### **INTRODUCTION**

This document describes how to adapt the Governance Dashboard when the QVPR is hosted in a Database. Customized Governance Dashboard is not Supported by Qlik, it is suggested to engage a developer to review the document and make the necessary changes.

# **DICLAIMER**

! The information in this article is provided as-is and to be used at own discretion. Ongoing support on the solution is not provided by Qlik Support.

# GOVERNANCE DASHBOARD CONNECTED TO SQL SERVER.

This document describes how to adapt the Governance Dashboard to read from SQL server.

The original Governance Dashboard has a subroutine called **publisherScan** that is the method that calls other subroutines to get the QDS information. The subroutine called qvprScan reads from the XML files that most of the customers use for their QVPR.

In order to adapt the dashboard, it is necessary to make 3 basic changes:

- 1. Create a new subroutine to read from the SQL Server tables, this includes connection to the Database and SQL queries to get the QVPR information.
- 2. To comment out the fraction of the code where the qvprScan is called.

The details are described below:

CREATE A NEW SUBROUTINE TO READ FROM THE SQL SERVER TABLES, THIS INCLUDES CONNECTION TO THE DATABASE AND SQL QUERIES TO GET THE QVPR INFORMATION.

The following code was just adapted to include the queries to the DB instead of reading XML files, there were no changes to any function or value, if the official Governance Dashboard changes in the future, this part needs to be adapted accordingly.

#### SQLQVPR SUBRUTINE

```
SUB sqlQVPR

ODBC CONNECT TO SQLQVPR;

LET vSQLDB='QVPR';

LET vDBO= 'dbo';
```

```
LET vDBDBO= '$(vSQLDB)' & '.' & '$(vDBO)' & '.' ;
                                 mapSDFR:
                                 Mapping LOAD
                                        mapTaskId,
                                        mappedPath;
                                  SQL SELECT RTRIM(LTRIM(ID))
                                                                          as mapTaskId,
//TRIM can be used on SQL Server 2017 and above
                                        Path as mappedPath //? XML doesn't have a
mappedPath field, not sure if it should be path the field to retrieve here
                                 FROM $ (vDBDBO) SourceDocumentFolderResource;
                                  trace 'ngm SOURCE DOCUMENT LOADED';
                                 mapSourceDocument:
                                 Mapping LOAD
                                        mapTaskId,
                                        ApplyMap('mapSDFR',trim(FolderID)) &Path as
mappedTaskFileName;
                                  SOL SELECT
                                        LTRIM(RTRIM(ID))
                                                                  as mapTaskId,
                                        FolderID,
                                        Path
                                  FROM $ (vDBDBO) SourceDocument;
                                 TaskTrigger:
                                  LOAD TaskId,
                                        TaskTriggerEnabled,
                                        replace(TriggerType, 'Trigger', '')
[Task Trigger Type];
                                 SQL SELECT
                                        LTRIM(RTRIM(taskID))
                                                                   as TaskId,
                                      [Enabled]
                                                           as TaskTriggerEnabled,
                                      TriggerType
                                  FROM $ (vDBDBO) [Trigger] ;
                           // Keep DocumentTask as separate table due to inability to
join to existing Tasks table (root cause still unknown)
                                 DocumentTask:
                                 LOAD
                                      TaskId, // Only join on TaskId
                                      // These fields exist already on Tasks table and
will be checked later and 'combined' with any existing field values
                                     ApplyMap('mapSourceDocument', SourceDocumentID)
      as docTask_Task_FileName,
                                      //ApplyMap('mapTaskCategory',trim(ID))
      as [Task CategoryDT],
SubField(replace(ApplyMap('mapSourceDocument', SourceDocumentID),'/','\'),'\',-1)
      as docTask DocName,
                                        docTask TaskName,
                                      docTask TaskEnabled,
      alt(timestamp(ModifiedTime), timestamp(timestamp#(ModifiedTime,'$(TimestampForma
t1)')),timestamp(timestamp#(ModifiedTime,'$(TimestampFormat2)'))) as
docTask TaskModified,
                                     // These fields are unique to DocumentTask and
are joined into the Tasks table directly
                                      AllowPluginClient,
                                      AllowMobileClient,
```

```
AllowZeroFootprintClient,
                                     AllowPDFGeneration,
                                     [Task PDF ReportName],
                                     AllowDownload,
                                     [Task Distribute],
                                     SectionAccessUserName,
                                     SessionTimeout,
                                     DocumentTimeout,
                                     replace(ReloadOption,'Reload','') as
ReloadOption;
                                 SQL SELECT
                                       LTRIM(RTRIM(ID))
                                 as TaskId, // Only join on TaskId
                                       Name
                                                                          as
docTask_TaskName,
                                     [Enabled]
                                                                          as
docTask TaskEnabled,
                                     // These fields are unique to DocumentTask and
are joined into the Tasks table directly
                                     AllowPluginClient,
                                     AllowMobileClient,
                                     AllowZeroFootprintClient,
                                     AllowPDFGeneration,
                                     PDFReportName
                                                                  as [Task PDF
ReportName],
                                     DownloadAccess
                                                                  AS AllowDownload,
                                     Distribute
                                                                          as [Task
Distribute],
                                     SectionAccessUserName,
                                     SessionTimeout,
                                     DocumentTimeout,
                                     ReloadOption,
                                     SourceDocumentID,
                                     ModifiedTime
                                 FROM $ (vDBDBO) DocumentTask;
                                 DistributionDetail:
                                 LOAD
                                        TaskId,
                                        Distribution,
                                        'Distribute to ' & RecipientType &': ' &
RecipientName as DistributionDetail,
                                     RecipientName,
                                     RecipientType,
                                     DistributionType;
                                 SQL SELECT
                                        LTRIM(RTRIM(DocumentTaskID)) as TaskId,
                                        1 as Distribution,
                                        RecipientType,
                                        RecipientName,
                                     DistributionType
                                 FROM $ (vDBDBO) DistributionDetail;
                                 Concatenate (Tasks)
                                 SQL SELECT
                                     LTRIM(RTRIM(ID))
                                                                                 as
TaskId,
                                     ApplyMap('mapTaskCategory',trim(ID))
                                                                                as
[Task Category],
                                        CommandLine
                                                                          as [Task
CommandLine],
                                     Name
                                                                          as [Task
```

```
Name],
                                      Enabled
                                                                           as [Task
Enabled],
                                      Description
                                                                   as [Task
Description],
                                      IgnoreErrors
                                                                   as [Task
IgnoreErrors],
                                                                           as
TaskExternalProgram
                                  FROM $ (vDBDBO) ExternalProgramTask;
            About the OVPR files
      DistributionDetail >> Keep this separate with Recipient Type and Name because
can have multiple entries per Task
             > in DistributionDetail entity:
                                                                   as TaskId >
                    DocumentTaskID
             TaskId in Tasks and ID in DocumentTask,
links to >
                    RecipientName="All Users" + RecipientType="Anonymous"
                    Unused Data:
DistributionType, DDDField, DDDValueType, FSPath, SubPath, QvsResourceID, ValidateEmails, ID,
ModifiedByUser, ModifiedTime, IsDynamicDistribution
       DocumentTask
             > in DocumentTask entity:
                                                                   as TaskId > to
link with DistributionDetail for recipient name and type
                    Name as DT_Name < Already have this from Tasks!
Enabled as DT_Enabled < Already have this in Tasks
                    Description as DT Description < Missing from tasks
      AllowPluginClient, AllowMobileClient, AllowZeroFootprintClient, AllowPDFGeneration
                    SourceDocumentID
                                                      < Links with ID from
SourceDocument.xml
                    Distribute="true"
      maybe:
                    SectionAccessUserName, SectionAccessPassword
                    Unused Data:
NameIsAutoGenerated, PDFReportID, AlwaysOpenable, ClearLocks, ClearAll, ClearAlwaysOneSelec
ted, ReapplySelections,
       EnableAuditLogging, SetScript, OverrideXSSectionAccess, MaxOpenSessions, SessionTim
eout, DocumentTimeout, ReloadOption, DistributionServiceID,
      TaskTrack, TimeoutMinutes, AjaxUrl, NumberOfAttempts, ScriptParameterName, ScriptPar
ameterValueField, ScriptParameterValueFilename, NameTemplate,
      CreationMode, CreatorUserNames, DownloadAccess, DownloadUsers, ExportAccess, ExportU
sers, VersionID, EnableSessionCollaboration, DocumentDescription,
                    SendNotificationEmail,ModifiedByUser,ModifiedTime
      ExternalProgramTask >>> Concatenate this onto the Tasks table. No doc will be
directly associated with it.
             >> Might not have any entries (common)
                    Name
                                                as [Task Name],
                    Enabled
                                                      as [Task Enabled],
                    Description
                                               as [Task Description],
                    ID
                                                      as TaskId,
                    IgnoreErrors as [Task IgnoreErrors],
```

```
SourceDocument >> We have most of this data in Tasks &
TaskExecutionHistory xmls from QDS. However, that is just for tasks which executed.
Need this to show
                                       Information for Tasks that have not executed
(or whose last execution was before the history cutoff date (too old).
                                        Just concanetante this SourceDocument info
into SessionTaskAuditMaster to get DocName linked to TaskId
                                                           as SourceDocumentID
      > link with DocumentTask
                   applymap('mapFolderResource','FolderID') & Path
      as Task FileName
                   FolderID
                                       > Need this linked to to get full path
and name of Task FileName (as shown in Tasks table)
                   Not used: DistributionServiceID, ModifiedByUser, ModifiedTime
                                            > to get the full path of the
      SourceDocumentFolderResource.xml
SourceDocument, map Path to SourceDocument via ID and FolderID
                   mapFolderResource:
                   Load ID, Path
                   Path = full path (up to the "path" on SourceDocument)
                                                            as FolderID > Link to
                    TD
SourceDocument
                         >> Map this into the Tasks Table (after other QVPR tasks
are added to it) to get trigger information
             > in Trigger:
                   TaskID
Enabled
TriggerType
                                      links to TaskId
                                                    as [Task Trigger Enabled],
                                              as [Task Trigger Type]
                    Data not used (yet)
                   EnableAt, ExpireAt, RunTaskID, MaxCount, Count, StartAt, Days=""
EDXPassword, TimeContraintFrom, TimeContraintTo, DayNumbers, Months, Occourence, AndTimeCons
traintMinutes,
```

as [Task CommandLine]

CommandLine

### ENDSUB

\*/

It will be necessary to create a new tab an paste the above code, I just created a new tab next to the Main tab,

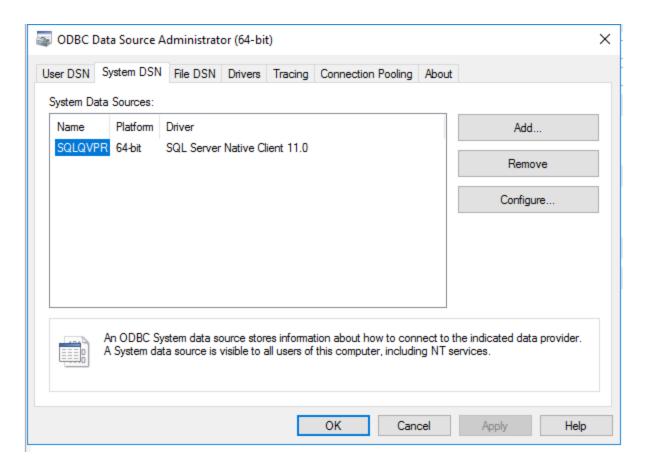
MainTriggerID, ID, ModifiedByUser, ModifiedTime,

```
File Edit Insert Tab Tools Help
Reload 🌋 Debug | 🔒 🎒 | 🐰 🖺 🖺 🔎 🗀 🗔 🔯 Tabs sqlQVPR
                                                                                     - | 🖷 🖈
  Main sqlQVPR Config FolderPath_Check cutoffDateField variables logTRACE filelist FileListQVD fileScan qwwMetadata SOE QVWTablesFieldsLineage qvdMetadata TableLineage serverScan Ever
            ODBC CONNECT TO SQLQVPR;
            LET vSOLDB='OVPR':
            LET vDBDB= 'dbo';
LET vDBDB= '$(vSQLDB)' & '.' & '$(vDBO)' & '.' ;
                                    mapSDFR:
Mapping LOAD
                                   mappedFath;

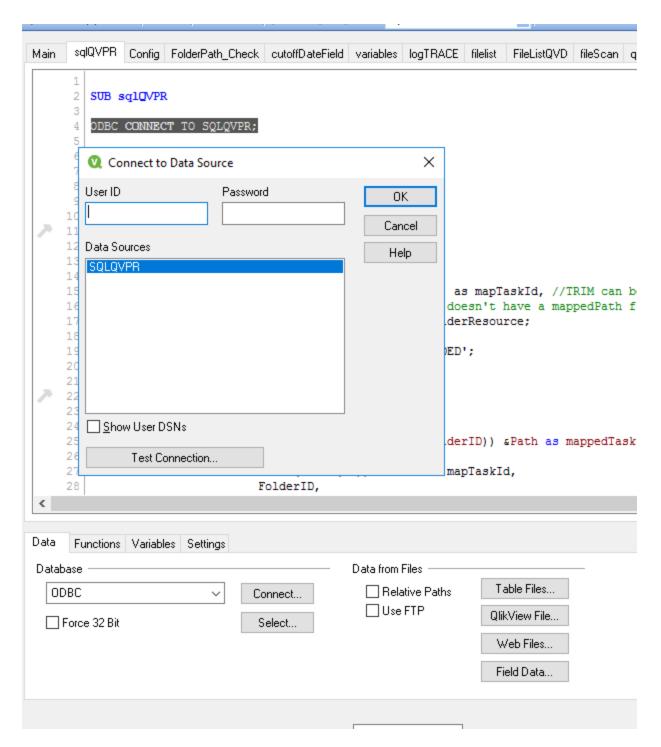
SQL SELECT RTRIM(LTRIM(ID)) as mapTaskId, //TRIM can be used on SQL Server 2017 and above
Path as mappedPath //? XML doesn't have a mappedPath field, not sure if it should be path the field to retrieve here
FROM $(vDBDBO) SourceDocumentFolderResource;
                                    trace 'ngm SOURCE DOCUMENT LOADED';
                                    mapSourceDocument:
                                    Mapping LOAD mapTaskId,
                                    ApplyMap('mapSDFR',trim(FolderID)) &Path as mappedTaskFileName;
SQL SELECT
LTRIM(RTRIM(ID)) as mapTaskId,
                                        FolderID,
                                   Path
FROM $ (vDBDBO) SourceDocument;
                                    TaskTrigger:
LOAD TaskId,
TaskTriggerEnabled,
                                    replace(TriggerType,'Trigger','') as [Task Trigger Type];
```

Once the code was pasted there are a couple of lines that need to be replaced.

1. The Connection, for this test I used a ODBC DSN



The Connection string in the script needs to be replaced inserting a new connection from QlikView desktop. Data - > ODBC -> Connect



The other information that needs to be replaced is the following:

```
LET vSQLDB='QVPR';
LET vDBO= 'dbo';
```

Where:

vSQLDB is the database name

vDBO is the database owner

It will be necessary to find the publisherScan subroutine and comment out the call to the subroutine qvprscan by sqlQVPR

```
SessionConcurrency publisherScan Tasks TaskLogIndex TaskExecutionHistory TaskReloadHeatmap qvprScan SessionTaskAuditMaster loadQVD storeQVD NodeTS_1
                          resident TaskLogIndex;
                      CASE 'Tasks'
                          mapTasks:
                          Mapping Load
                               TaskId as mapTaskId,
DocName_Tasks as mapDocName
    139
    140
    141
                          resident Tasks:
    142
    143
                      ENDSWITCH
    144
    145
                 NEXT logArea
    146
    147
                 IF NumRowsTaskLogIndexFinal >0 or NumRowsTaskLogIndex > 0 then
    148
                     Drop table TaskLogIndex;
    149
                  ENDIF
    150
                 Drop table RegistrationXML;
    151
    CALL sqlCVPR // Only for SQL DB

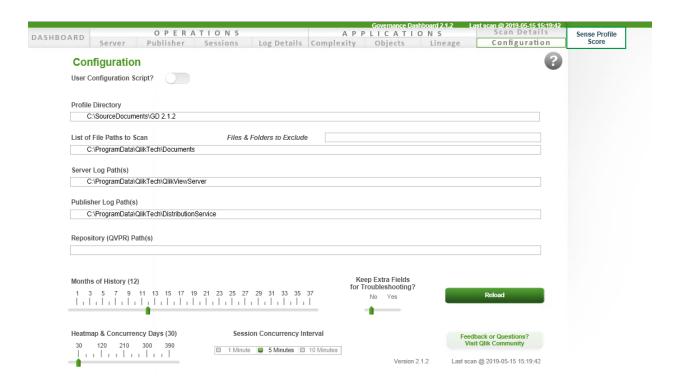
153 // CALL qvprScan // Only call QPVR logic if there is Publisher data, including Tasks, which we checked for above.
    154
    155
                     // No Paths to scan
                 TRACE No Publisher paths to scan. Skipping.;
             ENDIF
    159 ENDSUB
```

Save and create a duplicate of the QVW.

It is suggested to keep a copy of the GD that hasn't been reloaded for future use.

#### CONFIGURATION OF THE GOVERNANCE DASHBOARD

The configuration for the governance dashboard should be the same documented in the Supported Governance Dashboard, the only Path will be no necessary is the QVPR path as the dashboard will be reading data from the SQL Server database.



Now the configuration was completed the dashboard can be reloaded.