geoUte

Simple Tools.... for the Boring Jobs!

u L i s t

Directory and File Catalogue Generator

User Guide

U01.20.01

GDD

GEOLOGICAL DATA DESIGN

GEOLOGICAL DATA DESIGN

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DOCUMENT CONTROL

(*Vision, version, revision and rear-vision control*)

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uLIST REGISTRATION INFORMATION

uList is a licenced software application from Geological Data Design

Your uList licence keys are provided during the activation of this software. This Activation Key is required when you run uList for the first time.

Registration of this software entitles you to free technical support, along with free minor updates, and upgrade pricing on future uList releases.

For future reference, record your Activation Key below.

COPYRIGHT NOTICE

WELCOME!

Welcome to the geoUte garage, a collection of fundamental data identification, content analysis and preparation tools and utilities.

This document walks you through the uCrop utility, a tool to help make your investment in technical photos and images more accessible, usable, and thus more valuable

And remember, when all else fails, try reading the instructions!

INTENDED AUDIENCE

While this utility is primarily aimed at your geological exploration and mining images, it is also a capable generic processing tool for all of your images

Anyone who works with technical photos and other images related to resources industry data will find this utility of value

PRE-REQUISITES AND ASSUMPTIONS

No other software or devices are required to enable the use of this application, however other geoUte utilities will prove useful in the generation of file lists (**uList, uIndex**), the initial identification and naming of image files (**uLabel**), and the identification of related data files (**uLook**) for example

No specific skills or experience are required for the use of the base features and capabilities of uCrop, however, a basic understanding of the standards and procedures for the management of your drill core, table and chip photos will prove helpful for the use of those more specialised functions

CREDITS

Many people have contributed to the imagination, inspiration, crystallization, development and the bashing into shape of this application including the following –

(Everybody these days seem to need someone to blame….)

Christophe Louis

Tony Shellshear

Robyn Morley

Louise Shellshear

DOCUMENT CONVENTIONS

The following conventions relate to formatted text and other content -

- Text – read it…
- **Bold Text** – read it **carefully**
- **Italic text** – Read it with your head on an angle; they are generally internal draft notes and should not be in here if you are an end user…
- **Curious terms, odd words, flippant comments and various attempts at geological humour** are inserted to provide light entertainment, and to find out who actually reads this stuff… (Examples – The **NBN** and **CTC** approach to our systems design philosophy…)

SPECIAL NOTICE ICONS

GDD's marginal icon family - Throughout our documentation you will find various icons designed to draw you attention to ideas, suggestions, strong suggestions, baseball bats and other various forms of reader encouragement, direction, belittlement or abuse. These include –

Tip ! – You might find it worthwhile to consider …

Note ! – You WILL find it worthwhile if you…

Shortcut ! – Instead of following all the dribble above, a faster way to achieve this is…

Important ! – Please observe the following or you may have to come back here and do some of these boring bits again…..

Warning! – Doing this, or failing to do this, could have unexpected ramifications…

Danger ! – Doing, or failing to do this WILL have dire consequences that may lead to the end of the Universe as you know it!

So, get it? … **Got it!** … **GOOD!!!!**

Please read on !!!

TERMS AND ABBREVIATIONS

The following abbreviations are used within this document, mostly with reference to keyboard actions –

- (**RC**) – Right Click
- (**Shft-**…) – Shift key
- (**Ctrl-**….) – Control key
- (**Alt-**…) – Alt key

TABLE OF CONTENTS

INTRODUCTION

GDD's geoUte Utility Applications are a series of data management utilities aimed at helping you identify, catalogue and understand your data and to assist you in getting it assembled, integrated and ready for addition to your technical database.

They also include applications aimed at assembling reports and other documents from data within your database, and the 'linked objects' such as photos and drawings related to that data.

uLIST

uList is the **geoUte** tool to generate Excel catalogues of system files, for use as checklists, audit checklists, input lists for other applications, data file management and analysis, and a million other things.

The generated lists contains inbuilt capabilities to allow you to manage and manipulate the files; copying, moving, renaming, and deleting for example.

The catalogues extract all the normal file attribute information such as size, dates created and modified, file type etc.

Additional information is extracted for specific file types such as raster image size, photo date taken and GPS location and orientation, and coordinate data for georeferenced images for example.

(*Better as a bulleted list?)*

SECTION 1 –
A CONCEPTUAL OVERVIEW

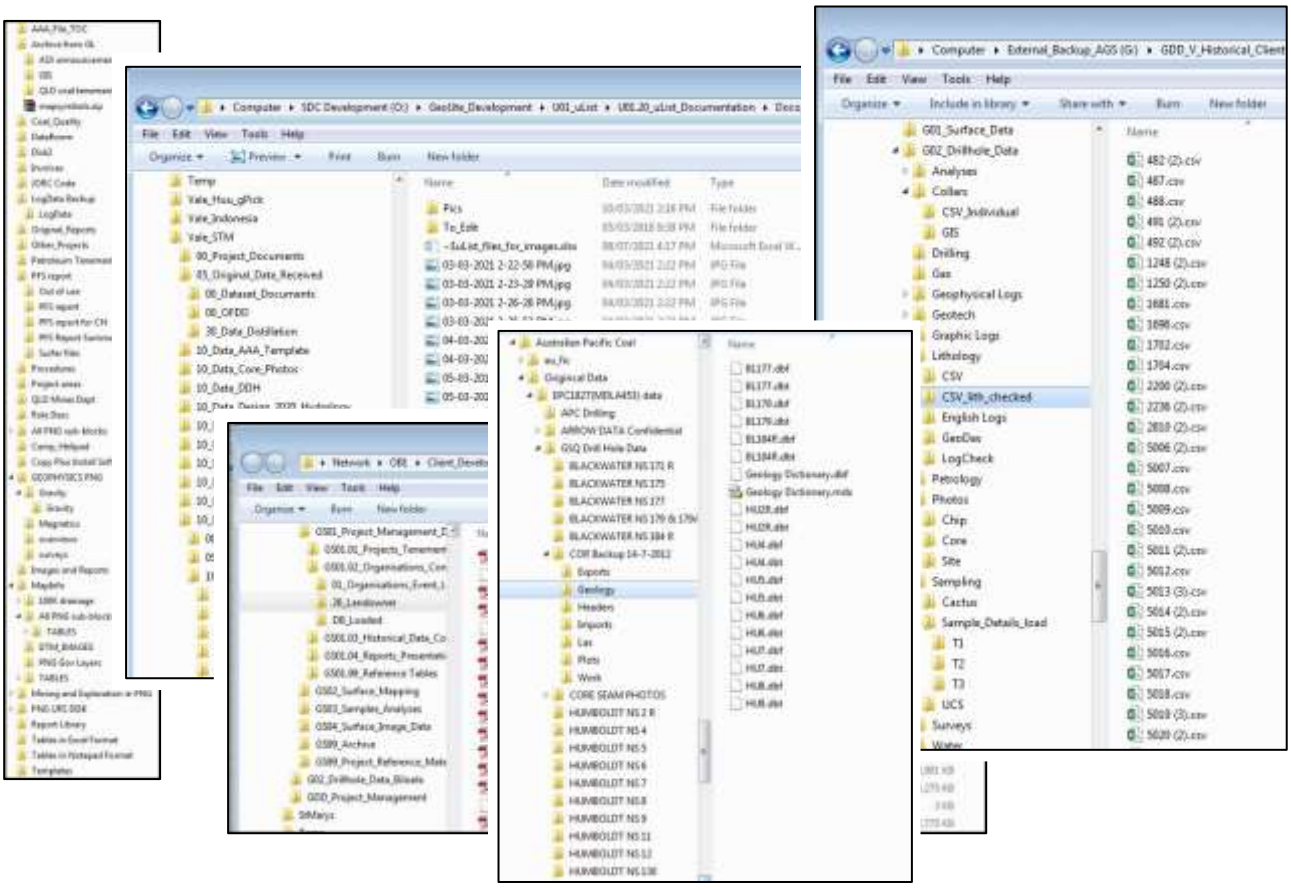
uLIST OVERVIEW

This section is designed to provide an understanding of the uList System File List Generator; including its purpose, the various concepts relevant to the system, the data and its relationships, as well as an understanding of the normal workflow that would be used in conjunction with the utility application.

WHAT IS uLIST?

Very simply, uList is designed to generate a list of the files or folders under a nominated folder or directory in a file system, along with file attributes and selected metadata for specific file types

uList generates two types of lists - A list of all folders and sub-folders under a nominated folder, and a list of the folders and sub-folders only



The file lists include various folder or file attributes and properties. For certain file types, additional attributes can extracted. For example, data can be extracted from images, (pixel dimensions etc.), or from photographs (date taken, camera, images dimensions, GPS coordinates etc.)

Folder lists include statistics for the folder such as the number of sub-folders it contains, and the total file sizes in the folder and in its sub-folders

GENERAL CONCEPTS AND WORK FLOW

uList is a very simple tool both in terms of what it does, and how to use it.

The normal steps or activities involved in using uList involve –

- Identify the root folder from which the file or folder list is to be created.
- Select the additional file attributes to be identified
- Enter the file name and location for the created list
- Run it mate!

uLIST MAJOR FUNCTIONS

GENERATE A FILE CATALOGUE

This utility, very simply, extracts file details and metadata and creates a file catalogue in CSV or Excel format, including the following information -:

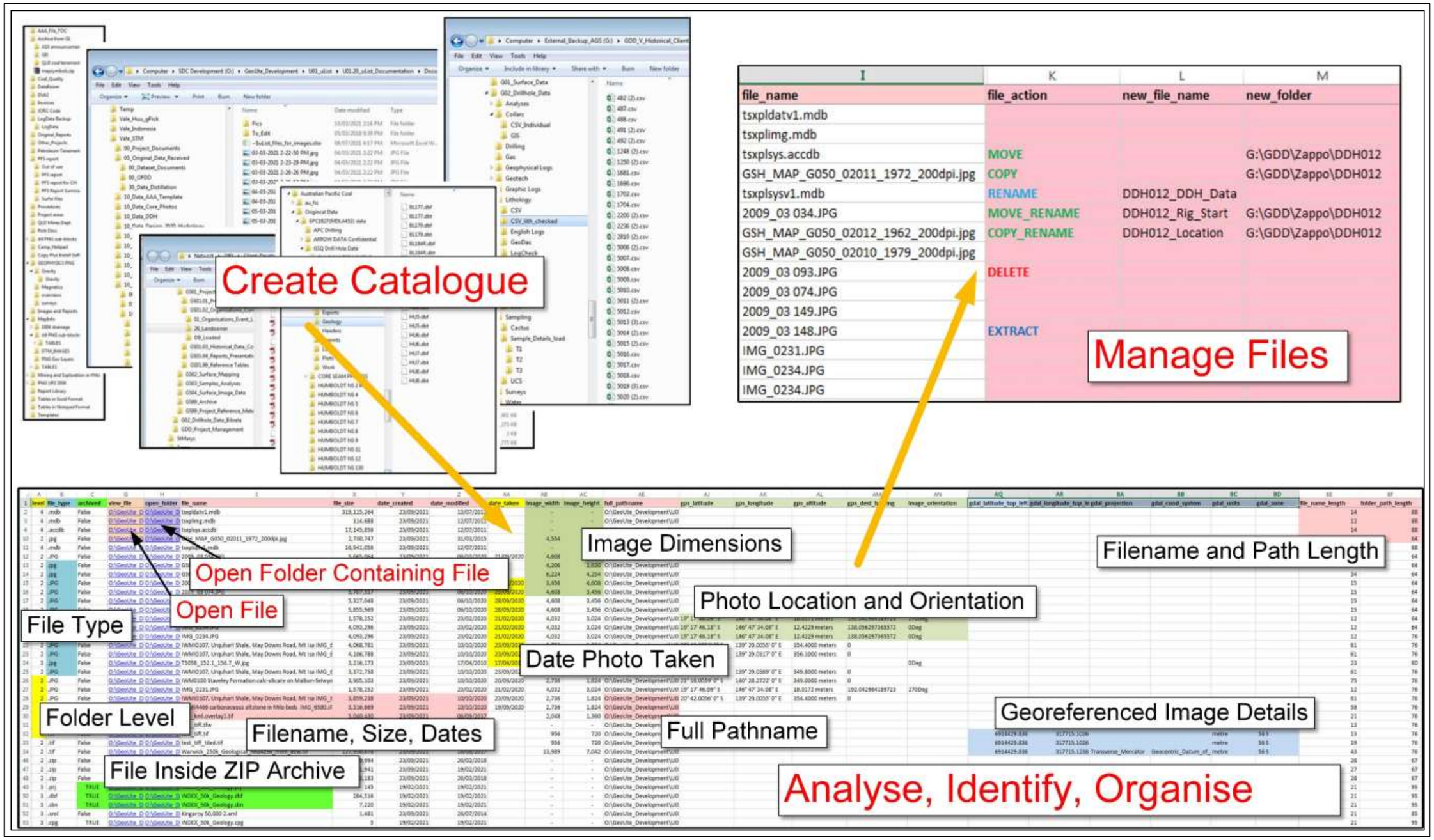
- Filename
- File path
- File type
- Date created
- Date last modified
- File size
- For image files of any type –
    - Image pixel dimensions
- For digital photos –
    - Date taken
    - Size
    - GPS location and orientation if available
    - Access to all other EXIF data which can be extracted if required
        - E.g. Camera make and model, settings etc.
- For Georeferenced images –
    - Location of all four image corners
    - Coordinate system and projection information if available

ANALYSE THE FILE CATALOGUE

The file catalogue can be analysed and used in a variety of ways, dependent purely on what you are trying to achieve.

- Use sorting columns to identify and group files by type, content, status or version for example
    - Sort on dates, size, name etc to identify and flag duplicates, temporary or other rubbish files for deletion
- Use the embedded links to open the folder in which a file lives.
- Or to open a file directly from the list in its native application
- Use work columns to help assemble data and attributes or descriptions for grouping or renaming files
- Build Excel logic to help automate the entry (for example) of hole_no, depth_from, depth_to data for core photos, viewing each image directly in the Excel spreadsheet

uList generates either an Excel spreadsheet, or a CSV, depending on your requirement for the file

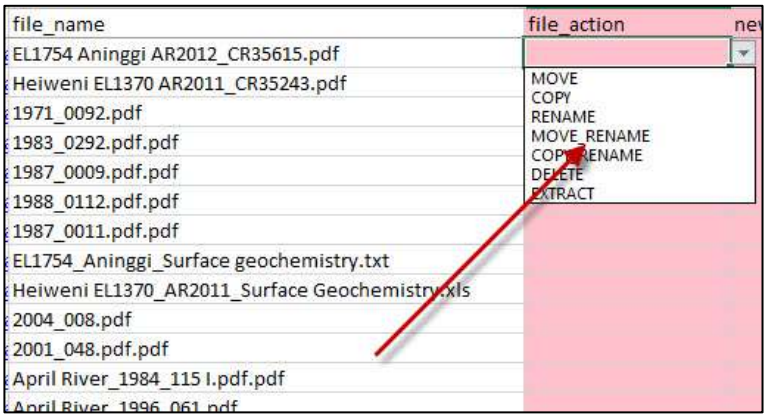


I	K	L	M
file_name	file_action	new_file_name	new_folder
tsxpldatv1.mdb			
tsxplimg.mdb			
tsxplsys.accdb	MOVE		G:\GDD\Zappo\DDH012
GSH_MAP_G050_02011_1972_200dpi.jpg	COPY		G:\GDD\Zappo\DDH012
tsxplsysv1.mdb	RENAME	DDH012_DDH_Data	
2009_03 034.JPG	MOVE_RENAME	DDH012_Rig_Start	G:\GDD\Zappo\DDH012
GSH_MAP_G050_02012_1962_200dpi.jpg	COPY_RENAME	DDH012_Location	G:\GDD\Zappo\DDH012
GSH_MAP_G050_02010_1979_200dpi.jpg			
2009_03 093.JPG	DELETE		
2009_03 074.JPG			
2009_03 149.JPG			
2009_03 148.JPG	EXTRACT		
IMG_0231.JPG			
IMG_0234.JPG			
IMG_0234.JPG			

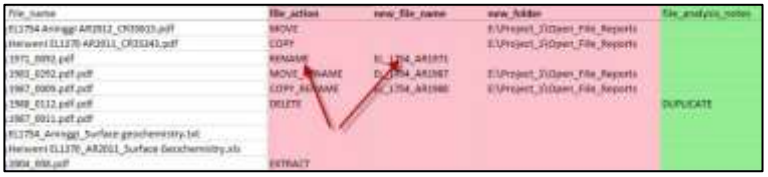
GDD Plug! – And note the clever way the headers and footers magically expand when the page changes to A3 Landscape; ask GDD about 'uWurd', our geoUte tools for MS Word creation

MANAGE AND MANIPULATE FILES

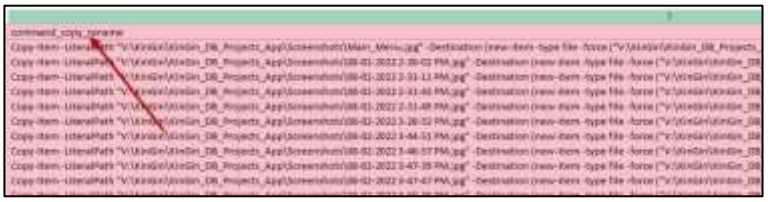
Generates commands to manipulate files in the list –



By selecting an action…



Adding the required parameters…



And running the generated command in PowerShell

KEY FEATURES AND BENEFITS

{ *from* U00.20_GeoUte_Utilities_Overview.docx }

In summary then, the key features and associated benefits of the geoUte uList utility include the following -

uLIST

- Quickly and reliably generate file lists for any folder and its subfolders for a multitude of uses.
- Map single folders or entire drives.

GENERATED FILES CATALOGUE CONTENT

- List content –
  - Includes file information such as file type, size, dates created and modified, location and directory level.
  - Includes additional information for specific file types, for example –
    - Raster images – Image size details
    - Digital photos – Image size, date taken, GPS location
    - Georeferenced maps and images – location and coordinate system details
  - Lists can optionally include files inside ZIP or other file archives
- Provide complete lists that can form the basis for audit checks, processing checklists, file delivery lists

CATALOGUE USES

File Lists as Input

- Use lists as input for other applications, checklists, audits or file clean-ups.

Create Project and Audit Data Checklists

- Create working lists to manage and maintain your data folders;

Group Files By Type

Extract File Metadata

- From images, photos, georeferenced maps etc.

Identify and Sort Large Data Collections

- Access folders and files
  - Directly access any folder
  - Open any file in its native application directly from the list

Clean Up and Reorganise Files

- Use Excel to assemble new file and folder names quickly, consistently and accurately
- Generate scripts to rename, copy, move, delete files, and more….
  - The list then forms an audit trail of what was done!
  - View all the EXIF data for JPG files; copy and paste data from there into the spreadsheet as required
  - Generates error logs so you can see if you stuffed up!
- Help manage and process large data file sets reliably, in an auditable manner.
- Create file list subsets by file type (for example), for various purposes
  - Renaming image and photo files
  - Assembling data sets of a particular type for a project
  - Creating an annotated list of files to accompany a 'data warehouse' or report
- Find those dreaded files that live in places having a file pathname that is too long {*more explanation*}

- Search the lists - find stuff you could swear you had lost in the bowels of the data drives.....
- Clean up and rearrange data collections

Preserve an Activity Log of Actions Taken

Assemble Deliverable Data Package Catalogue

Find Files Hidden in Archives

- Extract individual files from within archives

uIndex ! – uList has a big brother; uIndex maintains the same information as uList, but keeps its data in an SQL Server database. So you can quickly and reliably find information on any file anywhere on you network, using uIndex forms or native SQL queries

SECTION 2 –
QUICK START GUIDE

A QUICK WALKTHROUGH

To create a files or folders list -

- Open the **uList** application

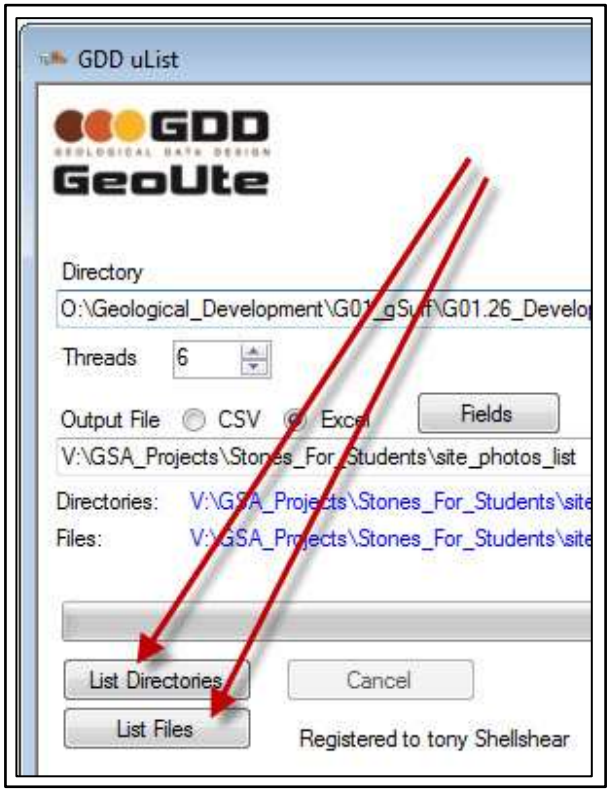
- Identify the root directory from which you want to start your list generation.

- Select the output file type (CSV or Excel).
- Name the output file for the generated list.

- Select any additional EXIF or other file attributes you want to include using the 'Fields' button.

- Select whether or not you want to examine ZIP file contents

- Click 'List Directories' or 'List Files' to generate the required list.

- 

- Be patient, if you nominated a folder with a very large number of files and directories below it, it may take a few minutes.
- Open the generated list using the link on the uList form
- 

That's it! You can open the list in Excel and start searching, sorting, annotating and identifying to your heart's content.

For further information on using the generated lists, refer to ….(**XXXX**)

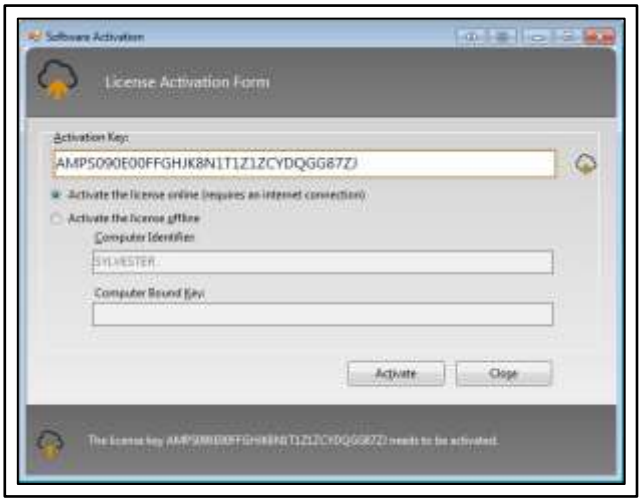
SECTION 3 –
HOW TO DRIVE uLIST

GENERATING A ULIST CATALOGUE

STARTING ULIST

To start uList, simply locate the icon on the desktop and double click to bring up the uList form.

If this is the first time uList has been used, an authentication form will open –



Enter the Authentication Key you received when uList was downloaded, and click 'Activate', then 'Close'

For details, see the Installation Guide in the Appendices.


GDD uList
GDD
GeoUte
uList
Directory and File List Generator
Directory
O:\Geological_Development\G01_gSurf\G01.26_Development_Data\Database\
Browse
Threads
6
Output File
CSV
Excel
Fields
Scan archives
V:\GSA_Projects\Stones_For_Students\site_photos_list
Browse
Directories:
V:\GSA_Projects\Stones_For_Students\site_photos_list_directories.xlsx
Files:
V:\GSA_Projects\Stones_For_Students\site_photos_list_files.xlsx
List Directories
Cancel
List Files
Website:
http://www.gdd.net.au
Email:
admin@gdd.net.au
Registered to tony Shellshear
1.2.13.0
Log
Elapsed Time:
Scanned Folders:
Scanned Files:
Errors:

GENERATING A FILE CATALOGUE

To generate a list of the files in a selected folder, and the sub-folders below –

Identify the Root Folder

- Enter or browse to the directory from which you want to start your list generation

Nominate the Output Type

- Select the output file type (CSV or Excel).

Set the Output File and Location

- Enter a name and location for the output file containing the generated list.

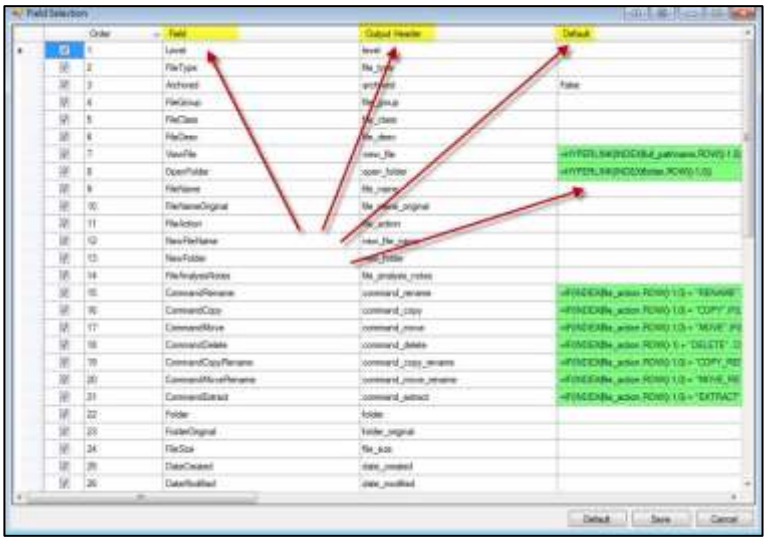
Look Inside Archives?

- Tick the checkbox if you want to ferret into any archive files to see what's in there

Select Additional Data Options for Images

- Select any additional EXIF or other file attributes you want to include.

- Select 'Fields'
- Select or unselect the attributes required in the generated list
- **Note** – Some of the fields are mandatory and cannot be unselected

- 

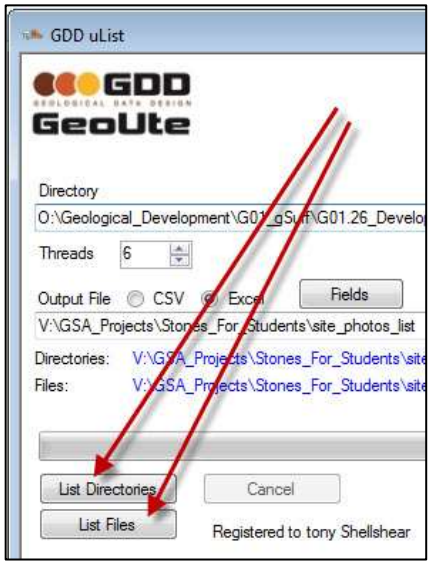
Allocate Number of CPU Cores To Use

- If you need it in a hurry, increase the number of CPU cores to use / abuse!

- 

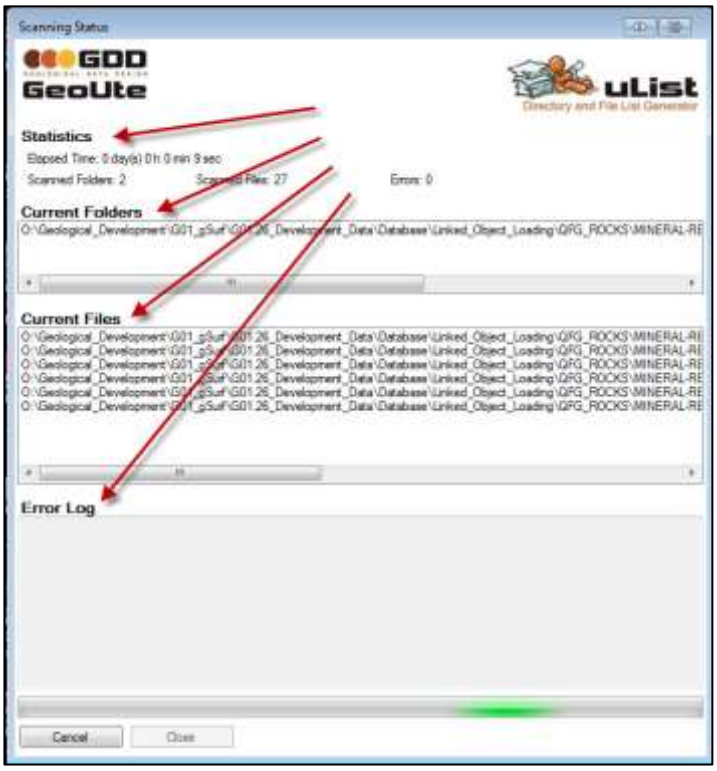
Generate the List

- Click ‘List Directories’ or ‘List Files’ to generate the required list.

- 

Note ! - Be patient, if you nominated a folder with a very large number of files and directories below it, it may take a significant time to examine them all!.

- … Especially if archives are being searched, or very large images are being interrogated. A progress form provides some information on what's happening



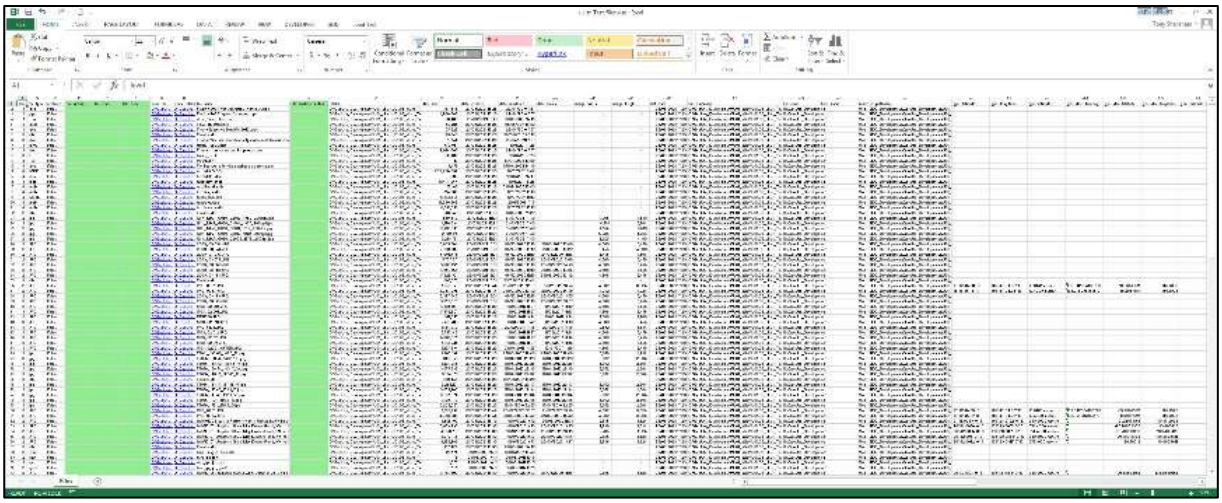
- The progress form indicates –
  - Progress statistics
  - Folder currently being processed
  - File(s) currently being interrogated (depends on no. of CPU cores allocated.)
  - Error message if things go pear shaped.

Open the File Catalogue

- Open the generated list using the link on the uList form

- 

That's it! You can open the list in Excel and start searching, sorting, annotating and identifying to your heart's content.



For further information on using the generated lists, refer to ….(**XXXX**)

CREATING A FOLDERS LIST

While not often used, this function is a quick and easy way of getting a picture of the folder hierarchy under a given root folder, for use as a check list or guide for rearranging or cleaning up.

The 'Folders' function does not provide any statistics on the contained files in the folders, but uList's big brother '**uIndex'** will do that for you.

uIndex generates similar catalogues to uList, but retains the lists in an SQL database, where it is analysed and tagged for potential duplicates among other things

To generate a **uList** list of the folders below a selected folder -

- Enter or browse to the directory from which you want to start your list generation

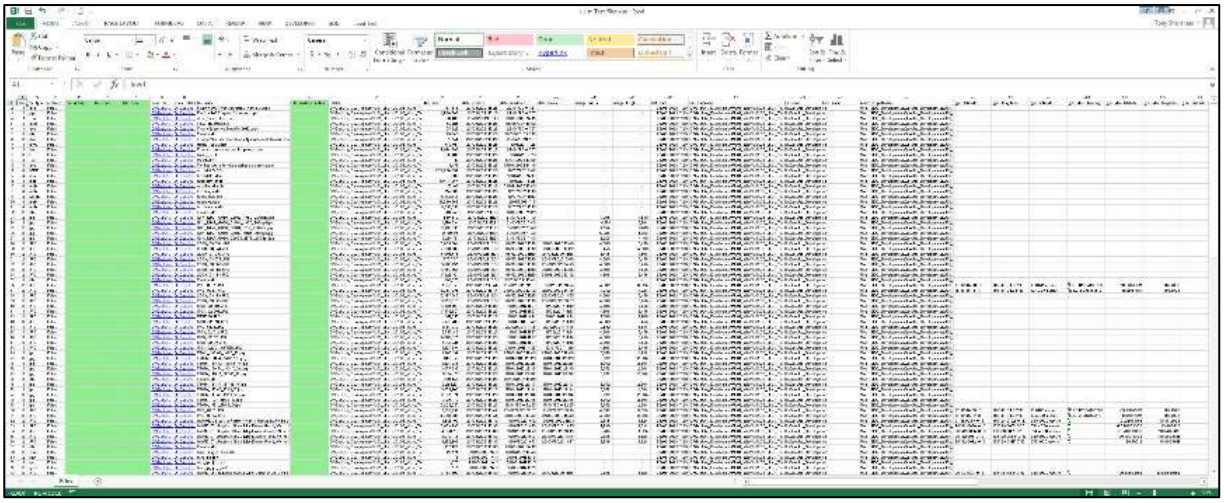
- Select the output file type (CSV or Excel).

- Enter a name and location for the output file containing the generated folders list.
- Click ‘List Directories’ to generate the required list.
- Open the generated folders (directories) list using the link on the uList form
- 

That’s it! Open your new folders list

Level	Directory Name	Full Path
1	Bitmaps	F:\CoalMinder\Coalminder V1\Bitmaps
1	Databases	F:\CoalMinder\Coalminder V1\Databases
1	Design	F:\CoalMinder\Coalminder V1\Design
1	Dos Shells	F:\CoalMinder\Coalminder V1\Dos Shells
2	Backup	F:\CoalMinder\Coalminder V1\Dos Shells\Backup
2	Dos Shells	F:\CoalMinder\Coalminder V1\Dos Shells\Dos Shells
1	erwin	F:\CoalMinder\Coalminder V1\erwin
1	Excel	F:\CoalMinder\Coalminder V1\Excel
2	ShipmentBlends	F:\CoalMinder\Coalminder V1\Excel\ShipmentBlends
1	excell queries	F:\CoalMinder\Coalminder V1\excell queries
1	Exe	F:\CoalMinder\Coalminder V1\Exe
2	Bitmaps	F:\CoalMinder\Coalminder V1\Exe\Bitmaps
2	Coalminder	F:\CoalMinder\Coalminder V1\Exe\Coalminder
2	Remote	F:\CoalMinder\Coalminder V1\Exe\Remote
2	Shipping	F:\CoalMinder\Coalminder V1\Exe\Shipping
1	Historical_Data	F:\CoalMinder\Coalminder V1\Historical_Data
1	Misc	F:\CoalMinder\Coalminder V1\Misc
1	Pbr_Lib	F:\CoalMinder\Coalminder V1\Pbr_Lib
1	Pbr_Lib_Split	F:\CoalMinder\Coalminder V1\Pbr_Lib_Split
1	Raw Stationary Stack	F:\CoalMinder\Coalminder V1\Raw Stationary Stack
1	spc	F:\CoalMinder\Coalminder V1\spc
1	sql server scripts	F:\CoalMinder\Coalminder V1\sql server scripts
2	data	F:\CoalMinder\Coalminder V1\sql server scripts\data
2	defaults	F:\CoalMinder\Coalminder V1\sql server scripts\defaults
2	headers	F:\CoalMinder\Coalminder V1\sql server scripts\headers
2	indexes	F:\CoalMinder\Coalminder V1\sql server scripts\indexes
2	rules	F:\CoalMinder\Coalminder V1\sql server scripts\rules
2	scripts	F:\CoalMinder\Coalminder V1\sql server scripts\scripts
2	stored procedures	F:\CoalMinder\Coalminder V1\sql server scripts\stored procedures
2	tables	F:\CoalMinder\Coalminder V1\sql server scripts\tables
2	test data population scripts	F:\CoalMinder\Coalminder V1\sql server scripts\test data population
1	Stored_Procedures	F:\CoalMinder\Coalminder V1\Stored_Procedures
2	Core	F:\CoalMinder\Coalminder V1\Stored_Procedures\Core
2	Data	F:\CoalMinder\Coalminder V1\Stored_Procedures\Data
2	Movement	F:\CoalMinder\Coalminder V1\Stored_Procedures\Movement
2	Stockpile	F:\CoalMinder\Coalminder V1\Stored_Procedures\Stockpile

STANDARD uLIST CATALOGUE COLUMNS



The generated spreadsheet will initially appear as above

FOR ALL FILES

Information provided for all files includes the following –

Information Columns

- Folder level (with respect to the root folder used)
- File type - extension
- Archived
    - If 'TRUE', file is contained in an archive
- File name
- Folder path
- File size
- Date created
- Date last modified
- Full file path
- Network URL path
- File name length
- Folder path length
    - Useful for detecting file with a pathname that exceeds the dreaded 256 character 'limit' in Windows

File Access Links

- View_file

- Open this file in its native application

- Open_folder
  - Open the folder containing this file

FILES INSIDE ARCHIVES OR ZIPPED FILES

These are identified by the '**TRUE'** flag in the '**archived**' column

archived	file_name	folder
False	GSJ_MAP_G200_NI5313_1968.zip	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files
TRUE	INDEX_50k_Geology.prj	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip
False	Pajingo Block B False Colour.tif	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\50_Maps_Georeferenced\Tiff_Tfw
TRUE	INDEX_50k_Geology.dbf	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip
TRUE	INDEX_50k_Geology.sbn	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip
False	Kingaroy 50,000 2.xml	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\50_Maps_Georeferenced\Tiff_Xml
TRUE	INDEX_50k_Geology.cpg	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip
TRUE	INDEX_50k_Geology.sbx	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip
TRUE	INDEX_50k_Geology.shp	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip
TRUE	INDEX_50k_Geology.shx	O:\GeoUte_Development\U01_uList\U01.06_uList_Test_Data\90_ZIP_Files\GSJ_Mapping_50k_JGD2000.zip

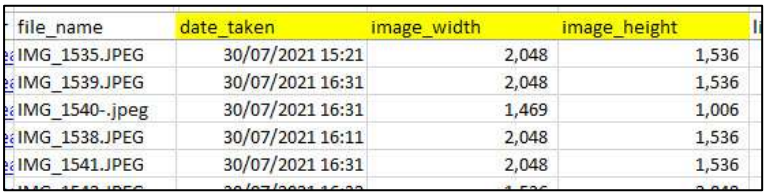
RASTER IMAGES

The following additional information is provided –

- Image width
- Image height

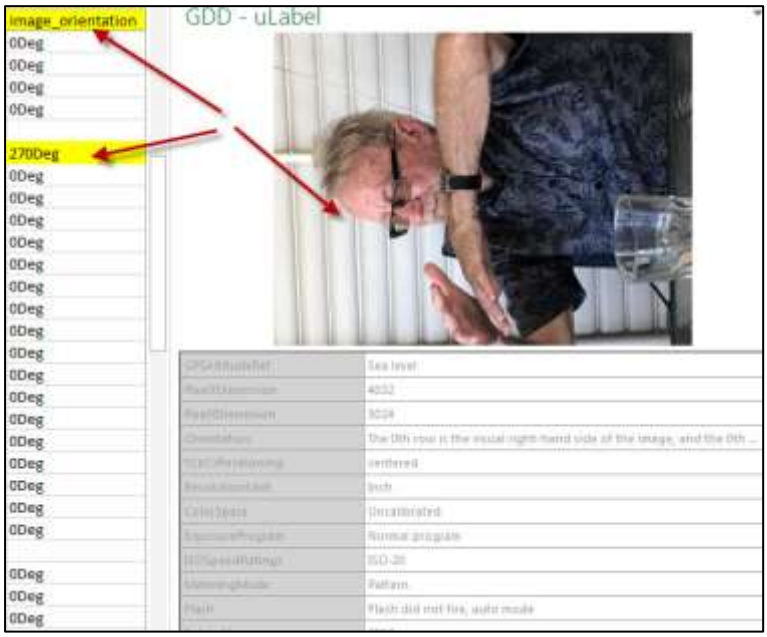
DIGITAL PHOTOS

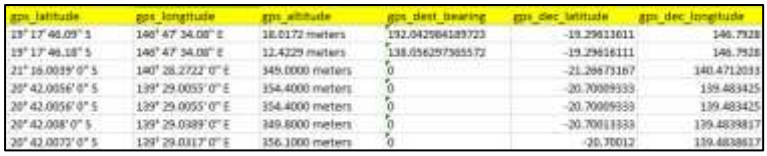
- Date taken
- Image width
- Image height



file_name	date_taken	image_width	image_height
IMG_1535.JPEG	30/07/2021 15:21	2,048	1,536
IMG_1539.JPEG	30/07/2021 16:31	2,048	1,536
IMG_1540-.jpeg	30/07/2021 16:31	1,469	1,006
IMG_1538.JPEG	30/07/2021 16:11	2,048	1,536
IMG_1541.JPEG	30/07/2021 16:31	2,048	1,536

-
- **Image orientation**

- 

- **Camera GPS Location**
  - If the camera has GPS capabilities, the following additional data is available
    - gps_latitude
    - gps_longitude
    - gps_altitude
    - gps_dest_bearing
    - gps_dec_latitude
    - gps_dec_longitude
- 

gps_latitude	gps_longitude	gps_altitude	gps_dest_bearing	gps_dec_latitude	gps_dec_longitude
19° 17' 46.09" S	146° 47' 34.08" E	18.0172 meters	192.042586189723	-19.29613611	146.7928
19° 17' 46.18" S	146° 47' 34.08" E	12.4229 meters	138.056257365572	-19.29616111	146.7928
21° 16.0039' 0" S	140° 28.2722' 0" E	349.0000 meters	0	-21.26673167	140.4712033
20° 42.0056' 0" S	139° 29.0055' 0" E	354.4000 meters	0	-20.70009333	139.483425
20° 42.0056' 0" S	139° 29.0055' 0" E	354.4000 meters	0	-20.70009333	139.483425
20° 42.008' 0" S	139° 29.0389' 0" E	349.8000 meters	0	-20.70013333	139.4839817
20° 42.0072' 0" S	139° 29.0317' 0" E	356.1000 meters	0	-20.70012	139.4838617

GEOREFERENCED IMAGES

For most georeferenced images, the following information is extracted –

- Corner coordinate locations –
  - gdal_latitude_top_left
  - gdal_longitude_top_left
  - gdal_latitude_top_right
  - gdal_longitude_top_right
  - gdal_latitude_bottom_right
  - gdal_longitude_bottom_right

- gdal_latitude_bottom_left
- gdal_longitude_bottom_left
- gdal_projection
- gdal_cood_system
- gdal_units
- gdal_zone

- Image centre coordinates -
  - gdal_latitude_center
  - gdal_longitude_center
- Coordinate units , system and projection information
  - gdal_projection
  - gdal_coord_system
  - gdal_units
  - gdal_zone

gdal_latitude_center	gdal_longitude_center	gdal_projection	gdal_cood_system	gdal_units
-24.24835063	151.1259164		GDA94	Degree
-24.74829352	151.1260645		GDA94	Degree
-24.74845949	150.3759426		GDA94	Degree
-24.24832687	150.3759412		GDA94	Degree
4037.5	1104.5			metre
-30.65661408	142.4529168		WGS_1984	degree
-29.38928237	141.9079453		WGS_1984	degree
6824374.719	437198.857	UTM 56 S	MGA	metre
6824400.296	496546.878	UTM 56 S	MGA	metre

Note ! – There exist many different methods for georeferencing files, each with different formats and related metadata. While uList will extract the location data from the majority of georeferenced files, it may not get them all.

ADDITIONAL CATALOGUE COLUMNS

A few generic columns are provided as an initial guide to identifying and tagging the files. These do not contain any data, and can be rename or deleted as appropriate.

Additional columns can likewise be added to the spreadsheet depending on the purpose of the generated list

Note ! - The GREEN columns will be blank, and are simply generic columns provided to allow the entry of classification codes or notes as you digest and understand the files and their relevance to your current objectives. See further notes under the following section – '**General Usage Tips**'

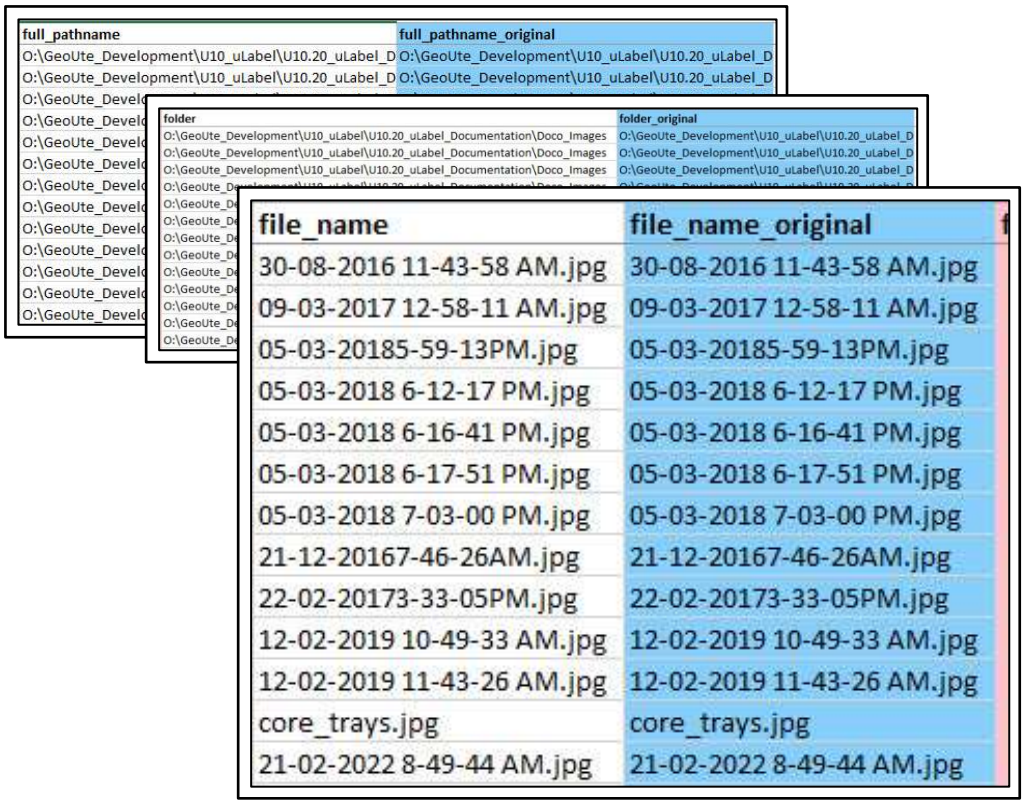
HIDDEN uLIST COLUMNS

Additional columns are generated into the list for specific purposes, and are initially hidden to avoid accidental destruction of the universe.

- file_name_original
- folder_original
- full_pathname_original

BLUE COLUMNS

Intentional duplicates of key column values are created and hidden including –



full_pathname	full_pathname_original
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D

folder	folder_original
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D

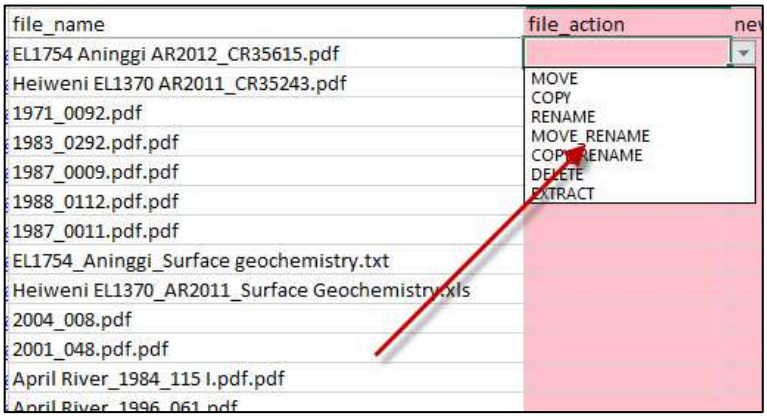
file_name	file_name_original
30-08-2016 11-43-58 AM.jpg	30-08-2016 11-43-58 AM.jpg
09-03-2017 12-58-11 AM.jpg	09-03-2017 12-58-11 AM.jpg
05-03-20185-59-13PM.jpg	05-03-20185-59-13PM.jpg
05-03-2018 6-12-17 PM.jpg	05-03-2018 6-12-17 PM.jpg
05-03-2018 6-16-41 PM.jpg	05-03-2018 6-16-41 PM.jpg
05-03-2018 6-17-51 PM.jpg	05-03-2018 6-17-51 PM.jpg
05-03-2018 7-03-00 PM.jpg	05-03-2018 7-03-00 PM.jpg
21-12-20167-46-26AM.jpg	21-12-20167-46-26AM.jpg
22-02-20173-33-05PM.jpg	22-02-20173-33-05PM.jpg
12-02-2019 10-49-33 AM.jpg	12-02-2019 10-49-33 AM.jpg
12-02-2019 11-43-26 AM.jpg	12-02-2019 11-43-26 AM.jpg
core_trays.jpg	core_trays.jpg
21-02-2022 8-49-44 AM.jpg	21-02-2022 8-49-44 AM.jpg

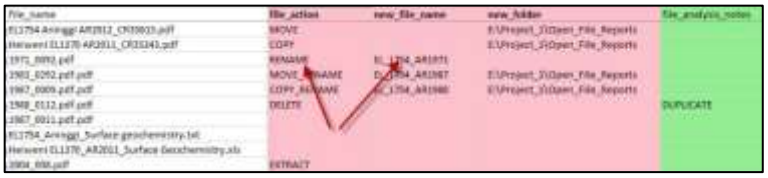
Note ! – These columns are provided as an audit trail. As you become more proficient with uList, using it to rename, copy or move files, these columns provide a reference to the original file name and location

PINK COLUMNS

The hidden PINK columns provide the tools to managing and manipulating your files.

File Management Actions

- file_action
  - What you want to do with the file
  - 

- new_file_name
- new_folder
  - Arguments for the action selected
  - 

Generated Action PowerShell Commands

- command_rename
- command_copy
- command_move
- command_delete
- command_copy_rename
- command_move_rename
- command_extract

Important ! - These generated commands are provided for use in PowerShell to do what you reckon you wanted done. Do not frig with them other than copying into PowerShell as explained below!

USING THE uLIST FILE CATALOGUE

The way you use the catalogue will be driven entirely by what you are using the catalogue for. A few common uses are described below, along with some notes on using the catalogue for those purposes.

Once you have used uList a few times it will become apparent that there are a wide variety of tasks to which the uList catalogue can be applied.

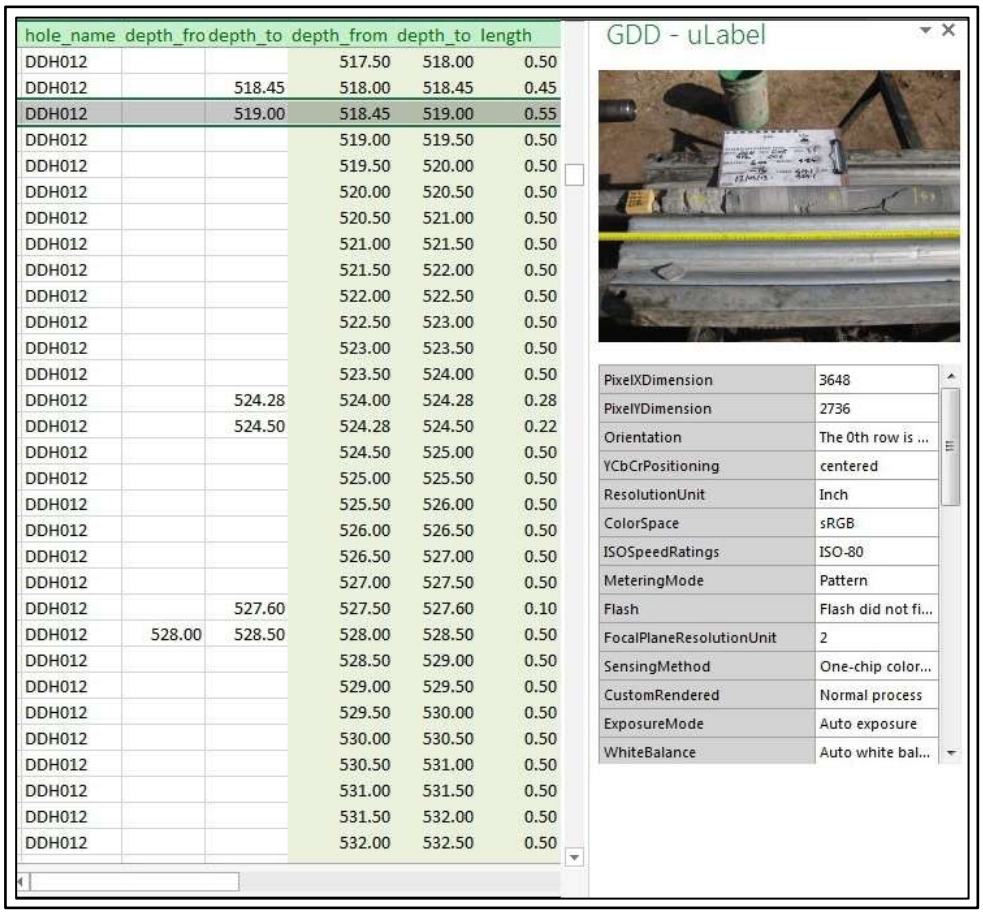
Here are just a few examples.

Create an Input File List

- Generating a list of files for input into other applications, for example –
  - uLook, the geoUte Data File Previewer
  - uCrop, the geoUte Image Cropping Utility

Identify and Rename Files

- Identifying, sorting, organising and renaming photos -
  - Assigning hole name, depths and photo conditions to core photos
  -



hole_name	depth_fro	depth_to	depth_from	depth_to	length
DDH012			517.50	518.00	0.50
DDH012		518.45	518.00	518.45	0.45
DDH012		519.00	518.45	519.00	0.55
DDH012			519.00	519.50	0.50
DDH012			519.50	520.00	0.50
DDH012			520.00	520.50	0.50
DDH012			520.50	521.00	0.50
DDH012			521.00	521.50	0.50
DDH012			521.50	522.00	0.50
DDH012			522.00	522.50	0.50
DDH012			522.50	523.00	0.50
DDH012			523.00	523.50	0.50
DDH012			523.50	524.00	0.50
DDH012		524.28	524.00	524.28	0.28
DDH012		524.50	524.28	524.50	0.22
DDH012			524.50	525.00	0.50
DDH012			525.00	525.50	0.50
DDH012			525.50	526.00	0.50
DDH012			526.00	526.50	0.50
DDH012			526.50	527.00	0.50
DDH012			527.00	527.50	0.50
DDH012		527.60	527.50	527.60	0.10
DDH012	528.00	528.50	528.00	528.50	0.50
DDH012			528.50	529.00	0.50
DDH012			529.00	529.50	0.50
DDH012			529.50	530.00	0.50
DDH012			530.00	530.50	0.50
DDH012			530.50	531.00	0.50
DDH012			531.00	531.50	0.50
DDH012			531.50	532.00	0.50
DDH012			532.00	532.50	0.50

PixelXDimension	3648
PixelYDimension	2736
Orientation	The 0th row is ...
YCbCrPositioning	centered
ResolutionUnit	Inch
ColorSpace	sRGB
ISOSpeedRatings	ISO-80
MeteringMode	Pattern
Flash	Flash did not fi...
FocalPlaneResolutionUnit	2
SensingMethod	One-chip color...
CustomRendered	Normal process
ExposureMode	Auto exposure
WhiteBalance	Auto white bal...

  -

Assemble Technical Data Files

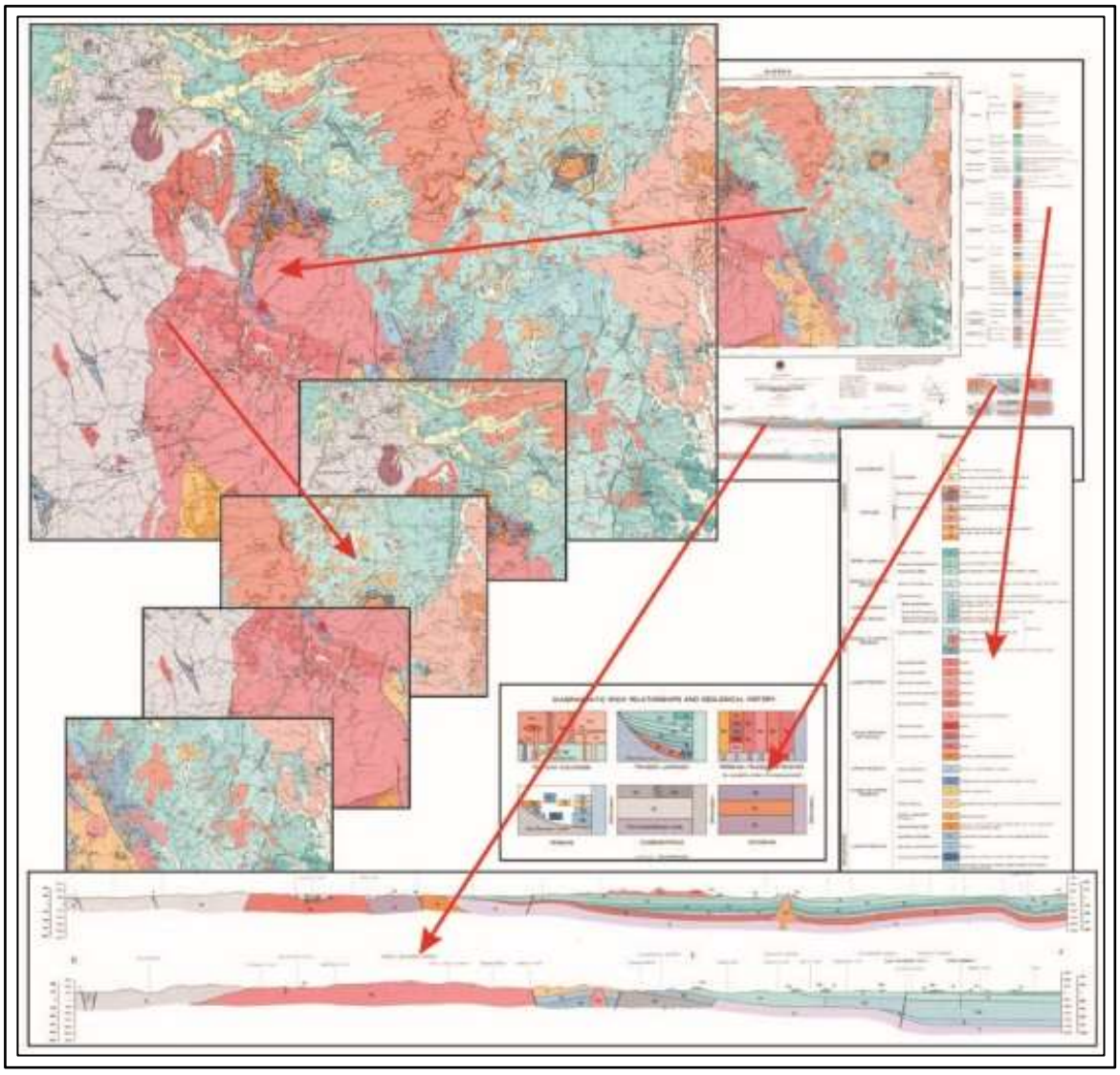
- Identifying project technical data files for preparation and assembly into a database -
  - Vulcan, Datamine, MicroMine, gDrill or gBore, for importing drillhole data

Extract Photo Locations

- Extract photo locations for matching against field data –
  - For linking the photos to the field data in gPick applications

Identify Maps and Georeferenced Maps and Images

- Extract the GIS sheet limits and parameters from georeferenced map sheets –
  - For cropping and georeferencing of selected parts of the maps with uCrop
  -



Create a File Catalogue

- Creating a file catalogue and dated archive to create a technical data package -
  - For joint venture partners or consultants tasked with an evaluation task.

- As a JORC audit list of the files used for a resource or reserve estimation

System File Clean-Ups

- Cleaning up and reorganising a set of folders / files -
  - Just so you can find stuff again….
  -

Tip ! - You will find notes on how to do these in the Tutorial section –

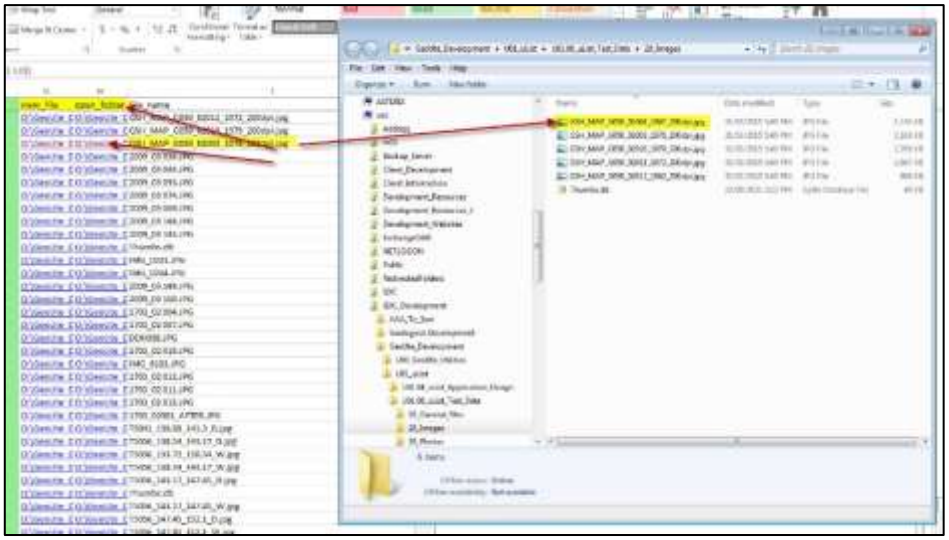
ACCESSING FILES DIRECTLY FROM THE uLIST FILE CATALOGUE

Two columns containing generated links allow you to open the folder in which the selected file lives, or to open the file directly in its native application

view_file	open_folder	file_name
G:\Client_Se	G:\Client_Se	SamplePoint.cpg
G:\Client_Se	G:\Client_Se	uList_Isobe_files.xlsx
G:\Client_Se	G:\Client_Se	SamplePoint.qmd
G:\Client_Se	G:\Client_Se	SamplePoint.prj
G:\Client_Se	G:\Client_Se	SamplePoint.shp.xml
G:\Client_Se	G:\Client_Se	SamplePoint.dbf

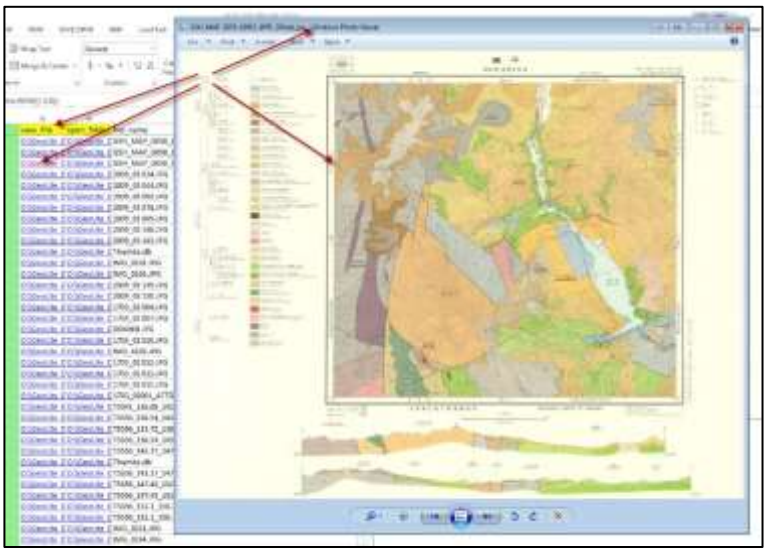
Open File Folder

- To open the file folder, clink the link in the ‘open_folder’ column



Open File

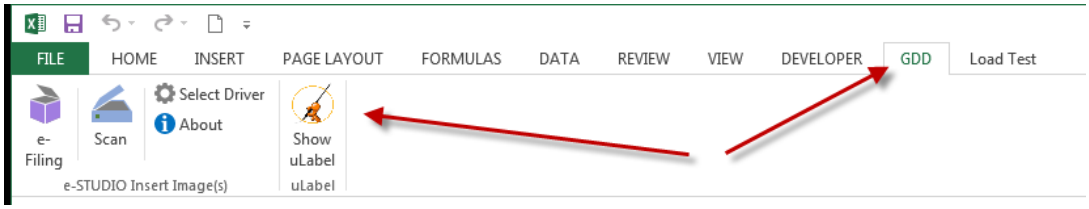
- To open the file directly, click the link in the ‘view_file’ column –



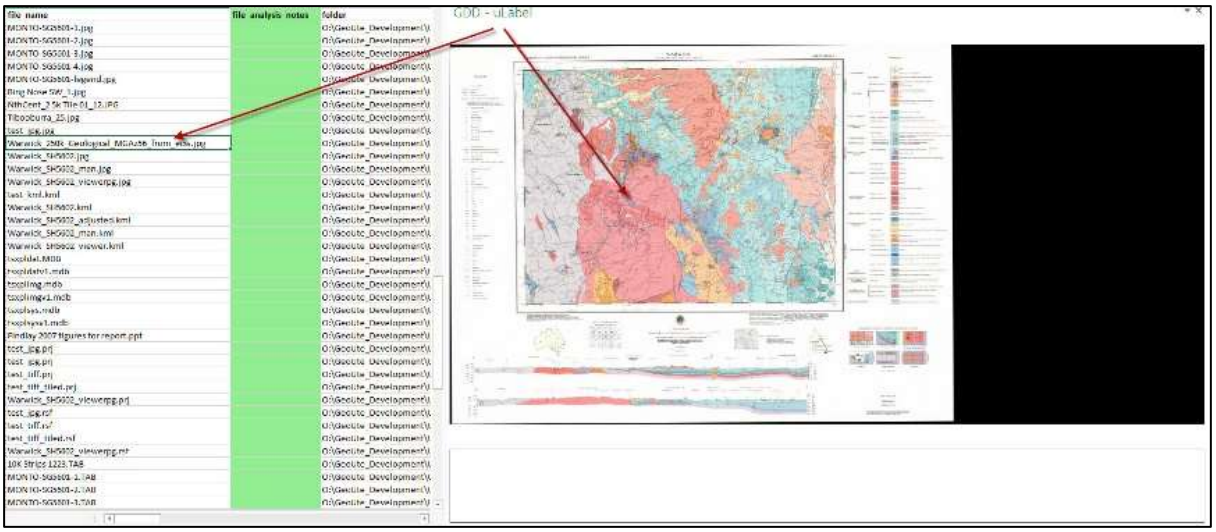
VIEWING IMAGE FILES DIRECTLY (ULABEL)

If the geoUte utility 'uLabel' is installed, images can be displayed directly inside Excel, greatly speeding up the identification and labelling or renaming of these files.

Open uLabel



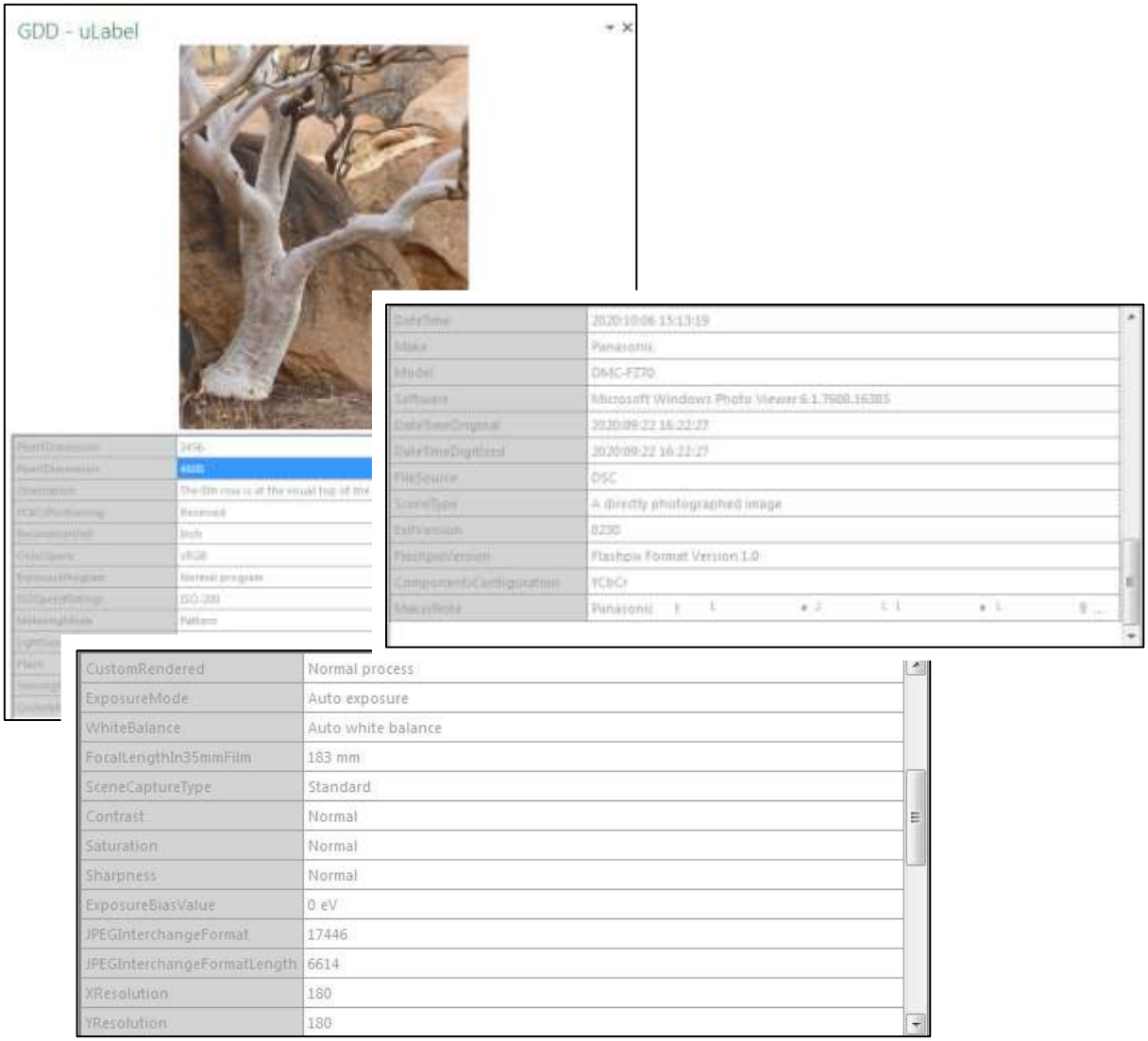
(The uLabel add-on for Excel is provided with uList)



A new name can be assembled in the spreadsheet and then used to rename the image file for example, as explained in following sections

EXTRACTING ADDITIONAL 'EXIF' DATA

For JPG images, and particularly photos, the embedded EXIF data is displayed below the image in the display panel.

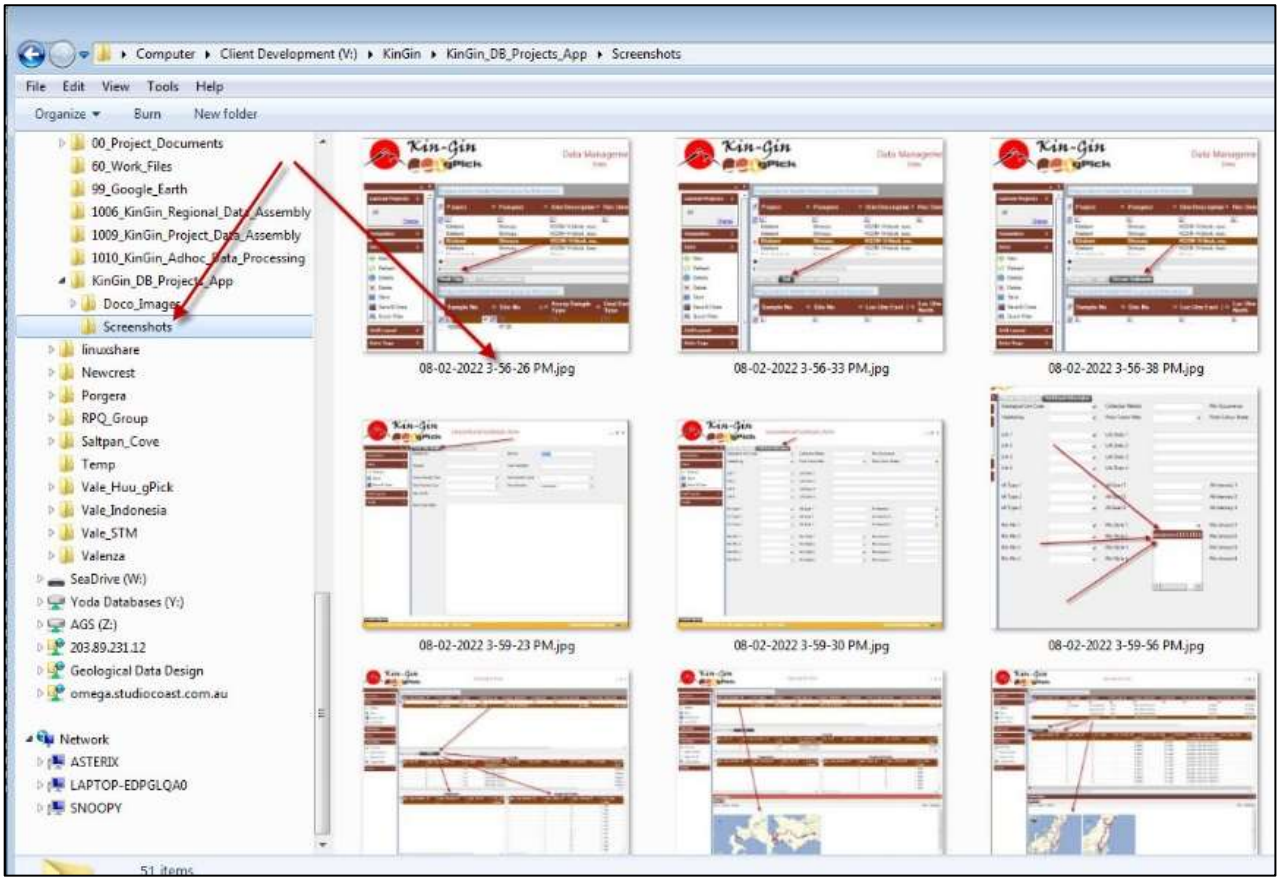


Relevant information can be copied from here into the spreadsheet as required

MANIPULATING FILES USING THE FILE CATALOGUE

uList and uLabel can be used to rename, copy, move and delete files in the generated catalogue.

A very common use is the identification and renaming of digital photos and screen capture images



ASSEMBLING NEW FILE AND FOLDER NAMES

In order to do this a new file name and / or a new folder location has to be identified.

In addition to the manual entry of these values, Excel functionality provides many ways to assist using text concatenation, string replacement, 'next record' value calculations etc.

Once the file name or folder location is created, the catalogue provides tools to generate commands to carry out the required actions.

Note ! – The commands cannot be executed directly from the spreadsheet, but must be copied into Microsoft PowerShell and executed. This was a conscious decision on GDD's part to prevent the 'accidental' execution of commands before they were fully checked etc.

Danger ! – Also please be aware that this functionality provides the ability to affect a large number of files, using a process that cannot be 'Undone'

It is strongly suggested that suitable backups and other safeguards are considered when using this capability in anger.

USING THE ACTION COMMANDS

The 'action' commands are initially hidden in the uList catalogue spreadsheet.

To access them, Unhide the columns between '**filename'** and '**file analysis notes'**

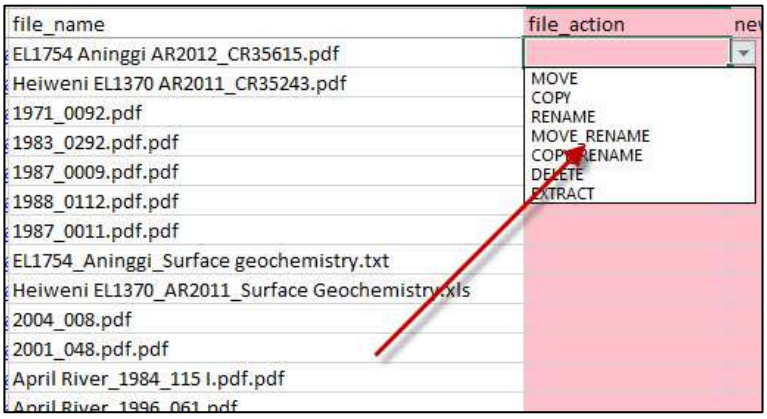
L	M	N
file_action	new_file_name	new_folder
COPY_RENAME	0_main_menu	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\0_main_menu
COPY_RENAME	1_projects_form_1	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	1_projects_form_2	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	1_projects_form_3	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	1_projects_form_4	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	1_projects_LO_open_1	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	1_projects_LO_open_2	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	2_tenements_form_1	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	2_tenements_form_2	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	2_tenements_form_3	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	3_prospects_form_1	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\1_project_Information
COPY_RENAME	1_sites_form_1	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\2_surface_data
COPY_RENAME	1_sites_form_2	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\2_surface_data
COPY_RENAME	1_sites_form_3	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\2_surface_data
COPY_RENAME	1_sites_form_4	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\2_surface_data
COPY_RENAME	1_sites_details_1	V:\KinGin\KinGin_DB_Projects_App\Doco_Images\10_Main_Menu\2_surface_data

In here the action type is selected, and the new filename and new folder location is entered (or pasted) as required

CONFIGURING THE COMMAND PARAMETERS

Select the Required Action

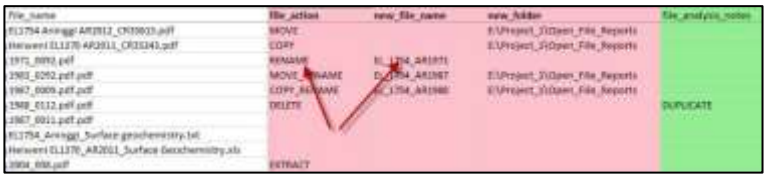
- First, select the file action using the dropdown



-

Rename Files

- Here a new file name only is required; the file will be renamed in place

- 

Important ! – DO NOT include the file type extension; this will be added using the file type identified for the file. This is done to prevent inadvertently changing the file type and rendering it unusable.

Move or Copy Files

- For these actions a new folder location only is required

- **Magic ! – uList will create any folder path elements that do not already exist; you don't have to create these first.**

- 

Rename AND Move or Copy Files

- Here both a new name and a new folder location is required

- 

Delete Files

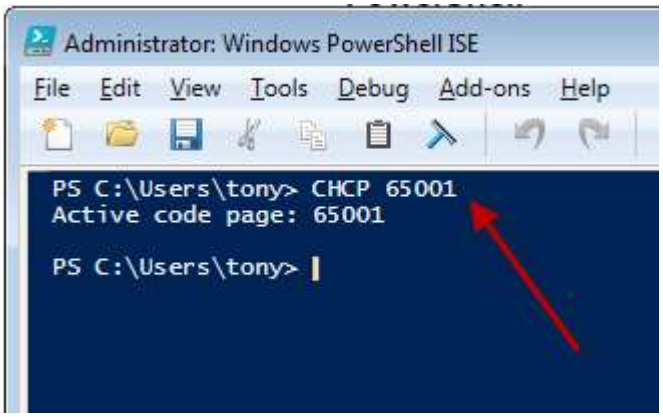
- For deletion, no additional information is required

- 

EXECUTING THE GENERATED COMMANDS

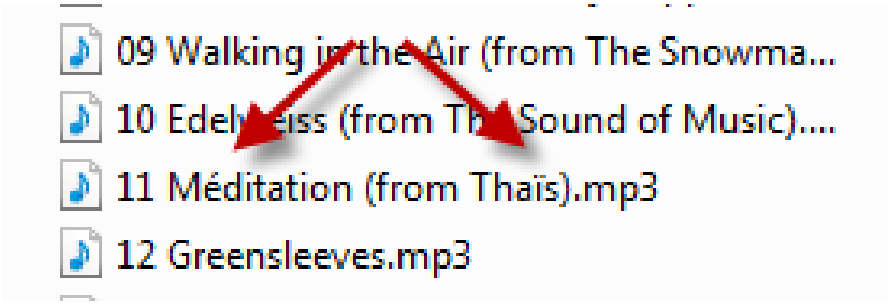
Generated action commands are constructed for MS PowerShell, a command line utility from Microsoft. If it is not installed on your machine, it can be downloaded from Microsoft here - Get Microsoft PowerShell

Open PowerShell ISE

- A big blank blue window appears!
- Before you execute any of the uList commands, execute the following command in PowerShell
  - '**CHPP 65001**'
  - 

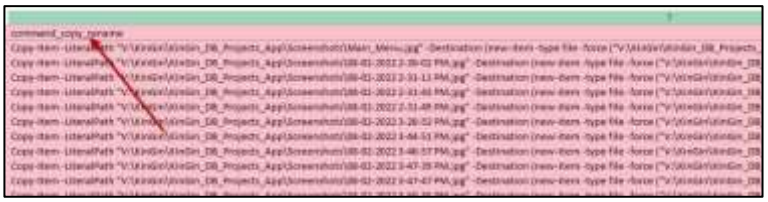
Important ! – This command tells PowerShell to use a standard 'extended' character set (UTF-8). This will ensure that characters with 'extra bits' on them such as accents are recognised correctly

- As an example, music albumn files often contain albumn and song names with accents etc. over the letters



Execute the Commands

- To access the generated commands, 'Unhide' some more hidden columns between the '**file_analysis_notes'** and '**folder'** columns
- A separate column exists for each of the command action types.

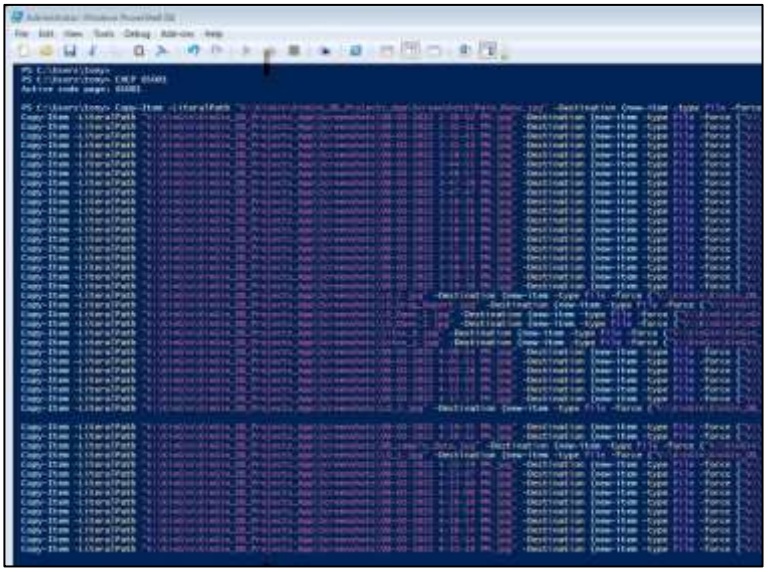


- To execute the commands, simply select the commands, copy them into the PowerShell window, and hit 'Return'

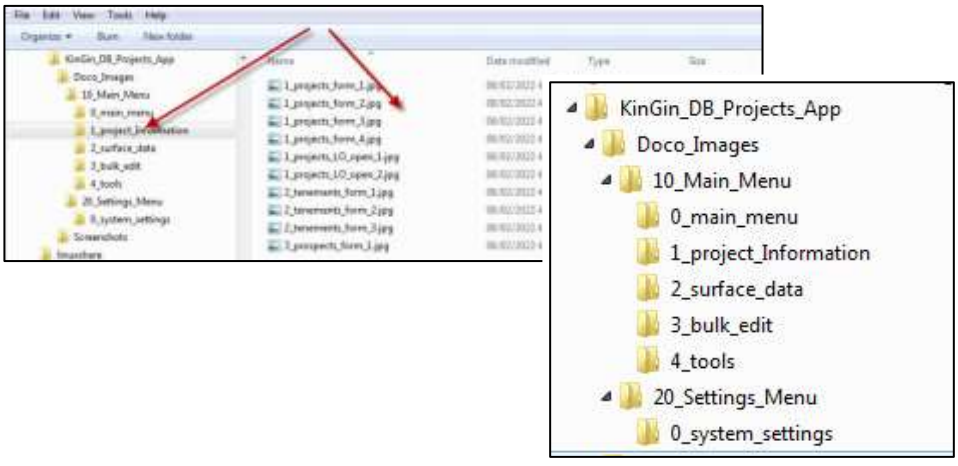
Warning! – BEFORE you execute the commands you have pasted into PowerShell, go back to the spreadsheet and step off any records involved in your action commands, and possibly turn off the uLabel image display

PowerSheel will not execute actions if it senses a file is in use for example in the catalogue list.

-

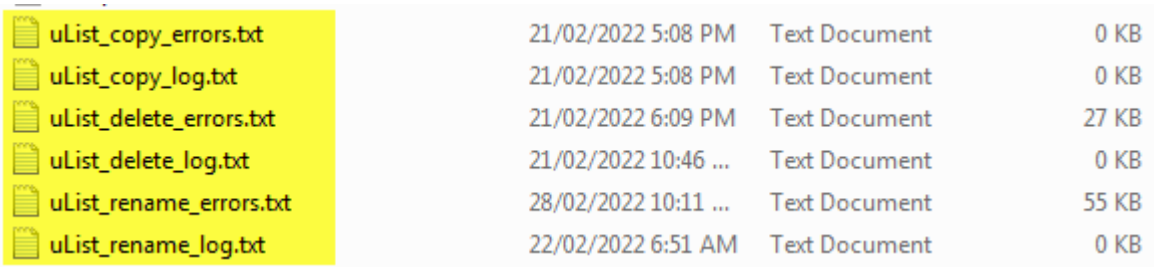


- And hopefully you will end up with your files nicely named and neatly organised in a new structured and logical environment

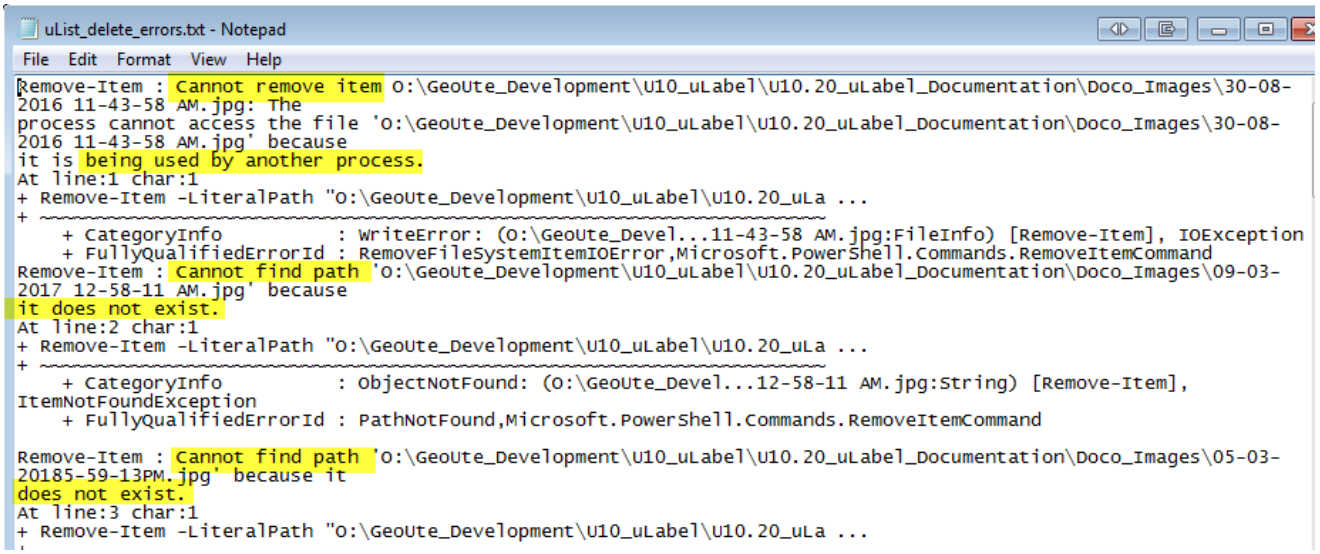


CHECKING FOR ERRORS

uList creates both a log file of actions performed, and an error file of all the things that didn't work as expected. These are created in the C:\Temp folder



If things go 'pear-shaped', check these files



PRESERVING AN AUDIT TRAIL

Once you have finished, the uList catalogue can be saved as a log of the changes you made to the files concerned

PERFORMING A SECOND SET OF ACTIONS

Be aware that once you have performed any of these actions, the name and location in the catalogue will be incorrect, referring to the original file name and location.

If you want to undertake a second set of actions **on files that you have already played with**, (not commonly necessary) there are two courses of action available

- Create a new uList catalogue of the related folders
- OR modify the uList catalogue to reflect the changes; i.e. to indicate what the file is NOW called, and where it NOW lives. To achieve this –
  - Update the 'file_name' column, including the file-type extension, to reflect the new filename
  - Update the 'full_pathname' column to reflect both the new folder location and new name.

Tip ! – As a reference, and to provide an audit trail, uList carries three other hidden columns, preserving the original details for the file_name, folder, and full_pathname

full_pathname	full_pathname_original
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
abel_D	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D

file_name	file_name_original
30-08-2016 11-43-58 AM.jpg	30-08-2016 11-43-58 AM.jpg
09-03-2017 12-58-11 AM.jpg	09-03-2017 12-58-11 AM.jpg
05-03-20185-59-13PM.jpg	05-03-20185-59-13PM.jpg
05-03-2018 6-12-17 PM.jpg	05-03-2018 6-12-17 PM.jpg
05-03-2018 6-16-41 PM.jpg	05-03-2018 6-16-41 PM.jpg
05-03-2018 6-17-51 PM.jpg	05-03-2018 6-17-51 PM.jpg
05-03-2018 7-03-00 PM.jpg	05-03-2018 7-03-00 PM.jpg
21-12-20167-46-26AM.jpg	21-12-20167-46-26AM.jpg
22-02-20173-33-05PM.jpg	22-02-20173-33-05PM.jpg
12-02-2019 10-49-33 AM.jpg	12-02-2019 10-49-33 AM.jpg
12-02-2019 11-43-26 AM.jpg	12-02-2019 11-43-26 AM.jpg
core_trays.jpg	core_trays.jpg
21-02-2022 8-49-44 AM.jpg	21-02-2022 8-49-44 AM.jpg

	folder_original
cumentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
cumentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
cumentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
cumentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D
O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_Documentation\Doco_Images	O:\GeoUte_Development\U10_uLabel\U10.20_uLabel_D

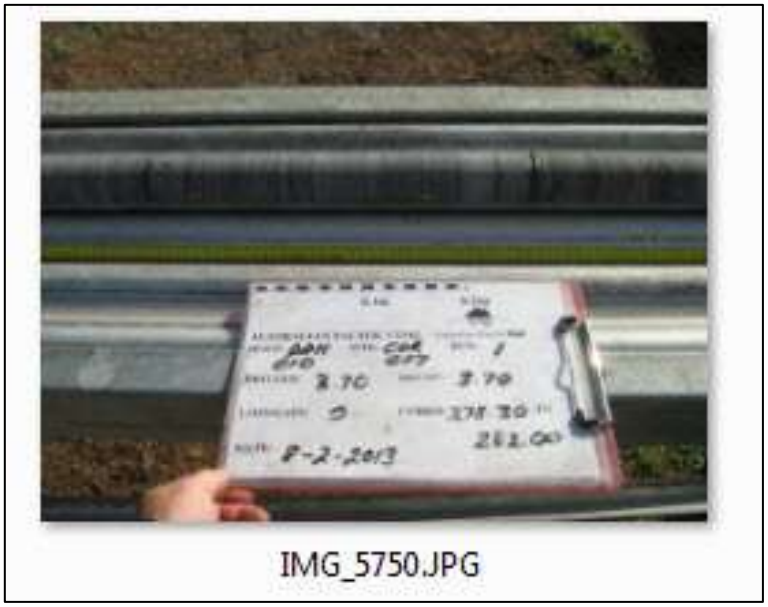
EXITING THE SYSTEM

Just like every other application; click the 'X'

{*Add examples for each of the suggested uses in the Concepts section*}

EXAMPLE – NAMING CORE TABLE PHOTOS

When logging drill core, it is common to take photos of the core, ideally in the split barrel before transfer to the core trays. These photos are taken normally of a fixed-length interval (say 0.5m) once the core has been marked up.



When these photos are transferred, they will have the camera-assigned filename (e.g. IMG1234, IMG1235…)

Using uList, a catalogue of these photos can be generated.

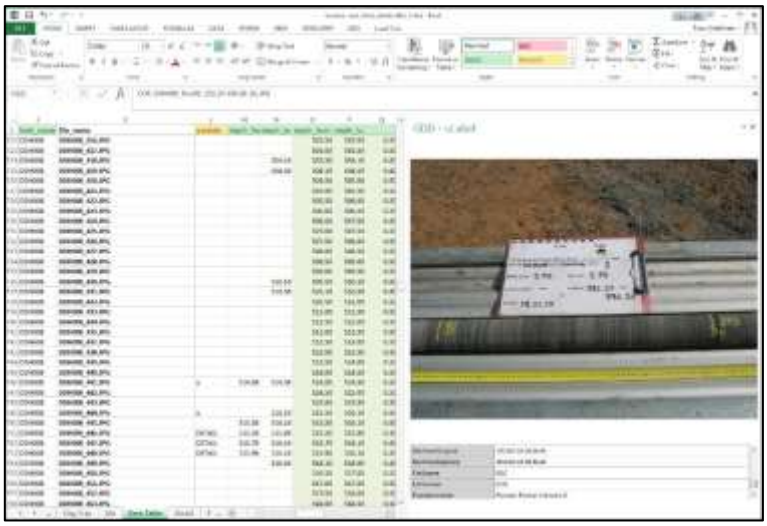
COR_DDH009_Run01_392.27-396.20_02.JPG

	L	M	N	O	P	Q
	exclude	depth_fro	depth_to	depth_from	depth_to	
				512.50	513.00	0.50
				513.00	513.50	0.50
				513.50	514.00	0.50
				514.00	514.50	0.50
	x	514.00	514.50	514.00	514.50	0.50
				514.50	515.00	0.50
				515.00	515.50	0.50
	x		516.10	515.50	516.10	0.60

By adding a few work columns for 'hole_no', 'depth_from' 'depth_to, and 'photo_code' (for WET or DRY for example, the relevant data can be assembled for each photo.

set_from	set_to	calc_from	calc_to	calc_thick	hole_ID
0.00	2.00	0.00	2.00	2.00	DDH001
		2.00	4.00	2.00	DDH001
		4.00	6.00	2.00	DDH001
		6.00	8.00	2.00	DDH001
	9.00	8.00	9.00	1.00	DDH001
	10.00	9.00	10.00	1.00	DDH001
		10.00	12.00	2.00	DDH001
		12.00	14.00	2.00	DDH001
		14.00	16.00	2.00	DDH001
		16.00	18.00	2.00	DDH001
		18.00	20.00	2.00	DDH001
		20.00	22.00	2.00	DDH001
		22.00	24.00	2.00	DDH001
		24.00	26.00	2.00	DDH001
		26.00	28.00	2.00	DDH001
		28.00	30.00	2.00	DDH001
		30.00	32.00	2.00	DDH001
		32.00	34.00	2.00	DDH001
		34.00	36.00	2.00	DDH001
		36.00	38.00	2.00	DDH001
		38.00	40.00	2.00	DDH001
		40.00	42.00	2.00	DDH001
		42.00	44.00	2.00	DDH001
		44.00	46.00	2.00	DDH001
0.00		0.00	2.00	2.00	DDH002
		2.00	4.00	2.00	DDH002
		4.00	6.00	2.00	DDH002
		6.00	8.00	2.00	DDH002
		8.00	10.00	2.00	DDH002
		10.00	12.00	2.00	DDH002
		12.00	14.00	2.00	DDH002
		14.00	16.00	2.00	DDH002
		16.00	18.00	2.00	DDH002
		18.00	20.00	2.00	DDH002
		20.00	22.00	2.00	DDH002

This is very easy using the uLabel viewer panel as shown.



Because the default photo target length is 0.5m, use of intelligent Excel functions can pre-populate the depth fields based on the record above.

As each photo is viewed, any variations can be entered over the calculated value.

SECTION 6 –
A uLIST TUTORIAL

Describe

Where to get it

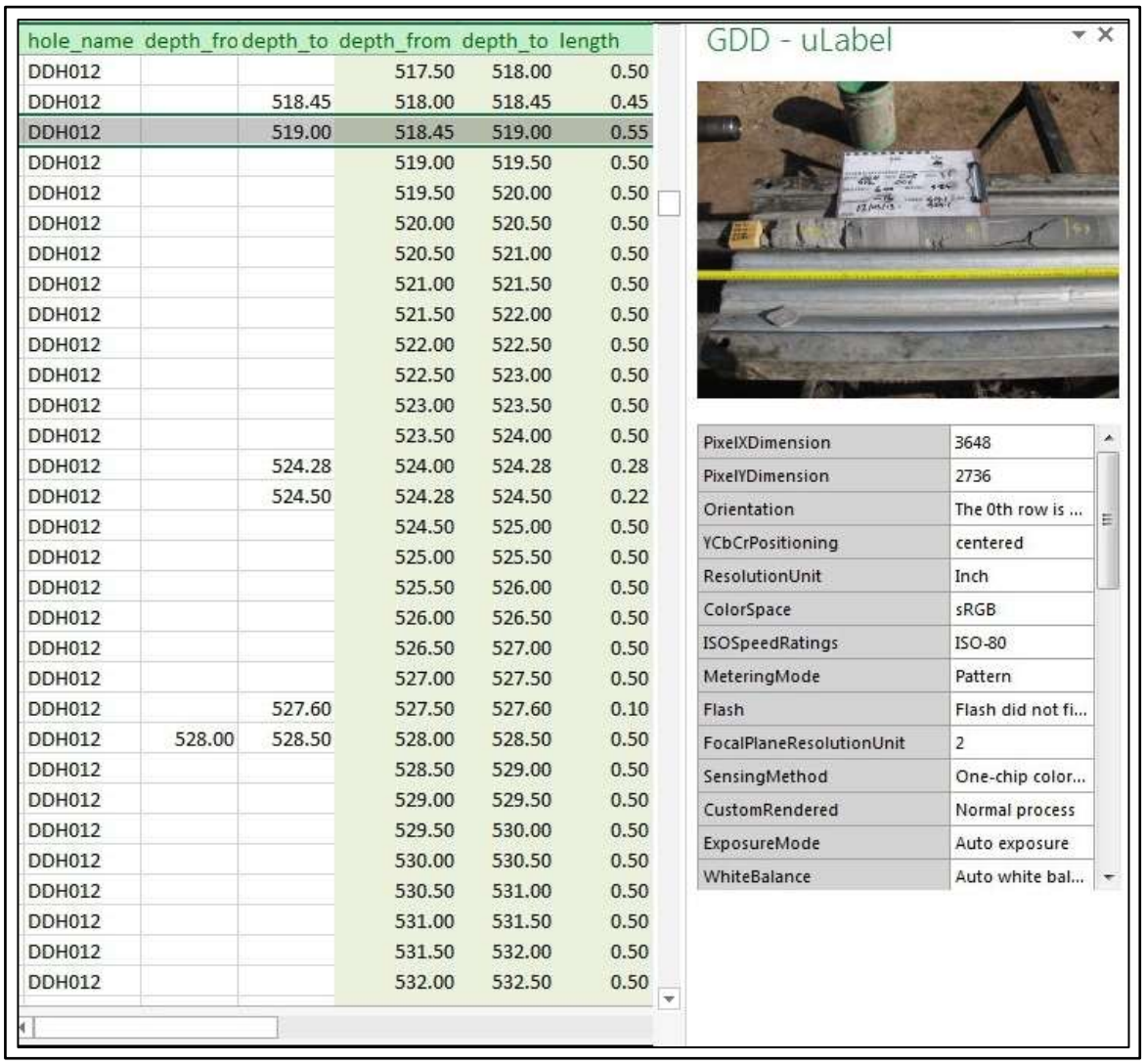
What it contains

(What it should contain…)

- File types –
  - MS Office files
  - Images
  - Photos
  - Photos with coords
  - Maps
  - Data files
  - Application work files
- Include some that –
  - Are duplicates
  - Need renaming
    - E.g. Photos
  - Are spread out ;
    - to reorganise with ‘move’
    - to centralise a type set with ‘copy’
  - Have strange suffixes – need identifying

Here are just a few examples.

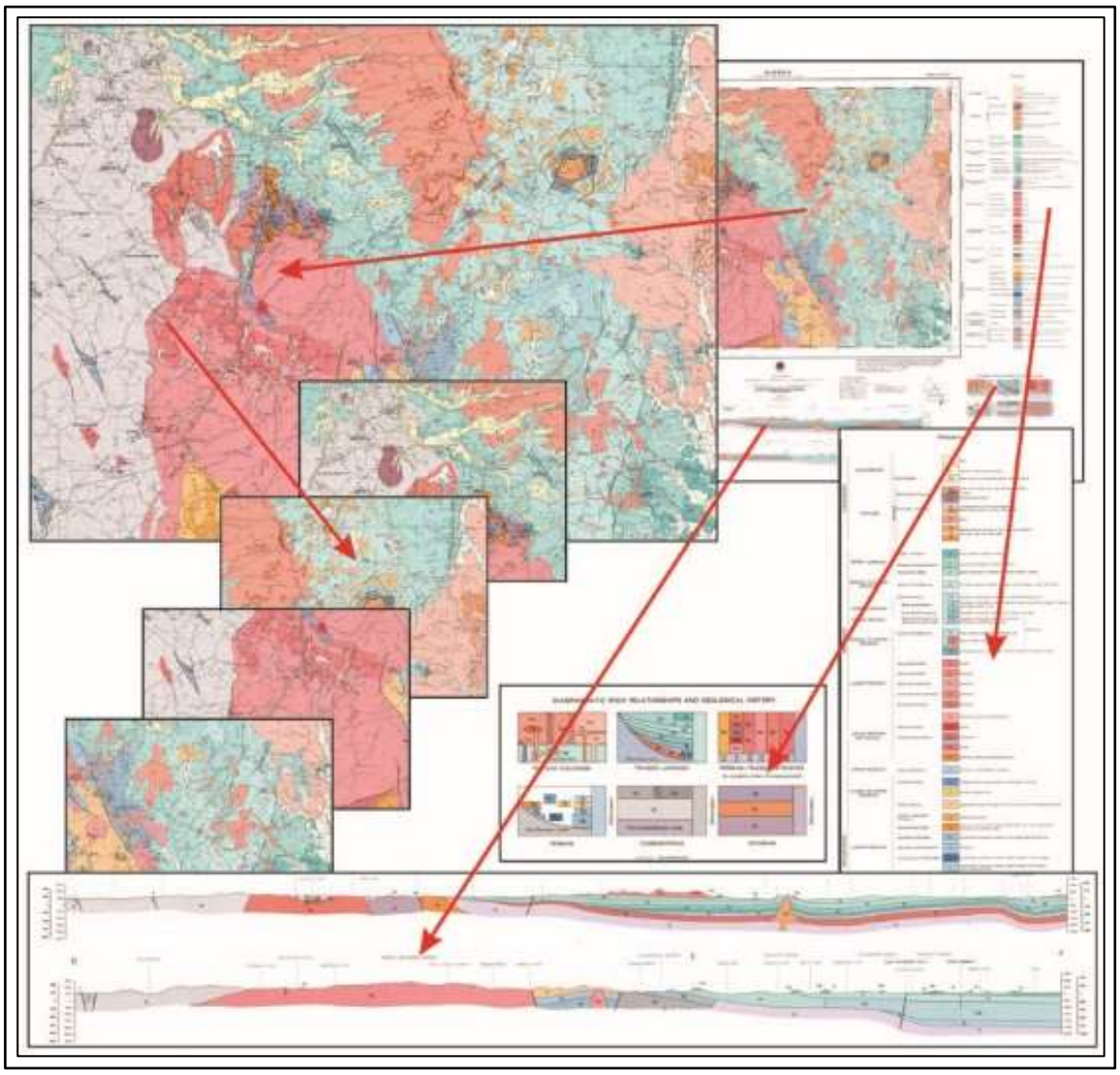
- Generating a list of files for input into other applications, for example –
  - uLook, the geoUte Data File Previewer
  - uCrop, the geoUte Image Cropping Utility
- Creating a file catalogue and dated archive to create a technical data package -
  - For joint venture partners or consultants tasked with an evaluation task.
  - As a JORC audit list of the files used for a resource or reserve estimation
- Cleaning up and reorganising a set of folders / files -
  - Just so you can find stuff again….
- Identifying, sorting, organising and renaming photos -
  - Assigning hole name, depths and photo conditions to core photos
  -



hole_name	depth_fro	depth_to	depth_from	depth_to	length
DDH012			517.50	518.00	0.50
DDH012		518.45	518.00	518.45	0.45
DDH012		519.00	518.45	519.00	0.55
DDH012			519.00	519.50	0.50
DDH012			519.50	520.00	0.50
DDH012			520.00	520.50	0.50
DDH012			520.50	521.00	0.50
DDH012			521.00	521.50	0.50
DDH012			521.50	522.00	0.50
DDH012			522.00	522.50	0.50
DDH012			522.50	523.00	0.50
DDH012			523.00	523.50	0.50
DDH012			523.50	524.00	0.50
DDH012		524.28	524.00	524.28	0.28
DDH012		524.50	524.28	524.50	0.22
DDH012			524.50	525.00	0.50
DDH012			525.00	525.50	0.50
DDH012			525.50	526.00	0.50
DDH012			526.00	526.50	0.50
DDH012			526.50	527.00	0.50
DDH012			527.00	527.50	0.50
DDH012		527.60	527.50	527.60	0.10
DDH012	528.00	528.50	528.00	528.50	0.50
DDH012			528.50	529.00	0.50
DDH012			529.00	529.50	0.50
DDH012			529.50	530.00	0.50
DDH012			530.00	530.50	0.50
DDH012			530.50	531.00	0.50
DDH012			531.00	531.50	0.50
DDH012			531.50	532.00	0.50
DDH012			532.00	532.50	0.50

PixelXDimension	3648
PixelYDimension	2736
Orientation	The 0th row is ...
YCbCrPositioning	centered
ResolutionUnit	Inch
ColorSpace	sRGB
ISOSpeedRatings	ISO-80
MeteringMode	Pattern
Flash	Flash did not fi...
FocalPlaneResolutionUnit	2
SensingMethod	One-chip color...
CustomRendered	Normal process
ExposureMode	Auto exposure
WhiteBalance	Auto white bal...

- Identifying project technical data files for preparation and assembly into a database -
  - Vulcan, Datamine, MicroMine, gDrill or gBore, for importing drillhole data
- Extract photo locations for matching against field data –
  - For linking the photos to the field data in gPick applications
- Extract the GIS sheet limits and parameters from georeferenced map sheets –
  - For cropping and georeferencing of selected parts of the maps with uCrop

- 
-

CREATE A LIST OF FILES

GENERATE THE FILES LIST

Steps

EXPLORING THE FILES CATALOGUE

Contents and uses

Opening a File

Open the Folder Containing a File

MOVING, COPYING, RENAMING AND DELETING FILES

Exercise for each –

Copying Files

Moving Files

Deleting Files

Renaming Files

Moving / Copying and Renaming Files ai the Same Time

Checking for Errors

CREATE A LIST OF FOLDERS

GENERATE THE FOLDERS LIST

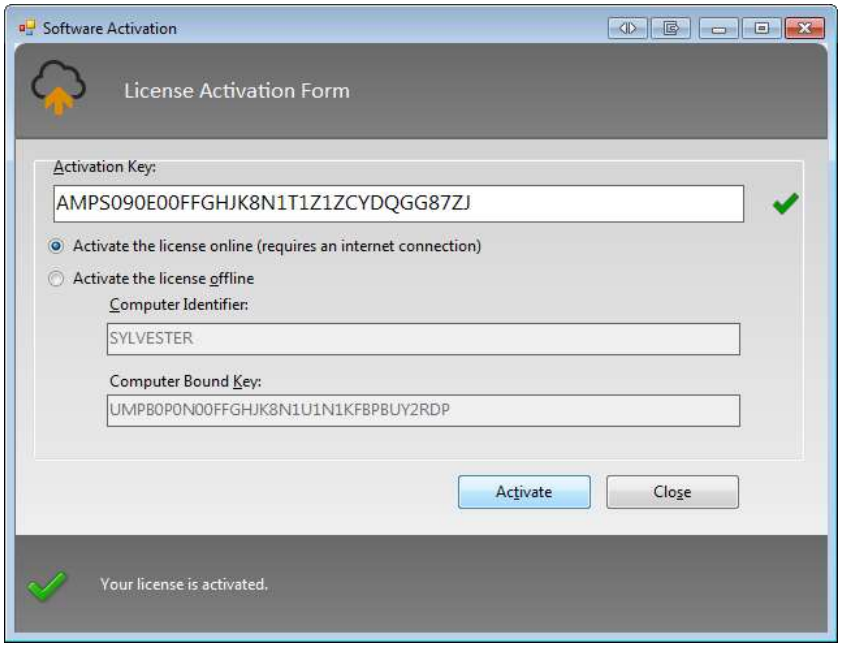
Steps

EXPLORING THE LIST OF FOLDERS

SECTION 7 – APPENDICES

HOW TO INSTALL & ACTIVATE uLIST

##CL Tony / Christophe to provide



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