



Optional SQL Feature Validator Summary

The following table lists the validating state for all optional features included in the SQL standard, based on SQL-2011.

The Mimer SQL Validator can validate almost all SQL features, but sometimes information about a feature can only be determined by having access to an existing database. These cases are indicated by "*No (Catalog lookup)*" in the table below.

Feature	Feature Name	Validated
B011	Embedded Ada	No
B012	Embedded C	No
B013	Embedded COBOL	No
B014	Embedded Fortran	No
B015	Embedded MUMPS	No
B016	Embedded Pascal	No
B017	Embedded PL/I	No
B021	Direct SQL	Yes
B031	Basic dynamic SQL	Yes
B032	Extended dynamic SQL	»
B032-01	<describe input statement>	No (Catalog lookup)
B033	Untyped SQL-invoked function arguments	Yes
B034	Dynamic specification of cursor attributes	Yes
B035	Non-extended descriptor names	No (Catalog lookup)
B041	Extensions to embedded SQL exception declarations	Yes
B051	Enhanced execution rights	Yes
B111	Module language Ada	No (Catalog lookup)
B112	Module language C	No (Catalog lookup)
B113	Module language COBOL	No (Catalog lookup)
B114	Module language Fortran	No (Catalog lookup)
B115	Module language MUMPS	No (Catalog lookup)
B116	Module language Pascal	No (Catalog lookup)
B117	Module language PL/I	No (Catalog lookup)
B121	Routine language Ada	No (Catalog lookup)
B122	Routine language C	No (Catalog lookup)
B123	Routine language COBOL	No (Catalog lookup)
B124	Routine language Fortran	No (Catalog lookup)
B125	Routine language MUMPS	No (Catalog lookup)
B126	Routine language Pascal	No (Catalog lookup)
B127	Routine language PL/I	No (Catalog lookup)
B128	Routine language SQL	No (Catalog lookup)
B211	Module language Ada: VARCHAR and NUMERIC support	No (Catalog lookup)
B221	Routine language Ada: VARCHAR and NUMERIC support	No (Catalog lookup)
F032	CASCADE drop behavior	Yes
F033	ALTER TABLE statement: DROP COLUMN clause	Yes
F034	Extended REVOKE statement	»
F034-01	REVOKE statement performed by other than the owner of a schema object	Yes
F034-02	REVOKE statement: GRANT OPTION FOR clause	Yes
F034-03	REVOKE statement to revoke a privilege that the grantee has WITH GRANT OPTION	Yes
F052	Intervals and datetime arithmetic	Yes

F053	OVERLAPS predicate	Yes
F054	TIMESTAMP in DATE type precedence list	No (Catalog lookup)
F111	Isolation levels other than SERIALIZABLE	»
F111-01	READ UNCOMMITTED isolation level	Yes
F111-02	READ COMMITTED isolation level	Yes
F111-03	REPEATABLE READ isolation level	Yes
F121	Basic diagnostics management	»
F121-01	GET DIAGNOSTICS statement	Yes
F121-02	SET DIAGNOSTICS statement: DIAGNOSTICS SIZE clause	Yes
F122	Enhanced diagnostics management	Yes
F123	All diagnostics	Yes
F171	Multiple schemas per user	Yes
F191	Referential delete actions	Yes
F200	TRUNCATE TABLE statement	Yes
F202	TRUNCATE TABLE: identity column restart option	No (Catalog lookup)
F222	INSERT statement: DEFAULT VALUES clause	Yes
F231	Privilege tables	»
F231-01	TABLE_PRIVILEGES view	No (Catalog Lookup)
F231-02	COLUMN_PRIVILEGES view	No (Catalog Lookup)
F231-03	USAGE_PRIVILEGES view	No (Catalog Lookup)
F251	Domain support	Yes
F262	Extended CASE expression	Yes
F263	Comma-separated predicates in simple CASE expression	Yes
F271	Compound character literals	Yes
F281	LIKE enhancements	Yes
F291	UNIQUE predicate	Yes
F301	CORRESPONDING in query expressions	Yes
F302	INTERSECT table operator	»
F302-01	INTERSECT DISTINCT table operator	No (Catalog lookup)
F302-02	INTERSECT ALL table operator	No (Catalog lookup)
F304	EXCEPT ALL table operator	Yes
F312	MERGE statement	Yes
F313	Enhanced MERGE statement	No (Catalog lookup)
F321	User authorization	Yes
F341	Usage tables	No (Catalog Lookup)
F361	Subprogram support	No (Embedded SQL)
F381	Extended schema manipulation	»
F381-01	ALTER TABLE statement: ALTER COLUMN clause	No (Catalog lookup)
F381-02	ALTER TABLE statement: ADD CONSTRAINT clause	No (Catalog lookup)
F381-03	ALTER TABLE statement: DROP CONSTRAINT clause	No (Catalog lookup)
F382	Alter column data type	Yes
F383	Set column not null clause	No (Catalog lookup)
F384	Drop identity property clause	No (Catalog lookup)
F385	Drop column generation expression clause	No (Catalog lookup)
F386	Set identity column generation clause	No (Catalog lookup)
F391	Long identifiers	Yes
F392	Unicode escapes in identifiers	Yes
F393	Unicode escapes in literals	Yes
F394	Optional normal form specification	No (Catalog lookup)
F401	Extended joined table	»
F401-01	NATURAL JOIN	No (Catalog lookup)
F401-02	FULL OUTER JOIN	No (Catalog lookup)
F401-03	UNION JOIN	No (Catalog lookup)
F401-04	CROSS JOIN	No (Catalog lookup)
F402	Named column joins for LOBs, arrays, and multisets	No (Catalog Lookup)

F403	Partitioned join tables	No (Catalog lookup)
F411	Time zone specification	Yes
F421	National character	Yes
F431	Read-only scrollable cursors	»
F431-01	FETCH with explicit NEXT	No (Catalog lookup)
F431-02	FETCH FIRST	No (Catalog lookup)
F431-03	FETCH LAST	No (Catalog lookup)
F431-04	FETCH PRIOR	No (Catalog lookup)
F431-05	FETCH ABSOLUTE	No (Catalog lookup)
F431-06	FETCH RELATIVE	No (Catalog lookup)
F441	Extended set function support	Yes
F442	Mixed column references in set functions	No (Catalog Lookup)
F451	Character set definition	Yes
F461	Named character sets	Yes
F491	Constraint management	Yes
F492	Optional table constraint enforcement	No (Catalog lookup)
F502	Enhanced documentation tables	»
F502-01	SQL_SIZING_PROFILES view	No (Catalog lookup)
F502-02	SQL_IMPLEMENTATION_INFO view	No (Catalog lookup)
F502-03	SQL_PACKAGES view	No (Catalog lookup)
F511	BIT data type	No (Catalog lookup)
F521	Assertions	Yes
F531	Temporary tables	Yes
F555	Enhanced seconds precision	Yes
F561	Full value expressions	Yes
F571	Truth value tests	Yes
F591	Derived tables	Yes
F611	Indicator data types	No (Catalog Lookup)
F641	Row and table constructors	Yes
F651	Catalog name qualifiers	Yes
F661	Simple tables	Yes
F671	Subqueries in CHECK constraints	Yes
F672	Retrospective check constraints	Yes
F690	Collation support	Yes
F691	Collation and translation	Yes
F692	Enhanced collation support	Yes
F693	SQL-session and client module collations	Yes
F695	Translation support	Yes
F696	Additional translation documentation	No (Catalog lookup)
F701	Referential update actions	Yes
F711	ALTER domain	Yes
F721	Deferrable constraints	Yes
F731	INSERT column privileges	Yes
F741	Referential MATCH types	Yes
F751	View CHECK enhancements	Yes
F761	Session management	Yes
F762	CURRENT_CATALOG	Yes
F763	CURRENT_SCHEMA	Yes
F771	Connection management	Yes
F781	Self-referencing operations	Yes
F791	Insensitive cursors	Yes
F801	Full set function	Yes
F813	Extended flagging	No (Catalog Lookup)
F821	Local table references	Yes
F831	Full cursor update	»

F831-01	Updateable scrollable cursors	No (Catalog lookup)
F831-02	Updateable ordered cursors	No (Catalog lookup)
F841	LIKE_REGEX predicate	No (Catalog lookup)
F842	OCCURRENCES_REGEX predicate	No (Catalog lookup)
F843	POSITION_REGEX predicate	No (Catalog lookup)
F844	SUBSTRING_REGEX	No (Catalog lookup)
F845	TRANSLATE_REGEX	No (Catalog lookup)
F846	Octet support in regular expression operators	No (Catalog lookup)
F847	Nonconstant regular expressions	No (Catalog lookup)
F850	Top-level <order by clause> in <query expression>	No (Catalog lookup)
F851	<order by clause> in subqueries	No (Catalog lookup)
F852	Top-level <order by clause> in views	No (Catalog lookup)
F855	Nested <order by clause> in <query expression>	No (Catalog lookup)
F856	Nested <fetch first clause> in <query expression>	No (Catalog lookup)
F857	Top-level <fetch first clause> in <query expression>	No (Catalog lookup)
F858	<fetch first clause> in subqueries	No (Catalog lookup)
F859	Top-level <fetch first clause> in views	No (Catalog lookup)
F860	Dynamic <fetch first row count> in <fetch first clause>	No (Catalog lookup)
F861	Top-level <result offset clause> in <query expression>	No (Catalog lookup)
F862	<result offset clause> in subqueries	No (Catalog lookup)
F863	Nested <result offset clause> in <query expression>	No (Catalog lookup)
F864	Top-level <result offset clause> in views	No (Catalog lookup)
F865	Dynamic <offset row count> in <result offset clause>	No (Catalog lookup)
F866	FETCH FIRST clause: PERCENT option	No (Catalog lookup)
F867	FETCH FIRST clause: WITH TIES option	No (Catalog lookup)
P001	Stored modules	Yes
P002	Computational completeness	Yes
P003	Information Schema views	No (Catalog Lookup)
P004	Extended CASE statement	Yes
P005	Qualified SQL variable references	No (Catalog Lookup)
P006	Multiple assignment	Yes
P007	Enhanced diagnostics management	Yes
P008	Comma-separated predicates in simple CASE statement	Yes
S011	Distinct structured types	Yes
S023	Basic structured types	Yes
S024	Enhanced structured types	Yes
S025	Final structured types	Yes
S026	Self-referencing structured types	Yes
S027	Create method by specific method name	Yes
S028	Permutable UDT options list	Yes
S041	Basic reference types	Yes
S043	Enhanced reference types	Yes
S051	Create table of type	Yes
S071	SQL paths in function and type name resolution	Yes
S081	Subtables	Yes
S091	Basic array support	»
S091-01	Arrays of built-in data type	No (Catalog lookup)
S091-02	Arrays of distinct types	No (Catalog lookup)
S091-03	Array expressions	No (Catalog lookup)
S092	Arrays of user-defined types	Yes
S094	Arrays of reference types	Yes
S095	Array constructors by query	Yes
S096	Optional array bounds	Yes
S097	Array element assignment	No (Catalog lookup)
S098	ARRAY_AGG	No (Catalog lookup)

S111	ONLY in query expressions	Yes
S151	Type predicate	Yes
S161	Subtype treatment	Yes
S162	Subtype treatment for references	Yes
S201	SQL-invoked routines on arrays	»
S201-01	Array parameters	No (Catalog lookup)
S201-02	Array as result type of functions	No (Catalog lookup)
S202	SQL-invoked routines on multisets	No (Catalog Lookup)
S211	User-defined cast functions	Yes
S231	Structured type locators	No (Catalog lookup)
S232	Array locators	No (Catalog lookup)
S233	Multiset locators	Yes
S241	Transform functions	Yes
S242	Alter transform statement	Yes
S251	User-defined orderings	Yes
S261	Specific type method	Yes
S271	Basic multiset support	Yes
S272	Multisets of user-defined types	Yes
S274	Multisets of reference types	Yes
S275	Advanced multiset support	Yes
S281	Nested collection types	Yes
S291	Unique constraint on entire row	No (Catalog lookup)
S301	Enhanced UNNEST	No (Catalog lookup)
S401	Distinct types based on array types	No (Catalog lookup)
S402	Distinct types based on distinct types	No (Catalog lookup)
S403	ARRAY_MAX_CARDINALITY	No (Catalog lookup)
S404	TRIM_ARRAY	No (Catalog lookup)
T011	Timestamp in Information Schema	No (Catalog Lookup)
T021	BINARY and VARBINARY data types	No (Catalog lookup)
T022	Advanced support for BINARY and VARBINARY data types	No (Catalog lookup)
T023	Compound binary literals	No (Catalog lookup)
T024	Spaces in binary literals	No (Catalog lookup)
T031	BOOLEAN data type	Yes
T041	Basic LOB data type support	»
T041-01	BLOB data type	No (Catalog lookup)
T041-02	CLOB data type	No (Catalog lookup)
T041-03	POSITION, LENGTH, LOWER, TRIM, UPPER, and SUBSTRING functions for LOB data types	No (Catalog lookup)
T041-04	Concatenation of LOB data types	No (Catalog lookup)
T041-05	LOB locator: non-holdable	No (Catalog lookup)
T042	Extended LOB data type support	No (Catalog Lookup)
T043	Multiplier T	No (Catalog lookup)
T044	Multiplier P	No (Catalog lookup)
T051	Row types	Yes
T052	MAX and MIN for row types	No (Catalog Lookup)
T053	Explicit aliases for all-fields reference	Yes
T061	UCS support	Yes
T071	BIGINT data type	Yes
T101	Enhanced nullability determination	No (Catalog lookup)
T111	Updatable joins, unions, and columns	No (Catalog Lookup)
T121	WITH (excluding RECURSIVE) in query expression	Yes
T122	WITH (excluding RECURSIVE) in subquery	No (Catalog lookup)
T131	Recursive query	Yes
T132	Recursive query in subquery	No (Catalog lookup)
T141	SIMILAR predicate	Yes
T151	DISTINCT predicate	Yes

T152	DISTINCT predicate with negation	No (Catalog lookup)
T171	LIKE clause in table definition	Yes
T172	AS subquery clause in table definition	Yes
T173	Extended LIKE clause in table definition	Yes
T174	Identity columns	Yes
T175	Generated columns	Yes
T176	Sequence generator support	Yes
T177	Sequence generator support: simple restart option	No (Catalog lookup)
T178	Identity columns: simple restart option	No (Catalog lookup)
T180	System-versioned tables	No (Catalog lookup)
T181	Application-time period tables	No (Catalog lookup)
T191	Referential action RESTRICT	Yes
T201	Comparable data types for referential constraints	No (Catalog Lookup)
T211	Basic trigger capability	»
T211-01	Triggers activated on UPDATE, INSERT, or DELETE of one base table	No (Catalog lookup)
T211-02	BEFORE triggers	No (Catalog lookup)
T211-03	AFTER triggers	No (Catalog lookup)
T211-04	FOR EACH ROW triggers	No (Catalog lookup)
T211-05	Ability to specify a search condition that shall be True before the trigger is invoked	No (Catalog lookup)
T211-06	Support for run-time rules for the interaction of triggers and constraints	No (Catalog lookup)
T211-07	TRIGGER privilege	No (Catalog lookup)
T211-08	Multiple triggers for the same event are executed in the order in which they were created in the catalog	No (Catalog lookup)
T212	Enhanced trigger capability	Yes
T213	INSTEAD OF triggers	No (Catalog lookup)
T231	Sensitive cursors	Yes
T241	START TRANSACTION statement	Yes
T242	Optional transaction modes in START TRANSACTION	Yes
T251	SET TRANSACTION statement: LOCAL option	Yes
T261	Chained transactions	Yes
T271	Savepoints	Yes
T272	Enhanced savepoint management	Yes
T281	SELECT privilege with column granularity	No (Catalog lookup)
T285	Enhanced derived column names	No (Catalog lookup)
T301	Functional dependencies	Yes
T312	OVERLAY function	Yes
T322	Overloading of SQL-invoked functions and procedures	No (Catalog Lookup)
T323	Explicit security for external routines	Yes
T324	Explicit security for SQL routines	Yes
T325	Qualified SQL parameter references	No (Catalog Lookup)
T326	Table functions	Yes
T331	Basic roles	Yes
T332	Extended roles	Yes
T341	Overloading of SQL-invoked functions and SQL-invoked procedures	No (Catalog lookup)
T351	Bracketed comments	Yes
T401	INSERT into a cursor	No (Catalog lookup)
T411	UPDATE statement: SET ROW option	No (Catalog lookup)
T431	Extended grouping capabilities (previously "CUBE and ROLLUP operations")	Yes
T432	Nested and concatenated GROUPING SETS	Yes
T433	Multiargument GROUPING function	Yes
T434	GROUP BY DISINCT	Yes
T441	ABS and MOD functions	No (Catalog Lookup)
T461	Symmetric BETWEEN predicate	Yes
T471	Result sets return value	Yes
T472	DESCRIBE CURSOR	No (Catalog lookup)
T491	LATERAL derived table	Yes

T495	Combined data change and retrieval	No (Catalog lookup)
T501	Enhanced EXISTS predicate	Yes
T502	Period predicates	No (Catalog lookup)
T511	Transaction counts	Yes
T521	Named arguments in CALL statement	No (Catalog lookup)
T522	Default values for IN parameters of SQL-invokes procedures	No (Catalog lookup)
T541	Updatable table references	No (Catalog lookup)
T551	Optional key words for default syntax	Yes
T561	Holdable locators	Yes
T571	Array-returning external SQL-invoked functions	No (Catalog Lookup)
T572	Multiset-returning external SQL-invoked functions	No (Catalog Lookup)
T581	Regular expression substring function	Yes
T591	UNIQUE constraints of possibly null columns	No
T601	Local cursor references	Yes
T611	Elementary OLAP operations	Yes
T612	Advanced OLAP operations	Yes
T613	Sampling	Yes
T614	NTILE function	No (Catalog lookup)
T615	LEAD and LAG functions	No (Catalog lookup)
T616	Null treatment option for LEAD and LAG functions	No (Catalog lookup)
T617	FIRST_VALUE and LAST_VALUE functions	No (Catalog lookup)
T618	NTH_VALUE function	No (Catalog lookup)
T619	Nested window functions	No (Catalog lookup)
T620	WINDOW clause: GROUPS option	No (Catalog lookup)
T621	Enhanced numeric functions	Yes
T631	IN predicate with one list element	Yes
T641	Multiple column assignment	Yes
T651	SQL-schema statements in SQL routines	Yes
T652	SQL-dynamic statements in SQL routines	Yes
T653	SQL-schema statements in external routines	No (Catalog lookup)
T654	SQL-dynamic statements in external routines	No (Catalog lookup)
T655	Cyclically dependent routines	No (Catalog lookup)
V001	Mimer SQL extension	Yes