

Data dictionary of GenericExpressions.xsd (normative)

schema location: **..\QIFLibrary\GenericExpressions.xsd**
attributeFormDefault: **unqualified**
elementFormDefault: **qualified**
targetNamespace: **http://qifstandards.org/xsd/qif2**

Complex types

[AndType](#)
[ArithmeticComparisonBaseType](#)
[ArithmeticConstantType](#)
[ArithmeticEqualType](#)
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[BinaryArithmeticExpressionBaseType](#)
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[TimesType](#)

Simple types

[BooleanConstantEnumType](#)

complexType **AndType**

diagram	
type	extension of BooleanExpressionBaseType
properties	base <code>BooleanExpressionBaseType</code>
children	BooleanExpression
used by	element And
annotation	<p>documentation</p> <p>The AndType defines an 'and' Boolean expression. The AndType evaluates to true if all of the BooleanExpression elements it contains evaluate to true. Otherwise, it evaluates to false. The BooleanExpression elements must be evaluated in order. If any BooleanExpression element evaluates to false, the remaining BooleanExpression elements must not be evaluated.</p>

complexType **ArithmeticComparisonBaseType**

diagram	
type	extension of BooleanExpressionBaseType
properties	base BooleanExpressionBaseType abstract true
children	ArithmeticExpression
used by	complexTypes ArithmeticEqualType GreaterOrEqualType GreaterThanType LessOrEqualType LessThanType
annotation	documentation The ArithmeticComparisonBaseType defines the base type for arithmetic comparisons. The evaluation environment for arithmetic comparisons must include the arithmetic constant, ComparisonTiny.

complexType **ArithmeticConstantType**

diagram						
type	extension of ArithmeticExpressionBaseType					
properties	base ArithmeticExpressionBaseType					
used by	element ArithmeticConstant					
attributes	Name val	Type xs:decimal	Use required	Default	Fixed	Annotation documentation The required val attribute is an arithmetic constant.
annotation	documentation The ArithmeticConstantType defines an arithmetic constant. The value of an ArithmeticConstant is the value of the Val element.					

attribute **ArithmeticConstantType/@val**

type	xs:decimal
properties	use required

annotation	documentation The required val attribute is an arithmetic constant.
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complexType ArithmeticEqualType

diagram	
type	extension of ArithmeticComparisonBaseType
properties	base ArithmeticComparisonBaseType abstract true
children	ArithmeticExpression
used by	element ArithmeticEqual
annotation	documentation The ArithmeticEqualType defines a test if the two ArithmeticExpression elements are equal. The ArithmeticEqualType evaluates to true if the first ArithmeticExpression element is (1) less than the second ArithmeticExpression element plus ComparisonTiny and (2) greater then the second ArithmeticExpression element minus ComparisonTiny. Otherwise, it evaluates to false.

complexType ArithmeticExpressionBaseType

diagram	
properties	abstract true
used by	element ArithmeticExpression complexType ArithmeticConstantType BinaryArithmeticExpressionBaseType NegateType
annotation	documentation The ArithmeticExpressionBaseType defines the base type for arithmetic expressions. All derived types of ArithmeticExpressionBaseType evaluate to an xs:decimal.

complexType **BinaryArithmeticExpressionBaseType**

diagram		
type	extension of ArithmeticExpressionBaseType	
properties	base	ArithmeticExpressionBaseType
	abstract	true
children	ArithmeticExpression	
used by	complexTypes	DividedByType MinusType PlusType TimesType
annotation	documentation	The BinaryArithmeticExpressionBaseType is the base type for binary arithmetic expressions.

complexType **BinaryBooleanExpressionBaseType**

diagram	
type	extension of BooleanExpressionBaseType
properties	base BooleanExpressionBaseType abstract true
children	BooleanExpression
used by	complexType BooleanEqualType
annotation	documentation The BinaryBooleanExpressionBaseType is the base type for binary Boolean expressions.

complexType **BooleanEqualType**

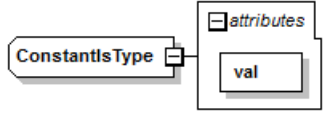
diagram	
type	extension of BinaryBooleanExpressionBaseType
properties	base BinaryBooleanExpressionBaseType
children	BooleanExpression
used by	element BooleanEqual
annotation	<p>documentation</p> <p>The BooleanEqualType defines a test of whether two Boolean expressions are the same. The BooleanEqualType evaluates to true if the two BooleanExpression elements both evaluate to true or both evaluate to false. Otherwise, the BooleanEqualType evaluates to false.</p>

complexType **BooleanExpressionBaseType**

diagram	
properties	abstract true
used by	<p>element BooleanExpression</p> <p>complexTypes AndType ArithmeticComparisonBaseType BinaryBooleanExpressionBaseType ConstantIsType NotType OrType</p>

annotation	documentation The BooleanExpressionBaseType defines the base type for Boolean expressions. All derived types of BooleanExpressionBaseType evaluate to true or false.
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complexType ConstantIsType

diagram						
type	extension of BooleanExpressionBaseType					
properties	base BooleanExpressionBaseType					
used by	element ConstantIs					
attributes	Name val	Type BooleanConstantEnumType	Use required	Default	Fixed	Annotation documentation The required val attribute is a Boolean constant given as an enumeration.
annotation	documentation The ConstantIsType evaluates to true if the val is QIF_TRUE and evaluates to false if the val is QIF_FALSE.					

attribute ConstantIsType/@val

type	BooleanConstantEnumType		
properties	use required		
facets	Kind enumeration	Value QIF_TRUE	Annotation
	enumeration	QIF_FALSE	
annotation	documentation The required val attribute is a Boolean constant given as an enumeration.		

complexType **DividedByType**

diagram	
type	extension of BinaryArithmeticExpressionBaseType
properties	base BinaryArithmeticExpressionBaseType
children	ArithmeticExpression
used by	element DividedBy
annotation	<p>documentation</p> <p>The DividedByType defines division. A DividedByType evaluates to the quotient of the values of its two ArithmeticExpression elements (the first divided by the second). The second ArithmeticExpression element must not evaluate to zero.</p>

complexType **GreaterOrEqualType**

diagram	
type	extension of ArithmeticComparisonBaseType
properties	base <code>ArithmeticComparisonBaseType</code>
children	ArithmeticExpression
used by	element GreaterOrEqual
annotation	<p>documentation</p> <p>The GreaterOrEqualType defines a test if the first ArithmeticExpression element is greater than or equal to the second ArithmeticExpression element. The GreaterOrEqualType evaluates to true if the value of the first ArithmeticExpression element is greater than the value of the second ArithmeticExpression element minus ComparisonTiny. Otherwise, it evaluates to false.</p>

complexType **GreaterThanType**

diagram	
type	extension of ArithmeticComparisonBaseType
properties	base <code>ArithmeticComparisonBaseType</code>
children	ArithmeticExpression
used by	element GreaterThan
annotation	<p>documentation</p> <p>The GreaterThanType defines a test if the first ArithmeticExpression element is greater than the second ArithmeticExpression element. The GreaterThanType evaluates to true if the value of the first ArithmeticExpression element is greater than or equal to the value of the second ArithmeticExpression element plus ComparisonTiny. Otherwise, it evaluates to false.</p>

complexType **LessOrEqualType**

diagram	
type	extension of ArithmeticComparisonBaseType
properties	base <code>ArithmeticComparisonBaseType</code>
children	ArithmeticExpression
used by	element LessOrEqual
annotation	<p>documentation</p> <p>The LessOrEqualType defines a test if the first ArithmeticExpression element is less than or equal to the second ArithmeticExpression element. The LessOrEqualType evaluates to true if the value of the first ArithmeticExpression element is less than the value of the second ArithmeticExpression element plus ComparisonTiny. Otherwise, it evaluates to false.</p>

complexType **LessThanType**

diagram	<p>The diagram illustrates the structure of the LessThanType complex type. It is an extension of ArithmeticComparisonBaseType. The LessThanType contains two ArithmeticExpression elements. Each ArithmeticExpression is further detailed with its own set of slots and operators: ArithmeticConstant, DividedBy, Minus, Negate, Plus, and Times. Each operator slot has a '2' indicating a cardinality of 2.</p>
type	extension of ArithmeticComparisonBaseType
properties	base <code>ArithmeticComparisonBaseType</code>
children	ArithmeticExpression
used by	element LessThan
annotation	<p>documentation</p> <p>The LessThanType defines a test if the first ArithmeticExpression element is less than the second ArithmeticExpression element. The LessThanType evaluates to true if the value of the first ArithmeticExpression element is less than or equal to the value of the second ArithmeticExpression element minus ComparisonTiny. Otherwise, it evaluates to false.</p>

complexType **MinusType**

diagram	
type	extension of BinaryArithmeticExpressionBaseType
properties	base BinaryArithmeticExpressionBaseType
children	ArithmeticExpression
used by	element Minus
annotation	<p>documentation</p> <p>The MinusType defines subtraction. A minus type evaluates to the value of the first ArithmeticExpression element minus the value of the second ArithmeticExpression element.</p>

complexType **NegateType**

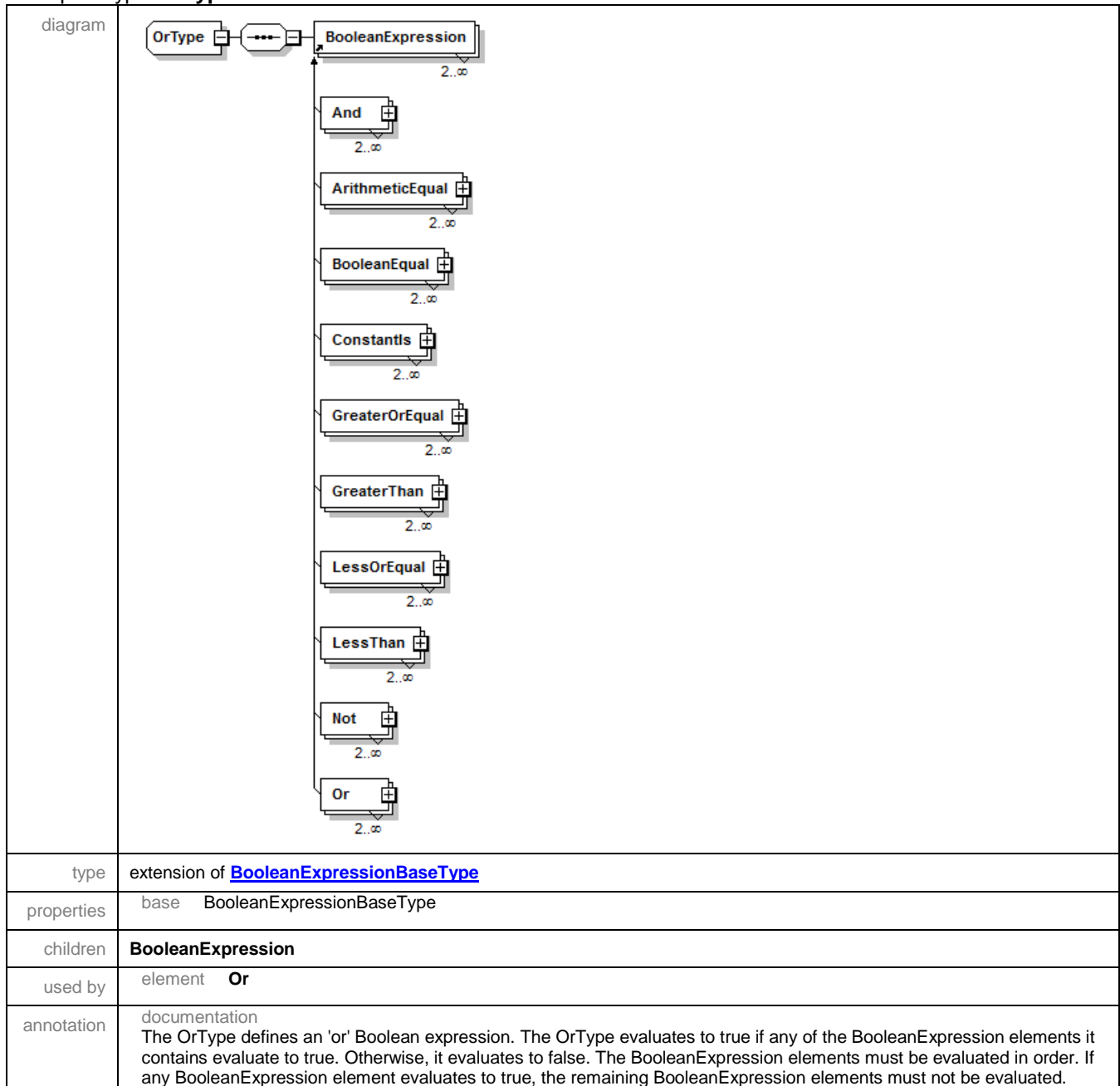
diagram	
type	extension of ArithmeticExpressionBaseType
properties	base ArithmeticExpressionBaseType
children	ArithmeticExpression

used by	element Negate
annotation	documentation The NegateType defines an arithmetic operations that changes the sign of a number. The value of a NegateType is the negative of the value of the ArithmeticExpression element.

complexType NotType

diagram	
type	extension of BooleanExpressionBaseType
properties	base BooleanExpressionBaseType
children	BooleanExpression
used by	element Not
annotation	documentation The NotType defines a Boolean expression that negates another Boolean expression. The NotType evaluates to true if the BooleanExpression element evaluates to false, and the NotType evaluates to false if the BooleanExpression element evaluates to true.

complexType OrType



complexType **PlusType**

diagram	<pre> classDiagram class PlusType class BinaryArithmeticExpressionBaseType["BinaryArithmeticExpressionBaseType (extension)"] class ArithmeticExpression class ArithmeticConstant class DividedBy class Minus class Negate class Plus class Times PlusType --> BinaryArithmeticExpressionBaseType : extension PlusType --> ArithmeticExpression : sequence of 2 BinaryArithmeticExpressionBaseType --> ArithmeticConstant : sequence of 2 BinaryArithmeticExpressionBaseType --> DividedBy : sequence of 2 BinaryArithmeticExpressionBaseType --> Minus : sequence of 2 BinaryArithmeticExpressionBaseType --> Negate : sequence of 2 BinaryArithmeticExpressionBaseType --> Plus : sequence of 2 BinaryArithmeticExpressionBaseType --> Times : sequence of 2 </pre>
type	extension of BinaryArithmeticExpressionBaseType
properties	base <code>BinaryArithmeticExpressionBaseType</code>
children	ArithmeticExpression
used by	element Plus
annotation	documentation The PlusType defines addition. A plus type evaluates to the sum of the values of its two ArithmeticExpression elements.

complexType **TimesType**

diagram	<p>The diagram illustrates the structure of the TimesType complex type. It is an extension of BinaryArithmeticExpressionBaseType. The TimesType contains two ArithmeticExpression elements, each with a cardinality of 2. The ArithmeticExpression elements are further detailed with their own structure: ArithmeticConstant, DividedBy, Minus, Negate, Plus, and Times, each with a cardinality of 2.</p>
type	extension of BinaryArithmeticExpressionBaseType
properties	base <code>BinaryArithmeticExpressionBaseType</code>
children	ArithmeticExpression
used by	element Times
annotation	<p>documentation</p> <p>The TimesType defines multiplication. A TimesType evaluates to the product of the values of its two ArithmeticExpression elements.</p>

simpleType **BooleanConstantEnumType**

type	restriction of xs:NMTOKEN
properties	base <code>xs:NMTOKEN</code>
used by	attribute ConstantIsType/@val
facets	<p>Kind Value Annotation</p> <p>enumeration <code>QIF_TRUE</code></p> <p>enumeration <code>QIF_FALSE</code></p>
annotation	<p>documentation</p> <p>The BooleanConstantEnumType enumerates values of the two Boolean constants. (The names are of these enumerated values are chosen to avoid conflicts with reserved words and macro definitions in common computer languages.)</p>