TAJO-57

hyunsik

2013-05-08

Contents

Chapter 1

Root issue TAJO-57

1.1 Summary

Recognize Parser and Catalog Standard SQL data types

1.2 Description

The current Tajo provides some of data types which resemble java primitive or class type names
as follows:
* string
* short
* bigdecimal
* byte

The this issue is to enable Tajo to recognize Standard SQL data types. For this, I'll change
existing data types to correspoding SQL types, and I'll improve parser and catalog to recognize
Standard SQL data types.

1.3 Attachments

1. TAJO-57_2.patch

1.4 Comments

1. **hyunsik:** I've attached the patch. In addition to this issue, I've eliminated some unused
   classes in the catalog module.

   Even though we don't have all datum types for SQL standard data types, I've added all
   parser rules for all SQL standard data types. See the below wiki page. This wiki page
   contains the data types that Tajo will have.

   http://wiki.apache.org/tajo/TajoDataTypes

   This is the first draft. Please feel free to make any suggestions.

2. **hyunsik:** The previous patch was wrong. This is the correct patch.

3. **jihoonson:** +1This is a necessary work to support the standard SQL data types.

I can't still test due to a problem of my machine.If this patch passes all the tests, please commit.

4. **hyunsik:** Thank you for your review.
   All unit tests are passed. I've committed it and resolved it as fixed.
   This change will break the backward compatibility of the catalog against the previous revision of Tajo. We haven't made any release so far. I think now is the right time for this work.

5. **hyunsik:** In addition, I've updated the schema of TPC-H tables.
   http://wiki.apache.org/tajo/TpchBenchmark

6. **jihoonson:** Thanks!

7. **hudson:** Integrated in Tajo-trunk-postcommit #2 (See [https://builds.apache.org/job/Tajo-trunk-postcommit/2/])
   TAJO-57: Recognize Parser and Catalog Standard SQL data types. (hyunsik) (Revision c1c6f83eafdea80d931094285f8da1186f062cf5)
   TAJO-57: Recognize Parser and Catalog Standard SQL data types. (adding missed files) (Revision 0652815f5e8d1f0e0b571539c5f20de545c2e03d)

   Result = SUCCESS
   hyunsik : https://git-wip-us.apache.org/repos/asf?p=incubator-tajo.git&a=commit&h=c1c6f83eafdea80d93109428
   Files :* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/writer/CharWriter.java
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   * tajo-core/tajo-core-backend/src/main/java/tajo/engine/eval/FieldEval.java
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   * tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/CompressedBlockWriter.java
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   * tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/writer/DoubleWriter.java
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* tajo-core/tajo-core-backend/src/main/java/tajo/engine/json/GsonCreator.java
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* tajo-core/tajo-core-backend/src/main/java/tajo/engine/planner/physical/PartitionedStoreExec.java
* tajo-core/tajo-core-storage/src/test/java/tajo/storage/TestStorages.java
* tajo-catalog/tajo-catalog-common/src/test/java/tajo/catalog/TestTableMeta.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/HColumnMetaWritable.java
* tajo-catalog/tajo-catalog-common/src/test/java/tajo/catalog/TestSchema.java
* tajo-core/tajo-core-backend/src/test/java/tajo/engine/planner/global/TestGlobalQueryOptimizer.java
* tajo-core/tajo-core-backend/src/test/java/tajo/engine/query/TestNullValues.java
* tajo-catalog/tajo-catalog-common/src/main/java/tajo/catalog/FunctionDesc.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/reader/TypeReader.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/compress/BitVector.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/reader/DoubleReader.java
* tajo-core/tajo-core-backend/src/main/java/tajo/engine/function/builtin/SumDouble.java
* tajo-core/tajo-core-backend/src/main/java/tajo/engine/parser/EvalTreeBin.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/Block.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/reader/ByteReader.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/writer/FloatWriter.java
* tajo-core/tajo-core-backend/src/main/java/tajo/engine/eval/BinaryEval.java
* tajo-core/tajo-core-backend/src/main/java/tajo/master/TajoMaster.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/Index.java
* tajo-core/tajo-core-backend/src/main/java/tajo/engine/utils/SchemaUtil.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/TableStatistics.java

* tajo-core/tajo-core-backend/src/test/java/tajo/engine/query/TestResultSetImpl.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/writer/Writer.java
* tajo-core/tajo-core-backend/src/main/java/tajo/engine/eval/NotEval.java
* tajo-core/tajo-core-storage/src/main/java/tajo/storage/hcfile/writer/ByteWriter.java
* tajo-core/tajo-core-backend/src/test/java/tajo/engine/planner/TestUniformRangePartition.java

hyunsik : https://git-wip-us.apache.org/repos/asf?p=incubator-tajo.git&a=commit&h=0652815f5e8d1f0e0b571539
Files :* tajo-common/src/test/java/tajo/datum/TestInet4Datum.java
* tajo-common/src/main/java/tajo/datum/Int4Datum.java
* tajo-core/tajo-core-storage/src/main/proto/DataTypes.proto
* tajo-common/src/test/java/tajo/datum/TestInt4Datum.java
* tajo-common/src/main/java/tajo/datum/TextDatum.java
* tajo-common/src/test/java/tajo/datum/TestInt2Datum.java
* tajo-catalog/tajo-catalog-client/src/main/proto/DataTypes.proto
* tajo-common/src/main/java/tajo/datum/Int8Datum.java
* tajo-core/tajo-core-backend/src/main/proto/DataTypes.proto
* tajo-common/src/test/java/tajo/datum/TestInt8Datum.java
* tajo-common/src/test/java/tajo/datum/TestFloat8Datum.java
* tajo-common/src/main/java/tajo/datum/Int2Datum.java
* tajo-catalog/tajo-catalog-common/src/main/proto/DataTypes.proto
* tajo-common/src/main/java/tajo/datum/Inet4Datum.java
* tajo-common/src/main/java/tajo/datum/BitDatum.java
* tajo-common/src/main/java/tajo/datum/Float8Datum.java
* tajo-common/src/test/java/tajo/datum/TestTextDatum.java
* tajo-common/src/main/java/tajo/gson/DataTypeAdapter.java
* tajo-common/src/main/java/tajo/datum/BlobDatum.java
* tajo-common/src/main/java/tajo/datum/Float4Datum.java
* tajo-common/src/main/java/tajo/datum/BooleanDatum.java
* tajo-common/src/test/java/tajo/datum/TestBitDatum.java
* tajo-common/src/main/proto/DataTypes.proto