## **Geocoding Address Tables**

Open ArcMap in a Citrix connection. Click on Existing Maps> Browse for more... and navigate to M:\Production\lojic\resources and click on beginner.mxd.

Log into the Oracle Database when the Spatial Database Connection window appears. Remember, only complete the User Name and Password form fields. Keep the Database form field <u>*blank*</u>.

## In the *File* Menu, **Save As H:\CitrixTraining\exercises\geocoding.mxd**.

Use Lesson 3 – Managing and Accessing Your Personal Data to download the exercise data and setup a training directory.

Click the Add Data button and go to the Lesson 5 directory in the H:\CitrixTraining\exercises\ directory.

Address tables do not have to be added into map document files to be geocoded. However, keeping source tables with shapefiles generated from them may help a user keep their work processes organized and may be helpful to others using the map document.

Add the table 'AddressList\$' spreadsheet from the AddressList.xls at H:\CitrixTraining\exercises\Lesson 5 to geocoding.mxd. (Figure 1)

Add Data												X
Look in:		AddressLis	t.xls		-	۵ 🟠		•	21	6	Ŭ,	6
III Addres III Databa	ssList\$ ase											_
Name:										A	dd	
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Figure 1 - Selecting the Excel Spreadsheet

'AddressList\$' can be viewed in the Table of

Contents by **clicking** on the **List by Source** button at the top of the Table of Contents and scrolling down to the bottom of the list. It will not be visible in the **List by Drawing Order** list. **It is important to remember that Excel (.xls) spreadsheets cannot be edited in ArcGIS software.** 

To geocode, **right click** on the **AddressList** table and **select Geocode Addresses**... (Figure 2)

표 🗹 Municipalities		
🛨 🗹 Surrounding.Cou	inty Boundari	
💷 LOJICAPPS 🛄	Open	
ADDRESS.i	Joins and Relates	
PVA.REMF		
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PVA.REMF	Data 🕨	
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🗄 🗌 Bullitt Colo 📩	Display XY Data	
🗉 🚞 H:\CitrixTrainin 🔗	Properties	
AddressList 🔋		

Figure 2 – Geocode Addresses.

To add the **JeffersonComposite** Locator, click on the **Add** button in the **Choose an Address Locator to use...** window. (Figure 3)



Figure 3 – Choose an Address Locator to use...

In the Add Address Locator window (Figure 4), navigate to I:\locators, click open and select the Jefferson\_Composite Locator. Click the Add button.



Figure 4 – Add Address Locator window.

Select the Jefferson\_Composite Locator and click OK in the Choose an Address Locator to use...window. (Figure 5)

Name	Description	Add
World Geocode Service (ArcGIS MGRS (Military Grid Reference Sy		
Jefferson_Composite	Geocode addresses again	

Figure 5 – Choose an Address Locator to use...

The Geocode Addresses: Jefferson\_Composite window will appear. (Figure 6) This is the main window for setting up the parameters for geocoding a table. In the Address table: option, the table is selected. In this example it is automatically selected but a browse function is available. The Address Input Fields option automatically selects ADDRESS fields in the selected table but again a browse function is available to select other fields if necessary. In the Output option, the Create static snapshot of table inside new feature class should be selected. In the Output shapefile or feature class: Click on the

Browse button, navigate to H:\CitrixTraining\exercises\Lesson 5 and enter AddressList.shp

The **Advanced Geometry Options** button opens up options in a window that would be used very rarely by the average users.

AddressList\$	<u> </u>
Address Input Fields C Single Field Street or Intersection: ZIP Code:	Multiple Fields       ADDRESS       ZIP
Output Create static snapshot o Create dynamic feature Output shapefile or feature H\CitrixTraining\exercises\	f table inside new feature class class related to table dass:
Output Create static snapshot o Create dynamic feature Output shapefile or feature H:\Citrix Training\exercises\ Config Keyword:	f table inside new feature dass class related to table dass: Lesson 5\AddressList.shp
Output Create static snapshot o Create dynamic feature Output shapefile or feature H:\CitrixTraining\exercises\ Config Keyword: Advanced Geometry O	f table inside new feature class class related to table class: Lesson 5\AddressList.shp

Figure 6 –Geocode Addresses: Jefferson\_Composite window.

The **Geocoding Options** button opens a window that may be used more frequently. (Figure 7) In this window Alias tables can be accessed, spelling sensitivity and match scores can be adjusted, and intersection connectors can be identified.

For this exercise, the default selections will be used. Click OK in the Geocoding Options window. Click OK in the Geocode Address: Jefferson\_Composite window.

The addresses will now be geocoded.

Geocoding Options	? ×
Locator JeffAdds	
Matching Options	
Place Name Alias Table <none></none>	
Spelling sensitivity:     80       Minimum candidate score:     10       Minimum match score:     60	
Intersections       Connectors:       Separate connectors:       space, e.g. "& @ , /"	by a
Output Options	
Side offset: 0 Reference data units	3 💌
End offset: 0 Percent	•
Match if candidates tie	
Output Fields	
☐ X and Y coordinates	s
Reference data ID Percent along	
ОК	Cancel

Figure 7–Geocoding Options window.

When the geocoding process is finished, the **Geocoding Addresses** window will appear showing the results. (Figure 8) In this exercise, one address was unmatched. To edit and try to match that address, **click** the **Rematch** button.

Matched:	40 (91%)	
Tied:	3 (7%)	
Unmatched:	1 (2%)	
Comple	ted	
Comple	ted	
Average speed: 109,	000 records/hour	

Figure 8 – Rematch Addresses window.

Unmatched addresses can be edited and matched in the **Interactive Rematch** window. (Figure 9) Select the **Unmatched Addresses** from the **Show results** pulldown. Use the pulldown in the **Locator** setting to select **JeffersonAdds**.

Interactive Rematch - AddressList				×
Show results: Unmatched Addresses	Manage result sets Re name Status Score	efresh Rematch Automatically e Match_type 0 A	Matched: 40 (91%) Tied: 3 (7%) Unmatched: 1 (2%)	
Locator JeffAdds	0 Candidates		Candidate details:	
Address:      Street or Intersection ZIP Code      40214	Loc_name   Score   Side   Mate	<u>h_addr Hous</u>	USE Pre House PreDir PreDir PreType StreetName SufType SufDir City City	
Geocoding Options Zoom to Ca	ndidates 🛛 🚸 Pick Address from Map	Search Match	Unmatch Save Edits Close	

Figure 9 –Interactive Rematch window.

To correct the unmatched address "7330 SOUTH SID DRIVE", the space between SOUTH and SIDE needs to be removed and an "E" needs to be added to "SID". Edit the address in the **Address** option and **hit** the Return key on the keyboard. Address Candidates will appear for the edited address. (Figure 10)

Interactive	Rematch - Addr	essList						<u>-0×</u>
Show results:	Unmatched Addr	esses 🔽 M	lanage result set	s Refresh	Rematch Automa	tically	Matched:	40 (91%)
FID FID	Shape 37 Point	Loc_name	Status U	Score	Match_type 0 A		Tied: Unmatched:	3 (7%) 1 (2%)
Locator J Address: Street or Interse	effAdds	1 Candida     1 Candida     Loc_nar     JeffAdd	ate ne Score Is 100	Side Match_addr 7330 SOUTH	IDE DR	House Pre 7330	Candi House PreDir	idate details:
ZIP Code	40214					Þ	PreType StreetName SufType SufDir City State	
Geocoding C	ptions Zo	om to Candidates	🎊 Pick Addr	ess from Map	Search M	latch Unma	tch Save Ec	dits Close

Figure 10 – Address Candidate window.

**Select** the candidate "7330 SOUTHSIDE DR" and **click** the **Match** button. The **Status** Field will change to "M" or matched for the first address. Click the **Close** button.

The new Geocoding Results: AddressList shapefile is automatically added to the project.

Save the map document.