INTERNATIONAL STANDARD

ISO/IEC 9579-2

Second edition
1998-02-15

Information technology — Open Systems Interconnection — Remote Database Access —

Part 2:
SQL Specialization

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Technologies de l'information — Interconnexion de systèmes ouverts (OSI) — Accès aux bases de données à distance —

Partie 2: Spécialisation SQL

ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

Reference number
ISO/IEC 9579-2:1998(E)

Contents

1. GENERAL 1
1.1 Scope 1
1.2 Normative references 1
1.3 Compatibility 2
1.3.1 SQL Standards Supported 2
1.3.2 Upward Compatibility 2
1.4 Definitions 2
1.4.1 Terms defined in ISO/IEC 9075 (Database Language SQL) 2
1.4.2 Terms defined in this part of ISO/IEC 9579 4
1.4.2.1 SQL database resource 4
1.4.2.2 RDA SQL statement 4
1.5 Abbreviations 5
1.6 Conventions 5
2. MODEL 6
2.1 The RDA SQL Specialization Service model 6
2.1.1 Mapping to the general model of the RDA Service 6
2.1.2 Mapping to the Concepts of Database Language SQL 6
3. SERVICE 7
3.1 The RDA SQL Specialization Service 7
3.1.1 RDA Dialogue Management services 7
3.1.1.1 RDA Dialogue Initialization functional unit 7
3.1.1.1.1 R-Initialize Service 7
3.1.1.2 RDA Dialogue Termination functional unit 7
3.1.1.2.1 R-Terminate Service 7
3.1.2 RDA Transaction Management services 8
3.1.2.1 RDA Transaction Management functional unit 8
3.1.2.1.1 R-BeginTransaction Service 8
3.1.2.1.2 R-Commit Service 8
3.1.2.1.3 R-Rollback Service 8
3.1.3 RDA Control Services 8
3.1.3.1 Cancel functional unit 8
3.1.3.1.1 R-Cancel Service 8
3.1.3.2 Status functional unit 8
3.1.3.2.1 R-Status Service 8
3.1.4 Resource Handling services 8
3.1.4.1 Resource Handling functional unit 8
3.1.4.1.1 R-Open Service 8
3.1.4.1.2 R-Close Service 11
3.1.5 Database Language Services 11
3.1.5.1 Immediate Execution DBL functional unit 11
3.1.5.1.1 R-ExecuteDBL Service 11
3.1.5.2 Stored Execution DBL functional unit 14
3.1.5.2.1 R-DefineDBL Service 14

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

© ISO/IEC 1998

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

3.1.5.2.2 R-InvokeDBL Service....15
3.1.5.2.3 R-DropDBLService:....17
3.1.6 SQL statements, arguments and results:....17
3.1.6.1 sQLDBLStatement:....17
3.1.6.2 sQLDBLArgumentSpecification and sQLDBLResultSpecification....18
3.1.6.3 sQLDBLArgumentValues and sQLDBLResultValues....23
3.1.6.4 Referencing to parameters....24
3.2 Sequencing rules....24
3.2.1.1 RDA client sequencing rules....24
3.2.2 RDA Server Sequencing Rules....25

4. PROTOCOL....26

4.1 The RDA SQL Specialization client execution rules....26
4.1.1 RDA SQL Specialization dialogue-state model....26
4.1.1.1 SQL Transaction Entity....26
4.1.2 General client execution rules....26
4.1.2.1 Generation of the SQL transaction entity....26
4.1.2.2 Execution of an SQL-statement....26
4.1.3 <set transaction statement>....26
4.1.4 <connect statement>....27
4.1.5 <set connection statement>....27
4.1.6 <commit statement>....27
4.1.7 <rollback statement>....27
4.2 The RDA SQL Specialization server execution rules....27
4.2.1 RDA SQL Specialization dialogue-state model....28
4.2.1.1 RDA dialogue entity....28
4.2.1.2 Opened data resource entity....28
4.2.1.3 Defined DBL Entity....28
4.2.1.4 RDA operation entity....29
4.2.2 General server execution rules....29
4.2.3 RDA Dialogue Management services....29
4.2.3.1 RDA Dialogue Initialization functional unit....29
4.2.3.1.1 R-Initialize Service....29
4.2.3.2 RDA Dialogue Termination functional unit....29
4.2.3.2.1 R-Terminate Service....29
4.2.4 RDA Transaction Management services....29
4.2.4.1 RDA Transaction Management functional unit....29
4.2.4.1.1 R-Begin Transaction Service....29
4.2.4.1.2 R-Commit Service....29
4.2.4.1.3 R-Rollback Service....29
4.2.5 RDA Control services....30
4.2.5.1 Cancel functional unit....30
4.2.5.1.1 R-Cancel Service....30
4.2.5.2 Status functional unit....30
4.2.5.2.1 R-Status Service....30
4.2.6 Resource Handling services....30
4.2.6.1 Resource Handling functional unit....30
4.2.6.1.1 R-Open Service....30
4.2.6.1.2 R-Close Service....31
4.2.7 Database Language services....31
4.2.7.1 Immediate Execution DBL functional unit....31
4.2.7.1.1 R-ExecuteDBL service....31
4.2.7.2 Stored Execution DBL functional unit....36
4.2.7.2.1 R-define DBL Service....36
4.2.7.2.2 R-InvokeDBL Service....39
4.2.7.2.3 R-DropDBL Service....43

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42e3-95e1-529ca2312f2b/iso-iec-9579-2-1998

4.3 Structure and Encoding of RDA SQL APDUs 43
4.3.1 Abstract Syntax Name 43
4.3.2 ASN.1 Module for RDA SQL Specialization ASE 43
4.4 Conformance 56
4.4.1 Static conformance 56
4.4.2 Dynamic Conformance 57

5. THE RDA SQL SPECIALIZATION APPLICATION-CONTEXTS 58

5.1 The RDA SQL Basic application-context 58
5.1.1 RDA SQL Basic application-context object identifier 58
5.1.2 Additional constraints on the RDA SQL ASE datatypes 58
5.1.3 Additional sequencing rules 58
5.1.4 Additional conformance requirements 58
5.1.4.1 Static conformance 58
5.1.4.2 Dynamic conformance 58
5.2 The RDA SQL TP application-context 58
5.2.1 RDA SQL TP application-context object identifier 58
5.2.2 Additional constraints on the RDA SQL ASE datatypes 58
5.2.3 Additional sequencing rules 58
5.2.4 Additional conformance requirements 58
5.2.4.1 Static conformance 58
5.2.4.2 Dynamic conformance 58

Annex A (informative): Encoding of Multiple Rows 59

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

Figures

Figure 1. Usage of Embedded SQL Variables 24

Tables

Table 1. R-Initialise SQL Specific Service Parameters 7
Table 2. R-Cancel SQL Specific Service Parameters 8
Table 3. R-Status SQL Specific Service Parameters 8
Table 4. R-Open SQL Specific Service Parameters 9
Table 5. R-Close SQL Specific Service Parameters 11
Table 6. R-ExecuteDBL SQL Specific Service Parameters 12
Table 7. R-Define DBL SQL Specific Service Parameters 14
Table 8. R-InvokeDBL SQL Specific Service Parameters 15
Table 9. sQLDBLStatement 17
Table 10. sQLDBLArgumentSpecification and sQLDBLResultSpecification 19
Table 11. sQLDBLArgumentValues and sQLDBLResultValues 23
Table 12. R-ExecuteDBL use of SQL argument and result parameters 33
Table 13. R-DefineDBL use of SQL argument and result parameters 37
Table 14. R-InvokeDBL use of SQL argument and result parameters 40

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

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.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 9579-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology,* Subcommittee SC 21, *Open systems interconnection, data management and open distributed processing.*

This second edition cancels and replaces the first edition (ISO/IEC 9579-2:1993), which has been technically revised. It also incorporates Technical Corrigendum 1:1995.

ISO/IEC 9579 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — Remote Database Access*:

— *Part 1: Generic Model, Service and Protocol*

— *Part 2: SQL Specialization*

Annex A of this part of ISO/IEC 9579 is for information only.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

Introduction

Remote Database Access (RDA) International Standards are members of a set of International Standards produced to facilitate the interworking of computer systems. The RDA International Standards are positioned in the Application Layer of the Reference Model of Open Systems Interconnection (OSI) and are related to other Open Systems International Standards in the set, as defined in ISO 7498, *OSI - Basic Reference Model*.

The goal of Remote Database Access is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of applications and database systems:

- from different manufacturers;
- under different managements;
- of different levels of complexity;
- exploiting different technologies.

An application may itself be a database system and therefore an RDA Specialization standard can be used to support multi-database system interworking.

This part of ISO/IEC 9579 is to be used together with ISO/IEC 9579-1 to provide remote data access to a database management system conforming to ISO/IEC 9075 (Database Language SQL).

This part of ISO/IEC 9579 is provided for implementators of the protocol and service defined in ISO/IEC 9579-2:1993 who wish to upgrade their implementation to support those features of ISO/IEC 9075:1992 which are not supported by ISO/IEC 9579-2:1993. A third edition of this part of ISO/IEC 9579 is in preparation which will provide enhanced support more appropriate for new implementations wishing to support ISO/IEC 9075:1992 in conjunction with ISO/IEC 9075-3:1995 (SQL/CLI).

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

This page intentionally left blank

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

Information technology – Open Systems Interconnection – Remote Database Access –

Part 2:
SQL Specialization

1 GENERAL

1.1 Scope

This part of ISO/IEC 9579 specifies the functionality of a database server within a distributed open systems environment and specifies the communication service and protocol for accessing its capabilities. The communications capabilities are positioned in the Application Layer of the Reference Model for Open Systems Interconnection (OSI).

This part of ISO/IEC 9579 complements ISO/IEC 9579-1 (RDA Generic) in order that the two parts together:

a) define the capabilities of an RDA SQL database server supporting dialogues with clients.

b) define a model of dialogues between the RDA SQL database server and remote users.

c) define a model of a dialogue between an RDA client and an RDA server.

d) define an abstract service for the RDA SQL ASE, which models the communications facilities supporting interaction between the RDA client and RDA server.

e) define the RDA SQL ASE protocol to support the RDA SQL Service.

f) define the characteristics of application-contexts which include the RDA SQL ASE.

g) define application contexts that support remote database access using SQL:

   1) RDA Basic application-context

   2) RDA TP application-context

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

This part of ISO/IEC 9579 does not specify individual implementations or products, nor does it constrain the implementation of entities and interfaces within a computer system.

This part of ISO/IEC 9579 does not define a programmatic interface. The RDA server includes a database capability as defined in ISO/IEC 9075 (Database Language SQL).

Notes:

1 The RDA client may contain an SQL application program but there is no requirement that the RDA client shall be an application program written to the ISO/IEC 9075 (Database Language SQL) application program interface.

2 ISO/IEC 9075:1989, the former International Standard for Database Language SQL, has been replaced by ISO/IEC 9075:1992. Both the current and former standards contain conformance rules, and the RDA SQL Specialization allows an RDA client to specify the desired level of conformance which it expects the RDA Server to support. Throughout this part of ISO/IEC 9579, "**SQL**" refers to the language statements permitted by the appropriate standard at the requested level of conformance.

1.2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 9579. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 9579 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 8824:1990, *Information technology – Open Systems Interconnection – Specification of Abstract Syntax Notation One (ASN.1).*

ISO/IEC 8825:1990, *Information technology – Open Systems Interconnection – Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1).*

ISO/IEC 9075:1992, *Information technology – Database languages – SQL.*

ISO/IEC 9075-3:1995, *Information technology – Database languages – SQL – Part 3: Call-Level Interface (SQL/CLI).*

ISO/IEC 9075-4:1996, *Information technology – Database languages – SQL – Part 4: Persistent Stored Modules.*

ISO/IEC 9579-1:1993, *Information technology – Open Systems Interconnection – Remote Database Access – Part 1: Generic Model, Service and Protocol.*

1.3 Compatibility

1.3.1 SQL Standards Supported

This part of ISO/IEC 9579 is fully compatible with the following editions and parts of the SQL International Standard:

- ISO/IEC 9075:1987 *SQL87*
- ISO/IEC 9075:1989 *SQL89*
- ISO/IEC 9075:1992 *SQL92*
- ISO/IEC 9075-3:1995 *SQL/CLI*
- ISO/IEC 9075-4:1996 *SQL/PSM*

1.3.2 Upward Compatibility

This edition of ISO/IEC 9579-2 is upward compatible with ISO/IEC 9579-2:1993. Where services or protocols are provided by both this edition and ISO/IEC 9579-2:1993, these services or protocols behave in the same manner and provide the same functionality.

SQL application programs which conform to SQL 87, SQL 89 or SQL 92 entry level should be able to correctly execute without change in the following configurations:

iTeh STANDARD PREVIEW
(standards.iteh.ai)

- ISO/IEC 9579-2:1993 client and ISO/IEC 9579-2:1993 server - This is the reference configuration against which the other cases are compared.

ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95c1-529ea231252b/iso-iec-9579-2-1998

- ISO/IEC 9579-2:1993 client and ISO/IEC 9579-2:1997 server - The ISO/IEC 9579 -2:1997 server behaves as an ISO/IEC 9579-2:1993 server.
- ISO/IEC 9579-2: 1997 client and ISO/IEC 9579-2:1993 server - The ISO/IEC 9579 -2: 1997 client behaves as an ISO/IEC 9579-2:1993 client.
- ISO/IEC 9579-2: 1997 client and ISO/IEC 9579-2: 1997 server - This is the configuration provided for by this standard.

1.4 Definitions

For the purposes of this part of ISO/IEC 9579, the definitions given in ISO/IEC 9579-1 and the following definitions apply.

1.4.1 Terms defined in ISO/IEC 9075 (Database Language SQL)

This part of ISO/IEC 9579 makes use of the following terms defined in ISO/IEC 9075:1989 (Database Language SQL) or ISO/IEC 9075:1992 (Database Language SQL).

applicable privileges
catalog
cluster of catalogs
Embedded SQL
ISOLATION LEVEL SERIALIZABLE
READ WRITE
SQLCODE
SQLSTATE
SYSTEM_USER

In addition, this part of ISO/IEC 9579 references the following non-terminal production symbols from the SQL syntax, which represent a valid string of characters that can be derived from these production symbols according to the syntax rules in ISO/IEC 9075 (Database Language SQL) at the appropriate level of conformance.

<1987>
<1989>
<1992>
<allocate descriptor statement>
<alter domain statement>
<alter table statement>
<assert definition>
<assignment statement>
<call statement>
<case statement>
<catalog name>
<character set definition>
<close statement>
<collation definition>
<commit statement>
<compound statement>
<condition declaration>
<connect statement>
<cursor name>
<deallocate descriptor statement>
<declare cursor>
<delete statement: positioned>
<delete statement: searched>
<direct implementation-defined statement>
<domain definition>
<drop assertion statement>
<drop character set statement>
<drop collation statement>
<drop domain statement>
<drop module statement>
<drop routine statement>
<drop schema statement>
<drop table statement>
<drop translation statement>
<drop view statement>
<embedded variable name>
<fetch statement>
<for statement>
<get descriptor statement>
<get diagnostics statement>
<grant statement>
<host identifier>
<if statement>
<indicator variable>

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

<insert statement>
<level of isolation>
<loop statement>
<module authorization identifier>
<module character set specification>
<module name>.
<open statement>
<repeat statement>
<resignal statement>
<revoke statement>
<rollback statement>
<routine invocation>
<schema definition>
<schema name>
<select statement: single row>
<set catalog statement>
<set connection statement>
<set constraints mode statement>
<set descriptor statement>
<set path statement>
<set schema statement>
<set transaction statement>
<signal statement>
<SQL conformance>
<SQL data statement>
<SQL edition>
<SQL variable declaration>
<SQL-invoked routine>
<SQL-server module definition>
<table definition>
<temporary table declaration>
<transaction access mode>
<translation definition>
<update statement: positioned>
<update statement: searched>
<variable specification>
<view definition>
<while statement>

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

1.4.2 Terms defined in this part of ISO/IEC 9579

1.4.2.1 SQL database resource

An SQL cluster of catalogs together with the data described by the schemas of the catalogs of that cluster.

1.4.2.2 RDA SQL statement

One of the non-terminals <schema definition>, <table definition>, <view definition>, <drop schema statement>, <alter table statement>, <drop table statement>, <drop view statement>, <domain definition>, <alter domain statement>, <drop domain statement>, <grant statement>, <SQL data statement>, <commit statement>, <rollback statement> and <declare cursor> as defined in ISO/IEC 9075 (Database Language SQL).

1.5 Abbreviations

For the purposes of this part of ISO/IEC 9579, the abbreviations given in ISO/IEC 9075 and ISO/IEC 9579-1 apply.

1.6 Conventions

This part of ISO/IEC 9579 adopts the conventions established in ISO/IEC 9579-1.

The RDA SQL Specialization is formally defined in an ASN.1 Module that is derived from the RDA Specialization module template defined in ISO/IEC 9579-1. The RDA SQL Specialization module provides definitions for those types listed in the template as being undefined by the Generic part of ISO/IEC 9579.

The structure of this part of ISO/IEC 9579 follows the requirements defined in ISO/IEC 9579-1 for defining specializations of the RDA Generic Service and Protocol.

In this part of ISO/IEC 9579, the RDA Generic parameters and data types named specificXxxx... and SpecificXxxx... are renamed to sQLXxxx... and to SQLXxxx...., respectively.

In the service parameter tables in 3.1, parameters which are defined by this specialization have values entered in the Req, Ind, Rsp or Cnf columns. Other service parameters in these tables which are copied from the RDA Generic to improve readability do not have entries in these columns.

The RDA SQL Specialization defines a means of communicating SQL database language statements and their parameters from an RDA client to an RDA server, and of returning the results of those statements. Database Language SQL is supported at various levels of conformance, determined by an Object Identifier defined in ISO/IEC 9075

In this part of ISO/IEC 9579, the reference "**ISO/IEC 9075 (Database Language SQL)**" means any International Standard carrying the designation ISO/IEC 9075 and year of approval. The specific version (or versions) of that standard that is intended in each instance is determined, for the RDA client, by the SQL Conformance Level requested either when the RDA dialogue is initialized or when a data resource is opened, and, for the RDA server, by the SQL Conformance Level (or Levels) claimed in the Protocol Implementation Conformance Statement.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca2512526/iso-iec-9579-2-1998

When the SQL Conformance Level specifies a year value of 1987 or 1989, the relevant International Standard is ISO/IEC 9075:1989; when the SQL Conformance Level specifies a year value of 1992, the relevant International Standard is ISO/IEC 9075:1992.

The term "**SQL**" is used throughout in a generic sense, intending to cover Database Language SQL at a particular conformance level as well as valid statements written within that conformance level.

2 MODEL

2.1 The RDA SQL Specialization Service model

2.1.1 Mapping to the general model of the RDA Service

This subclause relates the relevant concepts defined in Section 2 of ISO/IEC 9579-1 to this RDA SQL Specialization.

The term **data resource**, defined in ISO/IEC 9579-1, corresponds to an **SQL database resource** as defined in this part of ISO/IEC 9579.

The RDA client gains access to an SQL database resource at the RDA server by opening it. It is then available for use in requests for Database Language Services (3.1.5 Database Language Services" on page 11). Nested SQL database resources are not supported.

Closing an SQL database resource causes it to be made inaccessible to the RDA client; that is, unavailable for subsequent use in requests for Database Language Services.

An implementor shall provide an RDA server at which one or multiple SQL database resources are available.

2.1.2 Mapping to the Concepts of Database Language SQL

This subclause relates the relevant Concepts defined in clause 4 of ISO/IEC 9075 (Database Language SQL) to the database model contained in the RDA server.

RDA SQL statements are executed by the database server exactly as if they were embedded in a host program local to the SQL database resource. Any exception condition or completion condition raised by the database server is returned to the RDA client.

Note: A <declare cursor> RDA SQL statement must have been executed or invoked at the RDA server prior to executing or invoking any <open statement> that uses the same cursor name. A <dynamic declare cursor> or <allocate cursor statement> must have been executed or invoked at the RDA server prior to executing or invoking any <dynamic open statement> that uses the same <dynamic cursor name>.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

3 SERVICE

3.1 The RDA SQL Specialization Service

This clause contains the expansion of the RDA Generic Service parameters which are specialization defined. These specifications are in addition to those specified in ISO/IEC 9579-1.

Note: The subclauses in this clause are elaborations of the corresponding subclauses in ISO/IEC 9579-1 and are numbered accordingly.

3.1.1 RDA Dialogue Management services

3.1.1.1 RDA Dialogue Initialization functional unit

3.1.1.1.1 R-Initialize Service

Table 1 lists the R-Initialize SQL Specific Service Parameters.

Table 1. R-Initialize SQL Specific Service Parameters

	Req	Ind	Rsp	Cnf
Request Parameters				
sQLInitializeArgument	U	C(=)		
sQLConformanceLevelDefault	U	C(=)		
userData	C	C(=)		
Result Parameters				
sQLInitializeResult			U	C(=)
userData			C	C(=)
Error Parameters				
sQLInitializeError			S	S(=)
characterSetNotSupported			S	S(=)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Request Parameters

sQLInitializeArgument:
This argument is used to negotiate the level of support desired by the RDA client.

ISO/IEC 9579-2:1998
https://standards.iteh.ai/catalog/standards/sist/93089509-71db-42c3-95e1-529ca231252b/iso-iec-9579-2-1998

sQLConformanceLevelDefault:
This parameter identifies the characteristics ("SQL level") of the Database Language SQL requested by the RDA client. The object identifiers specifying those characteristics are defined in ISO/IEC 9075:1992. This is the default SQL Conformance Level requested by the RDA client. If this parameter is omitted, there is no default established for the RDA client.

userData:
The meaning of this parameter is defined by the implementor of the RDA server.

Result Parameters

SQLInitialize Result:
This parameter contains information returned by the RDA server whose meaning is specific to this RDA SQL Specialization

userData:
The meaning of this parameter is defined by the implementor of the RDA server.

Error Parameters

sQLInitializeError:
This parameter is used by the RDA server to report errors.

characterSetNotSupported:
This parameter is returned by the RDA server when the RDA server does not support a character set associated with a character string value received from an RDA client.

3.1.1.2 RDA Dialogue Termination functional unit

3.1.1.2.1 R-Terminate Service

Note: None of the specific request, result or error parameters for this service are used in this Specialization.