Exercise 1 – Data Check Out and Check In Process

Session Objectives: At the conclusion of this session, you will be able to:

- ❑ Check out data from a geodatabase for editing in the field using ArcPad Data Management Tools.
- ❑ Check in field data and update a geodatabase using ArcPad Data Management Tools.

Material Created By: Eric Kelchlin and Karen Klinger (October 2008)

Revision: January 2012

Software: ArcGIS 10 SP3, ArcPad 10 SP3

Directory Path: D:\CSP7301\Exercise1

MXD: D:\CSP7301\Exercise1 (created by student)

GDB: Field_Day1.gdb

Imagery: NCTC\Imagery\NAIP_2010

SECTION 1 – Establishing a Connection with your Mobile GPS Device

The software used to transfer files from your mobile GPS device to your PC or vice versa is called ActiveSync. This software is free and can be downloaded from: http://www.microsoft.com/windowsmobile/default.mspx

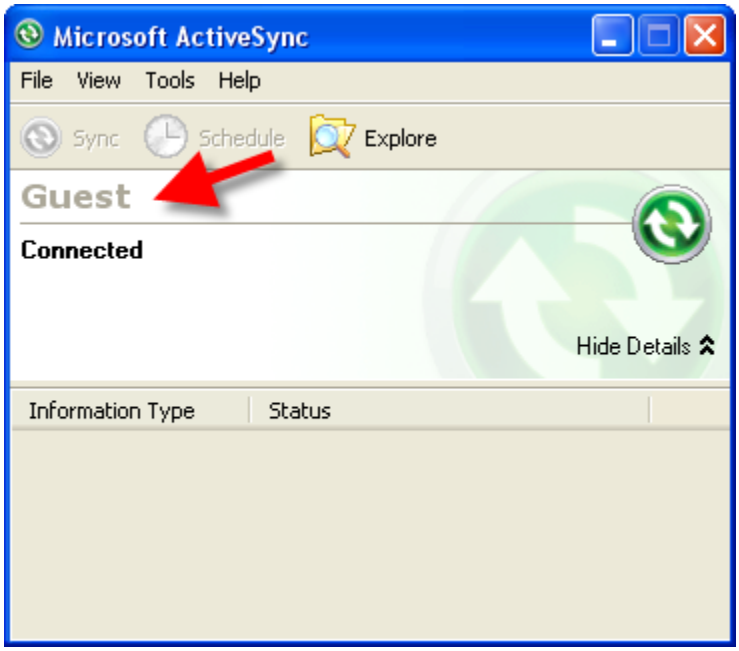
These instructions were developed using ActiveSync version 4.5 and assume that you have not established a partnership between a mobile GPS device and your PC. A "partnership" is not recommended. Connect as a "Guest".

1. Connect your GPS device to a USB port on your PC.

2. Click the [OK] button on the Microsoft ActiveSync screen (you may have to click **OK** twice, depending on your computer software configuration).

3. Click [Cancel] at the Synchronization Setup Wizard screen.

4. You should now be connected as a **Guest.**

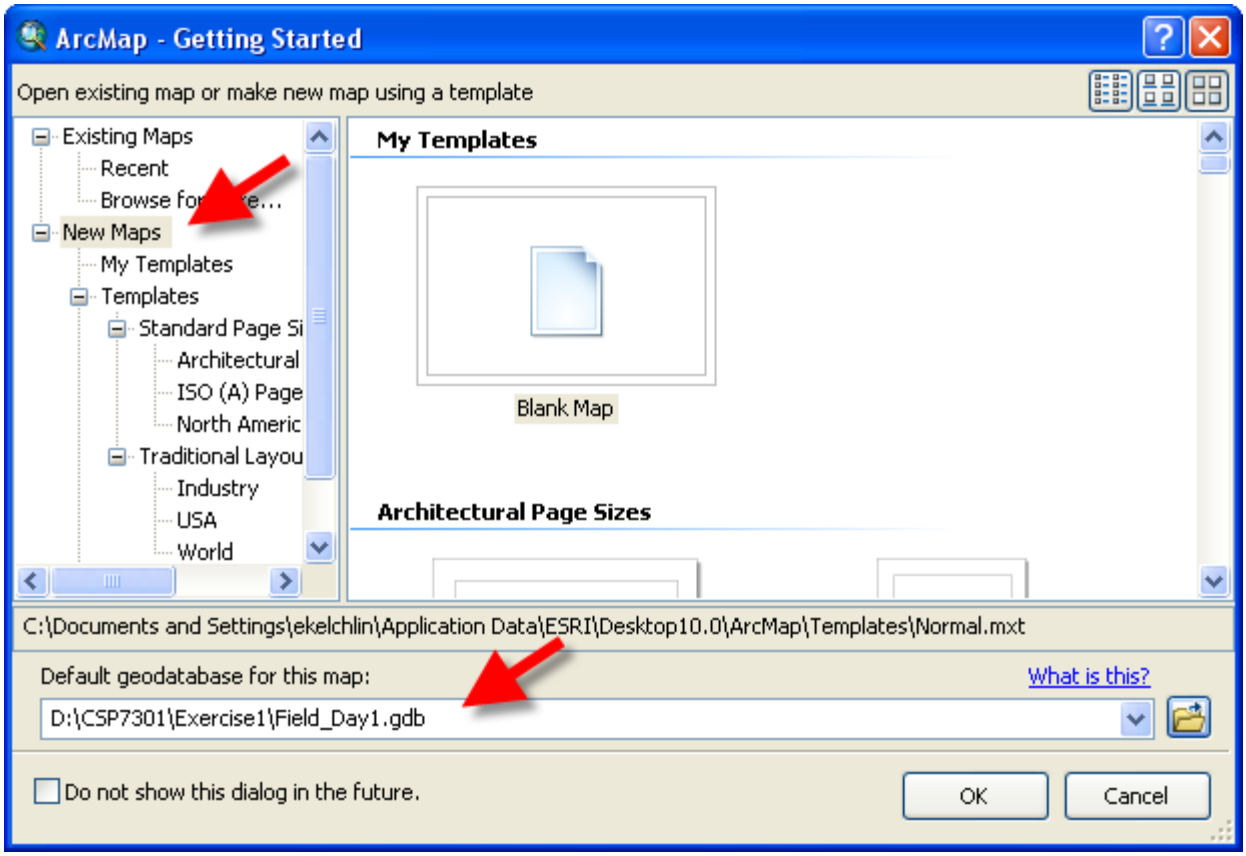


SECTION 2 – Preparing Data for Check Out

Unless stated otherwise, all data are located in D:\CSP7301\Exercise1.

1. Open ArcMap .

2. Open a New Blank Map and change your default geodatabase to **Field_Day1.gdb**.

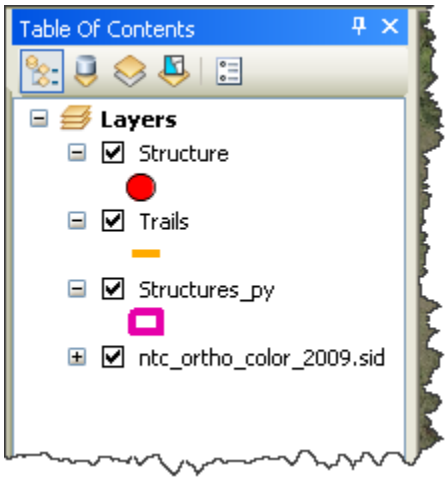


3. **Add** the **NAIP_2010** raster image from the **NCTC\Imagery** folder.

4. **Add** the **Infrastructure** feature dataset from the **Field_Day1.gdb** geodatabase. This is a quick way to add all feature classes into one ArcMap project.

5. Change the layer symbology to something much easier to see in the field. Follow these general guidelines:

   - Colors – bright colors that are visible on white or black background
   - Points – use a size of 10 -15
   - Lines – use a width of 1.5 -2.0
   - Polygons – no fill, line width of 1.5 – 2.0



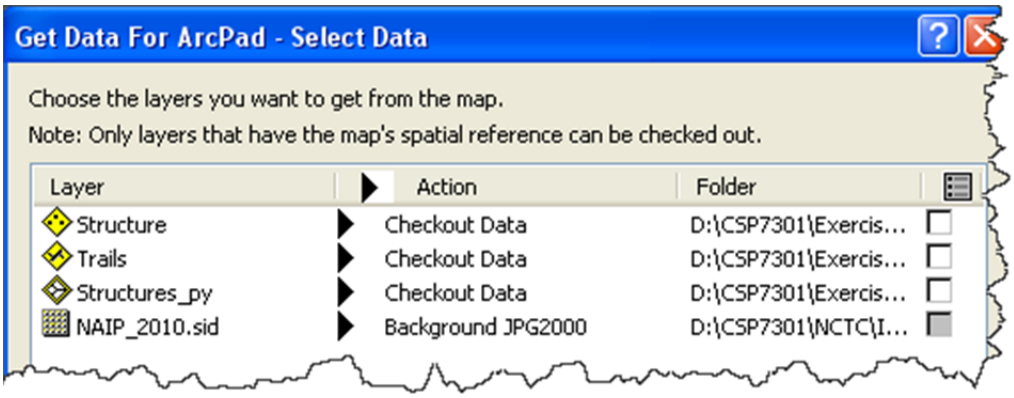
6. Zoom into your project area. Only the visible extent of the map will be exported out to ArcPad.

7. Save your map document in the **Exercise1** folder.

TASK 3 – Check Out the Data

1. Ensure that you have the ArcPad Data Manager Toolbar visible. Click on the Get Data for Arcpad button.

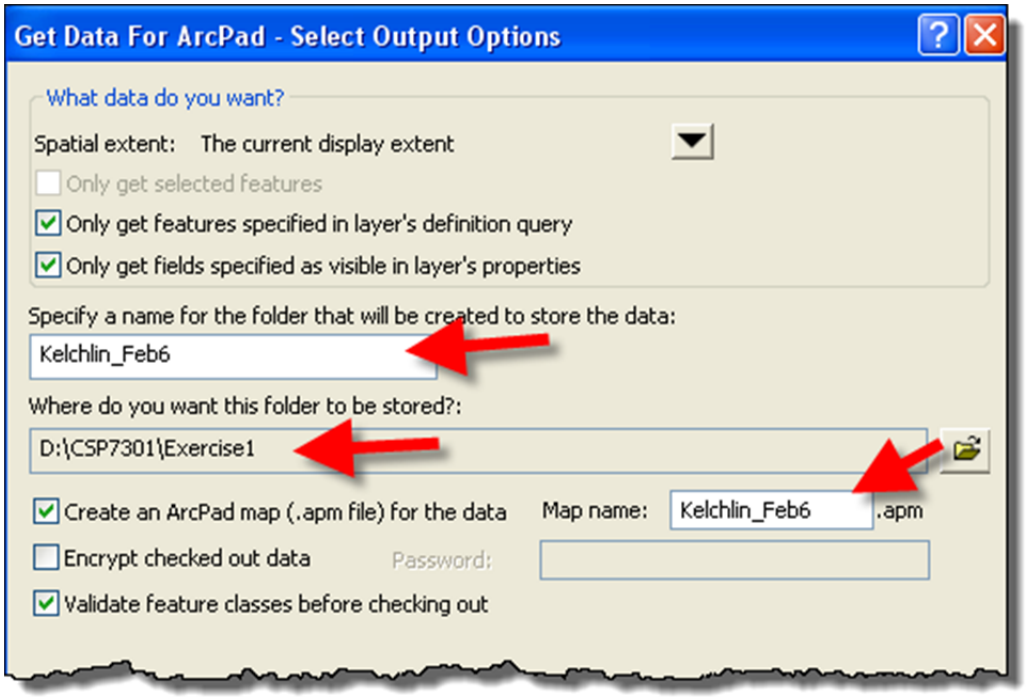
2. Click the **Action** column header and select **Check Out all geodatabases layers and copyout all other layers.** Set the raster layer to Background JPG2000.



NOTE: If you do not change the **NAIP_2010.sid** image from its original format, the entire .sid image will be checked out to the project folder. We want ArcPad to clip the image instead, that's why we change the format to JPG2000.

3. Click **Next** on the Select Picture Options dialog.

4. Name your project folder and ArcPad map using the following naming convention: *last name_date.* You could also use *Initials_project title_date* as well. Save the data on the Projects folder as shown below. Click **Next** and **Finish**.



5. The process will take about 10 seconds. Click **OK** at the checkout report dialog.

6. Save the map document again (just in case) and then minimize ArcMap.

7. **This is a very important step** → use the File Explorer

in ActiveSync to <u>copy the ArcPad project folder you just created, and paste onto your Mobile Device.</u>

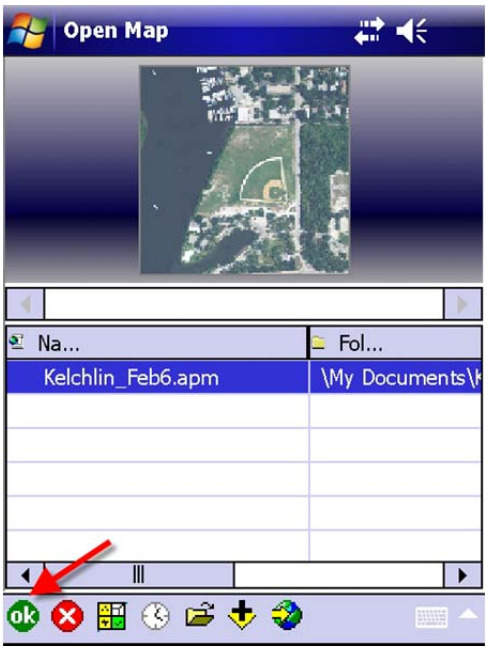
SECTION 4 – Open the Project on your Mobile Device

It's always good practice to open ArcPad on your mobile device and make sure all your data came over correctly before you head-out into the field.

1. Open ArcPad on your Trimble unit by single tapping the large ArcPad Icon on the Today Toolbar . It will take about 20 seconds to load.

2. Tap the **Choose map to open** button on the Welcome Dialog.

3. Highlight the map on the list (you should only have one right now) and tap the **OK** button at the bottom left of your screen to open the map.



4. Tap on the Table of Contents icon and see if your layers are present.

5. If your layers are present, then simply tap the Quick Action Toolbar and select **Exit**.

6. Tap **No**, do not save any changes. Get ready to head-out and collect field data.

SECTION 5 – Checking In GPS Field Data

In this exercise you will update your **Field_Day1.gdb** geodatabase with newly collected GPS field data using ArcPad's Data Management Toolbar.

1. Exit ArcPad on your mobile device if you haven't done so already. Connect the GPS device to your computer as a Guest via ActiveSync.

2. From the **Active Sync** dialog, click

and navigate to your **Mobile Device** folder.

3. Right mouse click on your GPS project folder and select **Copy**. **<u>COPY THE WHOLE FOLDER.</u>**

4. Browse to the **Exercise1** folder using the address bar or **Up Folder** button.

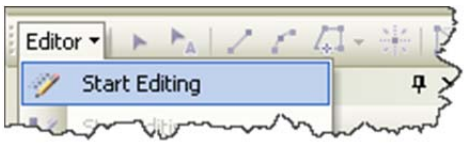
5. Right mouse click on the **Exercise1** folder and select **Paste**, completely replacing our prior checked out ArcPad project. Click on the **Yes to All** button at the **Confirm Folder Replace** dialogue.

6. Reopen ArcMap

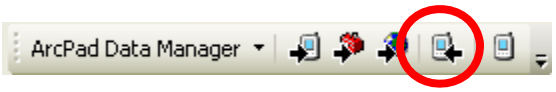
and open the map document we saved earlier in the day.

7. <u>You should be in an edit session to perform the check-in process</u>. To load the **Editor** Toolbar click on the **View** Menu, select **Toolbars**, and put a check next to **Editor**. Dock or float the toolbar as desired.

8. From the dropdown on the **Editor** Toolbar select **Start Editing**.



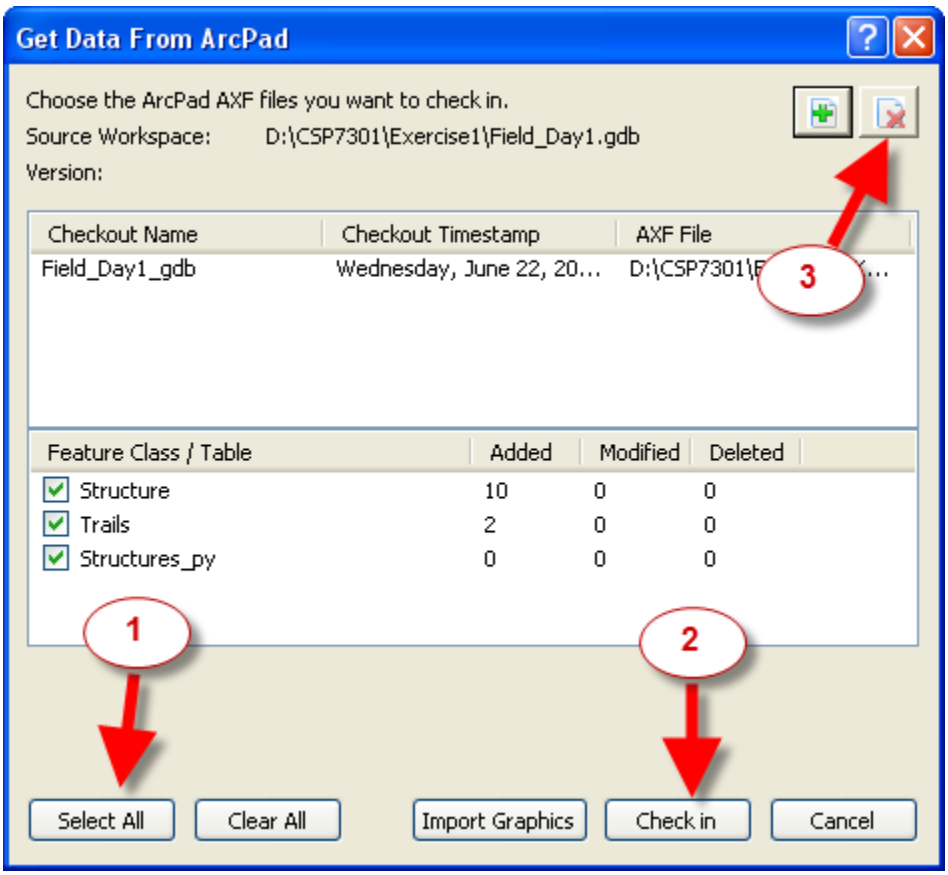
9. On the ArcPad Data Manager Toolbar, click the **Check In Edits From ArcPad** button.



10. Click the **Browse for ArcPad AXF files** button.

11. Browse to and select the **Field_Day1.gdb.axf** file in your ArcPad project folder. Click [Open].

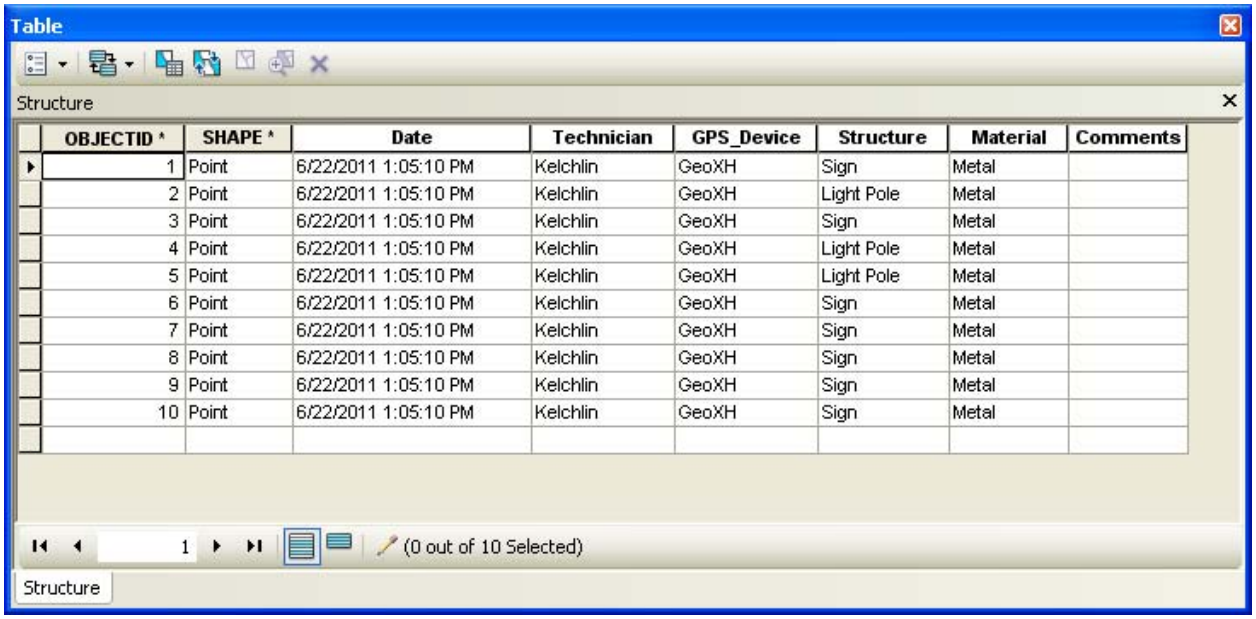
12. Click **Select All** and **Check In**. Click **Yes** and then **OK** to accept the updates.



13. Click [x] to close the Check in window.

14. Select **Stop editing** from the drop down list on **Editor** Toolbar and **Save** your edits.

15. Open the attributes table to view your new records. Mmmmm, tasty data.



OBJECTID *	SHAPE *	Date	Technician	GPS_Device	Structure	Material	Comments
1	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	
2	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Light Pole	Metal	
3	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	
4	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Light Pole	Metal	
5	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Light Pole	Metal	
6	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	
7	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	
8	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	
9	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	
10	Point	6/22/2011 1:05:10 PM	Kelchlin	GeoXH	Sign	Metal	

Congratulations, you just updated your file geodatabase with GPS field data!