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diff --git a/src/include/storage/sql_table.h b/src/include/storage/sql_table.h
index d55e9a53b..1b5cb2507 100644
--- a/src/include/storage/sql_table.h
+++ b/src/include/storage/sql_table.h
@@ -75,12 +75,13 @@ class SqlTable {
    * Inserts a tuple, as given in the redo, and return the slot allocated for the tuple.
    *
    * @param txn the calling transaction
    - * @param redo after-image of the inserted tuple. The TupleSlot in this RedoRecord will be
    set to the inserted
    - * location.
    + * @param redo after-image of the inserted tuple.
    + * @return TupleSlot for the inserted tuple
    */
    - void Insert(transaction::TransactionContext *const txn, RedoRecord *const redo) const {
    + TupleSlot Insert(transaction::TransactionContext *const txn, RedoRecord *const redo) const {
        const auto slot = table_.data_table->Insert(txn, *(redo->Delta()));
        redo->SetTupleSlot(slot);
    + return slot;
    }

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/**
diff --git a/src/include/transaction/transaction_context.h
b/src/include/transaction/transaction_context.h
index 910f44443..be1502209 100644
--- a/src/include/transaction/transaction_context.h
+++ b/src/include/transaction/transaction_context.h
@@ -96,11 +96,12 @@ class TransactionContext {

    /**
    * Expose a record that can hold a change, described by the initializer given, that will be
    logged out to disk.
    - * The change can either be copied into this space, or written in the space and then used to
    change the DataTable.
    + * The change should be written in the space and then used to change the SqlTable.
    * @param db_oid the database oid that this record changes
    * @param table_oid the table oid that this record changes
    * @param initializer the initializer to use for the underlying record
    * @return pointer to the initialized redo record.
    + * @warning RedoRecords returned by StageWrite are not guaranteed to remain valid
    forever. If you call StageWrite
    + * again, the previous RedoRecord's buffer may be swapped out, written to disk, and handed
    back out to another

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+ * transaction.
+ * @warning If you call StageWrite, its contents WILL be logged to disk. If you StageWrite
anything that you didn't
+ * succeed in writing into the table or decide you don't want to use, the transaction MUST
abort.
*/
storage::RedoRecord *StageWrite(const catalog::db_oid_t db_oid, const catalog::table_oid_t
table_oid,
                                const storage::ProjectedRowInitializer &initializer) {
diff --git a/test/include/util/tpcc/loader.h b/test/include/util/tpcc/loader.h
index 68f3f71a6..3a1062ba9 100644
--- a/test/include/util/tpcc/loader.h
+++ b/test/include/util/tpcc/loader.h
@@ -142,10 +142,9 @@ struct Loader {
    auto *const item_redo = txn->StageWrite(db->db_oid_, db->item_table_oid_,
item_tuple_pr_initializer);
    BuildItemTuple(i_id + 1, item_original[i_id], item_redo->Delta(), item_tuple_pr_map,
db->item_schema_,
                    generator);
-   db->item_table_->Insert(txn, item_redo);
+   const auto item_slot = db->item_table_->Insert(txn, item_redo);

    // insert in index
-   const auto item_slot = item_redo->GetTupleSlot();
    const auto *const item_key = BuildItemKey(i_id + 1, worker->item_key_buffer,
item_key_pr_initializer,
                                item_key_pr_map, db->item_primary_index_schema_);
    bool UNUSED_ATTRIBUTE index_insert_result =
db->item_primary_index_->InsertUnique(txn, *item_key, item_slot);
@@ -160,10 +159,9 @@ struct Loader {
    txn->StageWrite(db->db_oid_, db->warehouse_table_oid_,
warehouse_tuple_pr_initializer);
    BuildWarehouseTuple(static_cast<int8_t>(w_id + 1), warehouse_redo->Delta(),
warehouse_tuple_pr_map,
                        db->warehouse_schema_, generator);
-   db->warehouse_table_->Insert(txn, warehouse_redo);
+   const auto warehouse_slot = db->warehouse_table_->Insert(txn, warehouse_redo);

    // insert in index
-   const auto warehouse_slot = warehouse_redo->GetTupleSlot();
    const auto *const warehouse_key =
        BuildWarehouseKey(static_cast<int8_t>(w_id + 1), worker->warehouse_key_buffer,
warehouse_key_pr_initializer,

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        warehouse_key_pr_map, db->warehouse_primary_index_schema_);
@@ -188,10 +186,9 @@ struct Loader {
    auto *const stock_redo = txn->StageWrite(db->db_oid_, db->stock_table_oid_,
stock_tuple_pr_initializer);
    BuildStockTuple(s_i_id + 1, static_cast<int8_t>(w_id + 1), stock_original[s_i_id],
stock_redo->Delta(),
        stock_tuple_pr_map, db->stock_schema_, generator);
-    db->stock_table_->Insert(txn, stock_redo);
+    const auto stock_slot = db->stock_table_->Insert(txn, stock_redo);

    // insert in index
-    const auto stock_slot = stock_redo->GetTupleSlot();
    const auto *const stock_key =
        BuildStockKey(s_i_id + 1, static_cast<int8_t>(w_id + 1), worker->stock_key_buffer,
        stock_key_pr_initializer, stock_key_pr_map,
db->stock_primary_index_schema_);
@@ -209,10 +206,9 @@ struct Loader {
    txn->StageWrite(db->db_oid_, db->district_table_oid_, district_tuple_pr_initializer);
    BuildDistrictTuple(static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id + 1),
district_redo->Delta(),
        district_tuple_pr_map, db->district_schema_, generator);
-    db->district_table_->Insert(txn, district_redo);
+    const auto district_slot = db->district_table_->Insert(txn, district_redo);

    // insert in index
-    const auto district_slot = district_redo->GetTupleSlot();
    const auto *const district_key =
        BuildDistrictKey(static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id + 1),
worker->district_key_buffer,
        district_key_pr_initializer, district_key_pr_map,
db->district_primary_index_schema_);
@@ -241,10 +237,9 @@ struct Loader {
    txn->StageWrite(db->db_oid_, db->customer_table_oid_,
customer_tuple_pr_initializer);
    BuildCustomerTuple(c_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id +
1), c_credit[c_id],
        customer_redo->Delta(), customer_tuple_pr_map, db->customer_schema_,
generator);
-    db->customer_table_->Insert(txn, customer_redo);
+    const auto customer_slot = db->customer_table_->Insert(txn, customer_redo);

    // insert in index
-    const auto customer_slot = customer_redo->GetTupleSlot();

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const auto *const customer_key = BuildCustomerKey(
    c_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id + 1),
worker->customer_key_buffer,
    customer_key_pr_initializer, customer_key_pr_map,
db->customer_primary_index_schema_);
@@ -292,10 +287,9 @@ struct Loader {
    const auto order_results =
        BuildOrderTuple(o_id + 1, o_c_ids[c_id], static_cast<int8_t>(d_id + 1),
static_cast<int8_t>(w_id + 1),
        order_redo->Delta(), order_tuple_pr_map, db->order_schema_, generator);
-    db->order_table_->Insert(txn, order_redo);
+    const auto order_slot = db->order_table_->Insert(txn, order_redo);

    // insert in index
-    const auto order_slot = order_redo->GetTupleSlot();
    const auto *const order_key = BuildOrderKey(
        o_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id + 1),
worker->order_key_buffer,
        order_key_pr_initializer, order_key_pr_map, db->order_primary_index_schema_);
@@ -320,10 +314,9 @@ struct Loader {
    BuildOrderLineTuple(o_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id +
1),
        static_cast<int8_t>(ol_number + 1), order_results.o_entry_d,
order_line_redo->Delta(),
        order_line_tuple_pr_map, db->order_line_schema_, generator);
-    db->order_line_table_->Insert(txn, order_line_redo);
+    const auto order_line_slot = db->order_line_table_->Insert(txn, order_line_redo);

    // insert in index
-    const auto order_line_slot = order_line_redo->GetTupleSlot();
    const auto *const order_line_key = BuildOrderLineKey(
        o_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id + 1),
        static_cast<int8_t>(ol_number + 1), worker->order_line_key_buffer,
order_line_key_pr_initializer,
@@ -341,10 +334,9 @@ struct Loader {
        txn->StageWrite(db->db_oid_, db->new_order_table_oid_,
new_order_tuple_pr_initializer);
        BuildNewOrderTuple(o_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id +
1),
            new_order_redo->Delta(), new_order_tuple_pr_map,
db->new_order_schema_);
-    db->new_order_table_->Insert(txn, new_order_redo);
+    const auto new_order_slot = db->new_order_table_->Insert(txn, new_order_redo);

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// insert in index
-   const auto new_order_slot = new_order_redo->GetTupleSlot();
    const auto *const new_order_key = BuildNewOrderKey(
        o_id + 1, static_cast<int8_t>(d_id + 1), static_cast<int8_t>(w_id + 1),
worker->new_order_key_buffer,
        new_order_key_pr_initializer, new_order_key_pr_map,
db->new_order_primary_index_schema_);
diff --git a/test/storage/bwtree_index_test.cpp b/test/storage/bwtree_index_test.cpp
index 498d57283..dca7ce6c9 100644
--- a/test/storage/bwtree_index_test.cpp
+++ b/test/storage/bwtree_index_test.cpp
@@ -107,8 +107,7 @@ TEST_F(BwTreeIndexTests, UniqueInsert) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *const insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = i;
-   sql_table_->Insert(insert_txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    *reinterpret_cast<int32_t *>(insert_key->AccessForceNotNull(0)) = i;
    if (unique_index_->InsertUnique(insert_txn, *insert_key, tuple_slot)) {
@@ -125,8 +124,7 @@ TEST_F(BwTreeIndexTests, UniqueInsert) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *const insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = i;
-   sql_table_->Insert(insert_txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    *reinterpret_cast<int32_t *>(insert_key->AccessForceNotNull(0)) = i;
    if (unique_index_->InsertUnique(insert_txn, *insert_key, tuple_slot)) {
@@ -183,8 +181,7 @@ TEST_F(BwTreeIndexTests, DefaultInsert) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *const insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = i;
-   sql_table_->Insert(insert_txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

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        *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = i;
        EXPECT_TRUE(default_index_->Insert(insert_txn, *insert_key, tuple_slot));
@@ -197,8 +194,7 @@ TEST_F(BwTreeIndexTests, DefaultInsert) {
        insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
        auto *const insert_tuple = insert_redo->Delta();
        *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = i;
-       sql_table_->Insert(insert_txn, insert_redo);
-       const auto tuple_slot = insert_redo->GetTupleSlot();
+       const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

        *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = i;
        EXPECT_TRUE(default_index_->Insert(insert_txn, *insert_key, tuple_slot));
@@ -246,8 +242,7 @@ TEST_F(BwTreeIndexTests, ScanAscending) {
        insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
        auto *const insert_tuple = insert_redo->Delta();
        *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = i;
-       sql_table_->Insert(insert_txn, insert_redo);
-       const auto tuple_slot = insert_redo->GetTupleSlot();
+       const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

        auto *const insert_key =
default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
        *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = i;
@@ -321,8 +316,7 @@ TEST_F(BwTreeIndexTests, ScanDescending) {
        insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
        auto *const insert_tuple = insert_redo->Delta();
        *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = i;
-       sql_table_->Insert(insert_txn, insert_redo);
-       const auto tuple_slot = insert_redo->GetTupleSlot();
+       const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

        auto *const insert_key =
default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
        *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = i;
@@ -395,8 +389,7 @@ TEST_F(BwTreeIndexTests, ScanLimitAscending) {
        insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
        auto *const insert_tuple = insert_redo->Delta();
        *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = i;
-       sql_table_->Insert(insert_txn, insert_redo);

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- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    auto *const insert_key =
default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
    *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = i;
@@ -465,8 +458,7 @@ TEST_F(BwTreeIndexTests, ScanLimitDescending) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *const insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = i;
- sql_table_->Insert(insert_txn, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    auto *const insert_key =
default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
    *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = i;
@@ -531,8 +523,7 @@ TEST_F(BwTreeIndexTests, UniqueKey1) {
    txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_->Insert(txn0, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(txn0, insert_redo);

    // txn 0 inserts into index
    auto *insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -561,8 +552,7 @@ TEST_F(BwTreeIndexTests, UniqueKey1) {
    insert_redo = txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_->Insert(txn1, insert_redo);
- const auto new_tuple_slot = insert_redo->GetTupleSlot();
+ const auto new_tuple_slot = sql_table_->Insert(txn1, insert_redo);

    // txn 1 inserts into index and fails due to write-write conflict with txn 0
    insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -594,8 +584,7 @@ TEST_F(BwTreeIndexTests, UniqueKey2) {
    txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);

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    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn0, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(txn0, insert_redo);

    // txn 0 inserts into index
    auto *insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -621,8 +610,7 @@ TEST_F(BwTreeIndexTests, UniqueKey2) {
    insert_redo = txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn1, insert_redo);
-   const auto new_tuple_slot = insert_redo->GetTupleSlot();
+   const auto new_tuple_slot = sql_table_->Insert(txn1, insert_redo);

    // txn 1 inserts into index and fails due to visible key conflict with txn 0
    insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -652,8 +640,7 @@ TEST_F(BwTreeIndexTests, UniqueKey3) {
    txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn0, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(txn0, insert_redo);

    // txn 0 inserts into index
    auto *insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -675,8 +662,7 @@ TEST_F(BwTreeIndexTests, UniqueKey3) {
    insert_redo = txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn0, insert_redo);
-   const auto new_tuple_slot = insert_redo->GetTupleSlot();
+   const auto new_tuple_slot = sql_table_->Insert(txn0, insert_redo);

    // txn 0 inserts into index and fails due to visible key conflict with txn 0
    insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -705,8 +691,7 @@ TEST_F(BwTreeIndexTests, UniqueKey4) {
    txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,

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tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn0, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(txn0, insert_redo);

    // txn 0 inserts into index
    auto *insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -739,8 +724,7 @@ TEST_F(BwTreeIndexTests, UniqueKey4) {
    insert_redo = txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn1, insert_redo);
-   const auto new_tuple_slot = insert_redo->GetTupleSlot();
+   const auto new_tuple_slot = sql_table_->Insert(txn1, insert_redo);

    // txn 1 inserts into index and fails due to write-write conflict with txn 0
    insert_key = unique_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -789,8 +773,7 @@ TEST_F(BwTreeIndexTests, CommitInsert1) {
    txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn0, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(txn0, insert_redo);

    // txn 0 inserts into index
    auto *const insert_key =
default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -864,8 +847,7 @@ TEST_F(BwTreeIndexTests, CommitInsert2) {
    txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(txn1, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(txn1, insert_redo);

    // txn 1 inserts into index
    auto *const insert_key =

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default_index_>GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -936,8 +918,7 @@ TEST_F(BwTreeIndexTests, AbortInsert1) {
    txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_>Insert(txn0, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_>Insert(txn0, insert_redo);

    // txn 0 inserts into index
    auto *const insert_key =
default_index_>GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1010,8 +991,7 @@ TEST_F(BwTreeIndexTests, AbortInsert2) {
    txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_>Insert(txn1, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_>Insert(txn1, insert_redo);

    // txn 1 inserts into index
    auto *const insert_key =
default_index_>GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1081,8 +1061,7 @@ TEST_F(BwTreeIndexTests, CommitUpdate1) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_>Insert(insert_txn, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_>Insert(insert_txn, insert_redo);

    // insert_txn inserts into index
    auto *insert_key = default_index_>GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1112,8 +1091,8 @@ TEST_F(BwTreeIndexTests, CommitUpdate1) {
    insert_redo = txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t *>(insert_tuple->AccessForceNotNull(0)) = 15445;
- sql_table_>Insert(txn0, insert_redo);
- const auto new_tuple_slot = insert_redo->GetTupleSlot();

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+ const auto new_tuple_slot = sql_table_->Insert(txn0, insert_redo);
+
insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
*reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = 15445;
EXPECT_TRUE(default_index_->Insert(txn0, *insert_key, new_tuple_slot));
@@ -1209,8 +1188,7 @@ TEST_F(BwTreeIndexTests, CommitUpdate2) {
insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
auto *insert_tuple = insert_redo->Delta();
*reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_->Insert(insert_txn, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

// insert_txn inserts into index
auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1240,8 +1218,8 @@ TEST_F(BwTreeIndexTests, CommitUpdate2) {
insert_redo = txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
insert_tuple = insert_redo->Delta();
*reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15445;
- sql_table_->Insert(txn1, insert_redo);
- const auto new_tuple_slot = insert_redo->GetTupleSlot();
+ const auto new_tuple_slot = sql_table_->Insert(txn1, insert_redo);
+
insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
*reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = 15445;
EXPECT_TRUE(default_index_->Insert(txn1, *insert_key, new_tuple_slot));
@@ -1337,8 +1315,7 @@ TEST_F(BwTreeIndexTests, AbortUpdate1) {
insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
auto *insert_tuple = insert_redo->Delta();
*reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_->Insert(insert_txn, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

// insert_txn inserts into index
auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1368,8 +1345,8 @@ TEST_F(BwTreeIndexTests, AbortUpdate1) {
insert_redo = txn0->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
insert_tuple = insert_redo->Delta();

```

```

    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15445;
- sql_table_->Insert(txn0, insert_redo);
- const auto new_tuple_slot = insert_redo->GetTupleSlot();
+ const auto new_tuple_slot = sql_table_->Insert(txn0, insert_redo);
+
insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
    *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = 15445;
    EXPECT_TRUE(default_index_->Insert(txn0, *insert_key, new_tuple_slot));
@@ -1465,8 +1442,7 @@ TEST_F(BwTreeIndexTests, AbortUpdate2) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_->Insert(insert_txn, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

// insert_txn inserts into index
    auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1496,8 +1472,8 @@ TEST_F(BwTreeIndexTests, AbortUpdate2) {
    insert_redo = txn1->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15445;
- sql_table_->Insert(txn1, insert_redo);
- const auto new_tuple_slot = insert_redo->GetTupleSlot();
+ const auto new_tuple_slot = sql_table_->Insert(txn1, insert_redo);
+
insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
    *reinterpret_cast<int32_t*>(insert_key->AccessForceNotNull(0)) = 15445;
    EXPECT_TRUE(default_index_->Insert(txn1, *insert_key, new_tuple_slot));
@@ -1593,8 +1569,7 @@ TEST_F(BwTreeIndexTests, CommitDelete1) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
- sql_table_->Insert(insert_txn, insert_redo);
- const auto tuple_slot = insert_redo->GetTupleSlot();
+ const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

// insert_txn inserts into index
    auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1686,8 +1661,7 @@ TEST_F(BwTreeIndexTests, CommitDelete2) {

```

```

    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(insert_txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    // insert_txn inserts into index
    auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1779,8 +1753,7 @@ TEST_F(BwTreeIndexTests, AbortDelete1) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(insert_txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    // insert_txn inserts into index
    auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
@@ -1873,8 +1846,7 @@ TEST_F(BwTreeIndexTests, AbortDelete2) {
    insert_txn->StageWrite(CatalogTestUtil::test_db_oid, CatalogTestUtil::test_table_oid,
tuple_initializer_);
    auto *insert_tuple = insert_redo->Delta();
    *reinterpret_cast<int32_t*>(insert_tuple->AccessForceNotNull(0)) = 15721;
-   sql_table_->Insert(insert_txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table_->Insert(insert_txn, insert_redo);

    // insert_txn inserts into index
    auto *insert_key = default_index_->GetProjectedRowInitializer().InitializeRow(key_buffer_1_);
diff --git a/test/storage/bwtree_key_test.cpp b/test/storage/bwtree_key_test.cpp
index 963afae9f..fec0717c6 100644
--- a/test/storage/bwtree_key_test.cpp
+++ b/test/storage/bwtree_key_test.cpp
@@ -244,8 +244,7 @@ class BwTreeKeyTests : public TerrierTest {
    index->ScanKey(*txn, *key, &results);
    EXPECT_TRUE(results.empty());

-   sql_table.Insert(txn, insert_redo);
-   const auto tuple_slot = insert_redo->GetTupleSlot();
+   const auto tuple_slot = sql_table.Insert(txn, insert_redo);

```

```
EXPECT_TRUE(index->Insert(txn, *key, tuple_slot));
```

```
diff --git a/test/util/tpcc/new_order.cpp b/test/util/tpcc/new_order.cpp
```

```
index 7a380be3c..5a919b96f 100644
```

```
--- a/test/util/tpcc/new_order.cpp
```

```
+++ b/test/util/tpcc/new_order.cpp
```

```
@@ -90,10 +90,9 @@ bool NewOrder::Execute(transaction::TransactionManager *const  
txn_manager, Datab
```

```
    *reinterpret_cast<int8_t
```

```
*>(new_order_insert_tuple->AccessForceNotNull(no_d_id_insert_pr_offset)) = args.d_id;
```

```
    *reinterpret_cast<int8_t
```

```
*>(new_order_insert_tuple->AccessForceNotNull(no_w_id_insert_pr_offset)) = args.w_id;
```

```
- db->new_order_table_->Insert(txn, new_order_insert_redo);
```

```
+ const auto new_order_slot = db->new_order_table_->Insert(txn, new_order_insert_redo);
```

```
    // insert in New Order index
```

```
- const auto new_order_slot = new_order_insert_redo->GetTupleSlot();
```

```
    const auto new_order_key_pr_initializer =
```

```
db->new_order_primary_index_->GetProjectedRowInitializer();
```

```
    auto *const new_order_key =
```

```
new_order_key_pr_initializer.InitializeRow(worker->new_order_key_buffer);
```

```
@@ -119,10 +118,9 @@ bool NewOrder::Execute(transaction::TransactionManager *const  
txn_manager, Datab
```

```
    *reinterpret_cast<int8_t
```

```
*>(order_insert_tuple->AccessForceNotNull(o_all_local_insert_pr_offset)) =  
    static_cast<int8_t>(args.o_all_local);
```

```
- db->order_table_->Insert(txn, order_insert_redo);
```

```
+ const auto order_slot = db->order_table_->Insert(txn, order_insert_redo);
```

```
    // insert in Order index
```

```
- const auto order_slot = order_insert_redo->GetTupleSlot();
```

```
    const auto order_key_pr_initializer =
```

```
db->order_primary_index_->GetProjectedRowInitializer();
```

```
    auto *const order_key = order_key_pr_initializer.InitializeRow(worker->order_key_buffer);
```

```
@@ -263,10 +261,9 @@ bool NewOrder::Execute(transaction::TransactionManager *const  
txn_manager, Datab
```

```
    order_line_insert_tuple->AccessForceNotNull(ol_dist_info_insert_pr_offset)) =  
varlen_entry;
```

```
}
```

```
- db->order_line_table_->Insert(txn, order_line_insert_redo);  
+ const auto order_line_slot = db->order_line_table_->Insert(txn, order_line_insert_redo);
```

```
// insert in Order Line index
```

```
- const auto order_line_slot = order_line_insert_redo->GetTupleSlot();  
  const auto order_line_key_pr_initializer =  
db->order_line_primary_index_->GetProjectedRowInitializer();  
  auto *const order_line_key =  
order_line_key_pr_initializer.InitializeRow(worker->order_line_key_buffer);
```