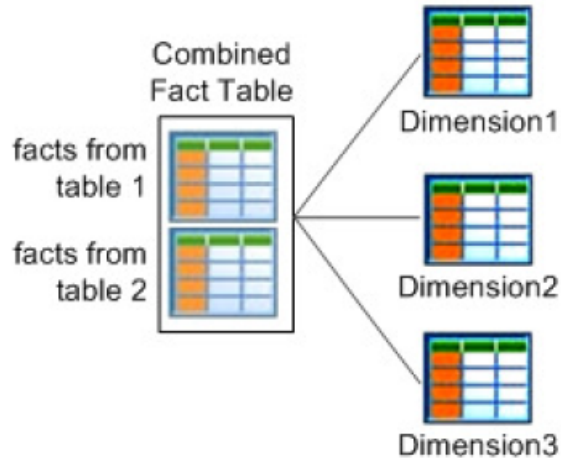
While star schemas are generally the best solution for fast, flexible QlikView applications, there are times when multiple fact tables are needed. Here are the wrong and right ways to join them:

Best Practices Guidelines: Development



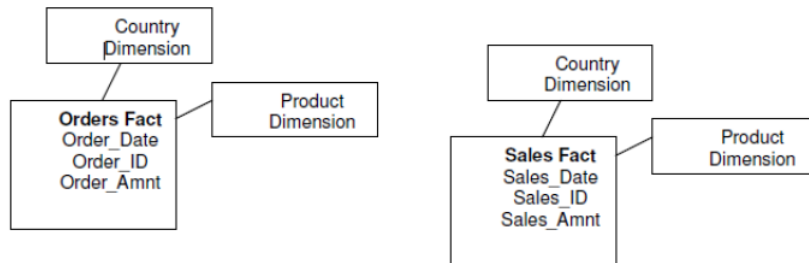
Further examples of how to build and use link tables are contained in QlikCommunity on line (<http://community.qlikview.com/>)

In addition to modeling for multiple fact tables, an alternative is to concatenate the two fact tables into a single fact table. This is illustrated below.

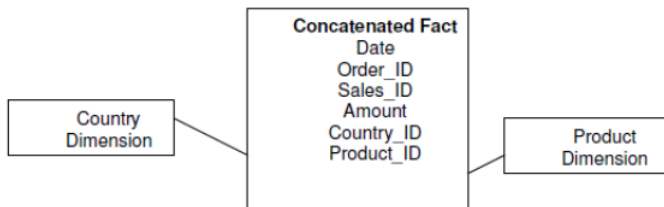


To show how this could be accomplished, the section below takes us through a scenario of two facts tables to be combined into one fact table.

Before



After



Script Example:

```
Load OrdersFact
  Order_Date as Date
  Order_ID
  Order_Amount as Amount
  Country_ID
  Product_ID
  'Order' as TransactionType
CONCATENATE
Load SalesFact
  Sales_Date as Date
  Sales_ID
  Sales_Amount as Amount
  Country_ID
  Product_ID
  'Sale' as TransactionType
```

Placing the 'Sale' and 'Order' text types in the script will provide you with a column to determine the transaction type.



QlikView is windows based application so if you're using MAC, you need to install windows on your Mac computer using VM or boot camp.

Here is the link to download a virtual machine:

<https://developer.microsoft.com/en-us/windows/downloads/virtual-machines>

Here is the link for QlikView download:

<https://www.qlik.com/us/try-or-buy/download-qlikview>