An application in DataPlus® Mobile determines the types of features and their attributes that can be collected in the field. In this support note we will cover creating the application, setting up the hierarchy, formatting the data, and testing a basic application on a PC that can later be copied to a handheld computer for use in the field.

Creating an Application

1. Open DPM Generator under Start> All Programs> DataPlus Mobile

2. Select New from the Application menu.
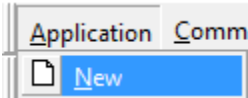
3. Type "CRUISE" in the New Application box.

4. Click OK.

5. To see all the option for this tutorial, we will be using the Line screen type.

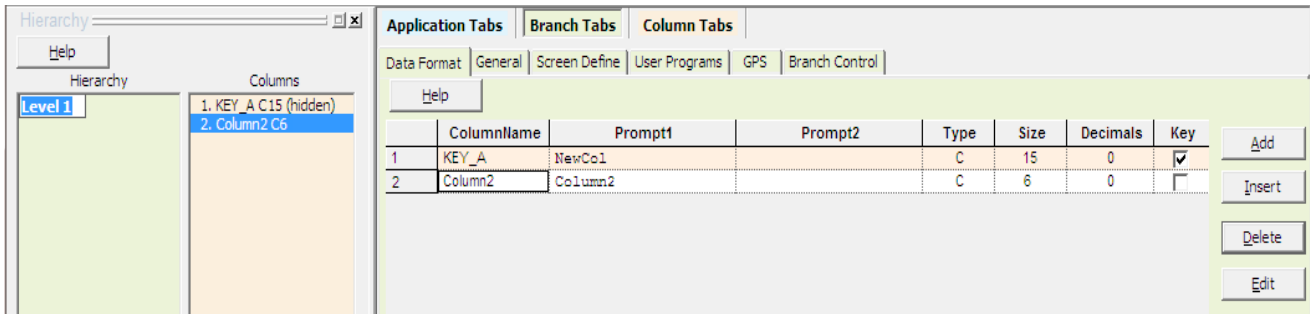6. Set Screen Type in the Screen Define on the Branch Tab to Line.

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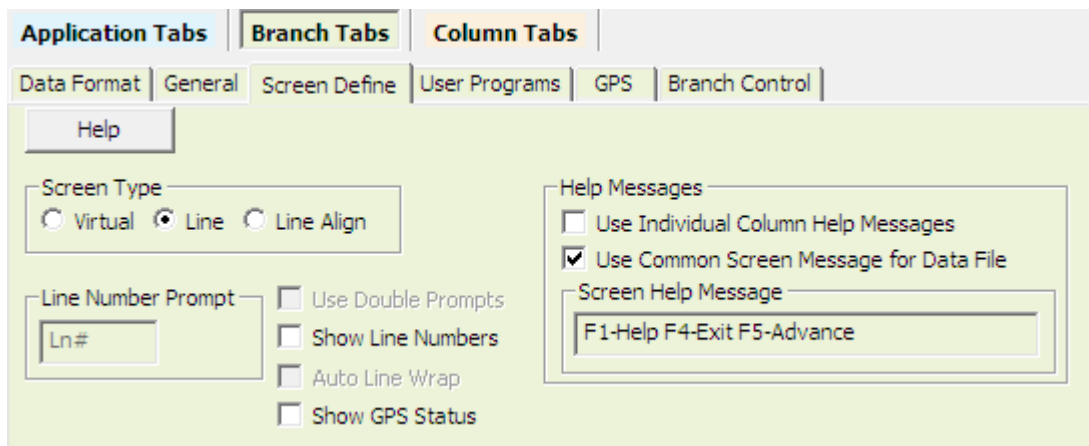
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Hierarchy

Next, we need to set up a file hierarchy like discussed in the introduction. In the hierarchy

To name the branch, click on the highlighted branch name or hit F2. Then type the branch name and hit enter.

To add a branch to the highlighted branch, press the Insert key or right click on the parent branch and select Add. Then type the branch name and hit enter. Each parent file may have up to nine child branches.

To delete the highlighted branch, press the delete key or right click on the branch and select Delete. All children will be deleted with it.

6. In the hierarchy window, select "Level 1" and rename it.
   - Click on Level 1.
   - Type "Stand".
   - Press ENTER.

7. Create a child branch
   - Select Stand (if needed).
   - Press INSERT.
   - Type "Plot".
   - Press ENTER.

8. Select Plot and press Insert for each of its three child branches, naming them

   Tree

   Wildlife

   Comments

   These three branches are called siblings.

9. Select Tree, press INSERT, and type "Damage". Press ENTER.

10. Click the Save button to save the application.

Data Format

Next, we need to define the data structure for the files in our hierarchy. Use the data file definitions from the introduction.

The Data Format tab is used to define and label the application columns. ColumnName is the field name and is required. It can be up to 10 characters in length and must begin with a letter. It can contain only letters, numbers, or underscores. Prompt 1 is optional and is how the field name should be displayed on the mobile collection screen; it has no restrictions. Prompt 2 is optional and has no restrictions. It is only viewed when selecting double prompts for a virtual screen type.

1. Click to select the Data Format tab, if needed.

2. Select Stand in the Hierarchy window.
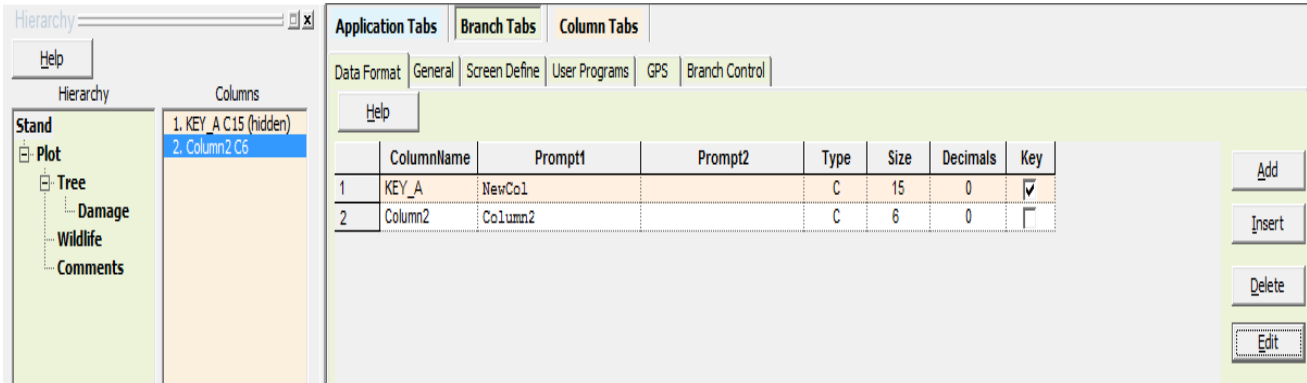
3. Click Edit. Enter data for column 1.

   - Replace Prompt1 with Date.
   - Replace Size with 10.
   - Click OK.

4. Click Add. Enter data for column 2.

   - Replace Prompt1 with Time.
   - Replace Size with 8.
   - Click OK.

5. Continue to add columns to the Stand level according to the following chart.

	ColumnName	Prompt1	Prompt2	Type	Size	Decimals	Key
1	KEY_A	NewCol		C	15	0	✔
2	Date	Date		C	10	0	
3	Time	Time		C	8	0	
4	Region	Region		N	2	0	
5	Forest	Forest		C	3	0	
6	Stand	Stand		C	6	0	
7	Cruiser	Cruiser		C	2	0	
8	Acres	Acres		N	5	0	

3

The Hierarchy and Columns windows should now appear as shown.

Hierarchy	Columns
Stand	1. KEY_A C15 (hidden)
⊟ **Plot**	2. Date C10
⊟ **Tree**	3. Time C8
Damage	4. Region N2.0
Wildlife	5. Forest C3
Comments	6. Stand C6
	7. Cruiser C2
	8. Acres N5.0

The Hierarchy window shows an application's file structure with branches.

The Columns window shows the type and precision for columns in the selected branch.

6. Create columns for levels 2, 3, and 4.
   - Select a branch in the Hierarchy window.
   - Click Edit or Add in the Data Format tab.
   - Enter the information shown in the following tables.

LEVEL 2

Plot

	ColumnName	Prompt1	Prompt2	Type	Size	Decimals	Key
1	KEY_A	NewCol		C	15	0	☐
2	KEY_AA	NewCol		C	10	0	☑
3	Plot	Plot		N	3	0	☐
4	Pt	Pt		C	1	0	☐
5	Size	Size		N	4	2	☐

LEVEL 3

Tree

	ColumnName	Prompt1	Prompt2	Type	Size	Decimals	Key
1	KEY_A	NewCol		C	15	0	☐
2	KEY_AA	NewCol		C	10	0	☐
3	KEY_AAA	NewCol		C	10	0	☑
4	Tree	Tree		N	3	0	☐
5	Spec	Spec		C	3	0	☐
6	TotalHght	TotalHght		N	3	0	☐
7	MerchHght	MerchHght		N	2	0	☐
8	DBH	DBH		N	4	1	☐

Wildlife

	ColumnName	Prompt1	Prompt2	Type	Size	Decimals	Key
1	KEY_A	NewCol		C	15	0	☐
2	KEY_AA	NewCol		C	10	0	☐
3	KEY_AAB	NewCol		C	10	0	☑
4	Species	Species		C	6	0	☐
5	Code	Code		C	1	0	☐
6	Nmbr	Nmbr		N	3	0	☐
7	Use	Use		C	6	0	☐
8	Bearing	Bearing		N	3	0	☐
9	Distance	Dist		N	4	0	☐

Comments

	ColumnName	Prompt1	Prompt2	Type	Size	Decimals	Key
1	KEY_A	NewCol		C	15	0	☐
2	KEY_AA	NewCol		C	10	0	☐
3	KEY_AAC	NewCol		C	10	0	☑
4	Comments	Comments		C	20	0	☐

LEVEL 4
Damage

	ColumnName	Prompt1	Prompt2	Type	Size	Decimals	Key
1	KEY_A	NewCol		C	15	0	☐
2	KEY_AA	NewCol		C	10	0	☐
3	KEY_AAA	NewCol		C	10	0	☐
4	KEY_AAAA	NewCol		C	10	0	☑
5	DQI	DQI		N	2	0	☐
6	DQS	DQS		N	3	0	☐
7	DQL	DQL		N	3	0	☐
8	DCC	DCC		N	2	0	☐
9	DQC	DQC		N	3	0	☐

Compile and Test

1. Click the Compile button.

The application can be compiled at any time. If errors are detected, they will be identified in the Output tab. The application cannot be tested until it has been successfully compiled.

2. Click the Test button.

The Test Program will present the application as it will appear on the handheld.

3. The DPM Test Defaults dialog box will display after clicking the Test button.

This is where you can select the screen size to match your handheld. For this tutorial, will be using a Portrait screen. Make the following changes.

- Change Screen Format to Portrait.
- Check the box next to Use Pop-up Keyboard.
- Change Touch Level to 4 High –Low (PopUp Keyboard).
- Change Font Size to 8.
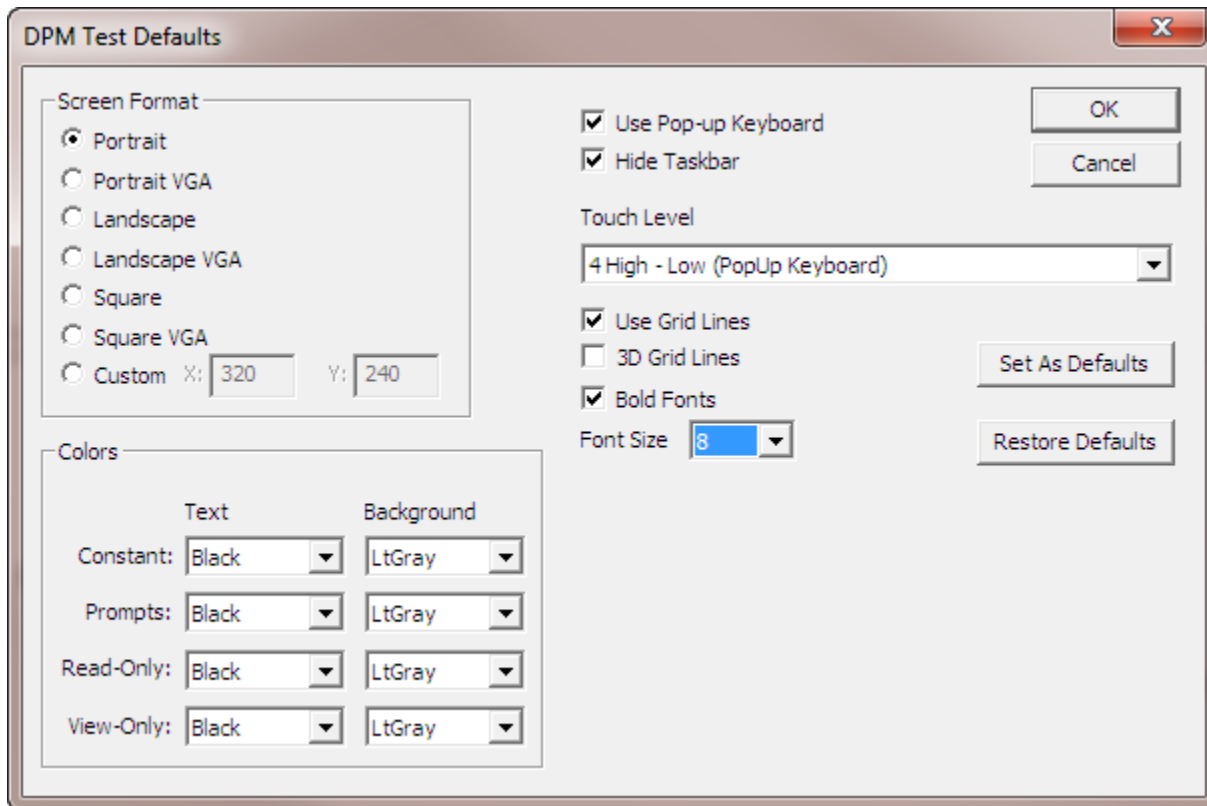
Keystroke Help

4. Press any key to start entering data.
5. Press the F1 key to view Help for the specific keys used to operate DataPlus on the hand held. The up/down arrows scroll the display.
6. Press Esc.

Enter Data

7. Enter data into each empty field, pressing ENTER or the ARROW KEY to advance.
8. Press the F5 key to move to level
9. Type data into each empty field in level 2. Several rows can be added by pressing the down arrow.

   Since the hand held display size is set to only 24 columns, not all columns in level 2 can be viewed simultaneously.

```
┌─────────────────────────┐   ┌─────────────────────────┐
│ ┌────┬──────────────┐    │   │ ┌────┬──┬─────┐          │
│ │Date│05/20/2014    │    │   │ │Plot│Pt│Size │          │
│ ├────┼────────────┬─┤    │   │ ├────┴──┴─────┤          │
│ │Time│14:36:05    │ │    │   │ │█        0.00 │          │
│ ├──────┬─┬──────┬─┴─┤    │   │ │  ┌<Select Child>─┐     │
│ │Region│1│Forest│1  │    │   │ │  │████          │     │
│ ├──────┴─┴──────┴───┤    │   │ │  │Tree          │     │
│ │Stand              │    │   │ │  │Wildlife       │     │
│ ├───────┬───┬───────┤    │   │ │  │Comments       │     │
│ │Cruiser│   │Acres  │15 │   │ │  │<ESC to Abort>│     │
│ └───────┴───┴───────┘    │   │ │  └──────────────┘     │
│                          │   │ │                        │
│                          │   │ │                        │
│ ┌──────────────────────┐ │   │ ┌──────────────────────┐ │
│ │F1-Help F4-Exit F5-Adv│ │   │ │F1-Help F4-Exit F5-Adv│ │
│ └──────────────────────┘ │   │ └──────────────────────┘ │
│                          │   │                          │
└─────────────────────────┘   └─────────────────────────┘
```

LEVEL 1- Stand   LEVEL 2- Plot

Sibling Jumps

10. Press the F5 key to advance to level 3.

11. The branch selection screen appears.

12. Press ENTER to select the Tree branch.

13. Press ALT-F5. The sibling jump screen appears.

14. Press down arrow twice to select the Comments branch.   Press ENTER.

15. Type a comment.

16. Press ALT-F5. The sibling jump screen again appears.

17. Select Wildlife and press ENTER.

18. Continue experimenting with sibling jumps. Press the down arrow. Try entering several lines into the same branch file.

Exit the Test Program

19. Press F4 or Esc/Y until you return to the Application Generator.