XiFrame XMI Explorer

User Manual

Document Version 1.0

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Copyright Statement

Questions & Feedback

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To see our other products, please visit http://www.xiframe.com.

Introduction

If you are reading this manual then you probably recently downloaded the XiFrame XMI Explorer application. This document will show you how to install and use the application.

Download and Installation

Before starting, please make sure that you have the latest version of the XiFrame XMI Explorer application. To get the latest version please go to http://www.xiframe.com and download it. Run the downloaded executable and follow the prompts on the installation script.

Note that the installation file will include the latest version of this documentation in Adobe PDF format. Please use that document version as it will be the latest issued document.

Application Purpose

The XiFrame XMI Explorer is a utility program designed for use by the IBM mainframe community. If you have spent any time developing applications on the IBM mainframe or you are an IBM mainframe systems programmer then you will already be familiar with XMI or XMIT files. We'll just call them XMI files for the remainder of this document.

XMI files are a common mechanism for moving data from one mainframe to another or for moving files from the mainframe environment to the PC environment.

The purpose of this application is to allow a mainframe developer to examine or extract data from an XMI file within the Windows Environment.

Compatibility

The XiFrame XMI Explorer application has been tested, and is known to work, on Windows XP, Windows 7, Windows 8 & Windows 8.1. We deliberately skipped Vista as it was seen (even by Microsoft) as a non-production ready operating system.

References

The greatest collection of XMI transmission files available on the web is undoubtedly the collection stored at http://www.cbttape.org. This repository is maintained by volunteers for the good of the mainframe community. This document uses File #876 as a test case for the purpose of describing the application functionality. For greatest ease of use, please download the same file to follow along. The file is described on cbttape.org as follows (click the link to download the XMI file directly)

`File # 876 ALGOL F v2.1 source and executables`

From this point forward the documentation assumes that you have a file called FILE876.XMI in an accessible location within your file system.

Application Operation

Application Appearance

The XiFrame XMI Explorer is a simple single window application. Figure 1 shows the main components of the application. When looking at an XMI file containing a PSD or PDSE the left hand pane shows the original name of the unloaded file followed by each of the members contained within the dataset. When looking at an unloaded sequential file then, of course, only the original file name is shown.

The right-hand pane shows the content of any active member. The XiFrame XMI Explorer will attempt to identify the contents of a particular member as text or data. For text data (such as program source code or JCL) the member contents are automatically translated to local representation (ASCII) and displayed in the right pane.

The Toolbar and Status-bar provide convenient access to program functions and application information.

The "Content Aware" bar appears when the content of a member is recognized as a valid external format. The bar provides an immediate option to save the data to a new file; or, where applicable, to launch the content directly inside its registered viewer. (For security reasons the XiFrame XMI Explorer does not allow launching of .EXE files.

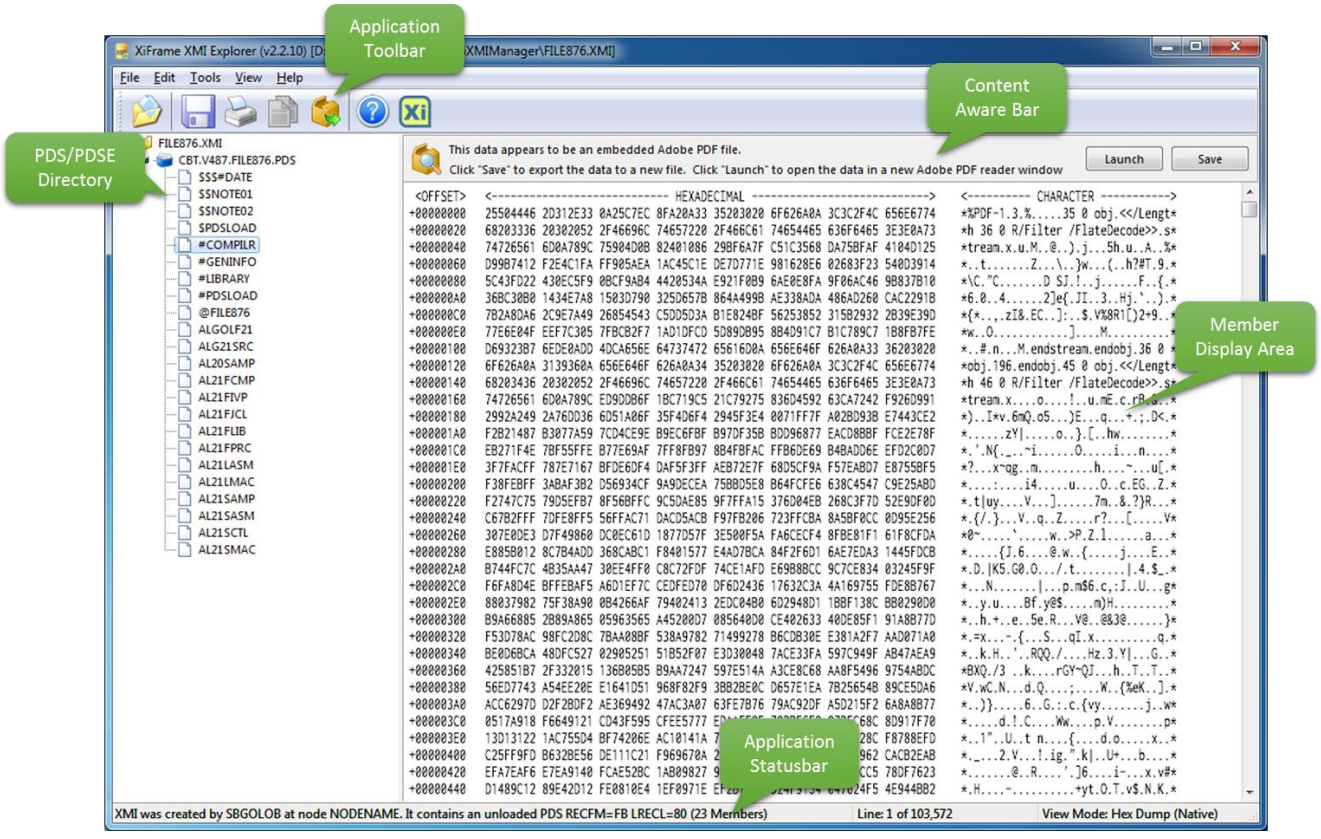

Figure 1- XiFrame XMI Explorer Main Window

Starting the Application

To start the XiFrame XMI Explorer application you simply click on the application icon (shown in Figure 2). Alternatively you can double click on any file on your computer with an XMI or XMIT extension. This will automatically start the application and, if the file is in a valid format, will open that file within the explorer.

Figure 2- XiFrame XMI Explorer application Icon

The XiFrame XMI Explorer Toolbar

The XiFrame XMI Explorer has a simple toolbar that allows access to many common functions. Each of the buttons on the toolbar is documented below. Note that if a particular function is not available within the current context then that button will be diabled.

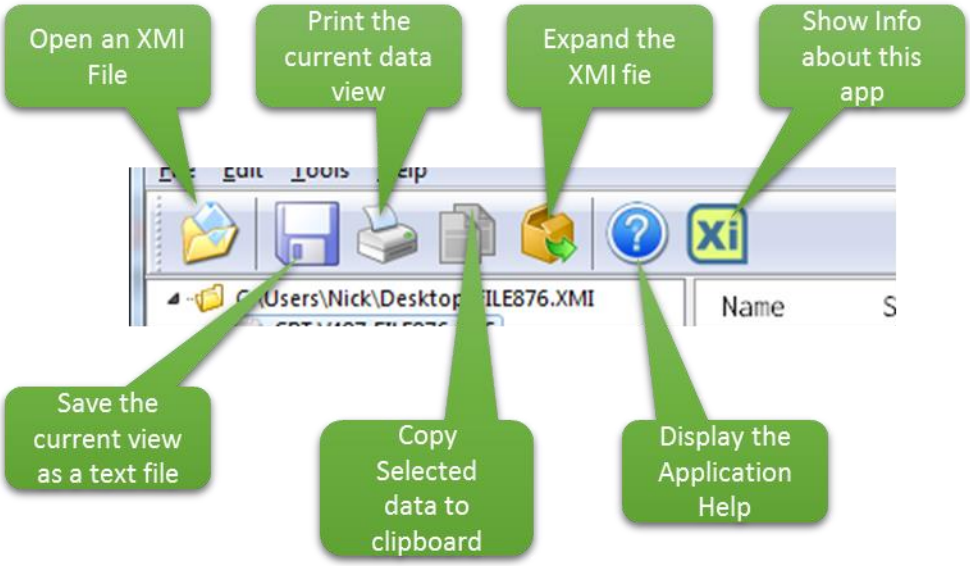

Figure 3-XiFrame XMI Explorer Toolbar

Opening an XMI file

There are several ways to open an XMI file within the XiFrame XMI Explorer:

1. From the windows desktop or windows explorer, double click an XMI file.
2. With the application open, press CTRL+O to start the file open dialog.
3. Select the "Open XMI File…" option from the "File" menu. This can also be done using keyboard shortcuts
    a. ALT+F
    b. O
4. Go to the recent items menu and select one of the last 9 XMI files you were looking at

Closing an XMI file

Closing an XMI file is simple. Either close the XiFrame XMI Explorer application by clicking on the close icon at the top right of the screen; Or, select "Close XMI File" from the application File menu.

Remember that XiFrame XMI Explorer is a "READ ONLY" application. The application does not change the content of an XMI file and so shutting down the application is safe.

Navigating Data

XMI Files can contain various file formats. XiFrame XMI Explorer supports the following XMI types

- A sequential dataset
  - Fixed Block
  - Variable Blocked
- A PDS or PDSE
  - Load Library
    - RECFM=U
    - RECFM=VB
  - Library
    - Variable Records
    - Fixed Records

XiFrame XMI Explorer will automatically select the most likely view format for each file type:

Sequential Datasets

Sequential datasets will be shown in full text mode if the record length is less than 150 bytes and more than 90% of the record content is displayable; otherwise the dataset will be shown in Hex Dump mode.

PDS/PDSE Libraries

XiFrame XMI Explorer will show an emulation of the TSO/ISPF directory listing for any PDS/PDSE. An example is shown below:

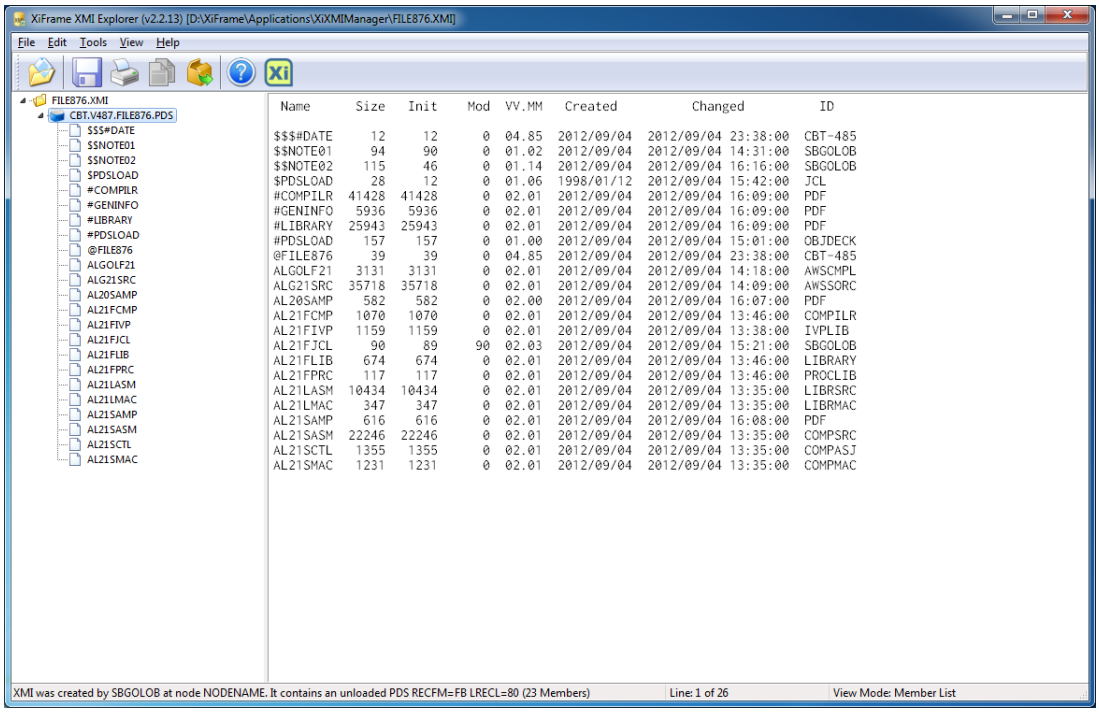

Figure 4- XiFrame XMI Explorer PDS directory listing

In this case the user clicked on the DSN name in the explorer; XiFrame XMI explorer shows the extracted PDS/PDSE statistics and displays them in an identical format to TSO/ISPF.

PDS Load Library members will always be shown in Hex Dump mode. Each load member will be shown as a full hex dump of the load module.

PDS library members with formats of FB or VB will show dynamically depending upon the content of a particular member. If the member is obviously EBCDIC or ASCII text, it will show accordingly in the view pane. If the member contains a non-displayable format, it will display as a hex dump of that member. Examples are when a member contains embedded data such as a load-library, PDF, ZIP or EXE file.

XiFrame XMI Explorer contains functionality to recognize the following data types being stored in a member:

- An embedded XMI unload file
- An Adobe™ PDF file
- An embedded EXE file
- An embedded ZIP file
- An embedded AWSTAPE file

If any of these conditions are recognized the application will provide an opportunity to either launch that data within an installed view, or it will give the opportunity to save the data to a separate file where it can be further explored using other tools. An example is shown below:

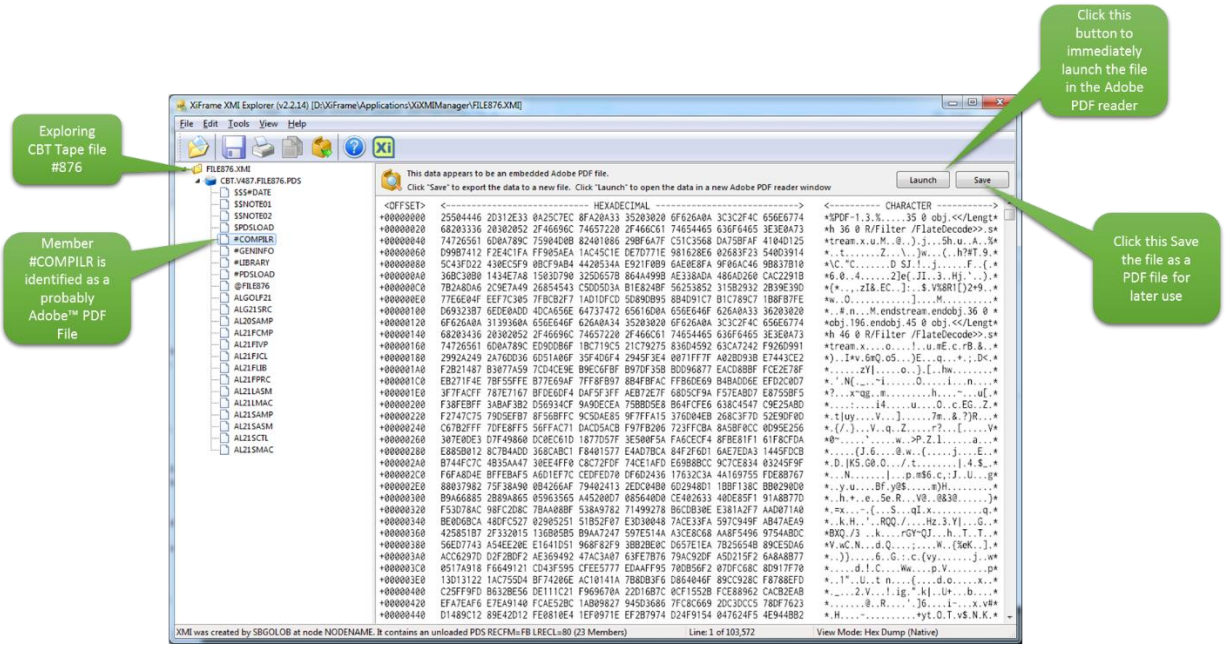

Figure 5- XiFrame XMI Explorer Recognizes embedded .PDF content

If the user clicks the "Launch" button then the PDF file will be immediately launched within the Adobe™ PDF reader application (Note that it is assumed that the Adobe PDF Reader application is installed – this is true for >90% of PCs operating today). Upon Launch the following window will be displayed:

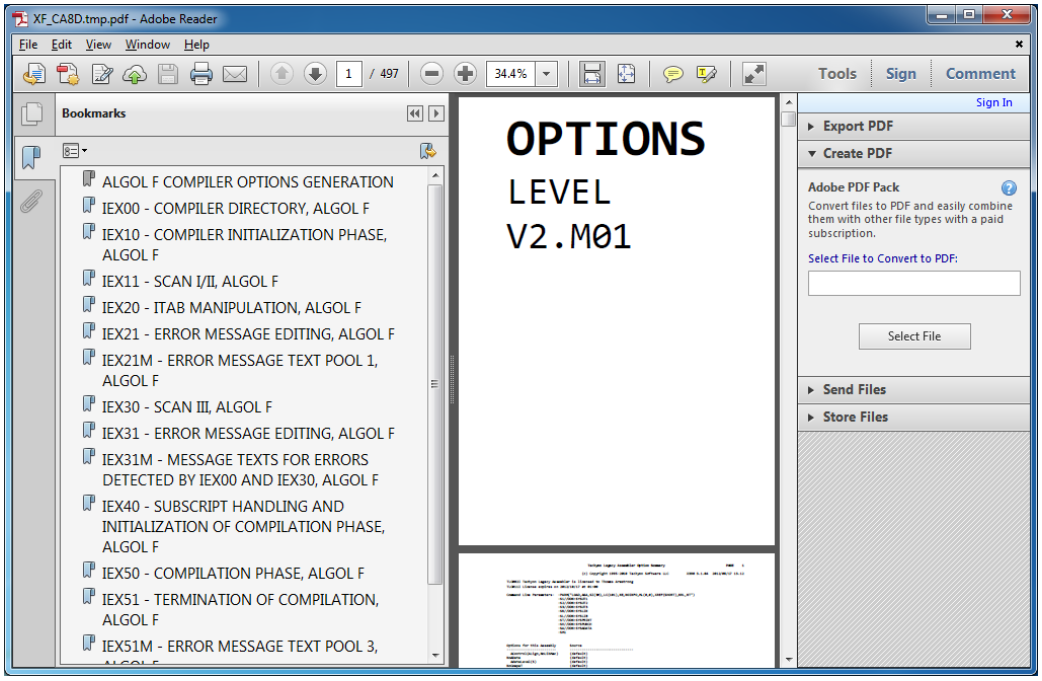

Figure 6- CBT Tape #876, Member #COMPILR launched in Adobe PDF Reader

Extract Data from an XMI File

Extracting the currently displayed member

Display Format

XiFrame XMI Explorer always allows the current "View Port" to be saved to a text file. To save the currently viewed data perform one of the following:

- Click the save button on the toolbar
- Select "Save Current Data" from the "File" menu
- Right-Click the data view and select "Save Current Data"

When one of these options is selected the user will be presented with the save dialog which will allow the contents of the display area to be saved in text format.

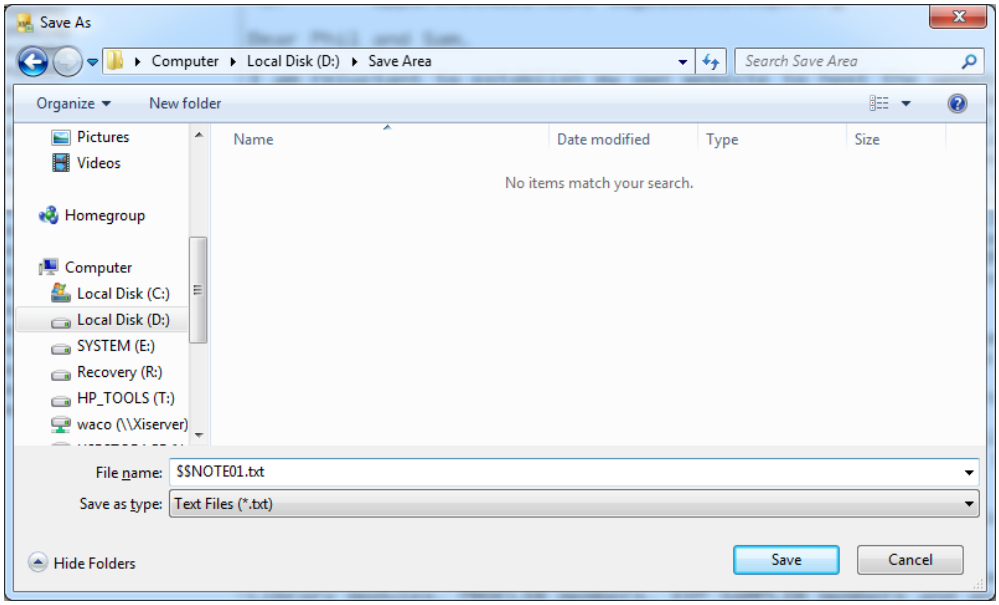

Figure 7- Save Dialog for the current member display

Native Format

It is also possible to save the current member in a "Native Format". Native Format saves the data exactly as it was found within the source XMI/XMIT file. To save in Native Format, select one of the following:

- Select "Save Current Native Data" from the "File" menu
- Right-Click the data view and select "Save Current Native Data"

Where it is possible to determine an appropriate native file extension (i.e. PDF, ZIP, AWS, EXE or XMI) then that option will be provided to the user, otherwise an extension of ".DAT" will be the default.

No Translation takes place when saving native format data.

Extracting All Members from the XMI/XMIT

When browsing a PDS/PDSE, it is possible to extract all members from the XMI as a "Batch Unload". To extract all members from a PDS/PDSE perform one of the following actions:

- Click the "Extract All Members from this XMI" toolbar button
- Right click anywhere in the left tree-view pane and select "Extract All Data from this XMI" from the pop-up menu.
- Select "Extract All Data from this XMI" from the "Tools" menu.

After selecting one of these options the user will be presented with the extract dialog:

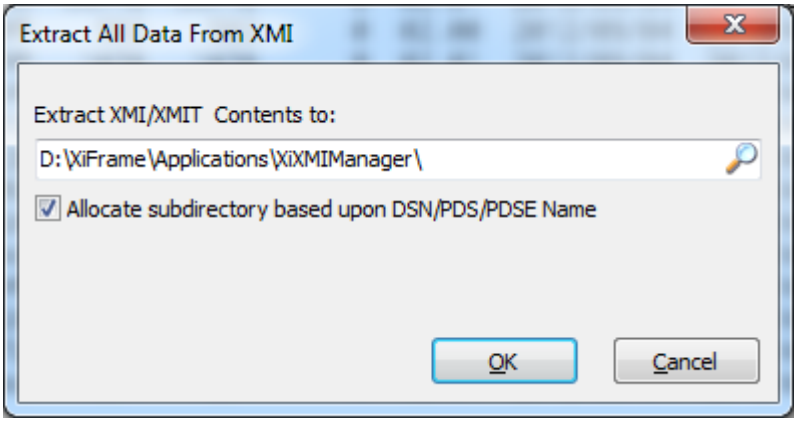

Figure 8- Extract All Data Dialog

To perform the extraction, navigate to the location where you would like to extract the information.

An option is provided (by default) to assign a new folder name based upon the DSN found within the XMI File.

Click “OK” to perform the batch extraction of Click “CANCEL” to abort the operation.

Copying Data to the Clipboard

To copy a portion of the displayed data to the Clipboard; Drag a selection box within the view panel to select the required data and hit CTRL+C to copy. Alternatively you can:

- Press the Copy button on the toolbar.
- Select “Copy Selected Text” from the “Edit” menu.
- Right-Click and select “Copy Selected Text” from the Pop-Up menu.

To copy the entire viewed data to the Clipboard, Select “Copy All Data” from the “Edit” menu. Or, Right-Click and select “Copy All Data” from the Pop-Up menu.

Printing Data

To print the currently viewed data, Select “Print” from the “File” menu or click the Print Icon from the toolbar.

Application Settings

The XiFrame XMI Explorer allows the user to select some options which affect the behavior of the application. To see the Application settings dialog, choose "Application Preferences" from the "Tools" menu. You will be presented with this dialog box:

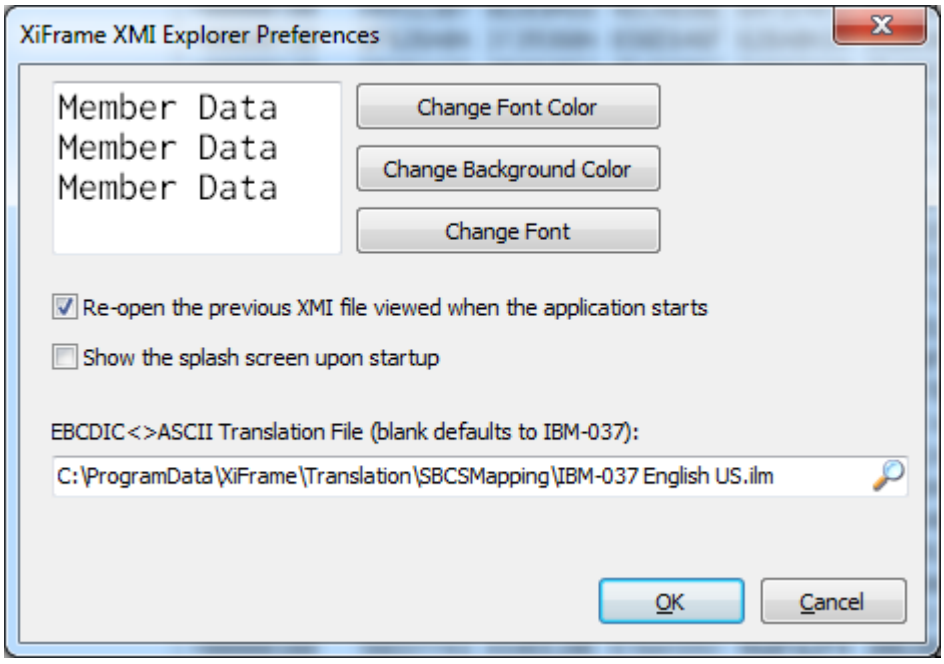

Figure 9- XiFrame XMI Explorer Preferences

The following options are available:

Member View

You can set the background color, foreground color and font for display of member data.

Re-open the Previous XMI file

Check this box to force the XiFrame XMI Explorer to automatically open the previously viewed file upon application start-up.

Show Splash Screen

The XiFrame XMI Explorer application has a splash screen. Un-check this setting to bypass display of the splash screen upon startup.

Character Translation

The XiFrame XMI Explorer application supports multiple code-pages when translating data from Native to PC format. The application includes many popular code-pages for global support

Note: At this time DBCS translation is not supported.

Application Support

XiFrame XMI Explorer is a free application. XiFrame is very interested in your suggestions for improvements to this documentation or to the application itself.

To contact XiFrame, please send an email to mailto://support@xiframe.com

Alternatively, visit http://www.xiframe.com/contact to send us a message from the website.

We promise to respond to all messages.

Thank you in advance for commenting on our products.