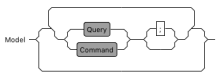
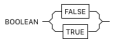
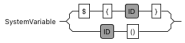
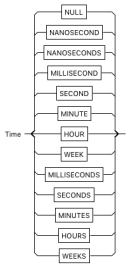
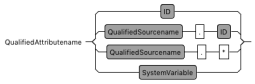
CQL Grammar


Model
Query
Command
;


BOOLEAN
FALSE
TRUE


SystemVariable
$
{
ID
}
ID
()

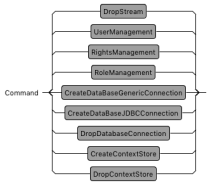

Time
NULL
NANOSECOND
NANOSECONDS
MILLISECOND
SECOND
MINUTE
HOUR
WEEK
MILLISECONDS
SECONDS
MINUTES
HOURS
WEEKS

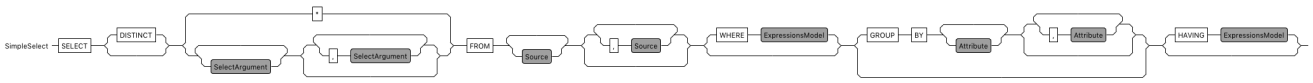

QualifiedAttributename
ID
QualifiedSourcename
.
ID
QualifiedSourcename
.
*
SystemVariable

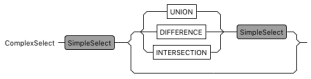

QualifiedAttributenameWithoutSpecialChars
ID
QualifiedSourcename
.
ID


QualifiedSourcename
ID


Query
Create
StreamTo
ComplexSelect


Command
DropStream
UserManagement
RightsManagement
RoleManagement
CreateDataBaseGenericConnection
CreateDataBaseJDBCConnection
DropDatabaseConnection
CreateContextStore
DropContextStore


SimpleSelect
SELECT
DISTINCT
*
SelectArgument
,
SelectArgument
FROM
Source
,
Source
WHERE
ExpressionsModel
GROUP
BY
Attribute
,
Attribute
HAVING
ExpressionsModel


ComplexSelect
SimpleSelect
UNION
DIFFERENCE
INTERSECTION
SimpleSelect


InnerSelect
(
SimpleSelect
)


InnerSelect2
SimpleSelect


SelectArgument
Attribute
SelectExpression


Source
SimpleSource
NestedSource


SimpleSource
QualifiedSourcename
WindowOperator
AS
Alias


NestedSource
InnerSelect
AS
Alias

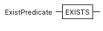

Attribute
QualifiedAttributename
AS
Alias


AttributeWithoutAliasDefinition
QualifiedAttributename


AttributeForSelectExpression
QualifiedAttributenameWithoutSpecialChars


ComplexPredicate
QuantificationPredicate
ExistPredicate
InPredicate
InnerSelect


QuantificationPredicate
AttributeWithoutAliasDefinition
COMPARE_OPERATOR
ALL
ANY
SOME

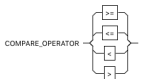

ExistPredicate
EXISTS

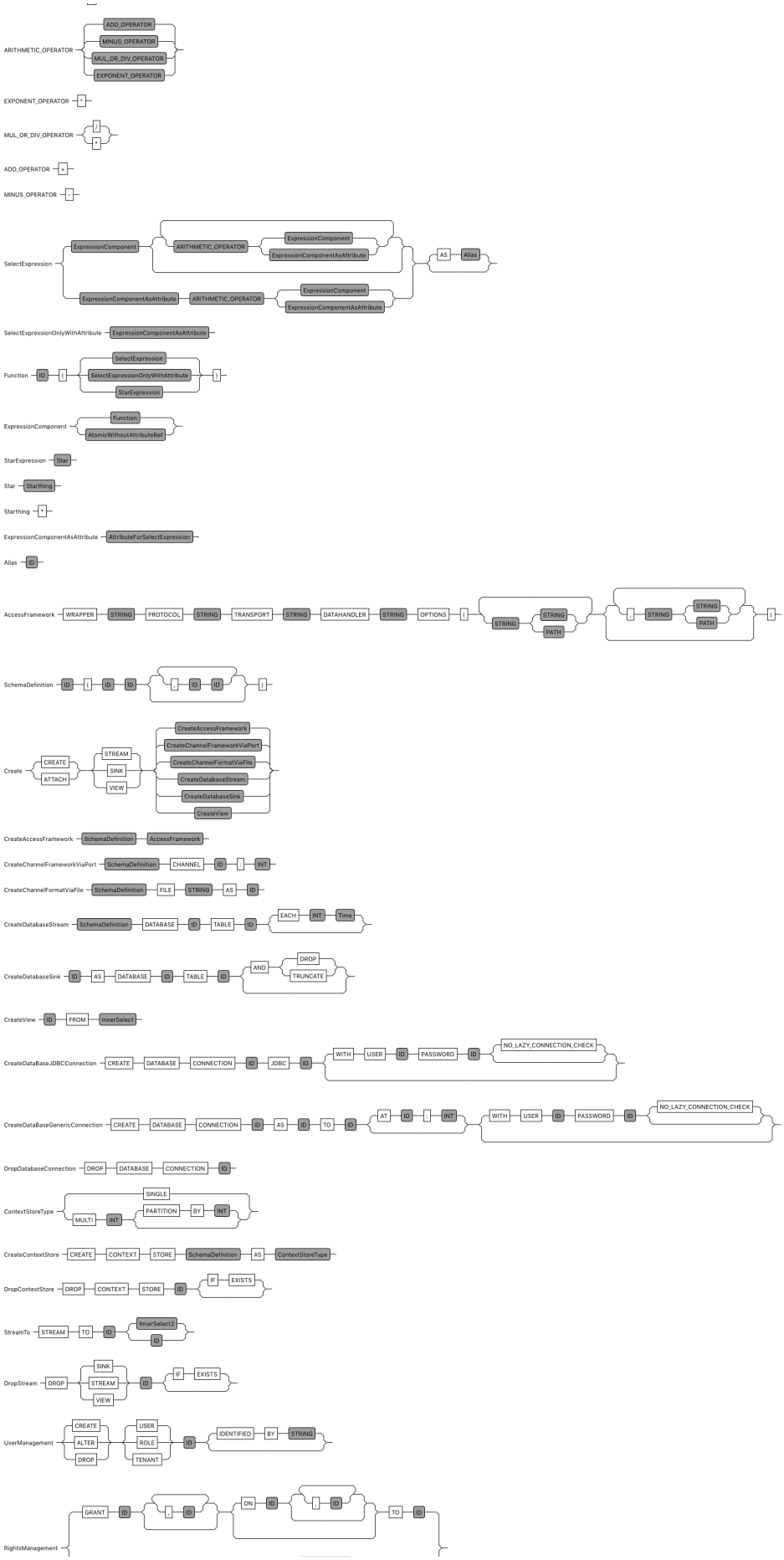

InPredicate
AttributeWithoutAliasDefinition
IN

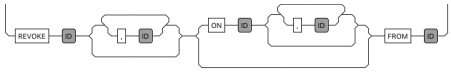

AndOperator
AND

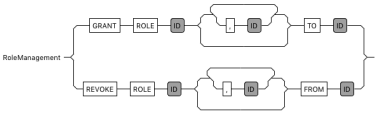

OrOperator
OR

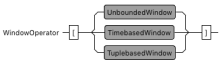

EQUALITIY_OPERATOR
=
!=


COMPARE_OPERATOR
>=
<=
<
>

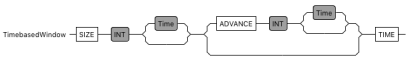

ARITHMETIC_OPERATOR
ADD_OPERATOR
MINUS_OPERATOR
MUL_OR_DIV_OPERATOR
EXPONENT_OPERATOR
EXPONENT_OPERATOR
*
MUL_OR_DIV_OPERATOR
/
*
ADD_OPERATOR
+
MINUS_OPERATOR
-
SelectExpression
ExpressionComponent
ARITHMETIC_OPERATOR
ExpressionComponent
ExpressionComponentAsAttribute
AS
Alias
ExpressionComponentAsAttribute
ARITHMETIC_OPERATOR
ExpressionComponent
ExpressionComponentAsAttribute
SelectExpressionOnlyWithAttribute
ExpressionComponentAsAttribute
Function
ID
(
SelectExpression
SelectExpressionOnlyWithAttribute
StarExpression
)
ExpressionComponent
Function
AtomicWithoutAttributeRef
StarExpression
Star
Star
Starthing
Starthing
*
ExpressionComponentAsAttribute
AttributeForSelectExpression
Alias
ID
AccessFramework
WRAPPER
STRING
PROTOCOL
STRING
TRANSPORT
STRING
DATAHANDLER
STRING
OPTIONS
(
STRING
STRING
PATH
,
STRING
STRING
PATH
)
SchemaDefinition
ID
(
ID
ID
,
ID
ID
)
Create
CREATE
ATTACH
STREAM
SINK
VIEW
CreateAccessFramework
CreateChannelFrameworkViaPort
CreateChannelFormatViaFile
CreateDatabaseStream
CreateDatabaseSink
CreateView
CreateAccessFramework
SchemaDefinition
AccessFramework
CreateChannelFrameworkViaPort
SchemaDefinition
CHANNEL
ID
:
INT
CreateChannelFormatViaFile
SchemaDefinition
FILE
STRING
AS
ID
CreateDatabaseStream
SchemaDefinition
DATABASE
ID
TABLE
ID
EACH
INT
Time
CreateDatabaseSink
ID
AS
DATABASE
ID
TABLE
ID
AND
DROP
TRUNCATE
CreateView
ID
FROM
InnerSelect
CreateDataBaseJDBCConnection
CREATE
DATABASE
CONNECTION
ID
JDBC
ID
WITH
USER
ID
PASSWORD
ID
NO_LAZY_CONNECTION_CHECK
CreateDataBaseGenericConnection
CREATE
DATABASE
CONNECTION
ID
AS
ID
TO
ID
AT
ID
:
INT
WITH
USER
ID
PASSWORD
ID
NO_LAZY_CONNECTION_CHECK
DropDatabaseConnection
DROP
DATABASE
CONNECTION
ID
ContextStoreType
SINGLE
MULTI
INT
PARTITION
BY
INT
CreateContextStore
CREATE
CONTEXT
STORE
SchemaDefinition
AS
ContextStoreType
DropContextStore
DROP
CONTEXT
STORE
ID
IF
EXISTS
StreamTo
STREAM
TO
ID
InnerSelect2
ID
DropStream
DROP
SINK
STREAM
VIEW
ID
IF
EXISTS
UserManagement
CREATE
ALTER
DROP
USER
ROLE
TENANT
ID
IDENTIFIED
BY
STRING
RightsManagement
GRANT
ID
,
ID
ON
ID
,
ID
TO
ID

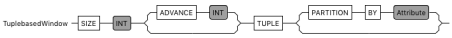

REVOKE
ID
,
ID
ON
ID
.
ID
FROM
ID

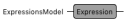

RoleManagement
GRANT
ROLE
ID
,
ID
TO
ID
REVOKE
ROLE
ID
,
ID
FROM
ID


WindowOperator
[
UnboundedWindow
TimebasedWindow
TuplebasedWindow
]

UnboundedWindow
UNBOUNDED


TimebasedWindow
SIZE
INT
Time
ADVANCE
INT
Time
TIME


TuplebasedWindow
SIZE
INT
ADVANCE
INT
TUPLE
PARTITION
BY
Attribute


ExpressionsModel
Expression

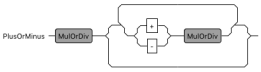

Expression
OrPredicate

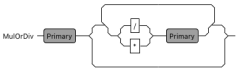

OrPredicate
AndPredicate
OrOperator
AndPredicate


AndPredicate
Equality
AndOperator
Equality

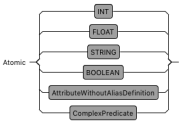

Equality
Comparison
EQUALITIY_OPERATOR
Comparison

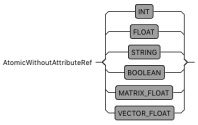

Comparison
PlusOrMinus
COMPARE_OPERATOR
PlusOrMinus


PlusOrMinus
MulOrDiv
+
-
MulOrDiv


MulOrDiv
Primary
/
*
Primary


Primary
(
Expression
)
NOT
Primary
Atomic


Atomic
INT
FLOAT
STRING
BOOLEAN
AttributeWithoutAliasDefinition
ComplexPredicate


AtomicWithoutAttributeRef
INT
FLOAT
STRING
BOOLEAN
MATRIX_FLOAT
VECTOR_FLOAT