Batch Image Attachment Utility

Overview

This application was designed to copy, resize, and rename photos from one folder to another folder (conforming to Manatron ProVal's naming conventions) and optionally insert records into ProVal. For each photo, it validates the parcel number and extension number, displaying the physical address, area, and sequence number. It can be used in conjunction with Manatron's AddImage.exe utility, or in place of it.

 This has been tested with ProVal 7.11.4 (patch 7) both integrated and non-integrated with Manatron GRM by two different jurisdictions. However, **this application has not been approved or tested by Manatron**. *Use at your own risk.* Test it against your test database before running against your live/production database.

This can be used with Thomson-Reuter's ProVal version 9, but you'll need to check the "Using ProVal Version 9" checkbox in the settings so the appropriate SQL statement is executed to fetch the parcel address information from the parcel_base table.

The latest version can be found at ftp://ftp.borough.kenai.ak.us/it/ImageAttach/ImageAttach_2.6.zip.
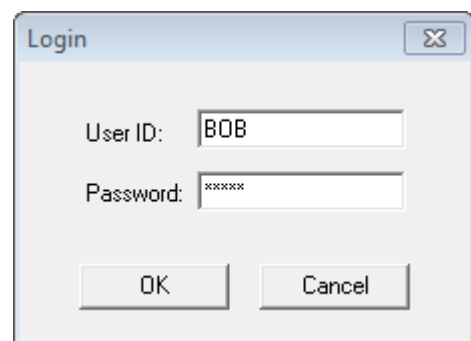
The application was written in VB.NET using Visual Studio 2010 targeting the .NET 2.0 Framework. The DevExpress (Win Suite v11.1) components were used, and there are references to ProVal components. This means that ProVal must be installed on the machine that this program will run on. A zip of the source code is also available at the above ftp site. If you make enhancements, please let me know so others can benefit as well - mfrederickson@borough.kenai.ak.us

Installation

Once you download the zip file, unzip it and run the setup.exe. If you have a previous version installed, you will need to uninstall it first. Remember, there is a prerequisite that ProVal be installed on the workstation that this will be running on. Once installed, you will find an icon on your desktop labeled ImageAttach. You can also find it under the Start Menu, under Kenai Peninsula Borough.
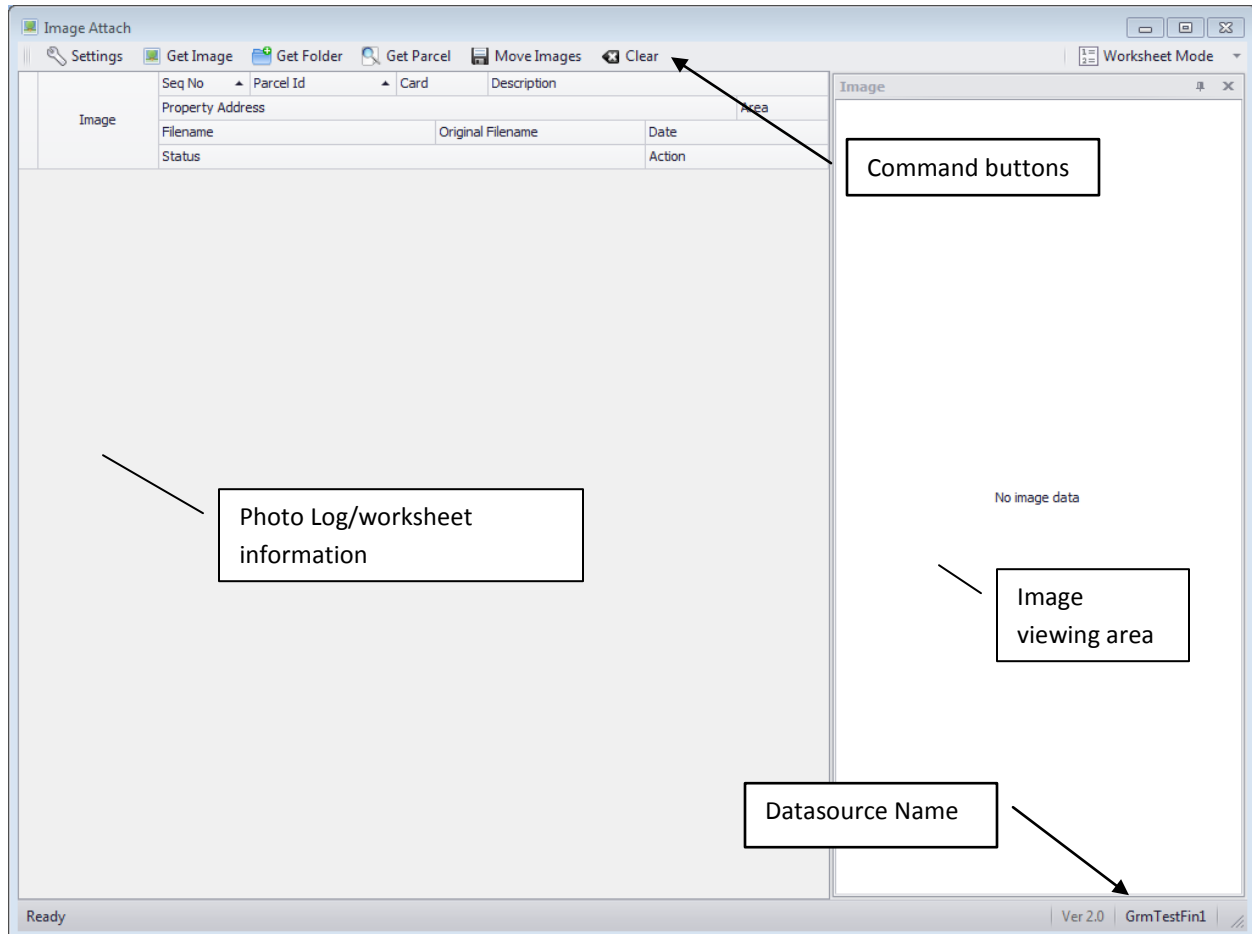

The application uses ProVal's settings to connect to the database and to check security. The user must have "update" rights on "Batch Attach Images" under ProVal Security to be able to run this application.

If ProVal is already running when you start this application then you will not be prompted to log in when you start this application.
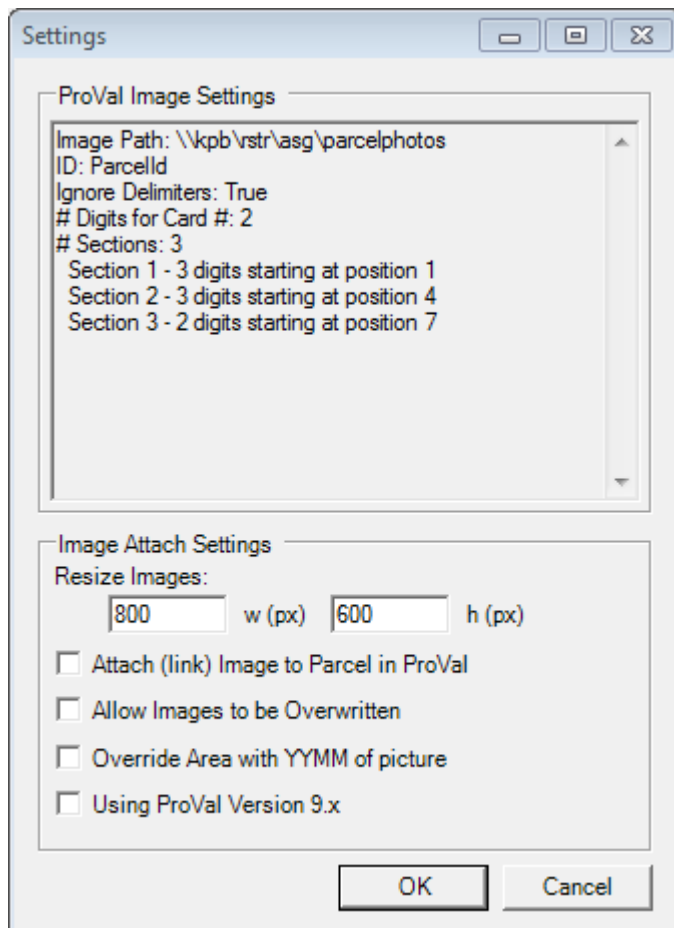
Usage

When you start the application the initial screen will appear similar to that shown below.

The **datasource name** in the lower right corner of the window shows you which database the lookup information is coming from and will be updated when the images are attached to the parcels. This comes from the ProVal settings. So if you want to change this then close this application, go into ProVal change it there, and then restart this application.

Settings

The **Settings** command button shows the ProVal Batch Image settings and the resize settings (shown below).

The *resize* and *attach* settings can be changed here because they only apply to this application. The measurements for the dimensions for the resized images are in pixels.
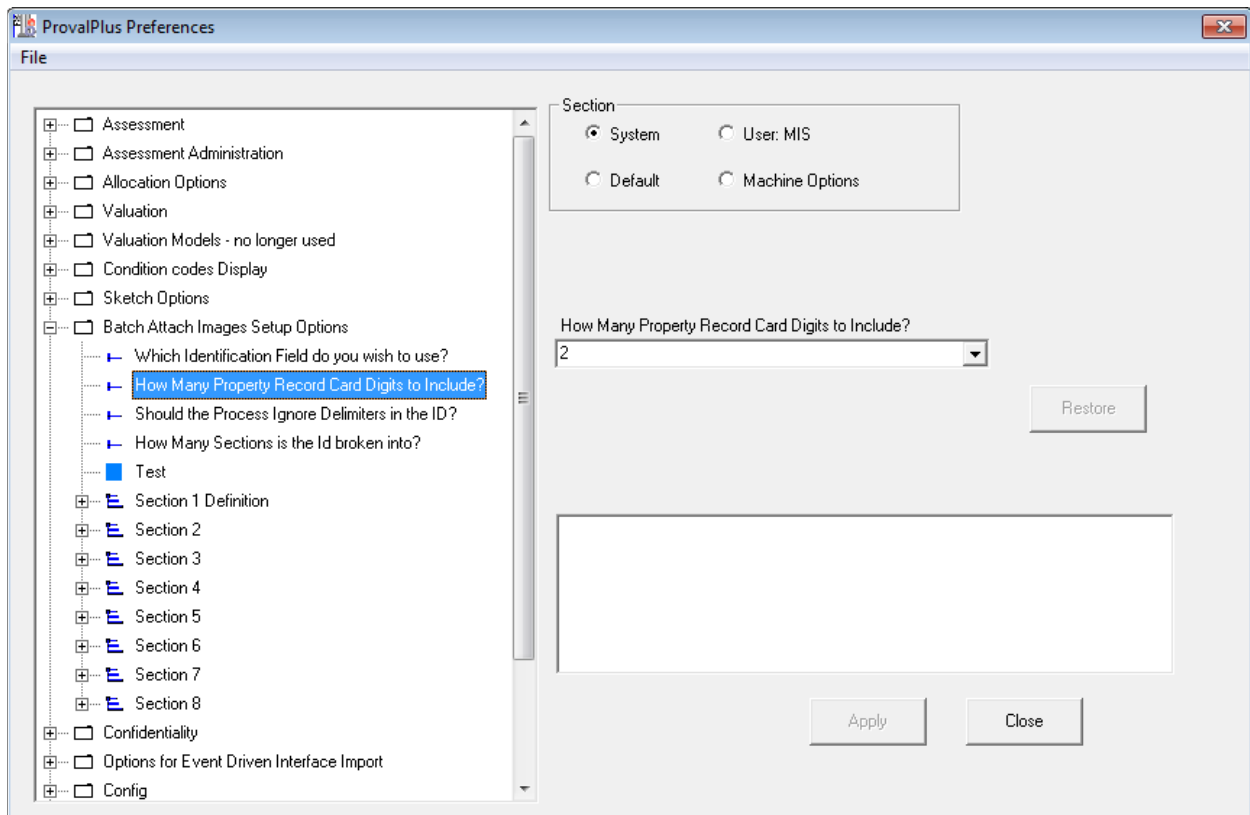
If the "*Attach Image to Parcel in ProVal*" checkbox is checked, then the "Send to ProVal" command button will show on the main window instead of the "Move Images" command button, and once the photos have been copied, renamed, and resized, they will be linked to their parcel in ProVal (entries will be inserted into the image_index table).

If this option is unchecked then no data will be modified in ProVal. The images can be copied to their destination directory but they will not be linked to their parcel in ProVal. You will need to run ProVal's "Imaging" utility to individually or batch attach them.

The *ProVal Image Settings* can be changed in ProVal under Prefs (System)->Batch Attach Images Setup Options, as shown below.

If the "Allow Images to be Overwritten" checkbox is not checked, then the system will ensure unique filenames.

The "Override Area with YYMM of Picture" checkbox will cause the file name generation routine to use the year and month of the photo instead of the area of the parcel. Typically the image filename is generated by using the Image Path, the Area, and then the Sections, and then the extension.
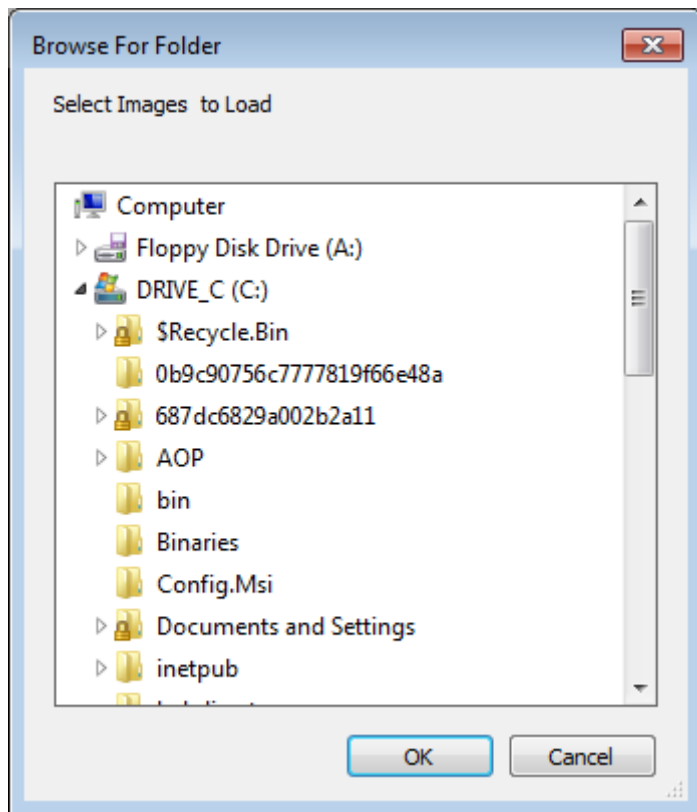

The "Using ProVal Version 9.x" checkbox will cause the SQL used to fetch the parcel address from the parcel_base table to use the *PropertyStreet* column instead of the *prop_street* column.

Loading Images

The Get Image command button will prompt for an image to import into the worksheet. Multiple images can be selected.
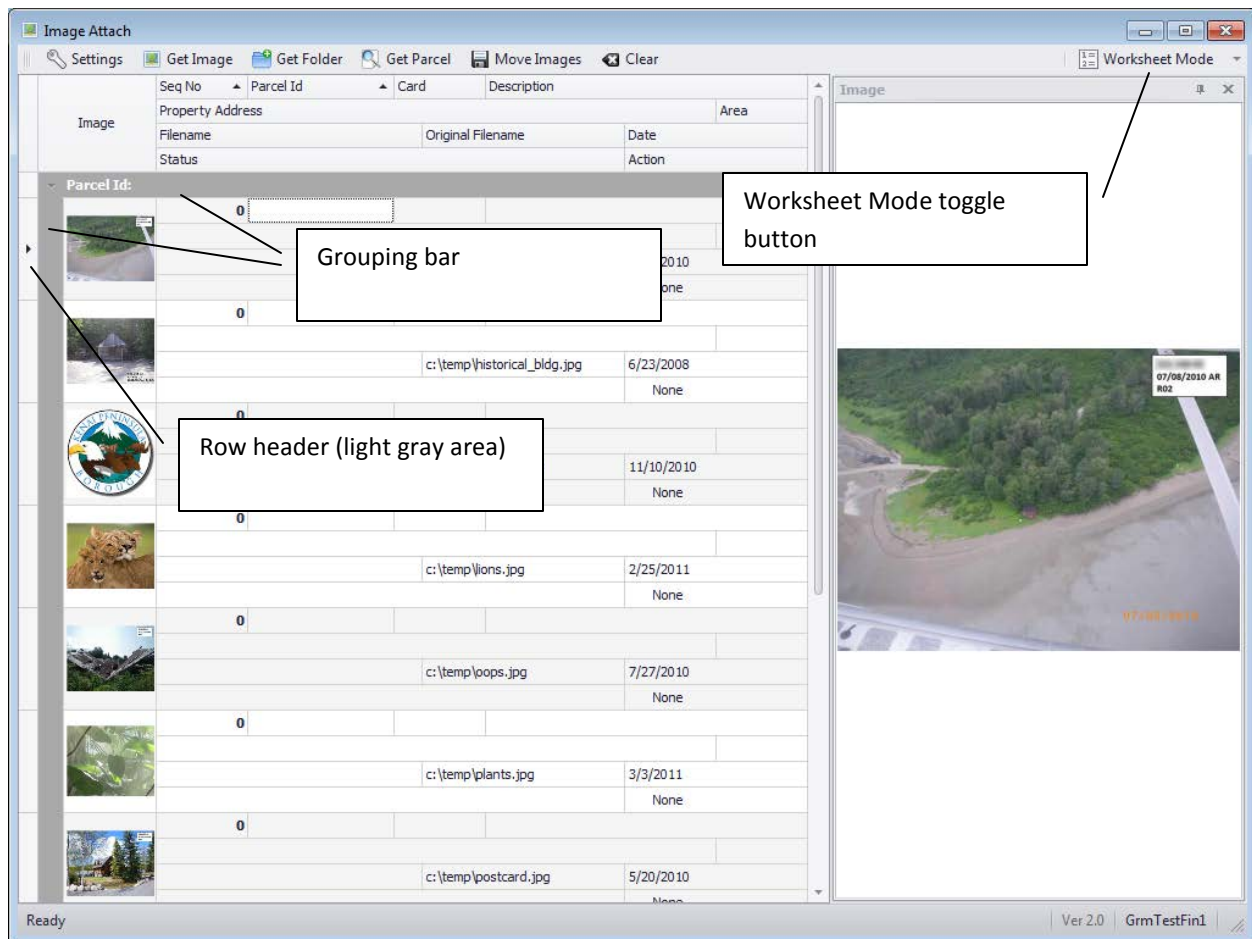
The Get Folder command button will prompt for a folder from which to import photos into the worksheet. The worksheet will be cleared before the folder is imported.

Once you choose the folder and select OK, the images will appear in the list. Currently, only JPG images are loaded. The application remembers the folder and defaults to it next time you choose this command button.
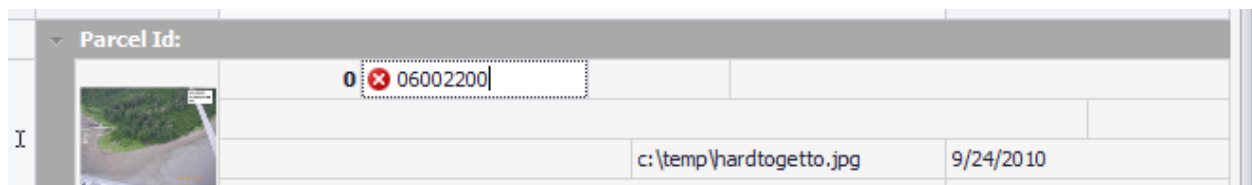
When the images are loaded into the list, the date is extracted from the EXIF information, if available, and if not the date comes from the date of the file.

The default view (of the worksheet area) is to have the entries sorted by Parcel ID and Sequence Number, and grouped by Parcel ID. Since there are no Parcel ID's specified initially, they are all grouped under a blank Parcel ID. If you don't want this grouping to occur, you can click on the Worksheet Mode toggle button. However, the Worksheet Mode view does not display related images (already in ProVal) either.

Only the Parcel ID, Card, and Description columns are editable in the grid.

When you type in a Parcel ID and tab out of the field, it will attempt to look up the parcel in the parcel_base_data view. If it does not find it, it will display an exclamation mark in the field indicating so. You can see the specific message by hovering the mouse pointer over the red exclamation point. If it does find the parcel then it will display the property address, area (township number) and the next available sequence number (from the image_index table); it will also pull in the related images for that parcel from ProVal (so you can resequence them, if desired).

Once you key in the extension (card #) the application will validate that it exists (for the selected parcel). If it does not then a validation message will appear like before. If it does exist, then the filename will be generated based on the ProVal Image Settings.

The Status column reflects the results of the file copy or database update (when updating ProVal, as indicated by the Action column).

To exclude some photos (rows) from processing select the row by clicking on the row header (gray area to the left of all of the columns) which will select the entire row, and then selecting "Delete" from the context menu that appears when you right-click on the row.

If the row you are deleting is an image that you imported into the worksheet and have not yet saved, then it will only remove the item from the worksheet—it will not delete the image from the disk.

If the row you are deleting is an image already in ProVal, then the entry in the worksheet will be marked as Deleted and its sequence number will change to 9999. When you save your changes (via the Send to ProVal button) then the image_index record will be deleted, and the related image file will be deleted.

Related images that are pulled into the list when a Parcel ID is keyed in appear in italics. These records can only have their description changed, or their sequence changed (by right-clicking on the row and choosing the appropriate option to move the row).
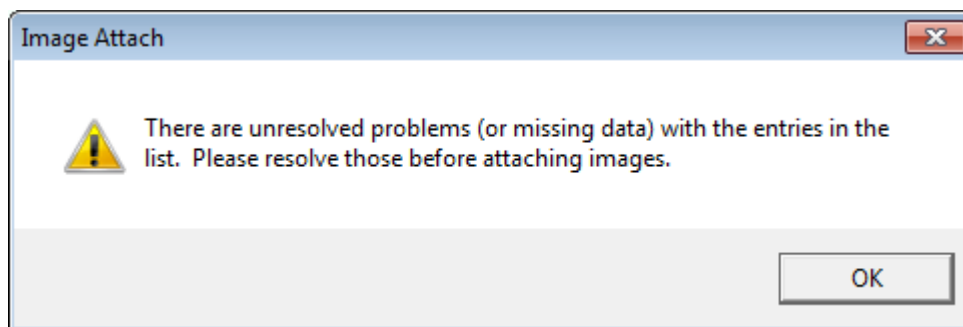
Move Images/Send to ProVal

If the command button reads "Move Images" then the images will be copied to their destination directory (as shown in the Filename column of the grid). During this process they are resized.

If the command button reads "Send to ProVal" then the images will be copied (as just mentioned) and records will be inserted into the image_index table in ProVal which associates each image with a parcel/extension. In addition, any records that have been resequenced will be updated and any records that have been marked as deleted will be deleted.

But before either of these tasks take place, a final validation check is made to ensure that the data required to compose the destination location of the file has been specified. If any validation errors occur then a message similar to the following will appear.

This means that there is still an exclamation mark showing in a cell (which indicates a data validation error) or a Parcel Id cell or Card cell is empty. These must be filled in before images can be moved or attached to ProVal. You may need to leave Worksheet Mode (if you went into that Mode) and Expand all Groups (in the context menu on a group row) to find the records that are not valid.

Once the process has completed a status message will appear in the status column for each row. This indicates which images got copied and/or loaded into ProVal.

If there is an error on a record and it does not get loaded into ProVal, but other records in the list do, then you can simply correct the issue with the row that did not get loaded, and try to save again.

Clearing the List

Clicking on the "Clear" command button will remove all entries from the grid so that you can load more photos into the list to process.

Problems?

If you have problems or need help, email me at mfrederickson@borough.kenai.ak.us