# Setup

1. I’m assuming that first we need to create a SQL Source Control project
   1. TBC why is this mentioned, because PoC v2 proved that it is not needed.
2. Then, create SQL Change Automation project which is using the state folder generated at step 1
   1. While creating the project, there is a step for options, one of them is filters
      1. I don’t see an option to configure options while creating a project in-place, however, it can be created using SSMS and the SQL Tool Belt (TODO: Ref the exact tool)
   2. There is a step to choose comparison options, this needs to be carefully reviewed and recorded somewhere
   3. OR it might be possible to just pull all of this locally from the repo, and just open the existing project in development machine
3. It asks to create a shadow DB
   1. This database’s purpose shouldn’t be any other than the tool itself
   2. But when opening the project within Visual Studio, this database is not usable because it is using it’s own created temporary DB in the background
      1. Probably we won’t use Visual Studio for that…

# Worflow

1. Make changes to the local development database
   1. Just a reminder – NEVER TOUCH SHADOW DATABASE CREATED EARLIER BECAUSE THIS WILL MESS UP ALL THE CHANGES DETECTION. Otherwise, quite some time will need to be spent to fix it, because shadow database is not Source Controlled and we can’t restore it easily to the previous version.
2. Load the SQL Change Automation tool and open the project if it’s not yet loaded.
3. Move to Generate Migration tab so databases are compared and changes are detected
4. If happy with the changes, click Generate migrations to generated .sql scripts required
5. Then, move to Verify tab to confirm that this migration is correct
   1. When playing around I created a few users under my Windows account and this apparently is wrong (might also be related that I assigned db\_owner roles for both new users). But anyway, this is where we should look for confirmation that our changes are valid
   2. Cannot be 100% sure if it detects all bad SQL, but any errors should also be detected when streamlined the changes to the pipeline and build agent tried generating a build
6. If no issues in the Verify tab, then move to Version Control tab, commit the changes and optionally push them to remote repository.