

# SessionWindow

A session window is a combination of [heartbeat](#) and [predicate window](#) with a specific configuration. A session ends when a heartbeat is received. Then, all stored elements will be transferred.

## Parameter

- `threshold`: The time to wait for a new element before closing the window [ms].
- `startAtCurrentTime`: Configuration of heartbeats. True = system time is used; False: time starts at 0.

Remark: This is a blocking operator. The operator does not write elements before it receives a heartbeat.

## Transformation

In the following the transformation of a session window to a heartbeat and predicate window is shown.

```
output = SESSIONWINDOW({
    threshold = 1000,
    startatcurrenttime = true
},
input
)
```

It will be transformed to

```
heartbeats = HEARTBEAT({
    applicationtimedelay = 1000,
    realtimedelay = 1000,
    sendalwaysheartbeat = 'false',
    allowoutofordercreation = 'false',
    startatcurrenttime = 'true',
    sendOnlyOneHeartbeat =
'true'
},
input
)

output= PREDICATEWINDOW({
    start = 'true',
    end = 'false',
    closewindowwithheartbeat =
'true'
},
graph_data_with_heartbeat
)
```