# **Training Module Section IV**

## **Add Layers**

#### 1. Introduction

In this module we explore the features of MapLab further and describe the procedure for adding new map layers and annotation to our web mapping application. The data source for this module is derived from the "Urban Geoscientific Data of East and Southeast Asia GIS data sets of 11 cities, Second Edition" published by the Geological Survey of Japan under aegis of the DCGM III Working Group in 2001.

Predefine of Mapfile is used for a template for a beginning of first Map Publishing step. User have to modified some parameters of this predefine to fulfill for case by case such as geographical extent or path parameter.

#### 2. Objective

The objectives of Map Publishing training module are:

- 2.1 To familiarize with MapLab for editing "MapFiles"
- 2.2 To add new layer objects and annotation to existing "Mapfiles"

#### 3. Procedure

The demo.exe automatically installs the data into the user Web Server's document root (C:\\Foxserv\www\template). Then this directory will be copy and used for a template to begin a web mapping application. New name of paste directory can be changed for any new application.

3.1 Copy template directory and paste it in C:\\Foxserv\www\

3.2 Rename new directory to "mydata"

This step is a step to copy all of GIS and Image dataset to a data directory by this demo shape file will be used from Phuket demo.

- 3.3 Copy all files in C:\\Foxserv\www\sample\_shp\ to C:\\Foxserv\www\mydata\data\
- 3.4 Start Maplab by invoking the URL mentioned below on the Web browser http://localhost/maplab-2.0-release/htdocs/index.phtml
- 3.5 from Mapedit List box.

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File Menu	-
File Menu	
New Map	1
Open Map	
Import 3.x Map	
Save Map	
Save Map As	

3.6 Browse MapFile template.map from mydata/mapfile/ then click open button

Template MapFile is shown on screen. As pointed out in the earlier section, that this is a predefine MapFile. What is most important is an extent parameter which defines the spatial extent of the map to be created. Extent parameters have to corresponding with Unit parameter also. In this case extent of data is already filled with UTM value cause UNITS parameter of this template is in METERS.



3.7 Use the pull down menu in the tool bar and change Create New Object to Layer Object. Click on the Add new item button + to add a new layer object.

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Create New Object	
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Output Format Object	8
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3.8 Click on the new layer at the bottom of the Object Browser.

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3.9 Once the properties for that layer opens, Type Village in the Name parameter.

Name:	Village		
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3.10 Click on the Select a File button in next to the Data Type parameter. Here, you will see all the shape files under data directory. Choose Village.shp and then click OPEN button.

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- 3.11 This data layer can be set to display automatically by turning the data layer "off" or "on". In this we turn the Village layer on and allow the user to turn it off on in the legend.
- 3.12 We also need to specify the data type. For vector data we must also indicate whether the data is of points, lines, or polygons. Since the Village.shp is a point, we use the pull down menu and choose point.

Type:	POINT
	POINT
	LINE
	CIRCLE
	POLYGON
	ANNOTATION
	RASTER
	QUERY

3.13 Select on "Save Map as ..." from Mapedit List box.



3.14 Select the Village layer. Use the drop down menu in the toolbar and change. Create New Object to Class Object. Now click on the Add new item button.

+ You should see a class object appear underneath the Village layer.

Feature Object	-
Create New Object	
Metadata Object	
Projection Object	
Class Object	
Feature Object	
Grid Object	
Comment	_

3.15 Type Village in the Name parameter.

Name: Village

3.16 Select the Village layer. Use the drop down menu in the toolbar and change to

Style Object. Now click on the Add new item button +. You should see a style object appear underneath the Village class

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3.17 Appropriate symbol mark can be assigned to villages. To do this go to the Symbol parameter and click on the Select a symbol button. The Symbol picker panel will appear. Choose the appropriate Symbol and click OK.

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3.18 We can select a color for the symbol. Go to the Color parameter to pick a color. You can either enter in numbers (Red, Green, Blue) or you can click on the Select a color button. Note that in some browsers, picking colors with the mouse may not work, in which case you have to enter the RGB combination to define your color.

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3.19 Choose the size of your symbol. Scroll down the Object Properties frame until you see a parameter called Size and enter appropriate size (type 4 for this parameter).

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- 3.20 Hit Save
- 3.21 Click on the Class Object underneath the Village layer. Use the pull down menu in the toolbar and change Create New Object to Label Object. Click on the Add new item button.



3.22 Now click on the Label Object that appears underneath the Class Object.

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- 3.23 We need to select if we use truetype or bitmap font. This case we used truetype font.
- 3.24 Pick a font to be used to display the label, Click on the Select font button. The Font Picker panel will appear. There are several fonts listed, pick an appropriate font.

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3.25 Position the label on the map can also be selected. Go to the parameter called Position and using the pull down menu and choose Auto.

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- 3.26 We can select a color for the font. To do this go to the Color parameter and click on the Select a color button and choose a appropriate color. Note that in some browsers, picking colors with the mouse may not work, in which case you have to enter the RGB combination to define your color.
- 3.27 Hit Save
- 3.28 We need to define field for getting the name from the Village layer. Click on the Village layer. Scroll down the Object Properties Frame until you see a parameter called LabelItem. Select VILL\_NAM\_E for LabelItem parameter then hit OK button.

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3.29 Hit Save

3.30 Preview your map by click preview button. You should see the label.



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### 4. Conclusion

In this training module, we have seen how to add layer object to an existing Mapfile using the DCGM III data for Phuket Island, Thailand. We have also learnt how to add symbols and annotation to map layers using the MapLab RAD.