## preTransaction Validation

dstud5b.w - preTransactionValidate

```
for each rowObjUpd where lookup(rowObjUpd.rowmod, "a,u") ne 0:
    if not can-find(state of rowobjupd) and rowobjupd.countrycode = "USA" then
do:
    run addmessage("State code " + rowobjupd.stcode + " not valid for
Student: "
        + string(rowobjupd.studentId), "state", "student").
    end.
end.
if anymessage() then return "State code(s) is/are not valid".
END PROCEDURE.
```

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<u>File Navigation</u>	
studentId: 000001	
First Name: Abraham	
Last Name: Bush	
Address: 527 Baltic Place	
city: Louisville	
State/Province: TIM	
Zip Code: 40017	
Country: USA	
phone: (502) 392-4578	
Graduated?: no Year: 2001	
1211年前121111111111111111111111111111111	



## preTransaction Validation

- In wstudpretran.w, we are checking to see if the state field in the student record is valid for U.S. students.
  - In the SmartDataObject, dstud5b.w, the procedure preTransactionValidate is created.
  - It is necessary to read the rowObjUpd temp-table and look for records that have been added or updated ("a" or "u").
  - This procedure introduces the **addMessage** procedure call which also raises the error condition.
    - It takes three arguments:
      - ▲ The message string
      - ▲ The error condition field (or a ? if it doesn't pertain to a given field)
      - ▲ The error condition table (or a ? if it doesn't pertain to a given table)
    - The addMessage procedure is necessary if the SmartDataObject is running on an Application Server. 4GL message statements will only appear on the AppServer log and will not be seen by the end-user. However, the addMessage procedure will display messages to the end-user no matter where the SmartDataObject executes.
      - ▲ Optionally, the **anyMessage()** function may be used to determine if there are any messages on the message queue.
    - Note that since this procedure has database references, it should be performed on the server. The **DB-REQUIRED** togglebox is now checked.
  - Notice that multiple rowObjUpd records are read. This is because the server-side validation does not occur until the transaction is attempted to be committed.