

# SOURCE/TARGET PQL Cheat Sheet

Functions available since Celonis 4.3

## Syntax

```
SOURCE("Activities"."Column", a filter_column, b edge_config)
TARGET("Activities"."Column", a filter_column, b edge_config)
```

Each **case** in the activity table can be seen as a graph (like in the Process Explorer). Each edge in the graph has a Source event and a Target event. With **SOURCE** and **TARGET** we can create and access a temporary **EDGE\_TABLE**, containing all the edges for each case.

## Example Data Model

## Process Explorer

A ACTIVITIES

Case	Activity	Timestamp (TS)
1	A	1.1.
1	B	2.1.
1	C	1.3.
2	A	8.1.
2	A	9.1.

\$\$EDGE\_TABLE\_0\$\$

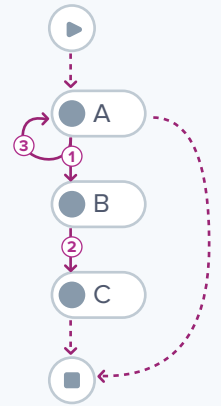
Case	Source (Act.)	Target (Act.)	Source (TS)	Target (TS)
1	A	B	1.1.	2.1.
1	B	C	2.1.	1.3.
2	A	A	8.1.	9.1.

Parent table

C CASES

Case
1
2

Child table



## How to configure SOURCE/TARGET

SOURCE and TARGET provide two different configuration options:

### a filter\_column

Every row of the Activity table that is NULL in this column will be ignored when creating the edges. Usually, **CASE WHEN** or **REMAP\_VALUES** is used to set Activities to NULL.

**Example:** Ignore Activity 'B' by setting 'B' to NULL:

```
SOURCE("Activities"."Activity",
REMAP_VALUES("Activities"."Activity", ['B', NULL]))
```

Given the example activity table above, this configuration leads to:

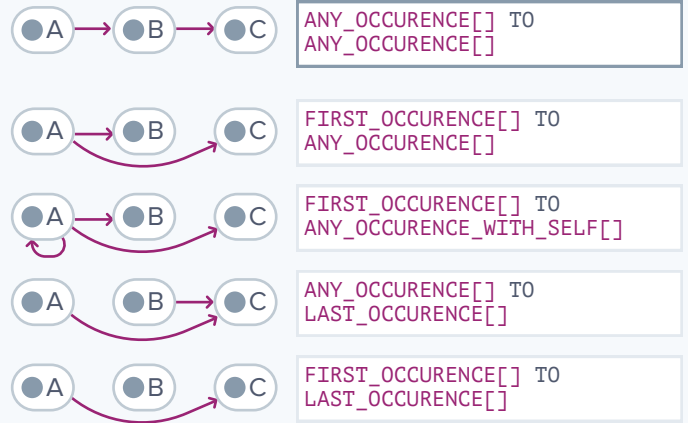
\$\$EDGE\_TABLE\_0\$\$

Case	Source (Act.)	Target (Act.)	Source (TS)	Target (TS)
1	A	C	1.1.	1.3.
2	A	A	8.1.	9.1.

### b edge\_config

Defines which edges should be used.

DEFAULT



The configs **a** + **b** only need to be defined once per query as they are automatically propagated to all other SOURCE/TARGET occurrences. Different configs generate different edge tables. The Edge tables are joined to the Case table. They can therefore not be combined with a "raw" column from the Activity table:

**Error in formula** - The tables Activities and \$\$EDGE\_TABLE\_0\$\$ do not have a common parent in the schema.

or with different edge tables inside the same query:

**Error in formula** - The tables \$\$EDGE\_TABLE\_0\$\$ and \$\$EDGE\_TABLE\_1\$\$ don't have a common parent in the schema.