

MobileMapper Tech Note: Using Background Imagery in ArcPad

25 October 2005

To create an ArcPad map with background imagery, you first need to locate the image files you wish to use on your PC the image files you wish to use. If you already have such images, please proceed to Step 9.

If you do not have any existing image files and wish to download free images from Microsoft, you can follow Steps 1 - 8:

- 1. Go to: <u>http://www.terraserver.microsoft.com</u>
- 2. Enter approximate street address or lat/lon of your area of interest
- 3. Select "Urban Areas" if available. This is typically fairly recent, color imagery.
- 4. At the top left of image there are 3 boxes. Click the largest box and then pan image to ensure demo area is in center of the screen.
- 5. Click "Download" at top right of image.
- 6. Right-click on the image and select "Save Picture As..." to place the image in an image directory.
- 7. Click "World file" at top right of the image.
- 8. When the new window appears with six lines of numbers, copy the six lines and paste into a text editor such as Notepad. Save this file with the same name as your image but with a .jgw file extension.

In your newly created image directory, you should now have a .jpg image file and a .jgw world file. Note that this imagery is WGS84 UTM, so you will need to know the UTM zone in which you're working. You can find which zone you are in from sites such as http://www.dmap.co.uk/utmworld.htm.

When you have the image files loaded on your PC, you may proceed with importing them into ArcPad by following these steps:

9. Launch ArcPad on your PC.



10. Click the "Add Layers" icon and select an image (in this case a .jpg file) by checking the adjacent box.



- 11. Click "Layers" and select an image (in this case a.jpg). **ISN'T THIS STEP REDUNDANT?**
- 12. In the "Layers" window click the "Projection Definition" icon.

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13. Select the appropriate WGS84 UTM zone projection.

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14. Click the "Projection Info" icon in the "Layers" window.

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15. Confirm that the projection is now set to the appropriate WGS84 UTM zone projection.



- 16. Click the "New Layer" icon and create two new layers of PointZ and PolylineZ with whatever feature names are appropriate for your job (i.e.: fire hydrant and sidewalk) and save layers to the image directory you created earlier.
- 17. Save the ArcPad map (.apm) to this image directory.
- 18. Copy the entire image directory to an SD card and insert it into MobileMapper CE.

After following these steps, you will be able to launch ArcPad on MobileMapper CE and open the map (.apm) you just created on your PC using the background image.

Note: All data collected by ArcPad in the example above will be in WGS84 UTM. ArcPad does not re-project layers on the fly, i. e., you can not drop existing layers into this ArcPad map unless they were logged as WGS84 UTM). For re-projection on-the-fly capabilities, customers will need access to an ArcGIS desktop application.