

#### Checklist

The checklist provides a foundational guide to key areas of friendly Qlik app development, such as data modeling and performance tuning.

It's applicable to general app dev and can be easily used for day-to-day management.

This checklist looks at three main areas and how to improve them:

- Scripts
- Data models
- User Interfaces

Read the companion tutorial for more info on how to use this list optimally.

Now, let's get building.





#### Qlik App Development Checklist

## Script best practices

First tab holds information section

Use of Include files/hidden script for all ODBC connections

All file references using preferred relative naming

Business names for UI fields

Security script in Include file

Turn Generate Logfile option on

UPPER() function used on Section Access fields

Service Accts added to Section Access, as needed

Use numeric flags where possible

Naming standards used for columns, tables, variables

Script is well commented-changes date flagged

Subject areas each have tab in script

All code blocks with comment sections

#### Data model performance

Synthetic keys removed from data model

Ambiguous loops removed from data model

Correct granularity of data

Remove system keys/ timestamps from data model

Remove unneeded snowflaked tables (consolidate)

Use Autonumber to replace large concatenated keys

Use integers to join tables where possible

Remove link tables from very large data models

Break concatenated dim. fields into distinct fields

Unused fields removed from data model

All QVD reads optimized

#### Qlik App Development Checklist

### Interface performance

Minimize count distinct functions

Minimize nested Ifs

Minimize string comparisons

Avoid "Show Frequency" feature on large data

Avoid IF statements in calculated chart dimensions

Avoid built-in time functions in UI (inmonth, etc...)

Minimize open objects on sheet

Minimize set analysis against large fact tables

Minimize pivot charts in very large apps

Avoid AGGR function when possible

### **Naming conventions**

Field	Name	Example
Variables	Starts with a "v"	vCurrentYear
Key Fields	Starts with a "%"	%CustomerKey
Flag Fields	Starts with a "_"	_YTDFlag
Cycle Group	Starts with a "<"	<productcycle< th=""></productcycle<>
Drilldown Group	Starts with a ">"	>GeoDrillDown
Key Field Separator	Separated by "_"	Company&'_'&N br as Key
Temp Fields & Tables	Start With "tmp_"	tmp_daily_trans



# Steps to performance tuning an application

Action	Explanation	
Reduce Rows	Eliminate unneeded data volume (rows) from apps (how far back does the app really need to store data?	
Reduce Columns	Find unused fields in the data model - use  Qlik's DocumentAnalyze App against your app to do this, then copy the "DROP FIELD" statements that are generated for the unused fields and place these into a new tab in YOUR application, as the VERY LAST tab in the script.	
Increase efficiency	Use Set Analysis, instead of IF statements, wherever possible, for better performance in Measures.	
Reduce data model complexity	Collapse snowflake tables to attain a more pure star schema	
Reduce App complexity	Reduce number of tabs/objects in the application, where appropriate	
Reduce App complexity	Reduce the number of open charts down to 1 on tabs where this is possible and appropriate	
Follow Best Practices	Follow checklist items above in all areas	
Reduce or Eliminate iterations of application	Remove all unneeded iteration of application before moving to production	

## Let's get to work today, together.

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