



# GeoReference Tool

## Description:

The *ODOT\_OSIP\_References.mvba* is a Visual Basic Application developed to assist the process of finding and attaching OSIP data. This application is available for use externally and internally to ODOT via the ODOTcadd standards (see [next section](#) for details on loading the application). Please note while the application is available from the ODOTcadd standards the OSIP data in which this application uses is not released with the ODOTcadd standards. Externals will have to download the data from OGIPS website, <http://ogrip.oit.ohio.gov/> if they want to attach the tif or point cloud data. But the application can still be used with the WMS files which are released in the standards.

The application file can be found in the following place:

*ODOTcadd Standards: ..\ODOTcadd\Standards\vba\ODOT\_OSIP\_References.mvba*

Follow this [link](#) to watch the How To YouTube video on this application.  
The main purpose of this documentation is to explain how to use this application.

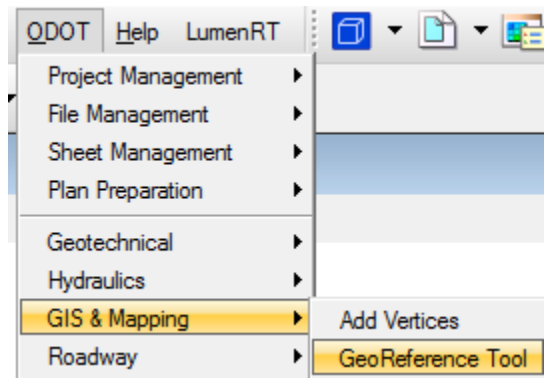
## Loading the Application:

This Application requires a *cfg* file in order to show up in the ODOT pulldown menu. The *cfg* file should be named **GeoReferenceTool.cfg** and should be placed inside the local\config folder of the ODOTcadd Standards. If this file does not exist at this location then the application will not be shown in the ODOT pulldown menu. Multiple variables can be set inside this *cfg* file and their values should be set according to the location of the data. Please note that this is for an office level setting. This is not for a per user setting, that is discussed below in the [Settings section](#). The following are a list of variables that can be set for use with this application.

```
ODOT_IMAGERY_PRIM_DIR =
ODOT_PC_PRIM_DIR =
ODOT_IMAGERY_SEC_DIR =
ODOT_PC_SEC_DIR =
ODOT_MISC_IMAGERY_DIR =
ODOT_MISC_PC_DIR =
ODOT_MISC_TILE_LOC =
```

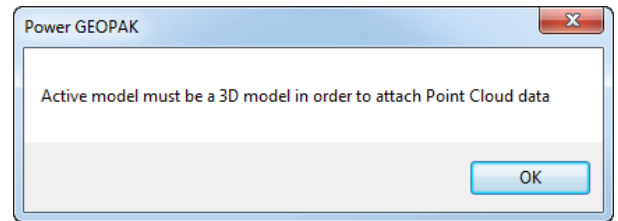
To load the *ODOT\_OSIP\_References.mvba* open MicroStation and select **ODOT > GIS & Mapping > GeoReference Tool** from the MicroStation pull down Menu (active model must be a 3D model in order to attach point cloud data) or by the following key-in command:

*vba load ODOT\_OSIP\_References.mvba; vba run modPointCloud.runReferencePC*



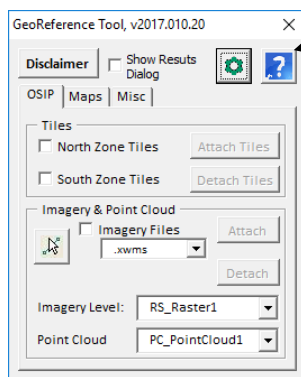


The user is first prompted with a disclaimer in which the user must select OK in order to open the application. If the active model is not a 3D model then the dialog box shown above to the right is displayed. After selecting OK the Application will still open but the option to attach point clouds will not be there. This is because point cloud files can only be attached in 3D models. Once the user switches to a 3D model the option for attaching point clouds will appear in the dialog.



## Application Operation:

When loaded the dialog shown below will appear.



This button will open this PDF.

The dialog is comprised of three pages, OSIP, Maps, and Misc. The OSIP page has two main sections, [Tiles Section](#) and [Point Cloud & Imagery Section](#). The Maps page has two main sections, [Google Maps Section](#) and [Bing Maps Section](#). The Misc page also has two main sections, [Misc Tiles Section](#) and [Misc Imagery & Point Cloud Section](#). It also has a [Disclaimer button](#), [Show Results Dialog checkbox](#), help button (called out in the image above), and has a [Settings](#) button.

## Tiles Section:

This section is for attaching or detaching the North Zone Tiles dgn file and/or the South Zone Tiles dgn file. These dgn files are needed by the application in order to know what OSIP data to attach. This section is comprised of two check boxes and two buttons.

### North Zone Tile CheckBox:

This checkbox is used to define if the North Zone Tiles dgn file should be attached or detached when either the [Attach Tiles Button](#) or the [Detach Tiles Button](#) is selected.

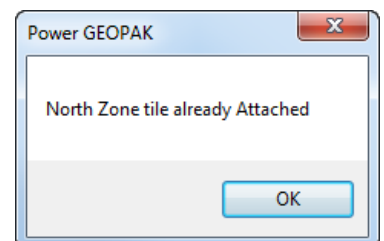
### South Zone Tile CheckBox:

This checkbox is used to define if the South Zone Tiles dgn file should be attached or detached when either the [Attach Tiles Button](#) or the [Detach Tiles Button](#) is selected.

### Attach Tiles Button:

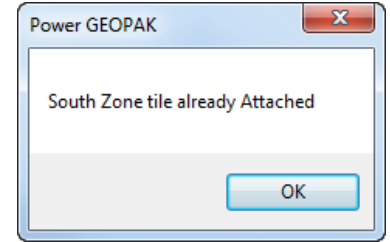
This button will not be enabled until at least one of the two checkboxes in the Tiles section is checked on.

When this button is selected it will attach the North Zone Tiles dgn file if the [North Zone Tile CheckBox](#) is checked on. If this dgn file is already referenced in the active model then the application will check to see if the existing reference link is broken, if it is then it detaches the broken reference and attached it again, if not then the user is prompted the dialog shown to the right.





It will also attach the South Zone Tiles dgn file if the [South Zone Tile CheckBox](#) is checked on. If this dgn file is already referenced in the active model then the application will check to see if the existing reference link is broken, if it is then it detaches the broken reference and attached it again, if not then the user is prompted the dialog shown below to the right.



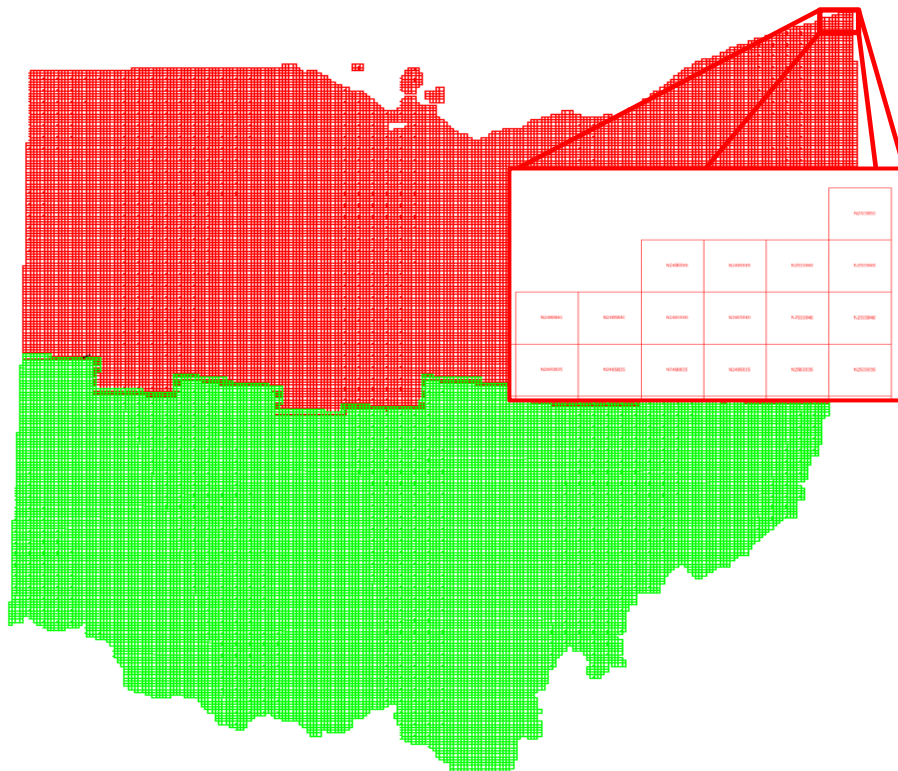
When the dgn files are attached the Orientation is set to Geographic – Reprojected. This is done so that if the active models GCS is different from the tiles dgn files then the tiles dgn files will be reprojected to line up with the active models GCS. If the active model does not have a GCS assigned then the orientation of the reference file is set to Coincident – World. It is the user’s responsibility to ensure that the references were attached and displayed at the correct location.

The referenced files are found in the ODOTcadd standards at the following locations.

```
..\ODOTcadd\Standards\data\OSIPTile_OH83-NF.dgn
..\ODOTcadd\Standards\data\OSIPTile_OH83-SF.dgn
```

The application finds the location of these two dgn files by use of the *ODOT\_STD* variable. This variable is being defined in the *z\_ODOT\_redirect.cfg* file that is created when configuring MicroStation for ODOTcadd standards.

Below is an example of what the attached tiles files look like in MicroStation and a zoomed in area. The Red tiles are the north zone tiles dgn reference and the green tiles are the south zone tiles dgn reference. Each tile consists of a square shape and a text element in the middle displaying the name of that given tile.





#### Detach Tiles Button:

When this button is selected it will detach the North Zone Tiles dgn file from the active model if the [North Zone Tile CheckBox](#) is check on. If the dgn file is not currently attached when the button is selected then nothing happens. If the [South Zone Tile CheckBox](#) is check on when this button is selected then the South Zone Tiles dgn file will be detached from the active model. If the dgn file is not currently attached when the button is selected then nothing happens.

### Point Cloud & Imagery Section:

This section is used to attach point cloud data and Imagery. The point cloud data and imagery is broken into tiles to manage the data in a more useful manner. See [Tiles Section](#) for more information on tiles. This section consists of two checkboxes, two dropdown lists, and three buttons.

#### Point Cloud Checkbox:

This checkbox is used to define if Point Cloud data should be attached or detached when either the [Attach Files Button](#) or [Detach Files Button](#) is selected. This Checkbox will only be shown if the active model is a 3D model.


#### Imagery Checkbox:

This checkbox is used to define if Imagery should be attached or detached when either the [Attach Files Button](#) or [Detach Files Button](#) is selected.

#### Imagery type List Box:

This list box has two values. “.xwms” and “.tif”. This sets which raster attachment type to use when the [Attach Files Button](#) or [Detach Files Button](#) is selected and the [Imagery Checkbox](#) is checked. Note that if the `ODOT_IMAGERY_PRIM_DIR` variable is not defined the “.tif” option in the listbox will not be there. See [Primary Imagery Directory](#) in the [Settings](#) sections for my info about this variable.

#### Selection Button:

This button is used to clear the selection set and start the element selection tool. The user could simply select the element selection tool  instead. The purpose of this button is to create a selection set. The selection set can be comprised of any elements but the intent is to select the desired tiles (See [Tiles Section](#) for attaching tiles) that the user wants to attach or detach point cloud data and/or imagery by use of the [Attach Files Button](#) or [Detach Files Button](#).

#### Point Cloud Level List Box:

This list box contains a list of Point Cloud levels in the ODOTcadd Standards. The selected level will be the level that Point Cloud files will be set to when attaching them.

#### Imagery Level List Box:

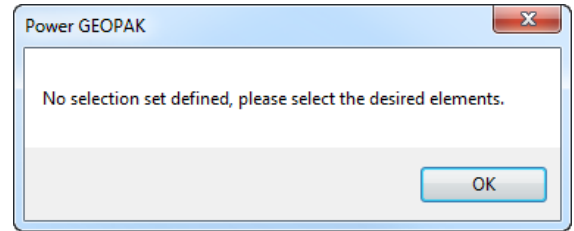
This list box contains a list of Imagery levels in the ODOTcadd Standards. The selected level will be the level that Imagery files will be set to when attaching them.

#### Attach Files Button:

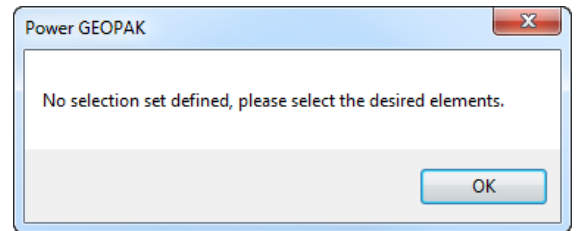
This button will not be enabled until at least one of the two checkboxes in the Point Cloud & Imagery Section is checked on.



When this button is selected and the [Point Cloud Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile. This is the text found in the center of each tile in the referenced tiles dgns (See [Tiles Section](#) for more information). Once a valid text element is found the application will attach the POD file associated with that tile. The location of the POD files are being defined with the use of two variables, *ODOT\_PC\_PRIM\_DIR* and *ODOT\_PC\_SEC\_DIR*. These variables will need defined in a cfg file in the local/config folder. The application checks for the POD files at the directory of the first variable first, if the file is not found then the second variable is used. Note that these POD files are not released with the ODOTcadd standards. Please read the [Description](#) of this document for more information. If the POD file is already attached it will not attach the file, if the POD file is not found it will also not attach.

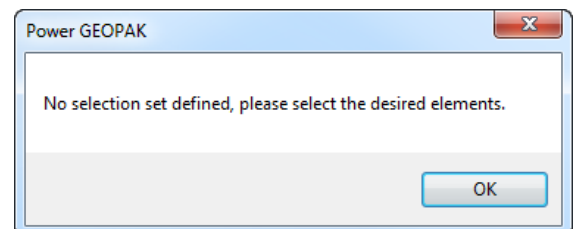


When this button is selected and the [Imagery Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown on the next page will appear. The application is looking in the selection set for any text elements that contain the name of a tile. This is the text found in the center of each tile in the referenced tiles dgns (See [Tiles Section](#) for more information). Once a valid text element is found the application will attach either the xwms file or the TIF file associated with that tile. If the [Imagery Type List Box](#) is set to .xwms then the application will attached the corresponding WMS file located inside the ODOTcadd standards *../Standards/data/WMSFiles/ directory*. If the [Imagery Type List Box](#) is set to .tif then the applicaiton will attach the corresponding tif file. The location of the TIF files are being defined with the use of two variables, *ODOT\_Imagery\_PRIM\_DIR* and *ODOT\_Imagery\_SEC\_DIR*. These variables will need defined in a cfg file in the local/config folder. The application checks for the TIF files at the directory of the first variable first, if the file is not found then the second variable is used. Note that these TIF files are not released with the ODOTcadd standards. Please read the [Description](#) of this document for more information. If the TIF file is already attached it will not attach the file again, if the TIF file is not found it will also not attach.



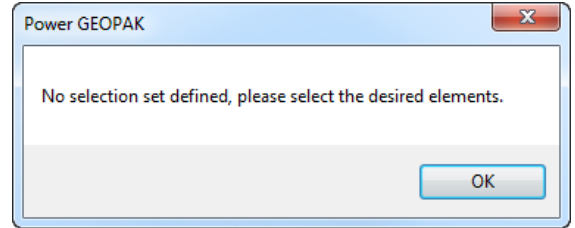
#### Detach Files Button:

When this button is selected and the [Point Cloud Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile. This is the text found in the center of each tile in the referenced tiles dgns (See [Tiles Section](#) for more information). Once a valid text element is found the application will detach the POD file associated with that tile if that POD file is currently attached.




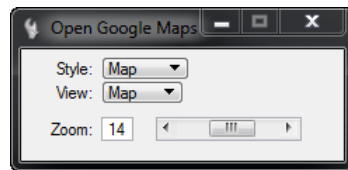


When this button is selected and the [Imagery Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile. This is the text found in the center of each tile in the referenced tile dgns (See [Tiles Section](#) for more information). Once a valid text element is found the application will detach the TIF file associated with that tile if that TIF file is currently attached.



## Google Maps Section

This section is used to open your projects location in google maps. An internet connection is required. This section has one button,  which activates a MicroStation tool called *Open Google Maps*. This tool works by issuing a data point at the location you want to open in Google Maps. Its tool box (shown below) can set the style, view, and zoom.



## Bing Maps Section

This section is used to attach Bings Maps to the users DNG file. Please Note that this section is only displayed if the MS\_RASTER\_BINGMAPS\_KEY variable is defined. Bing Maps has three different layers that can be attached, Road, Aerial, and Aerial with labels.

### Road Radial Button:

This radial button, if selected will specify to use the road layer when attaching Bing Maps using the [Attach Button](#).

### Aerial Radial Button:

This radial button, if selected will specify to use the Aerial layer when attaching Bing Maps using the [Attach Button](#).

### Aerial with labels Radial Button:

This radial button, if selected will specify to use the Aerial with labels layer when attaching Bing Maps using the [Attach Button](#).

### Imagery level List Box:

This list box contains a list of Imagery levels in the ODOTcadd Standards. The selected level will be the level that the Bing Maps reference will be set to when it is attached using the [Attach Button](#).



**Attach Button:**

This button is used to attach Bing Maps as a Raster Reference. The reference will be attached on the level set in the [Imagery level List Box](#). There are three layer options for Bing Maps. When attaching Bing Maps the layer will be whichever radial button is selected (Road, Aerial, or Aerial with Labels). If Bing Maps is already attached with the selected layer then a reference is not attached and the user is prompted with a message box saying that Bing Maps is already attached.

**Detach Button:**

This will detach all raster references to Bing Maps.

**Misc Tiles Section:**

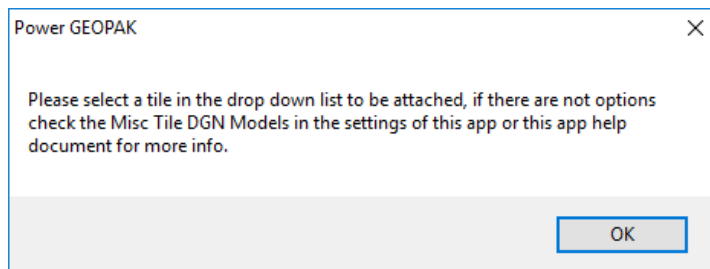
This section is for attaching or detaching miscellaneous tile dgn files. This page is very similar to the OSIP page but this page is intended for non-osip data. These tile dgn files should contain at a minimum text elements that match up to names of geo-located imagery files or point cloud files (.pod). The tile files are used by the application in order to know what data to attach. This section is comprised of a drop down list and two buttons.

**Tile drop down list:**

This list is populated initially from the *ODOT\_MISC\_TILE\_LOC* variable. This variable supports multiple values so when setting up the cfg file for this app you can set multiple dgns. The values consist of the full name including the full path to the dgn file then a “|” character and then the name of the model within that dgn file that contains the tiles or index for the desired data.

**Attach Tile Button:**

When this button is selected it will attach the selected model in the Tile drop down list as a reference. If nothing is selected in the Tile drop down list then a message box below will display.



**Detach Tile Button:**

When this button is selected it will detach the selected model in the Tile drop down list. If nothing is selected in the Tile drop down list then the message box displayed above will display.

**Misc Imagery & Point Cloud Section:**

This section is used to attach point cloud data and Imagery. The point cloud data and imagery is most often broken into tiles to manage the data in a more useful manner. See [Misc Tiles Section](#) for more information on tiles. This section consists of two checkboxes three buttons, and four dropdown lists.

**Imagery Directory Listbox:**

This listbox is populated from the *ODOT\_Misc\_Imagery\_DIR* variable. This variable can accept multiple values. This variable will need defined in a cfg file in the local/config folder. The user needs to select the directory from this list that contains the image files to be attached. Unlike the OSIP tab here imagery files can be organized into sub-folders.



### Point Cloud Directory Listbox:

This listbox is populated from the *ODOT\_Misc\_PC\_DIR* variable. This variable can accept multiple values. This variable will need defined in a cfg file in the local/config folder. The user needs to select the directory from this list that contains the point cloud files to be attached. Unlike the OSIP tab here point cloud files can be organized into sub-folders.


### Point Cloud Checkbox:

This checkbox is used to define if Point Cloud data should be attached or detached when either the [Attach Files Button](#) or [Detach Files Button](#) is selected. This Checkbox will only be shown if the active model is a 3D model.

### Imagery Checkbox:

This checkbox is used to define if Imagery should be attached or detached when either the [Attach Files Button](#) or [Detach Files Button](#) is selected.

### Selection Button:

This button is used to clear the selection set and start the element selection tool. The user could simply select the element selection tool  instead. The purpose of this button is to create a selection set. The selection set can be comprised of any elements but the intent is to select the desired tiles (See [Misc Tiles Section](#) for attaching tiles) that the user wants to attach or detach point cloud data and/or imagery by use of the [Attach Files Button](#) or [Detach Files Button](#).

### Point Cloud Level List Box:

This list box contains a list of Point Cloud levels in the ODOTcadd Standards. The selected level will be the level that Point Cloud files will be set to when attaching them.

### Imagery Level List Box:

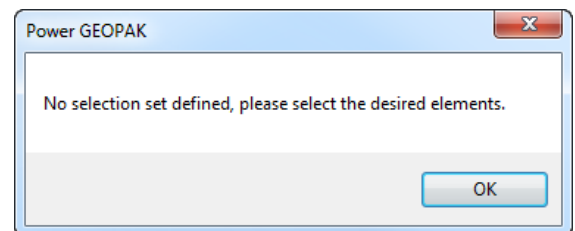
This list box contains a list of Imagery levels in the ODOTcadd Standards. The selected level will be the level that Imagery files will be set to when attaching them.

### Attach Files Button:

This button will not be enabled until at least one of the two checkboxes in the Point Cloud & Imagery Section is checked on.

When this button is selected and the [Point Cloud Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile or index. This is the text found in the Misc Tile DGN references (See [Misc Tiles Section](#) for more

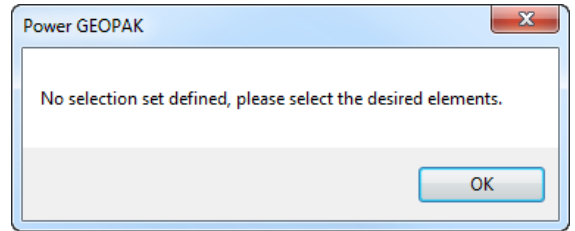
information). Once a valid text element is found the application will attach the POD file associated with that tile. The location of the POD files is obtained from the selected directory in the [Point Cloud Directory Listbox](#). The application checks for the POD files at this directory and sub-directories if the file is not found then nothing will be attached. If the POD file is already attached it will not attach the file.







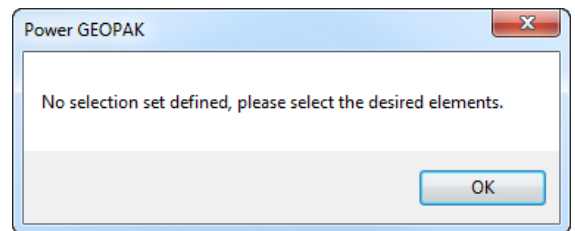
When this button is selected and the [Imagery Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile or index. This is the text found in the Misc Tile DGN references (See [Misc Tiles Section](#) for more information). Once a valid text element is found the application will attach the imagery file associated with that tile. The location of the imagery files are obtained from the selected directory in the [Imagery Directory Listbox](#). The application checks for the files at this directory and sub-directories, if the file is not found then the file is not attached. If the file is already attached it will not attach the file again.



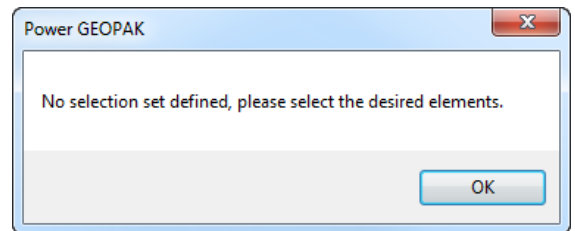
Currently the only supported file extensions for imagery in the misc page are .tif, .sid, and .jpg.

**Detach Files Button:**

When this button is selected and the [Point Cloud Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile. This is the text found in the referenced tiles dgns (See [Tiles Section](#) for more information). Once a valid text element is found the application will detach the POD file associated with that tile if that POD file is currently attached.



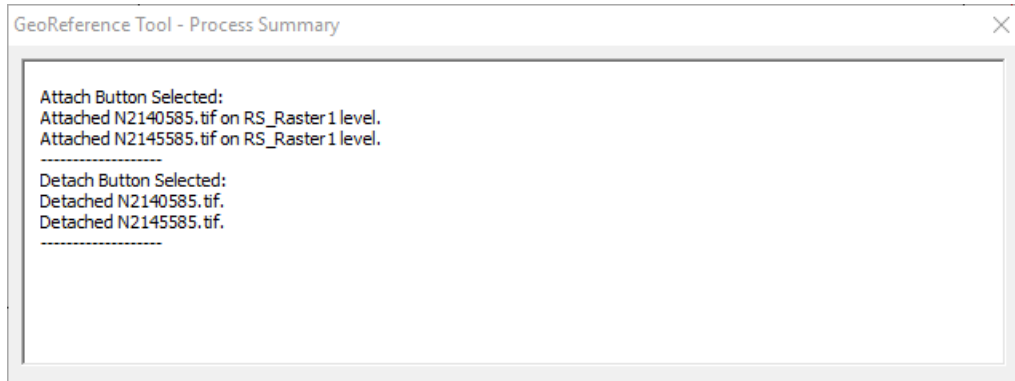
When this button is selected and the [Imagery Checkbox](#) is checked on the application will loop through all selected elements. If there are no selected elements the dialog shown to the right will appear. The application is looking in the selection set for any text elements that contain the name of a tile. This is the text found in the referenced tile dgns (See [Tiles Section](#) for more information). Once a valid text element is found the application will detach the file associated with that tile if that file is currently attached.





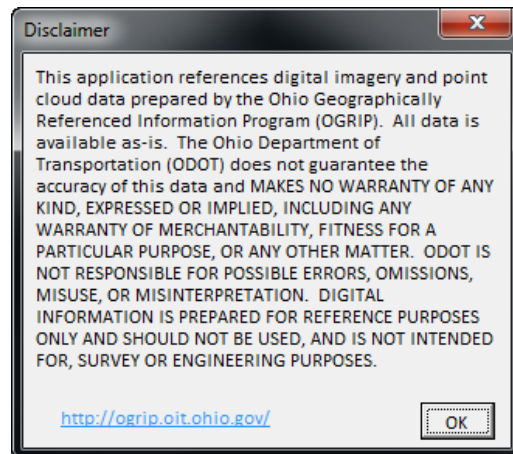
### Show Results Dialog Checkbox:

This checkbox if checked on then as you click the various button in this app a dialog will display and what button was selected and what that button did. For example if you select the Attach files button with a selection set contain a couple tile names. The show results dialog will say that the Attach Files button was selected and will then list which files the application tried to attach and which ones failed to attach and which ones successfully attached. You can leave this dialog open as you use the app.



### Disclaimer Button:

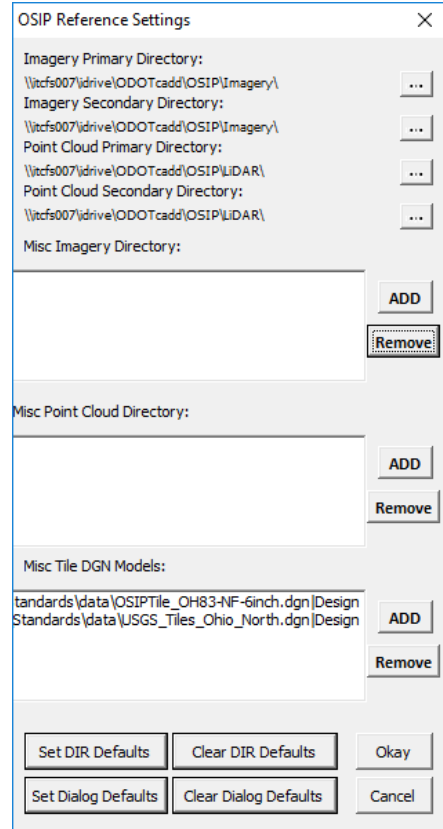
This button will launch the disclaimer dialog, imaged below. It also has a hyperlink to ogrips website. Please note that the X button has been disabled, the user must selected the OK button in order to close the dialog.





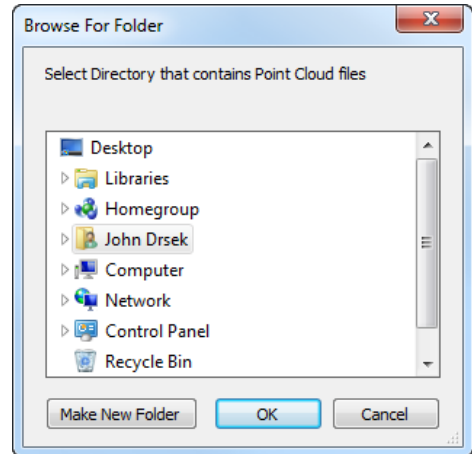
### Settings Button:

When this button is selected the following dialog appears. This dialog will display the current location the application is looking for Point Cloud and Imagery Files. The user can change these locations and set defaults for the application.



### Point Cloud Primary Directory:


This part of the dialog will display the current primary location the application is looking for Point Cloud data. If nothing is listed that means the *ODOT\_PC\_PRIM\_DIR* variable is not defined in the configuration. This variable will need to be defined in a cfg file in the local/config folder. It is not recommended to edit the *ODOT\_Site.cfg* file! The user can also set the directory by using the **...** button. This will launch a folder browser imaged to the right. Once the user selects a folder and hits OK the selected directory will be displayed in the settings dialog under Point Cloud Primary Directory. Note if the user hits the [Cancel Button](#) the change will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.

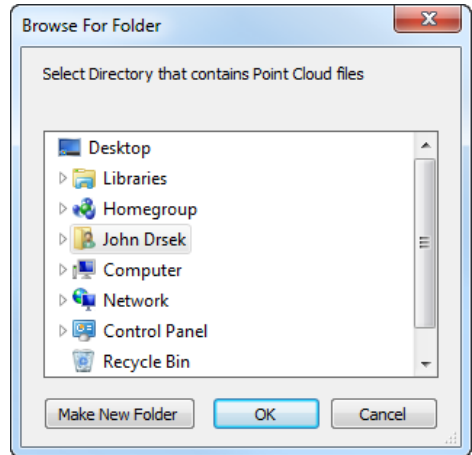


### Point Cloud Secondary Directory:


This part of the dialog will display the current secondary location the application is looking for Point Cloud data. If the application fails to find the file at the primary directory then this secondary directory is used. If nothing is listed that means the *ODOT\_PC\_SEC\_DIR* variable is not defined in the configuration.

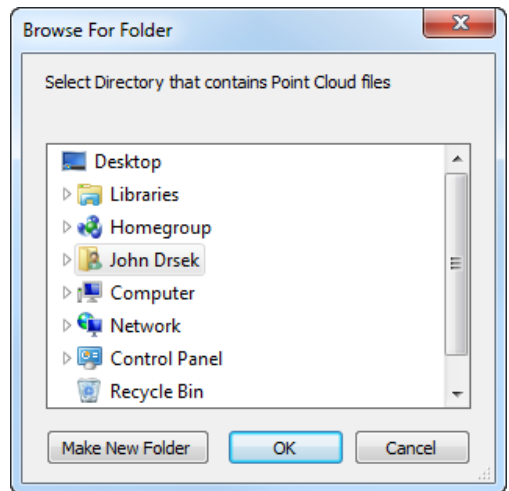


This variable will need to be defined in a cfg file in the local/config folder. It is not recommended to edit the ODOT\_Site.cfg file! The user can also set the directory by using the  button. This will launch a folder browser imaged to the right. Once the user selects a folder and hits OK the selected directory will be displayed in the settings dialog under Point Cloud Secondary Directory. Note if the user hits the [Cancel Button](#) the change will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.




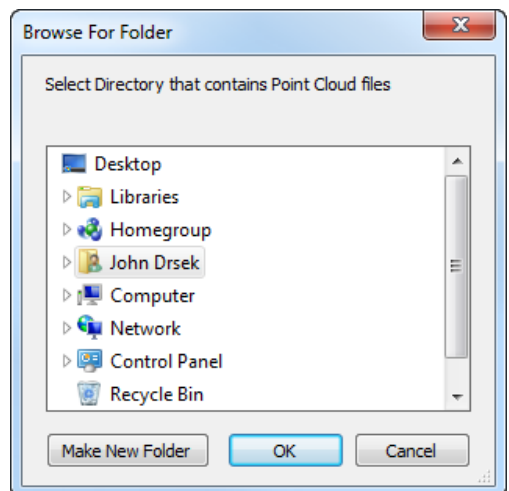
### Imagery Primary Directory:

This part of the dialog will display the current Primary location the application is looking for Imagery. If nothing is listed that means the *ODOT\_IMAGERY\_PRIM\_DIR* variable is not defined in the configuration. This variable will need to be defined in a cfg file in the local/config folder. It is not recommended to edit the ODOT\_Site.cfg file! The user can also set the directory by using the  button. This will launch a folder browser imaged to the right. Once the user selects a folder and hits OK the selected directory will be displayed in the settings dialog under Imagery Primary Directory. Note if the user hits the [Cancel Button](#) the change will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.



### Imagery Secondary Directory:

This part of the dialog will display the current secondary location the application is looking for Imagery. If the application fails to find the file at the primary directory then this secondary directory is used. If nothing is listed that means the *ODOT\_IMAGERY\_SEC\_DIR* variable is not defined in the configuration. This variable will need to be defined in a cfg file in the local/config folder. It is not recommended to edit the ODOT\_Site.cfg file! The user can also set the directory by using the  button. This will launch a folder browser imaged to the right. Once the user selects a folder and hits OK the selected directory will be displayed in the settings dialog under Imagery Secondary Directory. Note if the user hits the [Cancel Button](#) the change will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect

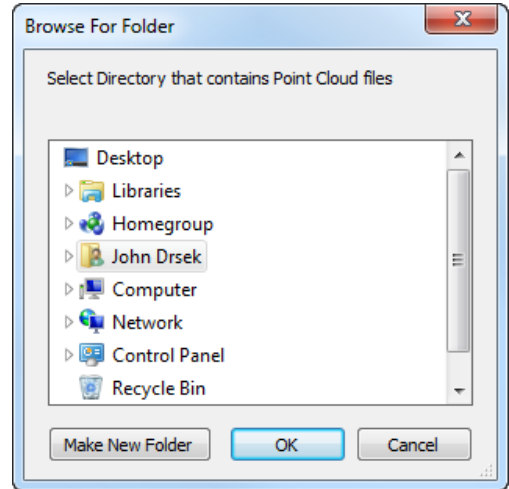




until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.

### Misc Imagery Directory:

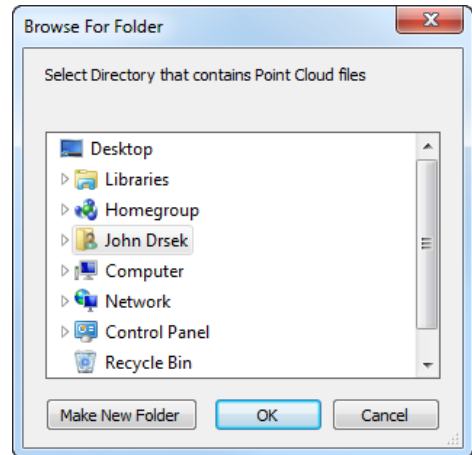
This part of the dialog will list all the locations the application can look for Misc Imagery. If nothing is listed that means the *ODOT\_MISC\_IMAGERY\_DIR* variable is not defined in the configuration. This variable will need to be defined in a *cfg* file in the *local/config* folder. It is not recommended to edit the *ODOT\_Site.cfg* file! The user can also add or remove items listed in this list box with the use of the ADD and Remove buttons directly to the right of the list box. The ADD button will launch a folder browser imaged to the right. Once the user selects a folder and hits OK the selected directory will be added in the settings dialog under Misc Imagery Directory. The remove button will remove the selected item from the list box.



Note if the user hits the [Cancel Button](#) the change will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.

### Misc Point Cloud Directory:

This part of the dialog will list the locations the application can look for Misc Point Cloud data. If nothing is listed that means the *ODOT\_MISC\_PC\_DIR* variable is not defined in the configuration. This variable will need to be defined in a *cfg* file in the *local/config* folder. It is not recommended to edit the *ODOT\_Site.cfg* file! The user can also add or remove items listed in this list box with the use of the ADD and Remove buttons directly to the right of the list box. The ADD button will launch a folder browser imaged to the right. Once the user selects a folder and hits OK the selected directory will be added in the settings dialog under Misc Point Cloud Directory. The remove button will remove the selected item from the list box.



Note if the user hits the [Cancel Button](#) the change will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.

### Misc Tile DGN Models:

This part of the settings dialog will list all the DGN models that contain the tiling information for misc data. It is initially populated with the *ODOT\_MISC\_TILE\_LOC* variable. If nothing is listed that means the variable is not defined in the configuration. This variable will need to be defined in a *cfg* file in the *local/config* folder. It is not recommended to edit the *ODOT\_Site.cfg* file! The user can also add or remove items listed in this list box with the use of the ADD and Remove buttons directly to the right of



the list box. The add button will open a file browser dialog where the user selected the desired DGN file and hits OK. After the user does this an additional dialog box will open listed all the models found in the selected file. The user should select the desired model and hit okay. At this point the selected model is now listed in the list box. The format of the items in the list box is the full file path and name followed by the “|” character and then the model name.

The remove button will remove the selected item from the list box.

Note if the user hits the [Cancel Button](#) the changes will not be saved, the user must select the [Okay Button](#) to apply the changes. Any changes will only be in effect until the application is closed. See [Set As Defaults Button](#) for information on how to make the changes permanent.

#### Set DIR Defaults Button:

This button can be used to permanently set settings for this application. When this button is selected the *ODOT\_PC\_PRIM\_DIR*, *ODOT\_PC\_SEC\_DIR*, *ODOT\_IMAGERY\_PRIM\_DIR*, *ODOT\_IMAGERY\_SEC\_DIR*, *ODOT\_MISC\_IMAGERY\_DIR*, *ODOT\_MISC\_PC\_DIR*, and *ODOT\_MISC\_TILE\_LOC* variables are defined in the user’s user preferences (ucf file). The values for these variables will be whatever is shown in the settings dialog for the [Point Cloud Primary Directory](#), [Point Cloud Secondary Directory](#), [Imagery Primary Directory](#), [Imagery Secondary Directory](#), [Misc Imagery Directory](#), [Misc Point Cloud Directory](#), and [Misc Tile DNG Models](#) respectfully. The next time the application is launched these two variables will be read to set the Point Cloud Directory and Imagery directory. Note that this only sets the default values for when the application is launched. The [Okay Button](#) will still need to be selected to apply the changes to the current session of this application.

#### Set Dialog Defaults Button:

This button add an *ODOT\_vbaOSIPRefPrefs* variable to the user’s user preferences (ucf file). This variable’s value will consist of a value comprised of numbers seperated by a ~. Each number represents a setting in the application.

- The first number is associated with the [Show Results Dialog Checkbox](#) (0 represents unchecked and a 1 represents checked)
- The second number is associated with the active page (OSIP, MAP, or Misc page would be 1, 2, 3 respectfully).
- The third number is associated with the [North Zone Tile CheckBox](#) (0 represents unchecked and a 1 represents checked).
- The fourth number is associated with the [South Zone Tile CheckBox](#) (0 represents unchecked and a 1 represents checked).
- The fifth number is associated with the [Imagery Checkbox](#) (0 represents unchecked and a 1 represents checked).
- The sixth number is associated with the [Imagery Type List Box](#) (the digit represents the selected index, the first item in the list box would be a 0 index. i.e. 0=.xwms, 1=.tiff).
- The seventh number is associated with the [Point Cloud Checkbox](#) (0 represents unchecked and a 1 represents checked).
- The eighth number is associated with the [Imagery Level List Box](#) (the digit represents the selected index, the first item in the list box would be a 0 index).
- The ninth number is associated with the [Point Cloud Level List Box](#) (the digit represents the selected index, the first item in the list box would be a 0 index).



- The tenth number is associated with the selected Bing Maps layer (0=Road, 1=Aerial,2=Aerial with Labels).
- The eleventh number is associated with the Bing Maps [Imagery Level List Box](#) (the digit represents the selected index, the first item in the list box would be a 0 index).
- The twelfth number is associated with the [Misc Tile DGN list](#) (the digit represents the selected index, the first item in the list would be a 0 index).
- The thirteenth number is associated with the [Misc Imagery Directory List](#) (the digit represents the selected index, the first item in the list would be a 0 index).
- The fourteenth number is associated with the [Misc Point Cloud Directory List](#) (the digit represents the selected index, the first item in the list would be a 0 index).
- The fifteenth number is associated with the [Misc Imagery Checkbox](#) (0 represents unchecked and a 1 represents checked).
- The sixteenth number is associated with the [Misc Point Cloud Checkbox](#) (0 represents unchecked and a 1 represents checked).
- The seventeenth number is associated with the [Misc Imagery Level list](#) (the digit represents the selected index, the first item in the list box would be a 0 index).
- The eighteenth number is associated with the [Misc Point Cloud Level list](#) (the digit represents the selected index, the first item in the list box would be a 0 index).

When this button is selected it takes the current settings of each checkbox, List Box, and Radial Button and creates the value to set the *ODOT\_vbaOSIPRefPrefs* variable in the ucf file. The next time the application is launched the checkboxes will automatically be checked on or off depending on the value of this variable.

#### Clear DIR Defaults Button:

This button will remove the *ODOT\_PC\_PRIM\_DIR*, *ODOT\_PC\_SEC\_DIR*, *ODOT\_IMAGERY\_PRIM\_DIR*, and *ODOT\_IMAGERY\_SEC\_DIR* variables from the user's ucf file if they exist. It will also clear these variables from the active session of MicroStation. The user will have to close MicroStation and reopen it in order to have these variables reloaded with the values defined in the cfg in the local/config folder (if they were defined).

#### Clear Dialog Defaults Button:

This button will remove the *ODOT\_vbaOSIPRefPrefs* variable from the user's ucf file if it exist. It will also clear this variable from the active session of MicroStation.

#### Okay Button:

Selecting this button will apply any changes made to the [Point Cloud Primary Directory](#), [Point Cloud Secondary Directory](#), [Imagery Primary Directory](#), or [Imagery Secondary Directory](#) while the application is opened. Once the application is closed the settings will go back to the defaults.

#### Cancel Button:

Selecting this button will close the settings dialog. Any changes made to the [Point Cloud Primary Directory](#), [Point Cloud Secondary Directory](#), [Imagery Primary Directory](#), or [Imagery Secondary Directory](#) will be discarded.



## Contacts

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For any questions, suggestions, or problems with this document please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

[https://odot.formstack.com/forms/cadd\\_servicerequest](https://odot.formstack.com/forms/cadd_servicerequest)

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