

pgRouting Directed Chinese Postman

Calculates the shortest circuit path which contains every edge in a directed graph and starts and ends on the same vertex.

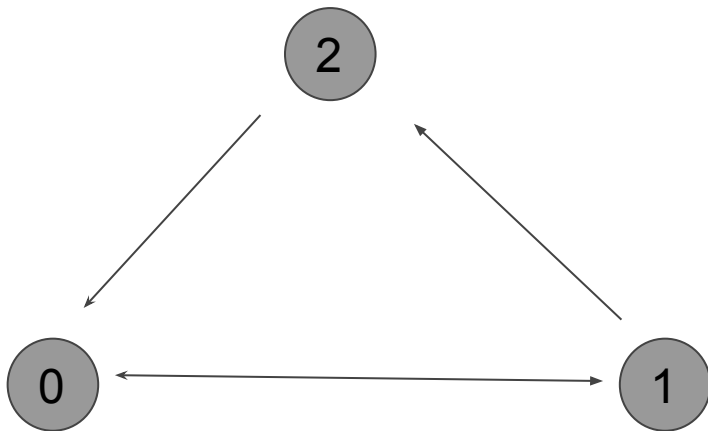
The time complexity for the algorithm using Minimum-cost Maximum-flow approach is $O(E * (E + V \log V))$.



Data

```
CREATE TABLE edge_table (  
  id BIGSERIAL,  
  source BIGINT,  
  target BIGINT,  
  cost FLOAT,  
  reverse_cost FLOAT  
);
```

```
INSERT INTO edge_table (  
  source, target  
  cost, reverse_cost) VALUES  
(0, 1, 1, 1), (1, 2, 1, -1),  
(2, 0, 1, -1);
```



Results

```
SELECT * FROM pgr_directedChPP (  
    'SELECT id, source, target, cost,  
reverse_cost FROM edge_table');
```

seq	node	edge	cost	agg_cost
1	2	3	1	0
2	0	1	1	1
3	1	1	1	2
4	0	1	1	3
5	1	2	1	4
6	2	-1	0	5

(6 rows)

