

Automating MongoDB Atlas to Looker Studio

Step 1: Enable Data Federation in MongoDB Atlas

1. Log in to MongoDB Atlas and navigate to the project where your cluster is hosted.
2. Go to "Data Services" > "Data Federation" and click "Create New Federated Database".
3. Choose "Set Up Manually" to configure the Federated Database Instance.
4. Provide a name for the Federated Database Instance (e.g., FederatedDB) using only ASCII letters, numbers, and hyphens.

Step 2: Configure the Federated Database Instance

1. Add Data Sources:
 - Click "Add Data Sources" and select your MongoDB cluster, database, and collections.
 - Drag and drop the data source into the Federated Database area.
2. Set the Export Destination:
 - Select Google BigQuery as the export destination.
 - Upload the Google Cloud Service Account JSON file and provide the project ID and dataset name.

Step 3: Schedule and Automate Data Sync

1. Configure the sync schedule in the pipeline settings (e.g., hourly, daily, or real-time sync).
2. Test the pipeline to ensure data flows correctly from MongoDB to BigQuery.

Step 4: Verify Data in Google BigQuery

1. Log in to the Google Cloud Console and navigate to BigQuery.
2. Check that the MongoDB data appears in the specified dataset and table.

Step 5: Connect BigQuery to Looker Studio

1. Open Looker Studio and create a new data source.
2. Select BigQuery, authorize access, and choose the dataset you synced from MongoDB.
3. Build your report in Looker Studio and enable auto-refresh for real-time updates.