List Tools Pro User Guide:

v10.18.03 : 21 April 2022

This is a detailed guide to loading and running the LIST Tools Pro Add-in. They are more detailed than the included Help information. These notes concentrate on the normal operation of the tools and should be used in conjunction with the Release Notes which detail, the history, compatibility, known issues and limitations of the tools.

Getting the Add-In

- Go to the https://github.com/DPIPWE/LIST_Tools_Pro_Addin/releases/latest
  Also, you can go to all the releases from the GitHub main:

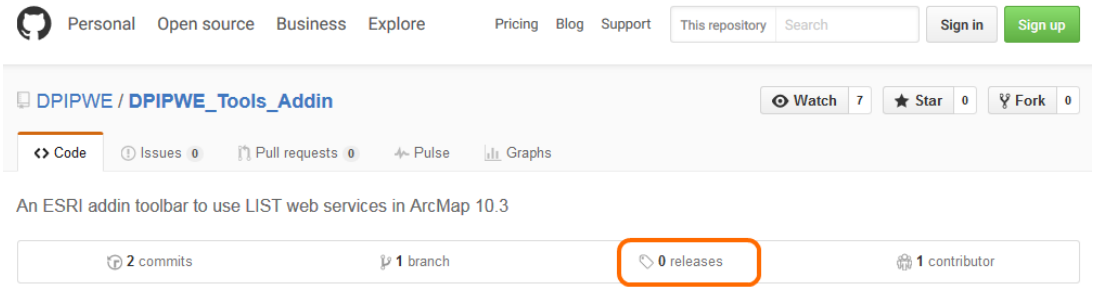


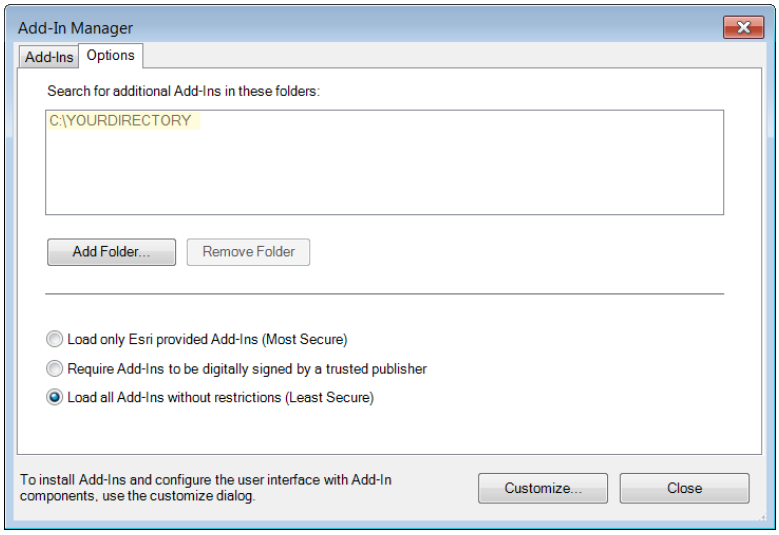
Image is for the older ArcMap repository but process is the same.

- Download either of the zip file or compressed tar.zip file. They are in standard zip format.
- View and Unzip the documents
- The Add-in is in the sub folder /application as a LIST_Tools_Pro*.esriaddinx file while documentation is either in the form of *.md files or pdf files in the docs sub directory.

Loading the Add-in into ArcGIS Pro

Place this file in an accessible directory. This directory can be on a network drive and so available to everybody that has access to that drive. The *.esriAddinx file should be at the top level of the directory.

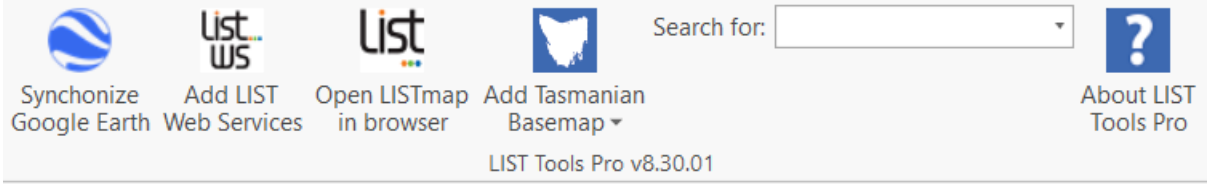
- In ArcGIS Pro: Select Project > Add-In Manager which has 2 tabs
  - Add In Manager: Displays available add-ins.
    The Date and Version should match the release
  - Options Tab: allows users to add an add-in
- Options: Add Folder. When the Add File dialog appears you can either navigate to the folder of paste in its path
- Check *"**Load All Add-Ins**" without restrictions (least secure)* option. We publish our add-ins without a digital signature.
- Save the Pro Project



The tool should appear on the main ribbon as a separate tab labeled “LIST Tools (Pro)”. Clicking the tab should bring up the LISTtools toolbar.

More about ESRI AddIns for ArcGIS Pro and the Add-In Manager.

The Tools



Open a Google Earth view of the ArcGIS Pro extent. Opens the system default installation of Google Earth and displays a view matching the extent of the active frame in ArcGIS Pro. This view is continuously updated as the Pro view is changed. Clicking the button again switches off this synchronisation of Google Earth to ArcGIS Pro.

To use the **Google Earth Viewer** you’ll need to install Google Earth Pro for desktop https://www.google.com/earth/versions/#earth-pro. There shouldn’t be any problems especially if it is installed to the standard location C:\Program Files\Google\Google Earth Pro.

On the first use of the viewer, it is determined if Google Earth is the default application for using kml/kmz files. If not, your system is searched for an installation of Google Earth and that is run instead of whatever the default application is for kml/kmz files.

It uses 2 KML files to store and manage the view in Google Earth. These are stored in:

Users\USERNAME\AppData\Local\GoogleView

The 2 kml files are:

- AMG2GE_CurrentView.kml: sets default location and connects to current view info
- MA2GE_NetworkLink.kml: updates current view

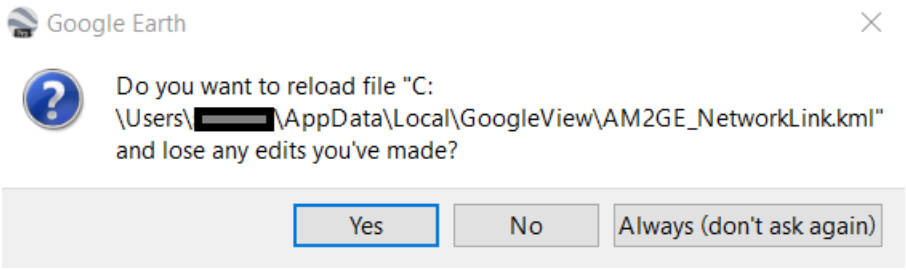
This methodology has been tested with a wide variety of Google Earth installations.

The code is based upon the work of Chris Stayte. Our Google Earth Viewer is no longer restricted to **v7.1.2.2041** of Google Earth and Google Earth Pro or earlier. So far, if we have been able to successfully install and run Google Earth, then the Google Earth Viewer of LIST Tools was able to use it.

To fix slow/jerky transitions between scenes of Google Earth:
Set the Zoom / Fly-to rate in Google Earth:

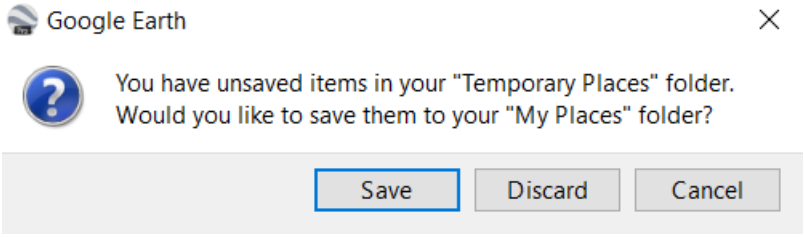
- Tools > Option> Navigation Tab >
- Adjust Fly_To_Speed to maximum of 5 from the default which is slow.
- Check "Do not automatically tilt while zooming"
- Apply

When you stop synchronisation Google Earth will respond with the following dialog:



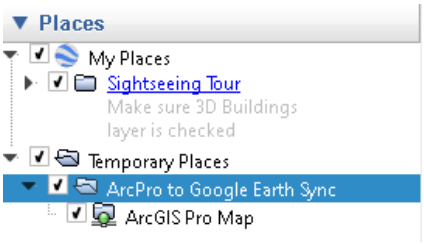
Answer either **Yes** or **Always (don't ask again)**.

When you shut down Google Earth, it will display the following dialog:



Answer with **Discard**.

This will keep the list in your "Temporary Places" and "My Places" clean. If you have trouble like Google Earth flickering or always going back to another place, check and delete entries like "ArcPro to Google Earth Sync"



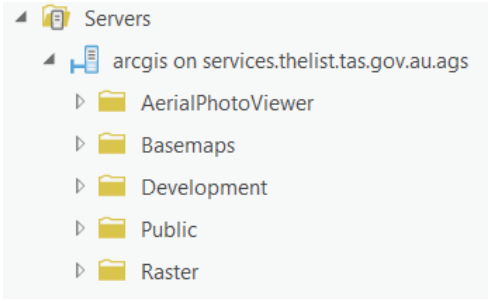
Create a LIST web services link and catalog entry.

Adds a directory of LISTMap web services to the Catalogue Pane.

This functionality replaces the detailed instructions for manually adding LIST Web Services given in: LIST Spatial Web Services User Guide. Look there if you need to Add Web Services to another GIS package.

When there is no arc gis server (ags) connection file available
(i.e. "services on services.thelist.tas.gov.au.ags" file) in the project folder, a connection file is added. This will be called "ListToolsPro_services.thelist.tas.gov.au"

The available LIST web services will be added to the catalogue pane. These can be expanded to explore all publicly available data sets.



Add List View

Opens LISTMap in your default browser with an extent similar to that shown in the active map pane of ArcGIS Pro. Click again to create another instance within your browser: one separate browser tab for each click.

- If the active map pane does not contain Tasmania, a view covering all of Tasmania will be displayed.
- A warning message will appear if the active map pane is in a spatial reference unsupported by LISTMap. In this case, the displayed view will be for all of Tasmania in the Web-Mercator spatial reference.

List Basemap Gallery

The user is presented with a gallery of available basemaps from LISTMap web-services. These include topographic, ortho imagery, elevation, scanned TasMap's and historical maps.

Once clicked the basemap will be added to the top of the contents pane. The extent will be that of the active map pane unless that is outside or much larger than Tasmania, in which case the active pane will display just Tasmania.

Search LISTMap for features and addresses.

The search capabilities are similar but not identical to those of LISTMap. LIST_Tools_Pro does not employ phonetic searches, but accepts a wider array of co-ordinate searches and distinguishes between survey markers and state highways. Like LISTmap you can search using what3words.

As you search for a feature or a position, Pop-up "Toast" notifications show the progress of your search. Summary information is added to Pro's Notifications. These notifications alert users to errors or when no features can be found. The search will fail if more than 500 features would be returned.

At the end of a search a feature class containing the search results will be created and added to the Table of Contents as a layer called LISTSearch_Polygons or LISTSearch_Points depending upon the type of search. The search results feature class will be added to the project's default gdb. This gdb will be updated for each new search.

If there is only one result the active map will automatically zoom to that feature. Otherwise, a list of features will be displayed and the map zoomed to the overall extent of the found features. The feature list is split into 2 parts: Named Features Found and Addresses Found. Clicking a tab, switches to that list. Hovering over a row in the table will place a marker on the map while a click will zoom to that feature. You can always zoom to the full extent.

For each type of search that returns a polygon (not coordinates) it is possible to search for multiple entries of the same type. The list should be enclosed in [] and separated by commas e.g. [MB001,MB100,MB407] or for exact searches ["THR1334","Scamander Fire Station","134 Macquarie Street Hobart"].

You can search for:

- Addresses or part of an address e.g., "134 Macqaurie Street"
  Abbreviations can be used: e.g., Rd for Road, St for Street.
  Basic punctuation is accepted.
  Mostly "Saints" are abbreviated with "ST", this is also handled.
- Named feature e.g., "Rosny Hill", EMP210 (Emergency Meeting Point)
- Property title by PID (e.g., 5668915) or Volume (e.g., 239460) or Volume\Folio e.g., 239460\1. Note Use backslash \ instead of forward slash /
- Coordinates using GDA MGA e.g. 526788.0 5251920 (" " or "," as coordinate separator).
- Coordinates using GDA Lat/long in
  Acceptable formats:
  - -42 53 05 147 19 41 (can have decimal seconds)
  - S42d 53m20.4s 147° 19' 41.0''E (Prefixes SN+-, EW+- and Suffixes: NS, EW). Yes you can mix formatting.
  - -42 53.08 147 19.68 (decimal minutes optional)
  - -44:45:03.9 , 148:34:23 (":" optional, need at least one space)
  - -41.8847,143.3279 (":" optional)

  The user will be warned if a valid point is out-side Tasmania and give the option to zoom to that point. Points inside Tasmania are zoomed-to automatically.
- Map Book Reference (e.g., MB001 to MB407, must have 3 digits; include leading 0's).
- Map Book Grid Reference (e.g., MB001A1 to MB407C36) (last digits A to X and 1-36)
- Street Atlas page number (e.g., SA022 to SA250, must have 3 digits include leading 0)

- Street Atlas 1K grid reference (e.g., SA022A1 to SA250F7).
- Emergency Meeting Point (e.g., EMP12).
- Route Codes / Highways “Route A1” are no longer used. Use A3, B10, C201 or as an exact search “A3”. If there is a Survey Marker with same designation both entries are returned. The case of Highway 1 aka “1” is handled specially.
- State Permanent Markers (e.g., SPM 5269, ST383, HECBM1779, 24/1 etc.).
- What3Words search. (e.g. biked.flow.chase)
- Exact search: enclose search string in double quotes i.e. “ blah “; this search includes spaces. This is the cleanest way to find suburbs e.g., Hobart, St Marys.

Display Help information.

A separate window with basic information about LIST Tools Pro is given. A pdf with more information is available by answering “Yes”. The information is similar-to but not quite as comprehensive as that of this Users Guide.

Logging and Error Handling

There is extensive error handling and logging. The log file is stored in C:/Data/ListTools and follows the naming convention of LISTtoolsProYYYYMMDD-hhmmss.log. Only the latest log is kept. By default, the log level is set at “Information”. This records all messages of this level or more severe. This can be changed by adding a text file called LISTtools.ini with the line like loglevel=Warning. The levels are in order of increasing severity: Verbose, Information, Warning, and Error.

For users within the NERT domain the log file is automatically sent to GISSD when an ERROR has been logged. In addition, NRET uses can send error messages to GISSD when an error occurs. This functionality is not available to users outside NRET.

Support

For information about compatibility, know issues … see the **Release Notes** for the latest release.

The development work has been undertaken by the GIS Systems and Development section of the Heritage and Land Tasmania for internal departmental use. As they may prove useful to the wider GIS community in Tasmania, they are provided “as-is” to external users without warranty of any kind, express or implied.

If you are seeking assistance or wish to provide feedback you can email mailto:gissd@dpipwe.tas.gov.au. However, our resources to provide support to external users is limited and at the discretion of Land Tasmania.

Contact

Tasmanian Government

Location Services
134 Macquarie Street
HOBART TAS 7000
Phone (03) 6165 4118
Email mailto:gissd@dpipwe.tas.gov.au