

Queries and reports work together in a database: **a query is a request to retrieve, filter, and organize specific data from one or more tables, while a report is a formatted, organized, and presentation-ready output of that data, often based on a query.** Queries act as the engine for finding the desired information, and reports serve as the polished presentation of that information for analysis and viewing by others. [1, 2, 3, 4]

## Queries

- **Purpose:** To extract and manipulate data from a database. [3, 5]
- **Functionality:**
  - **Retrieve specific records:** You can ask for, say, all customers in a particular city. [2, 6, 7]
  - **Filter data:** You can apply criteria to narrow down results, showing only records that meet your conditions. [2, 8]
  - **Perform calculations:** Queries can sum, average, or otherwise process data. [3, 5]
  - **Combine data:** They can pull information from multiple tables and present it in a single datasheet. [5, 9]
  - **Update data:** Some queries are "updateable," allowing you to edit data in the underlying tables. [3, 9]
- **Example:** A query could find all sales made by "Region A" in the last quarter. [2]

## Reports

- **Purpose:** To present the data retrieved by queries in a professional, formal, and easily digestible format. [1, 4]
- **Functionality:**
  - **Formal design:** Reports are designed for presentation, often with a formal look and feel for meetings or updates. [1, 4]
  - **Calculations and formatting:** They can include custom calculations, summaries, and visual elements like fonts and branding. [4]
  - **Printing:** Reports are heavily integrated with printers and are designed to produce well-formatted outputs on paper. [4]
  - **Data freshness:** Each time a report is opened, it displays the most current data available in the database. [4]
- **Relationship to Queries:** A report typically uses a pre-existing query as its data source, meaning it displays only the specific, filtered information the query provides. [4, 10]
- **Example:** A report based on the sales query would show a formal summary of "Region A" sales, potentially with totals and percentages. [1, 4, 11, 12]

In Summary

Think of a query as a powerful search and selection tool, and a report as a final brochure or document that showcases the search results. You first use a query to find the data you need, and then you create a report to display that data in a structured, visually appealing way. [1, 4, 10]

Ref link:

<https://learn.microsoft.com/en-us/intune/configmgr/core/servers/manage/introduction-to-queries>

<https://learn.microsoft.com/en-us/intune/configmgr/core/servers/manage/introduction-to-reporting>