

# Read Me for Ffenics v1.5

## *New Features*

### **Multi-Page Image Support**

You can now catalogue, read and print multipage images -such as scanned contracts. Multiple multi-page images may be stored within a single record and you can navigate between them independently, as well as flicking through the 'pages'. Multi-page images can also be printed either as a series of normal sized pages, or as a tiled thumbnail. The feature is ideal for retaining a copy of supporting paperwork for a transaction, or customer records, or as a means of cataloguing off-site hard copy storage that can be inspected on screen before retrieval from an external archive.

### **Go to Record by Line Number**

This feature's primary use is to enable a user to go back to a particular record in any given data entry session. As it is based on the record's position in the current selected set, the line number is subject to change so it should not be treated as a permanent reference number. The feature is also supplied as an Action and an Action Function to enable its use programmatically, e.g. to allow the user to be repositioned at the first record in a form that normally defaults to last record.

### **ShowWin() Action Function and 'Bring To Front'**

ShowWin() allows a script to 'push' another named document to the front. The main use for a closing document is to make sure that the menu it was called from is placed in *front* of the user, even though other documents may be open. In addition, there is now an application preference that will 'push' an existing open document to the front if it is opened again (rather than as at present where a duplicate is opened).

### **Internal Virus Protection**

Ffenics now implements Microsoft's Data Execution Prevention (DEP) system, which protects against viruses that embed themselves in data. This will defeat any virus that has embedded itself into a third party data source that you link to, or import, in your application. It also protects against viruses specifically aimed at inserting themselves into Ffenics data files. No virus of the latter type is known to exist, but that doesn't mean it will never exist! This is especially important now Ffenics supports memo fields, as they

are long enough to host substantial chunks of code – writing a virus that will load itself and do damage in 254 bytes is pretty difficult – and would be much easier in 64k!

## **My Reports**

In applications used by more than one user, there is now a mechanism for the users who were not application designers to manage their own library of reports. In the past such users could create and save reports, but they could not modify them afterwards or, typically, delete them – indeed, in most applications they might not even have been able to open them again after closing.

The ‘My Reports’ feature provides an interface which users can see their personal library of reports, open them for modification as well as running them, and delete them if they are no longer wanted. They are not allowed to carry out data modification as they can neither convert the reports to procedures nor create scripts – this should ensure this facility gives users a safe way to create reports on any forms they have access to without the ability to affect the data.

## **Large Icons**

There is now an alternative set of larger toolbar icons for use with higher screen resolutions, or for sight impaired users (or if you just think they look nicer!). They can be made to use the Windows workstation settings for icon size to decide whether they are used, or the developer can control them or they can be left to be set by the user.

## **Action Info, AppInfoDelete(), AppInfoRefresh()**

A new item has been added to the ‘More info’ options which will list button and image button actions and which can be further reported on (as with the other ‘More info’ reports). There are also New Action Functions AppInfoDelete() and AppInfoRefresh() to allow that functionality to be procedure or script driven.

## **ANSI character sets**

Support has been added for other ANSI character sets such as Greek. This applies to native data only at the moment.

## ***Major Enhancements to Existing Features***

### **Welcome Screen**

This has been re-designed. It now displays the last 5 applications opened, with optional display of paths for distinguishing between multiple copies of the same application. A single keystroke or mouse click will still take you to the last application you opened.

### **FormOpenRelated()**

This Action function now takes two parameters like the original Action, allowing you to choose which document to open.

### **RecordSave()**

This Action Function now returns a value in its current status which allows the developer to determine the result of the save action. Zero (the standard Windows 'SUCCESS' code) means a new record has been saved, -1 indicates that a duplicate was detected and the existing record modified. > 0 indicates no save took place.

### **Tooltips**

Tooltips on buttons and images can now be used when they are nested (e.g. when a button is placed on an image background). Tooltip help is now displayed on the status bar.

### **Select/Search in Record Entry**

This has been revised to achieve more consistency between simple search (F3 with data entered), Query>Select Records (QBF) and Query>Select by Expression (QBE). In the event of no matches being found, users can now choose to see all records, go back and edit their selection, or post their selection as data.

### **MultiBox**

This is now 'live' – as well as looking up data from a related form, when a record is entered it will reflect any changes on the current record as it is edited. As a result it can also be used with virtual fields. MultiBox is also now correctly listed as a visual object which means it can now be assigned over a basic field in a single operation. The Bound

column now no longer need be displayed – you can choose to ‘Hide Bound Column’, and it need not be the first item in the displayed column order (you could already have it not in the column order at all). If you use ‘Hide Bound Column’, the first matching item in the first column of the looked up data is displayed instead. You can now have a specific number of rows to display defined within your MultiBox (this also applies to **ListBoxes**).

Some display related options in a MultiBox can now be changed on an Aspect over the form containing the MultiBox, e.g. columns displayed, allow override, etc. You cannot change the basis of the lookup or the bound column.

## **Choice Field**

You can now edit choices in place as opposed to creating new entries and deleting old ones.

## **Windows Menu**

Help now appears on the status bar for open documents.

## **Exception Handler**

This has been updated to recognise more Windows types and more exceptions. It now displays the last Ffenics action and last Windows message which are much more useful in diagnosing errors than internal stack info etc., which is rarely meaningful and never so on a machine not running the debugger.

## **Insert Key**

This now always defaults to on at program start – this is not as trivial as it sounds!

## **Dynamic Lookup** (Ctrl-F10 – the ad-hoc runtime facility).

This has a revised layout, the user can also drag and drop columns to change their order (as well as resize them and sort them).

## **Memo Fields**

We now support memo fields in foreign data sources accessed via OLE\_DB (unfortunately not ODBC at present).

## **Script Editor**

Users can now change the colour and font used. This is stored per workstation/installed copy of Ffenics. It can also now read queries from a much larger variety of DBR files, and correctly saves and inserts scripts as .TXT files (normally used for saving incomplete queries or fragments that will be used in multiple scripts).

## **Call Program()**

Call program() will now run a console if not given a parameter.

## ***Network Locking***

A combination of changes means that the various options for 'shared locks' in record entry and report/procedure execution are now fully working. It should be kept in mind that the more restrictive locking you have, the greater the chance there is that normal working will result in a timeout, while another user holds a resource. Also, this means that everything will run slower –including procedures, searches and sorts.

So, you should always aim to use the minimum locking necessary for your application. Remember, even if you have record entry locking set to 'none', you are still protected against conflicting data updates by our replication ('Record modified since last read') technology.

It should also be remembered that a timeout is not usually an error – it's just an indication that someone else is doing something quite legitimate, but which is conflicting with something you want to do. This is why Ffenics tries to tell you who that user is so you can go and find out what they are doing!

Also, the 'Place Shared Locks When List Only' option does not just affect procedures -it affects *all* list only actions, including reports, exports and even record entry sorts. Record entry **searches**, however, (including lookups and subforms etc) lock according to the 'Record Entry Locking' setting.

## ***Upgrading from Previous Versions***

The necessary revisions to the application will be carried out when you first log on. You will see a message saying your configuration file has been updated (unless you have been on the beta program and kept up to date in which case this may have already happened). If you do see the message, you should log out of the application and log in again. This process should only be necessary once per application.

Note that once you have used Ffenics 1.5 against an application, you should not attempt to use it again with Ffenics version 1.24 or earlier. In any case, documents modified in 1.5 will, in most cases, be inaccessible from earlier versions. If you are in any doubt about FF 1.5 meeting your needs, try it out on a copy of your application first.

Normally, a new version as substantial as this would be a chargeable upgrade, but in gratitude to our 'early adopters' we have decided this version should be available free to existing users. However, don't be misled – there are substantial changes so do make sure you upgrade everything, including runtimes, to the current version! Don't try to mix different versions against the same application.

## ***Resolved Problems***

- Word wrap, when printing fields in multi-line mode, now appears to work the same whether output is sent to screen or to printer.
- Anything that causes the local workstation lock table to overflow will produce an error message, as will running out of server locks.
- Scrollbars on tabs that are not active when the tab control is entered are now initialized properly.
- The 'Convert to Procedure' button now works correctly.
- Lists of documents now appear in correct order.
- Saving a form with changes to the data definition did not previously handle memo fields, resulting in loss of the memo field data – it now does. This will noticeably slow such forms, but of course that's only the cost of actually saving the data.
- Following MS advice, the open calls for networked files have been modified so we never open a file for write only. Apparently doing so will prevent spurious 'access denied' errors and may improve performance.
- When running a 'print to window' from the catalog, the catalog was retaining focus. (So keystrokes 'bled' through to the catalog).
- Application names are now limited to 50 characters – this was the published limit, but it was possible to enter a longer name which led to GPF's.
- There is a fixed rounding problem, which when converting fields stored other than doubles (less than 10 digits) back to integers or to less decimal places when the number was negative.
- Pernicious GPF when switching from RT to DT in reports or procedures with certain kinds of statistics has been fixed.
- Various situations where 'sum of' and similar operators failed to derive in complex circumstances have been fixed.
- Problems with 'Print-to-Window' document startup have been fixed. Visible effects included duplicate records when scrolling, grey lines at top of screen, missing scroll bars etc.
- Memo field data now restores correctly from a Ffenics backup.

- Fixed failure to refresh MultiBox displayable data when scrolling upwards in a subform and the MultiBox had focus has been fixed. Although it was only the displayed data that initially changed, moving off the edit box set it, so it could cause unwanted changes if not noticed by the user.
- You can now connect to more than 2000 tables over a single database link.
- Temp directory for Ffenics files is now correctly obtained from workstation preferences instead of no-longer-extant part of the configuration file.
- The configuration form record should no longer get mysteriously set to 0 length. Code has been introduced to recover from such a situation should it occur again, and a warning message is displayed. Recovery requires logging in to the application and out again.
- The 'Place Shared Locks When List Only' setting now gets saved correctly
- Failure to switch from RT to DT when running a report or procedure 'print to window' from the Catalog has been fixed.
- Failure to print actual data when printing a live report has been fixed.
- Failure to display column headings in TableView after horizontal scroll has been fixed.
- GPF when (unnecessary) 'no matching records' dialog appeared on exit from related form (F10) has been fixed.
- Radio buttons and checkboxes now display correctly in 'Query->Select Records'.
- Corrupt display after F5 in TableView has been fixed.
- GPF when script added a relationship to a form over a foreign table that already had 124 rels has been fixed.
- Failure to display 'duplicate record' message when tried to save more than once has been fixed, also improved the text in the message.
- You can no longer bypass the 'No close if document open' option by close all, or close application. The option also now works with Chain Documents.
- Application custom toolbars, importing of document level custom toolbars, and the ability to change the toolbar location all now work as billed. The custom toolbar dialog has been cleaned up.

- Cut and Paste for images now works, and the occasional GPF when cutting and pasting expressions has been cured. Note that 'expressions' includes things like Temp Variables and LOV's, so was a significant cause of failure when cutting and pasting large chunks of layout.
- A memory leak in the OLEDB requester was fixed.
- Accidental double prompt when saving a doc in design view when you don't want to save changes has been fixed.
- Unnecessary repaint that caused toolbar to appear twice when loading a document has been removed.
- A document message has been added to app status – sometimes this will duplicate existing messages, but other times the document info was not being displayed because PRISM didn't know it.
- GPF when parsing invalid script on doc with no fields (e.g. old style menu doc) has been fixed. Also fixed GPF when parsing procedure with LOV's.
- Pasted temp or global variables in a procedure do NOT get a 'de-duplicated' name, as they lose their connection to the code in the DQL that fills them in if they do. Layout only variables (LOV's) do get a dedup'd name, however.
- Repeatedly editing an LOV's definition no longer causes a GPF.
- Variables now persistent after re-layout with merge.
- The 'refresh' option has been moved to the network settings section of the dialog where it should reside.
- A problem where temp form creation occasionally caused a duplicate form name, leading to unrecoverable forms after a reorganization has been fixed (as have bogus temp forms in the catalogue).
- Complex DQL's (featuring multiple for loops on the same form) should no longer GPF on parsing errors.
- Spurious 'unsaved changes' message when F5 pressed in select records mode has been fixed.
- Problem where 'shrink to fit' was disabled if 'stretch to fit' was unselected has been fixed.
- Colour bleed on tab item has been fixed.

- RT cut and paste on subform on tab has been fixed.
- Proper manifests have been added to all EXE's, DOL's and DLL's (so they all now report correctly in various Windows tools), also a proper versioning scheme for WebElements has been.
- In Field Definition, the ListBox options now only appear when list box style visual objects are selected. (ListBox and MultiBox)
- MultiBox columns now paint correctly even if there are blanks.
- Accidental fall-through in modify app obj processing (used when saving a document) which could lead to duplicate app obj entries has been fixed.
- GPF when editing action if existing tooltip deleted and different one subsequently added has been fixed.
- Pressing a key no longer interferes with the action of tooltips.
- The tendency to forget where images are located on exiting the application has been fixed, also the maximum cumulative length of saved image directories to 4096 chars has been increased.
- Fixes for various GPF's when opening docs have been implemented.
- A large number of duplicate shortcut keys have been changed to remove conflicts, mainly on the DT menus.
- Some menu options that were inadvertently de-activated have been re-activated, and the menu and toolbars brought back into sync.
- Leading spaces are no longer stripped from selection criteria on text and memo fields. (Trailing spaces are still unacceptable anywhere in Ff – exception – the last parameter in a concat() statement if it only contains spaces.)
- Users no longer get the unnecessary message on application that never has had a custom default toolbar.
- Hang when moving objects outside of their original container is fixed, at least in some circumstances. (It was an erratic problem, and so far two causes have been found – there may still be others). This also affected moving groups of objects which 'bumped into' the side of the container.
- Initial defaults for size of document have been reduced. This is an interim fix – in future default doc size should be an app pref. Also increased default length of text field to 20 to resolve problems in re-layout.

## ***Known Issues***

- The concatenate option in Document Print Options for Converter output is unavailable.
- The Relationships form needs adjustment to fit better on an 800x600 screen.
- The parameter to Help Search doesn't work – see MS article KB241381.
- The default de-limiter is not set correctly for CSV type on import/export screen (when first in). Some other options on these screens may need rechecking when loaded from a saved import or export definition.
- Convert to DQL does not always produce DQL that conforms to best-practice syntax rules – in rare cases this results in scripts that need editing before they produce correct results.
- Complex reports do not always render correctly when 'printed to window', especially if they have page or summary headers/footers. If you require rendering of the report on screen exactly as it is to be printed use the output to PDF option.
- The '+' boxes in the catalogue that indicate more information quite often appear when there is no more information – this is a Windows misfeature.