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## Simple overview of what DPQL can do, with examples for each:

Kim - 2026-04-28 - [Comments \(0\)](#) - [Using Deskpro](#)

### □ Aggregation (KPIs & totals)

Used for counts and summary stats.

```
SELECT DPQL_COUNT() AS 'Total Tickets'  
FROM tickets  
WHERE tickets.status = 'resolved'
```

### □ Grouping & reporting

Used to break data down (e.g. by agent, status, etc.)

```
SELECT DPQL_COUNT() AS 'Total Tickets'  
FROM tickets  
GROUP BY tickets.agent AS 'Agent'
```

You can use an alias in the Group By section.

### □ Matrix (pivot-style reports)

Used for cross-tab reports (e.g. agent vs status)

```
SELECT DPQL_COUNT()  
FROM tickets  
GROUP BY DPQL_MATRIX(tickets.agent, tickets.status)
```

### □ Filtering data

Used to limit results

```
SELECT DPQL_COUNT() AS 'Open Tickets'  
FROM tickets  
WHERE tickets.status IN ('pending', 'awaiting_agent', 'awaiting_user')
```

### □ Conditional values (IF())

Used to change how values are displayed

```
SELECT DPQL_COUNT() AS 'stat_value', IF(DPQL_COUNT() = 0, 'No tickets found',  
'Tickets created') AS 'stat_description'  
FROM tickets  
WHERE tickets.date_created = ${date}
```

## □ Basic calculations

Used for things like time differences

```
SELECT
  tickets.id,
  (UNIX_TIMESTAMP(tickets.date_resolved) - UNIX_TIMESTAMP(tickets.date_created)) /
  3600 AS 'Hours to Resolve'
FROM tickets
WHERE tickets.status = 'resolved'
```

## □ DPQL\_PERCENT() calculate percentages

Example: % of tickets that are resolved

```
SELECT DPQL_PERCENT(tickets.status = 'resolved') AS 'Resolved %'
FROM tickets
WHERE tickets.date_created = %THIS_MONTH%
```

What this does:

Counts how many rows match the condition

Divides by total rows

Returns a percentage

## □ SUM() adds numbers together

```
SELECT SUM(tickets.urgency) AS 'Total Urgency'
FROM tickets
WHERE tickets.status = 'resolved'
```

This returns:

urgency 3 + urgency 2 + urgency 5 = 10

So instead of counting tickets, it adds up a numeric field across them.

## □ Working with dates

Used for grouping or filtering by time

```
SELECT DPQL_COUNT()
FROM tickets
WHERE tickets.date_created = %THIS_MONTH%
```

You can find the full list of date placeholders in this section of the reports guide: [List of Date Placeholders](#)

## □ Date formatting functions

Example: group tickets by month

```
SELECT DPQL_COUNT()
FROM tickets
GROUP BY DPQL_ALIAS(DATE_FORMAT(tickets.date_created, '%Y-%m'), 'Month')
```

## □ Cross-referencing related data

Access related fields (no JOIN needed)

```
SELECT
  tickets.id,
  tickets.ticket_slas.sla_status AS 'SLA Status'
FROM tickets
```

You can read more about cross-referencing in this section of the reports guide: [Cross-referencing Table Fields](#)

## □ DPQL\_CONCAT() – combine text

Example: combine ticket ID + subject

```
SELECT
  DPQL_CONCAT('#', tickets.id, ' - ', tickets.subject) AS 'Ticket'
FROM tickets
```

Real use:

Build readable labels

Combine fields for exports

Format output nicely

## □ Simple subquery

Example: tickets that have feedback

```
SELECT tickets.id
FROM tickets
WHERE tickets.id IN (
  SELECT ticket_feedback.ticket_id
  FROM ticket_feedback
)
```

Subquery is in WHERE

It's simple (no nesting, no aggregates inside aggregates)

## Other useful DPQL functions

### □ DPQL\_COUNT\_DISTINCT() count unique values

Counts how many different values exist in a field.

```
SELECT DPQL_COUNT_DISTINCT(tickets.agent) AS 'Unique Agents'
FROM tickets
```

Useful for: “how many agents / orgs / categories are involved?”

### □ DPQL\_NOW() current date & time

Returns full timestamp.

```
SELECT
    tickets.id,
    (UNIX_TIMESTAMP(DPQL_NOW()) - UNIX_TIMESTAMP(tickets.date_created)) / 3600 AS 'Hours
Open '
FROM tickets
```

Now it answers: "How long has each ticket been open right now?"

Useful for: time comparisons

## □ **DPQL\_DAYNAME() weekday name**

Returns the day (e.g. Monday, Tuesday).

```
SELECT DPQL_COUNT()
FROM tickets
GROUP BY DPQL_DAYNAME(tickets.date_created) AS 'Day'
```

Useful for: "which day is busiest?"

## □ **DPQL\_DAYOFMONTH() day number (1-31)**

```
SELECT DPQL_COUNT()
FROM tickets
GROUP BY DPQL_DAYOFMONTH(tickets.date_created) AS 'Day'
```

Useful for: daily trends within a month

## □ **DPQL\_DAYOFWEEK() weekday number (1-7)**

```
SELECT DPQL_COUNT()
FROM tickets
GROUP BY DPQL_DAYOFWEEK(tickets.date_created) AS 'Day #'
```

Useful for: sorting days numerically

## □ **DPQL\_HOUR() hour of day (0-23)**

```
SELECT DPQL_COUNT()
FROM tickets
GROUP BY DPQL_HOUR(tickets.date_created) AS 'Hour'
```

Useful for: "what time of day are tickets created?"

## □ **DPQL\_MINUTE() minute (0-59)**

```
SELECT DPQL_COUNT()
FROM tickets
GROUP BY DPQL_MINUTE(tickets.date_created) AS 'Minute'
```

Rarely used, but helpful for very granular analysis

## □ **DPQL\_MONTH() month number (1-12)**

```
SELECT DPQL_COUNT()
FROM tickets
```

```
GROUP BY DPQL_MONTH(tickets.date_created) AS 'Month'
```

Useful for: yearly breakdowns

## □ **DPQL\_MONTHNAME() month name**

```
SELECT DPQL_COUNT()  
FROM tickets  
GROUP BY DPQL_MONTHNAME(tickets.date_created) AS 'Month'
```

Same as above, but readable labels

## □ **DPQL\_YEAR() extract year**

```
SELECT DPQL_COUNT()  
FROM tickets  
GROUP BY DPQL_YEAR(tickets.date_created) AS 'Year'
```

Useful for: multi-year reporting

## □ **DPQL\_DATE\_OFFSET\_GROUP() group time differences**

Groups time differences into ranges (e.g. 0-15 min, 1-2 hours).

```
SELECT DPQL_COUNT()  
FROM tickets  
WHERE tickets.status = 'resolved'  
GROUP BY DPQL_DATE_OFFSET_GROUP(tickets.date_resolved, tickets.date_created) AS 'Time  
to Resolve'
```

Very useful for: SLA / resolution time reporting

## □ **DPQL\_TIME\_LENGTH() format duration**

Turns seconds into readable time (e.g. "2h 30m").

```
SELECT  
    tickets.id,  
    DPQL_TIME_LENGTH(UNIX_TIMESTAMP(tickets.date_resolved) -  
    UNIX_TIMESTAMP(tickets.date_created)) AS 'Resolution Time'  
FROM tickets
```

Useful for: displaying durations cleanly

## □ **DPQL\_FORMAT() format values**

```
SELECT  
    tickets.id AS 'Ticket ID',  
    DPQL_FORMAT(tickets.date_created, 'date') AS 'Created Date'  
FROM tickets
```

It takes a full date/time value like:

```
2026-04-28 14:35:22
```

and displays it as a cleaner date value.

## □ **DPQL\_TO\_UTC() convert to UTC**

Converts a date to UTC timezone.

```
SELECT DPQL_TO_UTC(tickets.date_created) AS 'Created UTC'  
FROM tickets
```

## □ **DPQL\_UTC() run calculation in UTC**

Forces date logic to use UTC.

```
SELECT DPQL_COUNT()  
FROM tickets  
WHERE DPQL_UTC(tickets.date_created) = %THIS_MONTH%
```

Useful for: consistency across time zones

## **What DPQL does NOT support**

- No JOIN
- No HAVING
- No complex subqueries
- No scripting logic (no Twig-style if/else)
- No dynamic query structure

You can find the list of supported functions in the reports guide here: [List of Functions](#)

In short: DPQL is designed for reporting (counts, grouping, filtering), with some light formatting using functions like IF().

If you have a specific report in mind, feel free to reach out to support and we can help build it.