Automated Regression Testing

# User Epic

As a tester I want to identify unintended and valuidate expected changes in SQL data caused by a DR deployment.

*Initial version will focus on DR deployments that include the deployment of a BizRule SQL script or ETL dtsx package.*

## Tell me when to stop

* Tests can configured via the Data Request user interface.
* Tests are executed automatically at package runtime.
* Test results can be viewed and navigated via SSMS Custom Reports.

## How it does it

### Automatic regression test at package runtime

For each table affected by/specified in a DR (active table)

1. Copies a snap shot of an active table to the TestLog database (pre-execution snapshot table) on current server before a package is executed
2. waits the package/job execution to complete
   1. active table is called post-execution snapshot table
3. performs/logs/summarizes a diff between pre/post-execution versions of the active table
4. drops pre-execution snapshot tables from TestLog

### Identify active tables

#### Testers

Display a DR’s active tables in the DR UI. Allow tables to be removed and added. Add link from DR to SSRS report of test results.

#### Developers

TargetTable column in DQMF\_BizRule table specifies the active tables of the DR these tables are displayed in DR GUI for review. Add DataRequestID parameter to DQMF.dbo.SetBizRule proc. Resolve many to many relationship between DR and BR with a new DQMF\_BizRuleDataRequest mapping table. Execution of SetBizRule inserts BR GUID and DR ID into mapping table. These tables are displayed as suggested active tables in the DR GUI.

### Implementation

### Regression Test Results

# Future Versions

## Support for testing views and arbitrary queries

## Support for comparing pre-execution snapsnot to a different underlying dataset