

MGA

FdpDuty

**Flight Duty Periods system
FTL management tool for AOC
operations.**

MGA software.com

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Introduction

**FdpDuty flight duty management system.
planning, audits and record keeping system for AOC operators**

The **FdpDuty** system is designed for editing, maintaining and managing crew duty and flight times.

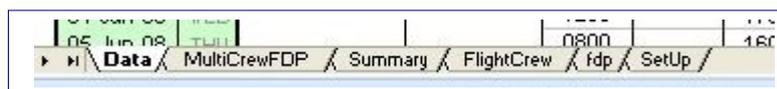
FdpDuty produces printed audit reports to a standard accepted by the licensing authorities. The software alerts the operator via a system of coloured flags if a pilot is closing on the statutory limits or has exceeded them (the 7day, 28 day, 3 month and annual limits on duty times and flying hours). A similar alerting function is incorporated for the automatically calculated Rest times.

A forward planning facility is incorporated to allow the testing of 'what-if' rostering scenarios. Using the same coloured flagging system the forward planner will help operations to use aircrew resources to best effect.

A MultiCrew input facility allows the data for all Flight Crew (up to 2 flight deck and 2 cabin crew) to be entered at the same time.

The interface for inputting, editing and checking data is the module fdp-dutyXX.xls (where XX is version number).

Click the Tab at screen bottom to select the screens available:



<u>Screens</u>		Page
Data	main input screen	4
Audit Report	printed 28 day audit form	8
FlightCrew	Crew list and statistics; select, manage	7
SetUp	Program parameters and user preferences.	11

Getting started

(for information on enabling macros within Excel see [MGA-install](#))

- 1 Run the program fdp-duty.xls
- 2 Go to the **FlightCrew** page (Click the Tab at screen bottom)
- 3 Click **Load Data** from the Housekeeping drop-down. Next Click **Create New Flight Crew member**
- 4 a) Enter a unique ident 2 - 4 character identifier for the pilot, and b) pilot's name.
c) Enter a starting date for records (This should be 3 months before the required record span or 28 days before the first check ride, whichever is the earlier). The program requires the starting date to be a MONDAY and will suggest the MONDAY preceeding the entered date iif necessary.
- 5 The 'Okay' button changes to 'Sure?'. Click to confirm.
- 6 Go to the **Data** page (click the tab at screen bottom)
The pilot you have just created will be selected (confirm at screen top)
Click the 'Scroll' button to move today's date near page center if required.

A new pilot data file is now created and data maybe entered either direct to the spreadsheet columns or else via the **Edit dialog** (to use, position the cursor on the row containing the target date and press the blue 'Edit' button)

fdpDuty Data screen:

BaseDate:	Ident:	Name:	Housekeeping	(auto)	Next Print	(auto)	Rank	Duty Period Max Hr				Flying M:			
25-Dec-06	ZZ	Zoot Hilev	DUTY	FDP	DUTY	HOURS	HOURS	18-Sep-06		55	95	180	100		
scroll		Roster info	ON	END	OFF	DUTY	FLYING	SECTORS	SPLIT/NOTES	Rest	Alerts	Last 7d	Last 14d	Last 28d	Last 28d
22-Oct-08	WED		0900		1700	8:00			Home office	20:00		25:50	46:50	73:40	26:40
23-Oct-08	THU		1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35		31:15	46:50	79:05	27:30
24-Oct-08	FRI		0700	1205	1235	5:35	03:00	2s	JET528 and JET529P			29:40	46:50	84:40	30:30
25-Oct-08	SAT		OFF									21:35	46:50	84:40	30:30
26-Oct-08	SUN		1630	2005	2035	4:05	02:35	1s	JET529			23:05	46:50	88:45	33:05
27-Oct-08	MON		OFF									23:05	40:55	84:55	33:05
28-Oct-08	TUE		OFF									23:05	40:55	82:45	32:15
29-Oct-08	WED		0900		1700	8:00			Home office	20:00		23:05	48:55	90:45	32:15
30-Oct-08	THU		1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35		23:05	54:20	96:10	33:05
31-Oct-08	FRI		0700	1205	1235	5:35	03:00	2s	JET528 and JET529P	17:55		23:05	52:45	95:55	32:55

All user input areas are **non-tinted**. The tinted cells contain Active Spreadsheet data. The Duty Hours column (in the centre of the user input area) is not accessible to the user. Typing the letter 'o' in the ON DUTY column will produce the 'OFF' legend.

Note: Be aware the column D and E are used by the optional Roster system for rostering assignments and roster stability counters respectively.

Where's my data?

The datasets for the fdp system are maintained in separate files (with the extension .csv) residing in the folder specified at SetUp. Every time you select a crew dataset in fdpDuty you are importing an individual spreadsheet file and every time you save from fdpDuty (whether from the data or MultiCrew FDP screens) you are saving your changes to individual dataset files. It is therefore important that you make frequent back-ups of the dataset files.

NB: Do Not edit the individual datasets.

Use the fdp-duty editor module for all editing and data management.

Data screen

The **Data** screen is designed around a rolling calendar presentation, with each row representing a day. The calendar 'matrix' expands automatically on start-up according to the number of days specified for the 'Matrix forward' parameter (**SetUp** screen). Press the 'Scroll' button to position 'today' about half way down the page:

BaseDate:	Ident:	Name:	Houskeeping				(auto)	Next Print:		(auto)	Rank	D
25-Dec-06	ZZ	Zoot Hilev	ON DUTY	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	18-Sep-06		Rest	Cabin	60
scroll			Scheduled									
12-May-08	MON		0735	1005	1330	5:55	00:45	1s	JET529P and travel	19:30	0	37
13-May-08	TUE		0900	1500	1600	7:00	02:15	2s		18:00	0	36
14-May-08	WED		1000	1330	1500	5:00			JET533P plus travel		0	33
15-May-08	THU		OFF									27
16-May-08	FRI		OFF						JET533P plus travel			22
17-May-08	SAT		1000	1735	1805	8:05	04:40		JET533/534	21:55	0	30
18-May-08	SUN		1600	1805	1835	2:35	02:35		JET537P	16:00	0	28
19-May-08	MON		0535	2100	2130	15:55	02:55	<Fwd>	JET538/Split duty credit 3:50	16:00	0	38
20-May-08	TUE		0830	1530	1630	8:00	04:35	3	ATX 9009 Test	20:30	0	39
21-May-08	WED		1300		1530	2:30		<Fwd>	Travel	14:00	0	37
22-May-08	THU		0530	1320	1350	8:20	04:45	<Fwd>	JET531P/JET531		0	45
23-May-08	FRI		OFF					<Fwd>			0	45
24-May-08	SAT		1545	2205	2235	6:50	01:30	<Fwd>	JET532P	17:55	0	44
25-May-08	SUN		1630	2200	2230	6:00	03:50	<Fwd>	JET532P/JET532	16:00	0	47
26-May-08	MON		1430	1850	2200	7:30	02:10	<Fwd>	JET533P/JET533 + travel		0	39
27-May-08	TUE		OFF					<Fwd>			0	31

The daily totals for duty periods is updated by pressing the 'Refresh' button and warning flags will be automatically triggered as appropriate:



Within 10 hrs of a duty time limit shows an orange flag, and exceeded limits shows red. Similarly the Rest column shows orange when Rest is within 1 hour of the minimum required and red where rest minimum has been exceeded. Additionally, a red flag annotated '7d, 14d, 28d' or '3mo' is displayed when duty day limits are violated by a particular day's duty.

Notes:

Because fdp limits include the last 3 month's records, the fdp program logic requires a span of records from the current date back to least 84 preceding days to be able to correctly compute limits. The program prompts when this condition is not met with (eg) 'Date Matrix for XXX insufficient to calculate FDP limits'.

Tip: This can result from the matrix not having been expanded to include the current date: Remember. the matrix is only expanded when a crew member's dataset is loaded into fdp-duty. The expanded dataset must then be Saved for the updated information to be available to the system).

Be aware that the **FlightCrew** screen gives statistical readout of each crew member's dataset including matrix start and end points. Any matrix end date which is more than 28 days out of date is flagged red.

Data screen cont

Here is the Ops Managers nightmare - just about everything has gone wrong!:

	M	N	Q	R	S	T
	[auto]	Rank	Duty Period Max Hr			Flying
		Cabin	60	105	210	100
	Rest		Last 7d	Last 14d	Last 28d	Last 28d
	14:30	0	40:00	69:05	159:20	37:15
	10:45	0	54:45	85:50	170:35	39:25
	19:00	0	43:15	88:20	171:50	39:25
	16:00	0	43:15	88:20	179:50	44:00
	15:00	28d	44:45	93:05	189:20	46:35
	16:00	28d	52:45	93:00	187:20	46:35
	16:00	28d	60:45	92:45	187:20	46:35
		7d	60:45	100:45	186:20	46:35
		0	44:00	98:45	177:00	40:50
		0	41:30	84:45	164:45	34:05
	16:00	0	41:30	84:45	172:45	34:05
		3mo	40:00	84:45	172:45	34:05

In column M the **Rest time** minima is violated (10:45).

In Column N, **Duty day limits** are exceeded: 28 day, 7 day and a 3 month limit.

In column Q the **FTL** max of 60 hours in the past 7 days is exceeded twice. The orange flags show where the crew member is approaching within 10 hours of the **FTL** max.

If this is a historic record, the company is in trouble with the CAA. However, if it is a Forward Planning scenario, then the situation may corrected by editing the duty periods for the days in question (see Forward Planning, next page).

The system of coloured flags as above alerts the operations department whenever a crew member is approaching FTL scheme limits and notifies any FTL violation. Flying hours (not fully shown above) are totalled and alerted upon for the last 28 days and the last year. The in-built forward planning function allows 'what-if' rostering scenarios to be tested utilising the same coloured flag alerting system as above

Housekeeping Drop-Down options:

Load data Load pilot data

Save data Save pilot data

Mark as Forward nominate selected days as Forward Planning dates (first highlight the rows required). Use this facility to run a tentative 'what-if' rostering scenario.

Double-Duty Day

Customise

Repair Matrix

Cleardown

Data screen cont

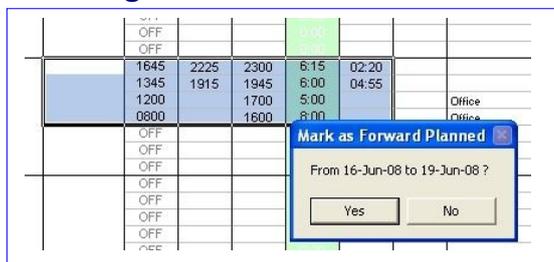
Forward Planning:

Use this facility to run tentative 'what-if' rostering scenarios. The forward planning function marks a selected block of fdp data with a '<Fwd>' flag in the sectors column and also causes the ext to be rendered in blue. The alerts and totalling functions inherent to the fdp system will work as normal with 'Fwd' data, but the operator can discriminate the real from tentative data, and later can remove either is allows

1 Highlight a block of dates and click 'Mark as Forward'.



2 Confirm the range of dates



3 A '<Fwd>' flag is placed in the Sectors column and text is coloured blue.

				6:15	02:20	<Fwd>	
				6:00	04:55	<Fwd>	
				5:00		<Fwd>	Office
				8:00		<Fwd>	Office

To clear tentative data (and convert the segment to normal data), remove the '<Fwd>' flag manually: Select the block of '<Fwd>' flags and press 'Delete'. Save the data and the next time the data is loaded it will be presented in normal coloured text.

FlightCrew screen

Ident	Name	BaseDate	MatrixTo	Days	1st Entry	LastEntry	NextPrint	Duty Periods			Flying		Status	Rank	OpTypes
								Last 7d	Last 14d	Last 28d	Last 28d	Last 12m			
MGA	Mgasoftware.Com	10-Dec-07	23-Nov-08	350	21-Jan-08	23-Jul-08	05-May-08	0:00	9:40	18:40	7:40	93:00	Active	Captain	Citation
ALT	Al Timiter	04-Feb-08	10-Aug-08	189	05-May-08	20-May-08	04-Feb-08	0:00	0:00	0:00	0:00	0:00	Active	Captain	Citation
ZZ	Zoot Hilev	25-Dec-06	23-Nov-08	700	26-Dec-06	24-Jul-08	18-Sep-06	35:20	53:10	95:00	39:30	493:05	Active	1st Officer	Citation
GLO	Gerry Lopenz												<-New-->	1st Officer	ALL

This screen presents tabulated statistics for each crew member on file. The data is refreshed by clicking the Housekeeping **Refresh** option. Note that crew member Name is presented as 'UPPER' or 'Proper' (first letter capitalised) as per 'nameFormat' on the **SetUp** page.

The 'MatrixTo' end points reported on this screen reflect those when Refresh was last exercised .Loading a dataset into fdp-duty automatically expands the matrix which can then be saved back to the dataset,

Create New Flight Crew Member (Housekeeping/Load Data option)

Specify Ident, Name and Base Date for starting records. This creates a blank datasheet commencing at the date specified. Base Date must be a Monday and the program will alert you if this is not so. The edit dialog includes drop-down options for Status and Rank. Base Date defaults to a Monday 84+ days BEFORE the current date. Print Date is not separately specified and defaults to BaseDate initially.

FlightCrew screen cont

'Parked' Data

MGA software.com		18-Jul-08	Housekeeping				Duty Periods			Flying		Status	Rank	
Ident	Name	BaseDate	MatrixTo	Days	1st Entry	LastEntry	NextPrint	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m		
MGA	Mgasoftware.Com	10-Dec-07	31-Aug-08	266	04-Mar-08	22-Apr-08	05-May-08	0:00	0:00	0:00	0:00	9:10	Active	Captain
ALT	Al Timiter	04-Feb-08	12-Oct-08	252	05-May-08	20-May-08	04-Feb-08	0:00	0:00	0:00	0:00	0:00	Active	Captain
ZZ	Zoot Hilev	25-Dec-06	21-Sep-08	637	26-Dec-06	19-Jun-08	18-Sep-06	0:00	0:00	8:00	0:00	440:55	Active	1st Officer
GLO	Gerry Lopez												<-New->	1st Officer

The *FlightCrew* screen may include crew members who are not currently in the fdp system but have been copied across from the pilots module (eg 'GLO' above). This 'parked' data is presented grayed out with the temporary Status of '<-New->'

Whenever a Refresh is commanded (from the 'Housekeeping' drop-down), the user will be reminded of any parked data which has not been resolved:



Be aware that parked ident's are included on the drop-down options when Load data is selected (but selection is not allowed). When a parked ident is entered in the New Crew Member dialog, name and Rank data are automatically copied in, facilitating the creation of a valid fdp record base.

When 'Refresh' is commanded (and also on startup), the fdp-duty module checks the files available in the nominated folder (as specified on the SetUp screen) and re-populates the FlightCrew list accordingly. This process will not disturb any 'parked' entries (ie. crew members created by the Pilots module but not yet incorporated into the fdp system).

'Refresh' gives the option to refresh the Crew dataset for the current line or for ALL data as appropriate (v3.6).

Total Crew on file is shown at top left of the Flight Crew listing. (v3.6)

FlightCrew screen cont

'Matrix To' showing red (Matrix end point out of date)

Be aware that if a red flag shows in the 'Matrix To' column of the FlightCrew screen, then you may get the error message: '[ident] - [date] out of range of Matrix' when saving data for that crew member on the MultiCrewFDP screen (depending on the date being edited).

The solution is as follows: Cycle the affected crew member once through Load and Save.
- The 'Load data' procedure extends the matrix within the fdp-duty module and 'Save data' copies the extended structure to disk.

The Refresh function (Housekeeping drop-down option)

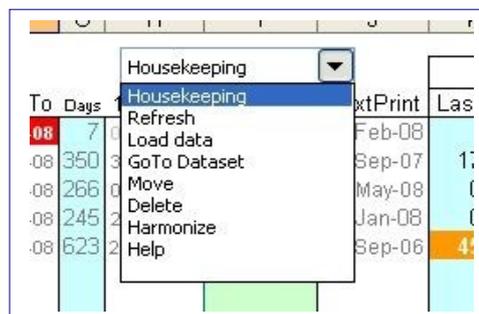
When 'Refresh' is commanded (and also on startup), the fdp-duty module checks the files available in the nominated folder (as specified on the SetUp screen) and re-populates the FlightCrew list accordingly. This brings crew records up to date by counting duty and flight times. At the same time it places a timestamp stamp on the dataset file, which gets removed when the file is re-saved. A full refresh (re-calculating the duty period time totals to current date) is triggered when the timestamp stamp has changed OR current date has changed, but a repeated 'refresh' on the same day follows an abbreviated process (Changes to Status, Rank, opType or name are updated only). To force a full re-calculation of ONE dataset, place the cursor on that record and clicking 'Refresh'. The Refresh procedure will not disturb any 'parked' entries (ie. crew members created by the Pilots module but not yet incorporated into the fdp system).

The Refresh function will return the prompt: Refresh FlightCrew before proceeding if the number of crew on the FlightCrew list is not equal the number of dataset files in the nominated fdp folder.

The Date Matrix

When Crew data is loaded into fdp-duty for editing on the Data screen, the date matrix is automatically expanded. fdp-duty33+ extends this process to the MultiCrewFDP and Summary screens. This is to circumvent the error message 'Date Matrix for XXX insufficient to calculate FDP limits' appearing unnecessarily. Be aware that the automatic matrix expansion does not change the start date for the dataset, and that the expanded matrix is not automatically saved back to disk. Crew data is only saved when 'Save Data' is commanded from the Housekeeping drop-down on the 'Data' screen.

FlightCrew screen cont

**Housekeeping drop-down options:****Refresh**

Communicates with each crew members' dataset and:

- copies any changes made to Name, Status, Rank or Op Types;
- updates and repaints the data grid with the latest information.

Load Data

The Load Crew Member dialog appears:

Select from the drop-down options (note placing the cursor on a crew member line before clicking **Load Data**, defaults to that entry), or else click 'Create New Flight Crew member' to initialise a new dataset:

View dataset (*'Goto dataset' prior to version 35*)

Go to the dataset module for the selected crew member.

Set Preferred Order

Allows you order the list to suit your preference. At the dialog enter the new position required for the selected records.

Delete Crew Record

Delete the dataset file for the selected crew member (only available if the last record is more than 15 months old)

Harmonise

Harmonize with **pilots.xls** file. Check each dataset record against **pilots.xls** and report any anomalies in Name, Status, Rank or OpTypes, with the option to make changes. If a record exists in **pilots** but not in the **fdp** system, the user is prompted with (eg): '**XXX not listed. If required, Create in fdp-duty.**'

FlightCrew screen Tips

All yellow cells are editable.

To save changes to Status /Rank/opType, use 'Refresh'.

SetUp screen

The parameters User Name, Company ident are set by MGA:

fdp-duty Set Up

User Name AOC Systems Demo

Company Ident MGA

Logo Image File mga2007.gif Insert Pic Valid until: 20-Mar-10

FDP records folder: fdp (change activated on Refresh or next boot)
folderSpec= C:\Documents and Settings\David Scott-Morgan\My Documents\techlog\demo\fdp

Help Filename: MGA-fdp.doc

Min post-flight time: 30 mins

Matrix Forward: 120 days

Report Size on save: 0 (0/1)

introSplash: 0 (0/1)

Set StartUp folder as default: 1 (0/1)

Headers on MultiCrew & Summary: 1 (0/1)

Dataset file extension: .csv

Excel file Spec: .xls XL pre-2007

version: 4.2
11-Feb-10
Import Data

opTypes

Citation opTypes

Gulfstream V available for

ALL selection in

FlightCrew

nameFormat

Proper

ranks		Last 7d	14d	28d
Captain	Capt	55	95	190
1st Officer	F/O	55	95	190
CabinCrew	Cabin	60	105	210

Linked files

pilots File: pilots33 Open

roster File: roster38 Open

fdpCalc File: fdpCalc27 Open

Program Parameters

Logo Image File
FDP records folder

The filespec for the image for printing to documents *. Location of fdp datasets. Specify as relative to the current folder. Full path is automatically presented below.

Help filename

The filespec for the Microsoft Word (.doc) help file *.

NameFormat

Select Proper or UPPER to display crew names as (eg) Michael or MICHAEL

MinPostFlight

Select the minimum time allowed between FDP End and OFF Duty (in minutes). the number of days forward of current date to extend the matrix. This happens when the program starts and whenever a crew dataset is loaded.

Matrix Forward

the number of days forward of current date to extend the matrix. This happens when the program starts and whenever a crew dataset is loaded.

introSplash

Show FDP splash screen on boot-up.

Set StartUp folder as default

Reset Excel's default folder location to the folder containing this file.

Headers on MultiCrew & Summary

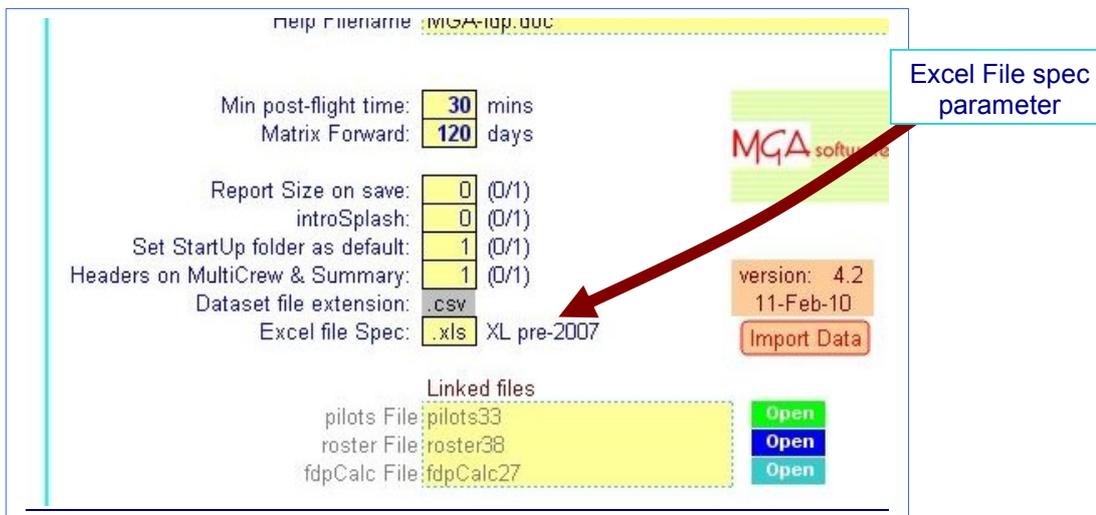
Show or hide Row and Column headers on MultiCrew & Summary screens.

* Logo file and help file must reside in the same folder as the parent program. Changes to introSplash and Set StartUp folder as default will be activated on the next boot.

SetUp screen

Dataset file extension (.csv)

The dataset file extension parameter is not editable and is retained on the SetUp screen for information only. From **fdpDuty** version 4.0 dataset files are stored in .csv format.



Excel 2007

MGA files are normally issued in Excel 2003 (.xls) format which runs in Excel 2007 but is not as reliable as other formats.

To use in Excel 2007, MGA recommends that you change the 'Excel file Spec' parameter on the SetUp screen and then, save the module in the same format (ie: if the selected file Spec is '.xlsb', save as a Binary Worksheet). Excel file Spec is selected by drop-down between 3 file formats :-

Option	Description	Notes
.xls	pre-XL 2007	Not recommended for use in XL2007.
.xlsm	XL 2007 macro-enabled	
.xlsb	XL2007 binary (+macros)	.xlsb files are more compact than .xlsm equivalent.

You can use MGA modules in Excel 2007 as either Macro-enabled '.xlsm' files or Binary format '.xlsb' files, but not in the standard '.xlsx' format as this does not allow the use of macros. (Note the selected file Spec must be common across all the MGA modules in your installation).

Flight Time Limitations data is displayed in a grid on the Set-Up screen (version 3.5+).

The values for the Last 7, 14 and 28 days set here are presented at the top of the data screen. Edit these values as and when your company FTL scheme warrants it.

ranks		Last 7d	14d	28d
Captain	Capt	55	95	190
1st Officer	F/O	55	95	190
CabinCrew	Cabin	60	105	210

Audit Report

Duty Record Form

Commanded from Data screen, Housekeeping drop-down, Print option.



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FLYING AND DUTY RECORD FORM

30-Mar-09 to 26-Apr-09		Zoot Hilev						DUTY			FLYING		
DATE	ON DUTY	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	Sx	SPLIT/NOTES	Rest	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m
M 30 Mar	OFF			0:00					0:00	0:00	0:00	0:00	
T 31 Mar	OFF			0:00					0:00	0:00	0:00	0:00	
W 01 Apr	0900		1700	8:00			Home office	20:00	8:00	8:00	8:00	0:00	245:45
T 02 Apr	1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35	13:25	13:25	13:25	0:50	
F 03 Apr	0700	1205	1235	5:35	03:00	2s	JET528 and JET529P		19:00	19:00	19:00	3:50	
S 04 Apr	OFF			0:00					19:00	19:00	19:00	3:50	
S 05 Apr	1630	2005	2035	4:05	02:35	1s	JET529		23:05	23:05	23:05	6:25	
TOTAL				23:05	6:25								
M 06 Apr	OFF			0:00					23:05	23:05	23:05	6:25	
T 07 Apr	OFF			0:00					23:05	23:05	23:05	6:25	
W 08 Apr	0900		1700	8:00			Home office	20:00	23:05	31:05	31:05	6:25	
T 09 Apr	1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35	23:05	36:30	36:30	7:15	
F 10 Apr	0700	1205	1235	5:35	03:00	2s	JET528 and JET529P	17:55	23:05	42:05	42:05	10:15	
S 11 Apr	0630	1400	1445	8:15	02:15	2s		25:45	31:20	50:20	50:20	12:30	
S 12 Apr	1630	2005	2035	4:05	02:35	1s	JET529	10:25	31:20	54:25	54:25	15:05	
TOTAL				31:20	8:40								
M 13 Apr	0700	1005	1330	6:30	00:45	1s	JET529P and travel		37:50	60:55	60:55	15:50	
T 14 Apr	OFF			0:00					37:50	60:55	60:55	15:50	
W 15 Apr	OFF			0:00					29:50	52:55	60:55	15:50	
T 16 Apr	OFF			0:00					24:25	47:30	60:55	15:50	
F 17 Apr	1200	1840	1910	7:10	04:40	1s	JET533P plus travel	14:50	26:00	49:05	68:05	20:30	
S 18 Apr	1000	1735	1805	8:05	04:40	2s	JET533/534	21:55	25:50	57:10	76:10	25:10	
S 19 Apr	1600	1805	1835	2:35	02:35	1s	JET537P		24:20	55:40	78:45	27:45	
TOTAL				24:20	12:40								
M 20 Apr	OFF			0:00					17:50	55:40	78:45	27:45	
T 21 Apr	OFF			0:00					17:50	55:40	78:45	27:45	
W 22 Apr	OFF			0:00					17:50	47:40	78:45	27:45	
T 23 Apr	0630	1435	1515	8:45	03:45	3			26:35	51:00	87:30	31:30	
F 24 Apr	OFF			0:00					19:25	45:25	87:30	31:30	
S 25 Apr	0730	1540	1630	9:00					20:20	46:10	96:30	31:30	
S 26 Apr	OFF			0:00					17:45	42:05	96:30	31:30	
TOTAL				17:45	3:45								
28 DAY TOTALS				96:30	31:30								

Ops use only: The above has been checked and verified correct.

Name: _____ Date: _____ Signed: _____

Notes: FDP END = the end of the last Flying Detail. FLYING HOURS is chock to chock time.
 OFF DUTY must be at least 30 mins later than FDP END. (Apr 2006)
 ALL TIMES ARE RECORDED AS UTC TIME (Jan 2007)

fdpDuty v5

fdpDuty Version 5.x Feb 2011 (integrated with roster and schedule versions 5.0)

Version 5 introduces several new capabilities plus a cache of useful enhancements:

New features

- * TWO duty periods commencing on the same day may be recorded.(1)
- * Split duty times may be recorded.
- * 'Next available for duty' time-date is automatically displayed.
- * FDP time is displayed and flagged if above the Maximum FDP available (2)
- * To de-clutter the display, 6 Column groups are customisable as visible or hidden.
- * Start location can be specified by ICAO code. (3)
- * The Multi-Crew edit dialog is directly available from the main Data screen. (4)
- * Handling Sectors are recordable for Flight Deck crew
- * Duty Time factored according to defined roster text. (5)

Notes:

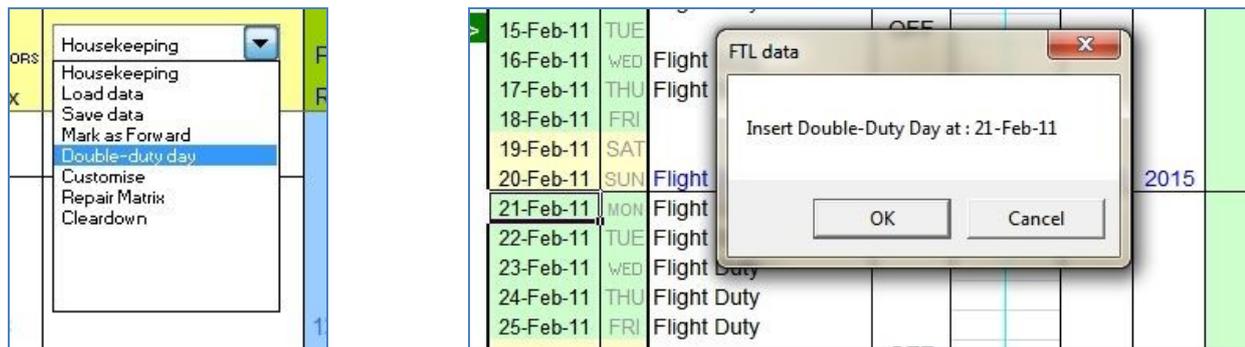
- (1) Housekeeping option 'Double-duty day' presents the option to insert a Double-duty row at the current cursor position, or to delete Double-duty data previously created.
- (2) FDP time is tested against the Maximum FDP available which is calculated from tabulated data defining your company FTL scheme.
- (3) When start location is specified, the appropriate UTC time offset is calculated including any Daylight Saving Time, and a UTC value is available for 'ON duty entry'.
- (4) The MultiCrew edit dialog allows up to 4 crew to be edited at once, one of which must be the current crew loaded in the fdpDuty program. After editing, the program re-calculates and displays duty and flying totals for 3 months following the edit date.
- (5) Defined roster text (ccolumn D) will trigger factoring of DutyTime in the amount specified at SetUp eg: 'Office = 0.5' will return half Duty Time value in Column P if roster text="Office" .

Other changes

- (a) Due to the new double-duty day capability, the 7, 14, 28 day duty and flying totals are no longer calculated by cell formula but by a macro. (When Double-duty is used, one row per day no longer applies). The macro takes a few seconds to run (after 'Load Data' for example).
- (b) The FlightCrew screen now features a 'Preferred List' dialog which allows the user to specify a crew listing order which is saved separately.
- (c) fdpDuty version 5.0 has an on board macro to identify and convert v4 data files. All crew must be cycled through Load and Save before the data files will be usable in the integrated v5 schedule and roster programs.

fdpDuty50

Double-duty day presentation



18-Feb-11	FRI		OFF					
19-Feb-11	SAT		OFF					
20-Feb-11	SUN	Flight Duty	1045		1930	2015	9:30	3:55
21-Feb-11	MON	Flight Duty						
21-Feb-11	MON	Flight Duty						
22-Feb-11	TUE	Flight Duty						
23-Feb-11	WED	Flight Duty						
24-Feb-11	THU	Flight Duty						
25-Feb-11	FRI	Flight Duty						
26-Feb-11	SAT		OFF					

Version 5.7 Double Duty Bug:

fdpDuty provides for only ONE Double Duty entry per day. Early v5 software could produce erroneous instances of consecutive Double Duty days. Version 5.7 has a repair facility for this condition:

If the data for a crew member displays more than ONE consecutive Double Duty day, select 'Repair Matrix' from the 'Housekeeping' drop down menu. The repair cycles through TWP processes, the second of which is the Double-Duty fix. The prompts read:

- 1 'This process will reset all conditional formats, cell formats and cell formulas in the calendar matrix.'
- 2 'Click OK to check for, and offer for repair, any Double Duty errors'

The logic will highlight affected blocks of data and prompt you before deleting any information. When repair is complete the following prompt will appear:

'Double Duty error scans complete. Click OK to restore formatting of the calendar matrix.'

Click OK at this prompt to repair the calendar matrix. Note that ONE Double Duty entry will remain at each instance where a block of data has been deleted. Scan the matrix, and manually remove any Double Duty entries which are not required by placing the cursor on the affected row, selecting 'Double Duty Day' from the 'Housekeeping' drop down, click 'OK' at the prompt 'Remove Double Duty Day...'

NB: After repair, be sure to Save the Crew Member's data ('Housekeeping' → 'Save data' option).

fdpDuty50

Multi-Crew FTL Edit

Multi Crew FDP Record

DATE: 11-Feb-11 FRI
Location: OMRK 4 Local Start: 0630

Duty (UTC): ON Duty: 1030 OFF: OFF ON: OFF FDP End: 1445 OFF Duty: 1530

Flying: Sectors: 2 Hrs (h:mm): 2:40 FDP Hrs: 5:00

Times: FDP Hrs: 5:00 Duty Hrs: 5:00

Crew:
Flight Crew: ALT Al Timiter ok
ZZ Zoot Hilev ok
Cabin Crew: CC Cindy Cline ok

Hand: 2 Sectors: 0

Note: JET 901 OMRK > OMAA RTN

Forward Cancel OK

11-Feb-11 FRI
Location: OMRK 4 Local Start: 0630
ON Duty: 1030 OFF: OFF ON: OFF FDP End: 1445 OFF Duty: 1530
Sectors: 2 Hrs (h:mm): 2:40 FDP Hrs: 5:00

Crew:
Flight Crew: ALT Al Timiter ok
ZZ Zoot Hilev ok
Cabin Crew: CC Cindy Cline ok

Hand: 2 Sectors: 0

Note: JET 901 OMRK > OMAA RTN

Crew Duty 11-Feb-11

Ident	Name	ON	OFF	Duty	RstPrior	RstPost	Alerts	7d	14d	28d
ZZ	Zoot Hilev	1030	1530	05:00	16:00	...	-	26:30	26:30	26:30
		MINIMUM REST		12:00		12:00		MAXIMUM DUTY TIMES		
								55:00	95:00	190:00

OK Cancel

OMRK 4 0630 1030 OFF 1445 1530 2 2:40 5:00

Crew:
Flight Crew: ALT Al Timiter ok
ZZ Zoot Hilev ok
Cabin Crew: CC Cindy Cline ok

Hand: 2 Sectors: 0

Note: JET 901 OMRK > OMAA RTN

Crew Duty 11-Feb-11

Ident	Name	ON	OFF	Duty	RstPrior	RstPost	Alerts	7d	14d	28d
CC	Cindy Cline	1030	1530	05:00	65:00	...	-	14:00	14:00	14:00
		MINIMUM REST		12:00		12:00		MAXIMUM DUTY TIMES		
								55:00	95:00	190:00

OK Cancel

Multi Crew FDP Record

DATE: 11-Feb-11 FRI
Location: OMRK 4 Local Start: 0630

Duty (UTC): ON Duty: 1030 OFF: OFF ON: OFF FDP End: 1445 OFF Duty: 1530

Flying: Sectors: 2 Hrs (h:mm): 2:40 FDP Hrs: 5:00

Times: FDP Hrs: 5:00 Duty Hrs: 5:00

Crew:
Flight Crew: ALT Al Timiter ok
ZZ Zoot Hilev ok
Cabin Crew: CC Cindy Cline ok

Hand: 2 Sectors: 0

Note: JET 901 OMRK > OMAA RTN

Forward Cancel OK

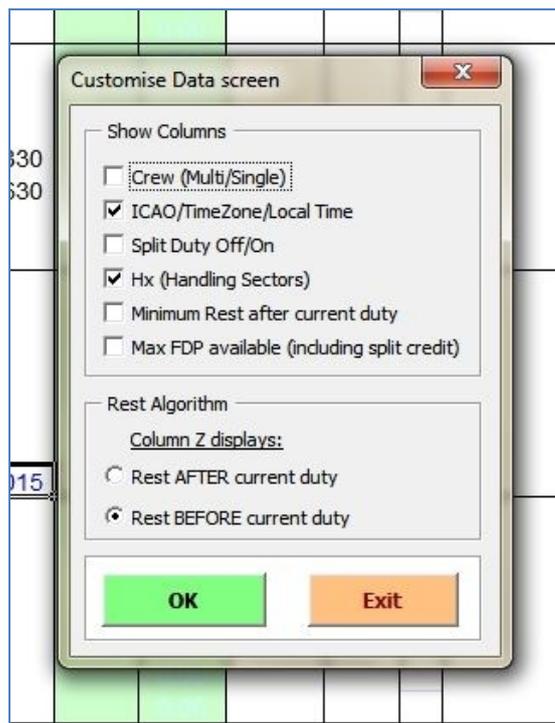
Crew duty records updated for: ALT/ZZ/CC

OK

fdpDuty50

Customised views

Base Date:		Ident: Name:		UTC DUTY TIMES					Housekeeping		Rank:		Duty Period Tot Hr				Flying Tot Hr		Nex
04-Feb-08		ALT AI Timiter		ON	FDP	OFF	FDP	Duty	Flying	sectors	Prior	Capt	55	95	190	190	900	Availa	
scroll		Edit		OFF	END	Duty	Hours	Hours	Hours	Sx	Rest	Alerts	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m	for DU	
05-Feb-11	SAT			OFF									0:00	0:00	0:00	0:00			
06-Feb-11	SUN	Flight Duty											0:00	0:00	0:00	0:00			
07-Feb-11	MON	Flight Duty											0:00	0:00	0:00	0:00			
08-Feb-11	TUE			OFF									0:00	0:00	0:00	0:00			
09-Feb-11	WED			OFF									0:00	0:00	0:00	0:00			
10-Feb-11	THU	Flight Duty		0730		1830	8:15	11:00	00:00	3	13.00		11:00	11:00	11:00	0:00		11-Feb	
11-Feb-11	FRI	FDA		0730	1545	1630		9:00					20:00	20:00	20:00	0:00		12-Feb	
12-Feb-11	SAT	Flight Duty											20:00	20:00	20:00	0:00			
13-Feb-11	SUN	Flight Duty											20:00	20:00	20:00	0:00			
14-Feb-11	MON	Flight Duty											20:00	20:00	20:00	0:00			
15-Feb-11	TUE			OFF									20:00	20:00	20:00	0:00			
16-Feb-11	WED	Flight Duty											20:00	20:00	20:00	0:00			



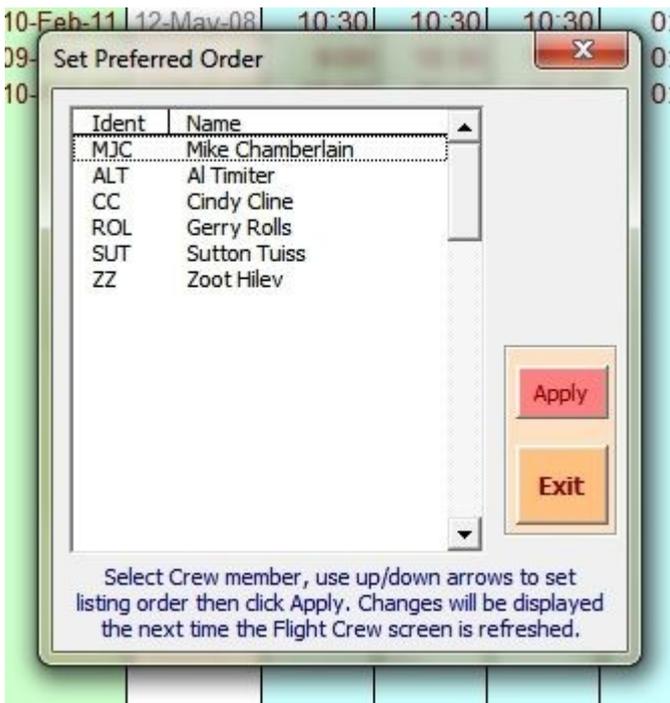
Base Date:		Ident: Name:		UTC DUTY TIMES					Housekeeping		Rank:		Duty Period Tot Hr				Flying Tot Hr		Nex
04-Feb-08		ALT AI Timiter		ON	FDP	OFF	FDP	Duty	Flying	SECTORS	Prior	Capt	55	95	190	190	900	Availa	
scroll		Edit		OFF	END	Duty	Hours	Hours	Hours	Sx	Hx	Rest	Alerts	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m	for DU
05-Feb-11	SAT			OFF										0:00	0:00	0:00	0:00		
06-Feb-11	SUN	Flight Duty												0:00	0:00	0:00	0:00		
07-Feb-11	MON	Flight Duty												0:00	0:00	0:00	0:00		
08-Feb-11	TUE			OFF										0:00	0:00	0:00	0:00		
09-Feb-11	WED			OFF										0:00	0:00	0:00	0:00		
10-Feb-11	THU	Flight Duty		0730		1830	8:15	11:00	00:00	3	3	13.00		11:00	11:00	11:00	0:00		11-Feb
11-Feb-11	FRI	FDA		0730	1545	1630		9:00						20:00	20:00	20:00	0:00		12-Feb
12-Feb-11	SAT	Flight Duty												20:00	20:00	20:00	0:00		
13-Feb-11	SUN	Flight Duty												20:00	20:00	20:00	0:00		
14-Feb-11	MON	Flight Duty												20:00	20:00	20:00	0:00		
15-Feb-11	TUE			OFF										20:00	20:00	20:00	0:00		
16-Feb-11	WED	Flight Duty												20:00	20:00	20:00	0:00		
17-Feb-11	THU	Flight Duty												9:00	20:00	20:00	0:00		
18-Feb-11	FRI			OFF										0:00	20:00	20:00	0:00		
19-Feb-11	SAT			OFF										0:00	20:00	20:00	0:00		
20-Feb-11	SUN	Flight Duty	OMAA 4 0645	1045	1930	2015	9:30	3:55	<Fwd>					9:30	29:30	29:30	72:00		21-Feb

fdpDuty50

All that and this too:

FDP Audit Report													Limits: 55 95 190 100			
Period commencing: 14-Feb-11 MON													Audit Report			
Crew ID ALT Name Al Timiter													FLYING AND DUTY RECORD FORM 14-Feb-11 to 13-M			
DATE	ON DUTY	SPLIT Off	SPLIT On	FDP END	OFF DUTY	FDP HOURS	DUTY HOURS	FLYING HOURS	Sectors	NOTES	Rest	DUTY				
												Last 7d	Last 14d	Last 28d	Last 28d	
M 14 Feb												20:00	20:00	20:00	0:0	
T 15 Feb	OFF											20:00	20:00	20:00	0:0	
W 16 Feb												20:00	20:00	20:00	0:0	
T 17 Feb												9:00	20:00	20:00	0:0	
F 18 Feb	OFF											0:00	20:00	20:00	0:0	
S 19 Feb	OFF											0:00	20:00	20:00	0:0	
S 20 Feb	1045			1930	2015		9:30	03:55	<Fwd>			9:30	29:30	29:30	3:5	
TOTAL							9:30	3:55								
M 21 Feb												9:30	29:30	29:30	3:5	
→ 21 Feb												9:30	29:30	29:30	3:5	
T 22 Feb												9:30	29:30	29:30	3:5	
W 23 Feb												9:30	29:30	29:30	3:5	
T 24 Feb												9:30	18:30	29:30	3:5	
F 25 Feb												9:30	9:30	29:30	3:5	

The audit report is the printed FTL summary for submission to the regulatory authority.



Listing order isn't a problem if there's only a few crew on your books. But you can manage 60 crew at a time in the MGA fdp system, so setting your own preferred listing order is a great facility.

fdpDuty50



Extended user parameters in version 5 include:

Default Crew: Single/Multi – defines FDP algorithm for a days record. Can be individually overridden.

Column D Text =Factor: DutyTime factored by the amount specified eg 'Office = 0.5' will return half Duty Time.

MultiCrew dialog Top & Left coordinates – define the screen position for the MultiCrew overlay to appear.

fdpDuty5.8 mods Oct 2012

fdpDuty58 introduces a modified Base Date for recency data when creating a new crew member:

The screenshot shows a dialog box titled "Set Up FDP Records for New Flight Crew Member". It has a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Ident:** A text box containing "NEW".
- Name:** A text box containing "New Pilot".
- Base Date:** A text box containing "02-Jul-12" and a dropdown menu showing "MON".
- Status:** A dropdown menu.
- Rank:** A dropdown menu.
- Ops:** A checkbox.
- Buttons:** "Okay" (green) and "Cancel" (red) buttons on the right side.
- Message:** A line of text at the bottom: "A Base Date of 02-Jul-12 or before makes Rostering available for October 2012".

Recency Data

When a new Crew Member is added to the system, the software assumes that he/she will begin working for the company on the SAME DAY the record is initiated. To satisfy the regulations, 84 days of previous data is required (to calculate the minimum days OFF in 3 months). In addition to the 84 days, fdpDuty58 introduces a modified algorithm which adds the current day of the month. The reason for this is to make the integrated Roster program immediately available for the new crew member. (Roster requires 3 months of recency data from the START of a Calendar Month. The data matrix for the new pilot must therefore include Day 1 of the current month for the new crew member to be available for rostering in the current month.

The placard at the bottom of the dialog displays the calculated Base Date and presents it as an option for the user. The Base Date is the Monday BEFORE the date which is 84 days prior to Today's date PLUS the value of Today's date.

Appendix 1

Notes

The **FdpDuty system** requires 84 days (approx. 3 months) of previous data in order to check Duty Period data against FTL limits:

- After 7 working days, the next day must be an OFF day.
- In any 14 day period, 2 consecutive days must be OFF days.
- In any 28 day period, a minimum of 7 days must be OFF
- In any 3 month period an average of 24 days must be OFF.

• Loading Data

When crew data is loaded to fdp-duty.xls, the matrix (the date grid against which data is presented) is automatically checked and expanded or contracted so that it extends beyond the current date.

• **fdpDuty** has a dummy sheet named '000' containing one week's matrix with formatting and embedded formulas. This sheet is not accessible and '000' is not available as an ident, along with 'MGA' which is the MGA demonstration file.

• The **12 Month** flying total is displayed on the first day of each month and shows the total flying hours up to the end of the previous month (as CAA regs require). Where records are less than 12 months old, the value shown is the total **Date Matrix**:

When data is saved from fdp-duty, the current matrix is saved also. The process optimises file space usage as all records saved have no more than set advanced matrix.

• **fdpDuty** will retain the previous dataset on the Data screen until it is overwritten by a new selection. The data on MultiCrewFDP and Summary screens may be cleared down to conserve memory.

• **Company logo** is printed to the header of 28 day audit reports. If commanded from **fdp** screen, the printout cycles via Print Preview. To initiate the logo on the audit report printout, click 'Print Duty Record' on the **fdp** screen.

• The **working folder** of Excel is reset on boot-up. This allows access to linked files if fdp-duty has been called up directly from a Windows file dialog or desktop link.

• **Crew datasets** are imported or exported by moving their files IN to, or OUT of, the nominated fdp records folder using Windows Explorer.

• The **Rank** flag sets the 7, 14 and 28 day duty limits. eg: the Flight Deck default of 55, 95 and 190 hours, or Cabin Crew default of 60,105 and 210 hours. The limits are presented at the head of the relevant columns and command the automatic alerts for 10 hour closing (amber) and a violation (red).

• Flying hours may be entered in H24 format (version 3.1), the program will represent it as HH:mm format (eg enter '130' for '01:30')so far.

• The fdp-duty module has no onboard user data apart from custom parameter settings on the SetUp screen. Crew data is stored in external files with the name fdp-XXX.dat (where 'XXX' is crew ident)

Versions & upgrades

MGAsoftware.com will alert you whenever a substantive revision of your software is available for release.

To implement an upgrade:

1. Make a safety back up of your existing file using Windows Explorer.
2. Copy your downloaded or emailed software into your MGA folder.
3. Run the updated software and from the SetUp screen, check/reset linked files; check/reset fdp folder.
4. Go to FlightCrew screen and click 'Refresh' (housekeeping drop-down) to re-establish crew list.

Appendix 2

Excel Folders

When Microsoft Excel is started it refers to its default folder location for any files. Typically this might be for example 'My Documents' in Windows XP. When an Excel file is called up by double clicking on its name in Windows Explorer, or by clicking on a desktop icon, the new instance of Excel invoked by this process does not refer to the folder containing the file called up, but to its default folder location. This can stop MGA files from obtaining information from other files on boot-up resulting in the following message:



If you see this message, check that the folder you are working by going to File | Open and using the dialog to navigate to your MGA folder. Click Cancel to exit the dialog. The folder change is registered in Excel whether or not a file is actually opened at the dialog box and the change will last for the current Excel session.

fdp-duty has a SetUp parameter which provides the option to change the working folder of Excel on boot-up in order to circumvent the above problem.

Be aware also that the full path to linked files can be specified on the SetUp screens of MGA modules

Disclaimer: Some MGA modules may be distributed with time-related validities (details will be published on the SetUp page). If the validity of your software is time related, MGA Software is not responsible for any consequences arising from the use of its software after expiry date.

If you have any requirements for software be aware we are happy to investigate the feasibility of bespoke software to your specifics. If it's possible for the job to be automated then we can do it!

MGA software.com

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