### pivot

Executes one or more aggregation on each row or column group.

#### Syntax

pivot [parallel=BOOL] AGGR\_FUNC [as ALIAS], ... [by|rows GRP\_FIELD, ...] [for|cols GRP\_FIELD, ...]

Required Parameter

**AGGR\_FUNC [as ALIAS], ...**

Pairs of a [group function](https://docs.logpresso.com/en/query/section-aggregate-functions) (AGGR\_FUNC) and optional alias (ALIAS) as a field name, separated by a comma (,). It is recommended that you specify an ALIAS. If no alias provided, the function name is labeled as the field name, such as count() and sum(sent\_pkts).

Optional Requirements

**parallel=BOOL**

Option to enable parallel processing (default: f).

1. t: Enables processing the query in parallel. The processing speed increases but the order of data is not guaranteed. Avoid using this option in query commands where the order of the data matters.
2. f: Disables processing the query in parallel.

**by|rows GRP\_FIELD, ...**

Grouping fields with by or rows directive, separated by a comma(,).

**for|cols GRP\_FIELD, ...**

Grouping fields with for or cols directive, separated by a comma(,).

If the 'by|rows' or 'for|cols' clause is not specified, the entire data that comes from the previous query command is aggregated into one group. There is a side effect that is sorted out based on the group field.

#### Usage

Return the number of rows.

pivot count

Return the number of rows by each src\_ip value.

pivot count by src\_ip

Count the number of rows for each **protocol** field value (e.g., TCP, UDP, ICMP and the like) for the **src\_ip** and **dst\_ip** fields.

pivot count by src\_ip, dst\_ip for protocol

Count the number of rows ([count()](https://docs.logpresso.com/en/query/count-aggregate-function)) and traffic ([sum(bytes)](https://docs.logpresso.com/en/query/sum-aggregate-function)) for each **protocol** field value (e.g., TCP, UDP, and ICMP) for the **src\_ip** and **dst\_ip** fields.

pivot sum(bytes) as bytes, count rows src\_ip, dst\_ip cols protocol