# GXDB Regression

## Introduction

“GXDBRegression” is a python based tool for GGX Sybase database schema regression. It runs SQL scripts in parallel and perform DB schema validation. The regression tests are a comprehensive set of SQL tests based on GXDB schema. It generates avn output schema in XML format and validates with provided verified schema.

## Configuration

Regression tool configuration settings are provided in XML format. These settings mainly define dbisql database credentials (uid, pwd and dbf), requisite directories paths (Source, Expected Results and log) and performance parameters (semaphore, debug). The performance parameters are for debugging purposes (don’t change). Configuration file can be found at

GXDBRegression/Configuration/configuration.xml

## Running the Tests

GXDBRegression can be run against any GXDB database. It starts up multiple Sybase server(max =10) to run groups of tests in parallel. It process each SQL scripts (<Source> parameter) and feed to dbserver (<dbisql> parameter) . In turn, DBServer generates XML formatted results set (<Result> parameter) for each SQL script. The generated XML files are validated with corresponding files in already provided dataset (<Expected>)

The very first run of GXDB regression results in all test cases failures as there is no user provodide expected result set. User analyse and verifies first generated dataset. The <Expected> parameter is set to path to verified dataset. Later, the <Expected> dataset is a benchmark for subsequent runs of GXDB regression.

Regression command is as follows

python.exe regression.py –c “path/configuration.xml”

## Metrics

## Install

Install Python 3.4.2 for windows.  
Intstall sqlparse-0.1.15. See package installation instruction.

## Dependencies

Python 3.4.2 ([https://www.python.org](https://www.python.org/))

SQLParse(<https://github.com/andialbrecht/sqlparse>)

Dbisql.com(Installed as part of GGX installation).