Groonga query specification

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Technical information sharing seminar

What is Groonga?

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Groonga is a fully free open-source full-text search engine and column store.

• Full-text search engine based on inverted index

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- Various tokenizers
- Sharable storage and read lock-free
- Basic funcitonality is privided from libgroonga
- Query syntax to do full-text search

Summary of query syntax

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Groonga has a query which is used by full-text search.

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- 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)

Motivation

 groonga.org documents is well-documented for users but for library developers.

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

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

Groonga query basics

Query order

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

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Groonga query basics

Query order

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

- 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?