2358049 - How to troubleshoot Crystal Reports Dynamic Parameter List of Values (LOV)?

Component: BI-RA-CR (Business intelligence solutions > Reporting, analysis, and dashboards > Crystal Reports designer or Business View Manager), Version: 8, Released On: 24.03.2023

Symptom

- Dynamic LOV is not updated.
- Parameter Prompt box is empty.
- Dynamic parameter shows incorrect values.
- Dynamic parameter is missing some values in the List of Values(LOV), in Crystal Reports, or in SAP BI LaunchPad.
- How to troubleshoot Dynamic Parameter List of Values issues?

- Note: Images and data in this SAP Knowledge Base Article is from SAP internal systems, sample data, or demo systems. Any resemblance to real data is purely coincidental.

Environment

- SAP Crystal Reports 2013
- SAP Crystal Reports 2016
- SAP Crystal Reports 2020

- SAP BusinessObjects Business Intelligence Platform 4.1
- SAP BusinessObjects Business Intelligence Platform 4.2
- SAP BusinessObjects Business Intelligence Platform 4.3

Reproducing the Issue

1. In Crystal Reports, or in SAP BI LaunchPad, refresh a report that contains parameters with a dynamic List of Values.
2. When prompted by the parameter, notice the list of values is empty, or missing values, or shows incorrect values.
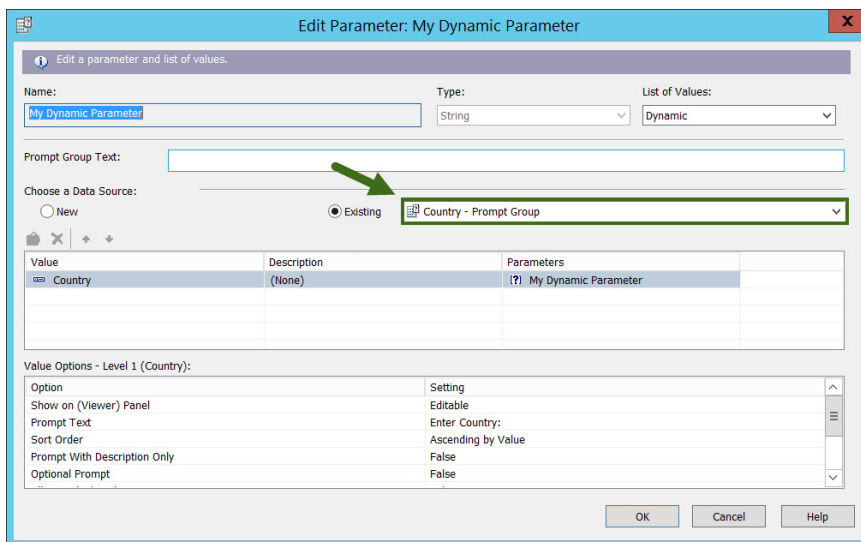
Cause

- There are many components and steps involved in generating a dynamic Lost of Values (LOV), therefore it can potentially fails at many layers.

Resolution

- When saving a report from Crystal Reports to the SAP BusinessObjects Repository, that is based on a relational data sources (not reporting off SAP data source or Universe) and use a dynamic parameter, it automatically generates the following objects on the SAP BusinessObjects Repository:
  - Data Connection (DC)
  - Data Foundation (DF)
  - Business Element (BE)
  - Business View (BV)
  - List Of Values (LOV)
  - LOV Prompt

- And the List of Values object is associated with a new report file saved to the File Repository server.

- When a report with Dynamic List of Values (LOV) is refreshed, it first checks if the list of values are available in the cache of the Crystal Reports Cache Server. If not, it reads all the objects listed above to verify users rights/permissions and locate the List of Values (LOV) associated report in the SAP BusinessObject Repository. Then the report is refreshed and results passed to Parameter's prompt as an html file.

- To identify the objects the List of Values points to, and help locate the cause, follow the steps below:

  1. Start Crystal Reports.

  2. From Crystal Reports, open the report that contains the Dynamic Parameter from the SAP BusinessObjects BI Server.
     (When login to the SAP BusinessObjects BI Server, use the same user name that reported the issue, and also perform another test as well with the Administrator account to see if it makes any differences.)

  3. In the Field Explorer pane, under "Parameters", right click on the dynamic parameter and select: "Edit"

  4. In the "Parameter" window, take note of the name of the LOV Prompt group associated with the parameter.

     In the example below, the LOV Prompt group name is: Country - Prompt Group

  5. Start the Business View Manager, and login to the SAP BusinessObjects BI Server.

  6. In the Repository Explorer pane, select the LOV Prompt Group.

  7. Then click on "Show Referenced Objects" located in the Repository Explorer pane toolbar, it will show all the associated objects:
     - Data Connection,
     - Data Foundation,
     - Business Element,
     - Business View,
     - List of Values (LOV)

  8. Note the name of the Business View.

  9. Go back to Crystal Reports, and create a new report by selecting Repository option in Database Expert, then select the Business View, Business Element and click "OK"

  10. Insert a group on the report based on the database fiels used for the dynamic parameter List of Values (LOV), and suppress the Details section.

  11. Refresh the report and save it to the SAP BusinessObjects BI Server.

  12. Refresh the new report in SAP BI Launchpad, and see if it is returning the expected data set / expected values on the report.

- For example, if the new report fails in SAP BI Launchpad, but could be schedule, it could be just a number of records limit on the Crystal Reports Processing Server. For more information, see the SAP Knowledge Base Article 1651124

- If the reports returns no data, then see the SAP Knowldge Base Article: 1856647 for more potential causes.

Keywords

CR, LOV

Products

Products
SAP Crystal Reports 2013
SAP Crystal Reports 2016
SAP Crystal Reports 2020

This document is referenced by

SAP Note/KBA	Component	Title
3278961		How to point a Dynamic Parameter to another data source in Crystal Reports?