Typy danych

Typy numeryczne

Name	Storage Size	Description	Range
smallint	2 bytes	small-range integer	-32768 to +32767
integer	4 bytes	typical choice for integer	-2147483648 to +2147483647
bigint	8 bytes	large-range integer	-9223372036854775808 to +9223372036854775807
decimal	variable	user-specified precision, exact	up to 131072 digits before the decimal point; up to 16383 digits after the decimal point
numeric	variable	user-specified precision, exact	up to 131072 digits before the decimal point; up to 16383 digits after the decimal point
real	4 bytes	variable-precision, inexact	6 decimal digits precision
double precision	8 bytes	variable-precision, inexact	15 decimal digits precision
smallserial	2 bytes	small autoincrementing integer	1 to 32767
serial	4 bytes	autoincrementing integer	1 to 2147483647
bigserial	8 bytes	large autoincrementing integer	1 to 9223372036854775807

Typy monetarne (pieniądze)

Name	Storage Size	Description	Range
money	8 bytes	currency amount	-92233720368547758.08 to +92233720368547758.07

Typy tekstowe

Name	Description

Name	Description
character varying(n), varchar(n)	variable-length with limit
character(n), char(n), bpchar(n)	fixed-length, blank-padded
bpchar	variable unlimited length, blank-trimmed
text	variable unlimited length

Typy binarne

Name	Storage Size	Description
bytea	1 or 4 bytes plus the actual binary string	variable-length binary string

Typy daty/czasu

Name	Storage Size	Description	Low Value	High Value	Resolution
timestamp [(p)] [without time zone]	8 bytes	both date and time (no time zone)	4713 BC	294276 AD	1 microsecond
timestamp [(p)] with time zone	8 bytes	both date and time, with time zone	4713 BC	294276 AD	1 microsecond
date	4 bytes	date (no time of day)	4713 BC	5874897 AD	1 day
time [(p)] [without time zone]	8 bytes	time of day (no date)	00:00:00	24:00:00	1 microsecond
time [(p)] with time zone	12 bytes	time of day (no date), with time zone	00:00:00+1559	24:00:00-1559	1 microsecond
interval [fields] [(p)]	16 bytes	time interval	-178000000 years	178000000 years	1 microsecond

Typy bool'owskie

Name	Storage Size	Description
boolean	1 byte	state of true or false

Typy enumeryczne

```
CREATE TYPE mood AS ENUM ('sad', 'ok', 'happy');
CREATE TABLE person (
    name text,
    current_mood mood
);
INSERT INTO person VALUES ('Moe', 'happy');
SELECT * FROM person WHERE current_mood = 'happy';
 name | current_mood
------+--------------
 Moe  | happy
```

Typy geometryczne

Name	Storage Size	Description	Representation
point	16 bytes	Point on a plane	(x,y)
line	24 bytes	Infinite line	{A,B,C}
lseg	32 bytes	Finite line segment	[(x1,y1),(x2,y2)]
box	32 bytes	Rectangular box	(x1,y1),(x2,y2)
path	16+16n bytes	Closed path (similar to polygon)	((x1,y1),...)
path	16+16n bytes	Open path	[(x1,y1),...]
polygon	40+16n bytes	Polygon (similar to closed path)	((x1,y1),...)
circle	24 bytes	Circle	<(x,y),r> (center point and radius)

Typy adresów internetowych

Name	Storage Size	Description
cidr	7 or 19 bytes	IPv4 and IPv6 networks
inet	7 or 19 bytes	IPv4 and IPv6 hosts and networks
macaddr	6 bytes	MAC addresses
macaddr8	8 bytes	MAC addresses (EUI-64 format)

Typy pozostałe

- Typy wyszukiwania tekstowego (tsvector, tsquery)
- Typ UUID
- Typ XML
- Typ JSON (string, number, boolean, null)

- Typ tablicowy

```
CREATE TABLE sal_emp (
    name            text,
    pay_by_quarter  integer[],
    schedule        text[][]
);
```