

# Groonga query specification

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Technical information sharing seminar

# Introduction

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- Full-text search engine based on inverted index
- Various tokenizers
- Sharable storage and read lock-free
- Basic functionality is provided from libgroonga
- Query syntax to do full-text search

# Query syntax – Motivation

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- So, this slide describes Groonga query structures for query builder library developers.

# Query syntax

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- It requires mandatory command name parameter(s) (e.g. select, load... etc.)
- It requires mandatory parameter(s) if they exist
- It may require optional parameter(s) if they can specify
- It may append additional parameter(s) if they are defined (e.g. request\_id and request\_timeout like parameters)

# Groonga query structure

## Query structure

Groonga query has multiple parts.

part	content	mandatory?
command	command name	yes
mandatory parameter(s)	pairs of keys and value	yes
optional parameter(s)	pairs of keys and values	no
additional parameter(s)	pairs of keys and values	no

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- **non-named query** **MUST** keep query order
- **named query** need not keep query order

# Groonga query basics –example

## Query order

Groonga query **MUST** keep query parameters order except for using **named query**.

query type	content	valid/invalid
non-named query	table_create Site TABLE_HASH_KEY ShortText	valid
non-named query	table_create Site ShortText TABLE_HASH_KEY	invalid
named query	table_create -flags TABLE_HASH_KEY -key_type ShortText -name Site	valid
named query	table_create -key_type ShortText -flags TABLE_HASH_KEY -name Site	valid

Any questions?