

One Design One Server One User Experience

Working with Actuate Query

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# About Working with Actuate Query

*Working with Actuate Query* provides information about Actuate Query option and how to use it to create a query for an Actuate information object. This book also describes how to modify, run, and schedule a query for an Actuate information object.

# Working with a query for an information object

This chapter contains the following topics:

- About information objects
- About creating a query for an information object
- Creating a query for an information object
- Specifying values for filters for an information object
- Modifying, running, and scheduling a query for an information object

## About information objects

The Actuate Query Option supports creating a query using an information object and making the query available to other users. An information object contains a database connection and an Actuate SQL query. An information object does not, however, contain page layouts, controls, or formatting. For example, the information object example in this chapter contains the following Actuate SQL query:

```
SELECT Customers.customerNumber AS customerNumber,
  Customers.customerName AS customerName,
  Customers."Contact Name" AS "Contact Name",
  Customers.addressLine1 AS addressLine1,
  Customers.addressLine2 AS addressLine2, Customers.city AS city,
  Customers.state AS state, Customers.country AS country,
  Customers.postalCode AS postalCode, Customers.creditLimit AS
  creditLimit, Offices.country AS country 1, Offices.state AS
  state 1, Offices.city AS city 1,
  Offices.officeCode AS officeCode, Orders.orderNumber AS
  orderNumber, Orders.orderDate AS orderDate,
  Orders.requiredDate AS requiredDate, Orders.shippedDate AS
  shippedDate, Orders.status AS status,
  Products.productCode AS productCode 1, OrderDetails.priceEach
  AS priceEach, OrderDetails.guantityOrdered AS guantityOrdered,
  ( (Sum(OrderDetails.guantityOrdered *
  OrderDetails.priceEach)) ) AS Total, Products.productLine AS
  productLine, Products.productName AS productName,
  Products.MSRP AS MSRP, Products.buyPrice AS buyPrice,
  Products.quantityInStock AS quantityInStock,
  Employees.employeeNumber AS employeeNumber, Employees.lastName
  AS lastName, Employees.firstName AS firstName,
  Employees.officeCode AS officeCode 1
FROM "../Base Layer/Customers/Customers.iob" AS Customers
GROUP BY Customers.customerName, Customers.customerNumber,
  Customers.addressLine1, Customers.addressLine2, Customers.city,
  Customers.state, Customers.country, Customers.postalCode,
  Customers.phone, Customers.creditLimit, Offices.country,
  Offices.state, Offices.city, Offices.officeCode,
  Employees.email, Employees.lastName, Employees.firstName,
  Employees.employeeNumber, Orders.orderNumber, Orders.orderDate,
  Orders.requiredDate, Orders.shippedDate, Orders.status,
  Customers."Contact Name", OrderDetails.orderLineNumber,
  Products.productCode, OrderDetails.priceEach,
  OrderDetails.guantityOrdered, Orders.comments,
  Products.productLine, Products.productName,
  ProductLine.textDescription, Products.MSRP, Products.buyPrice,
  Products.quantityInStock
```

## About creating a query for an information object

To create a query, complete the following tasks:

• Locate the information object that you want to use to create the query in the Encyclopedia volume. For more information about accessing an Encyclopedia volume, see *Using Information Console*.

You must have read privilege on the information object. For more information about privileges, see *Using Information Console*.

- Using the information object and Actuate Query Wizard, create and save the query.
- Run the query and examine the output.
- If the query generates the required output, grant read and execute privileges on the saved query to the appropriate users and security roles.
   If the query does not generate the required output, modify the query as necessary and run it again.

The topics that follow in this section provide an overview of each of the Actuate Query Wizard options.

# About including database columns in the query for an information object

Depending on how a report developer specifies database column names, you can include database columns by choosing from display names, column names, or data row variable names. If a report developer associates descriptive display names with database columns, the Actuate Query Wizard displays the descriptive names. If a report developer does not set the display names, the Actuate Query Wizard displays the column names as they appear in the database. The Actuate Query Wizard displays data row variable names instead of column names when no other information is available.

## About grouping query data for an information object

You can organize query output data in one or more groups, such as grouping sales orders by customer or sales representative. Using more than one group creates a hierarchy of group levels. For example, you can organize a list of items that are sold using a customer name group level and an order number group level, as shown in Figure 1-1.

When you run the query, the query output displays order number groups in each customer name group, as shown in Figure 1-2.

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6. Finish	0	
Choose the f	ields you wan	t to group by.					
Fields	ields		g				
Product Cod Product Nan Shipped Dat Price Order Quant Total	e e city		ps evel 1:Custom evel 2:Order N	er Name umber		습 문	Customer name group level Order number group level

Figure 1-1 Grouping query data

Customer Name: Auto Associés & Cie.							Customer name group
Order Numb	oer: 10216						Order number group
Product	Product Name	Shipped Date	Price	Order Quantity	Total	Address 1	
S12_1666	1958 Setra Bus	02/04/2004	\$133.94	43	5759.42	67, avenue de l'Europe	
Order Numb	oer: 10304						Order number group
Product	Product Name	Shipped Date	Price	Order Quantity	Total	Address 1	
\$700_2824	1982 Camaro Z28	10/17/2004	\$80.92	40	3236.8	67, avenue de l'Europe	
S32_3522	1996 Peterbilt 379 Stake Bed with Outrigger	10/17/2004	\$52.36	36	1884.96	67, avenue de l'Europe	

Figure 1-2 Query output displays order ID groups in each customer group

You can also add an additional column to a group heading. That column's value appears in the group heading in Actuate Query output. For example, you can add the address column. When you add a column to a group heading, Actuate Query Wizard appears as shown in Figure 1-3.



Figure 1-3 Adding a column name to a group heading

When you run the query, the query output displays both the group level and the additional column's value in the group heading. For example, the customer name and the address column values appear in the customer group heading, as shown in Figure 1-4.

		Customer r	name	Cu	stomer	address
Customer N	ame: Auto Associés	& Cie.	67, ave	nue de l'Europe		
Order Numb	er: 10216					
Product	Product Name	Shipped Date	Price	Order Quantity	Total	
S12_1666	1958 Setra Bus	02/04/2004	\$133.94	43	5759.42	
Order Numb	er: 10304					
Product	Product Name	Shipped Date	Price	Order Quantity	Total	
S700_2824	1982 Camaro Z28	10/17/2004	\$80.92	40	3236.8	
\$32_3522	1996 Peterbilt 379 Stake Bed with Outrigger	10/17/2004	\$52.36	36	1884.96	

Figure 1-4 Displaying a column name in a group heading

If you add a column to a group heading, ensure that a one-to-one relationship exists between the group level and the column you add. For the example in Figure 1-4, only one customer address appears in the data source for each customer name.

If you add a column for which Actuate Query retrieves multiple values from a data source, the group heading displays only one of those values. The other column values that the query retrieves determine what data appears in the detail rows of the Actuate Query output. For example, if Actuate Query retrieves more than one customer address from the data source, only one of those addresses appears in the customer name group heading. The detail rows of the Actuate Query output, however, display the retrieved data from all of this customer's addresses.

If you select Do not show detail rows, query output displays the group heading for each group level and includes only the summary rows, as shown in Figure 1-5.

Customer Name: Auto Associés & Cie.	Group heading	
	Total	
Order Number: 10216	Sum: 5759.42	
Order Number: 10304	Sum: 53116.99	-Summary values
Customer Name: Auto Associés & Cie.	Sum: 58876.41	

Figure 1-5 Displaying the group heading for each group level

# About summarizing query data for an information object

You can summarize numerical query output data. The summary can appear as a sum, an average, or a minimum or maximum value. The summary value appears at the end of each group of data, as shown in Figure 1-6.

Customer Name	e: Atelier graphi	que			
Order Number:	10123				
	Product	Price	Order Quantity	Total	
	S18_1589	\$120.71	26	3138.46	
	S18_2870	\$114.84	46	5282.64	Detail rows
	S18_3685	\$117.26	34	3986.84	Detail 10W3
	S24_1628	\$43.27	50	2163.50	
Order Number: 10	D123		Sum:	14571.44	— Summary value for an order
Order Number:	10298				number group
	Product	Price	Order Quantity	Total	
	S10_2016	\$105.86	39	4128.54	- Dotail rows
	S18_2625	\$60.57	32	1938.24	Detail 10WS
Order Number: 10	D298		Sum:	6066.78	— Summary value for an order
Order Number:	10345				number group
	Product	Price	Order Quantity	Total	
	S24_2022	\$38.98	43	1676.14	Summary value for an order
Order Number: 10	0345		Sum:	1676.14	number group
Customer Name:	Atelier graphique		Sum:	22314.36	Summary value for a customer
					name group

#### Figure 1-6 Summarizing query data

You can display group headings and summary information for each group and hide the detail rows in the query output, as shown in Figure 1-7.

Customer Nan	10: Atelier graphique		
			Total
Order Number:	10123	Sum:	14571.44
Order Number:	10298	Sum:	6066.78
Order Number:	10345	Sum:	1676.14
Customer Name:	Atelier graphique	Sum:	22314.36

Figure 1-7 Hiding the detail rows in the query output

## About sorting query data for an information object

You can sort query output data alphabetically, numerically, or by reversing the order in which the data appears in the data source. If you do not sort data, the data appears in the order in which it appears in the data source.

You can suppress the appearance of duplicate detail rows in Actuate Query output if you select Skip duplicate rows on Actuate Query Wizard—Content. If you sort column data that does not appear in the query output, duplicate data rows can appear in the query output. For example, if you sort the column, offices.state, and do not display the offices.state column data in the query output, the query output can display duplicate detail rows. If the query output displays duplicate detail rows, change the sorting options to ensure that all data source columns to which you apply sorting appear in the query output.

# About specifying values for filters for an information object

You can specify values for predefined and custom filters.

# About specifying a query output format for an information object

You can specify the following query output formats:

- Browser (DHTML) presents the query output in a web page when you run the query. From the DHTML Viewer toolbar, you can access other formats, such as Microsoft Excel, PDF, Microsoft PowerPoint, and RTF.
- Excel presents the query output in an Excel spreadsheet when you run the query. The run fails if the result set is too large to fit in the Excel document. The report retains basic data types for analysis in Excel. The output also includes column headings. This Excel output format option displays only data and not groups or summary values. You can display groups and summary information in Excel format by exporting the query output from the DHTML Viewer to Excel.
- PDF presents the query output as a PDF file when you run the query.
- e.Analysis presents the query output in Actuate e.Analysis if the Actuate e.Analysis Option is enabled for the BIRT iServer System. You can then analyze this data. You receive an error message if e.Analysis is not available. The run fails if multiple columns in the query have the same display name. For more information about Actuate e.Analysis, see *Using e.Analysis*.

### About saving a query for an information object

You can save a query to support reusing it. Information Console saves the query as an Actuate Query Definition (.dov) file. A saved DOV uses the latest version of the information object when you run the DOV. You can also create multiple versions of a query in an Encyclopedia volume. If you modify an existing DOV file or create a new version of a DOV file, the DOV saves the properties, such as privileges and scheduling information, from the original DOV as the default behavior.

# Creating a query for an information object

Use Actuate Query Wizard to create a query for an information object.

#### How to create a query for an information object

- 1 In an Encyclopedia volume, choose an information object. You can identify an information object in the following ways:
  - In Information Console, an information object appears in Information Objects You Can Query.

- In Management Console, Actuate Information Object appears in Type for an information object.
- 2 On Actuate Query—Content, set up report content:
  - 1 Select the columns to include in the query:
    - To add specific columns to the query, select the columns in Available Columns then choose the right arrow.
    - To add all available columns to Selected Columns, choose the double right arrow.
    - To remove a column from Selected Columns, select the column then choose the left arrow.
    - To remove all columns from Selected Columns, choose the double left arrow.

The columns you add to the query appear in Selected Columns, as shown in Figure 1-8. The order of the selected columns is the order in which the columns appear in the query output.

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6. Finish	0
Choose the f	ields to includ	e to your query.				
Available Col	umns		Selected Co	lumns		
Order Date Required Da Shipped Dat Order Status Product Cod Product Nam MSRP Buy Price Quantity In: Employee L Employee L Employee O Order Numb Customer Nu Employee ID	te e s Stock sstName rstName frice Code er umber	•	Customer Num Product Co Product Lin Price Order Qua Total	Name ber de ntity	_	↑
Product Nam	e					
🗖 Skip duplicate rows						
$\square$ Allow user to change column selection when running the query						
Preview Cancel Back Next Finish					1	

Figure 1-8 Columns you add to the query appear in Selected Columns

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- **2** To change the order of items in Selected Columns, select an item and choose the up arrow or the down arrow.
- **3** To prevent duplicate detail data rows from appearing in the query output, select Skip duplicate rows.
- **4** To support changing column selection or order when a user runs the query, select Allow user to change column selection when running the query.

To continue with the query setup, choose Next.

**3** On Actuate Query—Groups, set up grouping:

F

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F

- 1 Choose the columns by which to group data:
  - To add a column, select the column in Fields then choose the right arrow.
  - To remove a column from Grouping, select the column then choose the left arrow.
  - To nest a group within a group, select a column in Fields and a column in Grouping, then choose the right arrow.

In Figure 1-9, Grouping displays how to group data using an order number group level in each customer name group level.

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6. Finish	0
Choose the f	ields you wan	t to group by.				
Fields		Groupin	9			
Product Cod Product Line Price Order Quant Total	e ity	Grou Le	ps vel 1:Custome vel 2:Order Nu	er Name umber		
						Ŷ
						Ŷ
<u> </u>						
Do not sh Allow use	now detail row Ir to change g	's rouping when ru	nning the que	ry		
Preview	Cancel		Back Next		Finis	h

Figure 1-9 Grouping displays how to group data

- 2 To hide the detail rows in the query output, select Do not show detail rows.
- **3** To support changing the grouping when a user runs the query, select Allow user to change grouping when running the query.

To continue with the query setup, choose Next.

- 4 On Actuate Query—Summary, set up summary information for the report:
  - 1 Choose the summaries to include in your report, as shown in Figure 1-10.

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6. Finish	8
Choose the	summaries you	u want in your re	port.			
Column		Summary				
Price		-				
Order Quant	tity	<b>•</b>				
Total		Sum 💌				
🗖 Show ro	w counts in tot	al				
🗖 Allow use	er to change s	ummary options	when running	the query		
						_
Preview	Cancel		Back Next		Finisł	h_



2 To display row counts in the totals, select Show row counts in total.

A row count is the number of data rows from the data source that the query uses to calculate a summary value.

**3** To support changing the summary options when a user runs the query, select Allow user to change summary options when running the query.

To continue with the query setup, choose Next.

- **5** On Actuate Query—Sorting, specify the sort order for a query's output:
  - 1 In Groups, specify the sort order for groups.
  - 2 In Detail, specify the sort order for detail rows:
    - Select a field from the drop-down list.
    - After you select a field on which to sort, choose Ascending or Descending from the drop-down list. An additional set of sort fields appears.
    - To specify an additional column on which to sort, use a new sort field, as shown in Figure 1-11.

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6.Finish 🔞
Specify the s	ort order.				
— Groups —					
Customer	Name			Ascendin	ng 💌
Order Nu	mber			Ascendin	ig 💌
— Detail —					
Order Nu	umber			💌 🗛 Ascendir	ig 💌
				<ul> <li>Ascendir</li> </ul>	ig 💌
🗖 Allow us	er to change	sort order when	running the qu	uery	
Preview	Cancel		Back Nex	t	Finish

Figure 1-11 Specifying the sort order

**3** To support changing the sort order when a user runs the query, select Allow user to change sort order when running the query.

To continue with the query setup, choose Next.

- **6** On Actuate Query—Filters, specify default values for predefined and custom filters:
  - 1 In Predefined Filters (Parameters), specify default values for predefined filters.

For an ad hoc parameter, you can type a single value or create a QBE expression. To create a QBE expression:

1 Choose the QBE expression builder icon to the right of the field. The expression builder appears, as shown in Figure 1-12.

>
<
>=
<=
Or ( )
And (&)
Not (!)
Match 1 character (_)
Match 0 or more characters (%)
Match 1 of the characters ([ ])
Range of values (-)
Escape character (\)

Figure 1-12 Expression builder

- 2 Create a QBE expression. For information about QBE syntax, see *Using Information Console.*
- 3 To support changing the value of a predefined filter when a user runs the query, select the check box at the right of the field. If you do not select the check box, the query uses the default value.
- 2 In Custom Filters, set up the custom filters:
  - Choose a column name from the drop-down list and specify an operator and an operand, if necessary. You can create multiple filters for each column.
  - To support changing the value of a custom filter when a user runs the query, select the check box at the right of the field, as shown in

Figure 1-13. If you do not select the check box, the query uses the default value.

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6. Finish	0
Enter value:	s for the pred	efined filters and	l custom filters		Allo user chang	iw to ge
- Predenned	Filters (Paral	neters)			,	
Urder stat	us [ cioseu				ļ	•
- Custom Fil	ters					
Customer	Name	LIKE	🗾 Au%		F	₹
		-	-			₹
						_
Preview	Cancel		Back Nex	t	Finish	1

Figure 1-13 Setting up custom filters

To complete the query setup, choose Finish.

**7** On Actuate Query—Finish, as shown in Figure 1-14, complete the following settings:

1. Content	2. Groups	3. Summary	4. Sorting	5. Filters	6. Finish	0			
Finish your query, choose output format and save the query (optional).									
Page header:	Order numbers in customer name groups								
Output format:	Browser (DHTML)     C Excel     C PDF     C e Analysis     Run								
🗹 Allow us	er to change o	output format wi	nen running th	ne query					
Query name:	Sales_total_	by_Customer N	ame						
Location: C Home folder C Home folder C Home folder C Information Objects/Sample IO Prc Browse Browse									
Description:									
Save Query									
		Į	Back	ĸt	Clos	е			

Figure 1-14 Specifying options on Actuate Query—Finish

- In Page header, type an appropriate heading for the query. The page header appears on every page of the finished report.
- Select an output format for the query result.
- To support changing the output format selection when a user runs the query, select Allow user to change output format when running the query.

- To save the query, complete the following tasks in this order:
  - In Query name, type an appropriate name for the query.
  - In Location, choose Browse to navigate to the appropriate folder in the Encyclopedia volume. Choose OK.
  - In Description, type an appropriate description.
  - Choose Save Query. If the query already exists, you can replace the existing query.
- **8** To run the query, choose Run. The query output appears in a new window, as shown in Figure 1-15.

Order numb	pers in cust	omer	nan	ne groups	н
Customer Name:	Australian Coll	ectables,	Ltd		Customer name group he
Order Number: 1	0193				Order number group hea
Product	Product Line	Price	Order	Quantity Total	
S18 2949	Vintage Cars	\$87.13	28	2439.	4
S18 3136	Vintage Cars	\$97.39	23	2239.	7
S18 2957	Vintage Cars	\$53.09	24	1274.	6
S24 4258	Vintage Cars	\$92.52	20	1850.	
S18 3320	Vintage Cars	\$79.37	32	2539.	4
S18 1367	Vintage Cars	\$46.36	46	2132.	6
S18 1342	Vintage Cars	\$92.47	28	2589.	6
S18 2795	Vintage Cars	\$143.44	22	3155.	8
S24_2022	Vintage Cars	\$44.80	20	896	
S24_1937	Vintage Cars	\$32.19	26	836.	4
S18 2325	Vintage Cars	\$115.69	44	5090.	6
S24 3969	Vintage Cars	\$38.16	22	839.	52
S18 2248	Vintage Cars	\$60.54	42	2542.	8
S18 1749	Vintage Cars	\$153.00	21	3213	
S18 4409	Vintage Cars	\$92.03	24	2208.	2
S18_4933	Classic Cars	\$66.28	25	1657	
Order Number: 1019	13			Sum: 35505.	3 Order number group surr
Order Number 1	0265				Order number group bea
Product	Product Line	Price	Ordo	· Quantity Total	
11000ct		#100.47	40	Guantity Total	
818_3462 819_3379	Classic Cars	\$125.4/ \$74.79	49	0000.	2
518_32/8	Classic Cars	\$74.78	40	330).	
Order Number: 1026	5			Sum: 9415.	<sup>3</sup> Order number group sur
Order Number: 1	0415				Order number group hea
Product	Product Line	Price	Order	Quantity Total	-
S24 2841	Planes	\$60.97	21	1280.	7
S24 3420	Vintage Cars	\$59.83	18	1076.	4
\$72 1253	Planes	\$43.20	42	1814.	1
0/2 12/0	Ships	\$73.32	32	2346.	4
S700_2047	-	\$26.21	51	4427.	1
S72_1255 S700_2047 S18_3856	Vintage Cars	400.01			
S700_2047 S18_3856 Order Number: 1041	Vintage Cars 5	400.01		Sum: 10945.	6 — Order number group sum

Figure 1-15 Displaying query output

#### How to display groups and summary information in query output in Excel format

If you specify groups on Actuate Query Wizard—Groups and summary values on Actuate Query Wizard—Summary, complete the following procedure to display the groups and summary values in query output:

1 In Output format on Actuate Query Wizard—Finish, select Browser (DHTML). Choose Run.

The query output appears in the web browser.

- **2** To export the data from the query output in the DHTML Viewer to Microsoft Excel, retaining groups and summary values, choose Download.
- **3** In Export Report on Download, complete the following tasks:
  - Select Excel Data or Excel Display.
  - Choose View Report or Save Report.

The exported query output data retains the groups and summary values.

## Specifying values for filters for an information object

You can specify values for predefined and custom filters for an information object.

# Specifying values for predefined filters for an information object

A report developer defines predefined filters. A predefined filter can use a single value or a QBE expression. For more information about QBE expressions, see *Using Information Console.* 

# Specifying values for custom filters for an information object

For a custom filter, you can specify a database column, an operator, and an operand using QBE syntax. The following operators are available:

- **=** =
- ∎ <
- <=
- ∎ >
- ∎ >=
- <> (Not equal)

- LIKE
- NOT LIKE
- IS NULL
- IS NOT NULL
- IN

Table 1-1 shows the resulting SQL when the database column is Customer and the operand is ABB Kent.

Table 1-1	SQL examples	
Operator	SQL	
=	Customer = 'ABB Kent'	
<	Customer < 'ABB Kent'	
<=	Customer <= 'ABB Kent'	
>	Customer > 'ABB Kent'	
>=	Customer >= 'ABB Kent'	
<>	Customer <> 'ABB Kent'	
LIKE	Customer LIKE 'ABB Kent%'	
NOT LIKE	Customer NOT LIKE 'ABB Kent%'	
IN	Customer LIKE 'ABB Kent%'	

For more information about QBE expressions, see Using Information Console.

# Using NULL and IS NOT NULL for a custom filter for an information object

The operators IS NULL and IS NOT NULL are available. Table 1-2 shows the resulting SQL when you use the IS NULL and IS NOT NULL operators with the Customer database column.

Table 1-2	SQL examples using IS NULL and IS NOT NULL operators
Operator	SQL
IS NULL	Customer IS NULL
IS NOT NULL	Customer IS NOT NULL

Table 1-3 lists additional examples of custom filter operators, operands, and the SQL statements that Information Console uses.

Operator	Operand	SQL
=	Null	= 'Null'
<>	Null	<> 'Null'
LIKE	\Null	LIKE 'Null%'
LIKE	Null%	LIKE 'Null%'
LIKE	Null	IS NULL
NOT LIKE	\Null	NOT LIKE 'Null%'
NOT LIKE	Null	IS NOT NULL

 Table 1-3
 Examples of custom filter operators, operands, and SQL statements

# Using the IN operator for a custom filter for an information object

Using the IN operator, you specify an operand using QBE syntax. You can use the IN operator with a column of any data type. Table 1-4 lists examples of operands for the IN operator and the SQL statements that Information Console uses.

Operator	Operand	SQL
IN	6   21	Column = 6 OR Column = 21
IN	1 3-5	Column = 1 OR Column BETWEEN 3 AND 5
IN	CA CT NV	Column LIKE 'CA%' OR Column LIKE 'CT%' OR Column LIKE 'NV%'
IN	'CA'   'CT'   'NV'	Column = 'CA' OR Column = 'CT' OR Column = 'NV'

 Table 1-4
 SQL examples using the IN operator for a custom filter

For Actuate Query, BIRT iServer implements custom filters using QBE syntax. BIRT iServer does not distinguish between the following QBE expressions:

CustomerID = 6 CustomerID IN 6

BIRT iServer returns = 6 to the client application no matter how a user specified and saved the custom filter.

In Actuate Query custom filters, the following limitations apply to the IN operator:

 The IN operator does not support using operators in a list of values, for example:

```
!50 |>100 |<50 |null (1&2)
```

 Actuate Query does not support NOT IN. To specify such a filter condition, define multiple custom filters on the same column using the inequality operator, <>, for example:

```
CustomerState <> 'CA'
CustomerState <> 'NY'
```

For more information about QBE expressions, see Using Information Console.

# Modifying, running, and scheduling a query for an information object

You can make a query for an information object available to other users by granting read and execute privileges on the Actuate Query Definition (.dov) file to the appropriate users and security roles. Users with those privileges can:

- Modify the query.
- Run the query.

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• Schedule the query to run at a later time.

#### How to modify a query for an information object

- 1 Complete one of the following tasks:
  - In Information Console on Documents in Queries, choose Edit for the query to modify.
  - In Management Console, choose the icon to the left of an Actuate Query Definition. Choose Edit Query.

Actuate Query Wizard appears, displaying the current settings for the query.

**2** Modify the settings in Content, Groups, Summary, Sorting, Filters, and Finish as necessary.

#### How to run a query for an information object

- 1 Complete one of the following tasks:
  - In Information Console on Documents in Queries, choose the query to run.
  - In Management Console, choose the icon to the left of an Actuate Query Definition. Choose Run Query.

Actuate Query Wizard appears, displaying the current settings for the query. The options available depend on the settings that the query developer specifies.

- **2** Modify the settings as necessary.
- **3** Choose Finish. Actuate Query—Finish appears, as shown in Figure 1-16.

	1. Finish						
Run and view the query							
Output format:	<ul> <li>Browser (DHTML)</li> <li>Excel</li> <li>PDF</li> <li>e.Analysis</li> </ul>						
☐ Save the output docume	nt in the volume						
Document name:	Sales_total_customer_names						
Version name:							
Output Location:	Home folder     Other (please specify)/Information Objects/S     Browse						
If the File Already Exists:	Create a new version Replace the latest version						
	Back Next Close						

Figure 1-16 Actuate Query—Finish

- **4** Complete the following tasks:
  - 1 To save the output document, select Save the output document in the volume and specify a document name, version name, output location, and whether to create a new version of the file or replace the latest version. Information Console saves the output document as an Actuate Query Output file.
  - 2 Choose Run to run the query and view the query output.

#### How to schedule a query for an information object

1 Complete one of the following tasks:

- In Information Console on Documents in Queries, choose the clock icon for the query to schedule.
- In Management Console, choose the icon to the left of an Actuate Query Definition. Choose Schedule Query.

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- **2** On Actuate Query—Schedule, in Job Name, type a job name, then select one of the following scheduling options and specify its settings:
  - Right now, as shown in Figure 1-17, schedules the query to run immediately.

	1. Schedule		2. Finish	
Specify the schedule	for when you want the query to ru	ı.		
Job Name:	Sales_total_customer_names		*	
Scheduling Options:	• Right now • Once • Recurri	ng		
	Cancel	Back	Next	Finish

Figure 1-17 Actuate Query—Schedule shows the Right now option

Once, as shown in Figure 1-18, schedules a date and time at which to run the query. If you select Once, specify the date and time at which to run the query.

Scheduling Options:	C Right now 🖲 Once	C Recurring		
	10/13/2011	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	t 12:01 PM	(h:mm a)

Figure 1-18 Actuate Query—Schedule shows the Once option

 Recurring, as shown in Figure 1-19, schedules the query to run regularly at a specified interval. If you select Recurring, specify the recurrence interval, the time at which to run the query, and the start and end dates to use.

Scheduling Options:	C Right now		
	Every Day	(h:mm a)	
	🔽 Starting	10/13/2011 (M/d/yyyy)	
	🔽 Until	10/14/2011 (M/d/yyyy)	

Figure 1-19 Actuate Query—Schedule shows the Recurring option

Choose Next.

Actuate Query Wizard—Finish appears, displaying the current settings for the query. The options available depend on the settings that the query developer specifies.

- **3** On Actuate Query—Finish, as shown in Figure 1-20, complete the following settings:
  - Specify a document name, version name, output location, and whether to create a new version of the file or replace the latest version. Information Console saves the output document as an Actuate Query Output file.
  - In Notification:

- To receive an e-mail notification when the job completes, select Send me an e-mail notification.
- To attach an output document to the e-mail, select a format for the attachment from the drop-down list. The available formats are PDF, Excel, PowerPoint, RTF, and Fully editable RTF.

1	1. Schedule		sh
Run and view the query			
Document name:	Sales_total_customer_na	ames	
Version name:			
Output Location:	<ul> <li>Home folder</li> </ul>		
	O Other (please specify)	/Information Objects/S	Browse
If the File Already Exists:	Create a new version		
	Replace the latest version	sion	
Notification:	Send me an email not	ification with Attachment in	n PDF format 🗾
	Subr	nit	
		Back Next	Close

Figure 1-20 Actuate Query—Finish

**4** To submit the job, choose Submit.

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