TAJO-408

hyunsik

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# Contents

### Chapter 1

## Root issue TAJO-408

#### 1.1 Summary

Improve function system

#### 1.2 Description

Currently, function system was designed few years ago. So, there are lack of key features necessary for functions and user-defined functions.

I have discussed this issue with [~epsilon]. We could summary the following issues.

- \* There is no way to describe explanation of functions.
- \*\* For user convenience, Tajo needs to show users function information, including signature, parameters, results, descriptions, and examples.
- \* TajoMaster registers lots of functions at startup time. This is a burden to maintain registration codes. We need to improve this to automatically register built-in functions in a specific package.
- \* Currently, the way to find matched function is too strict.
- \*\* Due to this function match system, we have to register functions for each parameter type combination.
- \*\* Function match mechanism should consider type compatibility. For example, count(val:integer) can be compatibly to count(val:long). In this case, we need to only register count(val:bigint) function. Tajo has to find count(val:bigint) even though count(val:integer) function is called.
- \* We need more elaborate UDF regestration system.
- \*\* Currently, registering a user-defined function requires system restart. There is no way to register UDFs in runtime.
- \*\* Tajo should provide a run-time UDF registration system. \*\* It should involve user jars distribution.
- \*\* It should provide 'CREATE FUNCTION' and 'DROP FUNCTION' statements.
- \*\* The registration functions are stored in catalog system, and they should be loaded even though a Tajo cluster is restarted.

This is an umbrella issue. we'll create one or more sub tasks for the above issues.

#### 1.3 Attachments

No attachments

#### 1.4 Commits

1. Commit **e517140** by **Jihoon Son** (2012-01-27): TAJO-408: GlobalQueryPlannerìİŸ ìżťíŇŇìİij ìŮŘë§ňěěij ìĹŸìăŢíŢŸêÿř ìIJĎíŢIJ ìđĎìŃIJ ìżďëřŃ

#### 1.5 Comments

No comments

### 1.6 Pull requests

No pull requests