

Database Query

A query of a database allows you to extract a record (or records) of a data using logical statements on a field (or fields) stored within a specific database. With InfoWater Pro, you are able to select network components and related data by creating logical query statements through the user-friendly DB Query feature.

Using Queries in InfoWater Pro

DB Query is a time-saving tool that can be used for:

- Activating a portion of the network for simulation, typically as a facility set associated with a custom scenario (see [Facility Manager](#)).
- Creating a domain to highlight a subset of network components (see [Domain Manager](#).)
- Restricting the database records that are available for editing using the Database Editor.
- Customizing the map display by color-coding network components (see [Query Sets](#)).
- Creating Selection Sets.
- Output Relates (stored output result data) can also be associated with DB Queries which are important when creating Query Reports.
- Restricting model results to identify network components whose modeled performance (pressures, flows, etc.) meet or do not meet user-specified criteria (e.g., nodes where pressure drops below 20 psi) using the Output Report Manager.

You may develop your own query statements or use one of the pre-defined InfoWater Pro special queries to select portions of your distribution system model.

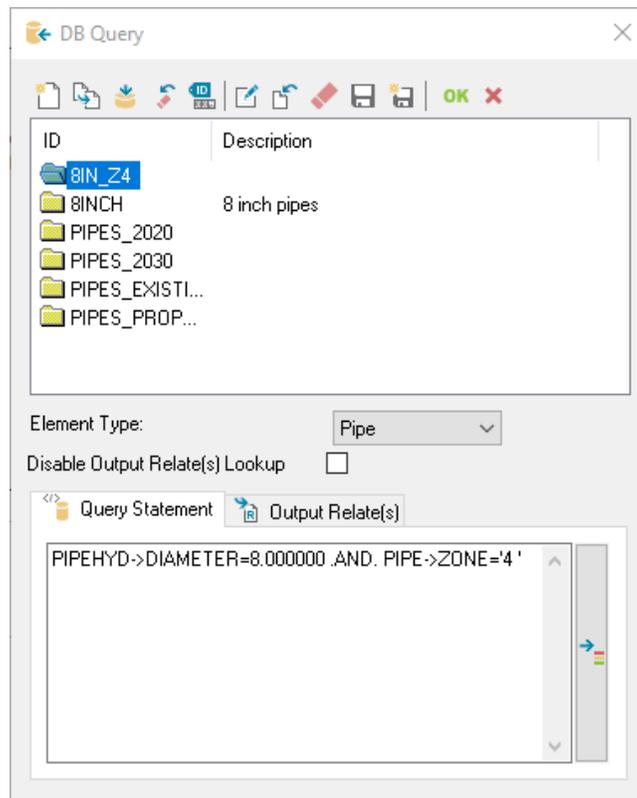
Methodology

To build a query statement, do the following:

- Click on **DB Query** from the **InfoWater Browser** -> **Operation tab**.
- Right click and choose the **New** command, and specify an ID and description (ID is no more than 20 characters, no spaces and Description is no more than 60 characters, may contain spaces) and click **OK**.
- Choose the Element Type that you want to create a query for (choose from **Junctions, Pumps, Tanks, Reservoirs, Valves** and **Pipes**) then click **OK**.
- Click **Query Builder** to launch the Query Builder dialog box.
- Choose the appropriate data tab from among the three tabs at the top of the Query Builder dialog box.
- Click on the column for the data type you want to query on.
- Choose on the operator from the functions and operator section.
- Enter the value that you want as your second operand in the Value Box.
- Click **Add** to add the query in the Statement section of the Query Builder.
- Click **Validate** to validate your query.
- Click **OK** to save your query and exit from the Query Builder dialog box.

DB Query Dialog Box

To create a Database Query, from the **Operation tab of the InfoWater Pro Browser**, select **DB Query** and right click and choose the **New** command.



Query ID & Description - The query ID and description are displayed here.

- Tip 1: In InfoWater Pro an element ID is up to 32 characters long, no spaces and some symbols are restricted such as #, % etc. (dash "-" and underscore "_" characters are OK)
- Tip 2: Description is up to 60 characters with spaces and symbol characters.
- Tip 3: A good description always helps identify the DB Query.

Element Type - Select the InfoWater Pro data element for which a query statement is to be made on the elements database. Choose from among the following different elements.

 Make sure to choose the right element type to create the query.

Disable Output Relates Lookup - Check this box to prevent output relates from being associated with a database query.

Query Statement Tab - Shows the current query statement associated with the highlighted database query. In case you want to create a new query, click on the **Query Builder** button to open the Query Builder dialog box.

Output Relate Tab - Show the output relate.

Query Builder - Click on the **DB query** icon to launch the Query Builder dialog box.