

# PostgreSQL Data Types

## www.databasestar.com

## Numeric

SMALLINT A small integer number

Range -32,768 to +32,767

INTEGER An integer number

Range -2,147,483,648 to +2,147,483,647,

BIGINT A large integer number

Range -9,223,372,036,854,775,808 to +9,223,372,036,854,775,807

DECIMAL A decimal number with precision.

Range: up to 131,072 digits before the decimal point; up to

16,383 digits after the decimal point

NUMERIC (p, s) A decimal number with precision of "p" and scale of "s"

Range: up to 131,072 digits before the decimal point; up to

16,383 digits after the decimal point

REAL A floating-point variable-precision number. 6 decimal digits

precision

DOUBLE A floating-point variable-precision number. 15 decimal digits

PRECISION precision

SMALLSERIAL A small automatically incrementing integer.

Range: 1 to 32,767

SERIAL An automatically incrementing integer.

Range: 1 to 2,147,483,647

BIGSERIAL A large automatically incrementing integer.

Range: 1 to 9,223,372,036,854,775,807

MONEY A currency amount.

Range: -92,233,720,368,547,758.08 to

+92,233,720,368,547,758.07

## Date

TIMESTAMP (p) A date and time value with no time zone. Precision "p" can be

specified which is the number of fractional seconds.

Range: 4713 BC to 294276 AD

TIMESTAMP (p) A date and time value with time zone. Precision "p" can be WITH TIME ZONE specified which is the number of fractional seconds.

Range: 4713 BC to 294276 AD

DATE A date but no time.

TIME ZONE

Range: 4713 BC to 5874897 AD

TIME (p) A time of day with no date Precision "p" can be specified

which is the number of fractional seconds.

Range: 00:00:00 to 24:00:00

TIME (p) WITH A time of day with no date and a time zone Precision "p" can be

specified which is the number of fractional seconds.

Range: 00:00:00+1459 to 24:00:00-1459

INTERVAL [fields] An interval of time. Precision "p" can be specified which is the

number of fractional seconds. The parameter "fields" can be used

to specify the type of data (e.g. YEAR, MONTH, DAY TO HOUR)

Range: -178,000,000 years to 178,000,000 years

#### Character

CHARACTER A variable-length string up to "n" characters. VARYING (n) Range: Up to 10,485,760 characters (1GB)

VARCHAR (n) A variable-length string up to "n" characters.

Range: Up to 10,485,760 characters (1GB)

CHARACTER (n) A fixed-length string, padded to a length of "n" characters.

Range: Up to 10,485,760 characters (1GB)

CHAR (n) A fixed-length string, padded to a length of "n" characters.

Range: Up to 10,485,760 characters (1GB)

TEXT A variable length string

BYTEA A variable-length binary string. Similar to BLOB

ENUM A set of values that can be used for a column.

JSON Stores JSON data

JSONB Stores JSON data in binary format, and can support

indexing

## Other

BOOLEAN Stores either true or false.

True, yes, on, 1. False, no off, 0.

POINT A point of geometry

LINE A line of geometry

LSEG A segment of a line

BOX A rectangular box

PATH An open path

POLYGON A polygon or shape

CIRCLE A circle

CIDR Stores IPv4 and IPv6 network addresses

INET Stores IPv4 and IPv6 hosts and network addresses

MACADDR Stores MAC addresses using 6 bytes.

MACADDR8 Stores MAC addresses using 8 bytes (the EUI-64 format)

TSVECTOR A sorted list of words

TSQUERY A list of words to be searched for

UUID Stores a Universally Unique Identifier (or GUID). A 128-bit

generated value

XML Stores XML data

PG\_LSN PostgreSQL Log Sequence Number

TXID\_SNAPSHOT A user-level transaction ID snapshot