Using the Remote Access Library

The Remote Access Library (RACLib) was created to give non-Docucorp applications the ability to start, stop, and control (to some degree) the Documaker Workstation, also known as the Processing System and PPS. The library provides API functions that can be called from any computer language that can interface to C functions in a DLL. In addition, an ActiveX component (RacCo) is provided for Windows NT/9x.

This document discusses using Remote Access in one of two ways: through the RacCo ActiveX component or through direct API function calls. The various API functions provided by RACLib are described in detail in this manual as a <u>Function Reference</u>. The RacCo library is detailed in the <u>ActiveX Object Reference</u> and the <u>Class Reference</u>. Topics covered include using C, C++, Visual Basic, and Oracle forms to remotely access the Documaker Workstation.

Verifying Access to the System

Run Documaker Workstation

Before beginning to use the Remote Access Library to customize Documaker Workstation, make sure Documaker Workstation works in your environment. You should be able to run the *AFEMNW32.EXE* program (if using the Windows 32-bit version of the product) to access your archives and do forms entry (if needed in your environment). For more information on setting up the system, refer to the Documaker Workstation Supervisor Guide and the Documaker Workstation User Guide.

Path statement

When you write your own application to access Documaker Workstation your program will need to locate and load DLLs and INI files that Documaker Workstation uses. Your application will make calls into RACLib, which will then call into other DLL files of Documaker Workstation. Therefore, the PATH environment variable should include Documaker Workstation program files location. Verify that the PC's PATH= variable includes the program files location; such as C:\FAP\DLL.

The normal Documaker Workstation installation process updates the PATH= variable to include the program directory.

Trouble Shooting

- Check your path statement. You should have C:\FAP\DLL (if that is the installed location) in your path statement. Be sure that it is in your path after a reboot.
- Check your working directory. If you are running from an icon make sure the working directory is correct.
- Check your INI settings. The INI files may be missing and you may have an incorrect directory path statements.
- Check to see if the shipping sample (SAMPCO) works. If not, perhaps you need to go through installation again.

Using the ActiveX Component (RacCo)

Library Platforms

Win 32	OS/2	Win 16	MVS	Unix	OS/400
RACCO					

Library Header Files

RACAPI.H, CRACLIB.H

Overview of Component

The component code is responsible for...

- Determining current window handle that will be passed to RACLib functions. The RACLib functions create a window from the handle passed to them.
- Calling the <u>RACTerminate</u> function when the component destructs and before additional calls to RACLib functions.
- Loading the RACLib DLL (RACW32.DLL) dynamically.

Registering the ActiveX Component

You must register the RACCO.DLL file in the Windows registry to make the Remote Access Component (RacCo) available. To do so:

- Within the MS-DOS command prompt change directory to Documaker Workstation program directory.
 cd c:\fap\dll
- Type: regsvr32 racco.dll
- Windows will display a message that shows the registration was successful.

Component Classes

<u>RacVw</u>	View an archive
RacEdit	Edit a form set
RacImport	Import transactions
RacProxy	Edit form sets

Using Visual Basic

How to use the component from Visual BASIC

1. Register component.

From the command line, you can run the following program. Regsvr32 racco.dll

If you need to unregister the component, type the following. Regsvr32 /u racco.dll

2. Introduce the type library to the Visual BASIC project.

Select the Project menu.

Select References.

Click the checkbox beside RacCo 'V.v' Type Library. (V.v indicates the version number)

3. Now you can declare an object of the type RacVw.

See Example below.

Public RacLib as RacVw

The <u>RACSetWorkingPath</u> API can be used to set the current working directory to the MRL data set you want your application and DAP to work with. A good place to call this function is on the Form Load event, since the MRL should be the current directory before you can work with data in the directory.

Example

The following sample code fragments retrieves an archived form set. The sample uses the SAMPCO master resource library that ships with Documaker Workstation. It creates a RacVw object and uses the SetWorkingDir method to set the working directory then calls ViewByKey to display the archive list selection window in Documaker Workstation.

First, we declared a RacVw object variable in the Declarations area of the form1 source file.

```
Public vbRacVw As RacVw
```

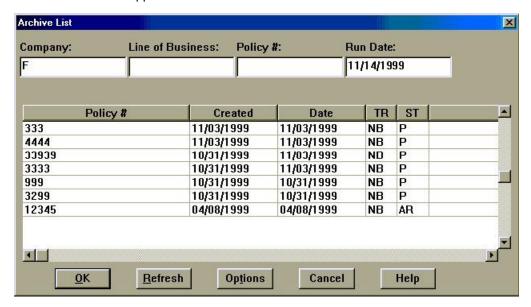
Next, the RacCo object is created and methods are called in sub-routines of the form1 source file. When the form is loaded, the RacVw object is created and the working path is set.

```
Private Sub Form_Load()
    Set vbRacVw = New RacVw
    vbRacVw.SetWorkingDir "c:\fap\mstrres\sampco"
End Sub
```

When a form button is pressed, RacCo is asked to retrieve archives that have a Key1 value starting with "F".

```
Private Sub cmdRACRetArc_Click()
    vbRacVw.ViewByKey "F", "", "", 1, 0
End Sub
```

When the <u>ViewByKey</u> method executes, a window is created to display the form set in and the following Archive List window appears.



Once a policy is selected, the form set appears in the created window.

Using C++

Files

File Type	Windows NT/9x
ActiveX DLL	RACCO.DLL
Type Library	RACCO.TLB

Example

The following sample code fragments retrieves an archived form set. The sample uses the SAMPCO master resource library that ships with Documaker Workstation. It creates an IRacVw object and uses the SetWorkingDir method to set the working directory then calls ViewByKey to display the archive list selection window in Documaker Workstation.

First, we create a RacCo object's <u>IRacVw</u> class using the type RACCO. *TLB* library. In the Microsoft Visual Studio you can choose:

- Select the View menu.
- Select Class Wizard...
- Select Add Class...
- Select From a type library...

Locate RACCO.TLB

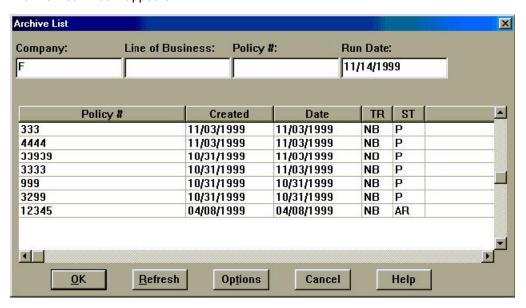
Next, create an instance of the <u>IRacVw</u> object when the application is initialized. Then set the working path for RacCo.

```
pRacVw = new IRacVw();
if (pRacVw != NULL)
{
    pRacVw->CreateDispatch("DocuCorpDAPRacCo.RacVw");
    pRacVw->SetWorkingDir("c:\\fap\\mstrres\\sampco");
}
```

When a menu item is selected, RacCo is asked to retrieve archives that have a Key1 value starting with "F".

```
PRacVw->ViewByKey("F", "", "", 1, 0);
```

When the <u>ViewByKey</u> method executes, a window is created to display the form set in and the following Archive List window appears.



Once a policy is selected, the form set is displayed in the created window.

Using API Functions

Library Platforms

Win 32	OS/2	Win 16	MVS	Unix	OS/400
RACW32	RACOS2	RACWIN			

Library Header Files

RACAPI.H, RACLIB.H

Overview of API Functions

Docucorp International's RACLib was created to give non-Docucorp applications the ability to start (and to somewhat control) the form's entry system.

RACLib supports both a modal or non-modal session. A modal session will assume control of window message handling and only return once the user completes form entry. A non-modal session relies upon the controlling application for message handling.

A non-modal session allows an external application to remain responsive to message commands. However, this greater control result in a little more complexity because the application becomes responsible for ensuring that the entry system performs all the necessary operations to collect and save data.

This reference includes those functions exported by RACLib for use by external applications. External applications can either include the *RACAPI.H* header into the source and link with the RAC import library (*RACW32.LIB*), or manually load the DLL thus querying the procedure address by name before each call. The examples in this documentation will assume the application is linked with RACLib.

For those applications that attempt to query procedures by name, it will still be important to note the prototypes of these functions. Calling a function indirectly (as this manner suggests) does not ensure the correct calling convention is used or that the correct size of parameter is pushed. When in doubt, provide a proper variable cast (especially when a "long" variable is required under Windows).

Most functions are prototyped with the calling convention defined by _RACAPI, others use _VMMAPI or EXPENTRY defines.

The definition of _RACAPI is:

The definition of _VMMAPI is:

The type EXPENTRY is defined for Windows as:

Archive Functions

Function Description

RACRetrieve	Display transaction from archive.
<u>RACRetrieveArchive</u>	View form set specified.
<u>RACRetrieveArchiveHab</u>	View form set specified.
RACViewByKey	View form set specified.
RACViewByKeyHab	View form set specified.
<u>RACViewData</u>	View form set specified.
<u>RACViewDataHab</u>	View form set specified.

Entry Functions

Function Description

RACCreate	Create a New WIP Entry
RACCreateEntry	Create a New WIP Entry
RACCreateWipEntry	Create a New WIP Entry
<u>RACEditData</u>	View form set specified.
RACEntry	Start the Entry (PPS) System.
RACMain	Remote Start of Entry (MODAL)

RACSave	Save transaction.
RACThread	New Process operating within another window.
<u>RACUpdate</u>	Edit an existing WIP entry.
<u>RACWipSelectFunction</u>	WIP selection support function.
RACWipSelection	Support function for WIP selection

Error Functions

Function	Description
RACGetDescription	Return description of error message
RACGetStatus	Get Last Error Status Code
RACSetStatus	Set the Error Status Code

Form Set Functions

Function	Description
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<u>RACCountPages</u>	Count the pages in a form set
RACFindCompanyLOB	Locate a specified Key1 and Key2 values
RACFindTransaction	Locate a specified transaction

Proxy Functions

The proxy file is the file representation of one DAP transaction. Usually, it is the archive transaction. This file has enough information for the Power Office application to be able to get the key information for display. Additionally, if needed, it has form names, image names, field data, and so on, so the application can invoke some kind of text search mechanism. Therefore, proxy files can be thought of as another import/export file format.

Function Description

RACArchive2Proxy	Display transaction from archive.
RACSaveAsProxy	Save the current form set in the current AFEData structure into a proxy file.
<u>RACSetProxyHandle</u>	Set the document handle of a proxy file for RACViewProxy .
RACViewProxy	Display archive from proxy file.

Session Functions

Multiple Session RACLib allows Documaker Workstation to have concurrent multiple desktops within the same process. Each window can perform different WIP and ARCHIVE functions within the same process concurrently and independent of the other session. A window's handle identifies each session. The RACInit function attaches Documaker Workstation to a window's handle. This window's handle can be obtained by calling RACGetFrameWindow.

The window's handle returned by <u>RACGetFrameWindow</u> will change after each successive call to <u>RACInit</u>.

<u>RACInit</u> can be called from another function within RACLib or external to RACLib. The following RACLib functions call <u>RACInit</u> internally. Therefore, if you make successive calls to any of these APIs we have new session.

- RACViewData
- RACViewByKey
- RACRetrieveArchive
- RACMain
- RACInitCtrl
- RACInitAll
- RACThread

The maximum number of sessions can be defined with the following INI option:

This example sets the maximum to five sessions. Therefore, the sixth call to <u>RACInit</u> will fail. The current version of RACLib will support no more than 10 concurrent sessions.

Function Description

RACGetSession	Get the session for this window
<u>RACSetCurSession</u>	Set this window to be the current session.
RACSetSessionMenu	Set the menu's handle in the session structure
RACTermSession	Terminate Entry Session.

System Functions

Command Line Arguments

This module parses command line arguments and keeps the valid arguments in a static structure.

The pointer to the structure is initially NULL but it's filled by the RACSetCmdLineArg function. The memory for the structure is static but there is a linked list's handle that is created via VMMCreateList. This handle will not survive RACSetCmdLineArg will need to be called before each RACInit.

This pointer to the command line structure is set to static memory when $\frac{RACSetCommandLineArg}{Endown}$ is called successfully.

Function	Description
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RACClose	Close.
<u>RACGetAFEData</u>	Get the Entry Data Structure
RACInit	Initialize Entry System
<u>RACInitAll</u>	Initialize Entire Entry System.
<u>RACInitCtrl</u>	Initialize Entry System (menu and accelerator control).
RACLibVersion	Get library version information.
RACLoadIni	Load the INI file.
<u>RACPackDatabase</u>	Pack the database.
<u>RACRestorePath</u>	Restore original working directory.
RACSetCmdLineArg	This allows historical command line options for AFEMAIN program to be passed to RACInit .
RACSetIniFile	Sets the INI file path name used by RACLib functions.
RACSetWorkingPath	Set current working directory.
RACTerminate	Terminate Entry Session.
<u>RACWorkingPath</u>	Establish correct working directory.

Window Functions

Function Description

RACCommand	Request command execution.
RACEnableMenu	Change to the Entry Menu.
RACGetAccelHandle	Get the Accelerator Table Handle
RACGetClientWindow	Return client window.
RACGetFrameWindow	Return frame window.
RACGetMenuHandle	Get the Entry Menu Handle.
<u>RACGetOrigMenuHandle</u>	Get the Original Menu Handle.
RACHookProc	Windows accelerator hook procedure
RACLoadMenu	This function will query the INI file for the MEN.RES compatible file to load.
<u>RACMainWndProc</u>	Documaker Workstation message handler.
RACModal	Start Modal Entry.
RACRemoveScrollbar	Remove the scroll bar from window.
RACRestoreMenu	Restore the Original Menu.
RACSetCaptionOff	Set caption off for this window.

<u>RACSetCaptionOn</u>	Set caption on for this window.
RACSetHook	Establish Windows message hook.
RACSetParent	Set parent window.
RACSubClass	Subclass a window's procedure with RACMainWndProc.
RACUnhook	Remove Windows message hook.

Using C/C++

The Remote Access Library (RACLib) was created using the C/C++ computer language. It is a natural fit to call the API functions from your C source. You can include the *RACAPI.H* header file and link the import library. The **Function Reference** in this document details the functions and their declaration syntax.

Files

File Type	Windows NT/9x	OS/2	Windows 3.x
Include file	RACAPI.H	RACAPI.H	RACAPI.H
Import library	RACW32.LIB	RACOS2.LIB	RACWIN.LIB
DLL	RACW32.DLL	RACOS2.DLL	RACWIN.DLL

Example

The following sample code fragments retrieves an archived form set. The sample uses the SAMPCO master resource library that ships with Documaker Workstation. It sets the working directory by using the RACSetWorkingPath API function then calls RACRetrieveArchive to display the archive list selection window in Documaker Workstation.

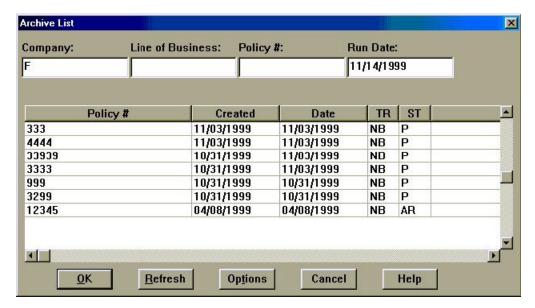
First, the RACLib header file RACAPI.H is included.

```
#include "racapi.h"
```

Next, the RACLib API functions are called in window procedure code when a menu item is selected. The working path is set then RACLib is asked to retrieve archives that have a Key1 value starting with "F".

```
RACSetWorkingPath("c:\\fap\\mstrres\\sampco");
RACRetrieveArchive(hWnd,"F","","",1,0);
```

When the RACRetrieveArchive function executes, a window is created to display the form set in and the following Archive List window appears.



Once a policy is selected, the form set is displayed in the created window.

Using Visual Basic

To make direct function calls into RACLib, you must declare the API's to be used in the General Declarations section of the Visual Basic project. The RACLIB.BAS file has been provided that declares all the Remote Access API's. You can include or copy the contents of the RACLIB.BAS file into your project. The **Function Reference** in this document details the functions and their declaration syntax.

Files

File Type	Windows NT/9x
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Declaration file	RACLIB.BAS
DLL	RACW32.DLL

Example

The following sample code fragments retrieves an archived form set. The sample uses the SAMPCO master resource library that ships with Documaker Workstation. It sets the working directory by using the RACSetWorkingPath API function then calls RACRetrieveArchive to display the archive list selection window in Documaker Workstation.

First, the RACLib API functions are declared in the Declarations area of the form1 source file. These declarations can be found in RACLIB.BAS.

```
ByVal location As Long) As Long
```

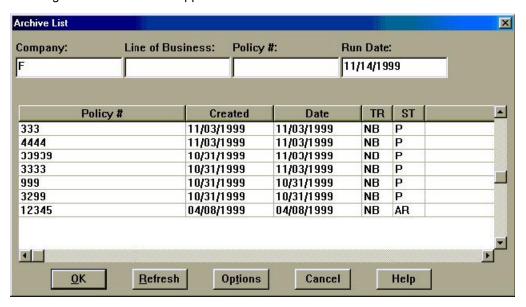
Next, the RACLib API functions are called in sub-routines of the form1 source file. When the form is loaded, the working path is set.

```
Private Sub Form_Load()
    RACSetWorkingPath "c:\fap\mstrres\sampco"
End Sub
```

When a form button is pressed, RACLib is asked to retrieve archives that have a Key1 value starting with "F".

```
Private Sub cmdRACRetArc_Click()
    RACRetrieveArchive Form1.hwnd, "F", "", 1, 0
End Sub
```

When the RACRetrieveArchive function executes, a window is created to display the form set in and the following Archive List window appears.



Once a policy is selected, the form set is displayed in the created window.

Using ORACLE Forms

You can make direct function calls into RACLib from ORACLE Forms. You can specify the API's to be used in a *globalvar* package specification and package body. The **Function Reference** in this document details the functions and their declaration syntax.

Example Code

This is how the RACThread function has been accessed from Oracle forms.

The *globalvar* package specification and package body was defined under "PROGRAM UNITS" in a specific form that accesses the RACLib functions. A pushbutton was defined in the Oracle form to start the <u>RACThread</u> function. An Oracle package is a set of functions and data that is grouped together. The package idea is similar to a C++ class.

This is the specification section similar to a class specification defined in the include file.

```
PACKAGE globalvar IS
threadactive NUMBER;
fh_mylib ora_ffi.libHandleType;
fh windll ora ffi.libHandleType;
```

```
fh_thread ora_ffi.funcHandleType;
fh_terminate ora_ffi.funcHandleType;
fh_getparent ora_ffi.funcHandleType;
END:
```

The *body* section contains function names and code that will be executed when the package is instantiated. In the *globalvar* package, there are no functions but the DLLs are loaded and the functions registered.

```
PACKAGE BODY globalvar IS
threadactive := 0;
fh mylib := ora ffi.load library('E:REL10\FAP400\SHIPW32\','racw32.dll');
fh windll := ora ffi.load library('D:\WINDOWS\SYSTEM\','user32.dll');
fh_thread := ora_ffi.register_function(fh_mylib, 'RACThread', ora_ffi.PASCAL_STD);
fh_terminate := ora_ffi.register_function(fh_mylib, 'RACTerminate',
ora ffi.PASCAL STD);
fh getparent := ora ffi.register function(fh windll, 'GetParent',
ora ffi.PASCAL STD);
ora_ffi.register_parameter(fh_thread, ORA FFI.C INT);
ora ffi.register return(fh thread, ORA FFI.C INT);
ora_ffi.register_parameter(fh_terminate, ORA_FFI.C_INT);
ora_ffi.register_return(fh_terminate, ORA_FFI.C_INT);
ora_ffi.register_parameter(fh_getparent, ORA_FFI.C_INT);
ora ffi.register return(fh getparent, ORA FFI.C INT);
END globalvar;
```

The following code was placed in the trigger section under a WHEN_BUTTON_PRESSED event. We obtain the parent of the current window so the RACThread window will not be placed inside the pushbutton.

```
declare
FUNCTION i TestDll(funcHandle in ora ffi.funcHandleType,
aNumber in BINARY INTEGER) RETURN BINARY INTEGER;
pragma interface(c, i TestDll, 11265);
FUNCTION i Term (funcHandle in ora ffi.funcHandleType,
aNumber in BINARY_INTEGER) RETURN BINARY_INTEGER;
pragma interface(c, i Term, 11265);
windowH BINARY INTEGER;
begin
if globalvar.threadactive = 1 then
windowH := i Term(globalvar.fh terminate, windowH);
windowH := Get_Item_Property(name_in('SYSTEM.CURSOR_ITEM'), WINDOW_HANDLE);
windowH := i TestDll(globalvar.fh_getparent, windowH);
windowH := i TestDll(globalvar.fh thread, windowH);
globalvar.threadactive := 1;
end;
```

Tips and Techniques

Verify that you can access Documaker Workstation before you customize it with RACLib/RacCo.

Run Documaker Workstation

Before beginning to use the Remote Access Library to customize Documaker Workstation, you **must** verify that Documaker Workstation works in your environment. You should be able to run the *AFEMNW32.EXE* (if using Win32 product) to access your archives and do forms entry (if needed in your environment). For more information on setting up Documaker Workstation, refer to the Documaker Workstation Supervisor Guide and the Documaker Workstation User Guide.

Path statement

When you write your own application to access Documaker Workstation your program will need to locate and load DLLs and INI files that Documaker Workstation uses. Your application will make calls into RACLib, which will then call into other DLL files of Documaker Workstation. Therefore, the PATH environment variable should include Documaker Workstation program files location. Verify that the PC's PATH= variable includes the program files location; such as C:\FAP\DLL.

The normal Documaker Workstation installation process updates the PC's PATH= variable to include the program directory.

Trouble Shooting

- Check your path statement. You should have C:\FAP\DLL (if that is the installed location) in your path statement. Be sure that it is in your path after a reboot.
- Check your working directory. If you are running from an icon make sure the working directory is correct.
- Check your INI settings. The INI files may be missing and you may have incorrect directory path statements.

 Check to see if the shipping sample (SAMPCO) works. If not, perhaps you need to go through installation again.

Check that the working directory and INI file settings are always accessible from your application.

Documaker Workstation uses the working directory path to locate the *FSIUSER.INI* and *FSISYS.INI* files. Within these INI files are path and file settings that the system uses to locate numerous other files and resources. When you are remotely controlling Documaker Workstation, you need to be aware of this working directory system requirement. Therefore, your application should set the working directory path for RACLib/RacCo.

If your application can change its working directory while running, this can cause issues with RACLib/RacCo finding files and resources. For instance, a simple file open window can change the current working directory of an application.

RACLib/RacCo can have trouble finding files and resources if your INI files contain settings with relative paths and your application has changed its working directory while running. If you have this problem, try one of these possible solutions:

- Change your INI files to have absolute path settings
- Save and restore the working path around the process that can change your path. For instance, you could
 get the current working path before the file open window then restore it once finished.
- Set the working directory for RACLib/RacCo before running each remote access process (RAC)

ActiveX Object Reference

AfeProxy (IAfeProxy)

AFE proxy class

Syntax

#include <AFEPROXY.H> class <u>AfeProxy</u>: public <u>CRacBase</u>

Remarks

The proxy file is the file representation of one DAP transaction. Usually, it is the archive transaction. This file has enough information for the Power Office application to be able to get the key information for display. Additionally, if needed, it has form names, image names, field data, and so on, so the application can invoke some kind of text search mechanism. Therefore, proxy files can be thought of as another import/export file format.

There are two proxy objects in the RacCo component.

RacProxy

Queries information from the proxy file, like getting the key information.

AfeProxy

Displays an archived transaction based on the input proxy file. Additionally, it lets you create a proxy file from an archived transaction.

Overview

Related Classes

CRacBase

Member Functions

Method	Description
<u>CloseFile</u>	Close proxy file.
<u>GetDocHandle</u>	Get the Documaker Workstation document handle.
GetIndex	Get the index value for a field.
<u>LoadFile</u>	Load a proxy file.
<u>LoadFileVar</u>	Load proxy file.

Details of AfeProxy class

Constructors

public AfeProxy(void)

CloseFile

Close proxy file.

Syntax

public void CloseFile(void)

GetDocHandle

Get the Documaker Workstation document handle.

Syntax

public void GetDocHandle(long* docH)

Parameter Description

docH	Document handle.
doci i	Document nancie.

GetIndex

Get the index value for a field.

Syntax

public void GetIndex(BSTR fldName, BSTR* fldText)

Parameter Description

fldName	Field name.
fldText	Field text value.

LoadFile

Load a proxy file.

Syntax

public void LoadFile(BSTR fileName)

Parameter Description

an an	
fileName	File name.
mertane	The name.

LoadFileVar

Load proxy file.

Syntax

public void LoadFileVar(VARIANT* fileName)

Parameter	Description
-----------	-------------

fileName File name.

RacEdit (IRacEdit)

Use this function to run Documaker Workstation for form entry.

Syntax

#include <RACEDIT.H> class RacEdit : public CRacBase

Overview

Remarks

Use this component to run Documaker Workstation for form entry. The component is an "in-process" DLL implemented with ATL. RACLib is responsible for the actual functionality of the component.

Related Classes

CRacBase

Member Functions

Method	Description

RACMain	Starts a modal session of the form entry system.
RACThread	Starts a new process operating within another window.
<u>SetINIPath</u>	Sets the path that Documaker Workstation uses to locate the INI files.
<u>SetParent</u>	Use this function to set the parent window.
<u>SetRacLibDII</u>	Set path and file name for RACLib.
<u>SetWorkingDir</u>	Set working directory for RACLib DLL.

Details of RacEdit class

Constructors

public RacEdit(void)

RACMain

Starts a modal session of the form entry system.

Syntax

public void RACMain(BSTR transaction, BSTR company,

BSTR lob,

BSTR policy,

BSTR description.

BSTR userid,

BSTR sysid,

long mode)

Parameter Description

transaction	A string that represents one of the valid [TRANSACTIONS] abbreviations defined in the INI file. For instance: "NB" for New Business "EN" for Endorsement and so on.
company	A string that represents the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is usually referred to as the "Company" value.
lob	A string that represents the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is usually referred to as the "Line of Business" value.
policy	A string that represents the WIP key ID value. This parameter is usually referred to as the "ID Number" value.
description	A string that should be assigned as the WIP description value.
userid	A string that corresponds to a valid user ID with access to the Entry module.
sysid	Not currently used.
mode	A valid RACLib action. Currently defined: 1 = AFEACTION_CREATE = Create new WIP. 2 = AFEACTION_UPDATE = Update existing WIP.

Remarks

Starts a modal session that is similar to starting Documaker Workstation (*AFEMNW32.EXE*). No other initialization or termination functions need be called by the user's application.

Since this function starts a modal session, it does not return until the session completes. It will take over the main window handling and replace the existing menu. The new menu will be created from the file specified by the [ALTMENU] setting in the INI file. If omitted, the menu will default to the file specified by the [MENU] setting in the INI file.

The original menu will be restored before returning. During initialization, the login screen can appear if the user ID is not specified by the parameter and is not specified in the INI file.

This method calls **RACMain** in RACLib.

RACThread

Starts a new process operating within another window.

Syntax

public void RACThread(long hndl)

Parameter Description

Remarks

It is assumed that the window handle passed represents the area that must contain the program. A frame window is created inside this area. It then starts the Entry module after the usual initialization.

This method calls the **RACThread** in RACLib.

SetINIPath

Sets the path that Documaker Workstation uses to locate the INI files.

Syntax

public void SetINIPath(BSTR iniPath)

Parameter Description

iniPath	Path name for INI files.

Remarks

The system will load FSISYS.INI and FSIUSER.INI from that location. This method calls <u>RACSetIniFile</u> in RACLib.

SetParent

Use this function to set the parent window.

Syntax

public void SetParent(HWND hwnd)

Parameter Description

hwnd	Handle of window.

Remarks

This method calls **RACSetParent** in RACLib.

SetRacLibDII

Set path and file name for RACLib.

Syntax

public void SetRacLibDll(BSTR racLibPath)

Parameter Description

racLibPath	Library path name.
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Remarks

If this method is not used the component will default to RACW32.DLL.

SetWorkingDir

Set working directory for RACLib DLL.

Syntax

public void SetWorkingDir(BSTR workDir)

Description

workDir	Working directory path.
WOLKDII	Working directory patri.

Remarks

This method also sets the FSIUSER environment variable. It calls RACLib.

RacImport (IRacImport)

Use this function to run Documaker Workstation for form entry.

Syntax

#include <RACIMPOR.H> class RacImport : public CRacBase

Overview

Remarks

Use this component to run Documaker Workstation for form entry. The component is an "in-process" DLL implemented with ATL. RACLib is responsible for the actual functionality of the component.

Related Classes

CRacBase

Member Functions

Method Description

<u>RACEditData</u>	View and edit a form set.
<u>SetINIPath</u>	Sets the path that Documaker Workstation uses to locate the INI files.
<u>SetRacLibDII</u>	Set path and file name for RACLib.
<u>SetWorkingDir</u>	Set working directory for RACLib DLL.

Details of RacImport class

Constructors

public RacImport(void)

RACEditData

View and edit a form set.

Syntax

public void RACEditData(long hndl, BSTR fileName)

Parameter

Description

hndl	Parent window to contain this application.
fileName	Name of file to import.

SetINIPath

Sets the path that Documaker Workstation uses to locate the INI files.

Syntax

public void SetINIPath(BSTR iniPath)

Parameter Description

iniPath	Path name for INI files.

Remarks

The system will load FSISYS.INI and FSIUSER.INI from that location. This method calls RACSetIniFile from RACLib.

SetRacLibDII

Set path and file name for RACLib.

Syntax

public void SetRacLibDll(BSTR racLibPath)

Parameter Description

racLibPath	Library patch name.
TOOLIDI UITI	Library pater name.

Remarks

If this method is not used the component will default to racw32.dll.

SetWorkingDir

Set working directory for RACLib DLL.

Syntax

public void SetWorkingDir(BSTR workDir)

Parameter Description

workDir	Working directory path.
WORDII	Working directory patri.

Remarks

This method also sets the FSIUSER environment variable.

RacProxy (IRacProxy)

Use this function to run Documaker Workstation for form entry.

Syntax

#include <RACPROXY.H> class RacProxy : public CRacBase

Overview

Remarks

Use this component to run Documaker Workstation for form entry. The component is an "in-process" DLL implemented with ATL. RACLib is responsible for the actual functionality of the component.

Related Classes

CRacBase

Member Functions

Method	Description
CloseView	Close the form set
RACArchive2Proxy	Display transaction from archive.
RACCommand	Request command execution.
RACSetCaptionOff	Set caption off for this window.
RACSetCaptionOn	Set caption on for this window.
RACViewAfeProxy	Display archive from proxy file.
RACViewProxy	Display archive from proxy file.
RemoveScrollBar	Remove the scroll bar from window.
<u>SetINIPath</u>	Sets the path that Documaker Workstation uses to locate the INI files.
<u>SetRacLibDII</u>	Set path and file name for RACLib.
<u>SetWorkingDir</u>	Set working directory for RACLib DLL.

Details of RacProxy class

Constructors

public RacProxy(void)

CloseView

Close the form set

Syntax

public void CloseView(void)

Remarks

Close the form set in the <u>RACViewProxy</u> session but don't end the session, by keeping the session alive we can avoid doing another initialization for RACLib.

RACArchive2Proxy

Display transaction from archive.

Syntax

```
public void RACArchive2Proxy(long hwnd,
BSTR Key1,
BSTR Key2,
BSTR KeyID,
short startpage,
BSTR* proxyfile)
```

Parameter Description

hwnd	The parent window to contain this application.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeylD	Search data for KeyID.
startpage	Page to begin display of form set.
proxyfile	Character pointer that contains name of the proxy file

Remarks

Display an archived transaction and allow user to store a proxy file pointing to the transaction in archive. Transactions are filtered the same as RACRetrieveArchive.

This method calls **RACArchive2Proxy** in RACLib.

RACCommand

Request command execution.

Syntax

public void RACCommand(long cmd)

Parameter Description

cmd	Command ID
-----	------------

Remarks

This will send the main window a command message corresponding to the command ID passed as a parameter. Most often, this function will be used during a non-modal session to pass in the IDs associated with WM_COMMAND messages. You must initialize the system before you call this function.

This method calls **RACCommand** in RACLib.

RACSetCaptionOff

Set caption off for this window.

Syntax

public void RACSetCaptionOff(void)

Remarks

Set caption off for this window. This method calls RACLib.

RACSetCaptionOn

Set caption on for this window.

Syntax

public void RACSetCaptionOn(void)

Remarks

Set caption on for this window. This method calls RACSetCaptionOn in RACLib.

RACViewAfeProxy

Display archive from proxy file.

Syntax

public void RACViewAfeProxy(long hwnd, AfeProxy* obj, short page, short isChildWindow)

Parameter Description

hwnd	Must be a valid window handle to contain form set display.
page	Page to begin display of form set.

Remarks

This method calls **RACViewProxy** in RACLib.

RACViewProxy

Display archive from proxy file.

Syntax

public void RACViewProxy(long hwnd, BSTR filename, short page, short isChildWindow)

Parameter Description

hwnd	Must be a valid window handle to contain form set display.
filename	path to a valid proxy file
page	page to begin display of form set

Remarks

This method calls **RACViewProxy** in RACLib.

RemoveScrollBar

Remove the scroll bar from window.

Syntax

public void RemoveScrollBar(void)

Remarks

Remove the scroll bar from window. This method calls **RACRemoveScrollbar** in RACLib.

SetINIPath

Sets the path that Documaker Workstation uses to locate the INI files.

Syntax

public void SetINIPath(BSTR iniPath)

Parameter Description

iniPath Path name for INI files.

Remarks

The system will load FSISYS.INI and FSIUSER.INI from that location. This method calls $\frac{RACSetIniFile}{RACLib}$.

SetRacLibDII

Set path and file name for RACLib.

Syntax

public void SetRacLibDll(BSTR racLibPath)

Parameter Description

racLibPath	Library patch name.
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Remarks

If this method is not used the component will default to racw32.dll.

SetWorkingDir

Set working directory for RACLib DLL.

Syntax

public void SetWorkingDir(BSTR workDir)

Parameter Description

workDir	Working directory path.

Remarks

This method also sets the FSIUSER environment variable.

RacVw (IRacVw)

Use this function to view archived form sets.

Syntax

#include <RACVW.H> class RacVw : public CRacBase

Overview

Remarks

Use this component to view archived form sets. The component is an "in-process" DLL implemented with ATL. RACLib is responsible for the actual functionality of the component.

Related Classes

CRacBase

Member Functions

Method	Description
<u>SetINIPath</u>	Sets the path that Documaker Workstation uses to locate the INI files.
<u>SetParent</u>	Use this function to set the parent window.
<u>SetRacLibDII</u>	Set path and file name for RACLib.
<u>SetWorkingDir</u>	Set working directory for RACLib DLL.
ViewByArcKey	Find transactions based on CAR Key.
<u>ViewByFilename</u>	View transaction stored in the export file.
<u>ViewByKey</u>	View the form set that matches the key values supplied.

Details of RacVw class

Constructors

public RacVw(void)

SetINIPath

Sets the path that Documaker Workstation uses to locate the INI files.

Syntax

public void SetINIPath(BSTR iniPath)

Parameter	Description
-----------	-------------

iniPath	Path name for INI files.

Remarks

The system will load FSISYS.INI and FSIUSER.INI from that location. This method calls $\frac{RACSetIniFile}{RACLib}$.

SetParent

Use this function to set the parent window.

Syntax

public void SetParent(HWND hwnd)

Remarks

This method calls **RACSetParent** from RACLib.

SetRacLibDII

Set path and file name for RACLib.

Syntax

public void SetRacLibDll(BSTR racLibPath)

Parameter Description

racLibPath	Library patch name.
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Remarks

If this method is not used the component will default to racw32.dll.

SetWorkingDir

Set working directory for RACLib DLL.

Syntax

public void SetWorkingDir(BSTR workDir)

Parameter Description

workDir	Working directory path.

Remarks

This method also sets the FSIUSER environment variable.

ViewByArcKey

Find transactions based on CAR Key.

Syntax

public void ViewByArcKey(BSTR carkey, short page, short location)

Parameter

Description

carkey	Key value of CAR key.
page	Page number.
	Screen location.
location	0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

This method calls **RACViewByKey** from RACLib.

ViewByFilename

View the transaction stored in the export file.

Syntax

public void ViewByFilename(BSTR filename, short page, short location)

Parameter

Description

filename	Name of export file.
page	Page number.
location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

This method calls **RACViewData** from RACLib.

ViewByKey

View the form set that matches the key values supplied.

Syntax

```
public void ViewByKey(BSTR Key1,
BSTR Key2,
BSTR KeyID,
short page,
short location)
```

Parameter Description

Key1	Search data for Key1. Usually known as company.
Key2	Search data for Key2. Usually known as line of business.
KeylD	Search data for KeyID. Usually known as policy number.
page	set beginning page
location	Set screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

Find transactions that match Key1, Key2, and KeyID. The fields that are used for these keys are defined in the INI file. See the *ArcRet* control group options Key1, Key2, and KeyID. Method calls <u>RACRetrieveArchive</u> from RACLib.

Class Reference

AfeLib

Interface class to AFELib.

Syntax

#include <CAFELIB.H> class AfeLib

Overview

Member Functions

Method	Description
<u>AFECloseProxyFile</u>	Close proxy file.
<u>AFEGetProxyFieldData</u>	Get proxy field data.
AFEIndex2Fld	Get Field given an index
<u>AFEOpenProxyFile</u>	Open proxy file.

Details of AfeLib class

Constructors

public AfeLib(void)

AFECloseProxyFile

Close proxy file.

Syntax

public void AFECloseProxyFile(VMMHANDLE docH)

Parameter Description

docH	Document handle.

AFEGetProxyFieldData

Get proxy field data.

Syntax

```
public int AFEGetProxyFieldData(<u>VMMHANDLE</u> docH, char* fldName, char* flddata, char** pAttr, int fldsize)
```

Parameter Description

docH	Document handle.
fldName	Field name.
flddata	Field data.
pAttr	Attributes.
fldsize	Field size.

AFEIndex2Fld

Get Field given an index

Syntax

public void AFEIndex2Fld(enum <u>ProxyIndexFields</u> fldno, char* fldName, short fldSize)

Parameter

Description

fldno	Field number.
fldName	Field name.
fldSize	Field size.

AFEOpenProxyFile

Open proxy file.

Syntax

 $public \ \underline{VMMHANDLE} \ AFEOpenProxyFile (public \ \underline{VMMHANDLE} \ AFEOpenProxyFile @ char* \ fileName)$

Parameter	Description

	-
fileName	File name.

CRacBase

Base class for common classes used by RacCo.

Syntax

#include <RACBASE.H> class CRacBase

Overview

Remarks

The ActiveX components are derived from this class. It keeps track of the parent window handle and the CRacLib interface class to RACLib.

Related Classes

AfeProxy | RacEdit | RacImport | RacProxy | RacVw

Member Functions

Method	Description
--------	-------------

ConvertToUnicode	Convert a string to Unicode.
DestroyProblemWindow	Destroy any problem window that may have been left.
Error	Error function.
<u>GetMyHab</u>	Get the current application instance handle.
GetMyWindow	Get the current active window.
makeWindow	Create a window for Documaker Workstation.
RACCommand	Request command execution.
RACSetCaptionOff	Set caption off for this window.
RACSetCaptionOn	Set caption on for this window.
<u>SetINIPath</u>	Sets the path that Documaker Workstation uses to locate the INI files.
<u>SetParent</u>	Use this function to set the parent window.
<u>SetRacLibDII</u>	Set path and file name for RACLib.
<u>SetWorkingDir</u>	Set working directory for RACLib DLL.

Details of CRacBase class

Constructors

protected CRacBase(void)

Protected Data Members

hwndParent

HWND hwndParent

Remarks

Parent window handle.

RacLib

CRacLib* RacLib

Remarks

Interface to RACLib API functions.

ConvertToUnicode

Convert a string to Unicode.

Syntax

protected OLECHAR* ConvertToUnicode(char* szA)

Parameter Description

szA String to convert.

DestroyProblemWindow

Destroy any problem window that may have been left.

Syntax

protected void DestroyProblemWindow(CRacLib* pRacLib, CRacErr& err)

Parameter Description

pRacLib	Pointer to a CRacLib class.
err	Reference to error class.

Remarks

Destroy any problem window that may have been left by <u>RACTerminate</u>. This has happened before and while <u>RACTerminate</u> was fixed.

Error

Error function.

Syntax

protected virtual HRESULT Error(LPCSTR err) pure

Remarks

This method is a virtual method.

GetMyHab

Get the current application instance handle.

Syntax

protected HINSTANCE GetMyHab(void)

GetMyWindow

Get the current active window.

Syntax

protected HWND GetMyWindow(void)

Remarks

This function tries to handle the situation if the current window is not available.

makeWindow

Create a window for Documaker Workstation.

Syntax

protected HWND makeWindow(HWND parentWindowH)

Parameter Description

parentWindowH	Handle of window to use as parent of new window.

RACCommand

Request command execution.

Syntax

protected HRESULT RACCommand(long cmd)

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Parameter	Description

and d	Communication
cmd	Command ID
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Remarks

This sends the main window a command message corresponding to the command ID passed as a parameter. This method calls RACCommand in RACLib.

RACSetCaptionOff

Set the caption off for this window.

Syntax

protected HRESULT RACSetCaptionOff(long hwnd)

Parameter Description

hwnd	Handle of window.
IIWIIG	nandle of window.

Remarks

Set the caption off for this window. This method calls RACLib..

RACSetCaptionOn

Set the caption on for this window.

Syntax

protected HRESULT RACSetCaptionOn(long hwnd)

Parameter Description

hwnd	Handle of window.

Remarks

Set the caption on for this window. This method calls RACLib.

SetINIPath

Sets the path that Documaker Workstation uses to locate the INI files.

Syntax

protected void SetINIPath(BSTR iniPath)

Parameter	Description
iniPath	Path name for INI files.

Remarks

The system loads the FSISYS.INI and FSIUSER.INI files from that location. This method calls RACSetIniFile in RACLib.

SetParent

Use this function to set the parent window.

Syntax

protected void SetParent(long hwnd)

Parameter

Description

hwnd Handle of window.	hwnd	Handle of window.
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Remarks

This method calls **RACSetParent** in RACLib.

SetRacLibDII

Set path and file name for RACLib.

Syntax

protected void SetRacLibDII(BSTR racLibPath)

Parameter Description

racLibPath	Library path name.

Remarks

If this method is not used the component will default to RACW32.DLL.

SetWorkingDir

Set working directory for RACLib DLL.

Syntax

protected void SetWorkingDir(BSTR workDir)

Parameter Description

workDir	Working directory path.

Remarks

This method also sets the FSIUSER environment variable. It calls RACLib.

CRacErr

Error message class

Syntax

#include <CRACERR.H> class CRacErr

Overview

Remarks

Translates RACLib error messages to text as well any other error number we need to define.

The CRacLib constructor throws an object of this type if it is unable to load a portion of the DLL.

Member Functions

Method Description

GetDescription	Get the error description.
<u>GetErrNum</u>	Get the error code number.

Details of CRacErr class

Constructors

Construct Error object with number.
public CRacErr(int RacErrNo,
CRacLib* pRacLib)

Parameter Description

RacErrNo	Error code number
pRacLib	Interface class to RACLib. This constructor calls RACGetDescription in RACLib.

Remarks

This constructor translates RACLib error messages to text as well any other error number we need to define.

Construct Error object with number. public CRacErr(int RacErrNo)

Construct Error object with a string. public CRacErr(char* desc) public CRacErr(void)

GetDescription

Get the error description.

Syntax

public LPCSTR GetDescription(void)

GetErrNum

Get the error code number.

Syntax

public int GetErrNum(void)

CRacLib

Interface class to RACLib.

Syntax

#include <CRACLIB.H> class CRacLib

Overview

Remarks

This class is responsible for making calls into RACLib API functions. All of the ActiveX components have an instance of this class.

Member Functions

Method	Descri	otion

RACArchive2Proxy	Display transaction from archive.
RACClose	Close.
RACCommand	Request command execution.
RACEditData	View form set specified.
RACGetDescription	Return description of error message
RACGetMainWindow	Return frame window.
RACGetSession	Get the session for this window
<u>RACInitCtrl</u>	Initialize the Entry system (menu and accelerator control).
RACLoadIni	Load the INI file.
RACLoadMenu	This function will query the INI file for the MEN.RES compatible file to load.
<u>RACMain</u>	Starts a modal session of the Entry system.
RACNeed2Terminate	Gets terminate state.
RACRemoveScrollbar	Remove the scroll bar from window.
RACRestoreMenu	Restore the Original Menu.
RACRetrieveArchive	View form set specified.
RACSetCaptionOff	Set the caption off for this window.
RACSetCaptionOn	Set the caption on for this window.
RACSetCurSession	Set this window to be the current session.
<u>RACSetIniFile</u>	Sets the path that Documaker Workstation uses to locate the INI files.
RACSetProxyHandle	Set the document handle of a proxy file for <u>RACViewProxy</u> .

<u>RACSetWorkingPath</u>	Set working directory for RACLib DLL.
RACTerminate	Terminate an Entry session.
RACTermSession	Terminate an Entry session.
RACThread	Starts a new process operating within another window.
<u>RACViewByKey</u>	View form set specified.
<u>RACViewData</u>	View form set specified.
RACViewProxy	Display archive from proxy file.
<u>SetParent</u>	Use this function to set the parent window.

Details of CRacLib class

Constructors

public CRacLib(void)
public CRacLib(char* dllname)

Public Data Members

isDLLLoaded

BOOL is DLLL oaded

Remarks

Indicates if RACLib DLL was loaded.

RACArchive2Proxy

Display transaction from archive.

Syntax

```
public void RACArchive2Proxy(HWND hwnd,
char* Key1,
char* Key2,
char* KeyID,
int startpage,
char* proxyfilename)
```

Parameter Description

hwnd	The parent window to contain this application.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeylD	Search data for KeylD.
startpage	Page to begin display of form set.
proxyfilename	Character pointer that contains name of the proxy file

Remarks

This method calls <u>RACArchive2Proxy</u> in RACLib. Display an archived transaction and allow user to store a proxy file pointing to the transaction in archive. Transactions are filtered the same as <u>RACRetrieveArchive</u>.

RACClose

Close.

Syntax

public void RACClose(HWND hwnd, BOOL querysave, BOOL open)

Parameter

Description

hwnd	Handle of window.
querysave	Boolean to indicate if a message should ask to save current form set.
open	Boolean to indicate if it should be opened.

Remarks

This method calls **RACClose** in RACLib.

Performs <u>AFEClose</u>, thus closing the form set and any windows that were associated with that form set. This lets you use the same session again without doing <u>RACInit</u>. You should call this function before you perform a consecutive view function.

RACCommand

Request command execution.

Syntax

public void RACCommand(int cmd)

Parameter Description

cmd	Command ID
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Remarks

This will send the main window a command message corresponding to the command ID passed as a parameter. Most often, this function will be used during a non-modal session to pass in the IDs associated with WM_COMMAND messages. You must initialize the system before you call this function.

This method calls **RACCommand** in RACLib.

RACEditData

View form set specified.

Syntax

public void RACEditData(HWND hwndParent, char* filename)

Parameter Description

hwndParent	The parent window to contain this application.
filename	The name of a file to import.

Remarks

It is assumed that the window handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

This method calls RACEditData in RACLib.

RACGetDescription

Return description of error message

Syntax

public char* RACGetDescription(int ErrNo)

Parameter Description

ErrNo	Error code.

Remarks

Get the description or message of an error code. This method calls RACGetDescription in RACLib.

RACGetMainWindow

Return frame window.

Syntax

public HWND RACGetMainWindow(void)

Remarks

Return the top level window handle created by <u>RACThread</u>. This method calls <u>RACGetFrameWindow</u> in RACLib.

RACGetSession

Get the session for this window

Syntax

public void* RACGetSession(HWND hwnd)

Parameter

Description

hwnd	Handle of window

Remarks

Retrieve the session that matches on the main frame's window handle. This method calls <u>RACGetSession</u> in RACLib.

RACInitCtrl

Initialize the Entry system (menu and accelerator control).

Syntax

```
public void RACInitCtrl(HWND hwnd,
char* userid,
char* sysid,
BOOL loadMenu,
BOOL loadAccel)
```

Parameter

Description

hwnd	The external application's main (highest level) window.
userid	A pointer to a null-terminated string that corresponds to a valid user ID with access to the entry system.
sysid	Future expansion - not currently used.
loadMenu	If true, the menu is loaded.
loadAccel	If true, the accelerator table is loaded.

Remarks

This method calls <u>RACInitCtrl</u> in RACLib. This causes the entry system to initialize. Initialization includes memory management, FAP, WIP, user login, and the help system.

This function will call <u>RACWorkingPath</u> before starting the initialization process. If an error occurs, <u>RACTerminate</u> will be called and the path restored.

If the process initializes correctly and the load menu flag is true; the defined "menu" will be loaded (although not activated). In addition, the default accelerators will be loaded if the load accelerator flag is true.

If the calling application does not call <u>RACModal</u>, then it should eventually call <u>RACTerminate</u> to shutdown correctly.

During initialization, the login screen can appear if the user ID is not specified by a parameter and is not specified in the INI file.

RACLoadIni

Load the INI file.

Syntax 5 4 1

public void RACLoadIni(void)

Remarks

Load the INI file. The file name is defaulted to FSIUSER.INI if RACSetIniFile did not supply it.

This method calls RACLoadIni in RACLib.

RACLoadMenu

This function will query the INI file for the MEN.RES compatible file to load.

Syntax

public void RACLoadMenu(void)

Remarks

This method calls <u>RACLoadMenu</u> in RACLib. This function will query the INI file for the MEN.RES compatible file to load. The following INI options will be queried in the order shown. Once a valid option has been determined the menu is created but not activated. A call to <u>RACEnableMenu</u> is required to activate the menu.

Order of search to determine menu to load:

[AltMenu]

File

If not located then use:

[MENU]

File

If not located the file MEN.RES will be attempted.

If no menu is located, none will be created and an error is returned.

RACRestoreMenu will restore the original menu. RACTerminate automatically calls this function.

RACMain

Starts a modal session of the form entry system.

Syntax

```
public void RACMain(HWND hwnd,
char* transaction,
char* company,
char* lob,
char* policy,
char* description,
char* userid,
char* sysid,
long mode)
```

Parameter Description

hwnd	Handle of window.	
transaction	A string that represents one of the valid [TRANSACTIONS] abbreviations defined in	

	the INI file. For instance: "NB" for New Business "EN" for Endorsement and so on.
company	A string that represents the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is usually referred to as the "Company" value.
lob	A string that represents the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is usually referred to as the "Line of Business" value.
policy	A string that represents the WIP key ID value. This parameter is usually referred to as the "ID Number" value.
description	A string that should be assigned as the WIP description value.
userid	A string that corresponds to a valid user ID with access to the Entry module.
sysid	Not currently used.
mode	A valid RACLib action. Currently defined: 1 = AFEACTION_CREATE = Create new WIP. 2 = AFEACTION_UPDATE = Update existing WIP.

Remarks

Starts a modal session that is similar to starting Documaker Workstation (*AFEMNW32.EXE*). No other initialization or termination functions need be called by the user's application.

Since this function starts a modal session, it does not return until the session completes. It will take over the main window handling and replace the existing menu. The new menu will be created from the file specified by the [ALTMENU] setting in the INI file. If omitted, the menu will default to the file specified by the [MENU] setting in the INI file.

The original menu will be restored before returning. During initialization, the login screen can appear if the user ID is not specified by the parameter and is not specified in the INI file.

This method calls **RACMain** in RACLib.

RACNeed2Terminate

Gets terminate state.

Syntax

public BOOL RACNeed2Terminate(void)

Remarks

If no RACLib termination is needed, TRUE (1) will be returned, otherwise FALSE (0) is returned.

RACRemoveScrollbar

Remove the scroll bar from a window.

Syntax

public void RACRemoveScrollbar(HWND hwnd)

Parameter Description

hwnd	Handle of window.

Remarks

Remove the scroll bar from a window. This method calls <u>RACRemoveScrollbar</u> in RACLib.

RACRestoreMenu

Restore the original menu.

Syntax

public void RACRestoreMenu(void)

Remarks

This method calls RACRestoreMenu in RACLib.

RACRetrieveArchive

View form set specified.

Syntax

```
public void RACRetrieveArchive(HWND hwndParent, char* Key1, char* Key2, char* KeyID, int startpage, int location)
```

Parameter Description

hwndParent	The parent window to contain this application.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeylD	Search data for KeylD.
startpage	set beginning page
location	Set screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

This method calls <u>RACRetrieveArchive</u> in RACLib. It is assumed that the window handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after the usual initialization.

See the ArcRet control group to determine which fields are matched with Key1, Key2, and KeyID.

RACSetCaptionOff

Set caption off for this window.

Syntax

public void RACSetCaptionOff(HWND hwnd)

Parameter Description

les sure al	Llandle of window
hwnd	Handle of window.

Remarks

Set caption off for this window. This method calls RACLib.

RACSetCaptionOn

Set caption on for this window.

Syntax

public void RACSetCaptionOn(HWND hwnd)

Parameter Description

hwnd	Handle of window.

Remarks

Set caption on for this window. This method calls RACLib.

RACSetCurSession

Set this window to be the current session.

Syntax

public void RACSetCurSession(HWND hwnd)

Parameter Description

hwnd	Handle of window

Remarks

Set the main frame's window handle (hwndMainFrame variable) if we have a valid session for the handle passed. This method calls RACSetCurSession in RACLib.

RACSetIniFile

Sets the path that Documaker Workstation uses to locate the INI files.

Syntax

public void RACSetIniFile(char* iniPath)

iniPath	Path name for INI files.

Remarks

The system loads the FSISYS.INI and FSIUSER.INI files from that location. This method calls RACSetIniFile in RACLib.

RACSetProxyHandle

Set the document handle of a proxy file for **RACViewProxy**.

Syntax

public void RACSetProxyHandle(VMMHANDLE docH)

Parameter Description

docH	Document handle.

Remarks

Set the document handle of a proxy file for **RACViewProxy**.

This method calls **RACSetProxyHandle** in RACLib.

RACSetWorkingPath

Set working directory for RACLib DLL.

Syntax

public void RACSetWorkingPath(char* workDir)

Parameter Description

workDir	Working directory path.

Remarks

This method also sets the FSIUSER environment variable. It calls RACSetWorkingPath in RACLib.

RACTerminate

Terminate Entry Session.

Syntax

public void RACTerminate(void)

Remarks

This method calls <u>RACTerminate</u> in RACLib. This will cause the session to release all resources used by the entry system. You must initialize the system before you call this function.

A non-modal session relies upon the controlling application to request termination. Exiting without terminating the system can cause unpredictable results.

RACTermSession

Terminate Entry Session.

Syntax

public void RACTermSession(BOOL mode, HWND hwnd)

Parameter Description

mode	The parameter mode should be TRUE if the entry system should ask the user to save (if necessary) and FALSE to cause the system to shutdown without asking.
hwnd	Handle of window

Remarks

This method calls **RACTermSession** in RACLib.

This will cause the session to release all resources used by the entry system. You must initialize the system before you call this function.

A non-modal session relies upon the controlling application to request termination. Exiting without terminating the system can cause unpredictable results.

RACThread

Starts a new process operating within another window.

Syntax

public void RACThread(HWND hndl)

Parameter Description

hndl Parent window to start this application	I	Parent window to start this application

Remarks

It is assumed that the window handle passed represents the area that must contain the program. A frame window will be created inside this area. Then starts the Entry module after the usual initialization.

This method calls the **RACThread** in RACLib.

RACViewByKey

View form set specified.

Syntax

```
public void RACViewByKey(HWND hwndParent, char* key, int startpage, int location)
```

Parameter Description

HwndParent	The parent window to contain this application.
Key	The archives key for the transaction.
Startpage	The page number to start display (defaults to 1)
Location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

This method calls <u>RACViewByKey</u> in RACLib. It is assumed that the window handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

RACViewData

View form set specified.

Syntax

```
public void RACViewData(HWND hwndParent, char* filename, int startpage, int location)
```

Parameter Description

hwndParent	The parent window to contain this application.
filename	The name of a file to import.
startpage	The page number to start display (defaults to 1)
location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window

5 = maximized window

Remarks

This method calls <u>RACViewData</u> in RACLib. It is assumed that the window handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

RACViewProxy

Display archive from proxy file.

Syntax

public void RACViewProxy(HWND hwnd, char* filename, int startpage)

Parameter Description

hwnd	must be a valid window handle to contain form set display
filename	path to a valid proxy file
startpage	page to begin display of form set

Remarks

This method calls **RACViewProxy** in RACLib.

SetParent

Use this function to set the parent window.

Syntax

public void SetParent(HWND hwnd)

Parameter Description

hwnd	Handle of window.

Remarks

This method calls **RACSetParent** in RACLib.

Function Reference

RACArchive2Proxy

Display transaction from archive.

Syntax

```
int RACArchive2Proxy(HWND hwnd,
char* Key1,
char* Key2,
char* KeyID,
int startpage,
char* proxyfilename)
```

Parameter Description

hwnd	The parent window to contain this application.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeylD	Search data for KeyID.
startpage	Page to begin display of form set.
proxyfilename	Character pointer that contains name of the proxy file

Remarks

Display an archived transaction and allow user to store a proxy file pointing to the transaction in archive. Transactions are filtered the same as RACRetrieveArchive.

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

```
ByVal proxyfilename As String) As Long
```

typedef

See Also

RACSaveAsProxy, RACViewProxy

Calls

 $\underline{RACGetSession}, \underline{RACGetStatus}, \underline{RACModalEx}, \underline{RACProcessError}, \underline{RACRetrieve}, \underline{RACSetCurSession}, \underline{RACSetStatus}$

RACClose

Close.

Syntax

int RACClose(HWND hwnd, unsigned int querysave, unsigned int open)

Parameter

Description

hwnd	Handle of window.
querysave	Boolean to indicate if a message should ask to save current form set.
open	Boolean to indicate if it should be opened.

Remarks

Performs <u>AFEClose</u>, thus closing the form set and any windows that were associated with that form set. This lets you use the same session again without doing <u>RACInit</u>. You should call this function before performing a consecutive view function.

Files

```
Include: racapi.h
Source: RACTERM.C
```

Code Declarations

typedef

Calls

RACGetSession

RACCommand

Request command execution.

Syntax

int RACCommand(int comID)

Parameter Description

comID Comma	nd ID
-------------	-------

Remarks

This will send the main window a command message corresponding to the command ID passed as a parameter. Most often, this function will be used during a non-modal session to pass in the IDs associated with WM_COMMAND messages. You must initialize the system before you call this function.

Returns

The return value will be that returned from a WndProc in the given operating environment.

Files

Calls

RACCountPages

RACCountPages

Count form set pages

Syntax

int RACCountPages(void)

Remarks

This will return the number of pages in the currently open form set.

Returns

This returns the number of pages. A zero return value indicates that the form set is empty or invalid.

Files

Include: racapi.h Source: RACDATA.C

Code Declarations

int _RACAPI RACCountPages(void);

Visual Basic Declaration

Private Declare Function RACCountPages Lib "racw32.dll" () As Long

RACCreate

Create a New WIP Entry

Syntax

```
int RACCreate(char* transaction,
char* company,
char* lob,
char* policy,
char* description)
```

Parameter

Description

transaction	A null-terminated string pointer that represents one of the valid [TRANSACTIONS] abbreviations defined in the INI file. For instance: "NB" for New Business; "EN" for Endorsement; and so on.
company	A null-terminated string pointer that corresponds to the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Company" value.
lob	A null-terminated string pointer that corresponds to the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Line of Business" value.
policy	A null-terminated string pointer that corresponds to the WIP KeyID value. This parameter is sometimes referred to as the "ID Number" value.
description	A pointer to a null-terminated string that should be assigned as the WIP description value.

Remarks

This will attempt to create a new WIP entry during a non-modal session by calling <u>RACCreateEntry</u>. You must initialize the system before you call this function.

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

```
ByVal Key1 As String, _
ByVal Key2 As String, _
ByVal KeyID As String, _
ByVal description As String) As Long
```

Example

See Also

RACCreateEntry, RACInit

Calls

RACCreateEntry

RACCreateEntry

Create a New WIP Entry

Syntax

int RACCreateEntry(char* transaction, char* company, char* lob, char* policy, char* description, unsigned int RunEntry)

Parameter Description

transaction	A null-terminated string pointer that represents one of the valid [TRANSACTIONS] abbreviations defined in the INI file. For instance: "NB" for New Business; "EN" for Endorsement; and so on.
company	A null-terminated string pointer that corresponds to the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Company" value.
lob	A null-terminated string pointer that corresponds to the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Line of Business" value.
policy	A null-terminated string pointer that corresponds to the WIP KeyID value. This parameter is sometimes referred to as the "ID Number" value.
description	A null-terminated string pointer that should be assigned as the WIP description value.
RunEntry	A Boolean that specifies whether Entry should begin or not. If Entry is started, the desktop and form windows are created. Whether Entry is started or not, the current form set will be defined in the pdata structure.

Remarks

Create a New WIP Entry. This will attempt to create a new WIP entry during a non-modal session. You must initialize the system before you call this function. RACLib should have been initialized before calling this function.

For additional information see: RACInitAll, RACModal

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

Include: racapi.h Source: RACCREAT.C

Code Declarations

```
int RACAPI RACCreateEntry(char far *transaction,
                                  char far *company,
                                  char far *lob,
                                   char far *policy,
                                   char far *description,
                                  BOOL RunEntry);
   Visual Basic Declaration
       Private Declare Function RACCreateEntry Lib "racw32.dll" _
                       (ByVal trans As String, _
                        ByVal Keyl As String, _
                        ByVal Key2 As String, _
                        ByVal KeyID As String,
                        ByVal description As String,
                        ByVal runEntry As Long) As Long
Example
   The following code is an excerpt from an external program.
   switch ( msg ) {
   case WM COMMAND:
       switch(Param1) {
       case ID CREATE NEWPOL:
           rval = RACCreateEntry("NB",
                                  "ACME INSURANCE",
                                 "HEALTH",
                                 "1402001",
                                 "New Sample Policy",
                                 TRUE);
           if (rval != RAC SUCCESS) {
                   ... handle error
                   break;
           ... continue success
           break;
       }
```

See Also

RACInitAll, RACModal

Calls

AFELoadPPSFormset, RACCreateWipEntry, RACFindTransaction

RACCreateWipEntry

Create a New WIP Entry

Syntax

```
int RACCreateWipEntry(char* company, char* lob, char* policy, char* description, PAFEDATA pdata, unsigned int uniqcheck)
```

Parameter Description

company	A null-terminated string pointer that corresponds to the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Company" value.
lob	A null-terminated string pointer that corresponds to the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Line of Business" value.
policy	A null-terminated string pointer that corresponds to the WIP KeyID value. This parameter is sometimes referred to as the "ID Number" value.
description	A null-terminated string pointer that should be assigned as the WIP description value.

Remarks

Create a New WIP Entry.

Files

Include: racapi.h Source: RACCREAT.C

Code Declarations

Visual Basic Declaration

```
Private Declare Function RACCreateWipEntry Lib "racw32.dll" _
(ByVal Key1 As String, _
ByVal Key2 As String, _
ByVal Key1D As String, _
ByVal description As String, _
ByVal pdata As Long, _
ByVal uniqcheck As Long) As Long
```

Calls

RACCheckUserEntry

RACEditData

View form set specified.

Syntax

HWND RACEditData(HWND hwndParent, char* filename)

Parameter Description

hwndParent	The parent window to contain this application.
filename	The name of a file to import.

Remarks

It is assumed that the window's handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

Returns

If successful, the handle of our desktop window is returned. On failure, zero will be returned and the caller should use RACGetStatus to retrieve the last know error code. Error code values are defined in RACAPI.H.

Files

```
Include: racapi.h
Source: RACVIEW.C

Code Declarations

HWND _RACAPI RACEditData(HWND hwndParent, char *filename);

Visual Basic Declaration

Private Declare Function RACEditData Lib "racw32.dll" _
(ByVal hwndParent As Long, _
ByVal filename As String) As Long

typedef

typedef HWND (_RACAPIPTR RACEDITDATA)
(HWND hwndParent, char *filename);
```

See Also

RACCreateMainWindow, RACInitAll

Calls

RACEditDataStat

RACEnableMenu

Change to the Entry Menu.

Syntax

int RACEnableMenu(void)

Remarks

This will cause the session to switch the menu within the main window. You must initialize the system before you call this function. This function replaces the existing menu with a new menu created from the file loaded by RACLoadMenu.

Calling **RACRestoreMenu** will restore the original menu.

Returns

This returns **RAC_SUCCESS** upon success or one of the values defined in RACAPI.H.

Files

Include: racapi.h Source: RACMENU.C

Code Declarations

int _RACAPI RACEnableMenu(void);

Visual Basic Declaration

Private Declare Function RACEnableMenu Lib "racw32.dll" As Long

RACEntry

Start the Entry (PPS) System.

Syntax

int RACEntry(HWND hwnd)

Parameter

Description

hwnd

The external application's main (highest level) window.

Remarks

This is the simplest method of causing the Entry Program start. The only parameter required is the handle to a main window that contains (or can contain) a menu. This entry point starts the application in a modal fashion and will return to the caller's application when the user "Exits" from our menu.

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

Example

```
The following code is an excerpt from an external C program.
switch ( msg ) {
case WM COMMAND:
        switch(Param1){
        case ID INIT ENTRY:
                rval = RACEntry( hwnd );
                if (rval != RAC SUCCESS) {
                        ... handle errors
                        break;
                ... continue success
                break;
In Visual Basic the following code could be used.
Sub Action Click (Index As Integer)
        retval% = RACEntry(Form1.hWnd)
REM Handle errors (retval% != 0) if needed.
End Sub
```

See Also

RACInitAll, RACTerminate, RACModal

Calls

RACGetStatus, RACInitAll, RACModal, RACProcessError

RACFindCompanyLOB

Locate a Specified Key1 and Key2 values

Syntax

```
VMMHANDLE RACFindCompanyLOB(VMMHANDLE masterH, char* company, char* lob)
```

Parameter Description

masterH	Form set handle that will be searched.
company	first group name (a.k.a. Key1)
lob	second group name (a.k.a. Key2)

Remarks

Determines if the specified company and line of business (Key1 and Key2) are a valid form set combination. The search is case insensitive.

This function is somewhat antiquated and limited in functionality. It has been left intact for legacy systems.

Returns

This returns a <u>VMMHANDLE</u> to the located group or VMMNULLHANDLE if not located.

```
Include: racapi.h
Source: RACFIND.C

Code Declarations

VMMHANDLE _RACAPI RACFindCompanyLOB(VMMHANDLE masterH, char far *company, char far *lob);

Visual Basic Declaration

Private Declare Function RACFindCompanyLOB Lib "racw32.dll" _
(ByVal masterH As Long, _
ByVal company As String, _
ByVal lob As String) As Long
```

RACFindTransaction

Locate a Specified Transaction

Syntax

<u>VMMHANDLE</u> RACFindTransaction(<u>VMMHANDLE</u> translistH, char* transaction)

Parameter Description

translistH	VMM list of valid transaction structures.
transaction	Transaction being searched.

Remarks

This searches the specified VMM list for the specified transaction. This search is case insensitive.

Returns

A <u>VMMHANDLE</u> to the located transaction or VMMNULLHANDLE if not located is returned.

Files

```
Include: racapi.h
Source: RACFIND.C
```

Code Declarations

```
VMMHANDLE _RACAPI RACFINGTransaction(VMMHANDLE translistH, char far *transaction);
```

Visual Basic Declaration

```
Private Declare Function RACFindTransaction Lib "racw32.dll" _ (ByVal translistH As Long, _ ByVal transaction As String) As Long
```

RACGetAccelHandle

Get the Accelerator Table Handle

Syntax

HWND RACGetAccelHandle(void)

Remarks

This returns the accelerator tables handle if it was loaded by a function (directly or indirectly) within RACLib. This is provided for applications that manage non-modal sessions that wish to provide accelerator translations.

Returns

A HANDLE or NULL is returned.

RACGetAFEData

Get the Entry Data Structure

Syntax

PAFEDATA RACGetAFEData(void)

Remarks

This returns the AFEDATA structure created by **RACInit**.

This structure should not be altered by the calling application. This structure contains most of the system wide information used by the Entry system. This structure is defined by AFELIB.H.

Returns

A pointer to the current AFEDATA structure will be returned.

Files

Include: racapi.h Source: RACDATA.C

Code Declarations

PAFEDATA _RACAPI RACGetAFEData(void);

Visual Basic Declaration

Private Declare Function RACGetAFEData Lib "racw32.dll" As Long

RACGetClientWindow

Return client window.

Syntax

HWND RACGetClientWindow(void)

Remarks

Get the top client window's handle created by **RACThread**.

Returns

The window's handle or NULLHANDLE is returned.

RACGetDescription

Return description of error message

Syntax

char* RACGetDescription(int RacErrNo)

Parameter Description

RacErrNo	Error code.
----------	-------------

Remarks

Get the description or message of an error code.

Returns

This returns a character pointer to the message.

RACGetFrameWindow

Return frame window.

Syntax

HWND RACGetFrameWindow(void)

Remarks

Return the top level Window Handle created by **RACThread**.

Files

Include: racapi.h Source: RACTHRD.C

Code Declarations

HWND RACAPI RACGetFrameWindow(void);

Visual Basic Declaration

Private Declare Function RACGetFrameWindow Lib "racw32.dll" As Long

RACGetMenuHandle

Get the Entry Menu Handle.

Syntax

HWND RACGetMenuHandle(void)

Remarks

This returns the menu's handle of a menu created by <u>RACLoadMenu</u>. You must initialize the system before you call this function.

Returns

A handle to a menu will be returned or NULL.

Files

Include: racapi.h Source: RACMENU.C

Code Declarations

HWND _RACAPI RACGetMenuHandle(void);

Visual Basic Declaration

Private Declare Function RACGetMenuHandle Lib "racw32.dll" As Long

RACGetOrigMenuHandle

Get the Original Menu Handle.

Syntax

HWND RACGetOrigMenuHandle(void)

Remarks

This returns the original main window's menu handle if it was replaced by a call to <u>RACEnableMenu</u>. You must initialize the system before you call this function.

Returns

A handle to a menu will be returned or NULL. A NULL value means the main application window does not contain a menu or that the original menu has not been replaced by RACLib.

Files

Include: racapi.h Source: RACMENU.C

Code Declarations

HWND RACAPI RACGetOrigMenuHandle(void);

Visual Basic Declaration

Private Declare Function RACGetOrigMenuHandle Lib "racw32.dll" As Long

RACGetSession

Get the session for this window

Syntax

struct racdata* RACGetSession(HWND hwnd)

Parameter Description

hwnd H	Handle of window
--------	------------------

Remarks

Retrieve the session that matches on the main frame window's handle.

Files

typedef

```
typedef void* ( RACAPIPTR RACGETSESSION) (HWND hwnd);
```

RACGetStatus

Get Last Error Status Code

Syntax

int RACGetStatus(void)

Remarks

This returns the most recent error code assigned by RACLib functionality.

Returns

One of the values defined in RACAPI.H is normally returned.

RACHookProc

Windows accelerator hook procedure

Syntax

LRESULT RACHookProc(int code, WPARAM wParam, LPARAM IParam)

Parameter

Description

code	a Window's hook code value
wParam	the first message parameter
IParam	the second message parameter

Remarks

This function is only useful for Windows applications. <u>RACHookProc</u> determines if the next queued message is an accelerator message for a RACLib application window or dialog.

The message hook is established by a call to RACSetHook and removed via RACUnhook.

Returns

Hooks are called in sequence; therefore, this hook will call the one installed before this hook. The return value will be the result of the last hook that executes. See Windows programming help for the meaning of the return values.

Files

Include: racapi.h Source: RACHOOK.C

Code Declarations

LRESULT CALLBACK RACHookProc(int code,

MPARAM1 wParam,

MPARAM2 lParam);

Visual Basic Declaration

RACInit

Initialize Entry System

Syntax

```
int RACInit(HWND hwnd,
char* userid,
char* sysid)
```

Parameter Description

hwnd	The external application's main (highest level) window.
userid	A null-terminated string pointer that corresponds to a valid user ID with access to the entry system.
sysid	Future expansion - not currently used.

Remarks

This causes the entry system to initialize. Initialization includes memory management, FAP, WIP, user login, and the help system.

Calling application will need to call <u>RACTerminate</u> to shutdown correctly at program end or during failure conditions.

When establishing a non-modal session, only RACWorkingPath can be called before this function.

During initialization, the login screen can appear if the user ID is not specified by the parameter and is not specified in the INI file.

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

Example

```
The following code is an excerpt from an external program. switch ( \ensuremath{\mathsf{msg}} ) {
```

See Also

RACTerminate

Calls

 $\underline{RACCmdLineArg2Afe,\,RACCreateNewSession},\,\underline{RACGetCmdLineArg},\,\underline{RACGetSession},\,\underline{RACSetStatus}$

RACInitAll

Initialize Entire Entry System.

Syntax

```
int RACInitAll(HWND hwnd,
char* userid,
char* sysid)
```

Parameter Description

hwnd	The external application's main (highest level) window.
userid	A null-terminated string pointer that corresponds to a valid user ID with access to the entry system.
sysid	Future expansion - not currently used.

Remarks

This causes the entry system to initialize. Initialization includes memory management, FAP, WIP, user login, and the help system.

This function will call <u>RACWorkingPath</u> before starting the initialization process. If an error occurs, <u>RACTerminate</u> will be called and the path restored.

If the process initializes correctly, the defined "menu" will be loaded (although not activated) and the default accelerators will be loaded.

If the calling application does not call <u>RACModal</u>, then it should eventually call <u>RACTerminate</u> to shutdown correctly.

During initialization, the login screen can appear if the user ID is not specified by parameter and is not specified in the INI file.

Returns

RAC_SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Example

```
The following code is an excerpt from an external program.
 switch ( msg ) {
 case WM COMMAND:
        switch(Param1){
        case ID INIT ENTRY:
               rval = RACInitAll(hwnd,
                                       "USER1",
                                        "");
               break;
               ... continue success
               break;
       }
case WM CLOSE:
  ... if RAC running
  RACTerminate(FALSE);
  break;
```

See Also

RACInit, RACWorkingPath, RACLoadMenu, RACLoadAccelerators, RACTerminate

Calls

 $\frac{RACGetStatus,}{RACInit,} \frac{RACLoadAccelerators,}{RACSetStatus,} \frac{RACProcessError,}{RACSetStatus,} \frac{RACWorkingPath}{RACWorkingPath}$

RACInitCtrl

Initialize Entry System (menu and accelerator control).

Syntax

int RACInitCtrl(HWND hwnd, char* userid, char* sysid, unsigned int loadMenu, unsigned int loadAccel)

Parameter Description

hwnd	The external application's main (highest level) window.
userid	A null-terminated string pointer that corresponds to a valid user ID with access to the entry system.
sysid	Future expansion - not currently used.
loadMenu	If true, the menu is loaded.
IoadAccel	If true, the accelerator table is loaded.

Remarks

This causes the entry system to initialize. Initialization includes memory management, FAP, WIP, user login, and the help system.

This function will call <u>RACWorkingPath</u> before starting the initialization process. If an error occurs, <u>RACTerminate</u> will be called and the path restored.

If the process initializes correctly and the load menu flag is true; the defined "menu" will be loaded (although not activated). In addition, the default accelerators will be loaded if the load accelerator flag is true.

If the calling application does not call <u>RACModal</u>, then it should eventually call <u>RACTerminate</u> to shutdown correctly.

During initialization, the login screen can appear if the user ID is not specified by parameter and is not specified in the INI file.

Returns

<u>RAC SUCCESS</u> (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

Include: racapi.h
Source: RACINIT.C

Code Declarations

int _RACAPI RACINITCTTl(HWND hwnd,

```
nt _RACAPI RACINITETTI(HWND hwnd,
char far *userid,
char far *sysid,
```

```
BOOL loadMenu,
                               BOOL loadAccel);
   Visual Basic Declaration
       Private Declare Function RACInitCtrl Lib "racw32.dll" _
                          (ByVal hwnd As Long,
                           ByVal userid As String, _
                            ByVal sysid As String, _
                            ByVal loadMenu As Long, _
                            ByVal loadAccel As Long) As Long
typedef
   typedef int (_RACAPIPTR RACINITCTRL)
                           (HWND hwnd,
                           char far *userid,
                           char far *sysid,
                           BOOL accel,
                           BOOL menu);
```

Calls

RACGetStatus, RACInit, RACLoadAccelerators, RACLoadMenu, RACProcessError, RACRestorePath, RACSetStatus, RACWorkingPath

RACLibVersion

Get library version information.

Syntax

FSI_VERSION* RACLibVersion(void)

Remarks

This returns a pointer to a structure containing version information. The structure is composed of four elements: a numeric version value, a character string, a date, and a time.

Returns

This returns a pointer to a structure containing version information.

Files

Include: racapi.h Source: RACVERSN.C

Code Declarations

FSI_VERSION * _VMMAPI RACLibVersion(void);
Visual Basic Declaration
 Private Declare Function RACLibVersion Lib "racw32.dll" As Long

RACLoadIni

Load the INI file.

Syntax

int RACLoadIni(void)

Remarks

Load the INI file. The file name is defaulted to FSIUSER.INI if RACSetIniFile did not supply it.

Files

Include: racapi.h Source: RACTHRD.C

Calls

RACGetIniFile, RACSetIniFile, RACSetStatus

RACLoadMenu

This function will query the INI file for the MEN.RES compatible file to load.

Syntax

int RACLoadMenu(void)

Remarks

This function will query the INI file for the MEN.RES compatible file to load. The following INI options will be queried in the order shown. Once a valid option has been determined the menu is created but not activated. A call to RACEnableMenu will be required to activate the menu.

Order of search to determine menu to load:

[AltMenu]

File

If not located then use:

[MENU]

File

If not located the file MEN.RES will be attempted.

If no menu is located, none will be created and an error returned.

RACRestoreMenu will restore the original menu. RACTerminate automatically calls this function.

Returns

This returns **RAC_SUCCESS** upon success or one of the values defined in RACAPI.H.

Files

Calls

RACGetCmdLineArg, RACSetStatus

RACMain

Remote Start of Entry (MODAL)

Syntax

int RACMain(HWND hwnd, char* transaction, char* company, char* lob, char* policy, char* description, char* userid, char* sysid, int entrymode)

Parameter Description

hwnd	The external application's main (highest level) window.
transaction	A null-terminated string pointer that represents one of the valid [TRANSACTIONS] abbreviations defined in the INI file. For instance: "NB" for New Business; "EN" for Endorsement; and so on.
company	A null-terminated string pointer that corresponds to the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Company" value.
lob	A null-terminated string pointer that corresponds to the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Line of Business" value.
policy	A null-terminated string pointer that corresponds to the WIP KeyID value. This parameter is sometimes referred to as the "ID Number" value.
description	A null-terminated string pointer that should be assigned as the WIP description value.
userid	A null-terminated string pointer that corresponds to a valid user ID with access to the entry system.
sysid	Future expansion - not currently used.
entrymode	A valid RACLib action. Currently defined: AFEACTION CREATE = Create new WIP. AFEACTION UPDATE = Update existing WIP.

Remarks

Starts a modal session that is similar to starting AFEMAIN.EXE. No other initialization or termination functions need be called by the user's application. The function does not return until the session completes.

This modal session will take over the main window handling and replace the existing menu. The new menu will be created from the file specified by the [ALTMENU] setting in the INI file. If omitted, the menu will default to the file specified by the [MENU] setting in the INI file. The original menu will be restored before returning.

During initialization, the login screen can appear if the user ID is not specified by the parameter and is not specified in the INI file.

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

```
Include: racapi.h
Source: RACMAIN.C
Code Declarations
       int RACAPI RACMain(HWND
                            char far *transaction,
                            char far *company,
                             char far *lob,
                            char far *policy,
char far *description,
                            char far *userid,
                            char far *sysid,
                             int
                                       mode);
   Visual Basic Declaration
        Private Declare Function RACMain Lib "racw32.dll"
                    (ByVal hwnd As Long, _
                     ByVal Keyl As String,
                     ByVal Key2 As String, _
                     ByVal KeyID As String,
                     ByVal description As String, _
                     ByVal userid As String, _
                     ByVal sysid As String,
                     ByVal modeval As Long) As Long
typedef
   typedef void ( RACAPIPTR RACMAIN) (HWND hwnd,
                                            char *transaction,
                                           char *company,
                                            char *lob,
                                           char *policy,
                                            char *description,
                                            char *userid,
                                           char *sysid,
                                            long mode);
```

Example

```
The following code is an excerpt from an external program.
 switch ( msg ) {
  case WM_COMMAND:
      switch(Param1) {
      case ID CREATE NEWPOL:
          rval = RACMain( hwnd,
                           "NB",
                           "ACME INSURANCE",
                           "HEALTH",
                           "1402001",
                           "New Sample Policy",
                           "USER1",
                           "",
                           AFEACTION CREATE);
          if (rval != RAC SUCCESS) {
                  \dots // handle error
                  break;
          }
```

```
... // continue success
break;
}
```

See Also

RACInitAll, RACCreate, RACUpdate, RACTerminate, RACModal

Calls

RACCreate, RACEnableMenu, RACGetStatus, RACInitAll, RACModal, RACProcessError, RACRestoreMenu, RACUpdate

RACMainWndProc

The Documaker Workstation message handler.

Syntax

```
MRESULT RACMainWndProc(HWND hwnd,
UINT msg,
WPARAM mp1,
LPARAM mp2)
```

Parameter Description

hwnd	Handle of window.
msg	Message
mp1	Message parameter one.
mp2	Message parameter two.

Remarks

Is a main window message handler used by the entry system. During a non-modal session, it is possible to pass messages to this function that should be handled by the entry system. Most often, this function will be passed WM_COMMAND messages associated with menu commands. You must initialize the system before you call this function.

The prototype for this function should conform to that required for a standard window within the operating environment.

Returns

The return value will be that returned from a WndProc in the given operating environment.

Files

Include: racapi.h

```
Source: RACPROC.C

Code Declarations

MRESULT EXPENTRY RACMainWndProc(HWND hwnd,
MMSG msg,
MPARAM1 mp1,
MPARAM2 mp2);

Visual Basic Declaration

Private Declare Function RACMainWndProc Lib "racw32.dll" _
(ByVal hwnd As Long, _
ByVal msg As Long, _
ByVal mp1 As Long,
```

Example

The following code is an excerpt from an external program.

ByVal mp2 As Long) As Long

```
switch ( msg ) {
case WM_COMMAND:
    rval = RACMainWndProc( hwnd, msg, Param1, Param2);
```

See Also

RACInit

Calls

RACGetCmdLineArg, RACGetSession, RACSaveAsProxy, RACSetDesktop, RACSetFocus, RACTermSession

RACModal

Start Modal Entry.

Syntax

int RACModal(void)

Remarks

This causes the session to take over the main window handling. You must initialize the system before you call this function.

This function replaces the existing menu with a new menu if one was loaded. The original menu will be restored before returning.

The function does not return until the Entry system completes. The entry system is terminated but the session is not terminated.

Returns

RAC SUCCESS (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

See Also

RACInit

Calls

RACModalEx

RACPackDatabase

Pack the database.

Syntax

int RACPackDatabase(HWND hwnd)

Parameter Description

hwnd	Handle of window.
------	-------------------

Remarks

Packs the database associated with the window session.

Files

Include: racapi.h Source: RACDATA.C

Code Declarations

Calls

RACGetSession

RACRemoveScrollbar

Remove the scroll bar from window.

Syntax

void RACRemoveScrollbar(HWND hwnd)

hwnd	Handle of window.
------	-------------------

Remarks

Remove the scroll bar from window.

Files

```
Include: racapi.h
Source: RACVIEW.C
```

Code Declarations

typedef

```
typedef void (_RACAPIPTR RACREMOVESCROLLBAR) (HWND hwnd);
```

RACRestoreMenu

Restore the Original Menu.

Syntax

int RACRestoreMenu(void)

Remarks

This will cause the session to restore the original main window's menu if it was replaced by a call to RACEnableMenu. You must initialize the system before you call this function.

RACTerminate automatically calls this function.

Returns

This returns **RAC_SUCCESS** upon success or one of the values defined in RACAPI.H.

RACRestorePath

Restore original working directory.

Syntax

void RACRestorePath(void)

Remarks

This function will restore the working directory to the original one saved by calling **RACWorkingPath**.

Files

See Also

RACWorkingPath

RACRetrieve

Display transaction from archive.

Syntax

```
int RACRetrieve(HWND hwnd,
char* Key1,
char* Key2,
char* KeyID,
int startpage)
```

Parameter

Description

hwnd	The parent window to contain this application.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeyID	Search data for KeylD.
startpage	Page to begin display of form set.

Remarks

Display transaction from archive, similar to <u>RACRetrieveArchive</u> except that it does not call <u>RACInit</u>, <u>RACInit</u> must be called before this function.

Files

Calls

RACFilterPageForDisplay, RACProcessError, RACSetCurSession, RACSetStatus

RACRetrieveArchive

View form set specified.

Syntax

```
HWND RACRetrieveArchive(HWND hwndParent, char* Key1, char* Key2, char* KeyID, int startpage, int location)
```

Parameter Description

hwndParent	The parent window to contain this application.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeyID	Search data for KeylD.
startpage	set beginning page
location	Set screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

It is assumed that the window's handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

See the <ArcRet> INI group to determine which fields are matched with Key1, Key2, and KeyID.

Returns

If successful, the handle of our desktop window is returned. On failure, zero will be returned and the caller should use RACGetStatus to retrieve the last know error code. Error code values are defined in RACAPI.H.

```
int location);
```

Visual Basic Declaration

Calls

RACRetrieveArchiveStat

RACRetrieveArchiveHab

View form set specified.

Syntax

```
HWND RACRetrieveArchiveHab(HINSTANCE hab, char* Key1, char* Key2, char* KeyID, int startpage, int location)
```

Parameter Description

hab	Anchor block. In Windows, it is the instance handle.
Key1	Search data for Key1.
Key2	Search data for Key2.
KeylD	Search data for KeylD.
startpage	set beginning page
location	Set screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

Is identical to <u>RACViewByKey</u> except the application instance is passed instead of a window's handle. Actually, <u>RACRetrieveArchiveHab</u> uses the window's handle only to obtain the application instance.

Returns

If successful, the handle of our desktop window is returned. On failure, zero will be returned and the caller should use RACGetStatus to retrieve the last know error code. Error code values are defined in RACAPI.H.

Files

Visual Basic Declaration

Calls

RACRetrieveArchiveStat

RACSave

Save transaction.

Syntax

int RACSave(void)

Remarks

Save the current transaction returns SUCCESS if the transaction was saved or if no transaction was current and needed to be saved.

Files

Calls

RACSaveAsProxy

Save the current form set in the current AFEData structure into a proxy file.

Syntax

```
int RACSaveAsProxy(HINSTANCE hab,
HWND hwnd,
VMMHANDLE menuH)
```

Parameter Description

hab	Anchor block or instance handle for Windows.
hwnd	Handle of window.
menuH	Menu handle.

Remarks

Save the current form set in the current AFEData structure into a proxy file.

Files

Calls

RACSetCaptionOff

Set caption off for this window.

Syntax

void RACSetCaptionOff(HWND hwnd)

Parameter Description

Remarks

Set caption off for this window.

Files

```
Include: racapi.h
Source: RACPROC.C
```

Code Declarations

typedef

typedef void (RACAPIPTR RACSETCAPTIONOFF) (HWND hwnd);

Calls

RACSetCaptionOn

Set caption on for this window.

Syntax

void RACSetCaptionOn(HWND hwnd)

Parameter Description

hwnd	Handle of window.
------	-------------------

Remarks

Set caption on for this window.

Files

```
Include: racapi.h
Source: RACPROC.C
```

Code Declarations

typedef

typedef void (RACAPIPTR RACSETCAPTIONON) (HWND hwnd);

Calls

RACSetCmdLineArg

This allows historical command line options for AFEMAIN program to be passed to RACInit.

Syntax

```
int RACSetCmdLineArg(int argc, char* argv[])
```

Parameter Description

argc	Number of parameters.
argv	Array of pointers that contain the parameters.

Remarks

This allows historical command line options for AFEMAIN program to be passed to <u>RACInit</u>. Parameters are identical to those of a c program's main function.

The pointer to the structure is initially NULL but it's filled by the <u>RACSetCmdLineArg</u> function. The memory for the structure is static but there is a linked list's handle that is created via <u>VMMCreateList</u>. This handle will not survive <u>RACTerminate</u>. Therefore, <u>RACSetCmdLineArg</u> will need to be called before each <u>RACInit</u>.

Returns

SUCCESS or FAIL

Files

-MODE or /MODE - set to one of the following to etrieve WIP

-INI or /INI - set the INI FILE.

-USERID or /USERID - set the user ID -HD or /HD - set help debug flag -MENU or /MENU - set the menu file.

Calls

RACSetIniFile

RACSetCurSession

Set this window to be the current session.

Syntax

int RACSetCurSession(HWND hwnd)

Parameter Description

hwnd H.	landle of window
---------	------------------

Remarks

Set the main frame window's handle (hwndMainFrame variable) if we have a valid session for the handle passed.

Files

Calls

RACGetSession, RACSetStatus

RACSetHook

Establish Windows message hook.

Syntax

void RACSetHook(void)

Remarks

This installs RACHookProc as a Windows compatible message hook. See that function for more information.

Files

RACSetIniFile

Sets the INI file path name used by RACLib functions.

Syntax

int RACSetIniFile(char* iniFile)

Parameter

Description

iniFile File path name of INI file.	iniFile	File path name of INI file.
-------------------------------------	---------	-----------------------------

Remarks

Sets the INI file path name used by RACLib functions. A string is set within RACLib that is used by the RACInit function.

Returns

RAC SUCCESS (0) is always returned.

Files

See Also

RACGetIniFile

RACSetParent

Use this function to set the parent window. This function lets you size the frame window which contains the form sets you display with these functions:

- RACViewData
- RACViewDataHab
- RACViewByKey
- RACViewByKeyHab
- RACRetrieveArchive
- RACRetrieveArchiveHab

If you omit the RACSetParent function, the size of the frame window is 1/3 of the screen size. In some cases, the text on the form set may be too small to read at this size.

Keep in mind that the form must be open before you can set it as a parent.

Syntax

void RACSetParent(HWND hwnd)

Remarks

Set the parent window for <u>RACThread</u> if the parent window has been set and is a valid window's handle then we create a child window instead of using the desktop.

Files

RACSetProxyHandle

Set the document handle of a proxy file for **RACViewProxy**.

Syntax

void RACSetProxyHandle(VMMHANDLE docH)

Remarks

Set the document handle of a proxy file for **RACViewProxy**.

Files

```
Include: racapi.h
Source: RACVIEW.C

Code Declarations

void _RACAPI RACSetProxyHandle(VMMHANDLE docH);
Visual Basic Declaration
Private Declare Sub RACSetProxyHandle Lib "racw32.dll" _
(ByVal docH As Long)

typedef

typedef void (_RACAPIPTR RACSETPROXYHANDLE)
(VMMHANDLE docH);
```

RACSetSessionMenu

Set the menu's handle in the session structure

Syntax

unsigned short RACSetSessionMenu(<u>VMMHANDLE</u> hwnd, <u>VMMHANDLE</u> newMenuH)

Parameter Description

hwnd	Menu Handle.
newMenuH	New Menu handle.

Remarks

This should be a call back function from **FWMSetCurrentMenu** in GUILIB.

Files

```
Include: racapi.h
Source: RACDATA.C
```

Code Declarations

```
WORD _VMMAPI RACSetSessionMenu(VMMHANDLE oldMenuH, VMMHANDLE newMenuH);
```

Visual Basic Declaration

```
Private Declare Function RACSetSessionMenu Lib "racw32.dll" _ (ByVal oldMenuH As Long, _ ByVal newMenuH As Long) As Long
```

Calls

RACGetFirstSession, RACGetNextSession

RACSetStatus

Set the Error Status Code

Syntax

int RACSetStatus(int status)

Parameter Description

status Statu	us code
--------------	---------

Remarks

Assigns the current error code that will be returned via <u>RACGetStatus</u>. Normally, this function will be called by functions within RACLib, but can be called by the master application during a non-modal session.

Returns

The value returned is the same as the parameter passed. This usually will be one of the values defined in the RACAPI.H file.

Files

RACSetWorkingPath

Set current working directory.

Syntax

void RACSetWorkingPath(char* path)

Parameter Description

	path	path to make the current directory
--	------	------------------------------------

Remarks

Set current working directory to whatever is in the parameter. The old parameter is saved and can be restored by the RACRestorePath function.

Files

RACSubClass

Subclass a window's procedure with RACMainWndProc.

Syntax

PFNWP RACSubClass(HWND hwnd)

Parameter Description

hwnd Handle of window	
-----------------------	--

Remarks

Subclass window specified with RACMainWndProc.

Returns

A pointer to the original window procedure is returned. If error, then NULL is returned.

Files

Include: racapi.h Source: RACTHRD.C

Code Declarations

RACTerminate

Terminate Entry Session.

Syntax

int RACTerminate(unsigned int mode)

Parameter Description

mada	The parameter mode should be TRUE if the entry system should ask the user to
mode	save (if necessary) and FALSE to cause the system to shutdown without asking.

Remarks

This will cause the session to release all resources used by the entry system. You must initialize the system before you call this function.

A non-modal session relies upon the controlling application to request termination. Exiting without terminating the system can cause unpredictable results.

Returns

Upon success, returns RAC SUCCESS or one of the values defined in RACAPI.H.

Files

Calls

RACClearSessions, RACGetFirstSession, RACGetNextSession, RACInitData, RACResetCmdLineArg, RACRestorePath, RACTermSession, RACUnhook

RACTermSession

Terminate Entry Session.

Syntax

int RACTermSession(unsigned int mode, HWND hwnd)

Parameter Description

mode	The parameter mode should be TRUE if the entry system should ask the user to save (if necessary) and FALSE to cause the system to shutdown without asking.
hwnd	Handle of window

Remarks

This will cause the session to release all resources used by the entry system. You must initialize the system before you call this function.

A non-modal session relies upon the controlling application to request termination. Exiting without terminating the system can cause unpredictable results.

Returns

Upon success, returns RAC SUCCESS or one of the values defined in RACAPI.H.

Files

Calls

RACGetSession, RACReleaseSession, RACSetParent

RACThread

New Process operating within another window.

Syntax

int RACThread(HWND hwndParent)

Parameter

Description

hwndParent	The parent window to contain this application.

Remarks

In this entry point, it is assumed that the window's handle passed represents the area that must contain the program. We'll create a frame window that we are familiar with inside this area and start the entry system after usual initialization.

Returns

If successful, RAC SUCCESS is returned otherwise a value from RACAPI.H is returned.

Files

```
Include: racapi.h
Source: RACTHRD.C

Code Declarations

int _RACAPI RACThread( HWND hwndParent );
Visual Basic Declaration

Private Declare Function RACThread Lib "racw32.dll" _
(ByVal hwndParent As Long) As Long

typedef

typedef int (_RACAPIPTR RACTHREAD) (HWND hwnd);
```

See Also

RACThread, RACInitAll, RACSetHook, RACEnableMenu

Calls

 $\frac{RACCreateMainWindow,\ RACEnableMenu,\ RACGetDescription,\ RACGetIniFile,\ RACGetStatus,\ RACInitAll,\ RACLoadMenuToolbar,\ RACPostInit,\ RACProcessError,\ RACSetHook,\ RACSetIniFile,\ RACSetStatus$

RACUnhook

Remove Windows message hook.

Syntax

void RACUnhook(void)

Remarks

This De-installs <u>RACHookProc</u> as a Windows compatible message hook. See that function for more information.

Files

RACUpdate

Edit an existing WIP entry.

Syntax

```
extern int RACUpdate(char* transaction, char* company, char* lob, char* policy, char* description, int entryMode)
```

Parameter Description

transaction	A null-terminated string pointer that represents one of the valid [TRANSACTIONS] abbreviations defined in the INI file. For instance: "NB" for New Business; "EN" for Endorsement; and so on.
company	A null-terminated string pointer that corresponds to the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Company" value.
lob	A null-terminated string pointer that corresponds to the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Line of Business" value.
policy	A null-terminated string pointer that corresponds to the WIP KeyID value. This parameter is sometimes referred to as the "ID Number" value.
description	A null-terminated string pointer that should be assigned as the WIP description value.
entryMode	AFEACTION_UPDATE - Update existing WIP.

Remarks

Attempts to reload for edit an existing WIP entry during a non-modal session. You must initialize the system before you call this function.

Returns

<u>RAC_SUCCESS</u> (0) is returned if the session completes successfully, otherwise one of the values defined in RACAPI.H is returned.

Files

```
Include: racapi.h
Source: RACUPDAT.C
```

Code Declarations

```
int
                                         mode);
   Visual Basic Declaration
       Private Declare Function RACUpdate Lib "racw32.dll" _
                       (ByVal transaction As String, _
                        ByVal Keyl As String, _
                        ByVal Key2 As String, _
                        ByVal KeyID As String,
                        ByVal description As String, _
                        ByVal mode As Long) As Long
Example
   The following code is an excerpt from an external program.
       switch ( msg ) {
       case WM COMMAND:
           switch (Param1) {
           case ID UPDATE OLDPOL:
               rval = RACUpdate("NB",
                                 "ACME INSURANCE",
                                "HEALTH",
                                "1402001",
                                 "New Sample Policy",
                                AFEACTION UPDATE);
               if (rval != RAC_SUCCESS) {
                   ... // handle error
                   break;
               ... // continue success
               break;
           }
```

See Also

RACInit

Calls

RACWipSelection

RACViewByKey

View form set specified.

Syntax

```
HWND RACViewByKey(HWND hwndParent, char* key, int startpage, int location)
```

Parameter Description

hwndParent	The parent window to contain this application.
key	The archive's key for the transaction.
startpage	The page number to start display (defaults to 1)
location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

It is assumed that the window's handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

Returns

If successful, the handle of our desktop window is returned. On failure, zero will be returned and the caller should use RACGetStatus to retrieve the last know error code. Error code values are defined in RACAPI.H.

Files

```
Include: racapi.h
Source: RACVIEW.C

Code Declarations

HWND _RACAPI RACViewByKey( HWND hwndParent, char *key, int startpage, int location);

Visual Basic Declaration

Private Declare Function RACViewByKey Lib "racw32.dll" _
(ByVal hwndParent As Long, _
ByVal key As String, _
ByVal startpage As Long, _
ByVal location As Long) As Long

typedef
```

```
typedef HWND ( RACAPIPTR RACVIEWBYKEY)
```

(HAB hab,
char *key,
int startpage,
int location);

See Also

RACCreateMainWindow, RACInitAll

Calls

RACViewByKeyStat

RACViewByKeyHab

View form set specified.

Syntax

```
HWND RACViewByKeyHab(HINSTANCE hhab, char* key, int startpage, int location)
```

Parameter Description

hhab	Anchor block or instance handle for Windows.
key	The archive's key for the transaction.
startpage	The page number to start display (defaults to 1)
location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

Is identical to <u>RACViewByKey</u> except the application instance is passed instead of a window's handle. Actually, <u>RACViewData</u> uses the window's handle only to obtain the application instance.

Returns

If successful, the handle of our desktop window is returned. On failure, zero will be returned and the caller should use RACGetStatus to retrieve the last know error code. Error code values are defined in RACAPI.H.

Files

```
Include: racapi.h
Source: RACVIEW.C

Code Declarations

HWND _RACAPI RACViewByKeyHab( HAB hhab, char *key, int startpage, int location);

Visual Basic Declaration

Private Declare Function RACViewByKeyHab Lib "racw32.dll" _
(ByVal hInstance As Long, _
ByVal key As String, _
ByVal startpage As Long, _
ByVal location As Long) As Long

typedef
```

typedef HWND (RACAPIPTR RACRETRIEVEARCHIVE)

(HAB hab,
char *Key1,
char *Key2,
char *KeyID,
int startpage,
int location);

See Also

RACCreateMainWindow, RACInitAll

Calls

RACViewByKeyStat

RACViewData

View form set specified.

Syntax

```
HWND RACViewData(HWND hwndParent,
char* filename,
int startpage,
int location)
```

Parameter Description

hwndParent	The parent window to contain this application.
filename	The name of a file to import.
startpage	The page number to start display (defaults to 1)
location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

It is assumed that the window's handle passed represents another application's main window. We'll create a frame window to contain the form set view and start the entry system after usual initialization.

Returns

If successful, the handle of our desktop window is returned. On failure, zero will be returned and the caller should use RACGetStatus to retrieve the last know error code. Error code values are defined in RACAPI.H.

Files

```
Include: racapi.h
Source: RACVIEW.C

Code Declarations

HWND _RACAPI RACViewData( HWND hwndParent, char *filename, int startpage, int location);

Visual Basic Declaration

Private Declare Function RACViewData Lib "racw32.dll" _
(ByVal hwndParent As Long, _
ByVal filename As String, _
ByVal startpage As Long, _
ByVal location As Long) As Long

typedef
```

typedef int (*RACVIEWFUNC) (HWND hwnd,

char *filename,
int startpage);

See Also

RACCreateMainWindow, RACInitAll

Calls

RACViewDataStat

RACViewDataHab

View form set specified.

Syntax

```
HWND RACViewDataHab(HINSTANCE hhab, char* filename, int startpage, int location)
```

Parameter Description

hhab	Anchor block or instance handle for Windows.
filename	The name of a file to import.
startpage	The page number to start display (defaults to 1)
location	Screen location. 0 = Left half display (default) 1 = Right half display 2 = Top half display 3 = Bottom half display 4 = normal window 5 = maximized window

Remarks

Is identical to <u>RACViewData</u> except the application instance is passed instead of a window's handle. Actually, <u>RACViewData</u> uses the window's handle only to obtain the application instance.

Returns

TRUE or FALSE (0) is returned depending upon whether the record matches the search criteria.

Files

(HAB hab,

char *filename,
int startpage,
int location);

Calls

RACViewDataStat

RACViewProxy

Display archive from proxy file.

Syntax

int RACViewProxy(HWND hwnd, char* filename, int startpage)

Parameter

Description

hwnd	must be a valid window's handle to contain form set display
filename	path to a valid proxy file
startpage	page to begin display of form set

Remarks

Display archive from proxy file, **RACInit** must be called before this function.

Files

```
Include: racapi.h
Source: RACVIEW.C
Code Declarations
       int _RACAPI RACViewProxy(HWND hwnd,
                                 char *filename,
                                 int startpage);
   Visual Basic Declaration
       Private Declare Function RACViewProxy Lib "racw32.dll"
                        (ByVal hwnd As Long,
                         ByVal filename As String,
                         ByVal startpage As Long) As Long
typedef
   typedef int ( RACAPIPTR RACVIEWPROXY)
                             (HWND hwnd,
                             char *filename,
                             int startpage);
```

Calls

RACFilterPageForDisplay, RACGetDescription, RACGetIniFile, RACGetStatus, RACProcessError, RACSetCurSession, RACSetStatus

RACWipSelectFunction

WIP selection support function.

Syntax

unsigned int RACWipSelectFunction(void* WipRec)

Parameter Description

WipRec Pointer to a WIP record that is to be evaluated.	
---	--

Remarks

This is a support function for RACUpdate. The WIP record is first evaluated by the AFEWipSelectFunction to see if it is a valid record for this user. A second test is then performed via RACWipSelection to see if the record matches the remaining search criteria.

Returns

TRUE or FALSE (0) is returned depending upon whether the record matches the search criteria.

Files

Include: racapi.h Source: RACUPDAT.C

Code Declarations

BOOL _VMMAPI RACWipSelectFunction(void FAR *WipRec); Visual Basic Declaration Cannot be called from VB

Calls

RACWipSelection

RACWipSelection

Support function for WIP selection

Syntax

```
unsigned int RACWipSelection(void* WipRec, char* transaction, char* company, char* lob, char* policy)
```

Parameter Description

WipRec	Pointer to a WIP record that is to be evaluated.
transaction	A null-terminated string pointer that represents one of the valid [TRANSACTIONS] abbreviations defined in the INI file. For instance: "NB" for New Business; "EN" for Endorsement; and so on.
company	A null-terminated string pointer that corresponds to the first WIP key value (which is also the first component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Company" value.
lob	A null-terminated string pointer that corresponds to the second WIP key value (which is also the second component of a line from the FORM.DAT). This parameter is sometimes referred to as the "Line of Business" value.
policy	A null-terminated string pointer that corresponds to the WIP KeyID value. This parameter is sometimes referred to as the "ID Number" value.

Remarks

This is a support function for RACUpdate used to compare a WIP record for matches search criteria.

When a NULL WipRec parameter is used, the remaining parameters are saved as the compare test information. Afterwards the function can be called with valid WipRec parameters to test for matches.

When a valid WipRec parameter is used, the remaining parameters are not used. Rather, the WIP record is compared to the static test information stored previously.

Returns

TRUE or FALSE (0) is returned depending upon whether the record matches the search criteria.

Files

```
Include: racapi.h
Source: RACUPDAT.C
```

Code Declarations

```
BOOL _RACAPI RACWipSelection(void far *WipRec, char far *transaction, char far *company, char far *lob, char far *policy);
```

Visual Basic Declaration

RACWorkingPath

Establish correct working directory.

Syntax

void RACWorkingPath(void)

Remarks

This function queries the environment for FSIPATH. If a path is specified, the original path is saved and the working directory is changed to the one specified by the environment variable. Calling RACRestorePath can restore original working directory.

If no FSIPATH environment variable is available, the working directory is not changed.

Files

See Also

RACRestorePath

Calls

RACSetWorkingPath

Global Types

CMDLINE

typedef struct CMDLINE

This structure contains information parsed from the command line that is used by **RACInit**.

Files

Source: RACAPI.H struct CMDLINE

Name Description

char ini[129 + 1]	The INI file name supplied by the /INI command line switch. INI=\fap\mstrres\sampco\fsiuser.ini	
int gMode	The mode state supplied by the /MODE command line switch. MODE=retrieve MODE=WIP	
char CmdLineUserID[129 + 1]	The user ID set by the /USERID command line switch. USERID="FORMAKER"	
BOOL bHelpDebug	True if the help system debug /HD command line switch is supplied.	
char menufile[129 + 1]	The menu file name supplied by the MENU command line switch. MENU=men.res	
VMMHANDLE argvH	Handle to argument list.	
char progName[129 + 1]	Program name.	

Files

MRESULT

typedef long MRESULT

Files

PFNWP

typedef WNDPROC PFNWP

Files

RAC_ENTRYMODES

typedef enum RAC_ENTRYMODES

Files

Source: RACAPI.H

enum RAC_ENTRYMODES

Name Description

AFEACTION_CREATE=1	Successful operation
AFEACTION_UPDATE=2	The main window handle is invalid or 0

Files

RAC_ERRNO

typedef enum RAC_ERRNO

Error codes supplied as return values and are used in the RACGetStatus functions.

Files

Source: RACAPI.H enum RAC_ERRNO

Name	Description
RAC_SUCCESS=0	Successful operation.
RAC_ERR_HWND=-1	The main window handle is invalid or 0.
RAC_ERR_ACCESS=-2	DLL is currently accessed.
RAC_ERR_FAP=-3	FAP Failed to initialize.
RAC_ERR_AFE=-4	Failed to initialize AFELib.
RAC_ERR_MENU=-5	Failed to load menu.
RAC_ERR_MODE=-6	The entry mode specified is not valid.
RAC_ERR_TRANS=-7	Transaction error transaction invalid.
RAC_ERR_COMPANYLOB=-8	Company or Line of Business error.
RAC_ERR_ENTRY=-9	Entry failed to start.
RAC_ERR_WIPCREATE=-10	Cannot create WIP record.
RAC_ERR_WIPSTATUS=-11	WIP status invalid.
RAC_ERR_NEWWIP=-12	WIP NEW type not specified in INI.
RAC_ERR_POLICY=-13	Policy number not specified.
RAC_ERR_WIPSEL=-14	WIP selection not completed.
RAC_ERR_FORMSET=-15	Form set load failed.
RAC_ERR_AFEDLL=-16	Cannot locate AFE DLL.
RAC_ERR_NOWIP=-17	No WIP to select from.
RAC_ERR_AFEDATA=-18	AFEDATA incorrect.
RAC_ERR_AFEFUNCION=-19	AFE function failed.
RAC_ERR_AFEINI=-20	AFE failed to load INI.
RAC_ERR_NEEDTERM=-21	Session already active.
RAC_ERR_NODLL=-22	Could not load DLL used by CRacLib.
RAC_ERR_MAXSESSIONS=-23	Maximum <r>RACLib sessions.</r>
RAC_ERR_SESSION=-24	Invalid RACLib session requested.
RAC_ERR_MISC=-25	Unknown error in RACLib.
RAC_ERR_CANCEL=-26	User canceled.

RAC_ERR_TERM=-27	Termination error.	
RAC_ERR_NOTUNIQUE=-101	WIP Key components are not unique.	
RAC_ERR_ARC=-102	Archive file failure.	
RAC_ERR_ARCDFD=-103	Archive DFD file failure.	
RAC_ERR_WIPADD=-104	WIP failed to add.	
RAC_ERR_PROXY=-105	Proxy error.	

Files

RACDATA

struct RACDATA

escription

HWND hwndMainFrame	handle to the main frame window	
int mainWndCreated	Was the main window created?	
int loginfailed	Did login fail?	
int racUserClosed	Has the user closed?	
HHOOK hHook	Hook procedure	
char SysID[20]	System Identification.	
char CmdLineUserID[129 + 1]	Command line user identification	
PAFEDATA pAFEData	AFE data structure.	
short RACRetVal	Latest RACLib return value.	
HWND hwndMain	The main client window.	
HWND hwndHelpInstance	The help instance	
int closeBar	Flag indicates whether close bar window was created	
int needTerminate	Flag indicates whether we need to call RACTerminate	
int terminateAllowed	Flag indicates whether we can terminate the active session	
PFNWP oldProc	Old window procedure	
PFNWP clientProc	New client window procedure	
HWND oldMenu	Old menu handle.	
HWND newMenu	New menu handle.	
char* m_ErrorMsg	Error message string.	
HWND hwndMainAccel	(added for OS2 compile)	
char oldworkdir[(129)]	Old working directory.	
long ulDriveNum	Drive number.	
int RACTermSession	true after RACClose has executed on this instance.	
<u>VMMHANDLE</u> curmenuH	Current menu handle.	
int modal	Is this a modal session?	
char proxyfilename[(129)]	Proxy file name.	
char Title[(129)]	Title for window.	
int NoCaptionWindow	Is there a caption?	
long orgWindowStyle	Original window style.	
-		

Files

Source: RACLIB.H

RACWNDCMDS

typedef enum RACWNDCMDS

Window Commands

Files

Source: RACAPI.H

enum RACWNDCMDS

Name	Description
CMD_ID_ZOOMDLG=1013	Bring up zoom dialog.
CMD_ID_ZOOMIN=1010	Zoom in.
CMD_ID_ZOOMOUT=1011	Zoom out.
CMD_ID_ZOOMNORM=1012	Zoom normal.
CMD_ID_FITWIDTH=1014	Fit to width.
CMD_ID_FITWINDOW=1072	Fit to window.
CMD_ID_PAGETOP=1022	Go to top of page.
CMD_ID_PAGEBOTTOM=1023	Go to bottom of page.
CMD_ID_PAGENEXT=1033	Go to next page.
CMD_ID_PAGEPREV=1034	Go to previous page.
CMD_ID_PAGELEFT=1024	Move page left.
CMD_ID_PAGERIGHT=1025	Move page right.
CMD_ID_FORMFIRST=1016	Go to first form.
CMD_ID_FORMLAST=1017	Go to last form.
CMD_ID_FORMNEXT=1007	Go to next form.
CMD_ID_FORMPREV=1008	Go to previous form.
CMD_ID_LINEUP=1020	Go up a line.
CMD_ID_LINEDOWN=1021	Go down a line.
CMD_ID_REFRESH=1009	Refresh display.
CMD_ID_CASCADE=1002	Cascade windows.
CMD_ID_TILE=1003	Tile windows.
CMD_ID_STACK=1004	Stack windows.
CMD_ID_PRT_FORMSET=1065	Print form set.
CMD_ID_PRT_FORM=1066	Print form.
CMD_ID_PRT_PAGE=1067	Print page.
CMD_ID_PRT_NODLG=1100	Print.
CMD_ID_COUNTPAGES=1	Count pages.

Files

VMMHANDLE

typedef void *VMMHANDLE

Files