

SYNOPSIS

Number and Title of the Indian Standard: IS/ ISO/IEC 9579 : 2000
Information technology — Remote database access for SQL with security enhancement

Scope:

This International Standard, Remote Database Access for SQL (RDA), defines a model for the remote interaction of an SQL-client and one or more SQL-servers through communication media, and defines the encoding of messages, the semantics of messages and associated facilities for mediating the interaction between one SQL-client and one SQL-server.

This International Standard also defines a mapping of the RDA Protocol to the specific communication infrastructures TCP/IP and Transport Layer Security (TLS).

This International Standard relies upon the facilities provided by ISO/IEC 9075 (SQL) and ISO/IEC 9075-3 (SQL/CLI).

This International Standard also:

- identifies potential security vulnerabilities in remote database access using RDA,
- defines RDA facilities which protect against the potential vulnerabilities.

Normative annexes provide:

- a Conformance Proforma,
- an optional language independent Application Programming Interface defined in the notational conventions of ISO/IEC 9075-3 (SQL/CLI) for invoking RDA Operations,
- an optional mapping of ISO/IEC 9075-3 (SQL/CLI) functions to RDA Operations,
- definitions of optional SQL-servers, the RDA Location Server and the RDA Support Server, to facilitate interoperation and data distribution in a heterogeneous environment,
- a set of security profiles that identify which RDA facilities and other security facilities are required for different levels of protection against potential vulnerabilities.

Informative annexes provide:

- an analysis of security service requirements,
- an ASN.1 specification for the RDA Protocol,
- an ASN.1 specification for the encoding of multiple rows.

This International Standard does not constrain:

- conforming RDA-client environments to be implemented using any particular processor decomposition,

– conforming RDA-server environments to be implemented using any particular processor decomposition.

This International Standard refers to but does not define:

- protocols and security mechanisms for communication confidentiality, integrity and authentication of communicating peers,
- digital signature and authentication mechanisms supported by protocol elements of RDA.

Salient features of content:

The goal of Remote Database Access for SQL is to allow, with a minimum of technical agreement outside this International Standard, the interconnection of applications and database systems:

- from different manufacturers,
- under different managements,
- of different levels of complexity,
- exploiting different technologies

c) Types/grades/classes, if any covered in the standard: NA

d) Disclaimer (to be automatically provided by the program/software): NA