Microsoft Foundation Class (MFC) Quick Reference

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CObject

<u>CObject</u>	Default constructor.
operator new	Special new operator.
operator delete	Special delete operator.
<u>operator =</u>	Assignment operator.
AssertValid	Validates this object's integrity.
<u>Dump</u>	Produces a diagnostic dump of this object.
IsSerializable	Tests to see whether this object can be
	serialized.
<u>Serialize</u>	Loads or stores an object from/to an archive.
GetRuntimeClass	Returns the CRuntimeClass structure
	corresponding to this object's class.
IsKindOf	Tests this object's relationship to a given class.
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CWinApp

<u>m_pszAppName</u> <u>m_hInstance</u>	Specifies the name of the application. Identifies the current instance of the
<u>m_hPrevInstance</u>	application. Set to NULL in a 32-bit application.
m_lpCmdLine	Points to a null-terminated string that specifies
	the command line for the application.
m_nCmdShow	Specifies how the window is to be shown initially.
m_bHelpMode	Indicates if the user is in Help context mode
m_pActiveWnd	(typically invoked with SHIFT+F1). Pointer to the main window of the container application when an OLE server is in-place active.
m pszExeName	The module name of the application.
m_pszHelpFilePath	The path to the application's Help file.
m_pszProfileName	The application's .INI filename.
m_pszRegistryKey	Used to determine the full registry key for
	storing application profile settings.
CWinApp	Constructs a CWinApp object
<u>CWinApp</u> LoadCursor	Constructs a CWinApp object. Loads a cursor resource
LoadCursor	Loads a cursor resource.
LoadCursor LoadStandardCurso	Loads a cursor resource. Loads a Windows predefined cursor that the
LoadCursor LoadStandardCurso <u>r</u>	Loads a cursor resource. Loads a Windows predefined cursor that the IDC_ constants specify in WINDOWS.H.
LoadCursor LoadStandardCurso	Loads a cursor resource. Loads a Windows predefined cursor that the IDC_ constants specify in WINDOWS.H. Loads a Windows OEM predefined cursor that
LoadCursor LoadStandardCurso <u>r</u> LoadOEMCursor	Loads a cursor resource. Loads a Windows predefined cursor that the IDC_ constants specify in WINDOWS.H. Loads a Windows OEM predefined cursor that the OCR_ constants specify in WINDOWS.H.
LoadCursor LoadStandardCurso LoadOEMCursor LoadIcon	Loads a cursor resource. Loads a Windows predefined cursor that the IDC _ constants specify in WINDOWS.H. Loads a Windows OEM predefined cursor that the OCR _ constants specify in WINDOWS.H. Loads an icon resource.
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	after calling ParseCommandLine. instead.
ParseCommandLine	Parses individual parameters and flags in the
	command line.
ProcessShellComma	Handles command-line arguments and flags.
	Finders command line arguments and hags.
<u>nd</u>	
GetProfileInt	Retrieves an integer from an entry in the
	application's .INI file.
WriteProfileInt	Writes an integer to an entry in the
	application's .INI file.
CatDrofileString	Detrious a string from an antry in the
GetProfileString	Retrieves a string from an entry in the
	application's .INI file.
WriteProfileString	Writes a string to an entry in the application's
	.INI file.
AddDocTemplate	Adds a document template to the application's
Addboerempiate	Adds a document template to the application's
~ ~ ~ ~ .	list of available document templates.
GetFirstDocTemplat	Retrieves the position of the first document
ePosition	template.
GetNextDocTempla	Retrieves the position of a document template.
te	Can be used recursively.
<u>OpenDocumentFile</u>	Called by the framework to open a document
	from a file.
AddToRecentFileLi	Adds a filename to the most recently used
st	(MRU) file list.
SelectPrinter	
SelectPlinter	Selects a printer previously indicated by a user
	through a print dialog box.
CreatePrinterDC	Creates a printer device context.
GetPrinterDeviceDe	Retrieves the printer device defaults.
faults	· · · · · · · · ·
	Override to perform Windows instance
InitInstance	
	initialization, such as creating your window
	objects.
Run	Runs the default message loop. Override to
<u>Run</u>	Runs the default message loop. Override to
	customize the message loop.
<u>Run</u> OnIdle	customize the message loop. Override to perform application-specific idle-
	customize the message loop. Override to perform application-specific idle- time processing.
	customize the message loop. Override to perform application-specific idle- time processing.
<u>OnIdle</u>	customize the message loop. Override to perform application-specific idle- time processing. Override to clean up when your application
OnIdle ExitInstance	customize the message loop. Override to perform application-specific idle- time processing. Override to clean up when your application terminates.
<u>OnIdle</u>	customize the message loop. Override to perform application-specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all
OnIdle ExitInstance HideApplication	customize the message loop. Override to perform application-specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents.
OnIdle ExitInstance HideApplication CloseAllDocuments	customize the message loop. Override to perform application-specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents.
OnIdle ExitInstance HideApplication	customize the message loop. Override to perform application-specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents.
OnIdle ExitInstance HideApplication CloseAllDocuments PreTranslateMessag	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to
OnIdle ExitInstance HideApplication CloseAllDocuments	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions <u>::TranslateMessage</u>
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OnIdle ExitInstance HideApplication CloseAllDocuments PreTranslateMessag e SaveAllModified DoMessageBox	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions ::TranslateMessage and ::DispatchMessage. Prompts the user to save all modified documents. Implements <u>AfxMessageBox</u> for the application.
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OnIdleExitInstanceHideApplicationCloseAllDocumentsPreTranslateMessaggSaveAllModifiedDoMessageBoxProcessMessageFilterProcessWndProcExceptionDoWaitCursor	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions <u>::TranslateMessage</u> and <u>::DispatchMessage</u> . Prompts the user to save all modified documents. Implements <u>AfxMessageBox</u> for the application. Intercepts certain messages before they reach the application. Intercepts all unhandled exceptions thrown by the application's message and command handlers. Turns the wait cursor on and off.
OnIdle ExitInstance HideApplication CloseAllDocuments PreTranslateMessag g SaveAllModified DoMessageBox ProcessMessageFilt er ProcessWndProcEx ception	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions <u>::TranslateMessage</u> and <u>::DispatchMessage</u> . Prompts the user to save all modified documents. Implements <u>AfxMessageBox</u> for the application. Intercepts certain messages before they reach the application. Intercepts all unhandled exceptions thrown by the application's message and command handlers. Turns the wait cursor on and off. Called by the framework in response to a
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OnIdleExitInstanceHideApplicationCloseAllDocumentsPreTranslateMessaggSaveAllModifiedDoMessageBoxProcessMessageFilterProcessWndProcExceptionDoWaitCursorOnDDECommand	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions <u>::TranslateMessage</u> and <u>::DispatchMessage</u> . Prompts the user to save all modified documents. Implements <u>AfxMessageBox</u> for the application. Intercepts certain messages before they reach the application. Intercepts all unhandled exceptions thrown by the application's message and command handlers. Turns the wait cursor on and off. Called by the framework in response to a dynamic data exchange (DDE) execute command.
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OnIdleExitInstanceHideApplicationCloseAllDocuments preTranslateMessag eSaveAllModifiedDoMessageBoxProcessMessageFilt crocessWndProcEx ceptionDoWaitCursor OnDDECommandWinHelp LoadStdProfileSetti	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions ::TranslateMessage and ::DispatchMessage. Prompts the user to save all modified documents. Implements <u>AfxMessageBox</u> for the application. Intercepts certain messages before they reach the application. Intercepts all unhandled exceptions thrown by the application's message and command handlers. Turns the wait cursor on and off. Called by the framework in response to a dynamic data exchange (DDE) execute command. Calls the WinHelp Windows function. Loads standard INI file settings and enables
OnIdle ExitInstance HideApplication CloseAllDocuments PreTranslateMessag g SaveAllModified DoMessageBox ProcessMessageFilt er DoWaitCursor OnDDECommand WinHelp LoadStdProfileSetti ngs	customize the message loop. Override to perform application -specific idle- time processing. Override to clean up when your application terminates. Hides the application before closing all documents. Closes all open documents. Filters messages before they are dispatched to the Windows functions ::TranslateMessage and ::DispatchMessage. Prompts the user to save all modified documents. Implements AfxMessageBox for the application. Intercepts certain messages before they reach the application. Intercepts all unhandled exceptions thrown by the application's message and command handlers. Turns the wait cursor on and off. Called by the framework in response to a dynamic data exchange (DDE) execute command. Calls the WinHelp Windows function. Loads standard .INI file settings and enables the MRU file list feature.
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SetRegistryKey	Causes application settings to be stored in the
	registry instead of .INI files.
EnableShellOpen	Allows the user to open data files from the
	Windows File Manager.
RegisterShellFileTy	Registers all the application's document types
pes	with the Windows File Manager.
Enable3dControls	Enables controls with three-dimensional
	appearance.
Enable3dControlsSt	Enables controls with a three-dimensional
atic	appear ance.
OnFileNew	Implements the ID_FILE_NEW command.
OnFileOpen	Implements the ID_FILE_OPEN command.
OnFilePrintSetup	Implements the ID_FILE_PRINT_SETUP
onr ner masetap	command.
OnContextHelp	Handles SHIFT+F1 Help within the
oncontextricip	application.
OnUsia	11
<u>OnHelp</u>	Handles F1 Help within the application (using
	the current context).
<u>OnHelpIndex</u>	Handles the ID_HELP_INDEX command
	and provides a default Help topic.
<u>OnHelpFinder</u>	Handles the ID_HELP_FINDER and
	ID_DEFAULT_HELP commands.
OnHelpUsing	Handles the ID_HELP_USING command.
CDocument	
CD	Contract CD

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•=•••	
CDocument	Constructs a CDocument object.
AddView	Attaches a view to the document.
GetDocTemplate	Returns a pointer to the document template that
	describes the type of the document.
GetFirstViewPositio	Returns the position of the first in the list of
<u>n</u>	views; used to begin iteration.
GetNextView	Iterates through the list of views associated
	with the document.
GetPathName	Returns the path of the document's data file.
<u>GetTitle</u>	Returns the document's title.
IsModified	Indicates whether the document has been
	modified since it was last saved.
<u>RemoveView</u>	Detaches a view from the document.
SetModifiedFlag	Sets a flag indicating that you have modified
-	the document since it was last saved.
SetPathName	Sets the path of the data file used by the
	document.
<u>SetTitle</u>	Sets the document's title.
UpdateAllViews	Notifies all views that document has been
	modified.
CanCloseFrame	Advanced overridable; called before closing a
	frame window viewing this document.
DeleteContents	Called to perform cleanup of the document.
OnChangedViewLis	Called after a view is added to or removed
<u>t</u>	from the document.
OnCloseDocument	Called to close the document.
OnNewDocument	Called to create a new document.
OnOpenDocument	Called to open an existing document.
OnSaveDocument	Called to save the document to disk.
ReportSaveLoadExc	Advanced overridable; called when an open or
eption	save operation cannot be completed because of
	an exception.
<u>GetFile</u>	Returns a pointer to the desired CFile object.
ReleaseFile	Releases a file to make it available for use by
	other applications.
SaveModified	Advanced overridable; called to ask the user

PreCloseFrame	whether the document should be saved. Called before the frame window is closed.	<u>m_bAutoMenuEnab</u> le	Controls automatic enable and disable functionality for menu items.	GetDeviceScrollPosit
OnFileSendMail	Sends a mail message with the document	rectDefault	Pass this static CRect as a parameter when	<u>GetDeviceScioni osit</u>
	attached.		creating a CFrameWnd object to allow	GetDeviceScrollSizes
OnUpdateFileSend	Enables the Send Mail command if mail		Windows to choose the window's initial size	
Mail	support is present.		and position.	
		CFrameWnd	Constructs a CFrameWnd object.	GetScrollPosition
CView		Create	Call to create and initialize the Windows frame	
DoPreparePrinting	Displays Print dialog box and creates printer		window associated with the CFrameWnd	<u>GetTotalSize</u>
	device context; call when overriding the	LoadFrame	object. Call to dynamically create a frame window	ResizeParentToFit
	OnPreparePrinting member function.	Loaurraine	from resource information.	Resizeratentiorit
GetDocument	Returns the document associated with the view.	LoadAccelTable	Call to load an accelerator table.	ScrollToPosition
OnDragEnter	Called when an item is first dragged into the	LoadBarState	Call to restore control bar settings.	Seronrorosnon
	drag-and-drop region of a view. Called when a dragged item leaves the drag-	SaveBarState	Call to save control bar settings.	SetScaleToFitSize
<u>OnDragLeave</u>	and-drop region of a view.	ShowControlBar	Call to show the control bar.	SetScrollSizes
OnDragOver	Called when an item is dragged over the drag-	SetDockState	Call to dock the frame window in the main	
Olibragover	and-drop region of a view.	C. (D. 10)	window.	
<u>OnDrop</u>	Called when an item has been dropped into the	GetDockState ActivateFrame	Retrieves the dock state of a frame window.	
-	drag-and-drop region of a view, default	Acuvaterrame	Makes the frame visible and available to the user.	CWnd
	handler.	InitialUpdateFrame	Causes the OnInitialUpdate member function	m_hWnd
<u>OnDropEx</u>	Called when an item has been dropped into the		belonging to all views in the frame window to	<u>CWnd</u>
	drag-and-drop region of a view, primary		be called.	DestroyWindow
OnDragScroll	handler. Called to determine whether the cursor is	GetActiveFrame	Returns the active CFrameWnd object.	Create
OliDiagScioli	dragged into the scroll region of the window.	SetActiveView	Sets the active CView object.	PreCreateWindow
OnInitialUpdate	Called after a view is first attached to a	GetActiveView	Returns the active CView object.	<u>r recreate window</u>
	document.	<u>CreateView</u>	Creates a view within a frame that is not	CalcWindowRect
OnScrollBy	Called when a view containing active in -place	GetActiveDocument	derived from CView . Returns the active CDocument object.	
-	OLE items is scrolled.	GetControlBar	Retrieves the control bar.	GetStyle
<u>OnScroll</u>	Called when OLE items are dragged beyond	GetMessageString	Retrieves message corresponding to a	<u>GetExStyle</u>
0.11	the borders of the view.		command ID.	Attach
sSelected	Tests whether a document item is selected. Required for OLE support.	IsTracking	Determines if splitter bar is currently being	Detach
OnActivateView	Called when a view is activated.		moved.	PreSubclassWindow
OnActivateFrame	Called when the frame window containing the	SetMessageText	Sets the text of a standard status bar.	1 100 ac clubs () fildOw
	view is activated or deactivated.	EnableDocking DockControlBar	Allows a control bar to be docked. Docks a control bar.	SubclassWindow
OnBeginPrinting	Called when a print job begins; override to	FloatControlBar	Floats a control bar.	
	allocate graphics device interface (GDI)	BeginModalState	Sets the frame window to modal.	
	resources.	EndModalState	Ends the frame window's modal state. Enables	UnsubclassWindow
<u>OnDraw</u>	Called to render an image of the document for		all of the windows disabled by	FromHandle
	screen display, printing, or print preview. Implementation required.		BeginModalState .	
OnEndPrinting	Called when a print job ends; override to	InModalState	Returns a value indicating whether or not a	
	deallocate GDI resources.	Show Owned Wind-	frame window is in a modal state.	FromHandlePerman
OnEndPrintPreview	Called when preview mode is exited.	ShowOwnedWindo	Shows all windows that are descendants of the CFrameWnd object.	ent
OnPrepareDC	Called before the OnDraw member function is	<u>ws</u> RecalcLayout	Repositions the control bars of the	
	called for screen display or the OnPrint	<u>recurciayour</u>	CFrameWnd object.	
	member function is called for printing or print	OnCreateClient	Creates a client window for the frame.	DeleteTempMap
OnDrononoDrintin	preview.	OnSetPreviewMode	Sets the application's main frame window into	
OnPreparePrinting	Called before a document is printed or previewed; override to initialize Print dialog		and out of print-preview mode.	GetSafeHwnd
	box.	<u>GetMessageBar</u>	Returns a pointer to the status bar belonging to	OCIDAICHWIIU
OnPrint	Called to print or preview a page of the		the frame window.	CreateEx
	document.	<u>NegotiateBorderSpa</u>	Negotiates border space in the frame window.	
<u>OnUpdate</u>	Called to notify a view that its document has	<u>ce</u> OnContextHelp	Handles SHIFT+F1 Help for in -place items.	
-	been modified.	oncontextricip		CreateControl
<u>CView</u>	Constructs a CView object.	CScrollView		
		CScrollView	Constructs a CScrollView object.	IsWindowEnabled
CFrameWnd		<u>CSCroll view</u> FillOutsidePect	Fills the area of a view outside the scrolling	

FillOutsideRect

Fills the area of a view outside the scrolling

ResizeParentToFit ScrollToPosition SetScaleToFitSize SetScrollSizes	logical units. Causes the size of the view to dictate the size of its frame. Scrolls the view to a given point, specified in logical units. Puts the scroll view into scale-to-fit mode. Sets the scroll view's mapping mode, total size, and horizontal and vertical scroll amounts.
CWnd	
<u>m hWnd</u> <u>CWnd</u> <u>DestroyWindow</u> <u>Create</u>	Indicates the HWND attached to this CWnd . Constructs a CWnd object. Destroys the attached Windows window. Creates and initializes the child window associated with the CWnd object.
PreCreateWindow	Called before the creation of the Windows window attached to this CWnd object.
CalcWindowRect	Called to calculate the window rectangle from the client rectangle.
<u>GetStyle</u> <u>GetExStyle</u> <u>Attach</u> <u>Detach</u>	Returns the current window style. Returns the window's extended style. Attaches a Windows handle to a CWnd object. Detaches a Windows handle from a CWnd object and returns the handle.
PreSubclassWindow	Allows other necessary subclassing to occur before SubclassWindow is called.
SubclassWindow	Attaches a window to a CWnd object and makes it route messages through the CWnd 's
<u>UnsubclassWindow</u> FromHandle	message map. Detaches a window from a CWnd object Returns a pointer to a CWnd object when given a handle to a window. If a CWnd object is not attached to the handle, a temporary
<u>FromHandlePerman</u> ent	CWnd object is created and attached. Returns a pointer to a CWnd object when given a handle to a window. If a CWnd object is not attached to the handle, NULL is
DeleteTempMap	returned. Called automatically by the CWinApp idle- time handler and deletes any temporary CWnd
GetSafeHwnd	objects created by FromHandle . Returns m_hWnd , or NULL if the this pointer is NULL .
<u>CreateEx</u>	Creates a Windows overlapped, pop-up, or child window and attaches it to a CWnd object.
CreateControl	Create an OLE control that will be represented in an MFC program by a CWnd object.
IsWindowEnabled	Determines whether the window is enabled for mouse and keyboard input.
EnableWindow	Enables or disables mouse and keyboard input.

area.

units.

units.

Gets the current scroll position in device

Gets the current mapping mode, the total size, and the line and page sizes of the scrollable view. Sizes are in device units.

Gets the current scroll position in logical

Gets the total size of the scroll view in

CFrameWnd

GetActiveWindow Retrieves the active window. SetActiveWindow Activates the window. GetCapture Retrieves the **CWnd** that has the mouse capture. SetCapture Causes all subsequent mouse input to be sent to the **CWnd**. GetFocus Retrieves the **CWnd** that currently has the input focus. SetFocus Claims the input focus. GetDesktopWindow Retrieves the Windows desktop window. GetForegroundWin Returns a pointer to the foreground window dow (the top-level window with which the user is currently working). SetForegroundWind Puts the thread that created the window into the foreground and activates the window. GetIcon Retrieves the handle to an icon. SetIcon Sets the handle to a specific icon. GetWindowContext Retrieves the help context identifier. HelpId **SetWindowContext** Sets the help context identifier. HelpId ModifyStyle Modifies the current window style. ModifyStyleEx Modifies the window's extended style. GetWindowPlaceme Retrieves the show state and the normal (restored), minimized, and maximized positions of a window. SetWindowPlaceme Sets the show state and the normal (restored). minimized, and maximized positions for a window. GetWindwRgn Retrieves a copy of the window region of a window. SetWindowRgn Sets the region of a window. IsIconic Determines whether **CWnd** is minimized (iconic). Determines whether **CWnd** is maximized. **IsZoomed** MoveWindow Changes the position and dimensions of CWnd. **SetWindowPos** Changes the size, position, and ordering of child, pop-up, and top-level windows. ArrangeIconicWind Arranges all the minimized (iconic) child windows. ows BringWindowToTo Brings **CWnd** to the top of a stack of overlapping windows. GetWindowRect Gets the screen coordinates of CWnd GetClientRect Gets the dimensions of the **CWnd** client area. ChildWindowFrom Determines which, if any, of the child windows contains the specified point. Point FindWindow Returns the handle of the window, which is identified by its window name and window class. GetNextWindow Returns the next (or previous) window in the window manager's list. GetOwner Retrieves a pointer to the owner of a **CWnd**. SetOwner Changes the owner of a **CWnd** GetTopWindow Returns the first child window that belongs to the **CWnd**. GetWindow Returns the window with the specified relationship to this window. GetLastActivePopu Determines which pop-up window owned by **CWnd** was most recently active. **IsChild** Indicates whether **CWnd** is a child window or

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other direct descendant of the specified window. GetParent Retrieves the parent window of **CWnd** (if any). GetSafeOwner Retrieves the safe owner for the given window. SetParent Changes the parent window. **WindowFromPoint** Identifies the window that contains the given point. GetDlgItem Retrieves the control with the specified ID from the specified dialog box. GetDlgCtrlID If the **CWnd** is a child window, calling this function returns its ID value. GetDescendantWin Searches all descendant windows and returns the window with the specified ID. GetParentFrame Retrieves the **CWnd** object's parent frame window. SendMessageToDes Sends a message to all descendant windows of cendants the window. GetTopLevelParent Retrieves the window's top-level parent. GetTopLevelOwner Retrieves the top-level window. GetParentOwner Returns a pointer to a child window's parent window. GetTopLevelFrame Retrieves the window's top-level frame window. **UpdateDialogContr** Call to update the state of dialog buttons and other controls. UpdateData Initializes or retrieves data from a dialog box. CenterWindow Centers a window relative to its parent. BeginPaint Prepares **CWnd** for painting. EndPaint Marks the end of painting. Draws the current window in the specified device context. PrintClient Draws any window in the specified device context (usually a printer device context). LockWindowUpdat Disables or reenables drawing in the given window. UnlockWindowUpd Unlocks a window that was locked with CWnd::LockWindowUpdate. Retrieves a display context for the client area. GetDCEx Retrieves a display context for the client area, and enables clipping while drawing. RedrawWindow Updates the specified rectangle or region in the client area. Retrieves the display context for the whole GetWindowDC window, including the caption bar, menus, and scroll bars. ReleaseDC Releases client and window device contexts. freeing them for use by other applications. **UpdateWindow** Updates the client area. SetRedraw Allows changes in **CWnd** to be redrawn or prevents changes from being redrawn. GetUpdateRect Retrieves the coordinates of the smallest rectangle that completely encloses the **CWnd** update region. Retrieves the **CWnd** update region. GetUpdateRgn Invalidate Invalidates the entire client area. InvalidateRect Invalidates the client area within the given rectangle by adding that rectangle to the current update region. InvalidateRgn Invalidates the client area within the given region by adding that region to the current update region.

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ValidateRect	Validates the client area within the given
	rectangle by removing the rectangle from the
ValidataDan	current update region. Validates the client area within the given
<u>ValidateRgn</u>	e
	region by removing the region from the current update region.
ShowWindow	Shows or hides the window.
IsWindowVisible	Determines whether the window is visible.
<u>ShowOwnedPopups</u>	Shows or hides all pop-up windows owned by
ShowOwneuropups	the window.
EnableScrollBar	Enables or disables one or both arrows of a
	scroll bar.
MapWindowPoints	Converts (maps) a set of points from the
	coordinate space of the CWnd to the
	coordinate space of another window.
ClientToScreen	Converts the client coordinates of a given point
	or rectangle on the display to screen
	coordinates.
ScreenToClient	Converts the screen coordinates of a given
	point or rectangle on the display to client
	coordinates.
SetWindowText	Sets the window text or caption tit le (if it has
	one) to the specified text.
GetWindowText	Returns the window text or caption title (if it
	has one).
GetWindowTextLen	Returns the length of the window's text or
<u>gth</u>	caption title.
SetFont	Sets the current font.
GetFont	Retrieves the current font.
GetScrollPos GetScrollRange	Retrieves the current position of a scroll box.
GetScionKange	Copies the current minimum and maximum
ConciliW/indow	scroll-bar positions for the given scroll bar. Scrolls the contents of the client area.
ScrollWindowEx	Scrolls the contents of the client area. Similar
Scionwindowith	to ScrollWindow , with additional features.
GetScrollInfo	Retrieves the information that the
<u>Octoeronnino</u>	SCROLLINFO structure maintains about a
	scroll bar.
GetScrollLimit	Retrieves the limit of the scroll bar.
SetScrollInfo	Sets information about the scroll bar.
SetScrollPos	Sets the current position of a scroll box and, if
	specified, redraws the scroll bar to reflect the
	new position.
SetScrollRange	Sets minimum and maximum position values
	for the given scroll bar.
ShowScrollBar	Displays or hides a scroll bar.
EnableScrollBarCtrl	Enables or disables a sibling scroll-bar control.
GetScrollBarCtrl	Returns a sibling scroll-bar control.
RepositionBars	Repositions control bars in the client area.
DragAcceptFiles	Indicates the window will accept dragged files.
CreateCaret	Creates a new shape for the system caret and
	gets ownership of the caret.
CreateSolidCaret	Creates a solid block for the system caret and
Cupata Cupat	gets ownership of the caret.
CreateGrayCaret	Creates a gray block for the system caret and
GetCoretPos	gets ownership of the caret. Retrieves the client coordinates of the caret's
GetCaretPos	
SatCaratDos	current position. Moves the caret to a specified position
<u>SetCaretPos</u> <u>HideCaret</u>	Moves the caret to a specified position. Hides the caret by removing it from the display
macan	screen.
	bereen.

ShowCaret Shows the caret on the display at the caret's current position. Once shown, the caret begins flashing automatically. CheckDlgButton Places a check mark next to or removes a check mark from a button control. CheckRadioButton Checks the specified radio button and removes the check mark from all other radio buttons in the specified group of buttons. GetCheckedRadioB Returns the ID of the currently checked radio utton button in a group of buttons. DlgDirList Fills a list box with a file or directory listing. DlgDirListComboB Fills the list box of a combo box with a file or directory listing. <u>ox</u> DlgDirSelect Retrieves the current selection from a list box. DlgDirSelectCombo Retrieves the current selection from the list box Box of a combo box. GetDlgItemInt Translates the text of a control in the given dialog box to an integer value. GetDlgItemText Retrieves the caption or text associated with a control. GetNextDlgGroupIt Searches for the next (or previous) control within a group of controls. em GetNextDlgTabItem Retrieves the first control with the WS_TABSTOP style that follows (or precedes) the specified control. IsDlgButtonCh ecke Determines whether a button control is d checked. **IsDialogMessage** Determines whether the given message is intended for the modeless dialog box and, if so, processes it. SendDlgItemMessa Sends a message to the specified control. <u>ge</u> <u>SetDlgItemInt</u> Sets the text of a control to the string that represents an integer value. SetDlgItemText Sets the caption or text of a control in the specified dialog box. SubclassDlgItem Attaches a Windows control to a **CWnd** object and makes it route messages through the **CWnd**'s message map. ExecuteDlgInit Initiates a dialog resource. RunModalLoop Retrieves, translates, or dispatches messages for a window that is in modal status. ContinueModal Continues a window's modal status. EndModalLoop Ends a window's modal status. BindDefaultPropert Binds the calling object's default simple bound property, as marked in the type library, to a y cursor associated with a data-source control. Binds a cursour-bound property on a data-BindProperty bound control to a data-source control and registers that relationship with the MFC binding manager. GetDSCCursor Retrieves a pointer to the underlying cursor that is defined by the DataSource, UserName, Password, and SQL properties of a data-source control. GetMenu Retrieves a pointer to the specified menu. SetMenu Sets the menu to the specified menu. DrawMenuBar Redraws the menu bar. GetSvstemMenu Allows the application to access the Control menu for copying and modification. **HiliteMenuItem** Highlights or removes the highlighting from a

	top-level (menu-bar) menu item.
EnableToolTips	Enables the tooltip control.
CancelToolTips	Disables the tooltip control.
FilterToolTipMessa	Retrieves the title or text associated with a
ge	control in a dialog box.
OnToolHitTest	Detemines whether a point is in the bounding
Onroommerest	rectangle of the specified tool and retrieves
	information about the tool.
<u>SetTimer</u>	Installs a system timer that sends a
	<u>WM_TIMER</u> message when triggered.
<u>KillTimer</u>	Kills a system timer.
FlashWindow	Flashes the window once.
MessageBox	Creates and displays a window that contains an
-	application-supplied message and caption.
GetCurrentMessage	Returns a pointer to the message this window is
<u></u>	currently processing. Should only be called
	when in an On <i>Message</i> message-handler
D.C.k	member function.
<u>Default</u>	Calls the default window procedure, which
	provides default processing for any window
	messages that an application does not process.
PreTranslateMessag	Used by CWinApp to filter window messages
e	before they are dispatched to the
—	TranslateMessage and DispatchMessage
	Windows functions.
SendMessage	Sends a message to the CWnd object and does
	not return until it has processed the message.
PostMassaga	Places a message in the application queue, then
PostMessage	
	returns without waiting for the window to
	process the message.
SendNotifyMessage	Sends the specified message to the window and
	returns as soon as possible, depending on
	whether the calling thread created the window.
ChangeClipboardCh	Removes CWnd from the chain of Clipboard
<u>ain</u>	viewers.
Set Clipboard Viewer	Adds CWnd to the chain of windows that are
	notified whenever the contents of the Clipboard
	are changed.
OpenClipboard	Opens the Clipboard. Other applications will
openenpoourd	not be able to modify the Clipboard until the
	Windows <u>CloseClipboard</u> function is called.
GetClipboardOwner	Retrieves a pointer to the current owner of the
Getenpoolardowner	Clipboard.
GetOpenClipboard	
Window	Retrieves a pointer to the window that currently has the Clipboard open.
GetClipboardViewe	Retrieves a pointer to the first window in the
<u>r</u>	chain of Clipboard viewers.
<u>SetProperty</u>	Sets an OLE control property.
OnAmbientProperty	Implement ambient property values.
GetControlUnknow	
OCICOINTOTOTIKIOW	Retrieves a pointer to an unknown OLE
<u>n</u>	Retrieves a pointer to an unknown OLE control.
<u>n</u>	control.
<u>n</u> <u>GetProperty</u>	control. Retrieves an OLE control property.
<u>n</u> <u>GetProperty</u> <u>InvokeHelper</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property.
<u>n</u> <u>GetProperty</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd .
<u>n</u> <u>GetProperty</u> <u>InvokeHelper</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the
<u>n</u> <u>GetProperty</u> <u>InvokeHelper</u> <u>WindowProc</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the message map.
<u>n</u> <u>GetProperty</u> <u>InvokeHelper</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the message map. Calls the default window procedure, which
<u>n</u> <u>GetProperty</u> <u>InvokeHelper</u> <u>WindowProc</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the message map. Calls the default window procedure, which provides default processing for any window
n GetProperty InvokeHelper WindowProc DefWindowProc	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the message map. Calls the default window procedure, which provides default processing for any window messages that an application does not process.
<u>n</u> <u>GetProperty</u> <u>InvokeHelper</u> <u>WindowProc</u>	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the message map. Calls the default window procedure, which provides default processing for any window messages that an application does not process. This virtual function is called by the default
n GetProperty InvokeHelper WindowProc DefWindowProc	control. Retrieves an OLE control property. Invokes an OLE control method or property. Provides a window procedure for a CWnd The default dispatches messages through the message map. Calls the default window procedure, which provides default processing for any window messages that an application does not process.

<u>OnNotify</u>	been destroyed. Called by the framework to inform a parent window an event has occurred in one of its
<u>OnChildNotify</u>	controls or that the control needs information. Called by a parent window to give a notifying
onennary	control a chance to respond to a control notification.
DoDataExchange	For dialog data exchange and validation. Called by UpdateData .
<u>OnInitMenu</u> OnInitMenuPopup	Called when a menu is about to become active. Called when a pop-up menu is about to become active.
<u>OnSysChar</u>	Called when a keystroke translates to a system character.
OnSysCommand	Called when the user selects a command from the Control menu, or when the user selects the
<u>OnSysDeadChar</u>	Maximize or Minimize button. Called when a keystroke translates to a system dead character (such as accent characters).
<u>OnSysKeyDown</u>	Called when the user holds down the ALT key and then presses another key.
<u>OnSysKeyUp</u>	Called when the user releases a key that was pressed while the ALT key was held down.
OnCompacting	Called when Windows detects that system memory is low.
<u>OnDevModeChange</u>	Called for all top-level windows when the user changes device-mode settings.
<u>OnFontChange</u>	Called when the pool of font resources changes.
OnPaletteIsChangin g	Informs other applications when an application is going to realize its logical palette.
OnPaletteChanged	Called to allow windows that use a color palette to realize their logical palettes and
OnSysColorChange	update their client areas. Called for all top-level windows when a
OnWindowPosChan ging	change is made in the system color setting. Called when the size, position, or Z-order is about to change as a result of a call to
	<u>SetWindowPos</u> or another window- management function.
OnWindowPosChan ged	Called when the size, position, or Z-order has changed as a result of a call to <u>SetWindowPos</u>
<u>OnDropFiles</u>	or another window-management function. Called when the user releases the left mouse button over a window that has registered itself as the recipient of dropped files.
<u>OnSpoolerStatus</u>	Called from Print Manager whenever a job is added to or removed from the Print Manager
OnTimeChange	queue. Called for all top-level windows after the system time changes.
OnWinIniChange	Called for all top-level windows after the Windows initialization file, WIN.INI, is
OnCommond	changed.
OnCommand OnActivate	Called when the user selects a command. Called when CWnd is being activated or
Unreuvaic	deactivated.
<u>OnActivateApp</u>	Called when the application is about to be activated or deactivated.
OnCancelMode	Called to allow CWnd to cancel any internal modes, such as mouse capture.

OnChildActivate	Called for multiple document interface (MDI)	OnCharToItem	Called by a child list box with the		mouse button.
OnemidActivate	child windows whenever the size or position of	<u>OnChar Follenn</u>	LBS_WANTKEYBOARDINPUT style in	OnRButtonDown	Called when the user presses the right mouse
	CWnd changes or CWnd is activated.		response to a <u>WM_CHAR</u> message.	OIRBUIIDINDOWII	
OrClass		Ordernalter		OrpDretter	button.
OnClose	Called as a signal that CWnd should be closed.	OnCompareItem	Called to determine the relative position of a	OnRButtonUp	Called when the user releases the right mouse
<u>OnCopyData</u>	Copies data from one application to another.		new item in a child sorted owner-draw combo		button.
<u>OnCreate</u>	Called as a part of window creation.		box or list box.	<u>OnSetCursor</u>	Called if mouse input is not captured and the
<u>OnCtlColor</u>	Called if CWnd is the parent of a control when	<u>OnDeleteItem</u>	Called when an owner-draw child list box or		mouse causes cursor movement within a
	the control is about to be drawn.		combo box is destroyed or when items are		window.
<u>OnDestroy</u>	Called when CWnd is being destroyed.		removed from the control.	<u>OnTimer</u>	Called after each interval specified in
<u>OnEnable</u>	Called when CWnd is enabled or disabled.	<u>OnDrawItem</u>	Called when a visual aspect of an owner-draw		<u>SetTimer</u> .
OnEndSession	Called when the session is ending.		child button control, combo-box control, list -	<u>OnVScroll</u>	Called when the user clicks the window's
OnEnterIdle	Called to inform an application's main window		box control, or menu needs to be drawn.		vertical scroll bar.
	procedure that a modal dialog box or a menu is	OnDSCNotify	Called in response to an event that a data-	OnCaptureChanged	Sends a message to the window that is losing
	entering an idle state.		source control fires when a control to which the		the mouse capture.
OnEraseBkgnd	Called when the window background needs		data-source control is bound modifies or	OnNcActivate	Called when the nonclient area needs to be
	erasing.		attempts to modify the underlying cursor.		changed to indicate an active or inactive state.
OnGetMinMaxInfo	Called whenever Windows needs to know the	OnGetDlgCode	Called for a control so the control can process	OnNcCalcSize	Called when the size and position of the client
	maximized position or dimensions, or the		arrow-key and TAB-key input itself.		area need to be calculated.
	minimum or maximum tracking size.	OnMeasureItem	Called for an owner-draw child combo box, list	OnNcCreate	Called prior to OnCreate when the nonclient
OnIconEraseBkgnd	Called when CWnd is minimized (iconic) and		box, or menu item when the control is created.		area is being created.
omeonExuseDikgitu	the background of the icon must be filled		CWnd informs Windows of the dimensions of	OnNc Destroy	Called when the nonclient area is being
	before painting the icon.		the control.	onrebestoy	destroyed.
OnKillFocus	Called immediately before CWnd loses the	SendChildNotifyLas	Provides a notification message to a child	OnNcHitTest	Called by Windows every time the mouse is
<u>Onrenn ocus</u>	input focus.	tMsg	window, from the parent window, so the child	Onternetest	moved if CWnd contains the cursor or has
OnMenuChar	Called when the user presses a menu	uvisg	window, non the parent window, so the clind window can handle a task.		captured mouse input with SetCapture .
Onvicinucinal	mnemonic character that doesn't match any of	ReflectChildNotify	Helper function which reflects a message to its	OnNcLButtonDblCl	Called when the user double-clicks the left
	the predefined mnemonics in the current menu.	Kenecterindivolity	source.	b	mouse button while the cursor is within a
OnMenuSelect	Called when the user selects a menu item.	OnWndMsg	Indicates if a windows message was handled.	<u>A</u>	nonclient area of CWnd
OnMove	Called after the position of the CWnd has been	ReflectLastMsg		OnOnNcLButtonDo	Called when the user presses the left mouse
Oliviove		OnVKeyToItem	Reflects the last message to the child window.		button while the cursor is within a nonclient
OnMoving	changed.	Onvkeyröhem	Called by a list box owned by CWnd in	wn	area of CWnd .
	Indicates that a user is moving a CWnd object.		response to a <u>WM_KEYDOWN</u> message.	ONLD # U	
OnDeviceChange	Notifies an application or device driver of a	<u>OnChar</u>	Called when a keystroke translates to a	OnNcLButtonUp	Called when the user releases the left mouse
	change to the hardware configuration of a		nonsystem character.		button while the cursor is within a nonclient
	device or the computer.	<u>OnDeadChar</u>	Called when a keystroke translates to a		area of CWnd .
OnStyleChanged	Indicates that the <u>::SetWindowLong</u> Windows		nonsystem dead character (such as accent	OnNcMButtonDblC	Called when the user double-clicks the middle
	function has changed one or more of the		characters).	<u>lk</u>	mouse button while the cursor is within a
	window's styles.	<u>OnHScroll</u>	Called when the user clicks the horizontal		nonclient area of CWnd
OnStyleChanging	Indicates that the <u>::SetWindowLong</u> Windows		scroll bar of CWnd .	OnNcMButtonDow	Called when the user presses the middle mouse
	function is about to change one or more of the	<u>OnKeyDown</u>	Called when a nonsystem key is pressed.	<u>n</u>	button while the cursor is within a nonclient
	window's styles.	<u>OnKeyUp</u>	Called when a nonsystem key is released.		area of CWnd .
<u>OnPaint</u>	Called to repaint a portion of the window.	OnLButtonDblClk	Called when the user double-clicks the left	OnNcMButtonUp	Called when the user releases the middle
<u>OnParentNotify</u>	Called when a child window is created or		mouse button.		mouse button while the cursor is within a
	destroyed, or when the user clicks a mouse	OnLButtonDown	Called when the user presses the left mouse		nonclient area of CWnd.
	button while the cursor is over the child		button.	OnNcMouseMove	Called when the cursor is moved within a
	window.	<u>OnLButtonUp</u>	Called when the user releases the left mouse		nonclient area of CWnd.
OnQueryDragIcon	Called when a minimized (iconic) CWnd is		button.	OnNcPaint	Called when the nonclient area needs painting.
	about to be dragged by the user.	OnMButtonDblClk	Called when the user double-clicks the middle	OnNcRButtonDblCl	Called when the user double-clicks the right
OnQueryEndSessio	Called when the user chooses to end the		mouse button.	<u>k</u>	mouse button while the cursor is within a
<u>n</u>	Win dows session.	OnMButtonDown	Called when the user presses the middle mouse		nonclient area of CWnd.
OnQueryNewPalett	Informs CWnd that it is about to receive the		button.	OnNcRButtonDown	Called when the user presses the right mouse
e	input focus.	OnMButtonUp	Called when the user releases the middle		button while the cursor is within a nonclient
OnQueryOpen	Called when CWnd is an icon and the user	<u>_</u>	mouse button.		area of CWnd .
	requests that the icon be opened.	OnMouseActivate	Called when the cursor is in an inactive	OnNcRButtonUp	Called when the user releases the right mouse
OnSetFocus	Called after CWnd gains the input focus.		window and the user presses a mouse button.		button while the cursor is within a nonclient
OnShowWindow	Called when CWnd is to be hidden or shown.	OnMouseMove	Called when the mouse cursor moves.		area of CWnd .
OnSize	Called after the size of CWnd has changed.	OnMouseWheel	Called when a user rotates the mouse wheel.	OnMDIActivate	Called when an MDI child window is activated
OnSizing	Indicates that the user is resizing the rectangle.	511110430 1111001	Uses Windows NT 4.0 message handling.	Smillen fourture	or deactivated.
OnStyleChanged	Indicates that one or more of the window's	OnRegisteredMouse	Called when a user rotates t he mouse wheel.	OnAskCbFormatNa	Called by a Clipboard viewer application when
onstyteenangeu	styles has changed.	Wheel	Uses Windows 95 and Windows NT 3.51	me	a Clipboard owner will display the Clipboard
OnStyleChanging	Indicates that one or more of the window's	<u> </u>	message-handling.	<u>me</u>	contents.
onstyleenanging	styles is about to change.	OnRButtonDblClk	Called when the user double-clicks the right	OnChangeCbChain	Notifies that a specified window is being
	styles is about to change.	SIRBUIDICIK	Canea when the user double-eneks the right	<u>Unenangeettenalli</u>	rounes that a specified window is being

	removed from the chain.
<u>OnDestroyClipboar</u>	Called when the Clipboard is emptied through
d	a call to the Windows EmptyClipboard
-	function.
OnDrawClipboard	Called when the contents of the change.
OnHScrollClipboar	Called when a Clipboard owner should scroll
d	the Clipboard image, invalidate the appropriate
-	section, and update the scroll-bar values.
OnPaintClipboard	Called when the client area of the Clipboard
	viewer needs repainting.
OnRenderAllFormat	Called when the owner application is being
<u>s</u>	destroyed and needs to render all its formats.
_ OnRenderFormat	Called for the Clipboard owner when a
	particular format with delayed rendering needs
	to be rendered.
OnSizeClipboard	Called when the size of the client area of the
ononeenpeend	Clipboard-viewer window has changed.
OnVScrollClipboar	Called when the owner should scroll the
d	Clipboard image, invalidate the appropriate
<u>u</u>	
On Entern Manual and	section, and update the scroll-bar values.
<u>OnEnterMenuLoop</u>	Called when a menu modal loop has been
	entered.
<u>OnExitMenuLoop</u>	Called when a menu modal loop has been
	exited.
CDialog	
CDialog	Constructs a CDialog object.
Create	Initializes the CDialog object. Creates a
	modeless dialog box and attaches it to the
	CDialog object.
C I I I	

CreateIndirect	Creates a modeless dialog box from a dialog-
	box template in memory (not resource-based).
InitModalIndirect	Creates a modal dialog box from a dialog box
	template in memory (not resource-based). The
	parameters are stored until the function
	DoModal is called.
DoModal	Calls a modal dialog box and returns when
	done.
MapDialogRect	Converts the dialog-box units of a rectangle to
	screen units.
<u>NextDlgCtrl</u>	Moves the focus to the next dialog-box control
	in the dialog box.
PrevDlgCtrl	Moves the focus to the previous dialog-box
	control in the dialog box.
GotoDlgCtrl	Moves the focus to a specified dialog-box
	control in the dialog box.
SetDefID	Changes the default pushbutton control for a
	dialog box to a specified pushbutton.
<u>GetDefID</u>	Gets the ID of the default pushbutton control
	for a dialog box.
SetHelpID	Sets a context-sensitive help ID for the dialog
	box.
EndDialog	Closes a modal dialog box.
<u>OnInitDialog</u>	Override to augment dialog-box initialization.
<u>OnSetFont</u>	Override to specify the font that a dialog-box
	control is to use when it draws text.
<u>OnOK</u>	Override to perform the OK button action in a
	modal dialog box. The default closes the dialog
	box and DoModal returns IDOK .
<u>OnCancel</u>	Override to perform the Cancel button or ESC
	key action. The default closes the dialog box

CFileDialog	
<u>m_ofn</u>	The Windows OPENFILENAME structure.
	Provides access to basic file dialog box
	parameters.
CFileDialog	Constructs a CFileDialog object.
<u>DoModal</u>	Displays the dialog box and allows the user to make a selection.
GetPathName	Returns the full path of the selected file.
GetFileName	Returns the filename of the selected file.
<u>GetFileExt</u>	Returns the file extension of the selected file.
GetFileTitle	Returns the title of the selected file.
GetNextPathName	Returns the full path of the next selected file.
GetReadOnlyPref	Returns the read-only status of the selected file.
GetStartPosition	Returns the position of the first element of the
	filename list.
OnShareViolation	Called when a share violation occurs.
<u>OnFileNameOK</u>	Called to validate the filename entered in the
	dialog box.
OnLBSelChangedN	Called when the list box selection changes.
<u>otify</u>	
<u>OnInitDone</u>	Called to handle the WM_NOTIFY
	CDN_INITDONE message.
OnFileNameChange	Called to handle the WM_NOTIFY
	CDN_SELCHANGE message.
OnFolderChange	Called to handle the WM_NOTIFY
0	CDN_FOLDERCHANGE message.
OnTypeChange	Called to handle the WM_NOTIFY
	CDN_TYPECHANGE message.

CFontDialog

Cronibialog	
<u>m_cf</u>	A structure used to customize a CFontDialog
	object.
CFontDialog	Constructs a CFontDialog object.
<u>DoModal</u>	Displays the dialog and allows the user to make
	a selection.
GetCurrentFont	Retrieves the name of the currently selected
	font.
GetFaceName	Returns the face name of the selected font.
GetStyleName	Returns the style name of the selected font.
GetSize	Returns the point size of the selected font.
<u>GetColor</u>	Returns the color of the selected font.
GetWeight	Returns the weight of the selected font.
IsStrikeOut	Determines whether the font is displayed with
	strikeout.
IsUnderline	Determines whether the font is underlined.
IsBold	Determines whether the font is bold.
IsItalic	Determines whether the font is italic.

CColorDialog

	A structure and the sector is the setting of
<u>m_cc</u>	A structure used to customize the settings of
	the dialog box.
<u>CColorDialog</u>	Constructs a CColorDialog object.
<u>DoModal</u>	Displays a color dialog box and allows the user
	to make a selection.
GetColor	Returns a COLORREF structure containing
	the values of the selected color.
GetSavedCustomCo	Retrieves custom colors created by the user.
<u>lors</u>	

SetCurrentColor	Forces the current color selection to the
OnColorOK	specified color. Override to validate the color entered into the dialog box.

CPrintDialog

<u>m_pd</u>	A structure used to customize a CPrintDialog
	object.
CPrintDialog	Constructs a CPrintDialog object.
CreatePrinterDC	Creates a printer device context without
	displaying the Print dialog box.
<u>DoModal</u>	Displays the dialog box and allows the user to
	make a selection.
GetCopies	Retrieves the number of copies requested.
GetDefaults	Retrieves device defaults without displaying a
	dialog box.
GetDeviceName	Retrieves the name of the currently selected
	printer device.
GetDevMode	Retrieves the DEVMODE structure.
GetDriverName	Retrieves the name of the currently selected
	printer driver.
GetFromPage	Retrieves the starting page of the print range.
GetToPage	Retrieves the ending page of the print range.
GetPortName	Retrieves the name of the currently selected
	printer port.
GetPrinterDC	Retrieves a handle to the printer device context.
PrintAll	Determines whether to print all pages of the
	document.
PrintCollate	Determines whether collated copies are
	requested.
PrintRange	Determines whether to print only a specified
	range of pages.
PrintSelection	Determines whether to print only the currently
	selected items.

CFindReplaceDialog

A structure used to customize a
CFindReplaceDialog object.
Call this function to construct a
CFindReplaceDialog object.
Creates and displays a CFindReplaceDialog
dialog box.
Call this function to determine whether the
user wants to find the next occurrence of the
find string.
Call this function to retrieve the
FINDREPLACE structure in your registered
message handler.
Call this function to retrieve the current find
string.
Call this function to retrieve the current replace
string.
Call this function to determine whether the
dialog box is terminating.
Call this function to determine whether the
user wants to match the case of the find string
exactly.
Call this function to determine whether the
user wants to match entire words only.
Call this function to determine whether the

ReplaceCurrent	user wants all occurrences of the string to be replaced. Call this function to determine whether the user wants the current word to be replaced.
<u>SearchDown</u>	Call this function to determine whether the user wants the search to proceed in a downward direction.
CStatic	
<u>CStatic</u>	Constructs a CStatic object.
Create	Creates the Windows static control and attaches it to the CStatic object.
<u>SetBitmap</u>	Specifies a bitmap to be displayed in the static control.
<u>GetBitmap</u>	Retrieves the handle of the bitmap previously set with SetBitmap.
<u>SetIcon</u>	Specifies an icon to be displayed in the static control.
GetIcon	Retrieves the handle of the icon previously set with SetIcon.
<u>SetCursor</u>	Specifies a cursor image to be displayed in the static control.
<u>GetCursor</u>	Retrieves the handle of the cursor image previously set with SetCursor.
SetEnhMetaFile	Specifies an enhanced metafile to be displayed in the static control.
GetEnhMetaFile	Retrieves the handle of the enhanced metafile previously set with <u>SetEnhMetaFile</u> .

CButton	
CButton	Constructs a CButton object.
Create	Creates the Windows button control and
	attaches it to the CButton object.
GetState	Retrieves the check state, highlight state, and
	focus state of a button control.
SetState	Sets the highlighting state of a button control.
GetCheck	Retrieves the check state of a button control.
SetCheck	Sets the check state of a button control.
GetButtonStyle	Retrieves information about the button control
	style.
SetButtonStyle	Changes the style of a button.
GetIcon	Retrieves the handle of the icon previously set
	with <u>SetIcon</u> .
SetIcon	Specifies an icon to be displayed on the button.
GetBitmap	Retrieves the handle of the bitmap previously
	set with <u>SetBitmap</u> .
<u>SetBitmap</u>	Specifies a bitmap to be displayed on the
	button.
GetCursor	Retrieves the handle of the cursor image
	previously set with <u>SetCursor</u> .
SetCursor	Specifies a cursor image to be displayed on the
	button.
DrawItem	Override to draw an owner-drawn CButton
	object.
	·
CEdit	
CLUIT	

<u>CEdit</u>	Constructs a CEdit control object.
Create	Creates the Windows edit control and attaches
	it to the CEdit object.
CanUndo	Determines whether an edit-control operation

GetLineCount	Retrieves the number of lines in a multiple-line edit control.
GetModify	Determines whether the contents of an edit control have been modified.
SetModify	Sets or clears the modification flag for an edit control.
GetRect	Gets the formatting rectangle of an edit control.
<u>GetSel</u>	Gets the starting and ending character positions of the current selection in an edit control.
GetHandle	Retrieves a handle to the memory currently allocated for a multiple-line edit control.
<u>SetHandle</u>	Sets the handle to the local memory that will be used by a multiple-line edit control.
SetMargins	Sets the left and right margins for this CEdit.
GetMargins Soft imitTout	Gets the left and right margins for this CEdit . Sets the maximum amount of text this CEdit
<u>SetLimitText</u>	can contain.
<u>GetLimitText</u>	Gets the maximum amount of text this CEdit can contain.
PosFromChar	Retrieves the coordinates of the upper-left corner of a specified character index.
CharFromPos	Retrieves the line and character indices for the character closest to a specified position.
GetLine	Retrieves a line of text from an edit control.
GetPasswordChar	Retrieves the password character displayed in
CatEirstVisibleLine	an edit control when the user enters text.
<u>GetFirstVisibleLine</u>	Determines the topmost visible line in an edit control.
EmptyUndoBuffer	Resets (clears) the undo flag of an edit control.
FmtLines	Sets the inclusion of soft line-break characters
T :	on or off within a multiple-line edit control.
<u>LimitText</u>	Limits the length of the text that the user may enter into an edit control.
LineFromChar	Retrieves the line number of the line that
	contains the specified character index.
LineIndex	Retrieves the character index of a line within a multiple-line edit control.
LineLength	Retrieves the length of a line in an edit control.
LineScroll	Scrolls the text of a multiple-line edit control.
ReplaceSel	Replaces the current selection in an edit control with the specified text.
SetPasswordChar	Sets or removes a password character displayed in an edit control when the user enters text.
<u>SetRect</u>	Sets the formatting rectangle of a multiple-line edit control and updates the control.
<u>SetRectNP</u>	Sets the formatting rectangle of a multiple-line edit control without redrawing the control
	window.
<u>SetSel</u>	Selects a range of characters in an edit control.
<u>SetTabStops</u>	Sets the tab stops in a multiple-line edit control.
SetReadOnly	Sets the read-only state of an edit control.
<u>Undo</u>	Reverses the last edit -control operation.
Clear	Deletes (clears) the current selection (if any) in
Copy	the edit control. Copies the current selection (if any) in the edit
<u></u>	control to the Clipboard in CF_TEXT format.
Cut	Deletes (cuts) the current selection (if any) in the edit control and copies the deleted text to
	the clink and in CE TEXT format

the Clipboard in **CF_TEXT** format.

Inserts the data from the Clipboard into the edit control at the current cursor position. Data is inserted only if the Clipboard contains data in **CF_TEXT** format.

CListBox **CListBox**

CListBox	
CListBox	Constructs a CListBox object.
Create	Creates the Windows list box and attaches it to
oreate	the CListBox object.
Table	5
InitStorage	Preallocates blocks of memory for list box
	items and strings.
<u>GetCount</u>	Returns the number of strings in a list box.
GetHorizontalExtent	Returns the width in pixels that a list box can
	be scrolled horizontally.
SetHorizontalExtent	Sets the width in pixels that a list box can be
SetHonzontalExtent	
	scrolled horizontally.
<u>GetTopIndex</u>	Returns the index of the first visible string in a
	list box.
<u>SetTopIndex</u>	Sets the zero-based index of the first visible
	string in a list box.
GetItemData	Returns the 32-bit value associated with the
Gentembata	
	list-box item.
<u>GetItemDataPtr</u>	Returns a pointer to a list-box item.
<u>SetItemData</u>	Sets the 32-bit value associated with the list -
	box item.
SetItemDataPtr	Sets a pointer to the list -box item.
GetItemRect	Returns the bounding rectangle of the list-box
Gentenikeet	
	item as it is currently displayed.
ItemFromPoint	Returns the index of the list -box item nearest a
	point.
SetItemHeight	Sets the height of items in a list box.
GetItemHeight	Determines the height of items in a list box.
GetSel	Returns the selection state of a list -box item.
<u>GetText</u>	Copies a list-box item into a buffer.
<u>GetTextLen</u>	Returns the length in bytes of a list -box item.
SetColumnWidth	Sets the column width of a multicolumn list
	box.
<u>SetTabStops</u>	Sets the tab-stop positions in a list box.
GetLocale	Retrieves the locale identifier for a list box.
SetLocale	Sets the locale identifier for a list box.
GetCurSel	Returns the zero-based index of the currently
GetCuiser	
	selected string in a list box.
<u>SetCurSel</u>	Selects a list -box string.
<u>SetSel</u>	Selects or deselects a list -box item in a
	multiple-selection list box.
GetCaretIndex	Determines the index of the item that has the
	focus rectangle in a multiple-selection list box.
SetCaretIndex	Sets the focus rectangle to the item at the
SetCaretifidex	
~ ~ . ~	specified index in a multiple-selection list box.
GetSelCount	Returns the number of strings currently
	selected in a multiple-selection list box.
GetSelItems	Returns the indices of the strings currently
	selected in a list box.
SelItemRange	Selects or deselects a range of strings in a
Sentemitunge	multiple-selection list box.
SetAnchorIndex	Sets the anchor in a multiple-selection list box
	to begin an extended selection.
GetAnchorIndex	Retrieves the zero-based index of the current
	anchor item in a list box.
AddString	Adds a string to a list box.
DeleteString	Deletes a string from a list box.
2. Sietessumg	zeretes a sump nom a not box.

InsertString	Inserts a string at a specific location in a list
	box.
ResetContent	Clears all the entries from a list box.
<u>Dir</u>	Adds filenames from the current directory to a
	list box.
FindString	Searches for a string in a list box.
FindStringExact	Finds the first list -box string that matches a specified string.
SelectString	Searches for and selects a string in a single- selection list box.
DrawItem	Called by the framework when a visual aspect of an owner-draw list box changes.
MeasureItem	Called by the framework when an owner-draw
	list box is created to determine list -box
	dimensions.
CompareItem	Called by the framework to determine the
	position of a new item in a sorted owner-draw
	list box.
DeleteItem	Called by the framework when the user deletes
	an item from an owner-draw list box.
VKeyToItem	Override to provide custom WM_KEYDOWN
	handling for list boxes with the
	LBS_WANTKEYBOARDINPUT style set.
CharToItem	Override to provide custom WM_CHAR
	handling for owner-draw list boxes which don't
	have strings.
	6

CComboBox

Constructs a CComboBox object.
5
Creates the combo box and attaches it to the
CComboBox object.
Preallocates blocks of memory for items and
strings in the list-box portion of the combo
box.
Retrieves the number of items in the list box of
a combo box.
Retrieves the index of the currently selected
item, if any, in the list box of a combo box.
Selects a string in the list box of a combo box.
Gets the starting and ending character positions
of the current selection in the edit control of a
combo box.
Selects characters in the edit control of a
combo box.
Sets the 32-bit value associated with the
specified item in a combo box.
Sets the 32-bit value associated with the
specified item in a combo box to the specified
pointer (void *).
Retrieves the application-supplied 32-bit value
associated with the specified combo-box item.
Retrieves the application-supplied 32-bit value
associated with the specified combo-box item
as a pointer (void *).
Returns the index of the first visible item in the
list-box portion of the combo box.
Sets the width in pixels that the list-box portion
of the combo box can be scrolled horizontally.
Returns the width in pixels that the list -box
portion of the combo box can be scrolled
horizontally.

SetDroppedWidth	Sets the minimum allowable width for the drop-down list-box portion of a combo box.
GetDroppedWidth	Retrieves the minimum allowable width for the drop-down list-box portion of a combo box.
Clear	Deletes (clears) the current selection (if any) in the edit control.
Copy	Copies the current selection (if any) onto the
Cut	Clipboard in CF_TEXT format. Deletes (cuts) the current selection, if any, in the edit control and copies the deleted text onto
Paste	the Clipboard in CF_TEXT format. Inserts the data from the Clipboard into the edit control at the current cursor position. Data is inserted only if the Clipboard contains data in
LimitText	CF_TEXT format. Limits the length of the text that the user can
SetItemHeight	enter into the edit control of a combo box. Sets the height of list items in a combo box or
	the height of the edit -control (or static -text) portion of a combo box.
GetItemHeight	Retrieves the height of list items in a combo box.
<u>GetLBText</u> <u>GetLBTextLen</u>	Gets a string from the list box of a combo box. Gets the length of a string in the list box of a
ShowDropDown	combo box. Shows or hides the list box of a combo box that has the CBS_DROPDOWN or
	CBS DROPDOWNLIST style.
<u>GetDroppedControl</u> <u>Rect</u>	Retrieves the screen coordinates of the visible (dropped-down) list box of a drop-down combo
GetDroppedState	box. Determines whether the list box of a drop- down combo box is visible (dropped down).
SetExtendedUI	Selects either the default user interface or the extended user interface for a combo box that
<u>GetExtendedUI</u>	has the CBS_DROPDOWN or CBS_DROPDOWNLIST style. Determines whether a combo box has the default user interface or the extended user interface.
<u>GetLocale</u> <u>SetLocale</u>	Retrieves the locale identifier for a combo box. Sets the locale identifier for a combo box.
AddString	Adds a string to the end of the list in the list box of a combo box or at the sorted position for
DeleteString	list boxes with the CBS_SORT style. Deletes a string from the list box of a combo box.
InsertString	Inserts a string into the list box of a combo
ResetContent	box. Removes all items from the list box and edit control of a combo box.
<u>Dir</u>	Adds a list of filenames to the list box of a combo box.
FindString	Finds the first string that contains the specified prefix in the list box of a combo box.
FindStringExact	Finds the first list -box string (in a combo box) that matches the specified string.
<u>SelectString</u>	Searches for a string in the list box of a combo box and, if the string is found, selects the string in the list box and copies the string to the edit control.

DrawItem	Called by the framework when a visual aspect
	of an owner-draw combo box changes.
MeasureItem	Called by the framework to determine combo
	box dimensions when an owner-draw combo
	box is created.
<u>CompareItem</u>	Called by the framework to determine the
	relative position of a new list item in a sorted
	owner-draw combo box.
<u>DeleteItem</u>	Called by the framework when a list item is
	deleted from an owner-draw combo box.
CToolBar	
CToolBar	Constructs a CToolBar object.
Create	Creates the Windows toolbar and attaches it to
	the CToolBar object.
<u>CreateEx</u>	Creates a CToolBar object with additional
	styles for the embedded CToolBarCtrl object.
SetSizes	Sets the sizes of buttons and their bitmaps.
SetHeight	Sets the height of the toolbar.
LoadToolBar	Loads a toolbar resource created with the
	resource editor.
<u>LoadBitmap</u>	Loads the bitmap containing bitmap-button
-	images.
<u>SetBitmap</u>	Sets a bitmapped image.
SetButtons [Value]	Sets button styles and an index of button
	images within the bitmap.
CommandToIndex	Returns the index of a button with the given
	command ID.
<u>GetItemID</u>	Returns the command ID of a button or
	separator at the given index.
GetItemRect	Retrieves the display rectangle for the item at
	the given index.
GetButtonStyle	Retrieves the style for a button.
SetButtonStyle	Sets the style for a button.
GetButtonInfo	Retrieves the ID, style, and image number of a
	button.
SetButtonInfo	Sets the ID, style, and image number of a
	button.
<u>GetButtonText</u>	Retrieves the text that will appear on a button.
SetButtonText	Sets the text that will appear on a button.
GetToolBarCtrl	Allows direct access to the underlyin g common
	control.
CStatusBar	
<u>CStatusBar</u>	Constructs a CStatusBar object.
Create	Creates the status bar, attaches it to the
	CStatusBar object, and sets the initial font and
	bar height.
<u>CreateEx</u>	Creates a CStatusBar object with additional
	styles for the embedded CStatusBarCtrl
	object.
SetIndicators	Sets indicator IDs.
CommandToIndex	Gets index for a given indicator ID.
CatItamID	Cate indicator ID for a given index

Gets indicator ID for a given index. GetItemID GetItemRect Gets display rectangle for a given index. Gets indicator ID, style, and width for a given GetPaneInfo index.

<u>GetPaneStyle</u> GetPaneText GetStatusBarCtrl

Gets indicator style for a given index. Gets indicator text for a given index. Allows direct access to the underlying common control.

SetPaneStyle	Sets indicator style for a given index.	ExtractIcon	Creates an icon based on an image and mask in		or list view.
SetPaneText SetPaneInfo	Sets indicator text for a given index.	Duorri	an image list.	SetColumnWidth	Changes the width of a column in report view or list view.
SetPanenno	Sets indicator ID, style, and width for a given index.	<u>Draw</u>	Draws the image that is being dragged during a drag-and-drop operation.	GetCheck	Retrieves the current display status of the state
DrawItem	Called when a visual aspect of an owner-draw	SetOverlayImage	Adds the zero-based index of an image to the	OctCheck	image associated with an item.
Diawitein	status bar control changes.	setovenaynnage	list of images to be used as overlay masks.	SetCheck	Sets the the current display status of the state
	status bar control changes.	Сору	Copies an image within a CImageList object.	Beteneek	image associated with an item.
CScrollBar		DrawIndirect	Draws an image from an image list.	GetViewRect	Retrieves the bounding rectangle of all items in
		SetDragCursorImag	Creates a new drag image.		the list view control.
CScrollBar Create	Constructs a CScrollBar object.	e	croates a new and mager	GetTextColor	Retrieves the text color of a list view control.
Create	Creates the Windows scroll bar and attaches it to the CScrollBar object.	GetDragImage	Gets the temporary image list that is used for	SetTextColor	Sets the text color of a list view control.
GetScrollPos	Retrieves the current position of a scroll box.		dragging.	GetTextBkColor	Retrieves the text background color of a list
SetScrollPos	Sets the current position of a scroll box.	Read	Reads an image list from an archive.		view control.
GetScrollRange	Retrieves the current minimum and maximum	Write	Writes an image list to an archive.	SetTextBkColor	Sets the background color of text in a list view
<u>Octocronikange</u>	scroll-bar positions for the given scroll bar.	BeginDrag	Begins dragging an image.		control.
SetScrollRange	Sets minimum and maximum position values	DragEnter	Locks updates during a drag operation and	GetTopIndex	Retrieves the index of the topmost visible item.
betberomtunge	for the given scroll bar.		displays the drag image at a specified position.	GetCountPerPage	Calculates the number of items that can fit
ShowScrollBar	Shows or hides a scroll bar.	<u>EndDrag</u>	Ends a drag operation.		vertically in a list view control.
EnableScrollBar	Enables or disables one or both arrows of a	DragLeave	Unlocks the window and hides t he drag image	GetOrigin	Retrieves the current view origin for a list view
	scroll bar.		so that the window can be updated.		control.
SetScrollInfo	Sets information about the scroll bar.	DragMove	Moves the image that is being dragged during a	SetItemState	Changes the state of an item in a list view
GetScrollInfo	Retrieves information about the scroll bar.		drag-and-drop operation.		control.
GetScrollLimit	Retrieves the limit of the scroll bar	DragShowNolock	Shows or hides the drag image during a drag	<u>GetItemState</u>	Retrieves the state of a list view item.
			operation, without locking the window.	GetItemText	Retrieves the text of a list view item or
CImageList					subitem.
m hImageList	A handle containing the image list attached to	CListCtrl		<u>SetItemText</u>	Changes the text of a list view item or subitem.
<u>m_mmagebist</u>	this object.	<u>CListCtrl</u>	Constructs a CListCtrl object.	SetItemCount	Prepares a list view control for adding a large
CImageList	Constructs a CImageList object.	<u>Create</u>	Creates a list control and attaches it to a		number of items.
Create	Initializes an image list and attaches it to a		CListCtrl object.	<u>SetItemData</u> GetItemData	Sets the item's application-specific value.
	CImageList object.	GetBkColor	Retrieves the background color of a list view	GettemData	Retrieves the application-specific value associated with an item.
GetSafeHandle	Retrieves m_hImageList.		control.	GetSelectedCount	Retrieves the number of selected items in the
operator	Returns the HIMAGELIST attached to the	SetBkColor	Sets the background color of the list view	GetSelectedCoulit	list view control.
HIMAGELIST	CImageList.		control.	SetColumnOrderArr	Sets the column order (left to right) of a list
FromHandle	Returns a pointer to a CImageList object when	GetImageList	Retrieves the handle of an image list used for	ay	view control.
	given a handle to a device context. If a	0 T T	drawing list view items.	<u>GetColumnOrderAr</u>	Retrieves the column order (left to right) of a
	CImageList object is not attached to the	SetImageList	Assigns an image list to a list view control.	ray	list view control.
	handle, a temporary CImage List object is	GetItemCount	Retrieves the number of items in a list view	SetIconSpacing	Sets the spacing between icons in a list view
	created and attached.	GetItem	control. Retrieves a list view item's attributes.	<u></u>	control.
FromHandlePerman	Returns a pointer to a CImageList object when	SetItem		GetHeaderCtrl	Retrieves the header control of a list view
ent	given a handle to an image list. If a	<u>GetCallbackMask</u>	Sets some or all of a list view item's attributes.		control.
	CImageList object is not attached to the	GetCallbackWask	Retrieves the callback mask for a list view control.	GetHotCursor	Retrieves the cursor used when hot tracking is
	handle, NULL is returned.	SetCallbackMask	Sets the callback mask for a list view control.		enabled for a list view control.
<u>DeleteTempMap</u>	Called by the <u>CWinApp</u> idle-time handler to	GetNextItem	Searches for a list view item with specified	SetHotCursor	Sets the cursor used when hot tracking is
	delete any temporary CImageList object	Gentextitem	properties and with specified relationship to a		enabled for a list view control.
C.J. C. J	created by FromHandle .		given item.	GetSubItemRect	Retrieves the bounding rectangle of an item in
GetImageCount	Retrieves the number of images in an image	GetFirstSelectedIte	Retrieves the position of the first selected list		a list view control.
SetBkColor	list. Sate the background color for an image list	mPosition	view item in a list view control.	GetHotItem	Retrieves the list view item currently under the
<u>GetBkColor</u>	Sets the background color for an image list.	GetNextSelectedIte	Retrieves the next selected list view item for		cursor.
GelbrColor	Retrieves the current background color for an image list.	<u>m</u>	iterating.	<u>SetHotItem</u>	Sets the current hot item of a list view control.
GetImageInfo	Retrieves information about an image.	GetItemRect	Retrieves the bounding rectangle for an item.	GetSelectionMark	Retrieves the selection mark of a list view
Attach	Attaches an image list to a CImageList object.	SetItemPosition	Moves an item to a specified position in a list		control.
Detach	Detaches an image list object from a		view control.	SetSelectionMark	Sets the selection mark of a list view control.
<u>iscuen</u>	CImageList object and returns a handle to an	GetIt emPosition	Retrieves the position of a list view item.	<u>GetExtendedStyle</u>	Retrieves the current extended styles of a list
	image list.	GetStringWidth	Determines the minimum column width		view control.
DeleteImageList	Deletes an image list.		necessary to display all of a given string.	<u>SetExtendedStyle</u>	Sets the current extended styles of a list view
SetImageCount	Resets the count of images in an image list.	GetEditControl	Retrieves the handle of the edit control used to		control.
Add	Adds an image or images to an image list.		edit an item's text.	SubItemHitTest	Determines which list view item, if any, is at a
Remove	Removes an image from an image list.	GetColumn	Retrieves the attributes of a control's column.	C - AW l- A	given position.
Replace	Replaces an image in an image list with a new	SetColumn	Sets the attributes of a list view column.	GetWorkAreas	Retrieves the current working areas of a list
	image.	GetColumnWidth	Retrieves the width of a column in report view		view control.
	image.				

GetNumberOfWork	Retrieves the current number of working areas
Areas	for a list view control.
SetItemCountEx	Sets the item count for a virtual list view
	control.
SetWorkAreas	Sets the area where icons can be displayed in a
	list view control.
ApproximateViewR	Determines the width and height required to
<u>ect</u>	display the items of a list view control.
GetBkImage	Retreives the current background image of a
	list view control.
SetBkImage	Sets the current background image of a list
	view control.
GetHoverTime	Retrieves the current hover time of a list view
	control.
SetHoverTime	Sets the current hover time of a list view
	control.
InsertItem	Inserts a new item in a list view control.
DeleteItem	Deletes an item from the control.
DeleteAllItems	Deletes all items from the control.
FindItem	Searches for a list view item having specified
	characteristics.
SortItems	Sorts list view items using an application-
	defined comparison function.
HitTest	Determines which list view item is at a
	specified position.
EnsureVisible	Ensures that an item is visible.
Scroll	Scrolls the content of a list view control.
RedrawItems	Forces a list view control to repaint a range of
	items.
<u>Update</u>	Forces the control to repaint a specified item.
Arrange	Aligns items on a grid.
EditLabel	Begins in-place editing of an item's text.
InsertColumn	Inserts a new column in a list view control.
DeleteColumn	Deletes a column from the list view control.
CreateDragImage	Creates a drag image list for a specified item.
DrawItem	Called when a visual aspect of an owner-draw
	control changes.

CSliderCtrl

oonder oth	
CSliderCtrl	Constructs a CSliderCtrl object.
Create	Creates a slider control and attaches it to a
	CSliderCtrl object.
GetLineSize	Retrieves the line size of a slider control.
SetLineSize	Sets the line size of a slider control.
GetPageSize	Retrieves the page size of a slider control.
SetPageSize	Sets the page size of a slider control.
GetRangeMax	Retrieves the maximum position for a slider.
GetRangeMin	Retrieves the minimum position for a slider.
GetRange	Retrieves the minimum and maximum
	positions for a slider.
SetRangeMin	Sets the minimum position for a slider.
SetRangeMax	Sets the maximum position for a slider.
SetRange	Sets the minimum and maximum positions for
	a slider.
GetSelection	Retrieves the range of the current selection.
SetSelection	Sets the range of the current selection.
GetChannelRect	Retrieves the size of the slider control's
	channel.
GetThumbRect	Retrieves the size of the slider control's thumb.
GetPos	Retrieves the current position of the slider.
SetPos	Sets the current position of the slider.
	-

GetNumTics	Retrieves the number of tick marks in a slider control
GetTicArray	Retrieves the array of tick mark positions for a slider control.
<u>GetTic</u>	Retrieves the position of the specified tick mark.
GetTicPos	Retrieves the position of the specified tick mark, in client coordinates.
SetTic	Sets the position of the specified tick mark.
SetTicFreq	Sets the frequency of tick marks per slider
	control increment.
<u>GetBuddy</u>	Retrieves the handle to a slider control buddy window at a given location.
SetBuddy	Assigns a window as the buddy window for a slider control.
C (T 1T)	
<u>GetToolTips</u>	Retrieves the handle to the tooltip control
	assigned to the slider control, if any.
SetToolTips	Assigns a tooltip control to a slider control.
SetTipSide	Positions a tooltip control used by a trackbar
<u>bernpolde</u>	control.
ClearSel	Clears the current selection in a slider control.
	Verifies that the position of a slider control is
<u>VerifyPos</u>	
CI T	between the minimum and maximum values.
<u>ClearTics</u>	Removes the current tick marks from a slider
	control.
CDC	
m_hDC	The output-device context used by this CDC
<u>III_IIDC</u>	
	object.
<u>m_hAttribDC</u>	The attribute device context used by this CDC
	object
	object.
<u>CDC</u>	Constructs a CDC object.
	Constructs a CDC object.
CreateDC	Constructs a CDC object. Creates a device context for a specific device.
	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific
CreateDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get
CreateDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a
CreateDC CreateIC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context.
CreateDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is
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<u>CreateDC</u> <u>CreateIC</u> <u>CreateCompatibleD</u> <u>C</u>	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated
<u>CreateDC</u> <u>CreateIC</u> <u>CreateCompatibleD</u> <u>C</u> <u>DeleteDC</u>	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object.
<u>CreateDC</u> <u>CreateIC</u> <u>CreateCompatibleD</u> <u>C</u>	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given
<u>CreateDC</u> <u>CreateIC</u> <u>CreateCompatibleD</u> <u>C</u> <u>DeleteDC</u>	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is
<u>CreateDC</u> <u>CreateIC</u> <u>CreateCompatibleD</u> <u>C</u> <u>DeleteDC</u>	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC
CreateDC CreateCompatibleD C DeleteDC FromHandle	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached.
<u>CreateDC</u> <u>CreateIC</u> <u>CreateCompatibleD</u> <u>C</u> <u>DeleteDC</u>	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to
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CreateDC CreateCompatibleD C DeleteDC FromHandle	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device
CreateDC CreateCompatibleD C DeleteDC FromHandle	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context.
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CreateDC CreateCompatibleD C DeleteDC FromHandle DeleteTempMap	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this
CreateDC CreateIC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this CDC object.
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CreateDC CreateICCreateCompatibleD CDeleteDCFromHandleDeleteTempMapAttachDetachSetAttribDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this CDC object. Detaches the Windows device context from this CDC object. Sets m_hAttribDC , the attribute device context.
CreateDC CreateICCreateCompatibleD CDeleteDCFromHandleDeleteTempMapAttachDetachSetAttribDCSetOutputDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this CDC object. Detaches the Windows device context from this CDC object. Sets m_hAttribDC , the attribute device context. Sets m_hDC , the output device context.
CreateDC CreateICCreateCompatibleD CDeleteDCFromHandleDeleteTempMapAttachDetachSetAttribDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this CDC object. Detaches the Windows device context from this CDC object. Sets m_hAttribDC , the attribute device context. Sets m_hDC , the output device context.
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CreateDC CreateICCreateICDeleteDCFromHandleDeleteTempMapAttachDetachSetAttribDCSetOutputDC ReleaseAttribDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this CDC object. Detaches the Windows device context from this CDC object. Sets m_hAttribDC , the attribute device context. Releases m_hAttribDC , the attribute device context.
CreateDC CreateICCreateCompatibleD CDeleteDCFromHandleDeleteTempMapAttachDetachSetAttribDCSetOutputDC	Constructs a CDC object. Creates a device context for a specific device. Creates an information context for a specific device. This provides a fast way to get information about the device without creating a device context. Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory. Deletes the Windows device context associated with this CDC object. Returns a pointer to a CDC object when given a handle to a device context. If a CDC object is not attached to the handle, a temporary CDC object is created and attached. Called by the CWinApp idle-time handler to delete any temporary CDC object created by FromHandle . Also detaches the device context. Attaches a Windows device context to this CDC object. Detaches the Windows device context from this CDC object. Sets m_hAttribDC , the attribute device context. Releases m_hAttribDC , the attribute device

GetCurrentBrush	CBitmap object. Returns a pointer to the currently selected
	CBrush object.
<u>GetCurrentFont</u>	Returns a pointer to the currently selected CFont object.
GetCurrentPalette	Returns a pointer to the currently selected CPalette object.
GetCurrentPen	Returns a pointer to the currently selected
GetWindow	CPen object. Returns the window associated with the display
CatSafaUda	device context.
GetSafeHdc SaveDC	Returns <u>m_hDC</u> , the output device context. Saves the current state of the device context.
RestoreDC	Restores the device context to a previous state
	saved with SaveDC .
<u>ResetDC</u>	Updates the m_hAttribDC device context.
GetDeviceCaps	Retrieves a specified kind of device-specific
	informat ion about a given display device's capabilities.
IsPrinting	Determines whether the device context is being
	used for printing.
GetBrushOrg	Retrieves the origin of the current brush.
SetBrushOrg	Specifies the origin for the next brush selected
E OLI I	into a device context.
EnumObjects	Enumerates the pens and brushes available in a
SelectObject	device context. Selects a GDI drawing object such as a pen.
<u>SelectStockObject</u>	Selects one of the predefined stock pens,
Scielistockobject	brushes, or fonts provided by Windows.
GetNearestColor	Retrieves the closest logical color to a specified
	logical color that the given device can
	represent.
SelectPalette	Selects the logical palette.
RealizePalette	Maps palette entries in the current logical
THE COL	palette to the system palette.
UpdateColors	Updates the client area of the device context by
	matching the current colors in the client area to the system palette on a pixel-by-pixel basis.
GetHalftoneBrush	Retrieves a halftone brush.
GetBkColor	Retrieves the current background color.
SetBkColor	Sets the current background color.
GetBkMode	Retrieves the background mode.
SetBkMode_	Sets the background mode.
GetPolyFillMode	Retrieves the current polygon-filling mode.
SetPolyFillMode	Sets the polygon-filling mode.
GetROP2	Retrieves the current drawing mode.
SetROP2 GetStretchBltMode	Sets the current drawing mode. Retrieves the current bitmap-stretching mode.
SetStretchBltMode	Sets the bitmap-stretching mode.
GetTextColor	Retrieves the current text color.
SetTextColor	Sets the text color.
GetColorAdjustmen	Retrieves the color adjustment values for the
<u>t</u>	device context.
SetColorAdjustment	Sets the color adjustment values for the device
CatMan Mad	context using the specified values.
GetMapMode SetMapMode	Retrieves the current mapping mode.
<u>SetMapMode</u> GetViewportOrg	Sets the current mapping mode. Retrieves the x - and y-coordinates of the
<u>Get viewpoittoig</u>	viewport origin.
SetViewportOrg	Sets the viewport origin.
OffsetViewportOrg	Modifies the viewport origin relative to the

coordinates of the current viewport origin. GetViewportExt Retrieves the x - and y-extents of the viewport. SetViewportExt Sets the x - and v -extents of the viewport. ScaleViewportExt Modifies the viewport extent relative to the current values. GetWindowOrg Retrieves the x - and y-coordinates of the origin of the associated window. SetWindowOrg Sets the window origin of the device context. OffsetWindowOrg Modifies the window origin relative to the coordinates of the current window origin. GetWindowExt Retrieves the x - and y-extents of the associated window. SetWindowExt Sets the x - and y extents of the associated window. ScaleWindowExt Modifies the window extents relative to the current values. **DPtoHIMETRIC** Converts device units into **HIMETRIC** units. DPtoLP Converts device units into logical units. HIMETRICtoDP Converts **HIMETRIC** units into device units. HIMETRICtoLP Converts **HIMETRIC** units into logical units. LPtoDP Converts logical units into device units. LPtoHIMETRIC Converts logical units into **HIMETRIC** units. FillRgn Fills a specific region with the specified brush. FrameRgn Draws a border around a specific region using a brush. InvertRgn Inverts the colors in a region. PaintRgn Fills a region with the selected brush. SetBoundsRect Controls the accumulation of boundingrectangle information for the specified device context. GetBoundsRect Returns the current accumulated bounding rectangle for the specified device context. **GetClipBox** Retrieves the dimensions of the tightest bounding rectangle around the current clipping boundary. SelectClipRgn Combines the given region with the current clipping region by using the specified mode. ExcludeClipRect Creates a new clipping region that consists of the existing clipping region minus the specified rectangle. ExcludeUpdateRgn Prevents drawing within invalid areas of a window by excluding an updated region in the window from a clipping region. IntersectClipRect Creates a new clipping region by forming the intersection of the current region and a rectangle. OffsetClipRgn Moves the clipping region of the given device. **PtVisible** Specifies whether the given point is within the clipping region. **RectVisible** Determines whether any part of the given rectangle lies within the clipping region. GetCurrentPosition Retrieves the current position of the pen (in logical coordinates). Moves the current position. MoveTo LineTo Draws a line from the current position up to, but not including, a point. Draws an elliptical arc. Arc ArcTo Draws an elliptical arc. This function is similar to **Arc**, except that the current position is updated. Draws a line segment and an arc, and moves AngleArc

GetArcDirection	Returns the current arc direction for the device context.
SetArcDirection	Sets the drawing direction to be used for arc and rectangle functions.
<u>PolyDraw</u>	Draws a set of line segments and Bézier splines. This function updates the current
Polyline	position. Draws a set of line segments connecting the specified points.
PolyPolyline	Draws multiple series of connected line segments. The current position is neither used
PolylineTo	nor updated by this function. Draws one or more straight lines and moves the current position to the ending point of the last line.
PolyBezier	Draws one or more Bézier splines. The current position is neither used nor updated.
PolyBezierTo	Draws one or more Bézier splines, and moves the current position to the ending point of the last Bézier spline.
<u>FillRect</u>	Fills a given rectangle by using a specific brush.
FrameRect	Draws a border around a rectangle.
InvertRect	Inverts the contents of a rectangle.
DrawIcon	Draws an icon.
DrawDragRect	Erases and redraws a rectangle as it is dragged.
<u>FillSolidRect</u>	Fills a rectangle with a solid color.
Draw3dRect	
	Draws a three-dimensional rectangle.
DrawEdge	Draws the edges of a rectangle.
DrawFrameControl	Draw a frame control.
<u>DrawState</u>	Displays an image and applies a visual effect to
	indicate a state.
<u>Chord</u>	Draws a chord (a closed figure bounded by the
	intersection of an ellipse and a line segment).
DrawFocusRect	Draws a rectangle in the style used to indicate
	focus.
Ellipse	Draws an ellipse.
Pie	Draws a pie-shaped wedge.
Polygon	Draws a polygon consisting of two or more
	points (vertices) connected by lines.
PolyPolygon	Creates two or more polygons that are filled
<u>r oryr orygon</u>	using the current polygon-filling mode. The
Dolulino	polygons may be disjoint or they may overlap.
<u>Polyline</u>	Draws a polygon consisting of a set of line
	segments connecting specified points.
<u>Rectangle</u>	Draws a rectangle using the current pen and
	fills it using the current brush.
RoundRect	Draws a rectangle with rounded corners using
	the current pen and filled using the current
	brush.
PatBlt_	Creates a bit pattern.
BitBlt	Copies a bitmap from a specified device
	context.
StretchBlt	Moves a bitmap from a source rectangle and
Sactombre	device into a destination rectangle, stretching
	<u> </u>
	or compressing the bitmap if necessary to fit
C D I	the dimensions of the destination rectangle.
<u>GetPixel</u>	Retrieves the RGB color value of the pixel at

the specified point.

SetPixel	Sets the pixel at the specified point to the
<u>SetPixelV</u>	closest approximation of the specified color. Sets the pixel at the specified coordinates to the closest approximation of the specified color.
	SetPixelV is faster than SetPixel because it
	does not need to return the color value of the
	point actually painted.
<u>FloodFill</u>	Fills an area with the current brush.
ExtFloodFill	Fills an area with the current brush. Provides
	more flexibility than the <u>FloodFill</u> member
MaskDlt	function. Combines the color data for the source and
<u>MaskBlt</u>	destination bitmaps using the given mask and
	raster operation.
<u>PlgBlt</u>	Performs a bit -block transfer of the bits of
	color data from the specified rectangle in the
	source device context to the specified
	parallelogram in the given device context.
<u>TextOut</u>	Writes a character string at a specified location
	using the currently selected font.
ExtTextOut	Writes a character string within a rectangular
TabbedTextOut	region using the currently selected font. Writes a character string at a specified location,
TabbedTextOut	expanding tabs to the values specified in an
	array of tab-stop positions.
DrawText	Draws formatted text in the specified rectangle.
<u>GetTextExtent</u>	Computes the width and height of a line of text
	on the attribute device context using the current
	font to determine the dimensions.
<u>GetOutputTextExte</u>	Computes the width and height of a line of text
<u>nt</u>	on the output device context using the current
GetTabbedTextExte	font to determine the dimensions. Computes the width and height of a character
nt	string on the attribute device context.
GetOutputTabbedTe	Computes the width and height of a character
xtExtent	string on the output device context.
GrayString	Draws dimmed (grayed) text at the given
	location.
<u>GetTextAlign</u>	Retrieves the text-alignment flags.
<u>SetTextAlign</u> GetTextFace	Sets the text-alignment flags. Copies the typeface name of the current font
Ottextrace	into a buffer as a null-terminated string.
GetTextMetrics	Retrieves the metrics for the current font from
	the attribute device context.
GetOutputTextMetri	Retrieves the metrics for the current font from
<u>cs</u>	the output device context.
SetTextJustification	Adds space to the break characters in a string.
<u>GetTextCharacterEx</u>	Retrieves the current setting for the amount of
tra SetTextCharacterEx	intercharacter spacing. Sets the amount of intercharacter spacing.
tra	Sets the amount of interenaracter spacing.
GetFontData	Retrieves font metric information from a
	scalable font file. The information to retrieve is
	identified by specifying an offset into the font
	file and the length of the information to return.
GetKerningPairs	Retrieves the character kerning pairs for the
	font that is currently selected in the specified
	device context.

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GetGlvphOutline

GetOutlineTextMetr Retrieves font metric information for TrueType fonts.

Retrieves the outline curve or bitmap for an

	outline character in the current font.
GetCharABCWidth	Retrieves the widths, in logical units, of
<u>s</u>	consecutive characters in a given range from
	the current font.
GetCharWidth	Retrieves the fractional widths of consecutive
	characters in a given range from the current
	font.
GetOutputCharWidt	Retrieves the widths of individual characters in
<u>h</u>	a consecutive group of characters from the
	current font using the output device context.
SetMapperFlags	Alters the algorithm that the font mapper uses
	when it maps logical fonts to physical fonts.
<u>GetAspectRatioFilte</u>	Retrieves the setting for the current aspect -ratio
<u>r</u>	filter.
<u>QueryAbort</u>	Calls the <u>AbortProc</u> callback function for a
	printing application and queries whether the
	printing should be terminated.
<u>Escape</u>	Allows applications to access facilities that are
	not directly available from a particular device
	through GDI. Also allows access to Windows
	escape functions. Escape calls made by an
	application are translated and sent to the device driver.
DrawEscape	Accesses drawing capabilities of a video
Diaw Docapt	display that are not directly available through
	the graphics device interface (GDI).
StartDoc	Informs the device driver that a new print job is
	starting.
StartPage	Informs the device driver that a new page is
	starting.
EndPage	Informs the device driver that a page is ending.
<u>SetAbortProc</u>	Sets a programmer-supplied callback function
	that Windows calls if a print job must be
	aborted.
<u>AbortDoc</u>	Terminates the current print job, erasing
	everything the application has written to the
	device since the last call of the StartDoc
E 15	member function.
EndDoc	Ends a print job started by the StartDoc
SameliDC	member function.
<u>ScrollDC</u>	Scrolls a rectangle of bits horizontally and vertically.
PlayMetaFile	Plays the contents of the specified metafile on
1 Tay Wictar 11C	the given device. The enhanced version of
	PlayMetaFile displays the picture stored in the
	given enhanced-format metafile. The metafile
	can be played any number of times.
AddMetaFileComm	Copies the comment from a buffer into a
ent	specified enhanced-format metafile.
AbortPath	Closes and discards any paths in the device
	context.
BeginPath	Opens a path bracket in the device context.
<u>CloseFigure</u>	Closes an open figure in a path.
EndPath	Closes a path bracket and selects the path
END 4	defined by the bracket into the device context.
<u>FillPath</u>	Closes any open figures in the current path and
	fills the path's interior by using the current
ElettenDeth	brush and polygon-filling mode.
<u>FlattenPath</u>	Transforms any curves in the path selected into
	the current device context, and turns each curve into a sequence of lines.
	nno a sequence or mies.

GetMiterLimit	Returns the miter limit for the device context.
GetPath	Retrieves the coordinates defining the
	endpoints of lines and the control points of
	curves found in the path that is selected into the
	device context.
SelectClipPath	Selects the current path as a clipping region for
	the device context, combining the new region
	with any existing clipping region by using the
	specified mode.
SetMiterLimit	Sets the limit for the length of miter joins for
	the device context.
StrokeAndFillPath	Closes any open figures in a path, strikes the
	outline of the path by using the current pen,
	and fills its interior by using the current brush.
StrokePath	Renders the specified path by using the current
	pen.
WidenPath	Redefines the current path as the area that
	would be painted if the path were stroked using
	the pen currently selected into the device
	context.
CBrush	
CBrush	Constructs a CBrush object.
CreateSolidBrush	Initializes a brush with the specified solid
	color.
CreateHatchBrush	Initializes a brush with the specified hatched
	pattern and color.
CreateBrushIndirect	Initializes a brush with the style, color, and
	pattern specified in a LOGBRUSH structure.
CreatePatternBrush	Initializes a brush with a pattern specified by a
	bitmap.
CreateDIBPatternBr	Initializes a brush with a pattern specified by a
ush	device-independent bitmap (DIB).
CreateSysColorBrus	Creates a brush that is the default system color.
h	· · · · · · · · · · · · · · · · · · ·
FromHandle	Returns a pointer to a CBrush object when
	given a handle to a Windows HBRUSH object.
GetLogBrush	Gets a LOGBRUSH structure.
operator HBRUSH	Returns the Windows handle attached to the
	CBrush object.
CPen	
CPen	Constructs a CPen object.
CreatePen	Creates a logical cosmetic or geometric pen
	with the specified style, width, and brush
	attributes, and attaches it to the CPen object.
CreatePenIndirect	Creates a pen with the style, width, and color
<u>creater ennititiett</u>	given in a LOCDEN structure, and attaches it

patient specified in a LOOBKOSH structure.		neigi
Initializes a brush with a pattern specified by a	CreateBitmapIndire	Initia
bitmap.	<u>ct</u>	widtl
Initializes a brush with a pattern specified by a		speci
device-independent bitmap (DIB).	CreateCompatibleBi	Initia
Creates a brush that is the default system color.	tmap	com
	CreateDiscardableB	Initia
Returns a pointer to a CBrush object when	<u>itmap</u>	that i
given a handle to a Windows HBRUSH object.	GetBitmap	Fills
Gets a LOGBRUSH structure.		abou
Returns the Windows handle attached to the	operator HBITMAP	Retu
CBrush object.		CBit
5		
	CString	
Constructs a CPen object.	CString	Cons
Creates a logical cosmetic or geometric pen	GetLength	Retu
with the specified style, width, and brush		objec
attributes, and attaches it to the CPen object.		bit cł
Creates a pen with the style, width, and color		multi
given in a LOGPEN structure, and attaches it		chara
to the CPen object.	IsEmpty	Tests
Returns a pointer to a CPen object when given		chara
a Windows HPEN.	Empty	Force
Returns the Windows handle attached to the	GetAt	Retu
CPen object.	operator []	Retu
Gets a LOGPEN underlying structure.		opera
Gets an EXTLOGPEN underlying structure.	<u>SetAt</u>	Sets
	operator LPCTSTR	Direc
	<u>.</u>	CStr

CFont	
<u>CFont</u>	Constructs a CFont object.
CreateFontIndirect	Initializes a CFont object with the characteristics given in a LOGFONT

FromHandle operator HPEN

<u>GetLogPen</u> GetExtLogPen

	structure.
CreateFont	Initializes a CFont with the specified
	characteristics.
CreatePointFont	Initializes a CFont with the specified height,
	measured in tenths of a point, and typeface.
CreatePointFontIndi	Same as CreateFontIndirect except that the
rect	font height is measured in tenths of a point
	rather than logical units.
FromHandle	Returns a pointer to a CFont object when
	given a Windows HFONT.
operator HFONT	Returns the Windows GDI font handle attached
	to the CFont object.
GetLogFont	Fills a LOGFONT with information about the
	logical font attached to the CFont object.

CBitmap <u>CBitmap</u> LoadBitma

Obitiliap	
<u>CBitmap</u>	Constructs a CBitmap object.
<u>LoadBitmap</u>	Initializes the object by loading a named
	bitmap resource from the application's
	executable file and attaching the bitmap to the
	object.
LoadOEMBitmap	Initializes the object by loading a predefined
	Windows bitmap and attaching the bitmap to
	the object.
LoadMappedBitmap	Loads a bitmap and maps colors to current
	system colors.
CreateBitmap	Initializes the object with a device-dependent
	memory bitmap that has a specified width,
	height, and bit pattern.
CreateBitmapIndire	Initializes the object with a bitmap with the
ct	width, height, and bit pattern (if one is
	specified) given in a BITMAP structure.
CreateCompatibleBi	Initializes the object with a bitmap so that it is
tmap	compatible with a specified device.
CreateDiscardableB	Initializes the object with a discardable bitmap
itmap	that is compatible with a specified device.
GetBitmap	Fills a BITMAP structure with information
	about the bitmap.
operator HBITMAP	Returns the Windows handle attached to the
	CBitmap object.

CString	
CString	Constructs CString objects in various ways.
GetLength	Returns the number of characters in a CString
	object. For multibyte characters, counts each 8-
	bit character; that is, a lead and trail byte in one
	multibyte character are counted as two
	characters.
<u>IsEmpty</u>	Tests whether a CString object contains no
	characters.
Empty	Forces a string to have 0 length.
<u>GetAt</u>	Returns the character at a given position.
operator []	Returns the character at a given position —
	operator substitution for GetAt.
<u>SetAt</u>	Sets a character at a given position.
operator LPCTSTR	Directly accesses characters stored in a
	CString object as a C-style string.
<u>operator =</u>	Assigns a new value to a CString object.
operator +	Concatenates two strings and returns a new
	string.
operator +=	Concatenates a new string to the end of an

	existing string.
<u>operator == $<$, etc.</u>	Comparison operators (case sensitive).
Compare	Compares two strings (case sensitive).
<u>CompareNoCase</u>	Compares two strings (case insensitive).
<u>Collate</u>	Compares two strings (case sensitive, uses
	locale-specific information).
CollateNoCase	Compares two strings (case insensitive, uses
	locale-specific information).
Mid	Extracts the middle part of a string (like the
MIU	
	Basic MID\$ function).
<u>Left</u>	Extracts the left part of a string (like the Basic
	LEFT\$ function).
<u>Right</u>	Extracts the right part of a string (like the Basic
Mgn	RIGHT\$ function).
a	
SpanIncluding	Extracts a substring that contains only the
	characters in a set.
SpanExcluding	Extracts a substring that contains only the
	characters not in a set.
Malastianan	
<u>MakeUpper</u>	Converts all the characters in this string to
	uppercase characters.
<u>MakeLower</u>	Converts all the characters in this string to
	lowercase characters.
MakeReverse	Reverses the characters in this string.
	÷
Replace	Replaces indicated characters with other
	characters.
Remove	Removes indicated characters from a string.
Insert	Inserts a single character or a substring at the
	given index within the string.
Delete	Deletes a character or characters from a string.
Delete	
<u>Format</u>	Format the string as sprintf does.
<u>FormatV</u>	Formats the string as vsprintf does.
TrimLeft	Trim leading whitespace characters from the
	string.
Traine Direkt	
<u>TrimRight</u>	Trim trailing whitespace characters from the
	string.
FormatMessage	Formats a message string.
Find	Finds a character or substring inside a larger
	string.
DeveneeFind	6
ReverseFind	Finds a character inside a larger string; starts
	from the end.
FindOneOf	Finds the first matching character from a set.
operator <<	Inserts a CString object to an archive or dump
	context.
operator >>	Extracts a CString object from an archive.
<u>operator >></u>	
<u>GetBuffer</u>	Returns a pointer to the characters in the
	CString.
GetBufferSetLength	Returns a pointer to the characters in the
	CString , truncating to the specified length.
ReleaseBuffer	Releases control of the buffer returned by
ReleaseBuller	•
	<u>GetBuffer</u> .
<u>FreeExtra</u>	Removes any overhead of this string object by
	freeing any extra memory previously allocated
	to the string.
LockBuffer	Disables reference counting and protects the
<u></u>	string in the buffer.
UnlockBuffer	Enables reference counting and releases the
	string in the buffer.
AllocSysString	Allocates a BSTR from CString data.
SetSysString	Sets an existing BSTR object with data from a
<u></u>	CString object.
LoadString	
LoadString	Loads an existing CString object from a

AnsiToOem	Makes an in -place conversion from the ANSI character set to the OEM character set.
<u>OemToAnsi</u>	Makes an in -place conversion from the OEM character set to the ANSI character set.
CPoint	
CPoint	Constructs a CPoint
<u>Offset</u>	Adds values to the x and y members of the CPoint .
<u>operator ==</u>	Checks for equality between two points.
<u>operator !=</u>	Checks for inequality between two points.
<u>operator +=</u>	Offsets CPoint by adding a size or point.
<u>operator –=</u> operator +	Offsets CPoint by subtracting a size or point. Returns the sum of a CPoint and a size or
<u>operator +</u>	point.
<u>operator –</u>	Returns the difference of a CPoint and a size, or the negation of a point.
operator –	Returns the size difference between two points.
<u>operator +</u>	Returns a CRect offset by a size.
operator –	Returns a CRect offset by a negative size.
CSize	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
CSize	Constructs a CSize object.
<u>operator ==</u>	Checks for equality between CSize and a size. Checks for inequality between CSize and a
<u>operator !=</u>	size.
operator +=	Adds a size to CSize .
operator $=$	Subtracts a size from CSize.
operator +	Adds two sizes.
operator –	Subtracts two sizes.
CRect	
CRect	Constructs a CRect object.
CRect Width	Calculates the width of CRect .
CRect Width Height	Calculates the width of CRect . Calculates the height of CRect .
CRect Width Height Size	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect .
CRect Width Height Size TopLeft	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect .
CRect Width Height Size	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect .
CRect Width Height Size TopLeft BottomRight	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0.
CRect Width Height Size TopLeft BottomRight CenterPoint	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0.
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top . bottom . left , and right member variables are all equal to 0. Determines whether the specified point lies
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect SetRectEmpty CopyRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect SetRectEmpty	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect SetRectEmpty CopyRect EqualRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top . bottom . left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle.
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRectEmpty CopyRect EqualRect InflateRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle. Increases the width and height of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect SetRect SetRectEmpty CopyRect EqualRect InflateRect DeflateRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle. Increases the width and height of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRectEmpty CopyRect EqualRect InflateRect NormalizeRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle. Increases the width and height of CRect . Decreases the width and height of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect SetRect SetRect SetRect SetRect DepRect EqualRect InflateRect DeflateRect NormalizeRect OffsetRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle. Increases the width and height of CRect . Standardizes the height and width of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRectEmpty CopyRect EqualRect InflateRect NormalizeRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets CRect to an empty rectangle (all coordinates equal to 0). Copies the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle. Increases the width and height of CRect . Decreases the width and height of CRect .
CRect Width Height Size TopLeft BottomRight CenterPoint IsRectEmpty IsRectNull PtInRect SetRect SetRectEmpty CopyRect EqualRect InflateRect DeflateRect OffsetRect SubtractRect	Calculates the width of CRect . Calculates the height of CRect . Calculates the size of CRect . Returns the top-left point of CRect . Returns the bottom-right point of CRect . Returns the centerpoint of CRect . Determines whether CRect is empty. CRect is empty if the width and/or height are 0. Determines whether the top , bottom , left , and right member variables are all equal to 0. Determines whether the specified point lies within CRect . Sets the dimensions of CRect . Sets the dimensions of CRect . Sets the dimensions of a source rectangle to CRect . Determines whether CRect is equal to the given rectangle. Increases the width and height of CRect . Decreases the width and height of CRect . Standardizes the height and width of CRect . Moves CRect by the specified offsets. Subtracts one rectangle from another.

UnionRect	Sets CRect equal to the union of two
	rectangles.
operator LPCRECT	Converts a CRect to an LPCRECT .
operator LPRECT	Converts a CRect to an LPRECT .
<u>operator =</u>	Copies the dimensions of a rectangle to CRect .
operator ==	Determines whether CRect is equal to a
	rectangle.
<u>operator !=</u>	Determines whether CRect is not equal to a
	rectangle.
<u>operator $+=$</u>	Adds the specified offsets to CRect or inflates
	CRect.
operator -=	Subtracts the specified offsets from CRect or
	deflates CRect .
operator &=	Sets CRect equal to the intersection of CRect
	and a rectangle.
operator =	Sets CRect equal to the union of CRect and a
	rectangle.
operator +	Adds the given offsets to CRect or inflates
	CRect and returns the resulting CRect .
operator –	Subtracts the given offsets from CRect or
	deflates CRect and returns the resulting
	CRect.
operator &	Creates the intersection of CRect and a
	rectangle and returns the resulting CRect .
operator	Creates the union of CRect and a rectangle and
<u> </u>	returns the resulting CRect .
	2

CTime	
CTime	Constructs CTime objects in various ways.
GetCurrentTime	Creat es a CTime object that represents the
	current time (static member function).
GetTime	Returns a time_t that corresponds to this
	CTime object.
<u>GetYear</u>	Returns the year that this CTime object
	represents.
GetMonth	Returns the month that this CTime object
	represents (1 through 12).
<u>GetDay</u>	Returns the day that this CTime object
	represents (1 through 31).
<u>GetHour</u>	Returns the hour that this CTime object
	represents (0 through 23).
<u>GetMinute</u>	Returns the minute that this CTime object
	represents (0 through 59).
GetSecond	Returns the second that this CTime object
	represents (0 through 61).
GetDayOfWeek	Returns the day of the week (1 for Sunday, 2
	for Monday, and so forth).
<u>GetGmtTm</u>	Breaks down a CTime object into components
	— based on UTC.
<u>GetLocalTm</u>	Breaks down a CTime object into components
~ ~ ~ ~	— based on the local time zone.
GetAsSystemTime	Converts the time information stored in the
	CTime object to a Win32-compatible
	SYSTEMTIME structure
<u>Format</u>	Converts a CTime object into a formatted
E	string — based on the local time zone.
FormatGmt	Converts a CTime object into a formatted
operator -	string — based on UTC.
<u>operator =</u>	Assigns new time values. Add and subtract CTimeSpan and CTime
<u>operator + –</u>	objects.
	00j003.

operator +=, -=	Add and subtract a CTimeSpan object to and
	from this CTime object.
<u>operator ==, $<$, etc.</u>	Compare two absolute times.
operator <<	Outputs a CTime object to CArchive or
	CDumpContext.
operator >>	Inputs a CTime object from CArchive .

<u>CTimeSpan</u>

<u>CTimeSpan</u>	Constructs CTimeSpan objects in various
	ways.
<u>GetDays</u>	Returns the number of complete days in this
	CTimeSpan.
GetHours	Returns the number of hours in the current day
	(-23 through 23).
GetTotalHours	Returns the total number of complete hours in
	this CTimeSpan .
GetMinutes	Returns the number of minutes in the current
	hour (-59 through 59).
GetTotalMinutes	Returns the total number of complete minutes
	in this CTimeSpan.
GetSeconds	Returns the number of seconds in the current
	minute (-59 through 59).
GetTotalSeconds	Returns the total number of complete seconds
	in this CTimeSpan.
Format	Converts a CTimeSpan into a formatted string.
operator =	Assigns new time-span values.
operator $+-$	Adds and subtracts CTimeSpan objects.
operator += -=	Adds and subtracts a CTimeSpan object to and
	from this CTimeSpan.
operator == < etc.	Compares two relative time values.
operator <<	Outputs a CTimeSpan object to CArchive or
	CDumpContext.
operator >>	Inputs a CTimeSpan object from CArchive .

CArray

OAnay	
<u>CArray</u>	Constructs an empty array.
<u>GetSize</u>	Gets the number of elements in this array.
GetUpperBound	Returns the largest valid index.
<u>SetSize</u>	Sets the number of elements to be contained in
	this array.
<u>FreeExtra</u>	Frees all unused memory above the current upper bound.
RemoveAll	Removes all the elements from this array.
GetAt	Returns the value at a given index.
<u>SetAt</u>	Sets the value for a given index; array not allowed to grow.
<u>ElementAt</u>	Returns a temporary reference to the element
	pointer within the array.
<u>GetData</u>	Allows access to elements in the array. Can be NULL .
SetAtGrow	Sets the value for a given index; grows the
A 11	array if necessary.
Add	Adds an element to the end of the array; grows
	the array if necessary.
<u>Append</u>	Appends another array to the array; grows the
~	array if necessary
<u>Copy</u>	Copies another array to the array; grows the
	array if necessary.
<u>InsertAt</u>	Inserts an element (or all the elements in
	another array) at a specified index.
<u>RemoveAt</u>	Removes an element at a specific index.

operator []	Sets or gets the element at the specified index.
operator []	sets of gets the element at the specified index.
CList	
CList	Constructs an empty ordered list.
GetHead	Returns the head element of the list (cannot be
Gerriead	empty).
GetTail	Returns the tail element of the list (cannot be
	empty).
RemoveHead	Removes the element from the head of the list.
RemoveTail	Removes the element from the tail of the list.
AddHead	Adds an element (or all the elements in another
	list) to the head of the list (makes a new head).
<u>AddTail</u>	Adds an element (or all the elements in another
	list) to the tail of the list (makes a new tail).
<u>RemoveAll</u>	Removes all the elements from this list.
GetHeadPosition	Returns the position of the head element of the
	list.
GetTailPosition	Returns the position of the tail element of the
	list.
<u>GetNext</u>	Gets the next element for iterating.
<u>GetPrev</u>	Gets the previous element for iterating.
<u>GetAt</u>	Gets the element at a given position.
<u>SetAt</u>	Sets the element at a given position.
<u>RemoveAt</u>	Removes an element from this list, specified by
	position.
InsertBefore	Inserts a new element before a given position.
InsertAfter	Inserts a new element after a given position.
<u>Find</u>	Gets the position of an element specified by
	pointer value.
<u>FindIndex</u>	Gets the position of an element specified by a
0.0	zero-based index.
<u>GetCount</u>	Returns the number of elements in this list.
<u>IsEmpty</u>	Tests for the empty list condition (no
	elements).
CMan	
СМар	Constructs a callestion that many hours to
<u>CMap</u>	Constructs a collection that maps keys to values.
Lookup	Looks up the value mapped to a given key.
<u>SetAt</u>	Inserts an element into the map; replaces an
<u>Soun</u>	existing element if a matching key is found.
operator []	Inserts an element into the map — operator
operator II	substitution for SetAt .
RemoveKey	Removes an element specified by a key.
RemoveAll	Removes all the elements from this map.
GetStartPosition	Returns the position of the first element.
GetNextAssoc	Gets the next element for iterating.
GetHashTableSize	Returns the size (number of elements) of the
	hash table.
InitHashTable	Initializes the hash table and specifies its size.
GetCount	Returns the number of elements in this map.
I. Franker	The first free days and the second se

CObArray

IsEmpty

<u>CObArray</u>	Constructs an empty array for CObject
	pointers.
<u>GetSize</u>	Gets the number of elements in this array.
GetUpperBound	Returns the largest valid index.
SetSize	Sets the number of elements to be contained in

elements).

Tests for the empty-map condition (no

Remove

	this array.
<u>FreeExtra</u>	Frees all unused memory above the current
D 411	upper bound.
<u>RemoveAll</u>	Removes all the elements from this array.
GetAt	Returns the value at a given index.
<u>SetAt</u>	Sets the value for a given index; array not
	allowed to grow.
<u>ElementAt</u>	Returns a temporary reference to the element
	pointer within the array.
<u>GetData</u>	Allows access to elements in the array. Can be
	NULL.
<u>SetAtGrow</u>	Sets the value for a given index; grows the
	array if necessary.
Add	Adds an element to the end of the array; grows
	the array if necessary.
Append	Appends another array to the array; grows the
	array if necessary.
<u>Copy</u>	Copies another array to the array; grows the
	array if necessary.
<u>InsertAt</u>	Inserts an element (or all the elements in
	another array) at a specified index.
<u>RemoveAt</u>	Removes an element at a specific index.
operator []	Sets or gets the element at the specified index.
CFile	
m_hFile	Usually contains the operating-system file
	handle.
<u>CFile</u>	Constructs a CFile object from a path or file
	handle.
Abort	Closes a file ignoring all warnings and errors.
Duplicate	Constructs a duplicate object based on this file.
Open	Safely opens a file with an error-testing option.
Close	Closes a file and deletes the object.
Read	Reads (unbuffered) data from a file at the
	current file position.
ReadHuge	Can read more than 64K of (unbuffered) data
	from a file at the current file position. Obsolete
	in 32-bit programming. See Read.
Write	Writes (unbuffered) data in a file to the current
	file position.
WriteHuge	Can write more than 64K of (unbuffered) data
	in a file to the current file position. Obsolete in
	32-bit programming. See Write.
Flush	Flushes any data yet to be written.
Seek	Positions the current file pointer.
SeekToBegin	Positions the current file pointer at the
	beginning of the file.
SeekToEnd	Positions the current file pointer at the end of
	the file.
GetLength	Retrieves the length of the file.
SetLength	Changes the length of the file.
LockRange	Locks a range of bytes in a file.
UnlockRange	Unlocks a range of bytes in a file.
GetPosition	Retrieves the current file pointer.
GetStatus	Retrieves the status of this open file.
GetFileName	Retrieves the filename of the selected file.
GetFileTitle	Retrieves the title of the selected file.
GetFilePath	Retrieves the full file path of the selected file.
SetFilePath	Sets the full file path of the selected file.
Rename	Renames the specified file (static function).
IXCHAILE	Deletes the specified file (static function).

Deletes the specified file (static function).

<u>GetStatus</u> <u>SetStatus</u>	Retrieves the status of the specified file (static, virtual function). Sets the status of the specified file (static, virtual function).	CSocket Create IsBlockin
CStdioFile		<u>FromHan</u>
<u>m_pStream</u> CStdioFile	Contains a pointer to an open file. Constructs a CStdioFile object from a path or	Attach

file pointer.

Reads a single line of text. Writes a single line of text. WriteString CAsyncSocket

ReadString

<u>CAsyncSocket</u>	Constructs a CAsyncSocket object.
Create	Creates a socket.
Attach	Attaches a socket handle to a CAsyncSocket
	object.
Detach	Detaches a socket handle from a
	CAsyncSocket object.
FromHandle	Returns a pointer to a CAsyncSocket object,
	given a socket handle.
GetLastError	Gets the error status for the last operation that
GetEdistError	failed.
GetPeerName	Gets the address of the peer socket to which the
<u>Oeti terrvanie</u>	socket is connected.
0.0.11	
GetSockName	Gets the local name for a socket.
<u>GetSockOpt</u>	Retrieves a socket option.
SetSockOpt	Sets a socket option.
Accept	Accepts a connection on the socket.
<u>AsyncSelect</u>	Requests event notification for the socket.
Bind	Associates a local address with the socket.
Close	Closes the socket.
Connect	Establishes a connection to a peer socket.
IOCtl	Controls the mode of the socket.
Listen	Establishes a socket to listen for incoming
	connection requests.
Receive	Receives data from the socket.
ReceiveFrom	Receives a datagram and stores the source
<u>Receiver tom</u>	address.
Send	Sends data to a connected socket.
SendTo	Sends data to a specific destination.
<u>ShutDown</u>	Disables Send and/or Receive calls on the
0 • • •	socket.
<u>OnAccept</u>	Notifies a listening socket that it can accept
	pending connection requests by calling Accept.
<u>OnClose</u>	Notifies a socket that the socket connected to it
	has closed.
<u>OnConnect</u>	Notifies a connecting socket that the
	connection attempt is complete, whether
	successfully or in error.
OnOutOfBandData	Notifies a receiving socket that there is out-of-
	band data to be read on the socket, usually an
	urgent message.
OnReceive	Notifies a listening socket that there is data to
Ontective	be retrieved by calling Receive .
0.0.1	
OnSend	Notifies a socket that it can send data by
10.1	calling Send.
m_hSocket	Indicates the SOCKET handle attached to this
	CAsyncSocket object.

ket

COUCKEL	
<u>CSocket</u>	Constructs a CSocket object.
Create	Creates a socket.
IsBlocking	Determines whether a blocking call is in
	progress.
FromHandle	Returns a pointer to a CSocket object, given a
	SOCKET handle.
Attach	Attaches a SOCKET handle to a CSocket
	object.
CancelBlockingCall	Cancels a blocking call that is currently in
	progress.
OnMessagePending	Called to process pending messages while
	waiting for a blocking call to complete.

CWinThread m_bA

CWinThread	
m_bAutoDelete	Specifies whether to destroy the object at
	thread termination.
<u>m_hThread</u>	Handle to the current thread.
m_nThreadID	ID of the current thread.
<u>m_pMainWnd</u>	Holds a pointer to the application's main
	window.
<u>m_pActiveWnd</u>	Pointer to the main window of the container
	application when an OLE server is in-place
	active.
CWinThread	Constructs a CWinThread object.
CreateThread	Starts execution of a CWinThread object.
GetMainWnd	Retrieves a pointer to the main window for the
	thread.
GetThreadPriority	Gets the priority of the current thread.
PostThreadMessage	Posts a message to another CWinThread
	object.
ResumeThread	Decrements a thread's suspend count.
SetThreadPriority	Sets the priority of the current thread.
SuspendThread	Increments a thread's suspend count.
ExitInstance	Override to clean up when your thread
	terminates.
InitInstance	Override to perform thread instance
	initialization.
<u>OnIdle</u>	Override to perform thread-specific idle-time
	processing.
PreTranslateMessag	Filters messages before they are dispatched to
e	the Windows functions TranslateMessage and
-	DispatchMessage.
IsIdleMessage	Checks for special messages.
ProcessWndProcEx	Intercepts all unhandled exceptions thrown by
ception	the thread's message and command handlers.
ProcessMessageFilt	Intercepts certain messages before they reach
er	the application.
Run	Controlling function for threads with a message
	pump. Override to customize the default
	message loop.
CCmdTarget	
FromIDispatch	Returns a pointer to the CCmdTarget object

Returns a pointer to the CCmdTarget object
associated with the IDispatch pointer.
Returns a pointer to the IDispatch object
associated with the CCmdTarget object.
Returns nonzero if an automation function
should return a value.
Displays the cursor as an hourglass cursor.

EnableAutomation	Allows OLE automation for the CCmdTarget object.
EndWaitCursor	Returns to the previous cursor.
RestoreWaitCursor	Restores the hourglass cursor.
OnCmdMsg	Routes and dispatches command messages.
OnFinalRelease	Cleans up after the last OLE reference is
	released.
CCmdUI	
<u>m_nID</u>	The ID of the user-interface object.
<u>m_nIndex</u>	The index of the user-interface object.
<u>m_pMenu</u>	Points to the men u represented by the
	CCmdUI object.
<u>m_pSubMenu</u>	Points to the contained sub-menu represented
	by the CCmdUI object.
<u>m_pOther</u>	Points to the window object that sent the
	notification.
Enable	Enables or disables the user-interface item for
	this command.
SetCheck	Sets the check state of the user-interface item
	for this command.
SetRadio	Like the SetCheck member function, but
	operates on radio groups.
<u>SetText</u>	Sets the text for the user-interface item for this
	command.
ContinueRouting	Tells the command-routing mechanism to
	continue routing the current message down the
	chain of handlers.
CC antral Dar	
CControlBar	

CC m

m_bAutoDelete	If nonzero, the CControlBar object is deleted
	when the Windows control bar is destroyed.
<u>GetBarStyle</u>	Retrieves the control bar style settings.
SetBarStyle	Modifies the control bar style settings.
GetBorders	Retrieves the border values of the control bar.
SetBorders	Sets the border values of the control bar.
GetCount	Returns the number of non-HWND elements in
	the control bar.
GetDockingFrame	Returns a pointer to the frame to which a
	control bar is docked.
IsFloating	Returns a nonzero value if the control bar in
	question is a floating control bar.
CalcFixedLayout	Returns the size of the control bar as a CSize
	object.
CalcDynamicLayout	Returns the size of a dynamic control bar as a
	CSize object.
OnUpdateCmdUI	Calls the Command UI handlers.
EnableDocking	Allows a control bar to be docked or floating.
	3
CMenu	
m_hMenu	Specifies the handle to the Windows menu
	attached to the CMenu object.
<u>CMenu</u>	Constructs a CMenu object.
Attach	Attaches a Windows menu handle to a CMenu
	object.
Detach	Detaches a Windows menu handle from a

	object.
Detach	Detaches a Windows menu handle from a
	CMenu object and returns the handle.
FromHandle	Returns a pointer to a CMenu object given a
	Windows menu handle.
GetSafeHmenu	Returns the m_hMenu wrapped by this

	CMonu object
DeleteTempMap	CMenu object. Deletes any temporary CMenu objects created by the EremHandle member function
<u>CreateMenu</u>	by the FromHandle member function. Creates an empty menu and attaches it to a CMenu object.
CreatePopupMenu	Creates an empty pop-up menu and attaches it to a CMenu object.
LoadMenu	Loads a menu resource from the executable file
LoadMenuIndirect	and attaches it to a CMenu object. Loads a menu from a menu template in
<u>DestroyMenu</u>	memory and attaches it to a CMenu object. Destroys the menu attached to a CMenu object
<u>DeleteMenu</u>	and frees any memory that the menu occupied. Deletes a specified item from the menu. If the menu item has an associated pop-up menu, destroyed the head head the sector area and
<u>TrackPopupMenu</u>	destroys the handle to the pop-up menu and frees the memory used by it. Displays a floating pop-up menu at the specified location and tracks the selection of
<u>AppendMenu</u> <u>CheckMenuItem</u>	items on the pop-up menu. Appends a new item to the end of this menu. Places a check mark next to or removes a check mark from a menu item in the pop-up
<u>CheckMenuRadioIt</u> em	menu. Places a radio button next to a menu item and removes the radio button from all of the other menu items in the group.
SetDefaultItem	Sets the default menu item for the specified
GetDefaultItem	Determines the default menu item on the specified menu.
EnableMenuItem GetMenuItemCount	Enables, disables, or dims (grays) a menu item. Determines the number of items in a pop-up or top-level menu.
<u>GetMenuItemID</u>	Obtains the menu-item identifier for a menu item located at the specified position.
GetMenuState	Returns the status of the specified menu item or the number of items in a pop-up menu.
<u>GetMenuString</u> <u>GetMenuItemInfo</u> <u>GetSubMenu</u> InsertMenu	Retrieves the label of the specified menu item. Retrieves information about a menu item. Retrieves a pointer to a pop-up menu. Inserts a new menu item at the specified
msertivienu	position, moving other items down the menu.
<u>ModifyMenu</u>	Changes an existing menu item at the specified position.
<u>RemoveMenu</u>	Deletes a menu item with an associated pop-up menu from the specified menu.
<u>SetMenuItemBitma</u>	Associates the specified check-mark bitmaps with a menu item.
<u>ps</u> <u>GetMenuContextHe</u>	Retrieves the help context ID associated with
lpId SetMenuContextHel	the menu. Sets the help context ID to be associated with
<u>pId</u> DrawItem	the menu. Called by the framework when a visual aspect
MeasureItem	of an owner-drawn menu changes. Called by the framework to determine menu dimensions when an owner-drawn menu is
	created.

CMemoryState

CMemoryState

Constructs a class-like structure that controls

Checkpoint	Obtains a snapshot or "checkpoint" of the
Difference	current memory state. Computes the difference between two objects
<u>DumpAllObjectsSin</u> <u>ce</u> DumpStatistics	of type CMemoryState . Dumps a summary of all currently allocated objects since a previous checkpoint. Prints memory allocation statistics for a
Dumpsudstes	CMemoryState object.

The Windows PROPSHEETHEADER

CPropertySheet m_psh

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	structure. Provides access to basic property
	sheet parameters.
<u>CPropertySheet</u>	Constructs a CPropertySheet object.
Construct	Constructs a CPropertySheet object.
GetActiveIndex	Retrieves the index of the active page of the
	property sheet.
GetPageIndex	Retrieves the index of the specified page of the
<u>oeu ugemaex</u>	property sheet.
CatDa and Canant	
GetPageCount	Retrieves the number of pages in the property
~ ~	sheet.
<u>GetPage</u>	Retrieves a pointer to the specified page.
GetActivePage	Returns the active page object.
SetActivePage	Programmatically sets the active page object.
SetTitle	Sets the caption of the property sheet.
GetTabControl	Retrieves a pointer to a tab control.
SetFinishText	Sets the text for the Finish button.
SetWizardButtons	Enables the wizard buttons.
SetWizardMode	Enables the wizard mode.
EnableStackedTabs	
EnableStackeuTabs	Indicates whether the property sheet uses
	stacked or scrolling tabs.
<u>DoModal</u>	Displays a modal property sheet.
Create	Displays a modeless property sheet.
AddPage	Adds a page to the property sheet.
RemovePage	Removes a page from the property sheet.
PressButton	Simulates the choice of the specified button in
	· · · ·
	a property sheet.
EndDialog	a property sheet. Terminates the property sheet.
EndDialog	a property sheet. Terminates the property sheet.
CArchive	Terminates the property sheet.
	Terminates the property sheet. Points to the CDocument object being
CArchive <u>m_pDocument</u>	Terminates the property sheet. Points to the CDocument object being serialized.
CArchive <u>m_pDocument</u> CArchive	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object.
CArchive <u>m_pDocument</u>	Terminates the property sheet. Points to the CDocument object being serialized.
CArchive <u>m_pDocument</u> CArchive	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object.
CArchive <u>m_pDocument</u> CArchive Abort	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an
CArchive <u>m_pDocument</u> CArchive	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile .
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the
CArchive m pDocument CArchive Abort Close Flush operator >>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the
CArchive m_pDocument CArchive Abort Close Flush operator >> operator <<	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u> <u>operator >></u> <u>operator <<</u> <u>Read</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes.
CArchive m_pDocument CArchive Abort Close Flush operator >> operator << Read Write	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u> <u>operator >></u> <u>operator <<</u> <u>Read</u> <u>Write</u> <u>WriteString</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u> <u>operator >></u> <u>operator <<</u> <u>Read</u> <u>Write</u> <u>WriteString</u> <u>ReadString</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u> <u>operator >></u> <u>operator <<</u> <u>Read</u> <u>Write</u> <u>WriteString</u> <u>ReadString</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text. Gets the CFile object pointer for this archive.
CArchive m pDocument CArchive Abort Close Flush operator >> operator < Read Write WriteString ReadString GetFile	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text. Gets the CFile object pointer for this archive.
CArchive <u>m_pDocument</u> <u>CArchive</u> <u>Abort</u> <u>Close</u> <u>Flush</u> <u>operator >></u> <u>operator <<</u> <u>Read</u> <u>Write</u> <u>WriteString</u> <u>ReadString</u>	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text. Gets the CFile object pointer for this archive. Called from the Serialize function to determine
CArchive m pDocument CArchive Abort Close Flush operator >> operator < Read Write WriteString ReadString GetFile	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text. Gets the CFile object pointer for this archive. Called from the Serialize function to determine the version of the object that is being
CArchive m pDocument CArchive Abort Close Flush operator >> operator < Read Write WriteString ReadString GetFile	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text. Gets the CFile object pointer for this archive. Called from the Serialize function to determine
CArchive m pDocument CArchive Abort Close Flush operator >> operator < Read Write WriteString ReadString GetFile	Terminates the property sheet. Points to the CDocument object being serialized. Creates a CArchive object. Closes an archive without throwing an exception. Flushes unwritten data and disconnects from the CFile . Flushes unwritten data from the archive buffer. Loads objects and primitive types from the archive. Stores objects and primitive types to the archive. Reads raw bytes. Writes raw bytes. Writes a single line of text. Reads a single line of text. Gets the CFile object pointer for this archive. Called from the Serialize function to determine the version of the object that is being

SetObjectSchema	Sets the object schema stored in the archive
	object.
<u>IsLoading</u>	Determines whether the archive is loading.
<u>IsStoring</u>	Determines whether the archive is storing.
IsBufferEmpty	Determines whether the buffer has been
	emptied during a Windows Sockets receive
	process.
ReadObject	Calls an object's Serialize function for loading.
WriteObject	Calls an object's Serialize function for storing.
MapObject	Places objects in the map that are not serialized
	to the file, but that are available for subobjects
	to reference.
SetStoreParams	Sets the hash table size and the block size of
	the map used to identify unique objects during
	the serialization process.
SetLoadParams	Sets the size to which the load array grows.
	Must be called before any object is loaded or
	before MapObject or ReadObject is called.
ReadClass	Reads a class reference previously stored with
	WriteClass.
WriteClass	Writes a reference to the CRuntimeClass to
	the CArchive .
SerializeClass	Reads or writes the class reference to the
	CArchive object depending on the direct ion of
	the CArchive.

CDocTemplate

Oboorompiato	
CDocTemplate	Constructs a CDocTemplate object.
SetContainerInfo	Determines the resources for OLE containers
	when editing an in -place OLE item.
SetServerInfo	Determines the resources and classes when the
	server document is embedded or edited in -
	place.
GetFirstDocPosition	Retrieves the position of the first document
	associated with this template.
GetNextDoc	Retrieves a document and the position of the
GentextDoe	next one.
LoadTemplate	Loads the resources for a given
Load remplate	CDocTemplate or derived class.
	Adds a document to a template.
AddDocument RemoveDocument	1
	Removes a document from a template.
GetDocString	Retrieves a string associated with the
	document type.
CreateOleFrame	Creates an OLE-enabled frame window.
MatchDocType	Determines the degree of confidence in the
	match between a document type and this
	template.
CreateNewDocument	Creates a new document.
CreateNewFrame	Creates a new frame window containing a
	document and view.
InitialUpdateFrame	Initializes the frame window, and optionally
	makes it visible.
SaveAllModified	Saves all documents associated with this
	template which have been modified.
CloseAllDocuments	Closes all documents associated with this
	template.
OpenDocumentFile	Opens a file specified by a pathname.
SetDefaultTitle	Displays the default title in the document
	window's title bar.

Diagnostic Macros

ASSERT	Prints a message and then aborts the program if
TOOLICI	the specified expression evaluates to FALSE in
	the Debug version of the library.
ASSERT KINDOF	Tests that an object is an object of the specified
ASSERT_RINDOF	5 5 1
	class or of a class derived from the specified
	class.
ASSERT_VALID	Tests the internal validity of an object by
	calling its AssertValid member function;
	typically overridden from CObject .
DEBUG_NEW	Supplies a filename and line number for all
	object allocations in Debug mode to help find
	memory leaks.
TRACE	Provides printf-like capability in the Debug
	version of the library.
TRACE0	Similar to TRACE but takes a format string
	with no arguments.
TRACE1	Similar to TRACE but takes a format string
	with a single argument.
TRACE2	Similar to TRACE but takes a format string
	with two arguments.
TRACE3	Similar to TRACE but takes a format string
IIIIIODO	with three arguments.
VERIFY	Similar to ASSERT but evaluates the
	expression in the Release version of the library
	as well as in the Debug version.
	as wen as in the Debug Version.
Afr functions	
Afx functions	

ON_REGISTERED

ON_REGISTERED

THREAD_MESS

ON_THREAD_ME

MESSAGE

AGE

AfxFreeLibrary	Decrements the reference count of the loaded
	dynamic-link library (DLL) module; when the
	reference count reaches zero, the module is
	unmapped.
<u>AfxGetApp</u>	Returns a pointer to the application's single
	CWinApp object.
<u>AfxGetAppName</u>	Returns a string containing the application's
	name.
AfxGetInstanceHan	Returns an HINSTANCE representing this
dle	instance of the application.
AfxGetMainWnd	Returns a pointer to the current "main" window
	of a non-OLE application, or the in -place frame
	window of a server application.
AfxGetResourceHa	Returns an HINSTANCE to the source of the
ndle	application's default resources. Use this to
	access the application's resources directly.
<u>AfxInitRichEdit</u>	Initializes the rich edit control for the
	application and initializes the common controls
	library, if the library hasn 't already been
	initialized for the process.
<u>AfxLoadLibrary</u>	Maps a DLL module and returns a handle that
	can be used to get the address of a DLL
	function.
AfxRegisterWndCla	Registers a Windows window class to
<u>SS</u>	supplement those registered automatically by
	MFC.
<u>AfxSocketInit</u>	Called in a CWinApp::InitInstance override
	to initialize Windows Sockets.
<u>AfxSetResourceHan</u>	Sets the HINSTANCE handle where the
<u>dle</u>	default resources of the application are loaded.
<u>AfxRegisterClass</u>	Registers a window class in a DLL that uses
	MFC.
AfxBeginThread	Creates a new thread.
AfxEndThread	Terminates the current thread.

<u>AfxGetThread</u>	Retrieves a pointer to the current CWinThread	<u>SSAGE</u>
A.C. 337' - T - 14	object.	
<u>AfxWinInit</u>	Called by the MFC-supplied WinMain	ON_UPDATE
	function, as part of the <u>CWinApp</u> initialization	<u>MMAND_UI</u>
	of a GUI-based application, to initialize MFC.	
	Must be called directly for console applications	ON_COMMAN
	using MFC.	<u>RANGE</u>
Common Data	Turne	ON_UPDATE
Common Data		MMAND_UI_
BOOL	Boolean value.	GE
BSTR	32-bit character pointer.	ON_CONTRO
BYTE	8-bit integer that is not signed.	ANGE
COLORREF	32-bit value used as a color value.	<u>MIGE</u>
DWORD	32-bit unsigned integer or the address of a	
LONG	segment and its associated offset.	
LONG	32-bit signed integer.	
LPARAM	32-bit value passed as a parameter to a window	WM Mooo
LDCCTD	procedure or callback function.	WM_Messa
LPCSTR	32-bit pointer to a constant character string.	ON_WM_ACT
LPSTR	32-bit pointer to a character string.	TE()
LPCTSTR	32-bit pointer to a constant character string that	ON_WM_ACT
	is portable for Unicode and DBCS.	TEAPP()
LPTSTR	32-bit pointer to a character string that is	ON_WM_ASK
	portable for Unicode and DBCS.	ORMATNAM
LPVOID	32-bit pointer to an unspecified type.	ON_WM_CAN
LRESULT	32-bit value returned from a window procedure	MODE()
	or callback function.	ON_WM_CAP
UINT	16-bit unsigned integer on Windows versions	ECHANGED()
	3.0 and 3.1; a 32-bit unsigned integer on	ON_WM_CHA
	Win32.	ECBCHAIN()
WNDPROC	32-bit pointer to a window procedure.	ON_WM_CHA
WORD	16-bit unsigned integer.	ON_WM_CHA
WPARAM	value passed as a parameter to a window	OITEM()
D.C. STEFFOLK	procedure or callback function:	ON_WM_CHI
POSITION	value used to denote the position of an element	CTIVATE()
	in a collection; used by MFC collection classes.	ON_WM_CLO
LPCRECT	32-bit pointer to a constant (nonmodifiable))
	RECT structure.	ON_WM_CON
		CTING()
Message Map I	Macros	ON_WM_COM
DECLARE_MESS	Declares that a message map will be used in a	REITEM()
AGE_MAP	class to map messages to functions (must be	ON_WM_CON
	used in the class declaration).	XTMENU()
BEGIN_MESSAGE	Begins the definition of a message map (must	ON_WM_COP
MAP	be used in the class implementation).	ATA()
END_MESSAGE_	Ends the definition of a message map (must be	ON_WM_CRE
MAP	used in the class implementation).	()
ON_COMMAND	Indicates which function will handle a	ON_WM_CTL
	specified command message.	OR()
ON_CONTROL	Indicates which function will handle a	ON_WM_DEA
	specified control-notification message.	HAR()
ON_MESSAGE	Indicates which function will handle a user-	ON_WM_DEL
	defined message.	ITEM()
ON_OLECMD	Indicates which function will handle a menu	ON_WM_DES
0	acommand from a DeaObject on its container	$\mathbf{Y}(\mathbf{x})$

command from a DocObject or its container.

Indicates which function will handle a

Indicates which function will handle a

registered user-defined message when you

Indicates which function will handle a user-

registered user-defined message.

have a **CWinThread** class.

defined message when you have a CWinThread class. <u>E_CO</u> Indicates which function will handle a specified user-interface update command message. AND_ Indicates which function will handle the range of command IDs specified in the first two parameters to the macro. Indicates which update handler will handle the E_CO RAN range of command IDs specified in the first two parameters to the macro. <u>OL_R</u> Indicates which function will handle notifications from the range of control IDs specified in the second and third parameters to

> the macro. The first parameter is a controlnotification message, such as **BN_CLICKED**.

sages Handlers

WM_Messages	Handlers
ON_WM_ACTIVA	Afx_msg void OnActivate(UINT, CWnd*,
TE()	BOOL);
ON_WM_ACTIVA	afx_msg void OnActivateApp(BOOL,
TEAPP()	HANDLE);
ON_WM_ASKCBF	afx_msg void <u>OnAskCbFormatName</u> (UINT,
ORMATNAME()	LPSTR);
ON_WM_CANCEL	afx_msg void <u>OnCancelMode();</u>
MODE()	
ON_WM_CAPTUR	afx_msg void OnCaptureChanged(CWnd*);
ECHANGED()	
ON_WM_CHANG	afx_msg void OnChangeCbChain(HWND,
ECBCHAIN()	HWND);
ON_WM_CHAR()	afx_msg void OnChar(UINT, UINT, UINT);
ON_WM_CHART	afx_msg int OnCharToItem(UINT, CWnd*,
OITEM()	UINT);
ON_WM_CHILDA	afx_msg void <u>OnChildActivate(</u>);
CTIVATE()	
ON_WM_CLOSE(afx_msg void <u>OnClose();</u>
)	
ON_WM_COMPA	afx_msg void <u>OnCompacting</u> (UINT);
CTING()	
ON_WM_COMPA	afx_msg int OnCompareItem(
REITEM()	LPCOMPAREITEMSTRUCT);
ON_WM_CONTE	afx_msg void OnContextMenu(CWnd*,
XTMENU()	CPoint);
ON_WM_COPYD	afx_msg BOOL OnCopyData(CWnd* pWnd,
ATA()	COPYDATASTRUCT* pCopyDataStruct);
ON_WM_CREATE	afx_msg int OnCreate(LPCREATESTRUCT
());
ON_WM_CTLCOL	afx_msg HBRUSH OnCtlColor(CDC*,
OR()	CWnd*, UINT);
ON_WM_DEADC	afx_msg void OnDeadChar(UINT, UINT,
HAR()	UINT);
ON_WM_DELETE	afx_msg void <u>OnDeleteItem(</u>
ITEM()	LPDELETEITEMSTRUCT);
ON_WM_DESTRO	afx_msg void <u>OnDestroy(</u>);
Y()	
ON_WM_DESTRO	afx_msg void <u>OnDestroyClipboard(</u>);
YCLIPBOARD()	
ON_WM_DEVICE	afx_msg void OnDeviceChange(UINT,
CHANGE()	DWORD);
ON_WM_DEVMO	afx_msg void OnDevModeChange(LPSTR);
DECHANGE()	

ON_WM_DRAWC	afx_msg void <u>OnDrawClipboard(</u>);
LIPBOARD()	
ON_WM_DRAWIT	afx_msg void <u>OnDrawItem(</u>
EM()	LPDRAWITEMSTRUCT);
ON_WM_DROPFI	afx_msg void OnDropFiles(HDROP);
LES()	(),
ON_WM_ENABLE	afx_msg void <u>OnEnable(</u> BOOL);
	arx_msg vold <u>OnEnable</u> (BOOL),
ON_WM_ENDSES	afx_msg void <u>OnEndSession</u> (BOOL);
SION()	
ON_WM_ENTERI	afx_msg void OnEnterIdle(UINT, CWnd*);
DLE()	
ON_WM_ERASEB	afx_msg BOOL OnEraseBkgnd(CDC *);
KGND()	
ON_WM_FONTCH	afx_msg void <u>OnFontChange(</u>);
ANGE()	
ON_WM_GETDLG	afx_msg UINT <u>OnGetDlgCode();</u>
	arx_msg on (1 <u>onocidigcode(</u>),
CODE()	afra man and On Cot Min Man Info (L DDOINTE).
ON_WM_GETMIN	afx_msg void <u>OnGetMinMaxInfo(</u> LPPOINT);
MAXINFO()	
ON_WM_HELPIN	afx_msg BOOL OnHelpInfo(HELPINFO*);
FO()	
ON_WM_HSCROL	afx_msg void OnHScroll(UINT, UINT,
L()	CWnd*);
ON_WM_HSCROL	afx_msg void OnHScrollClipboard CWnd*,
LCLIPBOARD()	UINT, UINT);
ON_WM_ICONER	afx_msg void <u>OnIconEraseBkgnd(</u> CDC *);
ASEBKGND()	arx_msg void <u>omeonEraseDikgild</u> (eDe),
	of man and Only it Manu (CManu *);
ON_WM_INITME	afx_msg void <u>OnInitMenu</u> (CMenu *);
NU()	
ON_WM_INITME	afx_msg void <u>OnInitMenuPopup</u> (CMenu *,
NUPOPUP()	UINT, BOOL);
ON_WM_KEYDO	afx_msg void <u>OnKeyDown(</u> UINT, UINT,
WN()	UINT);
ON_WM_KEYUP(afx_msg void OnKeyUp(UINT, UINT, UINT
));
ON_WM_KILLFO	afx_msg void OnKillFocus(CWnd*);
CUS()	uni_ning void <u>ominin otas</u> (e vind ');
ON_WM_LBUTTO	afx_msg void OnLButtonDblClk(UINT,
NDBLCLK()	CPoint);
ON_WM_LBUTTO	afx_msg void <u>OnLButtonDown(</u> UINT, CPoint
NDOWN());
ON_WM_LBUTTO	afx_msg void OnLButtonUp(UINT, CPoint);
NUP()	
ON_WM_MBUTT	afx_msg void OnMButtonDblClk(UINT,
ONDBLCLK()	CPoint);
ON_WM_MBUTT	afx_msg void OnMButtonDown(UINT,
ONDOWN()	CPoint);
ON_WM_MBUTT	afx_msg void <u>OnMButtonUp(</u> UINT, CPoint);
ONLID()	arx_msg void <u>onividutoirop</u> (onvi, ci onit),
ONUP()	
ON_WM_MDIACT	afx_msg void <u>OnMDIActivate(</u> BOOL,
IVATE()	CWnd*, CWnd*);
ON_WM_MEASU	afx_msg void OnMeasureItem(
REITEM()	LPMEASUREITEMSTRUCT);
ON_WM_MENUC	afx_msg LONG OnMenuChar(UINT, UINT,
HAR()	CMenu*);
ON_WM_MENUS	afx_msg void OnMenuSelect (UINT, UINT,
ELECT()	HMENU);
ON_WM_MOUSE	afx_msg int <u>OnMouseActivate(</u> CWnd*,
ACTIVATE()	UINT, UINT);
ON_WM_MOUSE	
OLL WINT WOODE	afx_msg void <u>OnMouseMove(</u> UINT, CPoint);

MOVE()	
ON_WM_MOUSE	afx_msg BOOL <u>OnMouseWheel</u> (UINT, short,
WHEEL()	CPoint);
ON_WM_MOVE()	afx_msg void <u>OnMove(</u> int, int);
ON_WM_MOVIN	afx_msg void <u>OnMoving</u> (UINT, LPRECT);
G()	
ON_WM_NCACTI	afx_msg BOOL OnNcActivate(BOOL);
VATE()	
ON_WM_NCCAL	afx_msg void OnNcCalcSize(BOOL,
CSIZE()	NCCALCSIZE_PARAMS FAR*);
ON_WM_NCCRE	afx_msg BOOL OnNcCreate(
ATE()	LPCREATESTRUCT);
ON_WM_NCDEST	afx_msg void OnNcDestroy();
ROY()	
ON_WM_NCHITT	afx_msg UINT OnNcHitTest (CPoint);
EST()	
ON_WM_NCLBUT	afx_msg void OnNcLButtonDblClk(UINT,
TONDBLCLK()	CPoint);
ON_WM_NCLBUT	afx_msg void OnNcLButtonDown(UINT,
TONDOWN()	CPoint);
ON_WM_NCLBUT	afx_msg void <u>OnNcLButtonUp</u> (UINT, CPoint
TONUP());
ON_WM_NCMBU	afx_msg void OnNcMButtonDblClk(UINT,
TTONDBLCLK()	CPoint);
ON_WM_NCMBU	afx_msg void OnNcMButtonDown(UINT,
TTONDOWN()	CPoint);
ON_WM_NCMBU	afx_msg void OnNcMButtonUp(UINT,
TTONUP()	CPoint);
ON_WM_NCMOU	afx_msg void OnNcMouseMove(UINT,
SEMOVE()	CPoint);
ON_WM_NCPAIN	afx_msg void <u>OnNcPaint(</u>);
T()	
ON_WM_NCRBU	afx_msg void OnNcRButtonDblClk(UINT,
TTONDBLCLK()	CPoint);
ON_WM_NCRBU	afx_msg void <u>OnNcRButtonDown(</u> UINT,
TTONDOWN()	CPoint);
ON_WM_NCRBU	afx_msg void OnNcRButtonUp(UINT, CPoint
TTONUP());
ON_WM_PAINT()	afx_msg void <u>OnPaint(</u>);
ON_WM_PAINTC	afx_msg void OnPaintClipboard(CWnd*,
LIPBOARD()	HANDLE);
ON_WM_PALETT	afx_msg void OnPaletteChanged(CWnd*);
ECHANGED()	
ON_WM_PALETT	afx_msg void OnPaletteIsChanging(CWnd*);
EISCHANGING()	
ON_WM_PARENT	afx_msg void OnParentNotify(UINT, LONG
NOTIFY());
ON_WM_QUERY	afx_msg HCURSOR <u>OnQueryDragIcon(</u>);
DRAGICON()	
ON_WM_QUERY	afx_msg BOOL OnQueryEndSession();
ENDSESSION()	
ON_WM_QUERY	afx_msg BOOL OnQueryNewPalette();
NEWPALETTE()	
ON_WM_QUERY	afx_msg BOOL OnQueryOpen();
OPEN()	
ON_WM_RBUTTO	afx_msg void OnRButtonDblClk(UINT,
NDBLCLK()	CPoint);
ON_WM_RBUTTO	afx_msg void OnRButtonDown(UINT, CPoint
NDOWN());
ON_WM_RBUTTO	afx_msg void OnRButtonUp(UINT, CPoint);
NUP()	

ON_WM_RENDER	afx_msg void <u>OnRenderAllFormats(</u>);
ALLFORMATS()	
ON_WM_RENDER	afx_msg void <u>OnRenderFormat(</u> UINT);
FORMAT()	of man POOL On Sot Comment OW at the INT
ON_WM_SETCUR	afx_msg BOOL <u>OnSetCursor</u> (CWnd*, UINT,
SOR() ON_WM_SETFOC	UINT); afx_msg void OnSetFocus(CWnd*);
US()	arx_msg volu <u>Onsenfocus</u> (C whu ⁺),
ON_WM_SHOWW	afx_msg void OnShowWindow(BOOL, UINT
INDOW());
ON_WM_SIZE()	afx_msg void OnSize(UINT, int, int);
ON_WM_SIZECLI	afx_msg void <u>OnSizeClipboard</u> (CWnd*,
PBOARD()	HANDLE);
ON_WM_SIZING(afx_msg void OnSizing(UINT, LPRECT);
)	
ON_WM_SPOOLE	afx_msg void OnSpoolerStatus(UINT, UINT
RSTATUS());
ON_WM_STYLEC	afx_msg void OnStyleChanged(int,
HANGED()	LPSTYLESTRUCT);
ON_WM_STYLEC	afx_msg void OnStyleChanging(int,
HANGING()	LPSTYLESTRUCT);
ON_WM_SYSCHA	afx_msg void <u>OnSysChar(</u> UINT, UINT, UINT
R());
ON_WM_SYSCOL	afx_msg void OnSysColorChange();
ORCHANGE()	fr. manual Organ Communed (UDIT LONG
ON_WM_SYSCO	afx_msg void <u>OnSysCommand(</u> UINT, LONG
MMAND() ON_WM_SYSDEA); of manual OnSusDeedChert LUNT LUNT
DCHAR()	afx_msg void <u>OnSysDeadChar(</u> UINT, UINT, UINT);
ON_WM_SYSKEY	afx_msg void OnSysKeyDown(UINT, UINT,
DOWN()	UINT);
ON_WM_SYSKEY	afx_msg void OnSysKeyUp(UINT, UINT,
UP()	UINT);
ON_WM_TCARD(afx_msg void OnTCard(UINT, DWORD);
)	
ON_WM_TIMECH	afx_msg void OnTimeChange();
ANGE()	
ON_WM_TIMER()	afx_msg void <u>OnTimer(</u> UINT);
ON_WM_VKEYT	afx_msg int OnVKeyToItem(UINT, CWnd*,
OITEM()	UINT);
ON_WM_VSCROL	afx_msg void <u>OnVScroll</u> (UINT, UINT,
L()	CWnd*);
ON_WM_VSCROL	afx_msg void <u>OnVScrollClipboard</u> (CWnd*,
LCLIPBOARD()	UINT, UINT); afr. msg.void OnWindowBosChanged(
ON_WM_WINDO WPOSCHANGED(afx_msg void <u>OnWindowPosChanged(</u> WINDOWPOS* lpwndpos);
)	minuto mi os ipminupos),
) ON_WM_WINDO	afx_msg void OnWindowPosChanging(
WPOSCHANGING	WINDOWPOS* lpwndpos);
()	
ON_WM_WININI	afx_msg void OnWinIniChange(LPSTR);
CHANGE()	······································
~ /	

Message Handlers

afx_msg void memberFxn();
afx_msg void memberFxn();
-
afx_msg LRESULT memberFxn(WPARAM,

<message>,</message>	LPARAM);
<memberfxn>)</memberfxn>	
ON_REGISTERED	afx_msg LRESULT memberFxn(WPARAM,
_MESSAGE(LPARAM);
<nmessagevariable< td=""><td></td></nmessagevariable<>	
>, <memberfxn>)</memberfxn>	
ON_THREAD_ME	afx_msg void memberFxn(UINT, LONG);
SSAGE(
<message>, <memberfxn>)</memberfxn></message>	
ON_REGISTERED	afx_msg void memberFxn(UINT, LONG);
_THREAD_MESS	
AGE(
<nmessagevariable< td=""><td></td></nmessagevariable<>	
>, <memberfxn>)</memberfxn>	

Button Messages

ON_BN_CLICKED	afx_msg void memberFxn();
(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_BN_DISABLE	afx_msg void memberFxn();
(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_BN_DOUBLE	afx_msg void memberFxn();
CLICKED(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_BN_HILITE(afx_msg void memberFxn();
<id>,</id>	
<memberfxn>)</memberfxn>	
ON_BN_PAINT(afx_msg void memberFxn();
<id>,</id>	
<memberfxn>)</memberfxn>	
ON_BN_UNHILIT	afx_msg void memberFxn();
E(<id>,</id>	
<memberfxn>)</memberfxn>	

ComboBox Messages

ON_CBN_CLOSE afx_msg void memberFxn() $UP(\langle id \rangle,$ <memberFxn>) ON_CBN_DBLCL afx_msg void memberFxn(); K(<id>, <memberFxn>) ON_CBN_DROPD afx_msg void memberFxn(); OWN(<id>. <memberFxn>) ON_CBN_EDITCH afx_msg void memberFxn(); ANGE(<id>, <memberFxn>) ON_CBN_EDITUP afx_msg void memberFxn(); DATE(<id>, <memberFxn>) ON_CBN_ERRSPA afx_msg void memberFxn(); CE(<id>>, <memberFxn>) ON_CBN_KILLFO afx_msg void memberFxn(); CUS(<id>, <memberFxn>) ON_CBN_SELCH afx_msg void memberFxn(); ANGE(<id>, <memberFxn>)

 ON_CBN_SELEN
 afx_msg void memberFxn();

 DCANCEL(<id>,

 <memberFxn>)
 on_CBN_SELEN

 ON_CBN_SELEN
 afx_msg void memberFxn();

 DOK(<id>,

 <memberFxn>)
 on_CBN_SETFOC

 US(<id>,

 <memberFxn>)
 ofx_msg void memberFxn();

Edit Message s

ON_EN_CHANGE(afx_msg void memberFxn(); <id>, <memberFxn>) ON_EN_ERRSPAC afx_msg void memberFxn(); E(<id>>, <memberFxn>) ON_EN_HSCROL afx_msg void memberFxn(); L(<id>>, <memberFxn>) ON_EN_KILLFOC afx_msg void memberFxn(); US($\langle id \rangle$, <memberFxn>) ON_EN_MAXTEX afx_msg void memberFxn(); T(<id>. <memberFxn>) ON_EN_SETFOCU afx_msg void memberFxn(); $S(\langle id \rangle)$. <memberFxn>) ON_EN_UPDATE(afx_msg void memberFxn(); <id>, <memberFxn>) ON_EN_VSCROL afx_msg void memberFxn(); L(<id>>, <memberFxn>)

ListBox Messages

ON_LBN_DBLCL	afx_msg void memberFxn();
K(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_LBN_ERRSPA	afx_msg void memberFxn();
CE(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_LBN_KILLFO	afx_msg void memberFxn();
CUS(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_LBN_SELCH	afx_msg void memberFxn();
ANGE(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_LBN_SETFOC	afx_msg void memberFxn();
US(<id>,</id>	
<memberfxn>)</memberfxn>	
ON_LBN_DBLCL	afx_msg void memberFxn();
K(<id>,</id>	
<memberfxn>)</memberfxn>	