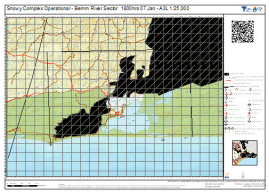
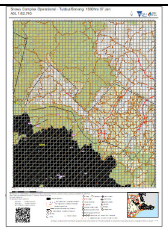
Method for using Data Driven Pages for Portrait and Landscape Division/Sector Maps

Creating the Data Driven Pages projects

Data Driven Pages allow the quick creation of multiple maps very much like how a Mail Merge works in Word. The title, extent, scale and any picture content can change for each map as it is exported.

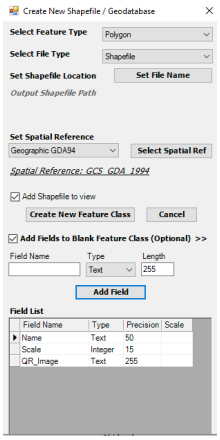
An ArcMap project (mxd) needs to be created/updated for each of *portrait* and *landscape* maps.

	
Landscape Template	Portrait Template

After the Situation Officer decides the location, extent, scale and orientation of the maps they require, usually by marking up paper versions of the complex, these can be separated into a list of portrait and landscape maps.

A separate polygon shapefile needs to be created/updated for **each** of these MXDs. These will have the required map extents in them and attributes with other map data to populate each map.

Use the CFA Utilities Menu and *Create New Featureclass*.



Each shapefile requires these fields:

Name of the map is text with 50 characters (*Precision*)

Scale is a type integer

QR_Image is text with 255 characters (*Precision*)

Click on Set File Name and enter a name like “Datadrivenpages_portrait”

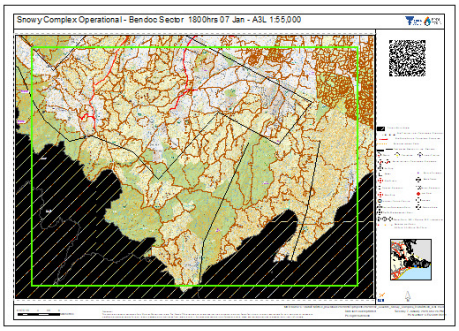
Navigate to your data folder and create the shapefile.

It will be automatically loaded into project.

To edit it, right click on the name and select *Edit Features > Start Editing*

From the edit toolbar click on *Editor > Editing Windows > Create Features*

Start, say, with the landscape ArcMap mxd move the map to the extent for each landscape map and create an approximate polygon rectangular feature at the scale given above. Enter the name and scale value in the attributes. Scales of 25k and 50k are recommended but other rounded values can be used. The map name only needs to contain the part that is changing. Pretext in the name, like “Snowy Complex - ” can be added in the embedded text of the title for every map.



Repeat this operation for the portrait mxd editing the landscape map shapefile with names and scales. Save the shapefile and stop editing. The shapefile layers do not need to be displayed on the map once they are created.

Data Driven Pages setup

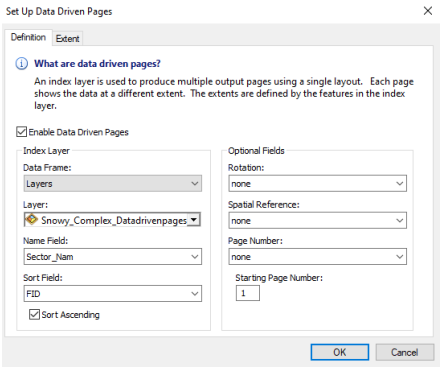
Ensure *Data Drive Pages* toolbar is active.

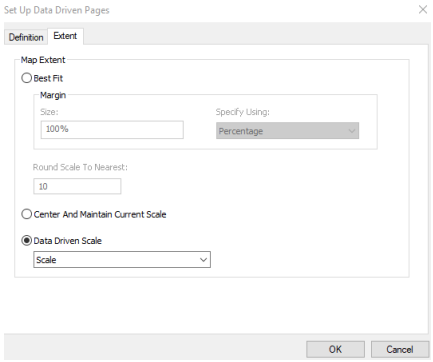
Click on the Setup (hand) icon and select the shapefile and *Enable Data Drive Pages*.

Select the shapefile for your map extent layer and your map **name** field for *Name Field*.

The sort field is not important.

On the *Extent* tab select your Scale field from your shapefile as the *Data Driven Scale*. This will force each map to be created the scale you decided for each map.





Exit the Data Driven Pages setup and the map pages will be created. They can be stepped through to be checked by clicking on the left/right arrows on the Data Driven Pages toolbar.

The map title can be configured to dynamically change on each map using the following format as an example:

Snowy Complex Operational - <dyn type="page" property="Name"> <dyn type="time" format="HH"/>00hrs <dyn type="date" format="dd MMM"/> A0L 1:<dyn type="dataFrame" name="Layers" property="scale"/>

The free text will be repeated on every map and the dynamic text (<dyn_type….), including the name, time and scale (in this example) will be automatically included in the title of each map. Note these dynamic texts are automatically created as the data driven pages are exported. Save the mxd.

Repeat the entire Data Driven Pages setup for the landscape mxd and save the mxd.

Map Export Process

Use *File > Export Map*.. to setup the map creation.

Set the DPI to 300 and click on the *Pages* tab and select *All*.

Set the *Export Pages As:* to *Multiple PDF files (page names)*. If *not* using data driven QR Codes, *Single PDF file*, which is a multipage PDF, can be created.

Locate the correct output folder to save the maps to and press Save. A PDF file per map will be created based on the contents of the shapefile created.

Repeat this whole operation for the other mxd. Once set up the creation and printing of multiple similar maps is far easier.

Creating QR Codes

To add QR Codes to the maps, you will need to submit each map pdf to the FFM QR generation page. After the QR codes are created, add to the data driven pages and exported with the maps, they will need to be uploaded again.

Log into https://apps.ffm.vic.gov.au/ using your fireweb credentials and select QR Codes. Login to this page as well.

Enter the full name of each map and select the fire it is associated with. Add (QR) to the end of the name.

Eg “Snowy Complex – Orbost Div- Simpson Creek Sector (QR)” in the “Snowy 16” fire.

Drag and drop the map PDF you have created for each map and press “Uploading”.

When all of the maps are uploaded, go to the Map Catalogue tab. Search for your fire name to display your maps.

In turn, click on each map name, then click on the first QR icon.

When the QR code appears on the screen, click *Download*. The QR Code png file will go to your computer’s download folder. It will have the name of the map you entered in the QR entry page above.

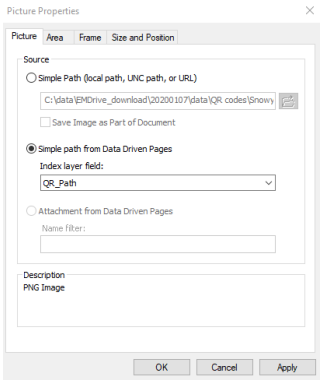
Repeat this for all the maps and then move the QR Code png files into the same data area as your shapefiles.

Back in each of the mxd projects, edit the created map extent shapefiles again. Make sure you show attributes, especially the QR_Image field.

Embedding the QR Codes

Using *Insert Picture* locate a QR Code in the data folder. Place it on the map and locate and size it to the best location. Right click on the QR code select properties and change the setting on the *Picture tab* to *Simple path from Data Driven Pages*. Change *Index layer field* to QR_Path (or the name you created). This only needs to be done once on each of your portrait and landscape mxds.

Display the folder with all the QR Code files in it. Shift-right click on each QR Code png file and select *Copy Path*. Paste the QR_Code file name into to the QR_Path field for each associated map. The 2 inverted quotes from Copy Path need to be removed. Do this on all maps in both portrait and landscape mxd projects.



Repeat the map export process for both the portrait and landscape maps, including the embedded QR Codes.

On the FFM QR page click on the three dots on the line at the end of each map and select *Update*.

Drop each new map pdf with the QR Codes embedded into respective map catalogue location.