

QBAggregate



Apr 06, 2024 12:24

Supported Clients

SmartClient WebClient NGClient

Property Summary

QBColumn	abs	Create abs(column) expression
QBSort	asc	Create an ascending sort expression
QBColumn	avg	Create an aggregate expression.
QBColumn	bit_length	Create bit_length(column) expression
QBColumn	ceil	Create ceil(column) expression
QBColumn	count	Create an aggregate expression.
QBColumn	day	Extract day from date
QBSort	desc	Create an descending sort expression
QBColumn	distinct	Add a distinct qualifier to the aggregate
QBColumn	floor	Create floor(column) expression
QBColumn	hour	Extract hour from date
QBCondition	isNull	Compare column with null.
QBColumn	len	Create length(column) expression
QBColumn	lower	Create lower(column) expression
QBColumn	max	Create an aggregate expression.
QBColumn	min	Create an aggregate expression.
QBColumn	minute	Extract minute from date
QBColumn	month	Extract month from date
QBColumn	not	Create a negated condition.
QBTableClause	parent	Get query builder parent table clause, this may be a query or a join clause.
QBSelect	root	Get query builder parent.
QBColumn	round	Create round(column) expression
QBColumn	second	Extract second from date
QBColumn	sqrt	Create sqrt(column) expression
QBColumn	sum	Create an aggregate expression.
QBColumn	trim	Create trim(column) expression
QBColumn	upper	Create upper(column) expression
QBColumn	year	Extract year from date

Methods Summary

QBCondition	between(value1, value2)	Compare column to a range of 2 values or other columns.
QBColumn	cast(type)	Create cast(column, type) expression
QBColumn	concat(arg)	Concatenate with value
QBColumn	divide(arg)	Divide by value
QBCondition	eq(value)	Compare column with a value or another column.
QBCondition	ge(value)	Compare column with a value or another column.
Number	getFlags()	The flags are a bit pattern consisting of 1 or more of the following bits: - JSColumn.
String	getTypeAsString()	Column type as a string
QBCondition	gt(value)	Compare column with a value or another column.
QBCondition	isin(query)	Compare column with subquery result.
QBCondition	isin(values)	Compare column with values.
QBCondition	isin(customQuery, args)	Compare column with custom query result.
QBCondition	le(value)	Compare column with a value or another column.
QBCondition	like(pattern)	Compare column with a value or another column.
QBCondition	like(pattern, escape)	Compare column with a value or another column.
QBColumn	locate(arg)	Create locate(arg) expression
QBColumn	locate(arg, start)	Create locate(arg, start) expression
QBCondition	lt(value)	Compare column with a value or another column.
QBColumn	minus(arg)	Subtract value
QBColumn	mod(arg)	Create mod(arg) expression
QBColumn	multiply(arg)	Multiply with value
QBColumn	nullif(arg)	Create nullif(arg) expression
QBColumn	plus(arg)	Add up value
QBColumn	substring(pos)	Create substring(pos) expression
QBColumn	substring(pos, len)	Create substring(pos, len) expression

Property Details

abs

Create abs(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
query.result.add(query.columns.custname.abs)
```

asc

Create an ascending sort expression

Returns

[QBSort](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
query.sort
.add(query.joins.orders_to_order_details.columns.quantity.asc)
.add(query.columns.companyid)
foundset.loadRecords(query)
```

avg

Create an aggregate expression.

Returns

[QBColumn](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
    query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
    .root.having.add(query.joins.orders_to_order_details.columns.quantity.avg.eq(1))
foundset.loadRecords(query)
```

bit_length

Create bit_length(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
query.result.add(query.columns.custname.bit_length)
```

ceil

Create ceil(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.ceil)
```

count

Create an aggregate expression.

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
    query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
    .root.having.add(query.joins.orders_to_order_details.columns.quantity.count.eq(0))
    foundset.loadRecords(query)
```

day

Extract day from date

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mydatecol.day)
```

desc

Create an descending sort expression

Returns[QBSort](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
query.sort
    .add(query.joins.orders_to_order_details.columns.quantity.desc)
    .add(query.columns.companyid)
foundset.loadRecords(query)
```

distinct

Add a distinct qualifier to the aggregate

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
// count the number of countries that we ship orders to
var query = datasources.db.example_data.orders.createSelect();
query.result.add(query.columns.shipcountry.count.distinct);
```

floor

Create floor(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.floor)
```

hour

Extract hour from date

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mydatecol.hour)
```

isNull

Compare column with null.

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.isNull)
```

len

Create length(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.custname.len)
```

lower

Create lower(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.custname.lower)
```

max

Create an aggregate expression.

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
    query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
    .root.having.add(query.joins.orders_to_order_details.columns.quantity.count.max(10))
    foundset.loadRecords(query)
```

min

Create an aggregate expression.

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
    query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
    .root.having.add(query.joins.orders_to_order_details.columns.quantity.count.min(10))
    foundset.loadRecords(query)
```

minute

Extract minute from date

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mydatecol.minute)
```

month

Extract month from date

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mydatecol.month)
```

not

Create a negated condition.

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.not.eq(1))
```

parent

Get query builder parent table clause, this may be a query or a join clause.

Returns

[QBTableClause](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
var query = datasources.db.example_data.person.createSelect();
    query.where.add(query.joins.person_to_parent.joins.person_to_parent.columns.name.eq('john'))
    foundset.loadRecords(query)
```

root

Get query builder parent.

Returns

[QBSelect](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
var subquery = datasources.db.example_data.order_details.createSelect();

    var query = datasources.db.example_data.orders.createSelect();
    query.where.add(query
        .or
            .add(query.columns.order_id.not.isin([1, 2, 3]))
            .add(query.exists(
                subquery.where.add(subquery.columns.orderid.eq(query.columns.order_id)).
                root
            ))
        )
    foundset.loadRecords(query)
```

round

Create round(column) expression

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.round)
```

second

Extract second from date

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mydatecol.second)
```

sqrt

Create `sqrt(column)` expression

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.custname.sqrt)
```

sum

Create an aggregate expression.

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
var query = datasources.db.example_data.orders.createSelect();
    query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
    .root.having.add(query.joins.orders_to_order_details.columns.quantity.count.sum(10))
    foundset.loadRecords(query)
```

trimCreate `trim(column)` expression**Returns**[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.custname.trim)
```

upperCreate `upper(column)` expression**Returns**[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.custname.upper)
```

year

Extract year from date

Returns[QBColumn](#)**Supported Clients**

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mydatecol.year)
```

Methods Details

between(value1, value2)

Compare column to a range of 2 values or other columns.

Parameters

[Object](#) value1;
[Object](#) value2;

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.between(0, 5))
```

cast(type)

Create cast(column, type) expression

Parameters

[String](#) type string type, see QUERY_COLUMN_TYPES

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.cast(QUERY_COLUMN_TYPES.TYPE_INTEGER))
```

concat(arg)

Concatenate with value

Parameters

[Object](#) arg value to concatenate with

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.firstname.concat(' ').concat(query.columns.lastname))
```

divide(arg)

Divide by value

Parameters

[Object](#) arg nr to divide by

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.divide(2))
```

eq(value)

Compare column with a value or another column.
Operator: equals

Parameters

[Object](#) value ;

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.eq(1))
```

ge(value)

Compare column with a value or another column.
Operator: greaterThanOrEqual

Parameters

[Object](#) value ;

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.ge(2))
```

getFlags()

The flags are a bit pattern consisting of 1 or more of the following bits:

- JSColumn.UUID_COLUMN
- JSColumn.EXCLUDED_COLUMN
- JSColumn.TENANT_COLUMN

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample**getTypeAsString()**

Column type as a string

Returns

[String](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample**gt(value)**

Compare column with a value or another column.
Operator: greaterThan

Parameters

[Object](#) value ;

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.gt(0))
```

isin(query)

Compare column with subquery result.

Parameters

[QBPart](#) query subquery

Returns

[QBCondition](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
query.where.add(query.columns.flag.isin(query2))
```

isin(values)

Compare column with values.

Parameters

[Array](#) values array of values

Returns

[QBCondition](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
query.where.add(query.columns.flag.isin([1, 5, 99]))
```

isin(customQuery, args)

Compare column with custom query result.

Parameters

[String](#) customQuery custom query

[Array](#) args query arguments

Returns

[QBCondition](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
query.where.add(query.columns.ccy.isin("select ccycode from currencies c where c.category = " + query.getTableAlias() + ".currency_category and c.flag = ?", ['T']))
```

le(value)

Compare column with a value or another column.
Operator: lessThanOrEqual

Parameters

[Object](#) value;

Returns

[QBCondition](#)

Supported Clients

SmartClient, WebClient, NGClient

Sample

```
query.where.add(query.columns.flag.le(2))
```

like(pattern)

Compare column with a value or another column.
Operator: like

Parameters

[String](#) pattern the string value of the pattern

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.companyname.like('Serv%'))
```

like(pattern, escape)

Compare column with a value or another column.
Operator: like, with escape character

Parameters

[String](#) pattern the string value of the pattern

[Number](#) escape the escape char

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.companyname.like('X_%', '_'))
```

locate(arg)

Create locate(arg) expression

Parameters

[Object](#) arg string to locate

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.locate('sample'))
```

locate(arg, start)

Create locate(arg, start) expression

Parameters

[Object](#) arg string to locate

[Number](#) start start pos

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.locate('sample', 5))
```

lt(value)

Compare column with a value or another column.
Operator: lessThan

Parameters

[Object](#) value ;

Returns

[QBCondition](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.where.add(query.columns.flag.lt(99))
```

minus(arg)

Subtract value

Parameters

[Object](#) arg nr to subtract

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.minus(2))
```

mod(arg)

Create mod(arg) expression

Parameters

[Object](#) arg mod arg

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.mod(2))
```

multiply(arg)

Multiply with value

Parameters

[Object](#) arg nr to multiply with

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.multiply(2))
```

nullif(arg)

Create nullif(arg) expression

Parameters

[Object](#) arg object to compare

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.nullif('none'))
```

plus(arg)

Add up value

Parameters

[Object](#) arg nr to add

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.plus(2))
```

substring(pos)

Create substring(pos) expression

Parameters

[Number](#) pos ;

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.substring(3))
```

substring(pos, len)

Create substring(pos, len) expression

Parameters

[Number](#) pos ;

[Number](#) len ;

Returns

[QBColumn](#)

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
query.result.add(query.columns.mycol.substring(3, 2))
```