At UniVerse 10.3, modifications made to the new.record contents in a trigger subroutine are not applied when the WRITE completes.

Abstract

When using a BEFORE UPDATE or INSERT trigger on a file where the trigger subroutine modifies the new.record contents (i.e. argument 7), the modified contents of new.record are not applied when the record is written. One situation where this technique can be used is for audit purposes by adding a timedate stamp of when the record was last updated. The issue described below exists at UniVerse Release 10.3.0 and above.

Solution

To illustrate, create a trigger subroutine as follows.

```
>ED BP TRIGGER.TEST
New record.

----: I
0001= SUBROUTINE TRIGGER.TEST(trigger.name, schema, table,
event, time, new.recordID, new.record, old.recordID, old.record,
association, association.event, count, chain.cascade, cascade)
0002= new.record<10> = DATE()
0003= crt new.record<10>
0004= return
0005= end
0006=
Bottom at line 5.
----: fi
"TRIGGER.TEST" filed in file "BP".
>BASIC BP TRIGGER.TEST
Compiling: Source = 'BP/TRIGGER.TEST', Object =
'BP.O/TRIGGER.TEST'


Compilation Complete.
>CATALOG BP *TRIGGER.TEST TRIGGER.TEST
"*TRIGGER.TEST" cataloged.
>
```

The following file will have the trigger.

```
>CREATE.FILE TRIG.FILE 2 1 1
Creating file "TRIG.FILE" as Type 2, Modulo 1, Separation 1.
Creating file "D_TRIG.FILE" as Type 3, Modulo 1, Separation 2.
Added "@ID", the default record for RetrieVe, to "D_TRIG.FILE".
```

```
>
>CREATE TRIGGER TRIGGER.TEST BEFORE INSERT OR UPDATE ON
TRIG.FILE FOR EACH ROW CALLING "*TRIGGER.TEST"
Adding trigger "TRIGGER.TEST"
>
```

Add a new record to the TRIG.FILE file. After the update field 10 should contain the current internal date.

```
>>ED TRIG.FILE 100
New record.

----: I LINE ONE
0001: LINE ONE
Bottom at line 1.
----: FI
15157
"100" filed in file "TRIG.FILE".
>
>ED TRIG.FILE 100
1 lines long.

----: P
0001: LINE ONE
Bottom at line 1.
----: EX
>
```

Note, the update made in the trigger subroutine was lost (i.e. field 10 was not updated - as shown that the bottom of the record is at field 1).

A fix for the issue is currently planned to be included in UniVerse 10.3.x patches being released beginning in August 2009.