

XiFrame XMI Explorer

User Manual

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Questions & Feedback

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To send feedback to XiFrame about this, or any other product, please write to us directly at mailto://support@xiframe.com

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



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 <u>http://www.xiframe.com</u> 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 <u>http://www.cbttape.org</u>. 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.

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#COMPILR	+866666646	74726561 6D0A789C 75904D0B 82401086 29BF6A7F C51C3568 DA75BFAF 4104D125	*tream.x.u.M@).j5h.uA%*	
#GENINFO	+66666666	D99B7412 F2E4C1FA FF905AEA 1AC45C1E DE7D771E 981628E6 02683F23 540D3914	*tZ\}w(h?#⊺.9.*	
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ALGOLF21	+656666E6	77E6E04F EEF7C305 7FBCB2F7 1AD1DFCD 5D89DB95 8B4D91C7 B1C789C7 1B8FB7FE	*w0*	D' I
ALGZISRC	+86666166	D6932387 6EDE0ADD 4DCA656E 64737472 65616D0A 656E646F 626A0A33 36203020	*#.nM.endstream.endobj.36 0 *	Display A
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ALZIFUMP	+00000140	68203436 20302052 2146696L /465/220 214666L61 /4654465 63616465 3E3E0A/3	*N 46 0 K/Filter /FlateDecode>>.st	
	+00000100	14/20301 0008/09U EU90000F 10U/19U3 21U/92/3 03004392 03U8/242 F9200991	*tream.x0	
AL21FUB	+00000100	29928249 28700030 0031800F 33F400F4 2943F3E4 0071FF7F 80200930 E7443LE2 E3031407 D30778E0 70040E0E D0506E0E D070E3ED D0006077 E800000E E003670E	*)1*V.0nQ.05)Eq+.;.U<.*	
AL21FPRC	+99999109	ER271F4E 7RESSEEE R77E60AE 7EE8ER07 8R4EREAC EER60E60 R4RADD6E EED2C0D7	*'N/ ~i 0 i n *	
AL21LASM	+99999159	3E7EACEE 787E7167 REDE6DE4 DAE5E3EE AER72E7E 68D5CE9A E57EAR07 E8755RE5	*? v~ng m h ~ u[*	
AL21LMAC	+88888288	E38FEREF 3ARAF3R2 D56934CF 9A9DECFA 75RRD5F8 R64FCFF6 638C4547 C9F25ARD	* i4 u 0 c FG 7 *	
AL21SAMP	+88888228	E2747C75_79D5EEB7_8E56BEEC_9C5DAE85_9E7EEA15_376D84EB_268C3E7D_52E9DE8D	* tluv V] 7m & ?3R *	
AL21SASM	+88888248	C67B2FFF 7DFE8FF5 56FFAC71 DACD5ACB F97FB206 723FFCBA 8A5BF0CC 0D95E256	*.{/.}V	
AL21SCTL	+88888268	307E0DE3 D7F49860 DC0EC61D 1877D57F 3E500E5A FA6CECF4 8FBE81F1 61F8CFDA	*8~	
AL21SMAC	+88888288	E885B012 8C7B4ADD 368CABC1 F8401577 E4AD7BCA 84F2F6D1 6AE7EDA3 1445FDCB	*{J.6@.w{iE*	
	+8666662A8	B744FC7C 4B35AA47 30EE4FF0 C8C72FDF 74CE1AFD E69B8BCC 9C7CE834 03245F9F	*.D. K5.G0.0/.t .4.\$*	
	+888882C8	F6FA8D4E BFFEBAF5 A6D1EF7C CEDFED70 DF6D2436 17632C3A 4A169755 FDE8B767	*Np.m\$6.c.:JUg*	
	+000002E0	88037982 75F38A90 0B4266AF 79402413 2EDC04B0 6D2948D1 1BBF138C BB0290D0	*y.uBf.y@\$m)H*	
	+86666366	B9A66885 2B89A865 05963565 A45200D7 085640D0 CE402633 40DE85F1 91A8B77D	*h.+e5e.RV@@&3@}*	
	+00000320	F53D78AC 98FC2D8C 7BAA08BF 538A9782 71499278 B6CDB30E E381A2F7 AAD071A0	*.=x{SqI.xq.*	
	+86666346	BE0D6BCA 48DFC527 02905251 51B52F07 E3D30048 7ACE33FA 597C949F AB47AEA9	*k.H'RQQ./Hz.3.Y G*	
	+00000360	425851B7 2F332015 136B05B5 B9AA7247 597E514A A3CE8C68 AA8F5496 9754ABDC	*BXQ./3krGY~QJhTT*	
	+86666386	56ED7743 A54EE20E E1641D51 968F82F9 3BB2BE0C D657E1EA 7B25654B 89CE5DA6	*V.wC.Nd.Q;W{%eK].*	
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	+866663C6	0517A918 F6649121 CD43F595 CFEE5777 EDuctor Jobscore 035C68C 8D917F70	*d.!.CWwp.Vp*	
	+866663E6	13013122 1AC/5504 BF74286E AC10141A 7 Application 28C F8788EFD	*1"Ut n{d.ox*	
	+866666466	C25FF9FD 86328E56 DE111C21 F969670A 2 Statushar 962 CACB2EAB	*Z.V!.ig.".k U+b*	
	+88888428	EFA/EAF6 E/EA9140 FCAE52BC 1AB0982/ 9 Statusbal CC5 78DF7623	*@R'.]6ix.v#*	
	+00000110	11/489/17/89E47017/EE9819E4_1EE9971E_EE907		

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
 - o 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:

🦂 XiFrame XMI Explorer (v2.2.13) [D:\XiFrame\Ap	plications\XiXMIN	/lanager\F	ILE876.XMI						- 🗆 🗙
<u>File Edit Tools View H</u> elp									
🔌 🕞 🖕 🖄 🄇	Xi								
PILES76.XM CELV487.PILES76.PDS SSNOTEL SSNOTEL	Name \$\$\$#DATE \$\$NOTE01 \$\$NOTE02 \$PDSLOAD #COMPILR #GENINFO #CENINFO #ULBRARY #DSLOAD @FILE876 ALG215RC AL205AMP AL21FCMP AL21FLDR AL21FLTPRC AL21FLASM AL21FLASM AL21SAMP AL21SAMP AL21SAMP AL21SAMP	Size 12 94 41428 41428 425943 157 39 3131 157 187 187 187 187 187 187 187 18	Init 12 90 46 5936 25943 157 37 37 37 35718 5582 10 159 8674 1159 8674 1159 8674 117 10434 3476 22246 1231	Mod 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	VV, MM 04.85 01.02 02.01 0	Created 2012/09/04	Changed 2012/09/04 23:38:00 2012/09/04 14:31:00 2012/09/04 16:16:00 2012/09/04 16:09:00 2012/09/04 16:09:00 2012/09/04 16:09:00 2012/09/04 16:09:00 2012/09/04 15:10 2012/09/04 13:33:00 2012/09/04 13:46:00 2012/09/04 13:45:00 2012/09/04 13:45:00 2012/09/04 13:45:00 2012/09/04 13:35:00 2012/09/04 13:35:00 201	ID CBT-485 SBGCLOB SBGCLOB JCL PDF PDF PDF PDF CBT-485 AWSCMPL AWSCMPL AWSCMPC PDF COMPILR IVPLIB SBGCLOB LIBRARY PDF PDF COMPSRC COMPAC	
XMI was created by SBGOLOB at node NODENAME	. It contains an ur	nloaded P	DS RECFM=	FB LRECL	.=80 (23 M	embers)	Line: 1 of 26	View Mode: Member List	đ

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.



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	omputer	 Local Disk (D:) 	 Save Area 	-	4 7	Search Save Area	م
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Pictures	*	Name	*	Date modified	Тур	e Size	
Videos 🗧				No items match your search.			
🍓 Homegroup							
Computer Cocal Disk (C:) Cocal Disk (D:) SYSTEM (E:) Recovery (R:) HP_TOOLS (T:) =) :)						
🚽 waco (\\Xiserv	ver) 🚽						
File <u>n</u> ame:	SSNOTE	01.txt					•
Save as <u>t</u> ype:	Text File	s (*.txt)					•
Alide Folders						Save	Cancel

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:



Extract All Data From XMI	×
Extract XMI/XMIT Contents to:	
D:\XiFrame\Applications\XiXMIManager\	\sim
Allocate subdirectory based upon DSN/PDS/PDSE Nan	ne
	<u>C</u> ancel

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:

XiFrame XMI Explorer Preference	ces 🛛 💌					
Member Data Member Data Member Data	Change Font Color Change Background Color Change Font					
Re-open the previous XMI file viewed when the application starts						
C:\ProgramData\XiFrame\Translation\SBCSMapping\IBM-037 English US.ilm						
	<u>Q</u> K <u>Cancel</u>					

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 <u>mailto://support@xiframe.com</u>

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

We promise to respond to all messages.

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