

CueTip

Archiving GeoCue Projects in Microsoft SQL Server



GeoCue Group Support
January 16, 2015
Revision 2.0

Introduction

GeoCue Server runs on top of a SQL database. The database stores all the metadata about projects as well as all internal links to the geospatial data stored in the GeoCue warehouses. The database may be a full SQL database installation or a limited edition of SQL such as Microsoft SQL Server Express (Express) or Microsoft SQL Desktop Engine (MSDE). Express and MSDE are free versions of SQL limited to five concurrent users and a maximum database file size of 10GB (SQL Express 2008 R2 and later) or 2 GB respectively. Note that it is very important to make sure regular GeoCue database backups are integrated with your standard IT backup and archiving policies. Failure to back-up your GeoCue database on a regular basis can result in a significant loss of project data in the case of a hardware or software failure.

Once the database size limit will be exceeded GeoCue will no longer be able to store additional metadata about projects as SQL will be unable to allocate additional space in the database - even if the current database size has yet to cross that threshold. Before the file size reaches the database limit of an Express version, it is recommended that a user upgrade to a full version of SQL Server. If a user does not have the ability to upgrade to a full version of SQL Server then the next best option is to delete old or unnecessary projects within the database using project utilities in the GeoCue Client. As a last resort one may archive projects from the SQL database, to be restored if they are needed at a later point in time. If the decision is made to archive projects from the database, then a knowledgeable SQL user should perform the steps as outlined in this CueTip.

The archived GeoCue project tables will need to be stored within a new database that is created using the GeoCue template database. An issue with having an Archive GeoCue database is that the archive database will be out-of-date once GeoCue is updated. Hence, before being able to return GeoCue Projects to the original database, the archive database will need to be updated first by following the general procedures for updating the standard GeoCue database.

This CueTip walks through creating a new database, copying and deleting project tables, updating the archive database and restoring project tables.

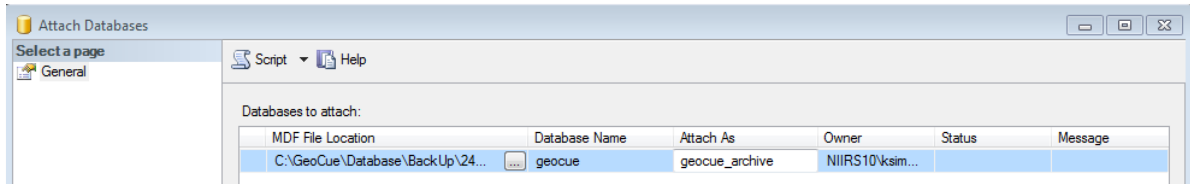
Important! Read and understand all of the directions in this CueTip prior to starting the process of archiving projects from the SQL database.

Preparing the GeoCue Database

- 1) Determine all the project ID's which are to be archived.
- 2) Stop the GeoCue Server Service.
- 3) Stop the SQL Server Service.
- 4) Make a physical back-up copy of the SQL Server files (*.MDF and *.LDF).
- 5) Restart the SQL Server Service.

Create a new Database within SQL

- 1) In the GeoCue Server installation folder, typically "C:\Program Files\GeoCue\GeoCue Server\DBTemplate" locate the GeoCue_Data.MDF and GeoCue_Data.LDF files.
- 2) Copy these two files to another location on the GeoCue Server machine, ie "c:\GeoCue\Database\Archive" in order to create an archive database. Change the properties to ensure that these two files are not set to read only.
- 3) Open SQL Server Management Studio and login into the instance that houses the current GeoCue Database.
- 4) Right-click on Databases and select Attach.
- 5) Browse to the location of the archive database and open the GeoCue_Data.MDF file.
- 6) Modify the "Attach as" name to call the database, "geocue_archive".



- 7) Click OK to add the database to SQL
- 8) There should now be the current GeoCue database, named "geocue", and the new archive database, named "geocue_archive", within the same SQL Server Instance.

Copy and delete Tables within SQL

- 1) Identify the project ID's that will be archived.
- 2) In the *geocue_archive* database locate the table called *dbo.GCProject*
 - a. Rename the table *dbo.GCProject_orig*
- 3) Expand the *dbo.GCProject_orig* table and under *Keys* rename *PK_Project*
- 4) There are a couple of different ways to achieve the results of the next step, the following is just one example:
 - a. Right-click on the *geocue* database and select Tasks → Export Data.
 - i. Specify the Server Name and the database the data is coming from (*geocue*)
 - ii. Click Next and specify the Server Name and the database that the data is going to (*geocue_archive*)
 - iii. Select the option to *Copy data from one or more tables or views*

- iv. Select *dbo.GCProject* and then all the tables that correspond to the Project ID that is going to be archived.
 1. As an example, all the tables that start with PROJ80298 should be selected.
 - v. Choose to *Run Immediately*
- 5) Verify that all the columns exist within each project
 - 6) Delete those tables from the original geocue database.
 - 7) Compress the geocue database.
 - 8) Restart the GeoCue Server Service.

At this point the projects will still exist in the project list, meaning they will still be visible during Open Project, however they will not be able to be opened and will show no information.

Updating the Archive Database before restoring Tables*

*If GeoCue updates have been performed on the main database then the following steps will need to be completed before the tables can be restored to the master database.


- 1) Stop the GeoCue Server Service.
- 2) Open regedit.exe.
- 3) Browse to the key DBName key found in "HKEY_LOCAL_MACHINE\SOFTWARE\GeoCue\GeoCue Server".
- 4) Select DBName and modify it from "geocue" to "geocue_archive".
- 5) Open Database Manager and update the database.
- 6) Return to regedit.exe and change DBName back to "geocue".
- 7) Continue to the section entitled *Restore Tables to the Master GeoCue Database*.

Restore Tables to the Master GeoCue Database*

*If no GeoCue updates have been performed then the steps to return the tables are the same but in reverse, except there is no need to include the *dbo.GCProject* table.


- 1) Stop the GeoCue Server Service.
- 2) Identify the project ID's that will be restored.
- 3) There are a couple of different ways to achieve the results of the next step, the following is just one example:
 - a. Right-click on the geocue_archive database and select Tasks → Export Data.
 - i. Specify the Server Name and the database the data is coming from (geocue_archive)
 - ii. Click Next and specify the Server Name and the database that the data is going to (geocue)
 - iii. Select the option to *Copy data from one or more tables or views*
 - iv. Select all the tables that correspond to the Project ID(s) that are going to be archived.

1. As an example, all the tables that start with PROJ80298 should be selected.
 - v. Choose to *Run Immediately*
- 4) Delete those tables from the geocue_archive database.
- 5) Compress the geocue_archive database.
- 6) Restart the GeoCue Server Service



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