

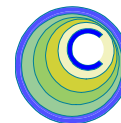
# The CEDRA Corporation's COMMAND OF THE MONTH

A monthly information bulletin

November 2008

FEATURED COMMAND

Querying, Proximity  
Checking and Hyperlinks



## Application Description

As we all know ArcGIS® offers a tremendous amount of functionality. However, have you ever wished that some of this functionality be condensed into a simpler form. That is to say, some tasks seem to take more steps than required.

Now, this is not a knock on ArcGIS because we appreciate the fact that when these tools were created they were designed to accommodate a wide variety of applications.

But, as we can all attest to, each of us works in specific areas and as such it is possible to streamline certain tasks, to eliminate extraneous “clicks”. Specifically, some of ArcMap’s general purpose commands can be tailored to meet certain user-specific requirements.

This month we wish to discuss the process of performing: (a) query operations, (b) proximity checks or buffer analysis as it is sometimes referred to as, and (c) the manipulation of hyperlinks.


We assume the reader is familiar with the ArcMap approach to tackling these applications, so that, the discussion below will only present the CEDRA approach.


## The CEDRA Solution

To address the applications mentioned above, the CEDRA-DataFrame-Tools-2 toolbar, see Figure 1, can be employed. As can be seen from Figure 1, four tools are available to the user.




Figure 1  
CEDRA-DataFrame-Tools-2 Toolbar


The **DataFrame 1** tool  enables the user to perform a query on the active layer to create a new selection and, if so desired, zoom to the extent of the selected features.

The **DataFrame 2** tool  enables the user to perform a proximity check for those features which fall within a user-specified tolerance of one or more selected features.

### Command Of The Month bulletin


*This month's issue discusses the tools for querying layers, performing a proximity check (buffer analysis) and manipulating hyperlinks.*

The **DataFrame 3** tool  enables the user to assign a hyperlink to one or more selected features.

The **DataFrame 4** tool  enables the user to remove or delete all hyperlinks that may be assigned to one or more selected features.


Summarizing, the tools provided within the CEDRA-DataFrame-Tools-2 toolbar, offer a simpler approach to ArcMap functionality, which for new users eases the ArcMap learning process.

## 1. Query and Zoom

With the  tool the user is able to:

- Create a new selection set for the active theme, and
- zoom to the extent of the selected features, if so desired.

To use this tool:

- Activate the layer to be queried in the Table of Contents.
- Pick the  tool.

If no layer is selected or if more than one layer is selected, the appropriate error message is displayed, see Figures 2 and 3. In this case, click the OK button and repeat Step 1.

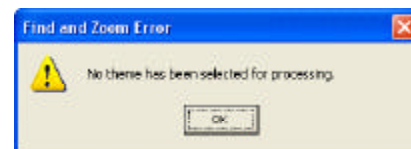


Figure 2  
No Layer Selected  
Error Message

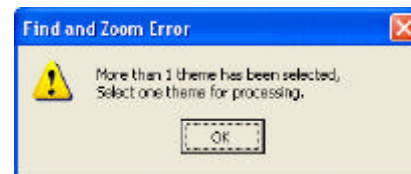
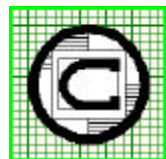


Figure 3  
Too Many Layers Selected  
Error Message



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3. Fill in the appropriate data for the parameters shown in Figure 4.

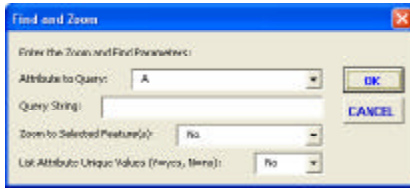


Figure 4  
Find and Zoom Multi-Input Dialog Box

Beginning at the top of the dialog box, the user is able to control the following:

Data Line 1 - Attribute to Query

From the choice list, select the attribute that is to be queried. Note that the names of the attributes are displayed in an alphabetical ascending order.

Data Line 2 - Query String

Enter the value to be searched for.

Data Line 3 - Zoom to Selected Features

From the choice list, select the option to indicate whether the command is to zoom to the extent of the features which satisfy the query, or not. Selecting the No option results in the current view being left as is. Selecting the Yes option results in the current view being changed.

Data Line 4 - List Attribute Unique Values

From the choice list, select the option to indicate whether the unique values for the attribute to be queried are to be displayed or not. Selecting the No option indicates that the value of the Data Line 2 parameter is to be used in the query. Selecting the Yes option indicates that no query is to be performed, but rather, the command is to generate a list of unique values and display them in the dialog box, see Figure 5.

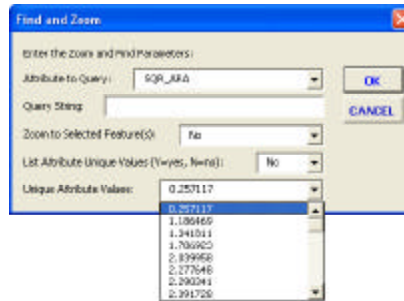


Figure 5  
Display of Unique Attribute Values

After entering the appropriate value(s), click at the:

- *Cancel* button to terminate the command, or the
- *OK* button to perform the query or generate a list of unique attribute values.

- A. **If the unique values of the attribute are to be displayed** (selecting the Yes option to the Data Line 4 parameter), the command will display a multi-input dialog box similar to that of Figure 5 where the bottommost parameter contains a choice list drop-down of the unique values.

At this point, the user can select the appropriate value from the unique value choice list and then click the OK button to perform the query. Once the query has been performed, the command highlights the selected features and displays in the status bar area the number of selected features.

If the user selects the Yes option to the Data Line 3 parameter, the command will also change the current view to display the selected features.

- B. **If the unique values of the attribute are not to be displayed** (selecting the No option to the Data Line 4 parameter), the command will use the value of the Data Line 2 parameter in performing its attribute query.


If no features satisfy the query, a warning message box similar to the one shown in Figure 6 will be dis-



Figure 6  
Display of Unique Attribute Values

played. At this point, the user can click the OK button to dismiss the warning message, at which point, a multi-input dialog box, see Figure 4, will be displayed. The user is now able to repeat Step 3.

## 2. Proximity Check

The  tool enables the user to determine which features fall within a user-specified distance from one or more selected features, see Figure 7. These selected features are referred to as the base features. The base features can be selected prior to activating this tool, or

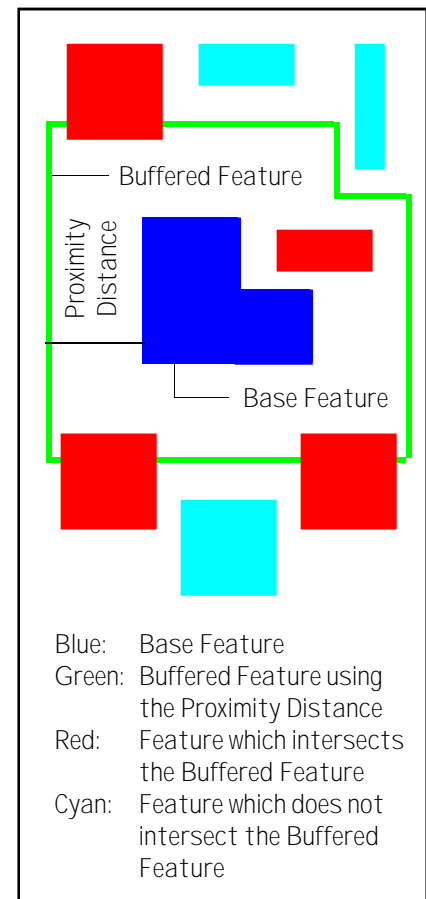



Figure 7 - Proximity Analysis

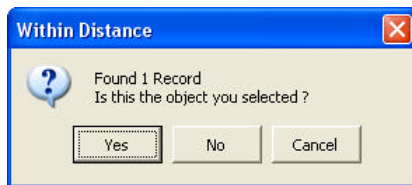
can be selected after the tool is activated.

Using the base feature(s) in conjunction with the user-specified distance, the tool creates buffer polygons for each of the base features and then determines which features from the active layers intersect the buffered base feature(s).

To use this tool:

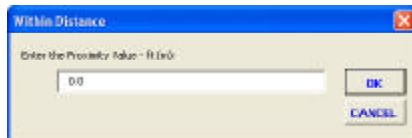
**A. If the base features are selected prior to activating this tool**

1. Activate the layer(s) to be searched in the Table of Contents.
2. Pick the  tool.
3. Confirm the selection of the base feature(s), see Figure 8.



**Figure 8**  
Base Feature(s) Confirmation Query

4. Enter in the data field of Figure 9, the proximity distance value. This value will be used in creating the buffer polygons about the base feature(s).



**Figure 9**  
Proximity Distance Query


Select the *OK* button to begin the proximity analysis. Click at the *Cancel* button to terminate the command.

Once the proximity analysis has been completed, the features from the active layers, which intersect

the buffered base features, will be highlighted and the number of selected features displayed in the status bar area.

Note, that the selected features can be used for further processing by any other command which processes selected features such as the [Mailing Labels File] command within the {CEDRA-MailingLabels-Menus} toolbar.

**B. If the base features are not selected prior to activating this tool**


1. Activate the layer(s) to be searched in the Table of Contents.
2. Pick the  tool.
3. Make a single click or drag a rectangle to select the base feature(s).
4. Confirm the selection of the base feature(s), see Figure 8.
5. Enter in the data field of Figure 9, the proximity distance value. This value will be used in creating the buffer polygons about the base features.

Select the *OK* button to begin the proximity analysis. Click at the *Cancel* button to terminate the command.

Once the proximity analysis has been completed, the features from the active layers, which intersect the buffered base features, will be highlighted and the number of selected features displayed in the status bar area.


Note, that the selected features can be used for further processing by any other command which processes selected features such as the [Mailing Labels File] command within the {CEDRA-MailingLabels-Menus} toolbar.

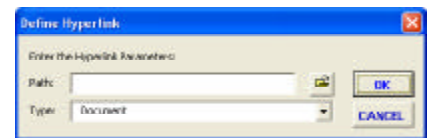
**3. Assign Hyperlink**

The  tool enables the user to assign a hyperlink to one or more selected features. If the selected feature(s) have a hyperlink currently assigned to them, the existing hyperlink will be replaced with the new hyperlink.

Unlike the native ArcMap hyperlink tool which allows for a feature to have more than one hyperlink, the DataFrame 3 tool is designed for features having only one hyperlink.

To use this tool:

1. Pick the  tool.
2. Make a single click or drag a rectangle to select the base feature(s).
3. Enter in the data fields of Figure 10, the hyperlink and type of hyperlink to be assigned to the selected feature(s).



**Figure 10**  
Define Hyperlink Dialog Box

Beginning at the top of the dialog box, the user is able to control the following:

Data Line 1 - Hyperlink Path

Enter the complete pathname for the hyperlink. The file folder icon on the right side of the parameter enables the user to use a traditional file navigation dialog box to select the file that represents the hyperlink.

In the case where the hyperlink represents a bitmap image (.tif, .bmp, etc.), the user can utilize the file navigation dialog box to select the desired image file. Once the file has been selected, click the *Open* button to dismiss the file navigation dialog box and transfer the filename to the data field for the Data Line 1 parameter.

If the hyperlink is to represent a URL (web address), the user should enter the full web address such as: <http://www.cedra.com>.

Data Line 2 - Hyperlink Type


From the choice list, select the option to the type of hyperlink being defined. The available options include the following:

Document  
URL  
Macro

After entering the appropriate value(s), click at the:


- *Cancel* button to terminate the command, or the
- *OK* button to assign the hyperlink to the selected feature(s).

#### 4. Delete Hyperlinks

The  tool enables the user to delete all hyperlinks that are assigned to one or more selected features.

If the user selects features which do not have hyperlinks assigned to them, no error or warning message is displayed. That is to say, the features are left as is, unaltered.

To use this tool:

1. Pick the  tool.
2. Make a single click or drag a rectangle to select the base feature(s).
3. Confirm whether or not the hyperlinks are to be deleted, see Figure 11.

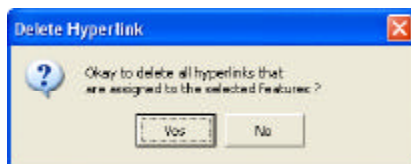


Figure 11  
Delete Hyperlinks Query

Selecting the *Yes* button results in the tool deleting all hyperlink definitions that are assigned to the selected feature(s). Click at the *No* button to terminate the command.

#### Summary

Note that the CEDRA-DataFrame-Tools-2 toolbar has been recently added and users with a software support agreement should check with The CEDRA Corporation on how to obtain a software update so as to be able to use these new tools.

The addition of this new toolbar was spurred by new users who wished a streamline interface in performing the applications discussed in this publication.

As always, should the reader have any suggestions on functionality that should be featured in Command of the Month, please feel free to forward them on to us.

*If you have a request for Command Of The Month, feel free to phone, fax or e-mail your request to The CEDRA Corporation.*