

POSTGRESQL - UNIONS CLAUSE

http://www.tutorialspoint.com/postgresql/postgresql_unions_clause.htm

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The PostgreSQL **UNION** clause/operator is used to combine the results of two or more SELECT statements without returning any duplicate rows.

To use UNION, each SELECT must have the same number of columns selected, the same number of column expressions, the same data type, and have them in the same order but they do not have to be the same length.

Syntax:

The basic syntax of **UNION** is as follows:

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]

UNION

SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

Here given condition could be any given expression based on your requirement.

Example:

Consider following two tables, (a) [COMPANY](#) table is as follows:

```
testdb=# SELECT * from COMPANY;
 id | name  | age | address  | salary
-----+-----+-----+-----+-----
  1 | Paul  |  32 | California | 20000
  2 | Allen |  25 | Texas     | 15000
  3 | Teddy |  23 | Norway    | 20000
  4 | Mark  |  25 | Rich-Mond | 65000
  5 | David |  27 | Texas     | 85000
  6 | Kim   |  22 | South-Hall | 45000
  7 | James |  24 | Houston   | 10000
(7 rows)
```

(b) Another table is [DEPARTMENT](#) as follows:

```
testdb=# SELECT * from DEPARTMENT;
 id | dept      | emp_id
-----+-----+-----
  1 | IT Billing |      1
  2 | Engineering |      2
  3 | Finance   |      7
  4 | Engineering |      3
  5 | Finance   |      4
  6 | Engineering |      5
  7 | Finance   |      6
(7 rows)
```

Now let us join these two tables using SELECT statement along with UNION clause as follows:

```
testdb=# SELECT EMP_ID, NAME, DEPT FROM COMPANY INNER JOIN DEPARTMENT
         ON COMPANY.ID = DEPARTMENT.EMP_ID
UNION
         SELECT EMP_ID, NAME, DEPT FROM COMPANY LEFT OUTER JOIN DEPARTMENT
         ON COMPANY.ID = DEPARTMENT.EMP_ID;
```

This would produce the following result:

emp_id	name	dept
5	David	Engineering
6	Kim	Finance
2	Allen	Engineering
3	Teddy	Engineering
4	Mark	Finance
1	Paul	IT Billing
7	James	Finance

(7 rows)

The UNION ALL Clause:

The UNION ALL operator is used to combine the results of two SELECT statements including duplicate rows. The same rules that apply to UNION apply to the UNION ALL operator as well.

Syntax:

The basic syntax of **UNION ALL** is as follows:

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]

UNION ALL

SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

Here given condition could be any given expression based on your requirement.

Example:

Now, let us join above-mentioned two tables in our SELECT statement as follows:

```
testdb=# SELECT EMP_ID, NAME, DEPT FROM COMPANY INNER JOIN DEPARTMENT
        ON COMPANY.ID = DEPARTMENT.EMP_ID
        UNION ALL
        SELECT EMP_ID, NAME, DEPT FROM COMPANY LEFT OUTER JOIN DEPARTMENT
        ON COMPANY.ID = DEPARTMENT.EMP_ID;
```

This would produce the following result:

emp_id	name	dept
1	Paul	IT Billing
2	Allen	Engineering
7	James	Finance
3	Teddy	Engineering
4	Mark	Finance
5	David	Engineering
6	Kim	Finance
1	Paul	IT Billing
2	Allen	Engineering
7	James	Finance
3	Teddy	Engineering
4	Mark	Finance
5	David	Engineering
6	Kim	Finance

(14 rows)