```cpp
// USBCashPOSSystemDlg.h : header file
//

#pragma once
#include "afxwin.h"


// Prototypes for the MSPOS_USB.dll functions
extern "C"
{
ULONG __stdcall GetDrawerHandle (BYTE drawer_number);
int __stdcall GetDrawerStatus (ULONG handle);
int __stdcall OpenDrawer (ULONG handle);
int __stdcall ReleaseDrawerHandle (ULONG handle);
}

// Define the types that will be used when accessing the
// various  MSPOS_USB.dll functions.
typedef ULONG(__stdcall *GET_DRAWER_HANDLE)(BYTE);
typedef int (__stdcall *GET_DRAWER_STATUS)(ULONG);
typedef int(__stdcall *OPEN_DRAWER)(ULONG);
typedef int(__stdcall *RELEASE_DRAWER_HANDLE)(ULONG);


// CUSBCashPOSSystemDlg dialog
class CUSBCashPOSSystemDlg : public CDialogEx
{
// Construction
public:
    CUSBCashPOSSystemDlg(CWnd* pParent = NULL); // standard constructor

// Dialog Data
    enum { IDD = IDD_USBCASHPOSSYSTEM_DIALOG };

    protected:
    virtual void DoDataExchange(CDataExchange* pDX);     // DDX/DDV support


// Implementation
protected:
    HICON m_hIcon;

    // Generated message map functions
    virtual BOOL OnInitDialog();
    afx_msg void OnSysCommand(UINT nID, LPARAM lParam);
    afx_msg void OnPaint();
    afx_msg HCURSOR OnQueryDragIcon();
    DECLARE_MESSAGE_MAP()
public:
    afx_msg void OnBnClickedButtonOpenDrawer();
    afx_msg void OnBnClickedButtonGetStatus();

private:
    BYTE                    mDrawerNumber;
    UINT_PTR                mTimerId;

    // Import Library
    HMODULE                 mhMSPOSUsb;
    GET_DRAWER_HANDLE       mProcGetDrawerHandle;
    GET_DRAWER_STATUS       mProcGetDrawerStatus;
    OPEN_DRAWER             mProcOpenDrawer;
    RELEASE_DRAWER_HANDLE   mProcReleaseDrawerHandle;


public:
```

```
    CEdit                   mEditSystemStatus;
    CEdit                   mEditDrawerStatus;
    CButton                 mButtonOpenDrawer;
    afx_msg void            OnTimer(UINT_PTR nIDEvent);
    afx_msg void            OnDestroy();
};
```

```cpp
// USBCashPOSSystemDlg.cpp : implementation file
//

#include "stdafx.h"
#include "USBCashPOSSystem.h"
#include "USBCashPOSSystemDlg.h"
#include "afxdialogex.h"

#ifdef _DEBUG
#define new DEBUG_NEW
#endif

// CAboutDlg dialog used for App About

class CAboutDlg : public CDialogEx
{
public:
    CAboutDlg();

// Dialog Data
    enum { IDD = IDD_ABOUTBOX };

    protected:
    virtual void DoDataExchange(CDataExchange* pDX);     // DDX/DDV support

// Implementation
protected:
    DECLARE_MESSAGE_MAP()
};

CAboutDlg::CAboutDlg() : CDialogEx(CAboutDlg::IDD)
{
}

void CAboutDlg::DoDataExchange(CDataExchange* pDX)
{
    CDialogEx::DoDataExchange(pDX);
}

BEGIN_MESSAGE_MAP(CAboutDlg, CDialogEx)
END_MESSAGE_MAP()


// CUSBCashPOSSystemDlg dialog

//
// CUSBCashPOSSystemDlg
//
// The following method is the class constructor. To process, we'll
// initialize all of our member variables.
CUSBCashPOSSystemDlg::CUSBCashPOSSystemDlg(CWnd* pParent /*=NULL*/)
    : CDialogEx(CUSBCashPOSSystemDlg::IDD, pParent)
{
    m_hIcon = AfxGetApp()->LoadIcon(IDR_MAINFRAME);

    // Initialze the member variables
    mDrawerNumber = 1;
    mhMSPOSUsb = NULL;
}

void CUSBCashPOSSystemDlg::DoDataExchange(CDataExchange* pDX)
{
    CDialogEx::DoDataExchange(pDX);
    DDX_Control(pDX, IDC_EDIT_SYSTEM_STATUS, mEditSystemStatus);
    DDX_Control(pDX, IDC_EDIT_DRAWER_STATUS, mEditDrawerStatus);
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    DDX_Control(pDX, IDC_BUTTON_OPEN_DRAWER, mButtonOpenDrawer);
}

BEGIN_MESSAGE_MAP(CUSBCashPOSSystemDlg, CDialogEx)
    ON_WM_SYSCOMMAND()
    ON_WM_PAINT()
    ON_WM_QUERYDRAGICON()
    ON_BN_CLICKED(IDC_BUTTON_OPEN_DRAWER, &CUSBCashPOSSystemDlg::OnBnClickedButtonOpenDrawer)
    ON_BN_CLICKED(IDC_BUTTON_GET_STATUS, &CUSBCashPOSSystemDlg::OnBnClickedButtonGetStatus)
    ON_WM_TIMER()
    ON_WM_DESTROY()
END_MESSAGE_MAP()


// CUSBCashPOSSystemDlg message handlers

BOOL CUSBCashPOSSystemDlg::OnInitDialog()
{
    CDialogEx::OnInitDialog();

    // Add "About..." menu item to system menu.

    // IDM_ABOUTBOX must be in the system command range.
    ASSERT((IDM_ABOUTBOX & 0xFFF0) == IDM_ABOUTBOX);
    ASSERT(IDM_ABOUTBOX < 0xF000);

    CMenu* pSysMenu = GetSystemMenu(FALSE);
    if (pSysMenu != NULL)
    {
        BOOL bNameValid;
        CString strAboutMenu;
        bNameValid = strAboutMenu.LoadString(IDS_ABOUTBOX);
        ASSERT(bNameValid);
        if (!strAboutMenu.IsEmpty())
        {
            pSysMenu->AppendMenu(MF_SEPARATOR);
            pSysMenu->AppendMenu(MF_STRING, IDM_ABOUTBOX, strAboutMenu);
        }
    }

    // Set the icon for this dialog.  The framework does this automatically
    //  when the application's main window is not a dialog
    SetIcon(m_hIcon, TRUE);         // Set big icon
    SetIcon(m_hIcon, FALSE);        // Set small icon

    // Extra initialization
    //
    // Load the import library and then get the address of the various
    // functions.
    ULONG   status;

    // Load the library
    mhMSPOSUsb = LoadLibrary(L"MSPOS_USB");
    if (mhMSPOSUsb == NULL)
    {
        status = GetLastError();
        return FALSE;
    }

    // Load the function pointers
    mProcGetDrawerHandle =
        (GET_DRAWER_HANDLE)GetProcAddress(mhMSPOSUsb, "GetDrawerHandle");
    if (mProcGetDrawerHandle == NULL)
    {
        status = GetLastError();
        return FALSE;
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    }

    mProcGetDrawerStatus =
        (GET_DRAWER_STATUS)GetProcAddress(mhMSPOSUsb, "GetDrawerStatus");
    if (mProcGetDrawerHandle == NULL)
    {
        status = GetLastError();
        return FALSE;
    }

    mProcOpenDrawer =
        (OPEN_DRAWER)GetProcAddress(mhMSPOSUsb, "OpenDrawer");
    if (mProcGetDrawerHandle == NULL)
    {
        status = GetLastError();
        return FALSE;
    }

    mProcReleaseDrawerHandle =
        (RELEASE_DRAWER_HANDLE)GetProcAddress(mhMSPOSUsb, "ReleaseDrawerHandle");
    if (mProcReleaseDrawerHandle == NULL)
    {
        status = GetLastError();
        return FALSE;
    }

    // Initialize the system status and the drawer status strings
    SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Not Connected");
    SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer Offline");
    mButtonOpenDrawer.EnableWindow(FALSE);

    // Init the drawer status polling timer
    mTimerId = SetTimer(1, 1000, NULL);

    return TRUE;  // return TRUE  unless you set the focus to a control
}

void CUSBCashPOSSystemDlg::OnSysCommand(UINT nID, LPARAM lParam)
{
    if ((nID & 0xFFF0) == IDM_ABOUTBOX)
    {
        CAboutDlg dlgAbout;
        dlgAbout.DoModal();
    }
    else
    {
        CDialogEx::OnSysCommand(nID, lParam);
    }
}

// If you add a minimize button to your dialog, you will need the code below
//  to draw the icon.  For MFC applications using the document/view model,
//  this is automatically done for you by the framework.

void CUSBCashPOSSystemDlg::OnPaint()
{
    if (IsIconic())
    {
        CPaintDC dc(this); // device context for painting

        SendMessage(WM_ICONERASEBKGND, reinterpret_cast<WPARAM>(dc.GetSafeHdc()), 0);

        // Center icon in client rectangle
        int cxIcon = GetSystemMetrics(SM_CXICON);
        int cyIcon = GetSystemMetrics(SM_CYICON);
        CRect rect;
```

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        GetClientRect(&rect);
        int x = (rect.Width() - cxIcon + 1) / 2;
        int y = (rect.Height() - cyIcon + 1) / 2;

        // Draw the icon
        dc.DrawIcon(x, y, m_hIcon);
    }
    else
    {
        CDialogEx::OnPaint();
    }
}

//
// OnQueryDragIcon
//
// The system calls this function to obtain the cursor to display while the
// user drags the minimized window.
//
HCURSOR CUSBCashPOSSystemDlg::OnQueryDragIcon()
{
    return static_cast<HCURSOR>(m_hIcon);
}



//
// OnBnClickedButtonOpenDrawer
//
// The following method is called whenever the user presses the "Open Drawer"
// button. To process, we'll get the drawer handle and then open the drawer.
//
void CUSBCashPOSSystemDlg::OnBnClickedButtonOpenDrawer()
{
    ULONG status;
    ULONG drawerHandle;

    // Get the device handle
    drawerHandle = mProcGetDrawerHandle(mDrawerNumber);
    if (drawerHandle == 0)
    {
        // The device is not connected. Update the status messages and then return.
        SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Not Connected");
        SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer Offline");
        return;
    }

    status = mProcOpenDrawer(drawerHandle);
    if (status == 0)
    {
        // Failed to open the drawer
        SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Not Connected");
        SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer Offline");
        return;
    }

    SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer is opened.");
    mButtonOpenDrawer.EnableWindow(FALSE);
    return;
}



//
// OnBnClickedButtonGetStatus
//
// The following method is called whenever the user press the "Get Status"
// button. To process, we'll get the drawer handle and then get the drawer
```

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// status.
//
void CUSBCashPOSSystemDlg::OnBnClickedButtonGetStatus()
{
    ULONG status;
    ULONG drawerHandle;

    // Get the device handle
    drawerHandle = mProcGetDrawerHandle(mDrawerNumber);
    if (drawerHandle == 0)
    {
        // The device is not connected. Update the status messages and then return.
        SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Not Connected");
        SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer Offline");
        mButtonOpenDrawer.EnableWindow(FALSE);
        return;
    }

    // Get the drawer's status
    status = mProcGetDrawerStatus(drawerHandle);
    if (status == 0)
    {
        // Failed to get the drawer status
        //
        // Update the status message and then return
        SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Not Connected.");
        SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer Offline.");
        mButtonOpenDrawer.EnableWindow(FALSE);

        // Since we got the handle open we should now release it
        mProcReleaseDrawerHandle(drawerHandle);
        return;
    }

    if (status == 2)
    {
        // The drawer is opened
        SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Connected");
        SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer is opened.");
        mButtonOpenDrawer.EnableWindow(FALSE);
    }
    else if (status == 1)
    {
        // The drawer is closes
        SetDlgItemText(IDC_EDIT_SYSTEM_STATUS, L"USB Device Connected");
        SetDlgItemText(IDC_EDIT_DRAWER_STATUS, L"Cash Drawer is closed.");
        mButtonOpenDrawer.EnableWindow(TRUE);
    }

    mProcReleaseDrawerHandle(drawerHandle);
    return;
}

//
// OnTimer
//
// The follow message handler is for the WM_TIMER message. To process
// this message handler, we'll poll current device status and then
// update the various statuses appropriately.
//
void CUSBCashPOSSystemDlg::OnTimer(UINT_PTR nIDEvent)
{
    if (nIDEvent = mTimerId)
    {
        OnBnClickedButtonGetStatus();
    }
```

```
        CDialogEx::OnTimer(nIDEvent);
}


//
// OnDestroy
//
// The following message handler is called just before the window
// is closed. To close, we'll terminate the timer
//
void CUSBCashPOSSystemDlg::OnDestroy()
{
        CDialogEx::OnDestroy();

        // Terminate the Drawer Status Polling Timer
        KillTimer(mTimerId);

        // Unload the dll
        if (mhMSPOSUsb != NULL)
        {
            FreeLibrary(mhMSPOSUsb);
        }
}
```