
**Information technology — Guidance
for the use of database language
SQL —**

**Part 6:
Support for JSON**

iTeh STANDARD PREVIEW
*Technologies de l'information — Recommandations pour l'utilisation
du langage de base de données SQL —
Partie 6: Support pour JSON*
(standards.iteh.ai)

ISO/IEC 19075-6:2021

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Contents	Page
Foreword.....	ix
Introduction.....	xi
1 Scope.....	1
2 Normative references.....	2
3 Terms and definitions.....	3
4 JavaScript Object Notation (JSON).....	6
4.1 Context for JSON.....	6
4.2 What is JSON?.....	6
4.3 Representations of JSON data.....	7
4.3.1 Introduction to representations of JSON data.....	7
4.3.2 Avro.....	7
4.3.3 BSON.....	8
4.4 Schemas.....	8
4.4.1 JSON schemata and validity.....	8
4.4.2 Avro schemata.....	9
4.4.3 BSON schemata.....	9
4.5 Why does JSON matter in the context of SQL? What is JSON's relationship to NoSQL?	10
4.6 Use cases for JSON support in SQL.....	11
4.6.1 Introduction to the use cases.....	11
4.6.2 JSON data ingestion and storage.....	11
4.6.3 JSON data generation from relational data.....	11
4.6.4 Querying JSON as persistent semi-structured data model instances.....	12
4.7 What features address those use cases?.....	12
4.7.1 Addressing the use cases.....	12
4.7.2 Storing JSON data in an SQL table.....	12
4.7.3 Generating JSON in an SQL query.....	12
4.7.4 Querying JSON data in SQL tables using SQL.....	13
5 The SQL/JSON data model.....	14
5.1 Introduction to the SQL/JSON data model.....	14
5.2 SQL/JSON items.....	15
5.2.1 Definition of SQL/JSON items.....	15
5.2.2 Atomic values.....	16
5.2.3 SQL/JSON arrays.....	17
5.2.4 SQL/JSON objects.....	17
5.3 SQL/JSON sequences.....	17
5.4 Parsing JSON.....	18
5.5 Serializing JSON.....	18
6 SQL/JSON functions.....	19

6.1	Introduction to SQL/JSON functions.	19
6.2	Handle JSON using built-in functions.	19
6.3	JSON API common syntax.	19
6.3.1	Introduction to JSON API common syntax.	19
6.3.2	JSON value expression.	20
6.3.3	Path expression.	20
6.3.4	PASSING clause.	20
6.3.5	JSON output clause.	21
6.3.6	ON ERROR and ON EMPTY syntax.	21
6.4	Query functions.	22
6.4.1	The four query functions.	22
6.4.2	JSON_EXISTS.	22
6.4.3	JSON_VALUE.	25
6.4.4	JSON_QUERY.	29
6.4.5	JSON_TABLE.	33
6.4.5.1	Introduction to JSON_TABLE.	33
6.4.5.2	COLUMNS clause that is not nested.	34
6.4.5.3	Nested COLUMNS clause.	36
6.4.5.4	PLAN clause.	37
6.4.6	Conformance features for query operators.	41
6.5	Constructor functions and IS JSON predicate.	43
6.5.1	Tables used to illustrate constructor functions and the IS JSON predicate.	43
6.5.2	JSON_OBJECT.	44
6.5.3	JSON_OBJECTAGG.	45
6.5.4	JSON_ARRAY.	46
6.5.5	JSON_ARRAYAGG.	47
6.5.6	IS JSON predicate.	49
6.5.7	Handling of JSON nulls and SQL nulls.	49
6.5.8	Conformance features for constructor functions.	50
7	SQL/JSON path language.	51
7.1	Overview of SQL/JSON path language.	51
7.2	Objectives for the SQL/JSON path language.	52
7.3	Modes.	53
7.3.1	Introduction to modes.	53
7.3.2	Example of strict vs lax.	54
7.4	Lexical issues.	56
7.5	Syntax summary.	58
7.6	Formal semantics and notational conventions.	58
7.7	Primitive operations in formal semantics.	59
7.7.1	Concatenation.	59
7.7.2	unwrap().	59
7.7.3	wrap().	60
7.8	Mode declaration.	60
7.9	<JSON path primary>.	61
7.9.1	Introduction to JSON path primaries.	61
7.9.2	Literals.	61
7.9.3	Variables.	62

7.9.4	Parentheses.....	63
7.10	Accessors.....	63
7.10.1	Introduction to accessors.....	63
7.10.2	Member accessor.....	64
7.10.3	Member wildcard accessor.....	67
7.10.4	Element accessor.....	68
7.10.5	Element wildcard accessor.....	70
7.10.6	Sequence semantics of the accessors.....	71
7.11	Item methods.....	71
7.11.1	Introduction to item methods.....	71
7.11.2	type().....	72
7.11.3	size().....	72
7.11.4	Numeric item methods (double, ceiling, floor, abs).....	73
7.11.5	datetime().....	73
7.11.6	keyvalue().....	73
7.12	Arithmetic expressions.....	75
7.12.1	Introduction to arithmetic expressions.....	75
7.12.2	Unary plus and minus.....	75
7.12.3	Binary operations.....	76
7.13	Filter expression.....	76
7.13.1	Introduction to filter expressions.....	76
7.13.2	true/false and <i>True/False</i> (standards.iteh.ai).....	77
7.13.3	null and <i>Unknown</i>	78
7.13.4	Error handling in filters..... ISO/IEC 19075-6:2021	78
7.13.5	Truth tables..... https://standards.iteh.ai/catalog/standards/sist/6c0b966a-e4fb-4af0-91bc-e36dfb397723/iso-iec-19075-6-2021	81
7.13.6	Comparison predicates..... e36dfb397723/iso-iec-19075-6-2021	82
7.13.7	like_regex predicate.....	83
7.13.8	starts with predicate.....	84
7.13.9	exists predicate.....	84
7.13.10	is unknown predicate.....	86
7.14	Conformance features for SQL/JSON path language.....	87
	Bibliography.....	88
	Index.....	89

Tables

Table	Page	
1	JSON, SQL/JSON, and SQL (other than SQL/JSON values and counterparts).	14
2	Parallels between JSON text and SQL/JSON data model.	18
3	JSON_EXISTS sample data.	22
4	Result of the sample query.	23
5	Accessor example.	24
6	Result 1.	26
7	Result 2.	26
8	Result 3.	27
9	Result 4.	27
10	Result 5.	28
11	Result 6.	29
12	JSON_EXISTS results.	30
13	ON EMPTY results.	31
14	ARRAY WRAPPER results.	31
15	Illustrating differences.	32
16	Comparison of wrapper options.	32
17	JSON_TABLE sample data in a book recommendation table.	33
18	Unnested query result.	35
19	Nested query result.	36
20	PLAN query result.	39
21	Second PLAN query result.	39
22	Third PLAN query result.	40
23	DEPTS table.	43
24	JOBS table.	43
25	EMPLOYEES table.	44
26	The JSON object returned.	45
27	Returned JSON object with the corresponding job sequence number.	46
28	ARRAYAGG query result.	48
29	Second ARRAYAGG query result.	48
30	Third ARRAYAGG query result.	49
31	Three aspects of path evaluation governed by modes.	54
32	Example of strict vs lax.	55
33	Features of the SQL/JSON path language.	58
34	Data used by unwrap() example.	59
35	Data used by wrap() example.	60
36	Examples of atomic values in the SQL/JSON path language	61
37	Examples of the escaping rules.	61
38	Evaluation of '\$.phones.type' in lax mode.	65
39	Intermediate step.	65
40	Evaluation of '\$.phones[*].type'	66
41	Evaluation of '\$.phones[*] ? (exists (@.type)).type'	66
42	Evaluation of '\$.phones.*' in lax mode.	67
43	Evaluation of '\$.phones[*].*'	67
44	Evaluation of 'lax \$.sensors.*[0, last, 2]'	69
45	The step in the evaluation	71
46	Result of the query with the sample data	74
47	Evaluation of 'lax -\$.readings.floor()'	75

48	Evaluation of 'lax (-\$.readings).floor()'	76
49	Table T with two rows	78
50	Computation on row K=102	79
51	Modified table T	79
52	Computation on row K=102 in modified table T	79
53	Computation of 'lax \$? (@.hours > 9)' on row K=102	80
54	Computation of 'strict \$? (@.hours > 9)' in strict mode	80
55	Result of &&	81
56	Result of	81
57	Result of !	81
58	Supported comparisons	82
59	Final result	83
60	A table with JSON column	85
61	Evaluation of 'strict \$? (exists (@.name)).name' on row K=201	85
62	Evaluation of 'strict \$? (exists (@.name)).name' on row K=202	85

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Figures

Figure	Page
1 Relationships between “JSON” and “SQL/JSON”.....	14
2 The SQL/JSON path language architecture.....	51

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents), or the IEC list of patent declarations received (see patents.iec.ch).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

This first edition of ISO/IEC 19075-6 cancels and replaces ISO/IEC TR 19075-6:2017. Several small technical errors have been corrected,

This document is intended to be used in conjunction with the following editions of the parts of the ISO/IEC 9075 series:

- ISO/IEC 9075-1, sixth edition or later;
- ISO/IEC 9075-2, sixth edition or later;
- ISO/IEC 9075-3, sixth edition or later;
- ISO/IEC 9075-4, seventh edition or later;
- ISO/IEC 9075-9, fifth edition or later;
- ISO/IEC 9075-10, fifth edition or later;
- ISO/IEC 9075-11, fifth edition or later;
- ISO/IEC 9075-13, fifth edition or later;
- ISO/IEC 9075-14, sixth edition or later;
- ISO/IEC 9075-15, second edition or later;
- ISO/IEC 9075-16, first edition or later.

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A list of all parts in the ISO/IEC 19075 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

The organization of this document is as follows:

- 1) **Clause 1, “Scope”**, specifies the scope of this document.
- 2) **Clause 2, “Normative references”**, identifies additional standards that, through reference in this document, constitute provisions of this document.
- 3) **Clause 3, “Terms and definitions”**, defines the terms and definitions used in this document.
- 4) **Clause 4, “JavaScript Object Notation (JSON)”**, introduces what is JSON.
- 5) **Clause 5, “The SQL/JSON data model”**, introduces the data model that is used by the SQL/JSON functions and the SQL/JSON path language.
- 6) **Clause 6, “SQL/JSON functions”**, introduces the SQL/JSON functions to query and construct JSON.
- 7) **Clause 7, “SQL/JSON path language”**, introduces the SQL/JSON path language.

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Information technology — Guidance for the use of database language SQL —

Part 6: Support for JSON

1 Scope

This document describes the support in SQL for JavaScript Object Notation.

This document discusses the following features of the SQL language:

- Storing JSON data.
- Publishing JSON data.
- Querying JSON data.
- SQL/JSON data model and path language.

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2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 9075-1, *Information technology — Database languages — SQL — Part 1: Framework (SQL/Framework)*

ISO/IEC 9075-2, *Information technology — Database languages — SQL — Part 2: Foundation (SQL/Foundation)*

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3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 9075-1 and the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

JSON text

sequence of tokens

Note 1 to entry: JSON text must be encoded in Unicode (UTF-8 by default); insignificant whitespace may be used anywhere in JSON text except within strings (where all whitespace is significant), numbers, and literals. JSON text is a single object or array

3.2

token

strings, numbers, literals, or one of six structural characters

Note 1 to entry: The six structural characters are “{”, “}”, “[”, “]”, “:”, “,”

3.3

value

object, array, number, string, or one of three literals

3.4

type

primitive type or structured type

3.5

primitive type

string, number, Boolean, or null

3.6

primitive value

value that is a string, number, Boolean, or null

3.7

structured type

object or array

3.8

structured value

value that is an object or an array