Windows Disassembler 1.5

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Introduction

Windows Disassembler disassembles Windows 3.x programs and Dynamic Link Libraries. It displays the assembly language source code of a given executable within a window and allows one to create the assembly language source code files if desired.

The Display Window Saving and Reassembling Files

Commands

File Commands Edit Commands View Commands Shortcut Keys

The Display Window

The display window displays the assembly language code of a segment from the program which you have opened, excluding certain directives (i.e., **TITLE**, **.MODEL**, **.286**, **PROC**, etc.). At the top of the window is the following information:

Segment number	The chronological number of the current segment. (This number is based on the order in which segments are placed in the executable file)
Segment offset	A hexadecimal value equal to the segment's offset relative to the beginning of the file
Segment size	A hexadecimal value equal to the number of bytes in the segment.

Bytes in the program can be changed from data declarations to instructions and vice versa with the <u>Set</u> <u>Bytes</u> command. The offset of each instruction can be displayed with the <u>Address Offsets</u> command. Only one segment can be displayed at a time. The **Segments** command allows you to choose which segment you want displayed. To create an assembly language file, use the <u>Save Text As</u> command. The **Far Call Names** command toggles between showing the Windows API function call names and the actual relocation bytes.

The Anatomy of Windows Disassembler's Interface

			W	/indows Disassembler 🛛 🔽	
<u>F</u> ile	<u>E</u> dit	⊻iew	<u>H</u> elp		
Segmer	it 1	is	at 4E0	Segment size = 0912H hello.exe	÷
001DH			JZ	L0022H	
001FH			JMP	NEAR PTR LOO8AH	
0022H	L002	2H:	MOV	WORD PTR [BP-46], 0003H	
0027H			MOV	WORD PTR [BP-44], LROFFSET WNDPROC	
002CH			MOV	WORD PTR [BP-42], SEG WNDPROC	
0031H			MOV	WORD PTR [BP-40], 0000H	
0036H			MOV	WORD PTR [BP-38], 0000H	
003BH			MOV	AX, WORD PTR [BP+12]	
003EH			MOV	WORD PTR [BP-36], AX	
0041H			PUSH	0	
novan			DIICU	0	+

(Click on the "menu" for information on a desired command.)

Creating and Assembling Assembly Language Files

You can create an assembly language file for the program that you've opened by using the <u>Save Text As</u> command. Note, however, that in some instances the source code created by *Windows Disassembler* cannot be reassembled without some editing. Also, you will need the resource files (which can be extracted using Borland's *Resource Workshop*), and a definition file (which can be created with the aid of a program file header utility such as *TDUMP* or *EXEHDR*). You will then need to make the following alterations:

- 1. Windows Disassembler can distinguish **SMALL** programs only. All other types of programs are assumed to have medium models. Change the model type in the **.MODEL** directive to the correct type if it is neither small or medium.
- 2. Make the data segment accessible to all modules via include files.

File Commands

Opens Opens a Windows executable file or dynamic link library. The default extension is **.exe**.

Save Text As Creates an assembly language source code file.

OPTIONS:

If the **Create Separate Files For Each Segment** option is checked each file's name will have an integer appended to the base name of the file equal to the segment's number

If the **Create One File Containing All Segments** option is checked one file will be created containing the whole program. Select this option only if the program is relatively small, i.e., has only two or three segments. The default file name extension is **.asm**.

If **Save Current Segment Only** is checked, a file is created containing only the segment that is currently being displayed in the window. The default file name extension is **.asm**. This option preserves the byte settings made for the segment.

NOTES: If a file having the specified name already exists, it will automatically be overwritten. Saving files erases all byte settings (see <u>Set Bytes</u>) made in the current segment unless you select the **Save Current Segment Only** option.

Edit Commands

Set Bytes Controls the way *Windows Disassembler* translates a (set of) byte(s). If Byte Data is selected, all bytes within the specified range are translated as byte declarations. If **Instruction** is selected, all bytes within the given range are translated as machine instructions. The **Labeled Instruction** option allows you to give labels to all instructions within the specified range (note that byte declarations are automatically given labels). Hexadecimal numbers are required for the range values.

View Commands

Go To	Goes to a specified address in the current segment (requires a hexadecimal value).
Address Offsets	Shows the offset of each instruction in the far left-hand column.
Far Call Names	Toggles between showing the Windows function call names and the actual relocation bytes.
Segment	Goes to the segment that you specify. Note that all byte format changes which you have made will be lost if you change segments. You can save your byte settings in an assembly language file before you change segments but you cannot retrieve the changes again (except by resetting the bytes manually).
Font	Allows the selection of the desired font in which the text in the window is to be written.

Keys

PAGE UP KEY	Scrolls the window up one page.
PAGE DOWN KEY	Scrolls the window down one page.
UP ARROW KEY	Scrolls the window up one line.
Down Arrow Key	Scrolls the window down one line.

IWindows Disassembler Version 1.5 Copyright (c) 1992-1993 Eric Grass Contents <u>About</u> Status bar: displays segment number, offset, size, and file name.